

JPL EXPORT ADMINISTRATION DOCUMENT REVIEW RECORD
---

Log #: 16554-17801

(Note: This form and process do not replace the procedures described in JPL Policy relating to review and approval of proposals and contractual documents. This process is intended to document the review and coordination of requests to ascertain the export control ramifications relating to specific documents. Export Administration signature does not convey authority to export or release the "Exporter of Record" from any export laws or regulations.)

**Program:** ISSM: Ice Sheet System Model

**Person Requesting or Initiating Export:** Dr. Eric Larour

**Date Received:** Apr-22-2014

**Document Title/Description:** ISSM changes from revision 16554 to revision 17801

**Release to:** <http://issm.ess.uci.edu/svn/issm/issm/trunk> on ISSM svn repository

**JPL Intranet:** [murdo.jpl.nasa.gov/proj/ice/larour/issm-uci/trunk-jpl](http://murdo.jpl.nasa.gov/proj/ice/larour/issm-uci/trunk-jpl)

**Disposition: 6** Does not contain export-controlled information. May be released/disclosed as requested subject to Company guidelines on protection of proprietary information (if applicable).

**Comments:** see table of changes below.

**Reviewed by ISSM Export Transfer Liaison:** Dr. Eric Larour      **Date:** Apr-22-2014



**Disposition:**

- 1: Public Domain Information (Ref ITAR Section 120.11)
  - 2: Qualifies for ITAR Exemption
  - 3: Covered by Department of State License/Agreement Number
  - 4: Covered by Department of Commerce validated license or exception
  - 5: New License Required
  - 6: Does not contain export-controlled information. May be released/disclosed as requested subject to Company guidelines on protection of proprietary information (if applicable).
  - 7: Other (specify)
- 

**Change #1** with diff file ISSM-16554-16555.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test120.py M /issm/trunk-jpl/test/NightlyRun/test421.py

Export determination: 6.

Rationale: CHG: tolerances python

**Change #2** with diff file ISSM-16555-16556.diff:

Function name:

M /issm/trunk-jpl M /issm/trunk-jpl/examples/Jakobshavn/Jks.par M /issm/trunk-jpl/examples/Jakobshavn/runme.m M /issm/trunk-jpl/examples/SquareIceShelf/runme.m

Export determination: 6.

Rationale: merged trunk and trunk-jpl

**Change #3** with diff file ISSM-16558-16559.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.m A /issm/trunk-jpl/test/NightlyRun/test334.m

A /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.

Rationale: adding extruded test case for the hydrologyDC

**Change #4** with diff file ISSM-16559-16560.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m  
Export determination: 6.  
Rationale: adding extrusion rules for the hydro solver

**Change #5** with diff file ISSM-16561-16562.diff:  
Function name:  
M /issm/trunk-jpl M /issm/trunk-jpl/src M /issm/trunk-jpl/test  
Export determination: 6.  
Rationale: Block revision 16560 from being merged into trunk-jpl

**Change #6** with diff file ISSM-16563-16564.diff:  
Function name:  
M /issm/trunk-jpl M /issm/trunk-jpl/test  
Export determination: 6.  
Rationale: merged trunk and trunk-jpl

**Change #7** with diff file ISSM-16565-16566.diff:  
Function name:  
M /issm/trunk-jpl M /issm/trunk-jpl/src M /issm/trunk-jpl/test  
Export determination: 6.  
Rationale: Block revision 16564 from being merged into trunk-jpl

**Change #8** with diff file ISSM-16566-16567.diff:  
Function name:  
A /issm/trunk-jpl/test/Archives/Archive334.nc A /issm/trunk-jpl/test/Archives/Archive335.nc  
Export determination: 6.  
Rationale: NEW: added archives hydrology 3d

**Change #9** with diff file ISSM-16567-16568.diff:  
Function name:  
M /issm/trunk/configure.ac M /issm/trunk-jpl/configure.ac  
Export determination: 6.  
Rationale: CHG: updating issm version

**Change #10** with diff file ISSM-16568-16569.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/AverageFilter M /issm/trunk-jpl/src/wrappers/BamgConvertMesh  
M /issm/trunk-jpl/src/wrappers/BamgMesher M /issm/trunk-jpl/src/wrappers/BamgTriangulate  
M /issm/trunk-jpl/src/wrappers/Chaco M /issm/trunk-jpl/src/wrappers/ContourToMesh  
M /issm/trunk-jpl/src/wrappers/ContourToNodes M /issm/trunk-jpl/src/wrappers/EdgeDetection  
M /issm/trunk-jpl/src/wrappers/ElementConnectivity M /issm/trunk-jpl/src/wrappers/EnumToString  
M /issm/trunk-jpl/src/wrappers/Exp2Kml M /issm/trunk-jpl/src/wrappers/ExpSimplify  
M /issm/trunk-jpl/src/wrappers/HoleFiller M /issm/trunk-jpl/src/wrappers/InternalFront  
M /issm/trunk-jpl/src/wrappers/InterpFromGridToMesh M /issm/trunk-jpl/src/wrappers/InterpFromMesh2d  
M /issm/trunk-jpl/src/wrappers/InterpFromMeshToGrid M /issm/trunk-jpl/src/wrappers/InterpFromMeshTo  
M /issm/trunk-jpl/src/wrappers/InterpFromMeshToMesh3d M /issm/trunk-jpl/src/wrappers/KMLFileRead  
M /issm/trunk-jpl/src/wrappers/KMLMeshWrite M /issm/trunk-jpl/src/wrappers/KMLOverlay  
M /issm/trunk-jpl/src/wrappers/Kml2Exp M /issm/trunk-jpl/src/wrappers/Kriging  
M /issm/trunk-jpl/src/wrappers/Ll2xy M /issm/trunk-jpl/src/wrappers/MeshPartition  
M /issm/trunk-jpl/src/wrappers/MeshProfileIntersection M /issm/trunk-jpl/src/wrappers/NodeConnectivity  
M /issm/trunk-jpl/src/wrappers/PointCloudFindNeighbors M /issm/trunk-jpl/src/wrappers/PropagateFlags  
M /issm/trunk-jpl/src/wrappers/Scotch M /issm/trunk-jpl/src/wrappers/Shp2Kml  
M /issm/trunk-jpl/src/wrappers/StringToEnum M /issm/trunk-jpl/src/wrappers/TriMesh  
M /issm/trunk-jpl/src/wrappers/TriMeshProcessRifts M /issm/trunk-jpl/src/wrappers/TriaSearch  
M /issm/trunk-jpl/src/wrappers/Xy2ll M /issm/trunk-jpl/src/wrappers/matlab/io  
M /issm/trunk-jpl/src/wrappers/python/io

Export determination: 6.

Rationale: CHG: get svn to ignore some files

**Change #11** with diff file ISSM-16569-16570.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/ShpRead

Export determination: 6.

Rationale: CHG: get svn to ignore some files

**Change #12** with diff file ISSM-16570-16571.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: Hacking the convergence criterion when the sediment layer is empty

**Change #13** with diff file ISSM-16571-16572.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/paraview/exportVTK.m

Export determination: 6.

Rationale: Fixing timestep issues for results with different number of time step

**Change #14** with diff file ISSM-16572-16573.diff:

Function name:

M /issm/trunk-jpl/src/m/Makefile.am

Export determination: 6.

Rationale: CHG: add issmversion to bin/

**Change #15** with diff file ISSM-16573-16574.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: fixed memory leaks

**Change #16** with diff file ISSM-16574-16575.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed wrong Enum

**Change #17** with diff file ISSM-16575-16576.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4

Export determination: 6.

Rationale: CHG: minor change in date if not found

**Change #18** with diff file ISSM-16576-16577.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/inversion.m

Export determination: 6.  
Rationale: CHG: taoinversion and inversion have now the same cost\_functions

**Change #19** with diff file ISSM-16577-16578.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py  
Export determination: 6.  
Rationale: CHG: extrude thickness\_obs also

**Change #20** with diff file ISSM-16578-16579.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: CHG: new configuration for pleiades gcc

**Change #21** with diff file ISSM-16579-16580.diff:  
Function name:  
M /issm/trunk-jpl/configs/config-linux64-pleiades-mpi-gcc.sh  
Export determination: 6.  
Rationale: NEW: new config for mpi runs on pleiades, using our own mpi.

**Change #22** with diff file ISSM-16580-16581.diff:  
Function name:  
A /issm/trunk-jpl/externalpackages/adjoinablempi/install-pleiades-gcc.sh  
Export determination: 6.  
Rationale: CHG: pleiades gcc adjoinable mpi

**Change #23** with diff file ISSM-16581-16582.diff:  
Function name:  
M /issm/trunk-jpl/etc/environment.csh  
Export determination: 6.  
Rationale: CHG: fixed environment for mpich

**Change #24** with diff file ISSM-16582-16583.diff:

Function name:

M /issm/trunk-jpl/externalpackages/mpich/install-2.1.5-linux64.sh

Export determination: 6.

Rationale: CHG: N/A

**Change #25** with diff file ISSM-16583-16584.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.4-pleiades-mpich2.sh

Export determination: 6.

Rationale: NEW: config for pleiades.

**Change #26** with diff file ISSM-16584-16585.diff:

Function name:

M /issm/trunk-jpl/externalpackages/modules/install-macosx64.sh

Export determination: 6.

Rationale: CHG: minor

**Change #27** with diff file ISSM-16585-16586.diff:

Function name:

M /issm/trunk-jpl/externalpackages/adjoinablempi/install-pleiades-gcc.sh M /issm/trunk-jpl/externalpackages/adolc/install-withampi-pleiades-gcc.sh

Export determination: 6.

Rationale: CHG: adjustments on pleiades using mpich (our own) and gcc 4.7.0

**Change #28** with diff file ISSM-16586-16587.diff:

Function name:

A /issm/trunk-jpl/configs/config-linux64-pleiades-intel2012.0.032-mpt.2.06rp16.sh

A /issm/trunk-jpl/externalpackages/petsc/install-3.4-pleiades-intel2012.0.032-mpt.2.06rp16

Export determination: 6.

Rationale: NEW: new configuration files for a pleiades intel compile using a certain set of compilers.



**Change #29** with diff file ISSM-16587-16588.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/discover.m

Export determination: 6.

Rationale: CHG: update to SLURM script type

**Change #30** with diff file ISSM-16588-16589.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/discover.m

Export determination: 6.

Rationale: CHG: update to SLURM script type

**Change #31** with diff file ISSM-16589-16590.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/classes/ExternalResults/GenericExternalResult.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp

Export determination: 6.

Rationale: CHG: make external results active, otherwise we have an issue with MPI type in ADOLC related operations.

**Change #32** with diff file ISSM-16590-16591.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnum

M /issm/trunk-jpl/src/m/classes/matice.m M /issm/trunk-jpl/src/m/classes/matice.py

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/MaterialsTemperatureIceConductivity

M /issm/trunk-jpl/test/Archives/Archive120.nc M /issm/trunk-jpl/test/Archives/Archive121.nc

M /issm/trunk-jpl/test/Archives/Archive122.nc M /issm/trunk-jpl/test/Archives/Archive325.nc

M /issm/trunk-jpl/test/Archives/Archive326.nc M /issm/trunk-jpl/test/Archives/Archive327.nc

M /issm/trunk-jpl/test/Archives/Archive431.nc M /issm/trunk-jpl/test/Archives/Archive432.nc

Export determination: 6.

Rationale: ADD: thermal conductivity of temperate ice "materials.temperateiceconductivity", minor bugs

**Change #33** with diff file ISSM-16591-16592.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h

M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

M /issm/trunk-jpl/src/c/main/issm.cpp M /issm/trunk-jpl/src/c/modules/OutputResultsx/OutputResultsx.c

M /issm/trunk-jpl/src/c/modules/OutputResultsx/OutputResultsx.h

Export determination: 6.

Rationale: CHG: simplifying prototype for OutputResultsx

**Change #34** with diff file ISSM-16592-16593.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/solutionsequences/soluti

M /issm/trunk-jpl/src/m/classes/clusters/greenplanet.m M /issm/trunk-jpl/src/m/contrib/paraview/exportV

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/EplHeadSlopeXEnum.m

A /issm/trunk-jpl/src/m/enum/EplHeadSlopeYEnum.m M /issm/trunk-jpl/src/m/plot/plot\_contour.m

Export determination: 6.

Rationale: Adding a slope computation for the EPL head

**Change #35** with diff file ISSM-16593-16594.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG:Adapt IceVolume routine to work for 2D Flowline mesh

**Change #36** with diff file ISSM-16594-16595.diff:

Function name:

A /issm/trunk-jpl/scripts/jenkins.sh

Export determination: 6.

Rationale: CHG new nightly system using jenkins, testing

**Change #37** with diff file ISSM-16595-16596.diff:

Function name:

M /issm/trunk-jpl/scripts/jenkins.sh

Export determination: 6.  
Rationale: CHG: no nightly locks on this type of checks

**Change #38** with diff file ISSM-16596-16597.diff:  
Function name:  
M /issm/trunk-jpl/scripts/jenkins.sh  
Export determination: 6.  
Rationale: CHG: we do not manage svn

**Change #39** with diff file ISSM-16597-16598.diff:  
Function name:  
M /issm/trunk-jpl/scripts/jenkins.sh  
Export determination: 6.  
Rationale: CHG: duplicate logs

**Change #40** with diff file ISSM-16598-16599.diff:  
Function name:  
M /issm/trunk-jpl/scripts/jenkins.sh  
Export determination: 6.  
Rationale: CHG: forgot to tee the logs

**Change #41** with diff file ISSM-16599-16600.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp  
Export determination: 6.  
Rationale: CHG: moving analysis specific parameters to their file

**Change #42** with diff file ISSM-16600-16601.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h  
M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.  
M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo  
M /issm/trunk-jpl/src/m/classes/hydrologydc.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
A /issm/trunk-jpl/src/m/enum/HydrologydcPenaltyLockEnum.m  
Export determination: 6.  
Rationale: Adding a ZigZag lock for hydrology and framing the variable thick-  
ness of the EPL

**Change #43** with diff file ISSM-16601-16602.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp

Export determination: 6.

Rationale: BUG: reverted some changes for fix NR

**Change #44** with diff file ISSM-16602-16603.diff:

Function name:

A /issm/trunk-jpl/externalpackages/shell2junit A /issm/trunk-jpl/externalpackages/shell2junit/README

A /issm/trunk-jpl/externalpackages/shell2junit/install.sh A /issm/trunk-jpl/externalpackages/shell2junit/shel  
1.0.0.zip

Export determination: 6.

Rationale: NEW: new shell2junit script for integration within Jenkins

**Change #45** with diff file ISSM-16603-16604.diff:

Function name:

M /issm/trunk-jpl/externalpackages/shell2junit M /issm/trunk-jpl/externalpackages/shell2junit/install.sh

Export determination: 6.

Rationale: CHG: get svn to ignore some files. Also streamline installation so  
we don't have the examples installed in the prefix target.

**Change #46** with diff file ISSM-16604-16605.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/

Export determination: 6.

Rationale: CHG: moving Enthalpy parameters to EnthalpyAnalysis

**Change #47** with diff file ISSM-16605-16606.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

Export determination: 6.

Rationale: BUG: missing additional parameter (parameters-¿AddObject(iomodel-¿CopyConstantObject(ThermalPenaltyFactorEnum));)

**Change #48** with diff file ISSM-16606-16607.diff:

Function name:

D /issm/trunk-jpl/scripts/jenkins.sh

Export determination: 6.

Rationale: CHG: moved jenkins.sh to issm-jpl

**Change #49** with diff file ISSM-16607-16608.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

Export determination: 6.

Rationale: BUG: spcvz converted twice from m/yr to m/s

**Change #50** with diff file ISSM-16608-16609.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test1106.m M /issm/trunk-jpl/test/NightlyRun/test1108.m

M /issm/trunk-jpl/test/NightlyRun/test1110.m M /issm/trunk-jpl/test/NightlyRun/test1208.m

M /issm/trunk-jpl/test/NightlyRun/test212.m

Export determination: 6.

Rationale: CHG: updated tolerances

**Change #51** with diff file ISSM-16609-16610.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive1502.nc M /issm/trunk-jpl/test/NightlyRun/test1502.m

Export determination: 6.

Rationale: BUG: fixed NR test1502 with archive

**Change #52** with diff file ISSM-16610-16611.diff:

Function name:

M /issm/trunk-jpl/externalpackages/mpich/install-3.0-macosx64.sh

Export determination: 6.

Rationale: CHG: no need to use llvm-gcc most of the time

**Change #53** with diff file ISSM-16611-16612.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp

Export determination: 6.

Rationale: BUG: slope was not recomputed if already in inputs

**Change #54** with diff file ISSM-16612-16613.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp M /issm/trunk-jpl/src/c/cores/stressbalance\_core.c

M /issm/trunk-jpl/src/c/cores/surfaceslope\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions

M /issm/trunk-jpl/src/c/shared/Enum/EnumToString.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: CHG: several changes regarding surface normal velocity computation at free surface for 2D vertical transient run

**Change #55** with diff file ISSM-16613-16614.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: added note for hack

**Change #56** with diff file ISSM-16614-16615.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions

Export determination: 6.

Rationale: BUG: ThermalSolution and SteadystateSolution give same results  
now. ADD: thermal conductivity at CTS is calculated using harmonic mean.

**Change #57** with diff file ISSM-16615-16616.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive120.nc M /issm/trunk-jpl/test/Archives/Archive121.nc  
M /issm/trunk-jpl/test/Archives/Archive122.nc M /issm/trunk-jpl/test/Archives/Archive325.nc  
M /issm/trunk-jpl/test/Archives/Archive326.nc M /issm/trunk-jpl/test/Archives/Archive327.nc  
M /issm/trunk-jpl/test/Archives/Archive431.nc M /issm/trunk-jpl/test/Archives/Archive432.nc

Export determination: 6.

Rationale: CHG: update archives enthalpy

**Change #58** with diff file ISSM-16616-16617.diff:

Function name:

A /issm/trunk-jpl/jenkins A /issm/trunk-jpl/jenkins/imac A /issm/trunk-jpl/jenkins/jenkins.sh  
A /issm/trunk-jpl/jenkins/linux64\_larsen A /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: jenkins configuration needs to be in trunk

**Change #59** with diff file ISSM-16617-16618.diff:

Function name:

A /issm/trunk-jpl/jenkins/execute\_shell

Export determination: 6.

Rationale: CHG: execute shell

**Change #60** with diff file ISSM-16618-16619.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_larsen M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: some testing

**Change #61** with diff file ISSM-16619-16620.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac

Export determination: 6.

Rationale: CHG: no need to install packages

**Change #62** with diff file ISSM-16620-16621.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/matice.m

Export determination: 6.

Rationale: Correction on matice display

**Change #63** with diff file ISSM-16621-16622.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

M /issm/trunk-jpl/test/Archives/Archive120.nc M /issm/trunk-jpl/test/Archives/Archive121.nc

M /issm/trunk-jpl/test/Archives/Archive122.nc M /issm/trunk-jpl/test/Archives/Archive325.nc

M /issm/trunk-jpl/test/Archives/Archive326.nc M /issm/trunk-jpl/test/Archives/Archive327.nc

M /issm/trunk-jpl/test/Archives/Archive431.nc M /issm/trunk-jpl/test/Archives/Archive432.nc

Export determination: 6.

Rationale: CHG: Added harmonic mean for better convergence of steadystate and transient solver when handling a jump in enthalpy conductivity

**Change #64** with diff file ISSM-16622-16623.diff:

Function name:

M /issm/trunk-jpl/jenkins/execute\_shell

Export determination: 6.

Rationale: CHG: changed name

**Change #65** with diff file ISSM-16623-16624.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m

Export determination: 6.

Rationale: CHG: verbose runme more so jenkins can pick up the logs



**Change #66** with diff file ISSM-16624-16625.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m

Export determination: 6.

Rationale: CHG: further changes to the runme to verbose for jenkins.

**Change #67** with diff file ISSM-16625-16626.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m

Export determination: 6.

Rationale: CHG: corrected printing bug.

**Change #68** with diff file ISSM-16626-16627.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh

Export determination: 6.

Rationale: CHG: better handling of test results.

**Change #69** with diff file ISSM-16627-16628.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: added dakota build

**Change #70** with diff file ISSM-16628-16629.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: better name convention for juLogging

**Change #71** with diff file ISSM-16629-16630.diff:

Function name:

M /issm/trunk-jpl/externalpackages/shell2junit/install.sh A /issm/trunk-jpl/externalpackages/shell2junit/inst

A /issm/trunk-jpl/externalpackages/shell2junit/patch A /issm/trunk-jpl/externalpackages/shell2junit/patch/s  
Export determination: 6.  
Rationale: CHG: starting patches

**Change #72** with diff file ISSM-16630-16631.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/linux64\_murdo  
Export determination: 6.  
Rationale: CHG: testing new julog script

**Change #73** with diff file ISSM-16631-16632.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: missing argument for juLog argument test

**Change #74** with diff file ISSM-16632-16633.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: get the right pwd for juLog processing

**Change #75** with diff file ISSM-16633-16634.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/shell2junit/patch/sh2ju.sh  
Export determination: 6.  
Rationale: CHG: better naming conventions for sh2ju.sh

**Change #76** with diff file ISSM-16634-16635.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/shell2junit/patch/sh2ju.sh  
Export determination: 6.  
Rationale: CHG: better name for the tests

**Change #77** with diff file ISSM-16635-16636.diff:

Function name:

M /issm/trunk-jpl/externalpackages/shell2junit/patch/sh2ju.sh

Export determination: 6.

Rationale: CHG: better name for the tests

**Change #78** with diff file ISSM-16636-16637.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: use EnthalpyPicard for Enthalpy non linear iterations

**Change #79** with diff file ISSM-16637-16638.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateSingleNodeToElementConnectivity.cpp

Export determination: 6.

Rationale: BUG: elementwidth not supported for 2dvertical

**Change #80** with diff file ISSM-16638-16639.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Material.h M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

M /issm/trunk-jpl/src/c/modules/InputDuplicatex/InputDuplicatex.cpp M /issm/trunk-

jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/solutionsequences/soluti

M /issm/trunk-jpl/src/m/classes/hydrologydc.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

A /issm/trunk-jpl/src/m/enum/HydrologydcEplConductivityEnum.m A /issm/trunk-

jpl/src/m/enum/HydrologydcEplThicknessOldEnum.m

Export determination: 6.

Rationale: modifying the hydro solver to take into account a variable EPL thick-  
ness

**Change #81** with diff file ISSM-16639-16640.diff:

Function name:

D /issm/trunk-jpl/src/m/enum/HydrologydcEplTransmitivityEnum.m

Export determination: 6.

Rationale: removing unused Enum

**Change #82** with diff file ISSM-16640-16641.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: fixing typo

**Change #83** with diff file ISSM-16641-16642.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp

Export determination: 6.

Rationale: CHG: updated statement

**Change #84** with diff file ISSM-16642-16643.diff:

Function name:

M /issm/trunk-jpl/externalpackages/shell2junit/patch/sh2ju.sh

Export determination: 6.

Rationale: CHG: testing various echos on sh2ju.sh

**Change #85** with diff file ISSM-16643-16644.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: more jenkins testing

**Change #86** with diff file ISSM-16644-16645.diff:

Function name:

M /issm/trunk-jpl/externalpackages/shell2junit/patch/sh2ju.sh

Export determination: 6.

Rationale: CHG: testing various echos on sh2ju.sh

**Change #87** with diff file ISSM-16645-16646.diff:

Function name:

M /issm/trunk-jpl/externalpackages/shell2junit/patch/sh2ju.sh

Export determination: 6.

Rationale: CHG: testing various echos on sh2ju.sh

**Change #88** with diff file ISSM-16646-16647.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: exploring new configurations for jenkins

**Change #89** with diff file ISSM-16647-16648.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: forgot to condense matrix

**Change #90** with diff file ISSM-16648-16649.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: do not forget to collapse p if MINI condensed

**Change #91** with diff file ISSM-16649-16650.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test333.m M /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.  
Rationale: updating hydrological tests

**Change #92** with diff file ISSM-16650-16651.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.

Rationale: CHG: updated tolerances

**Change #93** with diff file ISSM-16651-16652.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh

Export determination: 6.

Rationale: CHG: better formatting of jenkins test results

**Change #94** with diff file ISSM-16652-16653.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac M /issm/trunk-jpl/jenkins/linux64\_larsen M  
/issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: configuration changes

**Change #95** with diff file ISSM-16653-16654.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/Params/BoolParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/DoubleParam.cpp M /issm/trunk-jpl/src/c/classes/Params/FileParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/IntParam.cpp M /issm/trunk-jpl/src/c/classes/Params/StringParam.cpp

Export determination: 6.

Rationale: CHG: better Echo formatting

**Change #96** with diff file ISSM-16654-16655.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive120.nc M /issm/trunk-jpl/test/Archives/Archive122.nc

M /issm/trunk-jpl/test/Archives/Archive325.nc M /issm/trunk-jpl/test/Archives/Archive431.nc

M /issm/trunk-jpl/test/Archives/Archive432.nc

Export determination: 6.

Rationale: CHG: updated archives enthalpy

**Change #97** with diff file ISSM-16655-16656.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Params/BoolParam.cpp M /issm/trunk-jpl/src/c/classes/Params/DataSetPa

M /issm/trunk-jpl/src/c/classes/Params/DoubleParam.cpp M /issm/trunk-jpl/src/c/classes/Params/DoubleV

M /issm/trunk-jpl/src/c/classes/Params/FileParam.cpp M /issm/trunk-jpl/src/c/classes/Params/IntParam.c

M /issm/trunk-jpl/src/c/classes/Params/StringArrayParam.cpp M /issm/trunk-

jpl/src/c/classes/Params/StringParam.cpp

Export determination: 6.

Rationale: CHG: even better formatting

**Change #98** with diff file ISSM-16656-16657.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.

M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.cp

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.cpp

M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp

Export determination: 6.

Rationale: CHG: Echo better formatting

**Change #99** with diff file ISSM-16657-16658.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/classes/matrix/ElementMatrix.cpp

Export determination: 6.

Rationale: BUG: constraints need to be applied even if node is clone

**Change #100** with diff file ISSM-16658-16659.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/matrix/ElementMatrix.cpp  
Export determination: 6.  
Rationale: CHG: reverting back

**Change #101** with diff file ISSM-16659-16660.diff:

Function name:  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp  
Export determination: 6.  
Rationale: adding an Enum for slope computation in EPL

**Change #102** with diff file ISSM-16660-16661.diff:

Function name:  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/L2ProjectionEPLAnalys  
Export determination: 6.  
Rationale: adding an Enum for slope computation in EPL

**Change #103** with diff file ISSM-16661-16662.diff:

Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: adding a new capability to skip externalpackage install if  
nothing was modified

**Change #104** with diff file ISSM-16662-16663.diff:

Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: more involved checks on external packages install

**Change #105** with diff file ISSM-16663-16664.diff:

Function name:



M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: took out some debug statements

**Change #106** with diff file ISSM-16664-16665.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: better use of svnversion script

**Change #107** with diff file ISSM-16665-16666.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: refining jenkins way of checking externalpackages installs.

**Change #108** with diff file ISSM-16666-16667.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: missing sourcing of environment

**Change #109** with diff file ISSM-16667-16668.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: failsafe for failed externalpackages installs

**Change #110** with diff file ISSM-16668-16669.diff:  
Function name:  
A /issm/trunk-jpl/src/m/enum/SurfaceNormalVelocityEnum.m  
Export determination: 6.  
Rationale: CHG: add SurfaceNormalVelocityEnum.m

**Change #111** with diff file ISSM-16669-16670.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

Export determination: 6.

Rationale: changinig enum order

**Change #112** with diff file ISSM-16670-16671.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: changinig enum order

**Change #113** with diff file ISSM-16671-16672.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_larsen M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: boost dir missing

**Change #114** with diff file ISSM-16672-16673.diff:

Function name:

D /issm/trunk-jpl/jenkins/imac A /issm/trunk-jpl/jenkins/imac-012301-gil (from  
/issm/trunk-jpl/jenkins/imac:16671)

Export determination: 6.

Rationale: CHG: new configuration name for imac machine

**Change #115** with diff file ISSM-16673-16674.diff:

Function name:

M /issm/trunk-jpl/jenkins/execute\_shell

Export determination: 6.

Rationale: CHG: new name of configuration

**Change #116** with diff file ISSM-16674-16675.diff:

Function name:

M /issm/trunk-jpl/jenkins/execute\_shell

Export determination: 6.

Rationale: CHG: introducing ad runs

**Change #117** with diff file ISSM-16675-16676.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/Analysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h M /issm/trunk-jpl/src/c/classes/Inputs/Input.h  
M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h  
A /issm/trunk-jpl/src/c/classes/gauss/Gauss.h M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.cpp  
M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.h M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.cpp  
M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.h M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.cpp  
M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.h M /issm/trunk-jpl/src/c/classes/gauss/gaussobjects.h  
M /issm/trunk-jpl/src/c/modules/GetSolutionFromInputsx/GetSolutionFromInputsx.cpp  
M /issm/trunk-jpl/src/c/modules/GetSolutionFromInputsx/GetSolutionFromInputsx.h  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/toolkits/objects/Matrix  
M /issm/trunk-jpl/src/c/toolkits/objects/Solver.h M /issm/trunk-jpl/src/c/toolkits/objects/Vector.h  
Export determination: 6.  
Rationale: NEW: moved GetSolutionFromInputs from Element to analysis

**Change #118** with diff file ISSM-16676-16677.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: forgot brackets around vz\_input

**Change #119** with diff file ISSM-16677-16678.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed failures in NR

**Change #120** with diff file ISSM-16678-16679.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: fixed errors in UpdateSolutionFromInput for L1L2

**Change #121** with diff file ISSM-16679-16680.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/GaussPentaEnum.m  
A /issm/trunk-jpl/src/m/enum/GaussSegEnum.m A /issm/trunk-jpl/src/m/enum/GaussTriaEnum.m

Export determination: 6.

Rationale: Sync'ed Enum

**Change #122** with diff file ISSM-16680-16681.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed solution from inputs for tiling

**Change #123** with diff file ISSM-16681-16682.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: DEL: removed GetSolutionFromInputs from element

**Change #124** with diff file ISSM-16682-16683.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: L1L2 solution from input was not using inputs

**Change #125** with diff file ISSM-16683-16684.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive434.nc  
Export determination: 6.  
Rationale: CHG: updated l1l2 tolerance for improved solution from input

**Change #126** with diff file ISSM-16684-16685.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/Analysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h  
Export determination: 6.  
Rationale: NEW: moving InputUpdateFromSolution from element to analysis

**Change #127** with diff file ISSM-16685-16686.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp  
A /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h M /issm/trunk-jpl/src/c/analyses/analyses.h  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h  
M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h  
Export determination: 6.

Rationale: Adding stuff to compute Epl slopes only on active EPL

**Change #128** with diff file ISSM-16686-16687.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h  
Export determination: 6.

Rationale: Bug: Adding new function in L2ProjectionEPLAnalysis

**Change #129** with diff file ISSM-16687-16688.diff:

Function name:

M /issm/trunk-jpl/jenkins/execute\_shell A /issm/trunk-jpl/jenkins/execute\_shell.ad  
Export determination: 6.

Rationale: CHG: new configuration for ad runs on murdo

**Change #130** with diff file ISSM-16688-16689.diff:

Function name:

A /issm/trunk-jpl/jenkins/linux64\_murdo\_ad A /issm/trunk-jpl/jenkins/linux64\_murdo\_ampi  
Export determination: 6.

Rationale: CHG: configuration files for linux murdo automatic differentiation runs

**Change #131** with diff file ISSM-16689-16690.diff:

Function name:

M /issm/trunk-jpl/jenkins/execute\_shell.ad  
Export determination: 6.  
Rationale: CHG: slight mode in vairable name

**Change #132** with diff file ISSM-16690-16691.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: adding isefficient test in L2ProjectionEPLAnalysis

**Change #133** with diff file ISSM-16691-16692.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG Removing debug printf

**Change #134** with diff file ISSM-16692-16693.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_murdo.ad M /issm/trunk-jpl/jenkins/linux64\_murdo\_ampi

Export determination: 6.

Rationale: CHG: commi missing shell2junit package

**Change #135** with diff file ISSM-16693-16694.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: working on InputUpdateFromSolutionHoriz



**Change #136** with diff file ISSM-16694-16695.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: fixinf enum order

**Change #137** with diff file ISSM-16695-16696.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.h

Export determination: 6.

Rationale: CHG: added header file Analysis.h

**Change #138** with diff file ISSM-16696-16697.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.cpp

Export determination: 6.

Rationale: CHG: preparing analysis orientation

**Change #139** with diff file ISSM-16697-16698.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h

Export determination: 6.

Rationale: CHG: do not get Matpar pointer, use GetMaterialParameter instead

**Change #140** with diff file ISSM-16698-16699.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: working on UpdateInputFromSolution

**Change #141** with diff file ISSM-16699-16700.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: added case in thermalanalysis

**Change #142** with diff file ISSM-16700-16701.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

Export determination: 6.

Rationale: NEW: added vertical solution for stressbalance analysis

**Change #143** with diff file ISSM-16701-16702.diff:

Function name:

A /issm/trunk-jpl/jenkins/parsing\_rules

Export determination: 6.

Rationale: NEW: parsing rules for jenkins

**Change #144** with diff file ISSM-16702-16703.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: fixed casting issue that was incompatible with AD compilation.

**Change #145** with diff file ISSM-16703-16704.diff:

Function name:  
M /issm/trunk-jpl/jenkins/linux64\_murdo\_ampi  
Export determination: 6.  
Rationale: CHG: fixed issue with prefix directory ill-specified

**Change #146** with diff file ISSM-16704-16705.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive3108.nc  
Export determination: 6.  
Rationale: CHG: changed tolerance for temperature runs in AD mode.

**Change #147** with diff file ISSM-16705-16706.diff:  
Function name:  
A /issm/trunk-jpl/jenkins/linux64\_murdo\_pythonandmatlab  
Export determination: 6.  
Rationale: CHG: trying matlab and python

**Change #148** with diff file ISSM-16706-16707.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: process python logs

**Change #149** with diff file ISSM-16707-16708.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/nose/install-linux64-python2.sh M /issm/trunk-jpl/externalpackages/nose/install-linux64-python3.sh M /issm/trunk-jpl/externalpackages/nose/install-macosx64-python2.sh M /issm/trunk-jpl/externalpackages/nose/install-macosx64-python3.sh  
Export determination: 6.  
Rationale: CHG: create empty install directory, so that jenkins can flag the install automatically

**Change #150** with diff file ISSM-16708-16709.diff:

Function name:

M /issm/trunk-jpl/externalpackages/nose/install-linux64-python3.sh M /issm/trunk-jpl/externalpackages/nose/install-macosx64-python2.sh M /issm/trunk-jpl/externalpackages/nose/install-macosx64-python3.sh M /issm/trunk-jpl/externalpackages/numpy/install-linux64.sh M /issm/trunk-jpl/externalpackages/numpy/install-macosx-lion.sh M /issm/trunk-jpl/externalpackages/numpy/install-macosx-mlion.sh M /issm/trunk-jpl/externalpackages/numpy/install-macosx-snowleopard.sh

Export determination: 6.

Rationale: CHG: create fake install directory for jenkins to pick up on.

**Change #151** with diff file ISSM-16709-16710.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh M /issm/trunk-jpl/test/NightlyRun/runme.py

Export determination: 6.

Rationale: CHG: get jenkins to do the logs nicely for python. Modify runme.py to display markers for each test.

**Change #152** with diff file ISSM-16710-16711.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.py

Export determination: 6.

Rationale: CHG: formatting error with print statement

**Change #153** with diff file ISSM-16711-16712.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_murdo D /issm/trunk-jpl/jenkins/linux64\_murdo\_pythonandmatlab

Export determination: 6.

Rationale: CHG: finished testing addition of python in tests

**Change #154** with diff file ISSM-16712-16713.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.

Rationale: CHG: updating archives for new hydrology solution

**Change #155** with diff file ISSM-16713-16714.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh

Export determination: 6.

Rationale: CHG: avoid python log processing if running exclusively in matlab

**Change #156** with diff file ISSM-16714-16715.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/greenplanet.m

Export determination: 6.

Rationale: BUG: uncommenting launchcommand

**Change #157** with diff file ISSM-16715-16716.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: moved InputUpdateFromSolution in analyses for Stokes

**Change #158** with diff file ISSM-16716-16717.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_linear.cpp

Export determination: 6.

Rationale: BUG: fixing bug in EPLDomain for L2 computation

**Change #159** with diff file ISSM-16717-16718.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
Export determination: 6.  
Rationale: NEW: moved SIA update from solution in analyses

**Change #160** with diff file ISSM-16718-16719.diff:

Function name:

M /issm/trunk-jpl/src/m/shp/shpwrite.m

Export determination: 6.

Rationale: CHG: more involved shp write shapes, polygon, line, etc ...

**Change #161** with diff file ISSM-16719-16720.diff:

Function name:

M /issm/trunk-jpl/etc/environment.csh M /issm/trunk-jpl/etc/environment.sh

Export determination: 6.

Rationale: CHG: added shell2junit environment variable

**Change #162** with diff file ISSM-16720-16721.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: adding mass transport in analyses

**Change #163** with diff file ISSM-16721-16722.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: working on mass transport analyses for extrusion of solution

**Change #164** with diff file ISSM-16722-16723.diff:

Function name:

M /issm/trunk-jpl/src/m/dev/devpath.py

Export determination: 6.

Rationale: CHG: add .libs path

**Change #165** with diff file ISSM-16723-16724.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

Export determination: 6.

Rationale: NEW: Adding an enum to deal with initial thickness of the EPL

**Change #166** with diff file ISSM-16724-16725.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/HydrologydcEplInitialTh

Export determination: 6.

Rationale: NEW: Adding an enum to deal with initial thickness of the EPL

**Change #167** with diff file ISSM-16725-16726.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h

M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

Export determination: 6.

Rationale: NEW: There is now an initial thickness for the EPL

**Change #168** with diff file ISSM-16726-16727.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/hydrologydc.m

Export determination: 6.

Rationale: NEW: There is now an initial thickness for the EPL

**Change #169** with diff file ISSM-16727-16728.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: BUG: fixed SSA InputUpdateFromSolution

**Change #170** with diff file ISSM-16728-16729.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp

Export determination: 6.

Rationale: CHG: balance thickness input from solution

**Change #171** with diff file ISSM-16729-16730.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp

Export determination: 6.

Rationale: NEW: extended new InputUpdateFromSolution to Thermal

**Change #172** with diff file ISSM-16730-16731.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test333.m M /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.

Rationale: BUG: Changing epl thickness name

**Change #173** with diff file ISSM-16731-16732.diff:

Function name:



A /issm/trunk-jpl/externalpackages/petsc/install-3.4-acenet.sh  
Export determination: 6.  
Rationale: NEW: added install-3.4-acenet.sh

**Change #174** with diff file ISSM-16732-16733.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/petsc/install-3.4-acenet.sh  
Export determination: 6.  
Rationale: CHG: added blas lapack to acenet

**Change #175** with diff file ISSM-16733-16734.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plot\_section.m  
Export determination: 6.  
Rationale: added an option to print the mean value of data along a section in  
sectionvalue plot

**Change #176** with diff file ISSM-16734-16735.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: adding Enthalpy GetInputFromSolution

**Change #177** with diff file ISSM-16735-16736.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: meshtype not recovered

**Change #178** with diff file ISSM-16736-16737.diff:  
Function name:

A /issm/trunk-jpl/configs/config-linux64-acenet.sh

Export determination: 6.

Rationale: config file for acenet

**Change #179** with diff file ISSM-16737-16738.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/acenet.m

Export determination: 6.

Rationale: BUG: need to source environment.sh otherwise issm.exe does not know where to find libpetsc.so

**Change #180** with diff file ISSM-16738-16739.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.

Rationale: CHG: new archives saved on larsen

**Change #181** with diff file ISSM-16739-16740.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: CHG: changes input update of thermal

**Change #182** with diff file ISSM-16740-16741.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TransientInputRef.cpp

Export determination: 6.

Rationale: NEW: trying to make TransientInput creation faster

**Change #183** with diff file ISSM-16741-16742.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.  
Rationale: CHG: reverting back, per Basile's request

**Change #184** with diff file ISSM-16742-16743.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp M /issm/trunk-jpl/src/c/cores/steadystate\_core.cpp  
M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp M /issm/trunk-jpl/src/c/cores/thermal\_core.cpp  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

Export determination: 6.

Rationale: BUG: fixing memory leaks (requested\_output needs to be freed)

**Change #185** with diff file ISSM-16743-16744.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: CHG: better B in enthalpy solution

**Change #186** with diff file ISSM-16744-16745.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp

Export determination: 6.

Rationale: BUG: fixing memory leaks (input needs to be freed)

**Change #187** with diff file ISSM-16745-16746.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: CHG: working on Thermal and Enthalpy input update from solution

**Change #188** with diff file ISSM-16746-16747.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.  
Rationale: CHG: fixing thermal and enthalpy

**Change #189** with diff file ISSM-16747-16748.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive111.nc M /issm/trunk-jpl/test/Archives/Archive121.nc  
M /issm/trunk-jpl/test/Archives/Archive122.nc M /issm/trunk-jpl/test/Archives/Archive207.nc  
M /issm/trunk-jpl/test/Archives/Archive209.nc M /issm/trunk-jpl/test/Archives/Archive210.nc  
M /issm/trunk-jpl/test/Archives/Archive211.nc M /issm/trunk-jpl/test/Archives/Archive224.nc  
M /issm/trunk-jpl/test/Archives/Archive225.nc M /issm/trunk-jpl/test/Archives/Archive227.nc  
M /issm/trunk-jpl/test/Archives/Archive232.nc M /issm/trunk-jpl/test/Archives/Archive233.nc  
M /issm/trunk-jpl/test/Archives/Archive237.nc M /issm/trunk-jpl/test/Archives/Archive315.nc  
M /issm/trunk-jpl/test/Archives/Archive317.nc M /issm/trunk-jpl/test/Archives/Archive318.nc  
M /issm/trunk-jpl/test/Archives/Archive324.nc M /issm/trunk-jpl/test/Archives/Archive326.nc  
M /issm/trunk-jpl/test/Archives/Archive327.nc M /issm/trunk-jpl/test/Archives/Archive329.nc  
M /issm/trunk-jpl/test/Archives/Archive409.nc M /issm/trunk-jpl/test/Archives/Archive410.nc  
M /issm/trunk-jpl/test/Archives/Archive411.nc M /issm/trunk-jpl/test/Archives/Archive415.nc  
M /issm/trunk-jpl/test/Archives/Archive416.nc M /issm/trunk-jpl/test/Archives/Archive431.nc  
M /issm/trunk-jpl/test/Archives/Archive432.nc M /issm/trunk-jpl/test/Archives/Archive505.nc  
M /issm/trunk-jpl/test/Archives/Archive506.nc M /issm/trunk-jpl/test/Archives/Archive507.nc  
M /issm/trunk-jpl/test/Archives/Archive508.nc M /issm/trunk-jpl/test/Archives/Archive509.nc  
M /issm/trunk-jpl/test/Archives/Archive510.nc M /issm/trunk-jpl/test/Archives/Archive513.nc  
M /issm/trunk-jpl/test/Archives/Archive515.nc

Export determination: 6.

Rationale: CHG: updated archives for B update for enthalpy and thermal, we  
now use real P1 Enum

**Change #190** with diff file ISSM-16748-16749.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed enthalpy analysis solution

**Change #191** with diff file ISSM-16749-16750.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.

Rationale: CHG: archives hydrology

**Change #192** with diff file ISSM-16750-16751.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: CHG: finished changes of InputUpdateFromSolution in enthalpy analysis

**Change #193** with diff file ISSM-16751-16752.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp

Export determination: 6.

Rationale: NEW: added InputUpdateFromSolution for AdjointHoriz

**Change #194** with diff file ISSM-16752-16753.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizA

Export determination: 6.

Rationale: CHG: added InputUpdateFromSolution for Adjoint Stokes

**Change #195** with diff file ISSM-16753-16754.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.c

M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp

Export determination: 6.

Rationale: CHG: added support for balance velocities and balance thickness

**Change #196** with diff file ISSM-16754-16755.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.c

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: extending new InputUpdateFromSolution to FS 2d

**Change #197** with diff file ISSM-16755-16756.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/m/solve/parsereultsfromdisk.m  
Export determination: 6.  
Rationale: NEW: do not save empty steps in results

**Change #198** with diff file ISSM-16756-16757.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.cpp  
Export determination: 6.  
Rationale: NEW: extended InputUpdateFromSolution for FS 2d

**Change #199** with diff file ISSM-16757-16758.diff:  
Function name:  
M /issm/trunk-jpl/src/m/contrib/paraview/exportVTK.m  
Export determination: 6.  
Rationale: BUG: changing lenght in numel to check vector size

**Change #200** with diff file ISSM-16758-16759.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.cpp  
Export determination: 6.  
Rationale: CHG : cleanup and change in mask update

**Change #201** with diff file ISSM-16759-16760.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixing update for adjoint FS

**Change #202** with diff file ISSM-16760-16761.diff:

Function name:  
M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.cpp  
Export determination: 6.  
Rationale: BUG: reverting back to previous version (still testing)

**Change #203** with diff file ISSM-16761-16762.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: extended InputUpdateFromSolution to Hydrology

**Change #204** with diff file ISSM-16762-16763.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: BUG: fixed issues for higher order elements and trying to get Tiling HO SSA to work

**Change #205** with diff file ISSM-16763-16764.diff:

Function name:  
D /issm/trunk-jpl/test/NightlyRun/testad.m

Export determination: 6.  
Rationale: CHG: not needed anymore

**Change #206** with diff file ISSM-16764-16765.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/autodiff.m M /issm/trunk-jpl/src/m/classes/autodiff.py  
M /issm/trunk-jpl/src/m/classes/balancethickness.m M /issm/trunk-jpl/src/m/classes/balancethickness.py  
M /issm/trunk-jpl/src/m/classes/basalforcings.m M /issm/trunk-jpl/src/m/classes/basalforcings.py  
M /issm/trunk-jpl/src/m/classes/constants.m M /issm/trunk-jpl/src/m/classes/constants.py  
M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/damage.py  
M /issm/trunk-jpl/src/m/classes/flaim.m M /issm/trunk-jpl/src/m/classes/flaim.py  
M /issm/trunk-jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py  
M /issm/trunk-jpl/src/m/classes/friction.m M /issm/trunk-jpl/src/m/classes/friction.py  
M /issm/trunk-jpl/src/m/classes/geometry.m M /issm/trunk-jpl/src/m/classes/geometry.py  
M /issm/trunk-jpl/src/m/classes/gia.m M /issm/trunk-jpl/src/m/classes/gia.py  
M /issm/trunk-jpl/src/m/classes/groundingline.m M /issm/trunk-jpl/src/m/classes/groundingline.py  
M /issm/trunk-jpl/src/m/classes/hydrologydc.m M /issm/trunk-jpl/src/m/classes/hydrologyshreve.m  
M /issm/trunk-jpl/src/m/classes/hydrologyshreve.py M /issm/trunk-jpl/src/m/classes/initialization.m  
M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/inversion.m  
M /issm/trunk-jpl/src/m/classes/inversion.py M /issm/trunk-jpl/src/m/classes/mask.m  
M /issm/trunk-jpl/src/m/classes/mask.py M /issm/trunk-jpl/src/m/classes/masstransport.m  
M /issm/trunk-jpl/src/m/classes/masstransport.py M /issm/trunk-jpl/src/m/classes/matice.m  
M /issm/trunk-jpl/src/m/classes/matice.py M /issm/trunk-jpl/src/m/classes/mesh.m  
M /issm/trunk-jpl/src/m/classes/mesh.py M /issm/trunk-jpl/src/m/classes/mesh2d.m  
M /issm/trunk-jpl/src/m/classes/mesh2d.py M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m  
M /issm/trunk-jpl/src/m/classes/miscellaneous.m M /issm/trunk-jpl/src/m/classes/miscellaneous.py  
M /issm/trunk-jpl/src/m/classes/outputdefinition.m M /issm/trunk-jpl/src/m/classes/outputdefinition.py  
M /issm/trunk-jpl/src/m/classes/settings.m M /issm/trunk-jpl/src/m/classes/settings.py  
M /issm/trunk-jpl/src/m/classes/snowpack.m M /issm/trunk-jpl/src/m/classes/spheremesh.m  
M /issm/trunk-jpl/src/m/classes/steadystate.m M /issm/trunk-jpl/src/m/classes/steadystate.py  
M /issm/trunk-jpl/src/m/classes/stressbalance.m M /issm/trunk-jpl/src/m/classes/stressbalance.py  
M /issm/trunk-jpl/src/m/classes/surfaceforcings.m M /issm/trunk-jpl/src/m/classes/surfaceforcings.py  
M /issm/trunk-jpl/src/m/classes/taoinversion.m M /issm/trunk-jpl/src/m/classes/thermal.m  
M /issm/trunk-jpl/src/m/classes/thermal.py M /issm/trunk-jpl/src/m/classes/timestepping.m  
M /issm/trunk-jpl/src/m/classes/timestepping.py M /issm/trunk-jpl/src/m/classes/transient.m  
M /issm/trunk-jpl/src/m/classes/transient.py M /issm/trunk-jpl/src/m/consistency/checkfield.m  
M /issm/trunk-jpl/src/m/consistency/checkfield.py M /issm/trunk-jpl/src/m/interp/averaging.py

Export determination: 6.

Rationale: CHG: checkfield could not run for massatfluggate or misfit classes, because these classes do not have access to their own fields through the model! So we modified checkfield.m and checkfield.py to accept either directly a field, or indirectly a fieldname which then is used to retrieve from the model.



**Change #207** with diff file ISSM-16765-16766.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/rifts.m

Export determination: 6.

Rationale: CHG: fixed bug in rifts check consistency

**Change #208** with diff file ISSM-16766-16767.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/rifts.py

Export determination: 6.

Rationale: CHG: fixed bug in rifts check consistency

**Change #209** with diff file ISSM-16767-16768.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions

A /issm/trunk-jpl/src/m/enum/MisfitModelEnum.m A /issm/trunk-jpl/src/m/enum/MisfitNameEnum.m

A /issm/trunk-jpl/src/m/enum/MisfitObservationsEnum.m A /issm/trunk-jpl/src/m/enum/MisfitTimeinterp

A /issm/trunk-jpl/src/m/enum/MisfitWeightsEnum.m

Export determination: 6.

Rationale: NEW: new enums for misfit class.

**Change #210** with diff file ISSM-16768-16769.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp M /issm/trunk-jpl/src/c/classes/IoModel.h

Export determination: 6.

Rationale: CHG: new fetch multiple data for integers.

**Change #211** with diff file ISSM-16769-16770.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: minor

**Change #212** with diff file ISSM-16770-16771.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp M /issm/trunk-jpl/src/c/classes/IoModel.h

Export determination: 6.

Rationale: CHG: added multiple integer vector fetch.

**Change #213** with diff file ISSM-16771-16772.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp

Export determination: 6.

Rationale: CHG: fixed simple bugs.

**Change #214** with diff file ISSM-16772-16773.diff:

Function name:

M /issm/trunk-jpl/src/m/exp/expdisp.m

Export determination: 6.

Rationale: NEW : modifying the way in which single points are plotted

**Change #215** with diff file ISSM-16773-16774.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: BUG: fixed InputUpdateFromSolution for SSA HO tiling

**Change #216** with diff file ISSM-16774-16775.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: NEW: working on HOFs

**Change #217** with diff file ISSM-16775-16776.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: fixinf HOFS coupling

**Change #218** with diff file ISSM-16776-16777.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: NEW: done with SSAFS InputUpdateFromSolution

**Change #219** with diff file ISSM-16777-16778.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed SIASSA coupling

**Change #220** with diff file ISSM-16778-16779.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: BUG: fixed leak, spawned element need to delete its materials

**Change #221** with diff file ISSM-16779-16780.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed memory leak

**Change #222** with diff file ISSM-16780-16781.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed pressure HO issue for higher order element (need to be on vertices and not nodes)

**Change #223** with diff file ISSM-16781-16782.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed memory leak

**Change #224** with diff file ISSM-16782-16783.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/Analysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h

Export determination: 6.

Rationale: NEW: preparing CreateKMatrix and PVector (empty for now)

**Change #225** with diff file ISSM-16783-16784.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Loads/Numericalflux.h M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.h M /issm/trunk-jpl/src/c/classes/Loads/Penpair.h M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.h M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h M /issm/trunk-jpl/src/c/classes/Update.h M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.cpp

Export determination: 6.

Rationale: NEW: InputUpdateFromSolution is now entirely done by analyses

**Change #226** with diff file ISSM-16784-16785.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.cpp

Export determination: 6.

Rationale: CHG: line not needed anymore

**Change #227** with diff file ISSM-16785-16786.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.  
Rationale: BUG: fixed bug in balance velocities

**Change #228** with diff file ISSM-16786-16787.diff:

Function name:  
M /issm/trunk-jpl/test/NightlyRun/test511.m  
Export determination: 6.  
Rationale: reducing number of cpus

**Change #229** with diff file ISSM-16787-16788.diff:

Function name:  
M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
A /issm/trunk-jpl/src/c/classes/Misfit.h M /issm/trunk-jpl/src/c/classes/classes.h  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateOutputDefinitions.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp M /issm/trunk-  
jpl/src/c/modules/ModelProcessorx/ModelProcessorx.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinit  
M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo  
A /issm/trunk-jpl/src/m/classes/misfit.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
D /issm/trunk-jpl/src/m/enum/MisfitModelEnum.m A /issm/trunk-jpl/src/m/enum/MisfitModelEnumEnum  
A /issm/trunk-jpl/src/m/enum/MisfitObservationEnum.m A /issm/trunk-jpl/src/m/enum/MisfitObservation  
D /issm/trunk-jpl/src/m/enum/MisfitObservationsEnum.m A /issm/trunk-jpl/src/m/enum/MisfitWeightsEnu  
A /issm/trunk-jpl/src/m/enum/SurfaceObservationEnum.m A /issm/trunk-jpl/src/m/enum/WeightsSurfaceO  
Export determination: 6.  
Rationale: CHG: new Misfit output definition. Adapted ModelProcessorx and  
CreateOutputDefinitions accordingly. Created enums that go with it. Also cre-  
ate misfit.m class to setup this specific output definition.

**Change #230** with diff file ISSM-16788-16789.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp  
Export determination: 6.  
Rationale: BUG+CHG: fixing a conditional jmp in pengrid and changing the  
way in which we deal with the active nodes for L2ProjectionEPL

**Change #231** with diff file ISSM-16789-16790.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.h

Export determination: 6.

Rationale: NEW: AddToGlobal and condensation now done by SystemMatrices

**Change #232** with diff file ISSM-16790-16791.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: do not delete Ke while reducing matrices

**Change #233** with diff file ISSM-16791-16792.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SurfaceAreax/SurfaceAreax.h

Export determination: 6.

Rationale: CHG: reduce header file include scope

**Change #234** with diff file ISSM-16792-16793.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Params/DataSetParam.h M /issm/trunk-jpl/src/c/classes/Params/Parameters.h  
M /issm/trunk-jpl/src/c/classes/Params/Parameters.h

Export determination: 6.

Rationale: CHG: making a new SetParam functionality in Parameters for DataSet-Param type objects.

**Change #235** with diff file ISSM-16793-16794.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Misfit.h

Export determination: 6.

Rationale: CHG: finished implementing an arbitrary misfit routine, which re-

turns the temporally and spatially averaged misfit of the model with respect to observations.

**Change #236** with diff file ISSM-16794-16795.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/OutputDefinitionsResponse/OutputDefinitionsResponse.cpp

Export determination: 6.

Rationale: CHG: changed the way OutputDefinitionsResponse retrieves the output definitions, so we can store information in the output definitions without it being wiped out the next time we call the corresponding response function.

**Change #237** with diff file ISSM-16795-16796.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive123.nc M /issm/trunk-jpl/test/NightlyRun/IdToName.m

A /issm/trunk-jpl/test/NightlyRun/test123.m

Export determination: 6.

Rationale: NEW: new test123 in Nightly Runs, to test the surface misfit in transient mode.

**Change #238** with diff file ISSM-16796-16797.diff:

Function name:

M /issm/trunk-jpl/externalpackages/gdal/install-1.10-macosx64.sh M /issm/trunk-jpl/externalpackages/gdal/install-1.6-macosx64.sh

Export determination: 6.

Rationale: CHG: better install, with in particular linking to the right libexpat.

**Change #239** with diff file ISSM-16797-16798.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh

Export determination: 6.

Rationale: CHG: PROJ.4 and libexpat pre and post- appending onto LD\_LIBRARY\_PATH

**Change #240** with diff file ISSM-16798-16799.diff:



Function name:

A /issm/trunk-jpl/src/m/coordsystems/gdaltransform.m

Export determination: 6.

Rationale: NEW: gdaltransform routine, to handle any type of projection!

**Change #241** with diff file ISSM-16799-16800.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h M /issm/trunk-jpl/src/c/classes/Inputs/Input.h M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h M /issm/trunk-jpl/src/c/classes/gauss/Gauss.h

Export determination: 6.

Rationale: CHG: moving Pvector in Analysis

**Change #242** with diff file ISSM-16800-16801.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: implementing PVector in analysis for SSA and removing CreateKMatrix(pf)

**Change #243** with diff file ISSM-16801-16802.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.h

M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.h M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.h  
Export determination: 6.  
Rationale: CHG: done with Driving stress SSA

**Change #244** with diff file ISSM-16802-16803.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

Export determination: 6.

Rationale: NEW: implementing TransformLoad

**Change #245** with diff file ISSM-16803-16804.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: done with SSA 3d

**Change #246** with diff file ISSM-16804-16805.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

Export determination: 6.

Rationale: CHG: some clean up

**Change #247** with diff file ISSM-16805-16806.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp

Export determination: 6.  
Rationale: NEW: working on FS

**Change #248** with diff file ISSM-16806-16807.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.m  
Export determination: 6.  
Rationale: CHG: error out if result is empty

**Change #249** with diff file ISSM-16807-16808.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: done with FS shelf

**Change #250** with diff file ISSM-16808-16809.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp  
Export determination: 6.  
Rationale: BUG: reverting back to working version

**Change #251** with diff file ISSM-16809-16810.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: NEW: done with Mass conservation CG and DG

**Change #252** with diff file ISSM-16810-16811.diff:  
Function name:

M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cp  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: done with thermal shelf

**Change #253** with diff file ISSM-16811-16812.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.h

Export determination: 6.

Rationale: NEW: PVector Balance thickness

**Change #254** with diff file ISSM-16812-16813.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h

Export determination: 6.

Rationale: NEW: working on wnthalpy

**Change #255** with diff file ISSM-16813-16814.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: BUG: fixed enthalpy

**Change #256** with diff file ISSM-16814-16815.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim  
Export determination: 6.  
Rationale: CHG: updated C syntax highlight

**Change #257** with diff file ISSM-16815-16816.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/independent.m M /issm/trunk-jpl/src/m/classes/independent.py

Export determination: 6.

Rationale: CHG: new checkfield routine in independent class.

**Change #258** with diff file ISSM-16816-16817.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/shared/Elements/DrainageFunction.h

M /issm/trunk-jpl/src/c/shared/Elements/LliboutryDuval.cpp M /issm/trunk-

jpl/test/Archives/Archive121.nc M /issm/trunk-jpl/test/Archives/Archive122.nc

M /issm/trunk-jpl/test/Archives/Archive325.nc M /issm/trunk-jpl/test/Archives/Archive326.nc

M /issm/trunk-jpl/test/Archives/Archive327.nc M /issm/trunk-jpl/test/Archives/Archive431.nc

M /issm/trunk-jpl/test/Archives/Archive432.nc

Export determination: 6.

Rationale: CHG: Drainage of waterfraction debugged. Drainage happens now  
in Penta::ComputeBasalMeltingrates()

**Change #259** with diff file ISSM-16817-16818.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence.h

Export determination: 6.

Rationale: CHG : clean up and change in the way we treat inactive nodes for  
the epl thickness computation

**Change #260** with diff file ISSM-16818-16819.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/Analysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.h M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h M /issm/trunk-jpl/src/c/classes/Inputs/Input.h  
M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h

Export determination: 6.

Rationale: NEW: CreateKMatrixSSA in analysis

**Change #261** with diff file ISSM-16819-16820.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp

Export determination: 6.

Rationale: CHG: add friction coefficient for some users

**Change #262** with diff file ISSM-16820-16821.diff:

Function name:

M /issm/trunk-jpl/src/m/consistency/checkfield.m

Export determination: 6.

Rationale: BUG: check that string row is a cell first

**Change #263** with diff file ISSM-16821-16822.diff:

Function name:

M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.m

Export determination: 6.

Rationale: BUG: skip field if not an object

**Change #264** with diff file ISSM-16822-16823.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: BUG: fixed loadmodel for older model where outputdefinition is not defined

**Change #265** with diff file ISSM-16823-16824.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: adding other sliding laws in SIA

**Change #266** with diff file ISSM-16824-16825.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: added ref

**Change #267** with diff file ISSM-16825-16826.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test508.m M /issm/trunk-jpl/test/NightlyRun/test508.py

M /issm/trunk-jpl/test/NightlyRun/test513.m M /issm/trunk-jpl/test/NightlyRun/test513.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #268** with diff file ISSM-16826-16827.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: SIA do not delete gauss before dealing with base

**Change #269** with diff file ISSM-16827-16828.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: done with CreateKMatrixVert

**Change #270** with diff file ISSM-16828-16829.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

Export determination: 6.

Rationale: CHG: minor clean up

**Change #271** with diff file ISSM-16829-16830.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: added KMatrix HO

**Change #272** with diff file ISSM-16830-16831.diff:

Function name:

M /issm/trunk-jpl/src/m/Makefile.am

Export determination: 6.

Rationale: CHG: Added the Python scripts from the interp directory to the install list.

**Change #273** with diff file ISSM-16831-16832.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h



M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: added FS KMatrix Shelf

**Change #274** with diff file ISSM-16832-16833.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: added mass transport

**Change #275** with diff file ISSM-16833-16834.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: added function to figure out if an element includes zero level  
set values

**Change #276** with diff file ISSM-16834-16835.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: some simplifications

**Change #277** with diff file ISSM-16835-16836.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
Export determination: 6.

Rationale: BUG: added N to GetMaterialParameter

**Change #278** with diff file ISSM-16836-16837.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: added B to GetMaterialParameter

**Change #279** with diff file ISSM-16837-16838.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: CHG: added error message when water fraction exceeds 100

**Change #280** with diff file ISSM-16838-16839.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: starting to move Front vectors in analysis

**Change #281** with diff file ISSM-16839-16840.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: moved ice front HO in analysis

**Change #282** with diff file ISSM-16840-16841.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cp  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: working on thermal KMatrix

**Change #283** with diff file ISSM-16841-16842.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing KMatrix Thermal

**Change #284** with diff file ISSM-16842-16843.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing transient term in KMatrix

**Change #285** with diff file ISSM-16843-16844.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/BalancethicknessAnalysis.h

Export determination: 6.

Rationale: NEW: done with bal H

**Change #286** with diff file ISSM-16844-16845.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-  
jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: FS front

**Change #287** with diff file ISSM-16845-16846.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: no need to be on bed

**Change #288** with diff file ISSM-16846-16847.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: Bug : Fixing issues in the epl gradient computation

**Change #289** with diff file ISSM-16847-16848.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizA

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: done with PVector Adjoint Horiz

**Change #290** with diff file ISSM-16848-16849.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo

A /issm/trunk-jpl/src/m/enum/DamageFEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: CHG: done with Damage evolution

**Change #291** with diff file ISSM-16849-16850.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: PVector SIA 2D

**Change #292** with diff file ISSM-16850-16851.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: PVector SIA 3d

**Change #293** with diff file ISSM-16851-16852.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

Export determination: 6.

Rationale: CHG: Adding an element active mask for the EPL

**Change #294** with diff file ISSM-16852-16853.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/HydrologydcMaskEplact A /issm/trunk-jpl/src/m/enum/HydrologydcMaskEplactiveNodeEnum.m M /issm/trunk-jpl/src/m/shp/Shp2Exp.m

Export determination: 6.

Rationale: CHG: Adding an element active mask for the EPL

**Change #295** with diff file ISSM-16853-16854.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp  
 Export determination: 6.  
 Rationale: NEW: PVector DC

**Change #296** with diff file ISSM-16854-16855.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: changing current enum of mask epl active to reflect the nodal characteristic

**Change #297** with diff file ISSM-16855-16856.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/hydrologydc.m

Export determination: 6.

Rationale: CHG: changing current enum of mask epl active to reflect the nodal characteristic

**Change #298** with diff file ISSM-16856-16857.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test333.m M /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.

Rationale: CHG : Changing the hydro runs to reflect the Enum change

**Change #299** with diff file ISSM-16857-16858.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: commenting printf

**Change #300** with diff file ISSM-16858-16859.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: minor

**Change #301** with diff file ISSM-16859-16860.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h  
Export determination: 6.  
Rationale: NEW: PVector L1L2

**Change #302** with diff file ISSM-16860-16861.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceS  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: NEW: bal vel PVector

**Change #303** with diff file ISSM-16861-16862.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.m  
Export determination: 6.  
Rationale: BUG : Fix related to Enum Name change

**Change #304** with diff file ISSM-16862-16863.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: Adjoint BalH

**Change #305** with diff file ISSM-16863-16864.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing some memory leaks

**Change #306** with diff file ISSM-16864-16865.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.cpp

Export determination: 6.

Rationale: CHG:Modification in the way we treat with the epl element mask

**Change #307** with diff file ISSM-16865-16866.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp

Export determination: 6.

Rationale: BUG: memory leak

**Change #308** with diff file ISSM-16866-16867.diff:



Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: added FS vertical

**Change #309** with diff file ISSM-16867-16868.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m

Export determination: 6.

Rationale: CHG: added stoponerror option to runme.m

**Change #310** with diff file ISSM-16868-16869.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: Bug in retrieving the epl mask input

**Change #311** with diff file ISSM-16869-16870.diff:

Function name:

A /issm/trunk-jpl/jenkins/windows.sh

Export determination: 6.

Rationale: CHG: adding windows platform

**Change #312** with diff file ISSM-16870-16871.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequen

Export determination: 6.

Rationale: BUG: Fixing issue with the epl mask when we use only one layer

**Change #313** with diff file ISSM-16871-16872.diff:

Function name:

A /issm/trunk-jpl/jenkins/windows (from /issm/trunk-jpl/jenkins/windows.sh:16869)

D /issm/trunk-jpl/jenkins/windows.sh

Export determination: 6.

Rationale: CHG: wrong name

**Change #314** with diff file ISSM-16872-16873.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: added SSA friction KMatrix in analysis

**Change #315** with diff file ISSM-16873-16874.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.h

Export determination: 6.

Rationale: CHG: changed friction's interface

**Change #316** with diff file ISSM-16874-16875.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: NEW: KMatrix friction SSA

**Change #317** with diff file ISSM-16875-16876.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/DamageEvolutionAnalysis.h

Export determination: 6.

Rationale: NEW: added KMatrix damage

**Change #318** with diff file ISSM-16876-16877.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizA  
M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: Adjoint SSA and SIA

**Change #319** with diff file ISSM-16877-16878.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil M /issm/trunk-jpl/jenkins/jenkins.sh  
M /issm/trunk-jpl/jenkins/linux64\_larsen M /issm/trunk-jpl/jenkins/linux64\_murdo  
M /issm/trunk-jpl/jenkins/linux64\_murdo.ad M /issm/trunk-jpl/jenkins/linux64\_murdo\_ampi  
M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: adjusting for hostnaames on cygwin and missing REPOSI-  
TORY environmental variable.

**Change #320** with diff file ISSM-16878-16879.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: refining windows platform settings

**Change #321** with diff file ISSM-16879-16880.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: install cccl compiler first.

**Change #322** with diff file ISSM-16880-16881.diff:

Function name:

M /issm/trunk-jpl/externalpackages/petsc/install-3.1-win7.sh

Export determination: 6.

Rationale: CHG: get petsc directory into cygwin compatible path.

**Change #323** with diff file ISSM-16881-16882.diff:

Function name:

M /issm/trunk-jpl/externalpackages/petsc/install-3.1-win7.sh

Export determination: 6.

Rationale: CHG: prefix directory also requires going through cygpath.

**Change #324** with diff file ISSM-16882-16883.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: NEW: done with friction

**Change #325** with diff file ISSM-16883-16884.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: forgot to install matlab.

**Change #326** with diff file ISSM-16884-16885.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: typo in windows jenkins configuration

**Change #327** with diff file ISSM-16885-16886.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows  
Export determination: 6.  
Rationale: CHG: using the new m4 mpi macros

**Change #328** with diff file ISSM-16886-16887.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: KMatrix Adjoint FS and HO

**Change #329** with diff file ISSM-16887-16888.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

Export determination: 6.

Rationale: BUG: Taking of EPLMaskELt from the output to avoid the P0  
interpolation on outputs (not implemented)

**Change #330** with diff file ISSM-16888-16889.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.

Export determination: 6.

Rationale: CHG: added Enthalpy but not working

**Change #331** with diff file ISSM-16889-16890.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceS

Export determination: 6.

Rationale: NEW: K matrix bal vel

**Change #332** with diff file ISSM-16890-16891.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: FS flowband

**Change #333** with diff file ISSM-16891-16892.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: wrong size to create Gauss point on front

**Change #334** with diff file ISSM-16892-16893.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/gauss/Gauss.h M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.h M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.h M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.h

Export determination: 6.

Rationale: NEW: KMatrix L1L2 (not working)

**Change #335** with diff file ISSM-16893-16894.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing problem with L1L2 friction

**Change #336** with diff file ISSM-16894-16895.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnal  
Export determination: 6.  
Rationale: BUG: fixing enthalpy (fabs not used in stabilization)

**Change #337** with diff file ISSM-16895-16896.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.  
Export determination: 6.  
Rationale: CHG: fixed Enthalpy

**Change #338** with diff file ISSM-16896-16897.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixing enthalpy KMatrix

**Change #339** with diff file ISSM-16897-16898.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: fixing thermal but still not there yet

**Change #340** with diff file ISSM-16898-16899.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixing stabilization=2 in thermal

**Change #341** with diff file ISSM-16899-16900.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAna  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

Export determination: 6.  
Rationale: CHG: preparing KMatrix Hydrology DC

**Change #342** with diff file ISSM-16900-16901.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.cpp

Export determination: 6.

Rationale: CHG : Changing the position of the transfer computation in Hydrologydc

**Change #343** with diff file ISSM-16901-16902.diff:

Function name:

A /issm/trunk-jpl/src/m/solvers/bcgsasmoptions.m A /issm/trunk-jpl/src/m/solvers/bcgslbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgsgamoptions.m A /issm/trunk-jpl/src/m/solvers/bcgsgasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgshypreoptions.m A /issm/trunk-jpl/src/m/solvers/bcgslbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgslasmoptions.m A /issm/trunk-jpl/src/m/solvers/bcgslbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgslgamoptions.m A /issm/trunk-jpl/src/m/solvers/bcgslgasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgslhypreoptions.m A /issm/trunk-jpl/src/m/solvers/bcgslbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgslmgoptions.m A /issm/trunk-jpl/src/m/solvers/bcgslbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgslsoroptions.m A /issm/trunk-jpl/src/m/solvers/bcgslmgoptions.m  
A /issm/trunk-jpl/src/m/solvers/bcgspbjacobioptions.m A /issm/trunk-jpl/src/m/solvers/bcgssoroptions.m  
A /issm/trunk-jpl/src/m/solvers/bicgasmoptions.m A /issm/trunk-jpl/src/m/solvers/bicgbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bicggamoptions.m A /issm/trunk-jpl/src/m/solvers/bicggasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/bicghypreoptions.m A /issm/trunk-jpl/src/m/solvers/bicgjbacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bicgmgoptions.m A /issm/trunk-jpl/src/m/solvers/bicgpbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/bicgsoroptions.m A /issm/trunk-jpl/src/m/solvers/cgasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/cgbjacobioptions.m A /issm/trunk-jpl/src/m/solvers/cggamoptions.m  
A /issm/trunk-jpl/src/m/solvers/cggasmoptions.m A /issm/trunk-jpl/src/m/solvers/cghypreoptions.m  
A /issm/trunk-jpl/src/m/solvers/cgjbacobioptions.m A /issm/trunk-jpl/src/m/solvers/cgmgoptions.m  
A /issm/trunk-jpl/src/m/solvers/cgneasmoptions.m A /issm/trunk-jpl/src/m/solvers/cgnebjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/cgnegamoptions.m A /issm/trunk-jpl/src/m/solvers/cgnegasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/cgnehypreoptions.m A /issm/trunk-jpl/src/m/solvers/cgnebjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/cgnemoptions.m A /issm/trunk-jpl/src/m/solvers/cgnepbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/cgnesoroptions.m A /issm/trunk-jpl/src/m/solvers/cgpbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/cgsasmoptions.m A /issm/trunk-jpl/src/m/solvers/cgsbjacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/cgsgamoptions.m A /issm/trunk-jpl/src/m/solvers/cgsgasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/cgshypreoptions.m A /issm/trunk-jpl/src/m/solvers/cgsjbacobioptions.m  
A /issm/trunk-jpl/src/m/solvers/cgsmgoptions.m A /issm/trunk-jpl/src/m/solvers/cgsoroptions.m  
A /issm/trunk-jpl/src/m/solvers/cgspbjacobioptions.m A /issm/trunk-jpl/src/m/solvers/cgssoroptions.m  
A /issm/trunk-jpl/src/m/solvers/conditionnumberoptions.m A /issm/trunk-jpl/src/m/solvers/crasmoptions.m





jpl/src/m/solvers/richardsongamoptions.m A /issm/trunk-jpl/src/m/solvers/richardsongasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/richardsonhypreoptions.m A /issm/trunk-jpl/src/m/solvers/richardsonjacobi  
A /issm/trunk-jpl/src/m/solvers/richardsonmoptions.m A /issm/trunk-jpl/src/m/solvers/richardsonpbjacobi  
A /issm/trunk-jpl/src/m/solvers/richardsonsoptions.m A /issm/trunk-jpl/src/m/solvers/stcgasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/stegbjacobioptions.m A /issm/trunk-jpl/src/m/solvers/stcggamoptions.m  
A /issm/trunk-jpl/src/m/solvers/stcggasmoptions.m A /issm/trunk-jpl/src/m/solvers/stcghypreoptions.m  
A /issm/trunk-jpl/src/m/solvers/stcgjacobiptions.m A /issm/trunk-jpl/src/m/solvers/stcgmoptions.m  
A /issm/trunk-jpl/src/m/solvers/stcgpbjacobiptions.m A /issm/trunk-jpl/src/m/solvers/stcgsorptions.m  
A /issm/trunk-jpl/src/m/solvers/symmlqasmoptions.m A /issm/trunk-jpl/src/m/solvers/symmlqbjacobioption  
A /issm/trunk-jpl/src/m/solvers/symmlqgamoptions.m A /issm/trunk-jpl/src/m/solvers/symmlqgasmoption  
A /issm/trunk-jpl/src/m/solvers/symmlqhypreoptions.m A /issm/trunk-jpl/src/m/solvers/symmlqjacobiption  
A /issm/trunk-jpl/src/m/solvers/symmlqmgoptions.m A /issm/trunk-jpl/src/m/solvers/symmlqpbjacobiption  
A /issm/trunk-jpl/src/m/solvers/symmlqsorptions.m A /issm/trunk-jpl/src/m/solvers/tfqmrasmoptions.m  
A /issm/trunk-jpl/src/m/solvers/tfqmrjbacobiptions.m A /issm/trunk-jpl/src/m/solvers/tfqmrgamoptions.m  
A /issm/trunk-jpl/src/m/solvers/tfqmrgasmoptions.m A /issm/trunk-jpl/src/m/solvers/tfqmrhypreoptions.m  
A /issm/trunk-jpl/src/m/solvers/tfqmrjacobiptions.m A /issm/trunk-jpl/src/m/solvers/tfqmrmgoptions.m  
A /issm/trunk-jpl/src/m/solvers/tfqmrpbjacobiptions.m A /issm/trunk-jpl/src/m/solvers/tfqmrsoptions.m  
Export determination: 6.

Rationale: PETSc Iterative solver combinations (i.e. preconditioner and iterative methods). Stick with default solver (i.e. MUMPS) for stability. Try one of the highlighted solvers (from the paper) for a larger model or faster solution. CAUTION: iterative methods are sensitive to boundary conditions (i.e. multi-point constraints can cause convergence problems). Feel free to customize these templates with specific PETSc options.

**Change #344** with diff file ISSM-16902-16903.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: commented out comment

**Change #345** with diff file ISSM-16903-16904.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

Export determination: 6.

Rationale: NEW: done with hydrology Shreve

**Change #346** with diff file ISSM-16904-16905.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

Export determination: 6.

Rationale: NEW: KMatrix Hydrology DC Eff

**Change #347** with diff file ISSM-16905-16906.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: in 2d zmin is actually ymin (same for max)

**Change #348** with diff file ISSM-16906-16907.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: cosmetics

**Change #349** with diff file ISSM-16907-16908.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: moving coupling SSAHO in analysis

**Change #350** with diff file ISSM-16908-16909.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: fixed SSAHO PVector Coupling Viscous

**Change #351** with diff file ISSM-16909-16910.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: added friction in analysis for coupling SSAHO

**Change #352** with diff file ISSM-16910-16911.diff:

Function name:

A /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: moving some functions from Tria and Penta to Element.cpp,  
because these functions do not depend on the type of element

**Change #353** with diff file ISSM-16911-16912.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am

Export determination: 6.

Rationale: BUG: forgot to commit new Makefile.am, which includes Element.cpp

**Change #354** with diff file ISSM-16912-16913.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: NEW: moving more stuff from Tria to Element.cpp

**Change #355** with diff file ISSM-16913-16914.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: moving stuff to Element.cpp

**Change #356** with diff file ISSM-16914-16915.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: moved more stuff to Element.cpp

**Change #357** with diff file ISSM-16915-16916.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: moved more stuff from Tria to Element.cpp

**Change #358** with diff file ISSM-16916-16917.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: moved more stuff from Tria to Element.cpp

**Change #359** with diff file ISSM-16917-16918.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh

Export determination: 6.

Rationale: CHG: adapted pathprepend and pathappend to adapt to cygwin conventions.

**Change #360** with diff file ISSM-16918-16919.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: Changing the initialization of the transfer to deal with single layer hydrology model

**Change #361** with diff file ISSM-16919-16920.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive111.nc M /issm/trunk-jpl/test/Archives/Archive207.nc  
M /issm/trunk-jpl/test/Archives/Archive209.nc M /issm/trunk-jpl/test/Archives/Archive210.nc  
M /issm/trunk-jpl/test/Archives/Archive211.nc M /issm/trunk-jpl/test/Archives/Archive224.nc  
M /issm/trunk-jpl/test/Archives/Archive225.nc M /issm/trunk-jpl/test/Archives/Archive227.nc  
M /issm/trunk-jpl/test/Archives/Archive232.nc M /issm/trunk-jpl/test/Archives/Archive233.nc  
M /issm/trunk-jpl/test/Archives/Archive237.nc M /issm/trunk-jpl/test/Archives/Archive315.nc  
M /issm/trunk-jpl/test/Archives/Archive317.nc M /issm/trunk-jpl/test/Archives/Archive318.nc  
M /issm/trunk-jpl/test/Archives/Archive324.nc M /issm/trunk-jpl/test/Archives/Archive329.nc  
M /issm/trunk-jpl/test/Archives/Archive410.nc M /issm/trunk-jpl/test/Archives/Archive411.nc  
M /issm/trunk-jpl/test/Archives/Archive415.nc M /issm/trunk-jpl/test/Archives/Archive416.nc  
M /issm/trunk-jpl/test/Archives/Archive505.nc M /issm/trunk-jpl/test/Archives/Archive506.nc  
M /issm/trunk-jpl/test/Archives/Archive507.nc M /issm/trunk-jpl/test/Archives/Archive508.nc  
M /issm/trunk-jpl/test/Archives/Archive509.nc M /issm/trunk-jpl/test/Archives/Archive510.nc  
M /issm/trunk-jpl/test/Archives/Archive513.nc M /issm/trunk-jpl/test/Archives/Archive515.nc

Export determination: 6.

Rationale: CHG: saving archive, changed GaussPenta from 2,3 to 3,3

**Change #362** with diff file ISSM-16920-16921.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: no need for autotools anymore, patched directly

**Change #363** with diff file ISSM-16921-16922.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/test/Archives/Archive121.nc  
M /issm/trunk-jpl/test/Archives/Archive122.nc M /issm/trunk-jpl/test/Archives/Archive285.nc  
M /issm/trunk-jpl/test/Archives/Archive325.nc M /issm/trunk-jpl/test/Archives/Archive326.nc  
M /issm/trunk-jpl/test/Archives/Archive327.nc M /issm/trunk-jpl/test/Archives/Archive333.nc  
M /issm/trunk-jpl/test/Archives/Archive335.nc M /issm/trunk-jpl/test/Archives/Archive409.nc  
M /issm/trunk-jpl/test/Archives/Archive426.nc M /issm/trunk-jpl/test/Archives/Archive427.nc  
M /issm/trunk-jpl/test/Archives/Archive431.nc M /issm/trunk-jpl/test/Archives/Archive432.nc  
M /issm/trunk-jpl/test/Archives/Archive455.nc M /issm/trunk-jpl/test/Archives/Archive516.nc

Export determination: 6.

Rationale: CHG: switching some gauss points from 2,3 to 3,3

**Change #364** with diff file ISSM-16922-16923.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

Export determination: 6.

Rationale: CHG: ViscosityFS now requires dim

**Change #365** with diff file ISSM-16923-16924.diff:

Function name:

M /issm/trunk-jpl/externalpackages/cccl/install-win7.sh

Export determination: 6.

Rationale: CHG: fix permission issue.

**Change #366** with diff file ISSM-16924-16925.diff:

Function name:

M /issm/trunk-jpl/externalpackages/cccl/install-win7.sh

Export determination: 6.

Rationale: CHG: better level of permission.

**Change #367** with diff file ISSM-16925-16926.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh

Export determination: 6.  
Rationale: CHG: check on compilation return!

**Change #368** with diff file ISSM-16926-16927.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: keep working on coupling PVectors

**Change #369** with diff file ISSM-16927-16928.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: more cpus on the new machine

**Change #370** with diff file ISSM-16928-16929.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: new FiscosityFS arguments

**Change #371** with diff file ISSM-16929-16930.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: minor

**Change #372** with diff file ISSM-16930-16931.diff:

Function name:



M /issm/trunk-jpl/externalpackages/shell2junit  
Export determination: 6.  
Rationale: CHG: get svn to ignore some files.

**Change #373** with diff file ISSM-16931-16932.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
Export determination: 6.  
Rationale: CHG: minor

**Change #374** with diff file ISSM-16932-16933.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
Export determination: 6.  
Rationale: CHG: finished PVector coupling HOFS

**Change #375** with diff file ISSM-16933-16934.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/windows  
Export determination: 6.  
Rationale: CHG: reverting back to 8 threads.

**Change #376** with diff file ISSM-16934-16935.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/execute\_shell  
Export determination: 6.  
Rationale: CHG: new execute shell that includes windows build.

**Change #377** with diff file ISSM-16935-16936.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/windows  
Export determination: 6.

Rationale: CHG: do not overwhelm the matlab license manager.

**Change #378** with diff file ISSM-16936-16937.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: CHG: KMatric coupling HO viscous

**Change #379** with diff file ISSM-16937-16938.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m

Export determination: 6.

Rationale: CHG: not needed anymore

**Change #380** with diff file ISSM-16938-16939.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test119.m M /issm/trunk-jpl/test/NightlyRun/test119.py  
M /issm/trunk-jpl/test/NightlyRun/test215.m M /issm/trunk-jpl/test/NightlyRun/test215.py  
M /issm/trunk-jpl/test/NightlyRun/test322.m M /issm/trunk-jpl/test/NightlyRun/test322.py  
M /issm/trunk-jpl/test/NightlyRun/test410.m M /issm/trunk-jpl/test/NightlyRun/test410.py  
M /issm/trunk-jpl/test/NightlyRun/test415.m M /issm/trunk-jpl/test/NightlyRun/test415.py  
M /issm/trunk-jpl/test/NightlyRun/test423.m M /issm/trunk-jpl/test/NightlyRun/test423.py  
M /issm/trunk-jpl/test/NightlyRun/test426.m M /issm/trunk-jpl/test/NightlyRun/test426.py  
M /issm/trunk-jpl/test/NightlyRun/test501.m M /issm/trunk-jpl/test/NightlyRun/test501.py  
M /issm/trunk-jpl/test/NightlyRun/test504.m M /issm/trunk-jpl/test/NightlyRun/test504.py  
M /issm/trunk-jpl/test/NightlyRun/test511.m M /issm/trunk-jpl/test/NightlyRun/test511.py  
M /issm/trunk-jpl/test/NightlyRun/test514.m M /issm/trunk-jpl/test/NightlyRun/test514.py  
M /issm/trunk-jpl/test/NightlyRun/test515.m M /issm/trunk-jpl/test/NightlyRun/test515.py  
M /issm/trunk-jpl/test/NightlyRun/test608.m M /issm/trunk-jpl/test/NightlyRun/test608.py  
M /issm/trunk-jpl/test/NightlyRun/test610.m M /issm/trunk-jpl/test/NightlyRun/test610.py  
M /issm/trunk-jpl/test/NightlyRun/test701.m M /issm/trunk-jpl/test/NightlyRun/test702.m

Export determination: 6.

Rationale: CHG: adjusting tolerances.

**Change #381** with diff file ISSM-16939-16940.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp

Export determination: 6.

Rationale: CHG: fixed assert.

**Change #382** with diff file ISSM-16940-16941.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: CHG: Added Pvector coupling SSAFS viscous and friction

**Change #383** with diff file ISSM-16941-16942.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test215.py M /issm/trunk-jpl/test/NightlyRun/test508.py

Export determination: 6.

Rationale: CHG: relaxing tolerances on murdo.

**Change #384** with diff file ISSM-16942-16943.diff:

Function name:

M /issm/trunk-jpl/lib M /issm/trunk-jpl/src/c M /issm/trunk-jpl/src/c/analyses

M /issm/trunk-jpl/src/c/cores M /issm/trunk-jpl/src/c/toolkits/mpi/commops

M /issm/trunk-jpl/src/c/toolkits/petsc/objects M /issm/trunk-jpl/src/c/toolkits/petsc/patches

M /issm/trunk-jpl/src/wrappers/matlab

Export determination: 6.

Rationale: CHG: get svn to ignore some files.

**Change #385** with diff file ISSM-16943-16944.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/generic.m

Export determination: 6.

Rationale: CHG: not allowing parallel runs yet!

**Change #386** with diff file ISSM-16944-16945.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test508.m M /issm/trunk-jpl/test/NightlyRun/test508.py

Export determination: 6.

Rationale: CHG: relaxing tolerances.

**Change #387** with diff file ISSM-16945-16946.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil M /issm/trunk-jpl/test/NightlyRun/test101.m

M /issm/trunk-jpl/test/NightlyRun/test203.m M /issm/trunk-jpl/test/NightlyRun/test206.m

M /issm/trunk-jpl/test/NightlyRun/test209.m M /issm/trunk-jpl/test/NightlyRun/test415.m

M /issm/trunk-jpl/test/NightlyRun/test426.m M /issm/trunk-jpl/test/NightlyRun/test427.m

M /issm/trunk-jpl/test/NightlyRun/test507.m M /issm/trunk-jpl/test/NightlyRun/test515.m

Export determination: 6.

Rationale: CHG: relaxing tolerances. Not running dakota on imac.

**Change #388** with diff file ISSM-16946-16947.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test508.py

Export determination: 6.

Rationale: CHG: adjusting tolerances

**Change #389** with diff file ISSM-16947-16948.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: New: added support for P0 interpolation results and moved some stuff from Penta to Element.cpp

**Change #390** with diff file ISSM-16948-16949.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp

Export determination: 6.  
Rationale: BUG: allocate right size in result vector:

**Change #391** with diff file ISSM-16949-16950.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: moved KMatrix viscous coupling SSAFS in analysis

**Change #392** with diff file ISSM-16950-16951.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: minor

**Change #393** with diff file ISSM-16951-16952.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: CHG: starting friction SSAFS

**Change #394** with diff file ISSM-16952-16953.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test290.py M /issm/trunk-jpl/test/NightlyRun/test508.m M /issm/trunk-jpl/test/NightlyRun/test513.py

Export determination: 6.

Rationale: CHG: relaxing tolerances.

**Change #395** with diff file ISSM-16953-16954.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_section.m M /issm/trunk-jpl/src/m/plot/radarpower.m

Export determination: 6.

Rationale: CHG: adding section median and standard deviation if sectionmean requested

**Change #396** with diff file ISSM-16954-16955.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: Changing the convergence mechanism in hydro

**Change #397** with diff file ISSM-16955-16956.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale:

**Change #398** with diff file ISSM-16956-16957.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: finished coupling SSAFS

**Change #399** with diff file ISSM-16957-16958.diff:

Function name:

M /issm/trunk-jpl/src/m/os/oshostname.m

Export determination: 6.

Rationale: BUG: safer oshostname, needed to add j /dev/null to avoid wrong name

**Change #400** with diff file ISSM-16958-16959.diff:

Function name:

M /issm/trunk-jpl/src/m/os/oshostname.m

Export determination: 6.

Rationale: CHG: minor, missing ;

**Change #401** with diff file ISSM-16959-16960.diff:

Function name:

M /issm/trunk-jpl/src/m/os/oshostname.m

Export determination: 6.

Rationale: CHG: reverting change for windows machine, where /dev/null obviously does not exist

**Change #402** with diff file ISSM-16960-16961.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: fixing leaks in hydrology

**Change #403** with diff file ISSM-16961-16962.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: fixed leak

**Change #404** with diff file ISSM-16962-16963.diff:

Function name:

M /issm/trunk-jpl/src/m/mesh/bamg.py

Export determination: 6.

Rationale: CHG: fixed section dealing with required vertices.

**Change #405** with diff file ISSM-16963-16964.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG:fixing invalid read in hydro

**Change #406** with diff file ISSM-16964-16965.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp

Export determination: 6.

Rationale: NEW: added some InputUpdateFromSolution

**Change #407** with diff file ISSM-16965-16966.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Bamg/BigPrimeNumber.cpp

Export determination: 6.

Rationale: CHG: cosmetics

**Change #408** with diff file ISSM-16966-16967.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive119.nc M /issm/trunk-jpl/test/NightlyRun/runme.m

M /issm/trunk-jpl/test/NightlyRun/test119.m

Export determination: 6.

Rationale: NEW: added 'rand' option to bamg so that NR tests work on multiple platforms

**Change #409** with diff file ISSM-16967-16968.diff:

Function name:

M /issm/trunk-jpl/src/c/bamg/BamgOpts.cpp M /issm/trunk-jpl/src/c/bamg/BamgOpts.h

M /issm/trunk-jpl/src/c/bamg/Mesh.cpp M /issm/trunk-jpl/src/c/bamg/Mesh.h

M /issm/trunk-jpl/src/m/mesh/bamg.m M /issm/trunk-jpl/src/m/mesh/bamg.py

Export determination: 6.

Rationale: NEW: added 'rand' option to bamg so that NR tests work on multiple platforms



**Change #410** with diff file ISSM-16968-16969.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/matlab/io/FetchMatlabData.cpp M /issm/trunk-jpl/src/wrappers/python/io/FetchPythonData.cpp

Export determination: 6.

Rationale: NEW: added 'rand' option to bamg so that NR tests work on multiple platforms

**Change #411** with diff file ISSM-16969-16970.diff:

Function name:

M /issm/trunk-jpl/src/c/bamg/Mesh.cpp

Export determination: 6.

Rationale: CHG: typo

**Change #412** with diff file ISSM-16970-16971.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test119.py

Export determination: 6.

Rationale: CHG: updated python script

**Change #413** with diff file ISSM-16971-16972.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test334.m

Export determination: 6.

Rationale: CHG: minor, missing ;

**Change #414** with diff file ISSM-16972-16973.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing hydro tests

**Change #415** with diff file ISSM-16973-16974.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed HOFs tiling for friction

**Change #416** with diff file ISSM-16974-16975.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/test/Archives/Archive204.nc M /issm/trunk-jpl/test/Archives/Archive290.nc

M /issm/trunk-jpl/test/Archives/Archive322.nc M /issm/trunk-jpl/test/Archives/Archive404.nc

M /issm/trunk-jpl/test/Archives/Archive421.nc M /issm/trunk-jpl/test/Archives/Archive422.nc

M /issm/trunk-jpl/test/Archives/Archive503.nc M /issm/trunk-jpl/test/Archives/Archive507.nc

M /issm/trunk-jpl/test/Archives/Archive510.nc M /issm/trunk-jpl/test/Archives/Archive702.nc

Export determination: 6.

Rationale: CHG: made Gauss point similar in element and analyses

**Change #417** with diff file ISSM-16975-16976.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: CHG: making gauss point order similar to element

**Change #418** with diff file ISSM-16976-16977.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: trying to fix SSAFS coupling

**Change #419** with diff file ISSM-16977-16978.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.  
Rationale: BUG: trying to fix SSAFS

**Change #420** with diff file ISSM-16978-16979.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: no more leaks

**Change #421** with diff file ISSM-16979-16980.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: no more leaks

**Change #422** with diff file ISSM-16980-16981.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: getinput must be called by basalelement

**Change #423** with diff file ISSM-16981-16982.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: missing term in PVector Efficient

**Change #424** with diff file ISSM-16982-16983.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/modules/SystemMatricesx/System

Export determination: 6.  
Rationale: CHG: use analysis to create P Vector instead of element

**Change #425** with diff file ISSM-16983-16984.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive511.nc M /issm/trunk-jpl/test/Archives/Archive512.nc  
Export determination: 6.  
Rationale: NEW: updated archives for Pvector created by analysis instead of element

**Change #426** with diff file ISSM-16984-16985.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test3004.m M /issm/trunk-jpl/test/NightlyRun/test3004.py  
M /issm/trunk-jpl/test/NightlyRun/test3104.m M /issm/trunk-jpl/test/NightlyRun/test3104.py  
Export determination: 6.  
Rationale: CHG: legitimate relaxation of test tolerances.

**Change #427** with diff file ISSM-16985-16986.diff:  
Function name:  
A /issm/trunk-jpl/test/NightlyRun/temp291.m  
Export determination: 6.  
Rationale: NEW: added temporary test for debugging new FS finite element

**Change #428** with diff file ISSM-16986-16987.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: kappa is supposed to be calculated from EnthalpyPicardEnum

**Change #429** with diff file ISSM-16987-16988.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.

Rationale: BUG: removing return NULL

**Change #430** with diff file ISSM-16988-16989.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: SSA3d friction needs to be done on basalelement

**Change #431** with diff file ISSM-16989-16990.diff:

Function name:

M /issm/trunk-jpl/src/c/bamg/Mesh.cpp M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp

M /issm/trunk-jpl/src/c/classes/kriging/Quadtree.cpp M /issm/trunk-jpl/src/c/modules/Krigingx/pKrigingx

Export determination: 6.

Rationale: CHG: fixing some stuff in Kriging

**Change #432** with diff file ISSM-16990-16991.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: SSAHO supposed to call SSA3d and not SSA

**Change #433** with diff file ISSM-16991-16992.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: removed comments

**Change #434** with diff file ISSM-16992-16993.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/Analysis.h

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h

Export determination: 6.

Rationale: NEW: added CreateJacobianMatrix to each analysis

**Change #435** with diff file ISSM-16993-16994.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/modules/CreateJacobianMatrixxx/CreateJacobianMatrixxx.cpp M /issm/trunk-jpl/src/c/modules/CreateJacobianMatrixxx/CreateJacobianMatrixxx.h M /issm/trunk-jpl/src/c/modules/SystemMatrixesx/SystemMatrixesx.cpp

Export determination: 6.  
Rationale: NEW: moving all Stiffness matrices and Jacobian matrices to analyses

**Change #436** with diff file ISSM-16994-16995.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed memory leak

**Change #437** with diff file ISSM-16995-16996.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed memory leak

**Change #438** with diff file ISSM-16996-16997.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: cleaning up

**Change #439** with diff file ISSM-16997-16998.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed memory leak

**Change #440** with diff file ISSM-16998-16999.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test3104.m  
Export determination: 6.

Rationale: CHG: relaxing tolerances

**Change #441** with diff file ISSM-16999-17000.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing invalid write

**Change #442** with diff file ISSM-17000-17001.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/Analysis.h

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis

M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-

jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.c

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-

jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAna

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-

jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCIneffi

M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.c

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-

jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnal

M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-

jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceS

M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysi



M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIA  
M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-  
jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVertical.  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h  
Export determination: 6.  
Rationale: NEW: added CreateDVector in all analyses

**Change #443** with diff file ISSM-17001-17002.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/modules/SystemMatricesx/System  
Export determination: 6.

Rationale: CHG: moving DVector to analysis

**Change #444** with diff file ISSM-17002-17003.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.  
Export determination: 6.

Rationale: CHG: trying to add EnthalpyPostProcessing back to EnthalpyAnal-  
ysis.cpp

**Change #445** with diff file ISSM-17003-17004.diff:

Function name:

A /issm/trunk-jpl/src/m/interp/export\_geotif.m

Export determination: 6.

Rationale: CHG: export geotif

**Change #446** with diff file ISSM-17004-17005.diff:

Function name:

D /issm/trunk-jpl/src/m/interp/export\_geotif.m A /issm/trunk-jpl/src/m/print/export\_geotiff.m  
(from /issm/trunk-jpl/src/m/interp/export\_geotif.m:17003)

Export determination: 6.

Rationale: CHG: moved print/export\_geotiff.m

**Change #447** with diff file ISSM-17005-17006.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h

Export determination: 6.

Rationale: NEW: adding cores

**Change #448** with diff file ISSM-17006-17007.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: modification in the way the transfer deals with its mask

**Change #449** with diff file ISSM-17007-17008.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Vertex.cpp

Export determination: 6.

Rationale: BUG: do not change z for 2d horizontal meshes

**Change #450** with diff file ISSM-17008-17009.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test209.py M /issm/trunk-jpl/test/NightlyRun/test290.py

Export determination: 6.

Rationale: CHG: relaxing tolerances of python tests

**Change #451** with diff file ISSM-17009-17010.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/Analysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp

Export determination: 6.

Rationale: NEW: moving some cores to analyses

**Change #452** with diff file ISSM-17010-17011.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp

M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp

Export determination: 6.

Rationale: BUG: vertical velocities should not be calculated in Stressbalance-Analysis

**Change #453** with diff file ISSM-17011-17012.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test119.m M /issm/trunk-jpl/test/NightlyRun/test119.py

Export determination: 6.

Rationale: CHG: relaxed bamg tolerance

**Change #454** with diff file ISSM-17012-17013.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: fixing the update of eplthickness

**Change #455** with diff file ISSM-17013-17014.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.

Rationale: CHG: updated Hydro archives

**Change #456** with diff file ISSM-17014-17015.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: filled EnthalpyAnalysis::ComputeBasalMeltingrate with content. ADD: GetUpperElement, ThermalToEnthalpy for parent class Element\*.

**Change #457** with diff file ISSM-17015-17016.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed compilation error (Johannes, make sure you have –

enable-debugging in your configure.sh)

**Change #458** with diff file ISSM-17017-17018.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinit

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo

Export determination: 6.

Rationale: NEW: moving Eike and Pierre's modifs from trunk to trunk-jpl

**Change #459** with diff file ISSM-17018-17019.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/P1xP3Enum.m

A /issm/trunk-jpl/src/m/enum/P2xP4Enum.m

Export determination: 6.

Rationale: NEW: moving Eike and Pierre's modifs from trunk to trunk-jpl

**Change #460** with diff file ISSM-17019-17020.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test3104.m

Export determination: 6.

Rationale: CHG: relaxing tolerance, after commit shows impact beyond numerics

**Change #461** with diff file ISSM-17020-17021.diff:

Function name:

D /issm/trunk-jpl/src/m/enum/HydrologydcMaskEplactiveEnum.m

Export determination: 6.

Rationale: BUG: removing an old enum

**Change #462** with diff file ISSM-17021-17022.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp  
Export determination: 6.  
Rationale: CHG:the sediment transmitivity is now a mat and no more a constant

**Change #463** with diff file ISSM-17022-17023.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/hydrologydc.m M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: CHG:the sediment transmitivity is now a mat and no more a constant

**Change #464** with diff file ISSM-17023-17024.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test332.m M /issm/trunk-jpl/test/NightlyRun/test333.m

M /issm/trunk-jpl/test/NightlyRun/test334.m M /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.

Rationale: CHG:the sediment transmitivity is now a mat and no more a constant

**Change #465** with diff file ISSM-17024-17025.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: new solution sequence hydrology BUG:adding delete in efficient analysis

**Change #466** with diff file ISSM-17025-17026.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive333.nc M /issm/trunk-jpl/test/Archives/Archive335.nc

Export determination: 6.

Rationale: CHG: updated Hydro DC Archive per Basile's request

**Change #467** with diff file ISSM-17026-17027.diff:

Function name:

M /issm/trunk-jpl/src/m/shp/Shp2Exp.m

Export determination: 6.

Rationale: CHG: added support for line shapefiles

**Change #468** with diff file ISSM-17027-17028.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/cores/thermal\_core.cpp

M /issm/trunk-jpl/src/c/shared/Elements/LliboutryDuval.cpp M /issm/trunk-jpl/src/m/materials/arrhenius.m

Export determination: 6.

Rationale: CHG: moved ComputeBasalMeltingrate and UpdateBasalConstraints to EnthalpyAnalysis. Minor fixes to the LliboutryDuval rheology.

**Change #469** with diff file ISSM-17028-17029.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

D /issm/trunk-jpl/src/c/modules/PostprocessingEnthalpyx M /issm/trunk-jpl/src/c/modules/modules.h

Export determination: 6.

Rationale: DEL: UpdateBasalConstraintsEnthalpy, ComputeBasalMeltingrate and DrainWaterfraction from Element and its children. DEL: module PostprocessingEnthalpyx

**Change #470** with diff file ISSM-17029-17030.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: CHG: fixed Postprocessing of Enthalpy

**Change #471** with diff file ISSM-17030-17031.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLA  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequen  
Export determination: 6.  
Rationale: CHG: uniformisation of the mask gestion in Hydrology

**Change #472** with diff file ISSM-17031-17032.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: commenting printf

**Change #473** with diff file ISSM-17032-17033.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: commenting printf

**Change #474** with diff file ISSM-17033-17034.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: missing commented bracket

**Change #475** with diff file ISSM-17034-17035.diff:  
Function name:  
A /issm/trunk-jpl/test/NightlyRun/temp291.py  
Export determination: 6.  
Rationale: NEW: added temp291.py

**Change #476** with diff file ISSM-17035-17036.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/groundingline.m M /issm/trunk-jpl/src/m/classes/groundingline.py



Export determination: 6.  
Rationale: CHG: better check on bathymetry and bed.

**Change #477** with diff file ISSM-17036-17037.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/groundingline.py  
Export determination: 6.  
Rationale: CHG: better construct from Chris

**Change #478** with diff file ISSM-17037-17038.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/groundingline.m M /issm/trunk-jpl/src/m/classes/groundingline.py  
Export determination: 6.  
Rationale: BUG: fixing grounding line check (nothing was checked anymore...)

**Change #479** with diff file ISSM-17038-17039.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions  
A /issm/trunk-jpl/src/m/enum/OneLayerP4zEnum.m  
Export determination: 6.  
Rationale: NEW: Added new Stokes element: OneLayerP4zEnum

**Change #480** with diff file ISSM-17039-17040.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim  
Export determination: 6.  
Rationale: CHG: sync'ed syntax with Enums

**Change #481** with diff file ISSM-17040-17041.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py  
M /issm/trunk-jpl/test/NightlyRun/temp291.m M /issm/trunk-jpl/test/NightlyRun/temp291.py

Export determination: 6.  
Rationale: NEW: added OneLayerP4z for fe\_FS

**Change #482** with diff file ISSM-17041-17042.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.cpp

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp M /issm/trunk-

jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py

Export determination: 6.

Rationale: NEW: working on P1xP3 element (needs some debugging)

**Change #483** with diff file ISSM-17042-17043.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

Export determination: 6.

Rationale: CHG: minor constraint indexing

**Change #484** with diff file ISSM-17043-17044.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: BUG: fixing some nodal function derivatives P1xP3

**Change #485** with diff file ISSM-17044-17045.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: BUG: fixing another sign in P1P3 nodal function derivatives

**Change #486** with diff file ISSM-17045-17046.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/cores/thermal\_core.cpp

Export determination: 6.  
Rationale: BUG basal conditions corrected

**Change #487** with diff file ISSM-17046-17047.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: windows build broke because dim was not declared a constant.

**Change #488** with diff file ISSM-17047-17048.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: added MisfitArea function

**Change #489** with diff file ISSM-17048-17049.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Misfit.h  
Export determination: 6.  
Rationale: CHG: added MisfitArea.

**Change #490** with diff file ISSM-17049-17050.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/waitonlock.m  
Export determination: 6.  
Rationale: CHG: some changes for the lock and output file names

**Change #491** with diff file ISSM-17050-17051.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/marshall.m M /issm/trunk-jpl/src/m/solve/solve.m  
Export determination: 6.

Rationale: CHG: control verbosing.

**Change #492** with diff file ISSM-17051-17052.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/friction.m M /issm/trunk-jpl/src/m/classes/friction.py

Export determination: 6.

Rationale: CHG: make coefficient a forcing.

**Change #493** with diff file ISSM-17052-17053.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/generic.m

Export determination: 6.

Rationale: CHG: control verbose level of generic cluster

**Change #494** with diff file ISSM-17053-17054.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/misfit.m

Export determination: 6.

Rationale: CHG: makes weights a transient input.

**Change #495** with diff file ISSM-17054-17055.diff:

Function name:

M /issm/trunk-jpl/src/m/solvers/gcrbjacobioptions.m

Export determination: 6.

Rationale: CHG: fixed broken solver class.

**Change #496** with diff file ISSM-17055-17056.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/ExternalResults/GenericExternalResult.h M /issm/trunk-jpl/src/c/modules/ModelProcessorX/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/OutputResults M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_newton.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_nonlinear.cpp M /issm/trunk-jpl/src/m/solve/parseresultsfromd

Export determination: 6.

Rationale: CHG: make sure that start time is the one set in timestepping, not 0.

**Change #497** with diff file ISSM-17056-17057.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: BUG: fixed final nodal function derivatives P1xP3

**Change #498** with diff file ISSM-17057-17058.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.cpp

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: NEW: working on P2xP4 finite elements

**Change #499** with diff file ISSM-17058-17059.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: Fixed several errors in the derivatives of the P2xP4 Element.

**Change #500** with diff file ISSM-17059-17060.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows M /issm/trunk-jpl/src/m/solvers/gmresjacobioptions.m

M /issm/trunk-jpl/test/NightlyRun/test332.m M /issm/trunk-jpl/test/NightlyRun/test334.m

Export determination: 6.

Rationale: CHG: relaxed tolerances for windows tests on 334 and 332. For Windows runs, no MUMPS yet, so can't do the FS runs, exclude these from the nightly. gmresjacobioptions: need to convert all the solvers to the new IssmConfig format.

**Change #501** with diff file ISSM-17060-17061.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows M /issm/trunk-jpl/package32.sh  
M /issm/trunk-jpl/package64.sh M /issm/trunk-jpl/test/NightlyRun/test216.m  
M /issm/trunk-jpl/test/NightlyRun/test314.m M /issm/trunk-jpl/test/NightlyRun/test315.m  
M /issm/trunk-jpl/test/NightlyRun/test318.m M /issm/trunk-jpl/test/NightlyRun/test324.m  
M /issm/trunk-jpl/test/NightlyRun/test328.m M /issm/trunk-jpl/test/NightlyRun/test333.m  
M /issm/trunk-jpl/test/NightlyRun/test335.m M /issm/trunk-jpl/test/NightlyRun/test410.m  
M /issm/trunk-jpl/test/NightlyRun/test423.m M /issm/trunk-jpl/test/NightlyRun/test505.m  
Export determination: 6.

Rationale: CHG: exclude dakota runs in windows nightly. packagers: update old scripts using the new Caphyon installer. Get rid of some obsolete target files. tests: relax tolerances for tests to run successfully on Windows platforms.

**Change #502** with diff file ISSM-17061-17062.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: new windows tests that do not carry higher order dynamics or penalties, as our solvers can't take that yet

**Change #503** with diff file ISSM-17062-17063.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: fixing constraints on P2xP4

**Change #504** with diff file ISSM-17063-17064.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: NEW: creating FS One layer nodes

**Change #505** with diff file ISSM-17064-17065.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

Export determination: 6.

Rationale: CHG: changed the logic in the transient core so that: 1/ final time does always output the results. 2/ results are output at output\_frequency, unless these results are coming from a complicated output definition, in which case, for each transient time step, the result is computed, and only output at the requested output frequency.

**Change #506** with diff file ISSM-17065-17066.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: CHG: putting together FS OneLayerz4 formulation

**Change #507** with diff file ISSM-17066-17067.diff:

Function name:

A /issm/trunk-jpl/externalpackages/cython/install-18.sh (from /issm/trunk-jpl/externalpackages/cython/install

A /issm/trunk-jpl/externalpackages/cython/install-19.2.sh D /issm/trunk-jpl/externalpackages/cython/install

Export determination: 6.

Rationale: CHG: new version of cython.

**Change #508** with diff file ISSM-17067-17068.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: excluding tests 612 (discontinuous control method, unstable) and the Bamg Mesh test (which can only be run on larsen).

**Change #509** with diff file ISSM-17068-17069.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Misfit.h

Export determination: 6.

Rationale: CHG: make sure when area is null that our misfit is null too.

**Change #510** with diff file ISSM-17069-17070.diff:

Function name:

M /issm/trunk-jpl/examples/Jakobshavn/Jks.par M /issm/trunk-jpl/examples/Jakobshavn/runme.m

M /issm/trunk-jpl/examples/SquareIceShelf/Square.par

Export determination: 6.

Rationale: BUG: fixing tutorials with new damage field

**Change #511** with diff file ISSM-17070-17071.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: CHG: minor cosmetics

**Change #512** with diff file ISSM-17071-17072.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetIceSheetBC.m M /issm/trunk-

jpl/src/m/boundaryconditions/SetIceSheetBC.py M /issm/trunk-jpl/src/m/boundaryconditions/SetIceShelfBC

M /issm/trunk-jpl/src/m/boundaryconditions/SetIceShelfBC.py M /issm/trunk-

jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m M /issm/trunk-jpl/src/m/boundaryconditions/SetMa

M /issm/trunk-jpl/src/m/classes/basalforcings.m M /issm/trunk-jpl/src/m/classes/basalforcings.py

M /issm/trunk-jpl/src/m/classes/surfaceforcings.m M /issm/trunk-jpl/src/m/classes/surfaceforcings.py

Export determination: 6.

Rationale: NEW: initialize forcings by class itself instead of boundary condition method

**Change #513** with diff file ISSM-17072-17073.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessor/CreateParameters.cpp M

/issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStrin

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp A /issm/trunk-jpl/src/m/classes/SMB.m



M /issm/trunk-jpl/src/m/classes/surfaceforcings.m M /issm/trunk-jpl/src/m/classes/surfaceforcings.py  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
Export determination: 6.  
Rationale: NEW: working on SMB new class for surface mass balance

**Change #514** with diff file ISSM-17073-17074.diff:

Function name:  
A /issm/trunk-jpl/src/m/enum/SMBEnum.m A /issm/trunk-jpl/src/m/enum/SurfaceforcingsEnum.m  
Export determination: 6.  
Rationale: NEW: syncing enums

**Change #515** with diff file ISSM-17074-17075.diff:

Function name:  
M /issm/trunk-jpl/src/m/classes/SMB.m A /issm/trunk-jpl/src/m/classes/SMB.py  
M /issm/trunk-jpl/src/m/classes/model.py  
Export determination: 6.  
Rationale: NEW: added python's equivalent of SMB class

**Change #516** with diff file ISSM-17075-17076.diff:

Function name:  
M /issm/trunk-jpl/externalpackages/cython/install-19.2.sh M /issm/trunk-jpl/externalpackages/git/install.sh  
M /issm/trunk-jpl/externalpackages/nose/install-linux64-python2.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.4-linux64.sh M /issm/trunk-jpl/externalpackages/python/install-2.7.3-linux64.sh M /issm/trunk-jpl/externalpackages/scipy/install-linux64.sh M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/analyses.h M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToString.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/transient.m M /issm/trunk-jpl/src/m/classes/transient.py M /issm/trunk-jpl/src/m/dev/devpath.py M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
Export determination: 6.  
Rationale: ADD: Shell for Level-Set Method

**Change #517** with diff file ISSM-17076-17077.diff:

Function name:

A /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h

Export determination: 6.

Rationale: ADD: Shell for Level-Set Method pt. 2

**Change #518** with diff file ISSM-17077-17078.diff:

Function name:

M /issm/trunk-jpl/externalpackages/cython/install-19.2.sh M /issm/trunk-jpl/externalpackages/git/install.sh

M /issm/trunk-jpl/externalpackages/nose/install-linux64-python2.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.4-linux64.sh M /issm/trunk-jpl/externalpackages/python/install-2.7.3-linux64.sh M /issm/trunk-jpl/externalpackages/scipy/install-linux64.sh

Export determination: 6.

Rationale: CHG: restoring corrupted install scripts for externalpackages

**Change #519** with diff file ISSM-17078-17079.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateModel

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp A /issm/trunk-jpl/src/m/classes/SMBgradients.m

A /issm/trunk-jpl/src/m/classes/SMBgradients.py A /issm/trunk-jpl/src/m/classes/SMBpdd.m

A /issm/trunk-jpl/src/m/classes/SMBpdd.py M /issm/trunk-jpl/src/m/classes/model.py

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/LevelsetAnalysisEnum.m

A /issm/trunk-jpl/src/m/enum/SMBgradientsEnum.m A /issm/trunk-jpl/src/m/enum/SMBpddEnum.m

A /issm/trunk-jpl/src/m/enum/TransientIslevelsetEnum.m

Export determination: 6.

Rationale: NEW: added 2 more SMB classes

**Change #520** with diff file ISSM-17079-17080.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMB.m M /issm/trunk-jpl/src/m/classes/SMB.py

M /issm/trunk-jpl/src/m/classes/SMBgradients.m M /issm/trunk-jpl/src/m/classes/SMBgradients.py

M /issm/trunk-jpl/src/m/classes/SMBpdd.m M /issm/trunk-jpl/src/m/classes/SMBpdd.py

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

M /issm/trunk-jpl/src/m/classes/oldclasses/README M /issm/trunk-jpl/src/m/classes/oldclasses/diagnostic

M /issm/trunk-jpl/src/m/classes/oldclasses/hydrology.m M /issm/trunk-jpl/src/m/classes/oldclasses/prognos

A /issm/trunk-jpl/src/m/classes/oldclasses/surfaceforcings.m (from /issm/trunk-jpl/src/m/classes/surfaceforcings.m:17078) D /issm/trunk-jpl/src/m/classes/surfaceforcings.m  
D /issm/trunk-jpl/src/m/classes/surfaceforcings.py M /issm/trunk-jpl/src/m/classes/transient.m  
M /issm/trunk-jpl/src/m/classes/transient.py  
Export determination: 6.  
Rationale: NEW: deleted surfaceforcings class, now users need to decide what surfaceforcings class they want to use (SMB, SMBgradients, SMBpdd and more to come)

**Change #521** with diff file ISSM-17080-17081.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp

Export determination: 6.

Rationale: CHG: cleaning up surface forcings, not needed anymore

**Change #522** with diff file ISSM-17081-17082.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test236.m M /issm/trunk-jpl/test/NightlyRun/test236.py  
M /issm/trunk-jpl/test/NightlyRun/test237.m M /issm/trunk-jpl/test/NightlyRun/test237.py  
M /issm/trunk-jpl/test/NightlyRun/test328.m M /issm/trunk-jpl/test/NightlyRun/test328.py  
M /issm/trunk-jpl/test/NightlyRun/test329.m M /issm/trunk-jpl/test/NightlyRun/test329.py

Export determination: 6.

Rationale: CHG: fixing NR with new SMB classes

**Change #523** with diff file ISSM-17082-17083.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test236.m M /issm/trunk-jpl/test/NightlyRun/test236.py

Export determination: 6.

Rationale: BUG: fixing test

**Change #524** with diff file ISSM-17083-17084.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp

Export determination: 6.

Rationale: BUG: free surfaces should not try to get the SMB unless smb\_model = SMBEnum

**Change #525** with diff file ISSM-17084-17085.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test237.m M /issm/trunk-jpl/test/NightlyRun/test237.py

Export determination: 6.

Rationale: BUG: adding outputs to results

**Change #526** with diff file ISSM-17085-17086.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp

D /issm/trunk-jpl/src/c/modules/Delta18oParameterizationx M /issm/trunk-

jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp D /issm/trunk-jpl/src/c/modules/PositiveDegreeE

D /issm/trunk-jpl/src/c/modules/SmbGradientsx A /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex

A /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/.deps A /issm/trunk-

jpl/src/c/modules/SurfaceMassBalancex/.deps/SurfaceMassBalancex.Plo A /issm/trunk-

jpl/src/c/modules/SurfaceMassBalancex/.deps/libISSMCore\_a-SurfaceMassBalancex.Po

A /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/.deps/libISSMRose\_a-

SurfaceMassBalancex.r2cpp.Po A /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex

A /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.h

M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h

M /issm/trunk-jpl/src/c/shared/Enum/EnumToString.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToE

Export determination: 6.

Rationale: CHG: merging all SMB modules into one for simplicity

**Change #527** with diff file ISSM-17086-17087.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/SMBhenning.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

A /issm/trunk-jpl/src/m/enum/SMBhenningEnum.m

Export determination: 6.

Rationale: CHG: syncing enums

**Change #528** with diff file ISSM-17087-17088.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.cpp M /issm/trunk-jpl/src/m/classes/SMBhenning.m

Export determination: 6.

Rationale: NEW: added SMBhenning fonction, to be completed by Henning (dummy for now)

**Change #529** with diff file ISSM-17088-17089.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive119.nc M /issm/trunk-jpl/test/NightlyRun/test119.m  
M /issm/trunk-jpl/test/NightlyRun/test119.py

Export determination: 6.

Rationale: BUG: fixing bamg test for different OSs

**Change #530** with diff file ISSM-17089-17090.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: BUG: no more surfaceforcings

**Change #531** with diff file ISSM-17090-17091.diff:

Function name:

D /issm/trunk-jpl/test/Archives/Archive331.nc D /issm/trunk-jpl/test/Archives/Archive612.nc  
M /issm/trunk-jpl/test/NightlyRun/IdToName.m M /issm/trunk-jpl/test/NightlyRun/IdToName.py  
D /issm/trunk-jpl/test/NightlyRun/test331.m D /issm/trunk-jpl/test/NightlyRun/test331.py  
D /issm/trunk-jpl/test/NightlyRun/test612.m D /issm/trunk-jpl/test/NightlyRun/test612.py

Export determination: 6.

Rationale: CHG: removing Shreve test and CM Balance thickness DG, which both fail randomly

**Change #532** with diff file ISSM-17091-17092.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m

Export determination: 6.  
Rationale: CHG: print error message under Jenkins too

**Change #533** with diff file ISSM-17092-17093.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance D /issm/trunk-jpl/src/c/modules/SurfaceMassBalance

Export determination: 6.

Rationale: DEL: do not add .deps under svn

**Change #534** with diff file ISSM-17093-17094.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp

Export determination: 6.

Rationale: CHG: simplifying strain rate computation

**Change #535** with diff file ISSM-17094-17095.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/Input.h M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h

Export determination: 6.

Rationale: DEL: cleaning up Strain rate computation

**Change #536** with diff file ISSM-17095-17096.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.h

M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.h

Export determination: 6.

Rationale: CHG: cleaning up reference elements

**Change #537** with diff file ISSM-17096-17097.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: keep solution on the same finite element (commented out for now)

**Change #538** with diff file ISSM-17097-17098.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: NEW: added basal node indices for P2xP4

**Change #539** with diff file ISSM-17098-17099.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions

Export determination: 6.

Rationale: CHG: LevelsetAnalysis::CreateKMatrix and CreatePVector filled, required enums added

**Change #540** with diff file ISSM-17099-17100.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

Export determination: 6.

Rationale: BUG: do not return, just break

**Change #541** with diff file ISSM-17100-17101.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInp

M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.

M /issm/trunk-jpl/src/c/classes/Inputs/Input.h M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/settings.m  
M /issm/trunk-jpl/src/m/classes/settings.py M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
A /issm/trunk-jpl/src/m/enum/SettingsResultsOnNodesEnum.m  
Export determination: 6.

Rationale: NEW: added results as patch so that we can have nodal values

**Change #542** with diff file ISSM-17101-17102.diff:

Function name:

A /issm/trunk-jpl/externalpackages/cython/install.sh (from /issm/trunk-jpl/externalpackages/cython/install.sh)

Export determination: 6.

Rationale: CHG: Install script now clones directly from main development branch. This was done in order to stay consistent with SciPy.

**Change #543** with diff file ISSM-17102-17103.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp

Export determination: 6.

Rationale: CHG: preparing output on nodes for FS

**Change #544** with diff file ISSM-17103-17104.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: NEW: making Stress balance analysis work with md.settings.results\_on\_nodes=1

**Change #545** with diff file ISSM-17104-17105.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.



Rationale: CHG: fixing node numbering for OneLayerP4z elements

**Change #546** with diff file ISSM-17105-17106.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: ADD: minor: extrusion of md.initialization.watercolumn

**Change #547** with diff file ISSM-17106-17107.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp M /issm/trunk-jpl/src/c/shared/Exceptions/Exception

Export determination: 6.

Rationale: CHG: use id0 instead of iomodel-;nodecounter

**Change #548** with diff file ISSM-17107-17108.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/shared/Exceptions/Exceptions.cpp

Export determination: 6.

Rationale: REV: reverting back to previous version

**Change #549** with diff file ISSM-17108-17109.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: reverting back (again...)

**Change #550** with diff file ISSM-17109-17110.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscMat.cpp  
Export determination: 6.  
Rationale: NEW: starting to add analytical functions for FS

**Change #551** with diff file ISSM-17110-17111.diff:  
Function name:  
M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscMat.cpp  
Export determination: 6.  
Rationale: BUG: wrong petsc option

**Change #552** with diff file ISSM-17111-17112.diff:  
Function name:  
M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h A /issm/trunk-jpl/src/c/shared/FSanalytics  
A /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.h A /issm/trunk-  
jpl/src/c/shared/FSanalytics/fx.cpp A /issm/trunk-jpl/src/c/shared/FSanalytics/fy.cpp  
A /issm/trunk-jpl/src/c/shared/FSanalytics/fz.cpp M /issm/trunk-jpl/src/c/shared/shared.h  
Export determination: 6.  
Rationale: NEW: adding analytical functions framework for FS tests

**Change #553** with diff file ISSM-17112-17113.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: no analytical test by default

**Change #554** with diff file ISSM-17113-17114.diff:  
Function name:  
M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/shared/FSanalytics/FSanalytical1.cpp  
(from /issm/trunk-jpl/src/c/shared/FSanalytics/fx.cpp:17111) M /issm/trunk-  
jpl/src/c/shared/FSanalytics/fsanalytics.h D /issm/trunk-jpl/src/c/shared/FSanalytics/fx.cpp  
D /issm/trunk-jpl/src/c/shared/FSanalytics/fy.cpp D /issm/trunk-jpl/src/c/shared/FSanalytics/fz.cpp  
Export determination: 6.  
Rationale: CHG: adding analytical function values

**Change #555** with diff file ISSM-17114-17115.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Create

M /issm/trunk-jpl/src/m/classes/mask.m M /issm/trunk-jpl/src/m/classes/mask.py

M /issm/trunk-jpl/src/m/classes/transient.m M /issm/trunk-jpl/src/m/classes/transient.py

M /issm/trunk-jpl/src/m/parameterization/setmask.m M /issm/trunk-jpl/src/m/parameterization/setmask.py

Export determination: 6.

Rationale: ADD: Building LSM shell pt2: Adding InputUpdateFromSolution, CreateKMatrix, Artificial Diffusivity etc. CHG: m/py code modified such that ice exists where LSF negative

**Change #556** with diff file ISSM-17115-17116.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setmask.m M /issm/trunk-jpl/src/m/parameterization/setmask.py

Export determination: 6.

Rationale: BUG: for now levelset is  $\geq 0$  when ice is present

**Change #557** with diff file ISSM-17116-17117.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: improved analytical FS

**Change #558** with diff file ISSM-17117-17118.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_elementnumbering.m

Export determination: 6.

Rationale: BUG: fixing highlight elements in 3d

**Change #559** with diff file ISSM-17118-17119.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/classes/Loads/Numericalflux.cpp M /issm/trunk-jpl/src/m/parameterization/setmask.py  
M /issm/trunk-jpl/src/m/parameterization/setmask.py

Export determination: 6.

Rationale: CHG: Negative sign of md.mask.ice.levelset represents existence of ice. This way the normal computed by the level-set function points out of the ice domain.

**Change #560** with diff file ISSM-17119-17120.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test217.m M /issm/trunk-jpl/test/NightlyRun/test217.py  
M /issm/trunk-jpl/test/NightlyRun/test701.m M /issm/trunk-jpl/test/NightlyRun/test702.m

Export determination: 6.

Rationale: BUG: fixing level set in NR

**Change #561** with diff file ISSM-17120-17121.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

Export determination: 6.

Rationale: BUG: cannot allocate array with int that is not const (const int dim = 2 was required)

**Change #562** with diff file ISSM-17121-17122.diff:

Function name:

M /issm/trunk-jpl/src/m/mesh/triangle.m M /issm/trunk-jpl/src/m/mesh/triangle2dvertical.m

Export determination: 6.

Rationale: BUG: use size,1 to get the number of elements rather than length (does not work for meshes with 1 or 2 elements otherwise)

**Change #563** with diff file ISSM-17122-17123.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.h M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.c

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/FacesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.h  
Export determination: 6.  
Rationale: NEW: added face creation and partitioning

**Change #564** with diff file ISSM-17123-17124.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/shared/FSanalytics/FSanalytical2.cpp

M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.h

Export determination: 6.

Rationale: NEW: added second analytical solutions for FS

**Change #565** with diff file ISSM-17124-17125.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanalytics/FSanalytical2.cpp

Export determination: 6.

Rationale: CHG: minor header file

**Change #566** with diff file ISSM-17125-17126.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp

Export determination: 6.

Rationale: CHG: minor

**Change #567** with diff file ISSM-17126-17127.diff:

Function name:

M /issm/trunk-jpl/src/m/os/issmscpout.py

Export determination: 6.

Rationale: CHG: use gethostname() homogeneously across the code.

**Change #568** with diff file ISSM-17127-17128.diff:

Function name:

M /issm/trunk-jpl/src/m/os/issmscpin.py M /issm/trunk-jpl/src/m/os/issmssh.py

Export determination: 6.  
Rationale: CHG: corrected issues with uneven use of gethostname() routine.

**Change #569** with diff file ISSM-17128-17129.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: minor cleaning code

**Change #570** with diff file ISSM-17129-17130.diff:  
Function name:  
M /issm/trunk-jpl/src/wrappers/InterpFromMeshToGrid/InterpFromMeshToGrid.cpp  
M /issm/trunk-jpl/src/wrappers/InterpFromMeshToGrid/InterpFromMeshToGrid.h  
M /issm/trunk-jpl/src/wrappers/python/Makefile.am  
Export determination: 6.  
Rationale: CHG: new python module

**Change #571** with diff file ISSM-17130-17131.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: BUG: use ISSM\_MPI\_Allreduce instead of MPI\_Allreduce for AD compilation

**Change #572** with diff file ISSM-17131-17132.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/linux64\_murdo  
Export determination: 6.  
Rationale: CHG: trying to exclude some tests

**Change #573** with diff file ISSM-17132-17133.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/petsc/install-3.4-acenet.sh

Export determination: 6.  
Rationale: CHG: using mkl libraries for bals - lapack

**Change #574** with diff file ISSM-17133-17134.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: CHG: added intel-acenet VENDOR for mkl libraries

**Change #575** with diff file ISSM-17134-17135.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/linux64\_murdo  
Export determination: 6.  
Rationale: CHG: excluding 119 from murdo

**Change #576** with diff file ISSM-17135-17136.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/modules/IoModelToConstraint  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateEdges.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp  
Export determination: 6.  
Rationale: NEW: use Faces for P2xP4 elements

**Change #577** with diff file ISSM-17136-17137.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive285.nc M /issm/trunk-jpl/test/Archives/Archive455.nc  
M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py  
M /issm/trunk-jpl/test/NightlyRun/test455.m M /issm/trunk-jpl/test/NightlyRun/test455.py  
Export determination: 6.  
Rationale: NEW: added P1xP3 and P2xP4 tests HO

**Change #578** with diff file ISSM-17137-17138.diff:  
Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Cre  
Export determination: 6.  
Rationale: CHG: OneLayerP4z now uses faces instead of edges

**Change #579** with diff file ISSM-17138-17139.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoM  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp

Export determination: 6.

Rationale: BUG: fixing a bunch of memory leaks

**Change #580** with diff file ISSM-17139-17140.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp  
A /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.h M /issm/trunk-jpl/src/c/analyses/analyses.h  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h  
M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: ADD: Shell for extrapolation: ExtrapolationAnalysis

**Change #581** with diff file ISSM-17140-17141.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp

Export determination: 6.

Rationale: NEW: trying to solve AD compilation

**Change #582** with diff file ISSM-17141-17142.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: improved FS analytical 2



**Change #583** with diff file ISSM-17142-17143.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp  
Export determination: 6.  
Rationale: CHG: simplifying Nodalfunctions Velocity and Pressure

**Change #584** with diff file ISSM-17143-17144.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: removing eric's commit 17047

**Change #585** with diff file ISSM-17144-17145.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.h  
Export determination: 6.  
Rationale: ADD: setting spcs on ice domain for extrapolation

**Change #586** with diff file ISSM-17145-17146.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/ExternalResults/GenericExternalResult.h  
Export determination: 6.  
Rationale: CHG: missing instantiation.

**Change #587** with diff file ISSM-17146-17147.diff:  
Function name:  
M /issm/trunk-jpl/src/m/contrib/paraview/exportVTK.m  
Export determination: 6.  
Rationale: BUG:fixing minor issue with almost zero values

**Change #588** with diff file ISSM-17147-17148.diff:  
Function name:

D /issm/trunk-jpl/src/m/inversions/misfit.m A /issm/trunk-jpl/src/m/inversions/velocitymisfit.m  
(from /issm/trunk-jpl/src/m/inversions/misfit.m:17146)  
Export determination: 6.  
Rationale: CHG: renamed old misfit function to resolve naming conflict with  
recently-implemented misfit class

**Change #589** with diff file ISSM-17148-17149.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/IdToName.py A /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: ADD: NightlyRun for Level-Set Method

**Change #590** with diff file ISSM-17149-17150.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: CHG: LSM nightlyrun uses SquareSheetConstrained par file now

**Change #591** with diff file ISSM-17150-17151.diff:  
Function name:  
A /issm/trunk-jpl/test/Archives/Archive336.nc  
Export determination: 6.  
Rationale: NEW: adding archive

**Change #592** with diff file ISSM-17151-17152.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/flowequation.py  
Export determination: 6.  
Rationale: CHG: adding 'P1xP3', 'P2xP4' to consistency tests

**Change #593** with diff file ISSM-17152-17153.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py

M /issm/trunk-jpl/test/NightlyRun/test325.m M /issm/trunk-jpl/test/NightlyRun/test325.py  
Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #594** with diff file ISSM-17153-17154.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test203.py  
Export determination: 6.  
Rationale: CHG: Updated python tolerance (smae as matlab's)

**Change #595** with diff file ISSM-17154-17155.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: CHG: added \_DEVELOPMENT\_ macro

**Change #596** with diff file ISSM-17155-17156.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: added error message if non development version

**Change #597** with diff file ISSM-17156-17157.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed topy on defined

**Change #598** with diff file ISSM-17157-17158.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: enthalpy melting rates and drainage are now computed in

water equivalent

**Change #599** with diff file ISSM-17158-17159.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: ADD: Tria::GetNode(int node\_number) filled in

**Change #600** with diff file ISSM-17159-17160.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnal

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp M /issm/trunk-

jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions

Export determination: 6.

Rationale: CHG: extrapolation of scalar field using a steadystate solver

**Change #601** with diff file ISSM-17160-17161.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/applyoptions.py

Export determination: 6.

Rationale: BUG: missed some import statements for specifying colorbar limits

**Change #602** with diff file ISSM-17161-17162.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py

M /issm/trunk-jpl/test/NightlyRun/test404.m M /issm/trunk-jpl/test/NightlyRun/test404.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #603** with diff file ISSM-17162-17163.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp  
Export determination: 6.  
Rationale: CHG: Modification in the epl system looping

**Change #604** with diff file ISSM-17163-17164.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/WriteData.m

Export determination: 6.

Rationale: CHG: add error to Double Mat for arrays that are too large

**Change #605** with diff file ISSM-17164-17165.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/ExtrapolationAnalysisEnum.m A /issm/trunk-jpl/src/m/enum/ExtrapolationVariableEnum.m

Export determination: 6.

Rationale: NEW: adding enums

**Change #606** with diff file ISSM-17165-17166.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: adding a bypass for the transfered keyword when the efficient layer isn't used

**Change #607** with diff file ISSM-17166-17167.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.

Export determination: 6.

Rationale: CHG: separated computation of basal melting rates and drainage of excess water in ice column. minor cleanups

**Change #608** with diff file ISSM-17167-17168.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/WriteData.py

Export determination: 6.

Rationale: CHG: Attempt to add error to python WriteData for large arrays...

**Change #609** with diff file ISSM-17168-17169.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.py

Export determination: 6.

Rationale: CHG: enable passing list of ids: --exclude 101 102

**Change #610** with diff file ISSM-17169-17170.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/WriteData.py

Export determination: 6.

Rationale: BUG: fixing previous commit, python's exponent is \*\*, and EnumToString returns only one output -i [0]

**Change #611** with diff file ISSM-17170-17171.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: excluding more python tests

**Change #612** with diff file ISSM-17171-17172.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp

Export determination: 6.

Rationale: CHG: Added artificial diffusion to extrapolation routine to stabilize solution

**Change #613** with diff file ISSM-17172-17173.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/shared/Exceptions/Exceptions.cpp

Export determination: 6.

Rationale: NEW: trying to reimplement free surfaces (testing soon)

**Change #614** with diff file ISSM-17173-17174.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Exceptions/Exceptions.cpp

Export determination: 6.

Rationale: CHG: commenting out this-Report() which forces error messages to be printed

**Change #615** with diff file ISSM-17174-17175.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanalytics

Export determination: 6.

Rationale: CHG: getting svn to ignore some files

**Change #616** with diff file ISSM-17175-17176.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IOModel.cpp

Export determination: 6.

Rationale: BUG : fixing a conditional jump due to elementtofaceconnectivity

**Change #617** with diff file ISSM-17176-17177.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: Removing hydrological relaxation that mess up with the ac-

curacy of the results

**Change #618** with diff file ISSM-17177-17178.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: fixing some free surface problems

**Change #619** with diff file ISSM-17178-17179.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing free surfaces in 1d

**Change #620** with diff file ISSM-17179-17180.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h

Export determination: 6.

Rationale: BUG: some fixes

**Change #621** with diff file ISSM-17180-17181.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp

Export determination: 6.

Rationale: BUG: Fixing free surface models

**Change #622** with diff file ISSM-17181-17182.diff:

Function name:



M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: Fixing free surface models

**Change #623** with diff file ISSM-17182-17183.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
Export determination: 6.

Rationale: NEW: enabeling extrudefrombase for 3d meshes

**Change #624** with diff file ISSM-17183-17184.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h

Export determination: 6.

Rationale: BUG: needed to at dimension so that we get z axis properly

**Change #625** with diff file ISSM-17184-17185.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing extrusion for 3d meshes

**Change #626** with diff file ISSM-17185-17186.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.m A /issm/trunk-jpl/test/NightlyRun/test124.m  
A /issm/trunk-jpl/test/NightlyRun/test703.m

Export determination: 6.

Rationale: NEW: added 2 tests of free surfaces

**Change #627** with diff file ISSM-17186-17187.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive124.nc A /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: NEW: added archives for 703 and 124

**Change #628** with diff file ISSM-17187-17188.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive122.nc M /issm/trunk-jpl/test/Archives/Archive325.nc

Export determination: 6.

Rationale: CHG: updated archives for enthalpy change

**Change #629** with diff file ISSM-17188-17189.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive124.nc

Export determination: 6.

Rationale: CHG: updated archive 124

**Change #630** with diff file ISSM-17189-17190.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test124.m M /issm/trunk-jpl/test/NightlyRun/test404.m

M /issm/trunk-jpl/test/NightlyRun/test404.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #631** with diff file ISSM-17190-17191.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test124.m

Export determination: 6.

Rationale: CHG: relaxing tolerances

**Change #632** with diff file ISSM-17191-17192.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/HydrologydcMaxIterEnum  
Export determination: 6.  
Rationale: NEW : Adding a max iter enum for the hydro model

**Change #633** with diff file ISSM-17192-17193.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/solutionsequences/soluti

Export determination: 6.

Rationale: NEW: changing the maxiter parameter from hard coded to Enum

**Change #634** with diff file ISSM-17193-17194.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: coupling between LSM and stressbalance by checking for ice in element

**Change #635** with diff file ISSM-17194-17195.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: ADD: 2 methods: 1st get the ice front of the ice domain; 2nd Get the normal on the surface of the ice domain from the levelset function

**Change #636** with diff file ISSM-17195-17196.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test124.m

Export determination: 6.

Rationale: CHG: stricter tolerances

**Change #637** with diff file ISSM-17196-17197.diff:

Function name:

A /issm/trunk-jpl/src/m/materials/TMeltingPoint.m A /issm/trunk-jpl/src/m/materials/TMeltingPoint.py

M /issm/trunk-jpl/src/m/materials/arrhenius.m

Export determination: 6.

Rationale: CHG: stripped TMeltingPoint function out of arrhenius to make it an independent function

**Change #638** with diff file ISSM-17197-17198.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test124.m

Export determination: 6.

Rationale: CHG: relaxing tolerances test124

**Change #639** with diff file ISSM-17198-17199.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test333.m

Export determination: 6.

Rationale: CHG: minorchange in my personnal checkout things

**Change #640** with diff file ISSM-17199-17200.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/m/classes/hydrologydc.m

Export determination: 6.

Rationale: BUG; few fix related to the new enum

**Change #641** with diff file ISSM-17200-17201.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test124.m M /issm/trunk-jpl/test/NightlyRun/test211.m

M /issm/trunk-jpl/test/NightlyRun/test211.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #642** with diff file ISSM-17201-17202.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: CHG: use tripcolor to enable edgcolors for mesh overlay

**Change #643** with diff file ISSM-17202-17203.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: CHG: reverting previous commit, adding temporary mesh overlay to plots until I sort out the edgcolor problem

**Change #644** with diff file ISSM-17203-17204.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: CHG: enable support for edgcolor for python plots

**Change #645** with diff file ISSM-17204-17205.diff:

Function name:

M /issm/trunk-jpl/src/m/shp/shpdisp.m M /issm/trunk-jpl/src/m/shp/shpread.m

Export determination: 6.

Rationale: NEW: adding point ability for shapefile read and plot

**Change #646** with diff file ISSM-17205-17206.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py

M /issm/trunk-jpl/test/NightlyRun/test511.m M /issm/trunk-jpl/test/NightlyRun/test511.py

Export determination: 6.

Rationale: CHG: updated some tolerances

**Change #647** with diff file ISSM-17206-17207.diff:

Function name:  
M /issm/trunk-jpl/jenkins/imac-012301-gil  
Export determination: 6.  
Rationale: CHG: excluding some more tests

**Change #648** with diff file ISSM-17207-17208.diff:

Function name:  
M /issm/trunk-jpl/src/c/modules/InterpFromMeshToGridx/InterpFromMeshToGridx.cpp  
Export determination: 6.  
Rationale: BUG: fixinf segmentation fault due to bad indexing

**Change #649** with diff file ISSM-17208-17209.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
Export determination: 6.  
Rationale: CHG: setting of BCs for LSM, minor bugs

**Change #650** with diff file ISSM-17209-17210.diff:

Function name:  
M /issm/trunk-jpl/test/Archives/Archive336.nc M /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: BUG: update failing LSM test

**Change #651** with diff file ISSM-17210-17211.diff:

Function name:  
M /issm/trunk-jpl/externalpackages/ipython/install.sh M /issm/trunk-jpl/externalpackages/matplotlib/install  
linux64.sh M /issm/trunk-jpl/externalpackages/vim/addons/vimrc M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/test/Archives/Archive336.nc  
M /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: revert to r17207

**Change #652** with diff file ISSM-17211-17212.diff:

Function name:

M /issm/trunk-jpl/externalpackages/ipython/install.sh M /issm/trunk-jpl/externalpackages/matplotlib/install  
linux64.sh M /issm/trunk-jpl/externalpackages/vim/addons/vimrc M /issm/trunk-  
jpl/src/c/analyses/EnthalpyAnalysis.cpp  
Export determination: 6.  
Rationale: minor: partial correction of revert

**Change #653** with diff file ISSM-17212-17213.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/Analysis.h  
M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-  
jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/ExtrapolationAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-  
jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-  
jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-  
jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-  
jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h  
Export determination: 6.  
Rationale: NEW: added UpdateConstraints method to all analyses

**Change #654** with diff file ISSM-17213-17214.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py  
M /issm/trunk-jpl/test/NightlyRun/test426.py M /issm/trunk-jpl/test/NightlyRun/test455.m  
M /issm/trunk-jpl/test/NightlyRun/test455.py M /issm/trunk-jpl/test/NightlyRun/test703.m  
Export determination: 6.

Rationale: CHG: relaxing some tolerances for jenkins

**Change #655** with diff file ISSM-17214-17215.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mask.m M /issm/trunk-jpl/src/m/classes/mask.py  
Export determination: 6.

Rationale: BUG: description of ice\_levelset was backwards for ice versus no ice areas

**Change #656** with diff file ISSM-17215-17216.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py  
Export determination: 6.

Rationale: CHG: relaxing some tolerances



**Change #657** with diff file ISSM-17216-17217.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test333.m

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #658** with diff file ISSM-17217-17218.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: excluding some tests

**Change #659** with diff file ISSM-17218-17219.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py

M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py

M /issm/trunk-jpl/test/NightlyRun/test333.m M /issm/trunk-jpl/test/NightlyRun/test455.m

M /issm/trunk-jpl/test/NightlyRun/test455.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #660** with diff file ISSM-17219-17220.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py

M /issm/trunk-jpl/test/NightlyRun/test455.m M /issm/trunk-jpl/test/NightlyRun/test455.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #661** with diff file ISSM-17220-17221.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test404.m M /issm/trunk-jpl/test/NightlyRun/test404.py

M /issm/trunk-jpl/test/NightlyRun/test513.m M /issm/trunk-jpl/test/NightlyRun/test513.py

Export determination: 6.

Rationale: CHG: relaxed tolerances

**Change #662** with diff file ISSM-17221-17222.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test422.m M /issm/trunk-jpl/test/NightlyRun/test422.py

Export determination: 6.

Rationale: CHG: relaxed some tolerances

**Change #663** with diff file ISSM-17222-17223.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/mask.m

M /issm/trunk-jpl/src/m/classes/mask.py M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: ADD: IceMaskNodeActivationEnum. Ice mask for activation of nodes now marshalled during initialization of model

**Change #664** with diff file ISSM-17223-17224.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/IceMaskNodeActivationEnum.m

Export determination: 6.

Rationale: BUG: syncing enums

**Change #665** with diff file ISSM-17224-17225.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_overlay.m M /issm/trunk-jpl/src/m/plot/radarpower.m

Export determination: 6.

Rationale: NEW: enableing landsat image overlay, and commented out imad-just, because no license is ever available and creates an error

**Change #666** with diff file ISSM-17225-17226.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef

M /issm/trunk-jpl/src/c/classes/IoModel.cpp

Export determination: 6.

Rationale: BUG: fixed problem in the case of no initial field

**Change #667** with diff file ISSM-17226-17227.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp

Export determination: 6.

Rationale: BUG: missing P0 interpolation in TriaRef

**Change #668** with diff file ISSM-17227-17228.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vimrc M /issm/trunk-jpl/src/c/Makefile.am

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/SystemMatricesx/System

M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/m/dev/devpath.py

M /issm/trunk-jpl/src/m/plot/processmesh.py M /issm/trunk-jpl/test/Archives/Archive336.nc

M /issm/trunk-jpl/test/NightlyRun/test336.py

Export determination: 6.

Rationale: CHG: backup dump - to be reverted

**Change #669** with diff file ISSM-17228-17229.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp

Export determination: 6.

Rationale: BUG: fixed spawn input in case interpolation is P0

**Change #670** with diff file ISSM-17229-17230.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cp

Export determination: 6.

Rationale: BUG: fixed spawn input in case interpolation is P0

**Change #671** with diff file ISSM-17230-17231.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vimrc M /issm/trunk-jpl/src/c/Makefile.am  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/SystemMatricesx/System  
M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/m/dev/devpath.py  
M /issm/trunk-jpl/src/m/plot/processmesh.py M /issm/trunk-jpl/test/Archives/Archive336.nc  
M /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: revert to r17226

**Change #672** with diff file ISSM-17231-17232.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp  
Export determination: 6.  
Rationale: CHG: correct revert gone too far

**Change #673** with diff file ISSM-17232-17233.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: P1Enum should be provided to GetInputValue when it is not consistent with the element interpolation

**Change #674** with diff file ISSM-17233-17234.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/SegRef.cpp  
Export determination: 6.  
Rationale: CHG: added P0 number of nodes

**Change #675** with diff file ISSM-17234-17235.diff:

Function name:

M /issm/trunk-jpl/packagegers/win7/startup.m  
Export determination: 6.  
Rationale: CHG: startup missing path to lib on windows platforms

**Change #676** with diff file ISSM-17235-17236.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/SegRef.cpp  
Export determination: 6.  
Rationale: BUG: fixing P0 Inputs

**Change #677** with diff file ISSM-17236-17237.diff:

Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/Makefile.am  
M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp  
M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.h M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp  
M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/classes/Node.h  
M /issm/trunk-jpl/src/c/cores/CorePointerFromSolutionEnum.cpp M /issm/trunk-jpl/src/c/cores/WrapperCorePointerFromSolutionEnum.cpp M /issm/trunk-jpl/src/c/cores/steadystate\_core.cpp  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/ConstraintsStatex/ConstraintsStatex.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp M /issm/trunk-jpl/src/c/modules/ResetConstraintsx/ResetConstraintsx.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinition.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnum.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/Synchronize.sh  
Export determination: 6.  
Rationale: CHG: adding conditionnal compilation back (based on analyses for now)

**Change #678** with diff file ISSM-17237-17238.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: BUG: reverted default back

**Change #679** with diff file ISSM-17238-17239.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am

Export determination: 6.

Rationale: BUG: forgot to add kriging\_sources to modules

**Change #680** with diff file ISSM-17239-17240.diff:

Function name:

A /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx A /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx

A /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.h

Export determination: 6.

Rationale: NEW: module to set active/deactive nodes according to Mask-IceLevelset

**Change #681** with diff file ISSM-17240-17241.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/Makefile.am

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing some missing analyses (conditional)

**Change #682** with diff file ISSM-17241-17242.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/modules/modules.h

Export determination: 6.

Rationale: BUG: integration for steadystate stressbalance LSM over elements with no ice

**Change #683** with diff file ISSM-17242-17243.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Material.h M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h  
Export determination: 6.  
Rationale: NEW: preparing HO 2dvertical

**Change #684** with diff file ISSM-17243-17244.diff:

Function name:  
M /issm/trunk-jpl/src/m/classes/flowequation.m  
Export determination: 6.  
Rationale: NEW: preparing HO 2dvertical

**Change #685** with diff file ISSM-17244-17245.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp  
Export determination: 6.  
Rationale: NEW: done with HO 2d vertical (results does not seem to make sense yet)

**Change #686** with diff file ISSM-17245-17246.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed boundary condition problem for Mesh2dHorizontal (vy can be spc'ed)

**Change #687** with diff file ISSM-17246-17247.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: commenting out SetActiveNodesLSMx for now (FS issue)

**Change #688** with diff file ISSM-17247-17248.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed non initialization of D friction HO

**Change #689** with diff file ISSM-17248-17249.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Materials/Material.h

M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h M /issm/trunk-jpl/test/Archives/Archive103.nc

Export determination: 6.

Rationale: CHG: simplifying getviscosity calls, now only provide effective strain rate

**Change #690** with diff file ISSM-17249-17250.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp

Export determination: 6.

Rationale: BUG: fixing AD build

**Change #691** with diff file ISSM-17250-17251.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnaly

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/Se

Export determination: 6.

Rationale: BUG: minor bugs; transient coupling between stressbalance and lsm

**Change #692** with diff file ISSM-17251-17252.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test336.py

Export determination: 6.

Rationale: CHG: changed domain to circle in test336.py



**Change #693** with diff file ISSM-17252-17253.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive336.nc

Export determination: 6.

Rationale: CHG: updated archive for test336

**Change #694** with diff file ISSM-17253-17254.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: commenting levelset out for now

**Change #695** with diff file ISSM-17254-17255.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/mpi/issmmpi.cpp

Export determination: 6.

Rationale: CHG update after AMPI change (was to disambiguate Fortran support in AMPI)

**Change #696** with diff file ISSM-17255-17256.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/classes/Node.h

Export determination: 6.

Rationale: CHG: moved matrix rotation from Node.cpp to Element.cpp

**Change #697** with diff file ISSM-17256-17257.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/applyoptions.py

Export determination: 6.

Rationale: BUG: plotmodel sets ylim, zlim as xlim

**Change #698** with diff file ISSM-17257-17258.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: ADD: bool Element::IsIceFront(), minor bugs

**Change #699** with diff file ISSM-17258-17259.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp

Export determination: 6.

Rationale: BUG: fixed Transform solution going in circles

**Change #700** with diff file ISSM-17259-17260.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/organizer.m

Export determination: 6.

Rationale: NEW: allow \*.mat extension

**Change #701** with diff file ISSM-17260-17261.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mask.m

Export determination: 6.

Rationale: BUG: added warning when old models are loaded since we changed the sign of ice levelset

**Change #702** with diff file ISSM-17261-17262.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

Export determination: 6.

Rationale: CHG: Add coupling LSM - masstransport - ice dynamics. Order of

transient computation is now: stressbalance - moving boundary - masstransport  
on new domain

**Change #703** with diff file ISSM-17262-17263.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_icefront.m

Export determination: 6.

Rationale: BUG: wrong sign for ice\_levelset in BC plot

**Change #704** with diff file ISSM-17263-17264.diff:

Function name:

M /issm/trunk-jpl/scripts/vie M /issm/trunk-jpl/scripts/vil

Export determination: 6.

Rationale: BUG: fixed script for gp

**Change #705** with diff file ISSM-17264-17265.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/generic.py M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py M /issm/trunk-jpl/src/m/solve/waitonlock.py

Export determination: 6.

Rationale: BUG: fixing oshostname issue, do not use split('.') anymore

**Change #706** with diff file ISSM-17265-17266.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.py

Export determination: 6.

Rationale: BUG: fixing oshostname issue, do not use split('.') anymore

**Change #707** with diff file ISSM-17266-17267.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Loads/Load.h M /issm/trunk-jpl/src/c/classes/Loads/Numericalflux.cpp

M /issm/trunk-jpl/src/c/classes/Loads/Numericalflux.h M /issm/trunk-jpl/src/c/classes/Materials/Material.h

M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp

Export determination: 6.  
Rationale: CHG: removing inputs from NumericalFlux

**Change #708** with diff file ISSM-17267-17268.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
Export determination: 6.  
Rationale: ADD: Penta::IsIcefront()

**Change #709** with diff file ISSM-17268-17269.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.h  
Export determination: 6.  
Rationale: CHG: removing inputs from Pengrid

**Change #710** with diff file ISSM-17269-17270.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Loads/Numericalflux.h M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.cpp  
M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.h  
Export determination: 6.  
Rationale: CHG: removing inputs from Riftfront

**Change #711** with diff file ISSM-17270-17271.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
Export determination: 6.  
Rationale: CHG: restoring order stressbalance - levelset - masstransport - ground-ingline - gia in transient\_core.cpp

**Change #712** with diff file ISSM-17271-17272.diff:  
Function name:  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_thermal\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: use setparam instead of InputUpdateFromConstantx(femmodel,melting\_offset,MeltingOffsetE

**Change #713** with diff file ISSM-17272-17273.diff:

Function name:

M /issm/trunk-jpl/externalpackages/adolc/install-withampi.sh

Export determination: 6.

Rationale: CHG space inserted to trigger rebuild on jenkins - following Eric's advice

**Change #714** with diff file ISSM-17273-17274.diff:

Function name:

M /issm/trunk-jpl/externalpackages/adjoinablempi/install.sh

Export determination: 6.

Rationale: CHG space inserted to trigger rebuild on jenkins - following Eric's advice

**Change #715** with diff file ISSM-17274-17275.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/cores/cores.h A /issm/trunk-jpl/src/c/cores/levelsetfunctionslope\_core.cpp

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnum

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/LevelsetfunctionSlopeXEnum

A /issm/trunk-jpl/src/m/enum/LevelsetfunctionSlopeYEnum.m

Export determination: 6.

Rationale: CHG: slope of levelset function for derivation of normal is now calculated once before extrapolation, since calculation in element can lead to normal = 0 for equal values on nodes.

**Change #716** with diff file ISSM-17275-17276.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.c  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Materials/Material.h  
M /issm/trunk-jpl/src/c/classes/Materials/Materials.cpp M /issm/trunk-jpl/src/c/classes/Materials/Materials.h  
M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h  
M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h  
M /issm/trunk-jpl/src/c/modules/GetVectorFromInputsx/GetVectorFromInputsx.cpp  
M /issm/trunk-jpl/src/c/modules/InputDuplicatex/InputDuplicatex.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Control/UpdateElementsAndMaterialsControl.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
Export determination: 6.  
Rationale: CHG: removing materials inputs, that are now in element

**Change #717** with diff file ISSM-17276-17277.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: minor typo

**Change #718** with diff file ISSM-17277-17278.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: temporary fix for SetActiveNodesLSMx in stressbalance/masstransport

**Change #719** with diff file ISSM-17278-17279.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp

Export determination: 6.

Rationale: BUG: added case Mesh2dVertical

**Change #720** with diff file ISSM-17279-17280.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp  
Export determination: 6.  
Rationale: BUG: do not duplicate QmuVz if not in 3d

**Change #721** with diff file ISSM-17280-17281.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/adjoinablempi/install.sh  
Export determination: 6.  
Rationale: CHG whitespace change to try again to trigger the jenkins rebuild

**Change #722** with diff file ISSM-17281-17282.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Material.h M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h  
Export determination: 6.  
Rationale: CHG: renamed new copy function copy2 to avoid shadowing Object-  
\_copy()

**Change #723** with diff file ISSM-17282-17283.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/test/Archives/Archive336.nc  
Export determination: 6.  
Rationale: CHG: update archive 336; using SU stabilization instead of artificial  
diffusion for better front tracking

**Change #724** with diff file ISSM-17283-17284.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/mask.py  
Export determination: 6.  
Rationale: BUG: in lsm, an element has ice only if at least one of its vertices  
has a negative levelset function value

**Change #725** with diff file ISSM-17284-17285.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/robintemperature.m

Export determination: 6.

Rationale: BUG: fix for elementwise division in case accumrate is a vector

**Change #726** with diff file ISSM-17285-17286.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanlytical3.cpp

M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanlyticals.h

Export determination: 6.

Rationale: NEW: adding full stokes analytical function form flowband

**Change #727** with diff file ISSM-17286-17287.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanlytical3.cpp

Export determination: 6.

Rationale: BUG: y instead of z

**Change #728** with diff file ISSM-17287-17288.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: typo

**Change #729** with diff file ISSM-17288-17289.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanlytical3.cpp

Export determination: 6.

Rationale: BUG: fixing analytical 2d



**Change #730** with diff file ISSM-17289-17290.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/FSanalytical3.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics

Export determination: 6.

Rationale: NEW: new analytical force for 3d case

**Change #731** with diff file ISSM-17290-17291.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive3003.nc M /issm/trunk-jpl/test/Archives/Archive3019.nc

M /issm/trunk-jpl/test/Archives/Archive3103.nc

Export determination: 6.

Rationale: CHG: updated archives for stress tensor for AD mode

**Change #732** with diff file ISSM-17291-17292.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/FSanalytical3.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics

Export determination: 6.

Rationale: NEW: added analytical test 5:

**Change #733** with diff file ISSM-17292-17293.diff:

Function name:

M /issm/trunk-jpl/externalpackages/adolc/install-withamp-macosx64.sh M /issm/trunk-jpl/externalpackages/adolc/install-withamp-pleiades-gcc.sh M /issm/trunk-jpl/externalpackages/adolc/install-withamp-pleiades.sh M /issm/trunk-jpl/externalpackages/adolc/install-withamp.sh

Export determination: 6.

Rationale: CHG the new version of adolc by default renames the library when compiled with AMPI (insisted on by the Paderborn folks); use the switch to keep the library name the same

**Change #734** with diff file ISSM-17293-17294.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanalytics M /issm/trunk-jpl/src/c/shared/FSanalytics/FSanalytical3.c

Export determination: 6.

Rationale: CHG: trying cmath instead of math to fix windows compile

**Change #735** with diff file ISSM-17294-17295.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.cpp M /issm/trunk-jpl/src/c/classes/Misfit.h M /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanlytical3.cpp

Export determination: 6.

Rationale: BUG: fixing some windows warnings

**Change #736** with diff file ISSM-17295-17296.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanlytical3.cpp

Export determination: 6.

Rationale: CHG: trying to fix windows compile

**Change #737** with diff file ISSM-17296-17297.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: moved some functions from each element to Element.cpp

**Change #738** with diff file ISSM-17297-17298.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: CHG: preparing SSA 1d

**Change #739** with diff file ISSM-17298-17299.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp

Export determination: 6.

Rationale: BUG: fixing SSA 2d

**Change #740** with diff file ISSM-17299-17300.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mesh2d.m

Export determination: 6.

Rationale: CHG: added conversion from mesh to mesh2d

**Change #741** with diff file ISSM-17300-17301.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mesh2d.m

Export determination: 6.

Rationale: BUG: fixed case 1 in constructor

**Change #742** with diff file ISSM-17301-17302.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx

Export determination: 6.

Rationale: BUG: do not commit with FSANALYTICAL macro

**Change #743** with diff file ISSM-17302-17303.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: do not commit with FSANALYTICAL uncommented

**Change #744** with diff file ISSM-17303-17304.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
D /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanalytical1.cpp D /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanalytical2.cpp D /issm/trunk-jpl/src/c/shared/FSanlyticals/FSanalytical3.cpp  
A /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanalyticals.cpp M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanalyticals.h  
Export determination: 6.  
Rationale: CHG: cleaned analytical solutions code

**Change #745** with diff file ISSM-17304-17305.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanalyticals.cpp M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanalyticals.h

Export determination: 6.

Rationale: CHG: minor name

**Change #746** with diff file ISSM-17305-17306.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/Makefile.am  
M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp  
A /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.h M /issm/trunk-jpl/src/c/analyses/analyses.h M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToAnalysis.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions.h  
A /issm/trunk-jpl/src/m/enum/LsfReinitializationAnalysisEnum.m

Export determination: 6.

Rationale: ADD: shell for levelset function reinitialization analysis

**Change #747** with diff file ISSM-17306-17307.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanalyticals.cpp M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanalyticals.h

Export determination: 6.

Rationale: NEW: additional analytical 2d tests

**Change #748** with diff file ISSM-17307-17308.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.h

Export determination: 6.

Rationale: BUG: removing error messages

**Change #749** with diff file ISSM-17308-17309.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m

Export determination: 6.

Rationale: CHG: added note about spc for vertical velocity as a reminder for future discussion

**Change #750** with diff file ISSM-17309-17310.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/SegRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.cpp  
M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.h M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Creat

Export determination: 6.

Rationale: CHG: preparing SSA 1d

**Change #751** with diff file ISSM-17310-17311.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.h

Export determination: 6.

Rationale: CHG: working on SSA 1d

**Change #752** with diff file ISSM-17311-17312.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test103.m M /issm/trunk-jpl/test/NightlyRun/test103.py  
Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #753** with diff file ISSM-17312-17313.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/imac-012301-gil  
Export determination: 6.  
Rationale: CHG: excluding FS tests, not stable for now

**Change #754** with diff file ISSM-17313-17314.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test455.m M /issm/trunk-jpl/test/NightlyRun/test455.py  
Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #755** with diff file ISSM-17314-17315.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/flowequation.m  
Export determination: 6.  
Rationale: CHG: accept SSA in 2d vertical

**Change #756** with diff file ISSM-17315-17316.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.cpp  
Export determination: 6.  
Rationale: CHG: working on SSA 1d

**Change #757** with diff file ISSM-17316-17317.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test204.m M /issm/trunk-jpl/test/NightlyRun/test204.py

Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #758** with diff file ISSM-17317-17318.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed SSA 2d horizontal

**Change #759** with diff file ISSM-17318-17319.diff:  
Function name:  
A /issm/trunk-jpl/test/Archives/Archive435.nc M /issm/trunk-jpl/test/NightlyRun/IdToName.m  
A /issm/trunk-jpl/test/NightlyRun/test435.m  
Export determination: 6.  
Rationale: NEW: additional test for grounding lines in HO

**Change #760** with diff file ISSM-17319-17320.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: fixing assertion

**Change #761** with diff file ISSM-17320-17321.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test513.m M /issm/trunk-jpl/test/NightlyRun/test513.py  
Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #762** with diff file ISSM-17321-17322.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Node.cpp  
Export determination: 6.

Rationale: CHG: done with SSA 1d

**Change #763** with diff file ISSM-17322-17323.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp

D /issm/trunk-jpl/src/c/modules/ResetCoordinateSystemx A /issm/trunk-jpl/src/c/modules/ResetFSBasalBoundaryConditionx (from /issm/trunk-jpl/src/c/modules/ResetCoordinateSystemx:17321) D /issm/trunk-

jpl/src/c/modules/ResetFSBasalBoundaryConditionx/ResetCoordinateSystemx.cpp

D /issm/trunk-jpl/src/c/modules/ResetFSBasalBoundaryConditionx/ResetCoordinateSystemx.h

A /issm/trunk-jpl/src/c/modules/ResetFSBasalBoundaryConditionx/ResetFSBasalBoundaryConditionx.cpp

(from /issm/trunk-jpl/src/c/modules/ResetCoordinateSystemx/ResetCoordinateSystemx.cpp:17321)

A /issm/trunk-jpl/src/c/modules/ResetFSBasalBoundaryConditionx/ResetFSBasalBoundaryConditionx.h

(from /issm/trunk-jpl/src/c/modules/ResetCoordinateSystemx/ResetCoordinateSystemx.h:17321)

M /issm/trunk-jpl/src/c/modules/modules.h

Export determination: 6.

Rationale: CHG: changed name of ResetCoordinateSystemx to include FS boundary condition

**Change #764** with diff file ISSM-17323-17324.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Node.cpp

Export determination: 6.

Rationale: NEW: adding assert in NodeInSset

**Change #765** with diff file ISSM-17324-17325.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed node on bed assertion

**Change #766** with diff file ISSM-17325-17326.diff:

Function name:



M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
Export determination: 6.  
Rationale: CHG: updating no penetration condition for FS at each time step

**Change #767** with diff file ISSM-17326-17327.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive435.nc M /issm/trunk-jpl/test/NightlyRun/test435.m  
Export determination: 6.  
Rationale: CHG: updated archives and tolerance recent test

**Change #768** with diff file ISSM-17327-17328.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp  
Export determination: 6.  
Rationale: BUG: fixing number of observations in case

**Change #769** with diff file ISSM-17328-17329.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp M /issm/trunk-jpl/src/c/toolkits/gsl/DenseGslSolve.cpp  
M /issm/trunk-jpl/src/c/toolkits/gsl/gslincludes.h  
Export determination: 6.  
Rationale: NEW: added GslTriple solve to have a faster solution of Kriging

**Change #770** with diff file ISSM-17329-17330.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp  
Export determination: 6.  
Rationale: CHG: fixing DenseGslTripleSolve call

**Change #771** with diff file ISSM-17330-17331.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: fixed set FS basal boundary conditions for flow line models

**Change #772** with diff file ISSM-17331-17332.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h  
Export determination: 6.  
Rationale: NEW: added mass transport for flowline models

**Change #773** with diff file ISSM-17332-17333.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: ficed wrong mesh type

**Change #774** with diff file ISSM-17333-17334.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
Export determination: 6.  
Rationale: NEW: finished implementation of mass transport in 2d flowband

**Change #775** with diff file ISSM-17334-17335.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions  
A /issm/trunk-jpl/src/m/enum/LevelsetfunctionPicardEnum.m  
Export determination: 6.  
Rationale: ADD: LsfReinitializationAnalysis: CreateKMatrix, CreatePVector.  
Preparing Picard Iteration on Levelsetfunction for initialization.

**Change #776** with diff file ISSM-17335-17336.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp

Export determination: 6.

Rationale: BUG: fixed meshtype that need vertical extrusion

**Change #777** with diff file ISSM-17336-17337.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp

Export determination: 6.

Rationale: CHG: trying to fix the AD build

**Change #778** with diff file ISSM-17337-17338.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: iBUG: fixed FS basal boundary conditions for tiling

**Change #779** with diff file ISSM-17338-17339.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: moved some GetInputValue to Element.cpp

**Change #780** with diff file ISSM-17339-17340.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: BUG: fixed Reset for real stokes

**Change #781** with diff file ISSM-17340-17341.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp

Export determination: 6.

Rationale: CHG: simplified kriging

**Change #782** with diff file ISSM-17341-17342.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixing SSA friction

**Change #783** with diff file ISSM-17342-17343.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp

Export determination: 6.

Rationale: CHG: error is now identical to gslib

**Change #784** with diff file ISSM-17343-17344.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/gsl/DenseGslSolve.cpp M /issm/trunk-jpl/src/c/toolkits/gsl/gslincludes.h

Export determination: 6.

Rationale: DEL: removed TripleSolve, not needed anymore

**Change #785** with diff file ISSM-17344-17345.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test435.m

Export determination: 6.

Rationale: CHG: relaxed some tolerances

**Change #786** with diff file ISSM-17345-17346.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h

Export determination: 6.

Rationale: BUG: fixed failure in weekly NR

**Change #787** with diff file ISSM-17346-17347.diff:

Function name:

M /issm/trunk-jpl/src/m/shp/Shp2Exp.m

Export determination: 6.

Rationale: BUG: better support for line layers with multiple features

**Change #788** with diff file ISSM-17347-17348.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp

Export determination: 6.

Rationale: BUG: fixed gauss point when position is provided

**Change #789** with diff file ISSM-17348-17349.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp

Export determination: 6.

Rationale: NEW: added friction law for Henning:

**Change #790** with diff file ISSM-17349-17350.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficient

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence

Export determination: 6.

Rationale: CHG:Now computing the transfer between layer in an implicit way

**Change #791** with diff file ISSM-17350-17351.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: leaving a dummy hydrologytransfer routine

**Change #792** with diff file ISSM-17351-17352.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: BUG: fixing analysis related bug in hydrology

**Change #793** with diff file ISSM-17352-17353.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py D /issm/trunk-jpl/src/m/enum/L2ProjectionTopAnalysisEnum.m D /issm/trunk-jpl/src/m/enum/WaterTransferEnum.m

Export determination: 6.

Rationale: CHG: removing water transfer enum, cleaning L2ProjectionTopAnalysisEnum

**Change #794** with diff file ISSM-17353-17354.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnum.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: cleaning water transfer from tria and related stuff

**Change #795** with diff file ISSM-17354-17355.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/SegRef.cpp

Export determination: 6.

Rationale: NEW: added basal functions and derivatives in Segment

**Change #796** with diff file ISSM-17355-17356.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: cleaning element, initializing transfer to 0 in case there is no transfer

**Change #797** with diff file ISSM-17356-17357.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: minor cosmetics

**Change #798** with diff file ISSM-17357-17358.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: minor cleanup

**Change #799** with diff file ISSM-17358-17359.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp

Export determination: 6.

Rationale: CHG: improved maximum numberoffaces

**Change #800** with diff file ISSM-17359-17360.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.h

Export determination: 6.

Rationale: NEW: added HO convergence tests

**Change #801** with diff file ISSM-17360-17361.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.h

Export determination: 6.

Rationale: CHG: cleaned analytical solutions

**Change #802** with diff file ISSM-17361-17362.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG:transferring epl thickness computation to the analysis

**Change #803** with diff file ISSM-17362-17363.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

Export determination: 6.

Rationale: CHG: Getting rid of AllActive

**Change #804** with diff file ISSM-17363-17364.diff:



Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp

Export determination: 6.

Rationale: CHG: Instead of extrapolation along normal, diffuse variable outward. Once initialization of levelset function to signed distance function is working, revert this step.

**Change #805** with diff file ISSM-17364-17365.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/masstransport.

M /issm/trunk-jpl/src/m/classes/masstransport.py M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

A /issm/trunk-jpl/src/m/enum/MasstransportCalvingrateEnum.m M /issm/trunk-

jpl/test/Archives/Archive336.nc M /issm/trunk-jpl/test/NightlyRun/test336.py

Export determination: 6.

Rationale: ADD: Calvingrate as model field; LevelsetAnalysis::SetDistanceOnIntersectedElements;

MINOR: code cleanup

**Change #806** with diff file ISSM-17365-17366.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/hydrologydc.py M /issm/trunk-jpl/src/m/classes/hydrologyshreve.py

Export determination: 6.

Rationale: NEW: adding python for hydrologydc

**Change #807** with diff file ISSM-17366-17367.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/hydrologyshreve.py

Export determination: 6.

Rationale: minor: typo

**Change #808** with diff file ISSM-17367-17368.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-

jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/damage.m  
M /issm/trunk-jpl/src/m/classes/damage.py M /issm/trunk-jpl/src/m/classes/model.m  
A /issm/trunk-jpl/src/m/enum/DamageEquivStressEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py M /issm/trunk-jpl/src/m/mech/mechanicalproperties.m  
M /issm/trunk-jpl/src/m/mech/steadystateiceshelftemp.m M /issm/trunk-jpl/src/m/mech/thomasparams.m  
M /issm/trunk-jpl/src/m/plot/colormaps/getcolormap.m  
Export determination: 6.  
Rationale: CHG: added a model field to choose the type of scalar equivalent stress for a damage evolution solution

**Change #809** with diff file ISSM-17368-17369.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

Export determination: 6.

Rationale: BUG: incompatibility of ternary operator with adolc

**Change #810** with diff file ISSM-17369-17370.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/cores/damage\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/damage.py

A /issm/trunk-jpl/src/m/enum/DamageEvolutionNumRequestedOutputsEnum.m

A /issm/trunk-jpl/src/m/enum/DamageEvolutionRequestedOutputsEnum.m M

/issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: CHG: enable requested outputs for damage evolution solution

**Change #811** with diff file ISSM-17370-17371.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

Export determination: 6.

Rationale: CHG: trying to fix AD

**Change #812** with diff file ISSM-17371-17372.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

Export determination: 6.

Rationale: BUG: replaced static arrays by dynamic ones

**Change #813** with diff file ISSM-17372-17373.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficient

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-

jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_hydro\_nonlinear.cpp

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_linear.cpp

Export determination: 6.

Rationale: CHG: moving hydrology related routines from the element to the analysis

**Change #814** with diff file ISSM-17373-17374.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: excluding FS test

**Change #815** with diff file ISSM-17374-17375.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: excluding test 435, which is failing for unknown reasons

**Change #816** with diff file ISSM-17375-17376.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
Export determination: 6.  
Rationale: CHG: change input managment in Hydro

**Change #817** with diff file ISSM-17376-17377.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.py A /issm/trunk-jpl/test/NightlyRun/test3300.m

Export determination: 6.

Rationale: NEW: adding a more evolve hydro test case

**Change #818** with diff file ISSM-17377-17378.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: removing 435 from windows only

**Change #819** with diff file ISSM-17378-17379.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.4-pleiades2.sh

Export determination: 6.

Rationale: NEW: added install-3.4-pleiades2.sh with old packages

**Change #820** with diff file ISSM-17379-17380.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/paraview/exportVTK.m D /issm/trunk-jpl/src/m/enum/DamageEvolutionRequestedOutputsEnum.m

D /issm/trunk-jpl/src/m/enum/DamageEvolutionRequestedOutputsEnum.m M /issm/trunk-jpl/src/m/exp/expdisp.m

Export determination: 6.

Rationale: BUG: Fix in exportVTK to deal with simulation without results

**Change #821** with diff file ISSM-17380-17381.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/DamageEvolutionNumRequestedOutputsEnum.m

A /issm/trunk-jpl/src/m/enum/DamageEvolutionRequestedOutputsEnum.m

Export determination: 6.

Rationale: BUG: Reverting enums

**Change #822** with diff file ISSM-17381-17382.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/process\_solve\_options.m M /issm/trunk-jpl/src/m/solve/solve.m

Export determination: 6.

Rationale: NEW: added 'runtimeName' option to avoid complex filename convention so that runtimeName = md.miscellaneous.name (default is true)

**Change #823** with diff file ISSM-17383-17384.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp

M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.cpp M /issm/trunk-jpl/src/c/modules/IoModelToConstraints

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp M /issm/trunk-

jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/M

Export determination: 6.

Rationale: BUG: fixed P2 in Penta

**Change #824** with diff file ISSM-17384-17385.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: fixed segfault of P2 caused by Facepartitionning

**Change #825** with diff file ISSM-17385-17386.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive285.nc M /issm/trunk-jpl/test/Archives/Archive290.nc

M /issm/trunk-jpl/test/Archives/Archive455.nc

Export determination: 6.

Rationale: CHG: updated archives for new P2 penta

**Change #826** with diff file ISSM-17386-17387.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateFaces.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: fixed problem with 2d taylor hood

**Change #827** with diff file ISSM-17387-17388.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test290.m M /issm/trunk-jpl/test/NightlyRun/test290.py

Export determination: 6.

Rationale: CHG: relaxed tolerances

**Change #828** with diff file ISSM-17388-17389.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanlyticals.cpp

Export determination: 6.

Rationale: NEW: another analytical solution

**Change #829** with diff file ISSM-17389-17390.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/analyticaldamage.m

Export determination: 6.

Rationale: BUG: fixed wrong vector length in damage calculation

**Change #830** with diff file ISSM-17390-17391.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/mechanicalproperties.m

Export determination: 6.

Rationale: CHG: added some comments to clarify stress calculations

**Change #831** with diff file ISSM-17391-17392.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/cores/damage\_core.cpp

Export determination: 6.

Rationale: CHG: misc changes to damage evolution solution, mirroring changes to mass transport analysis

**Change #832** with diff file ISSM-17392-17393.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/damage.py M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.py M /issm/trunk-jpl/src/m/solve/process\_solve\_options.py

Export determination: 6.

Rationale: CHG: updates for damage evolution in python

**Change #833** with diff file ISSM-17393-17394.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive275.nc M /issm/trunk-jpl/test/NightlyRun/IdToName.m M /issm/trunk-jpl/test/NightlyRun/IdToName.py M /issm/trunk-jpl/test/NightlyRun/runme.py A /issm/trunk-jpl/test/NightlyRun/test275.m A /issm/trunk-jpl/test/NightlyRun/test275.py

Export determination: 6.

Rationale: CHG: new NR for damage evolution

**Change #834** with diff file ISSM-17394-17395.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

Export determination: 6.

Rationale: NEW: added divergence calculation in elements

**Change #835** with diff file ISSM-17395-17396.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/mechanicalproperties.py

Export determination: 6.

Rationale: CHG: fixing array size for python calcs

**Change #836** with diff file ISSM-17396-17397.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/damage.py

Export determination: 6.

Rationale: CHG: added max principal stress as option for damage equiv\_stress

**Change #837** with diff file ISSM-17397-17398.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp

Export determination: 6.

Rationale: BUG: comparison of constant 3 with expression of type 'bool' is always false

**Change #838** with diff file ISSM-17398-17399.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp

A /issm/trunk-jpl/src/c/classes/Elements/Tetra.h A /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp

A /issm/trunk-jpl/src/c/classes/Elements/TetraRef.h M /issm/trunk-jpl/src/c/classes/classes.h

A /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.cpp A /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.h

M /issm/trunk-jpl/src/c/classes/gauss/gaussobjects.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinition

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo

Export determination: 6.

Rationale: NEW: preparing Tetra elements

**Change #839** with diff file ISSM-17399-17400.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/DivergenceEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

A /issm/trunk-jpl/src/m/enum/GaussTetraEnum.m A /issm/trunk-jpl/src/m/enum/TetraEnum.m



A /issm/trunk-jpl/src/m/enum/TetraInputEnum.m  
Export determination: 6.  
Rationale: CHG:Sync'ed Enums

**Change #840** with diff file ISSM-17400-17401.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive271.nc M /issm/trunk-jpl/test/NightlyRun/test271.m  
A /issm/trunk-jpl/test/NightlyRun/test271.py  
Export determination: 6.  
Rationale: updated archive and added source term as a checked field

**Change #841** with diff file ISSM-17401-17402.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/damage.py  
Export determination: 6.  
Rationale: CHG: fixed field display for damage class

**Change #842** with diff file ISSM-17402-17403.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plotmodel.py  
Export determination: 6.  
Rationale: CHG: clear any previous plot window for re-plotting

**Change #843** with diff file ISSM-17403-17404.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp  
Export determination: 6.  
Rationale: CHG: updating Henning's surface mass balance scheme

**Change #844** with diff file ISSM-17404-17405.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.cpp  
Export determination: 6.

Rationale: NEW: another analytical solution

**Change #845** with diff file ISSM-17405-17406.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp M /issm/trunk-jpl/src/c/shared/Exceptions/Exception

Export determination: 6.

Rationale: CHG: implementing nodal functions P1 and P2 for tetra

**Change #846** with diff file ISSM-17406-17407.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp

Export determination: 6.

Rationale: NEW: added Jacobian:

**Change #847** with diff file ISSM-17407-17408.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp

Export determination: 6.

Rationale: CHG: extrapolate by diffusion or along normal by setting bool 'extrapolatebydiffusion'

**Change #848** with diff file ISSM-17408-17409.diff:

Function name:

M /issm/trunk-jpl/src/m/Makefile.am

Export determination: 6.

Rationale: CHG: moved issmversion.py to PYTHON build

**Change #849** with diff file ISSM-17409-17410.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: fixed problem with numberoffaces in 2d

**Change #850** with diff file ISSM-17410-17411.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: CHG: clean up execution first to avoid disk space limitations

**Change #851** with diff file ISSM-17411-17412.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h  
Export determination: 6.  
Rationale: NEW: added ice shelf dampening for FS

**Change #852** with diff file ISSM-17412-17413.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: fixed windows compilation

**Change #853** with diff file ISSM-17413-17414.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
Export determination: 6.  
Rationale: CHG: now using local coordinate system for all nodes at the base in FS (for shelf dampening)

**Change #854** with diff file ISSM-17414-17415.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: local referential coordinates in tria as well

**Change #855** with diff file ISSM-17415-17416.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive703.nc M /issm/trunk-jpl/test/NightlyRun/test703.m

Export determination: 6.

Rationale: NEW: added test for shelf dampening (FS)

**Change #856** with diff file ISSM-17416-17417.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: numberoffaces only in 3D

**Change #857** with diff file ISSM-17417-17418.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: another numberoffaces missing

**Change #858** with diff file ISSM-17418-17419.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: wrong commit

**Change #859** with diff file ISSM-17419-17420.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp

Export determination: 6.

Rationale: BUG: fixed problem with nodes in 2d

**Change #860** with diff file ISSM-17420-17421.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/test/Archives/Archive204.nc M /issm/trunk-jpl/test/NightlyRun/test204.m

M /issm/trunk-jpl/test/NightlyRun/test204.py  
Export determination: 6.  
Rationale: BUG: fixed Stokes ice shelf dampening in 3d

**Change #861** with diff file ISSM-17421-17422.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/Numerics/GaussPoints.cpp  
Export determination: 6.  
Rationale: BUG: wrong gauss point for order 3 tetra

**Change #862** with diff file ISSM-17422-17423.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/hydrologydc.m  
M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/contrib/paraview/exportVTK.m  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py M /issm/trunk-jpl/test/NightlyRun/test3300.m  
M /issm/trunk-jpl/test/NightlyRun/test332.m M /issm/trunk-jpl/test/NightlyRun/test333.m  
M /issm/trunk-jpl/test/NightlyRun/test334.m M /issm/trunk-jpl/test/NightlyRun/test335.m  
Export determination: 6.  
Rationale: NEW: Adding new stuff to deal with moulin input

**Change #863** with diff file ISSM-17424-17425.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive703.nc  
Export determination: 6.  
Rationale: CHG: updated archives for dampening

**Change #864** with diff file ISSM-17425-17426.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: save results after extrapolation

**Change #865** with diff file ISSM-17426-17427.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp

Export determination: 6.

Rationale: CHG: adaptation to LSM in 3D

**Change #866** with diff file ISSM-17427-17428.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

Export determination: 6.

Rationale: CHG: adaptation of LSM to 3D

**Change #867** with diff file ISSM-17428-17429.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp

Export determination: 6.

Rationale: CHG: PVector for spawned basal element; minor cleanup

**Change #868** with diff file ISSM-17429-17430.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Node.cpp

Export determination: 6.

Rationale: BUG: deactivate nodes on non-basal layer for 2d solving process of extrapolation and LSM

**Change #869** with diff file ISSM-17430-17431.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.h

Export determination: 6.

Rationale: CHG: SetActiveNodesLSMx adapted to 3D case with distinction for 2D calculations; ADD: coupling LSM - HO flow approximation

**Change #870** with diff file ISSM-17431-17432.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp

Export determination: 6.

Rationale: ADD: coupling LSM - SIA flow model. Use this as a template for coupling LSM to an analysis.

**Change #871** with diff file ISSM-17432-17433.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setmask.m M /issm/trunk-jpl/src/m/parameterization/setmask.py

Export determination: 6.

Rationale: ADD: setting mask.ice\_levelset from argus file in setmask

**Change #872** with diff file ISSM-17433-17434.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setmask.m

Export determination: 6.

Rationale: BUG: fixed setmask in matlab

**Change #873** with diff file ISSM-17434-17435.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

Export determination: 6.

Rationale: ADD: Coupling LSM to thermal and enthalpy analysis

**Change #874** with diff file ISSM-17435-17436.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: ADD: extrusion of masstransport.calvingrate

**Change #875** with diff file ISSM-17436-17437.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: do drain waterfraction

**Change #876** with diff file ISSM-17437-17438.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive336.nc M /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: CHG: enabled masstransport; checking fields Thickness and Surface

**Change #877** with diff file ISSM-17438-17439.diff:  
Function name:  
M /issm/trunk-jpl/test/Par/SquareSheetConstrained.py  
Export determination: 6.  
Rationale: ADD: field masstransport.calvingrate to parameter file

**Change #878** with diff file ISSM-17439-17440.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/IdToName.m M /issm/trunk-jpl/test/NightlyRun/IdToName.py  
A /issm/trunk-jpl/test/NightlyRun/test336.m  
Export determination: 6.  
Rationale: ADD: LSM NR; update IdToName

**Change #879** with diff file ISSM-17440-17441.diff:  
Function name:  
M /issm/trunk-jpl/test/Par/SquareSheetConstrained.par  
Export determination: 6.  
Rationale: BUG: missing calving rate in matlab

**Change #880** with diff file ISSM-17441-17442.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test336.m  
Export determination: 6.



Rationale: CHG: trying to fix matlab test

**Change #881** with diff file ISSM-17442-17443.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

Export determination: 6.

Rationale: BUG: ZeroLevelsetCoordinates method get non-covered cases

**Change #882** with diff file ISSM-17443-17444.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test336.m

Export determination: 6.

Rationale: CHG: minor typos in matlab test

**Change #883** with diff file ISSM-17444-17445.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.h

M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp

Export determination: 6.

Rationale: NEW: Adding moulin Input capability to the Hydro Model

**Change #884** with diff file ISSM-17445-17446.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/HydrologydcBasalMoulinInputEnum.m

Export determination: 6.

Rationale: NEW: Adding enum

**Change #885** with diff file ISSM-17446-17447.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: making detection of zero levelset in element more general

**Change #886** with diff file ISSM-17447-17448.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive801.nc M /issm/trunk-jpl/test/NightlyRun/IdToName.py

A /issm/trunk-jpl/test/NightlyRun/test801.py

Export determination: 6.

Rationale: ADD: Levelset Method NightlyRun: ValleyGlacierLevelsetSSA2d

**Change #887** with diff file ISSM-17448-17449.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive801.nc M /issm/trunk-jpl/test/NightlyRun/test801.py

A /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: ADD: Valley glacier parameter file; coarsened resolution; setting ice domain to 2/3 of square.exp

**Change #888** with diff file ISSM-17449-17450.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: friction in 3d tria (for ssa 3d)

**Change #889** with diff file ISSM-17450-17451.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp

Export determination: 6.

Rationale: BUG: multiple manipulations on vector if running in parallel mode leads to inconsistencies in vector values

**Change #890** with diff file ISSM-17451-17452.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive801.nc A /issm/trunk-jpl/test/Archives/Archive802.nc

M /issm/trunk-jpl/test/NightlyRun/IdToName.py M /issm/trunk-jpl/test/NightlyRun/test801.py

A /issm/trunk-jpl/test/NightlyRun/test802.py M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py  
Export determination: 6.  
Rationale: ADD: Levelset NR ValleyGlacierLevelsetThermalSSA2d; CHG: change  
test801 to 3 processors

**Change #891** with diff file ISSM-17452-17453.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive803.nc M /issm/trunk-jpl/test/NightlyRun/IdToName.py  
A /issm/trunk-jpl/test/NightlyRun/test803.py M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py  
Export determination: 6.  
Rationale: ADD: Levelset NR 803: ValleyGlacierLevelsetEnthalpyHO3d

**Change #892** with diff file ISSM-17453-17454.diff:

Function name:

D /issm/trunk-jpl/test/Archives/Archive336.nc M /issm/trunk-jpl/test/NightlyRun/IdToName.m  
M /issm/trunk-jpl/test/NightlyRun/IdToName.py D /issm/trunk-jpl/test/NightlyRun/test336.m  
D /issm/trunk-jpl/test/NightlyRun/test336.py  
Export determination: 6.  
Rationale: DEL: obsolete Levelset nightlyruns

**Change #893** with diff file ISSM-17454-17455.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive804.nc A /issm/trunk-jpl/test/Archives/Archive805.nc  
M /issm/trunk-jpl/test/NightlyRun/IdToName.py M /issm/trunk-jpl/test/NightlyRun/test803.py  
A /issm/trunk-jpl/test/NightlyRun/test804.py A /issm/trunk-jpl/test/NightlyRun/test805.py  
Export determination: 6.  
Rationale: ADD: Levelset method NRs: ValleyGlacierLevelsetCalvingSIA2d &  
ValleyGlacierLevelsetEnthCalvingHO3d

**Change #894** with diff file ISSM-17455-17456.diff:

Function name:

A /issm/trunk-jpl/src/m/materials/cuffey.m A /issm/trunk-jpl/src/m/materials/cuffey.py  
M /issm/trunk-jpl/src/m/materials/paterson.m  
Export determination: 6.  
Rationale: NEW: added cuffey rigidity parameter

**Change #895** with diff file ISSM-17456-17457.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/matice.m M /issm/trunk-jpl/src/m/classes/matice.py

Export determination: 6.

Rationale: NEW: added cuffey rigidity parameter

**Change #896** with diff file ISSM-17457-17458.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/shared/Elements/Cuffey.cpp

M /issm/trunk-jpl/src/c/shared/Elements/Paterson.cpp M /issm/trunk-jpl/src/c/shared/Elements/elements.h

M /issm/trunk-jpl/src/c/shared/Exceptions/Exceptions.cpp

Export determination: 6.

Rationale: NEW: added Cuffey.cpp

**Change #897** with diff file ISSM-17458-17459.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim

Export determination: 6.

Rationale: CHG: syncing syntax highlight

**Change #898** with diff file ISSM-17459-17460.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.c

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

Export determination: 6.

Rationale: NEW: added CuffeyEnum

**Change #899** with diff file ISSM-17460-17461.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/CuffeyEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: NEW: added CuffeyEnum

**Change #900** with diff file ISSM-17461-17462.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/greenplanet.m

Export determination: 6.

Rationale: NEW : adding walltime and memory limit

**Change #901** with diff file ISSM-17462-17463.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive801.nc M /issm/trunk-jpl/test/Archives/Archive802.nc

M /issm/trunk-jpl/test/Archives/Archive803.nc M /issm/trunk-jpl/test/Archives/Archive804.nc

M /issm/trunk-jpl/test/Archives/Archive805.nc M /issm/trunk-jpl/test/NightlyRun/test801.py

M /issm/trunk-jpl/test/NightlyRun/test802.py M /issm/trunk-jpl/test/NightlyRun/test805.py

M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: CHG: relaxing tolerances, adding slope in y direction for geometry

**Change #902** with diff file ISSM-17463-17464.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAna

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnal

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp

Export determination: 6.

Rationale: minor: cleanup code

**Change #903** with diff file ISSM-17464-17465.diff:

Function name:

A /issm/trunk-jpl/test/NightlyRun/test801.m M /issm/trunk-jpl/test/NightlyRun/test801.py

A /issm/trunk-jpl/test/NightlyRun/test802.m A /issm/trunk-jpl/test/NightlyRun/test803.m

A /issm/trunk-jpl/test/NightlyRun/test804.m A /issm/trunk-jpl/test/NightlyRun/test805.m

Export determination: 6.  
Rationale: ADD: Matlab NRs for level set method

**Change #904** with diff file ISSM-17465-17466.diff:  
Function name:  
M /issm/trunk-jpl/src/m/extrusion/project3d.m M /issm/trunk-jpl/src/m/extrusion/project3d.py  
Export determination: 6.  
Rationale: CHG: no more dimensions, look for meshtype

**Change #905** with diff file ISSM-17466-17467.diff:  
Function name:  
M /issm/trunk-jpl/src/m/parameterization/setflowequation.py  
Export determination: 6.  
Rationale: CHG: HO and FS now available for 2d flowbands

**Change #906** with diff file ISSM-17467-17468.diff:  
Function name:  
A /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par  
Export determination: 6.  
Rationale: ADD: Matlab parameter file for ValleyGlacier setup

**Change #907** with diff file ISSM-17468-17469.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test801.m M /issm/trunk-jpl/test/NightlyRun/test802.m  
M /issm/trunk-jpl/test/NightlyRun/test803.m M /issm/trunk-jpl/test/NightlyRun/test804.m  
M /issm/trunk-jpl/test/NightlyRun/test805.m  
Export determination: 6.  
Rationale: minor: semicolons

**Change #908** with diff file ISSM-17469-17470.diff:  
Function name:  
M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par  
Export determination: 6.

Rationale: minor: more semicolons

**Change #909** with diff file ISSM-17470-17471.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.m M /issm/trunk-jpl/test/NightlyRun/test801.m  
M /issm/trunk-jpl/test/NightlyRun/test802.m M /issm/trunk-jpl/test/NightlyRun/test803.m  
M /issm/trunk-jpl/test/NightlyRun/test803.py M /issm/trunk-jpl/test/NightlyRun/test804.m  
M /issm/trunk-jpl/test/NightlyRun/test805.m M /issm/trunk-jpl/test/NightlyRun/test805.py  
M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par

Export determination: 6.

Rationale: BUG: fixed level set tests in matlab

**Change #910** with diff file ISSM-17471-17472.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/thermal.py

Export determination: 6.

Rationale: CHG: make python's checkconsistency consistent to matlab's one

**Change #911** with diff file ISSM-17472-17473.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
A /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.cpp A /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.h  
M /issm/trunk-jpl/src/c/classes/classes.h M /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.cpp  
M /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.h M /issm/trunk-jpl/src/c/modules/MeshPartitionx/MeshPartitionx.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNumberNodeToElementConnectivity.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ElementsAndVerticesPartitioning.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp

Export determination: 6.

Rationale: NEW: working on Tetra elements

**Change #912** with diff file ISSM-17473-17474.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/Mesh3DtetrasEnum.m

Export determination: 6.

Rationale: CHG: syncing enums

**Change #913** with diff file ISSM-17474-17475.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_highlightelements.m M /issm/trunk-jpl/src/m/plot/plot\_mesh.m

M /issm/trunk-jpl/src/m/plot/processdata.m M /issm/trunk-jpl/src/m/plot/processmesh.m

Export determination: 6.

Rationale: CHG: some changes to display results on tetra mesh, stop looking for md.mesh.dimension

**Change #914** with diff file ISSM-17475-17476.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.py

Export determination: 6.

Rationale: CHG: stop looking for md.mesh.dimension

**Change #915** with diff file ISSM-17476-17477.diff:

Function name:

D /issm/trunk-jpl/src/m/mesh/planet/planetmesher.m D /issm/trunk-jpl/src/m/mesh/planet/planetmixedm

M /issm/trunk-jpl/src/m/mesh/planet/planettrimesh.m

Export determination: 6.

Rationale: DEL removed some unused files

**Change #916** with diff file ISSM-17477-17478.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.py

Export determination: 6.

Rationale: BUG: fixed python version



**Change #917** with diff file ISSM-17478-17479.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test803.m M /issm/trunk-jpl/test/NightlyRun/test803.py

Export determination: 6.

Rationale: CHG: relaxed some tolerances

**Change #918** with diff file ISSM-17479-17480.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Numerics/GaussPoints.cpp M /issm/trunk-jpl/src/c/shared/Numerics/Gauss

Export determination: 6.

Rationale: BUG: fixinf AD compilation, gauss tetra needs to have IssmDouble  
and not PDouble

**Change #919** with diff file ISSM-17480-17481.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetIceSheetBC.py M /issm/trunk-jpl/src/m/boundaryconditions/SetIceShelfBC.py M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIce  
M /issm/trunk-jpl/src/m/classes/clusters/generic.py M /issm/trunk-jpl/src/m/classes/damage.py  
M /issm/trunk-jpl/src/m/classes/dependent.py M /issm/trunk-jpl/src/m/classes/flowequation.py  
M /issm/trunk-jpl/src/m/classes/groundingline.py M /issm/trunk-jpl/src/m/classes/independent.py  
M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/mesh.py  
M /issm/trunk-jpl/src/m/classes/mesh2d.py M /issm/trunk-jpl/src/m/classes/pairoptions.py  
M /issm/trunk-jpl/src/m/classes/plotoptions.py M /issm/trunk-jpl/src/m/classes/qmu.py  
M /issm/trunk-jpl/src/m/classes/results.py M /issm/trunk-jpl/src/m/classes/stressbalance.py  
M /issm/trunk-jpl/src/m/classes/toolkits.py M /issm/trunk-jpl/src/m/classes/verbose.py  
M /issm/trunk-jpl/src/m/consistency/checkfield.py M /issm/trunk-jpl/src/m/contrib/bamg/YamsCall.py  
M /issm/trunk-jpl/src/m/exp/expcoarsen.py M /issm/trunk-jpl/src/m/exp/expread.py  
M /issm/trunk-jpl/src/m/extrusion/project3d.py M /issm/trunk-jpl/src/m/geometry/FlagElements.py  
M /issm/trunk-jpl/src/m/mesh/ComputeHessian.py M /issm/trunk-jpl/src/m/mesh/bamg.py  
M /issm/trunk-jpl/src/m/mesh/rifts/meshprocessoutsiderifts.py M /issm/trunk-jpl/src/m/mesh/triangle.py M /issm/trunk-jpl/src/m/miscellaneous/fielddisplay.py  
M /issm/trunk-jpl/src/m/os/issmdir.py M /issm/trunk-jpl/src/m/os/issmscpin.py  
M /issm/trunk-jpl/src/m/os/issmscpout.py M /issm/trunk-jpl/src/m/os/issmssh.py  
M /issm/trunk-jpl/src/m/parameterization/setflowequation.py M /issm/trunk-jpl/src/m/solve/WriteData.py M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.py  
M /issm/trunk-jpl/src/m/solve/loadresultsfromdisk.py M /issm/trunk-jpl/src/m/solve/parsereultsfromdisk.py  
M /issm/trunk-jpl/src/m/solve/solve.py M /issm/trunk-jpl/src/m/solve/waitonlock.py

Export determination: 6.

Rationale: CHG: cleaning up python imports. Use "m" prefix when using Mat-  
labFuncs so that users can track down where these functions are defined rather

than assuming they are mysterious python built-ins. Avoid importing Archive Forms ocreview.sh TEMP Template when possible, which cleans up the namespace and makes sure each module imports only what it needs (and that modules are not using functions imported by another module, which can break the code if modules are moved around)

**Change #920** with diff file ISSM-17481-17482.diff:

Function name:

A /issm/trunk-jpl/externalpackages/fti A /issm/trunk-jpl/externalpackages/fti/Makefile

A /issm/trunk-jpl/externalpackages/fti/install.sh

Export determination: 6.

Rationale: NEW: added fti for checkpointing

**Change #921** with diff file ISSM-17482-17483.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.m

Export determination: 6.

Rationale: CHG: preparing plot for tetras

**Change #922** with diff file ISSM-17483-17484.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/mesh3dtetras.m M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: NEW: added tetras method in model that splits mesh3dprism into mesh3dtetra

**Change #923** with diff file ISSM-17484-17485.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp

Export determination: 6.

Rationale: BUG: fixing numberofvertices

**Change #924** with diff file ISSM-17485-17486.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.cpp  
Export determination: 6.  
Rationale: CHG: fixed volume of reference tetra:

**Change #925** with diff file ISSM-17486-17487.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp  
Export determination: 6.  
Rationale: BUG: got Jacobian rightvim TetraRef.cpp

**Change #926** with diff file ISSM-17487-17488.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ElementsAndVerticesPartitioning.cpp  
Export determination: 6.  
Rationale: BUG: make ElementsAndVerticesPartitioning work for any type of mesh

**Change #927** with diff file ISSM-17488-17489.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.py M /issm/trunk-jpl/src/m/exp/expread.py  
M /issm/trunk-jpl/src/m/mesh/ComputeHessian.py M /issm/trunk-jpl/src/m/parameterization/contourenvel  
M /issm/trunk-jpl/src/m/parameterization/setmask.py  
Export determination: 6.  
Rationale: BUG: missed a few changes after updating the import of Matlab-Funcs

**Change #928** with diff file ISSM-17489-17490.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp  
Export determination: 6.  
Rationale: CHG: removed some comments

**Change #929** with diff file ISSM-17490-17491.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp

M /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.cpp M /issm/trunk-jpl/src/c/modules/IoModelToConstrai

M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateEdges.cpp M /issm/trunk-

jpl/src/c/modules/ModelProcessorx/EdgesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/SystemMatrices

Export determination: 6.

Rationale: NEW: P1bubble implemented for tetras

**Change #930** with diff file ISSM-17491-17492.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp

Export determination: 6.

Rationale: NEW: done with Tetra P1bubblecondensed

**Change #931** with diff file ISSM-17492-17493.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp

Export determination: 6.

Rationale: CHG: reverting back

**Change #932** with diff file ISSM-17493-17494.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h

M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.

Export determination: 6.

Rationale: CHG: working on MINI elements FS

**Change #933** with diff file ISSM-17494-17495.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/Makefile.am

A /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp A /issm/trunk-

jpl/src/c/analyses/DepthAverageAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/analyses.h A /issm/trunk-jpl/src/c/cores/depthaverage\_core.cpp

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/shared/Exceptions/Exce  
Export determination: 6.  
Rationale: NEW: working on depthaveraging method

**Change #934** with diff file ISSM-17495-17496.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Exceptions/Exceptions.cpp

Export determination: 6.

Rationale: CHG: reverting back

**Change #935** with diff file ISSM-17496-17497.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setflowequation.py

Export determination: 6.

Rationale: BUG: missed a couple references to PythonFuncs

**Change #936** with diff file ISSM-17497-17498.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMB.py M /issm/trunk-jpl/src/m/classes/SMBgradients.py  
M /issm/trunk-jpl/src/m/classes/SMBpdd.py M /issm/trunk-jpl/src/m/classes/autodiff.py  
M /issm/trunk-jpl/src/m/classes/balancethickness.py M /issm/trunk-jpl/src/m/classes/basalforcings.py  
M /issm/trunk-jpl/src/m/classes/constants.py M /issm/trunk-jpl/src/m/classes/flaim.py  
M /issm/trunk-jpl/src/m/classes/friction.py M /issm/trunk-jpl/src/m/classes/geometry.py  
M /issm/trunk-jpl/src/m/classes/gia.py M /issm/trunk-jpl/src/m/classes/hydrologydc.py  
M /issm/trunk-jpl/src/m/classes/hydrologyshreve.py M /issm/trunk-jpl/src/m/classes/inversion.py  
M /issm/trunk-jpl/src/m/classes/mask.py M /issm/trunk-jpl/src/m/classes/massfluxatgate.py  
M /issm/trunk-jpl/src/m/classes/masstransport.py M /issm/trunk-jpl/src/m/classes/matice.py  
M /issm/trunk-jpl/src/m/classes/miscellaneous.py M /issm/trunk-jpl/src/m/classes/organizer.py  
M /issm/trunk-jpl/src/m/classes/outputdefinition.py M /issm/trunk-jpl/src/m/classes/private.py  
M /issm/trunk-jpl/src/m/classes/rifts.py M /issm/trunk-jpl/src/m/classes/settings.py  
M /issm/trunk-jpl/src/m/classes/steadystate.py M /issm/trunk-jpl/src/m/classes/thermal.py  
M /issm/trunk-jpl/src/m/classes/timestepping.py M /issm/trunk-jpl/src/m/classes/transient.py  
M /issm/trunk-jpl/src/m/io/loadmodel.py M /issm/trunk-jpl/src/m/mesh/ElementsFromEdge.py  
M /issm/trunk-jpl/src/m/mesh/meshconvert.py M /issm/trunk-jpl/src/m/mesh/rifts/meshprocessrifts.py  
M /issm/trunk-jpl/src/m/mesh/roundmesh.py M /issm/trunk-jpl/src/m/mesh/squaremesh.py  
M /issm/trunk-jpl/src/m/parameterization/contourenvelope.py M /issm/trunk-  
jpl/src/m/parameterization/setflowequation.py M /issm/trunk-jpl/src/m/parameterization/setmask.py

M /issm/trunk-jpl/src/m/plot/plot\_manager.py M /issm/trunk-jpl/src/m/plot/plotmodel.py  
M /issm/trunk-jpl/src/m/solve/marshall.py M /issm/trunk-jpl/src/m/solvers/asmoptions.py  
M /issm/trunk-jpl/src/m/solvers/iluasmoptions.py M /issm/trunk-jpl/src/m/solvers/issmgsolver.py  
M /issm/trunk-jpl/src/m/solvers/issmmumpsolver.py M /issm/trunk-jpl/src/m/solvers/jacobiasmoptions.py  
M /issm/trunk-jpl/src/m/solvers/jacobicgoptions.py M /issm/trunk-jpl/src/m/solvers/matlaboptions.py  
M /issm/trunk-jpl/src/m/solvers/mumpsoptions.py M /issm/trunk-jpl/src/m/solvers/soroptions.py  
M /issm/trunk-jpl/src/m/solvers/stokesoptions.py  
Export determination: 6.  
Rationale: CHG: cleaning up import Archive Forms oecreview.sh TEMP Template statements, caught a few missing modules

**Change #937** with diff file ISSM-17498-17499.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/DepthAverageAnalysisEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/InputToDepthaverageEnum.m

Export determination: 6.

Rationale: CHG: syncing enums

**Change #938** with diff file ISSM-17499-17500.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test101.py M /issm/trunk-jpl/test/NightlyRun/test202.py  
M /issm/trunk-jpl/test/NightlyRun/test203.py M /issm/trunk-jpl/test/NightlyRun/test204.py  
M /issm/trunk-jpl/test/NightlyRun/test205.py M /issm/trunk-jpl/test/NightlyRun/test206.py  
M /issm/trunk-jpl/test/NightlyRun/test207.py M /issm/trunk-jpl/test/NightlyRun/test208.py  
M /issm/trunk-jpl/test/NightlyRun/test209.py M /issm/trunk-jpl/test/NightlyRun/test211.py  
M /issm/trunk-jpl/test/NightlyRun/test212.py M /issm/trunk-jpl/test/NightlyRun/test213.py  
M /issm/trunk-jpl/test/NightlyRun/test214.py M /issm/trunk-jpl/test/NightlyRun/test215.py  
M /issm/trunk-jpl/test/NightlyRun/test216.py M /issm/trunk-jpl/test/NightlyRun/test217.py  
M /issm/trunk-jpl/test/NightlyRun/test219.py M /issm/trunk-jpl/test/NightlyRun/test220.py  
M /issm/trunk-jpl/test/NightlyRun/test237.py

Export determination: 6.

Rationale: BUG: NR's need to import generic class

**Change #939** with diff file ISSM-17500-17501.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setmask.py

Export determination: 6.

Rationale: BUG: missed import

**Change #940** with diff file ISSM-17501-17502.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/organizer.py

Export determination: 6.

Rationale: BUG: missed import

**Change #941** with diff file ISSM-17502-17503.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/plotoptions.py M /issm/trunk-jpl/src/m/plot/plotmodel.py

Export determination: 6.

Rationale: BUG: instantiation of paioptions in plotoptions

**Change #942** with diff file ISSM-17503-17504.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.h M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelPr

Export determination: 6.

Rationale: CHG: Levelsetfunction initialization routine to solve penalization scheme in a transient fashion with artificial time steps

**Change #943** with diff file ISSM-17504-17505.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.c

Export determination: 6.

Rationale: CHG: cosmetics

**Change #944** with diff file ISSM-17505-17506.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test210.py

Export determination: 6.

Rationale: BUG: missed cluster import

**Change #945** with diff file ISSM-17506-17507.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMBpdd.py

Export determination: 6.

Rationale: BUG: missed numpy import

**Change #946** with diff file ISSM-17507-17508.diff:

Function name:

M /issm/trunk-jpl/src/c/bamg/BamgQuadtree.cpp M /issm/trunk-jpl/src/c/bamg/BamgVertex.cpp

M /issm/trunk-jpl/src/c/bamg/Geometry.cpp M /issm/trunk-jpl/src/c/bamg/ListofIntersectionTriangles.cpp

M /issm/trunk-jpl/src/c/bamg/Mesh.cpp M /issm/trunk-jpl/src/c/bamg/Triangle.cpp

Export determination: 6.

Rationale: CHG: removed all register commands to get rid of (warning: 'register' storage class specifier is deprecated)

**Change #947** with diff file ISSM-17508-17509.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

Export determination: 6.

Rationale: BUG: fixed Dirichlet conditions on faces for P2P4

**Change #948** with diff file ISSM-17509-17510.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/objects/Vector.h M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscVec.h

M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscVec.h

Export determination: 6.

Rationale: NEW: added Max function to PetscVec

**Change #949** with diff file ISSM-17510-17511.diff:

Function name:

M /issm/trunk-jpl/src/m/extrusion/DepthAverage.m M /issm/trunk-jpl/src/m/extrusion/project2d.m

Export determination: 6.

Rationale: CHG: do not use md.mesh.dimension anymore



**Change #950** with diff file ISSM-17511-17512.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp M /issm/trunk-jpl/src/c/cores/cores.h  
M /issm/trunk-jpl/src/c/cores/depthaverage\_core.cpp M /issm/trunk-jpl/src/c/cores/surfaceslope\_core.cpp  
Export determination: 6.

Rationale: NEW: done with depth averaging solution :)

**Change #951** with diff file ISSM-17512-17513.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp  
Export determination: 6.

Rationale: BUG: fixing numbering of dirichlet on faces P2P4

**Change #952** with diff file ISSM-17513-17514.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/ElementHook.cpp M /issm/trunk-jpl/src/c/classes/Elements/ElementHook.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/Input.h M /issm/trunk-jpl/src/c/classes/Inputs/Inputs.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/Inputs.h M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h  
M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/shared/Exceptions/exceptions.h  
Export determination: 6.

Rationale: CHG: working on spawnTria function of Tetra

**Change #953** with diff file ISSM-17514-17515.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/ElementHook.cpp M /issm/trunk-jpl/src/c/classes/Elements/ElementHook.h

jpl/src/c/classes/Elements/ElementHook.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/BoolInput.h M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.h M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.h M /issm/trunk-jpl/src/c/classes/Inputs/Input.h  
M /issm/trunk-jpl/src/c/classes/Inputs/Inputs.cpp M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/IntInput.h M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.h M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.h  
M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.h  
Export determination: 6.  
Rationale: CHG: removed duplicate SpawnTria that required location only

**Change #954** with diff file ISSM-17515-17516.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp

Export determination: 6.

Rationale: NEW: working on FS Tetra:

**Change #955** with diff file ISSM-17516-17517.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolution.cpp  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/MassTransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressBalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.h  
D /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_damage\_nonlinear.cpp  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h

Export determination: 6.

Rationale: CHG: cosmetics, removed penalties from damage transient, merged some functions from Tria and Penta to Element

**Change #956** with diff file ISSM-17517-17518.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am

Export determination: 6.

Rationale: BUG: removed ./solutionsequences/solutionsequence\_damage\_nonlinear.cpp from Makefile

**Change #957** with diff file ISSM-17518-17519.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp

Export determination: 6.

Rationale: BUG: wrong artificial diffusion caught by Hongju

**Change #958** with diff file ISSM-17519-17520.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp

Export determination: 6.

Rationale: BUG: wrong artificial diffusion caught by Hongju

**Change #959** with diff file ISSM-17520-17521.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test1502.m

Export determination: 6.

Rationale: CHG: no verbose needed in Nightly runs

**Change #960** with diff file ISSM-17521-17522.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp

Export determination: 6.

Rationale: BUG: variable 'approximation' is used before its value is set

**Change #961** with diff file ISSM-17522-17523.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/flowequation.m  
M /issm/trunk-jpl/src/m/classes/flowequation.py M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
A /issm/trunk-jpl/src/m/enum/XTaylorHoodEnum.m  
Export determination: 6.  
Rationale: NEW: added new enum for Nathan's LA theta algo

**Change #962** with diff file ISSM-17523-17524.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: CHG: adding an initialization value for the epl thickness

**Change #963** with diff file ISSM-17524-17525.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test3300.m M /issm/trunk-jpl/test/NightlyRun/test333.m  
M /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.

Rationale: CHG: updating hydro test to the new initialization method

**Change #964** with diff file ISSM-17525-17526.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/C  
A /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h

Export determination: 6.

Rationale: CHG: working on XTaylorhood

**Change #965** with diff file ISSM-17526-17527.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: working onXTH

**Change #966** with diff file ISSM-17527-17528.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: while spawning segments for top, make sure to have consistent elements (x increasing)

**Change #967** with diff file ISSM-17528-17529.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: fixed coupling FS

**Change #968** with diff file ISSM-17529-17530.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: CHG: fixed indexing on top segments (see Hongju's email)

**Change #969** with diff file ISSM-17530-17531.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil

Export determination: 6.

Rationale: CHG: enable development to check moving boundaries

**Change #970** with diff file ISSM-17531-17532.diff:

Function name:

M /issm/trunk-jpl/jenkins/imac-012301-gil

Export determination: 6.

Rationale: BUG: fixed syntax:

**Change #971** with diff file ISSM-17532-17533.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: local coordinates for all elements on the bed thanks to hongju

**Change #972** with diff file ISSM-17533-17534.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: enable development to check moving boundaries

**Change #973** with diff file ISSM-17534-17535.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive104.nc M /issm/trunk-jpl/test/Archives/Archive124.nc

M /issm/trunk-jpl/test/Archives/Archive211.nc M /issm/trunk-jpl/test/Archives/Archive215.nc

M /issm/trunk-jpl/test/Archives/Archive220.nc M /issm/trunk-jpl/test/Archives/Archive221.nc

M /issm/trunk-jpl/test/Archives/Archive503.nc M /issm/trunk-jpl/test/Archives/Archive507.nc

M /issm/trunk-jpl/test/Archives/Archive510.nc M /issm/trunk-jpl/test/Archives/Archive511.nc

Export determination: 6.

Rationale: CHG: updating archives for local coordinates ice shelf

**Change #974** with diff file ISSM-17535-17536.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToString.cpp

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp A /issm/trunk-jpl/src/m/enum/DeviatoricStress

A /issm/trunk-jpl/src/m/enum/DeviatoricStressxxEnum.m A /issm/trunk-jpl/src/m/enum/DeviatoricStressxx

A /issm/trunk-jpl/src/m/enum/DeviatoricStressxxzEnum.m A /issm/trunk-jpl/src/m/enum/DeviatoricStressyy

A /issm/trunk-jpl/src/m/enum/DeviatoricStressyyzEnum.m A /issm/trunk-jpl/src/m/enum/DeviatoricStresszz

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/StrainRateEnum.m

A /issm/trunk-jpl/src/m/enum/StrainRatexxEnum.m A /issm/trunk-jpl/src/m/enum/StrainRatexyEnum.m

A /issm/trunk-jpl/src/m/enum/StrainRatexzEnum.m A /issm/trunk-jpl/src/m/enum/StrainRateyyEnum.m

A /issm/trunk-jpl/src/m/enum/StrainRateyzEnum.m A /issm/trunk-jpl/src/m/enum/StrainRatezzEnum.m

Export determination: 6.

Rationale: CHG: constructing d and tau from inputs

**Change #975** with diff file ISSM-17536-17537.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.h

Export determination: 6.

Rationale: CHG: adding Tensor basis functions'

**Change #976** with diff file ISSM-17537-17538.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: creating Dstar matrix

**Change #977** with diff file ISSM-17538-17539.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: done with create P Vector

**Change #978** with diff file ISSM-17539-17540.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h

Export determination: 6.

Rationale: CHG: working on initialization

**Change #979** with diff file ISSM-17540-17541.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp  
Export determination: 6.  
Rationale: CHG: moved initialization to solution sequence

**Change #980** with diff file ISSM-17541-17542.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp  
Export determination: 6.

Rationale: NEW: preparing input update from solution XTH

**Change #981** with diff file ISSM-17542-17543.diff:

Function name:

D /issm/trunk-jpl/src/m/shp/Shp2Exp.m A /issm/trunk-jpl/src/m/shp/shp2exp.m  
(from /issm/trunk-jpl/src/m/shp/Shp2Exp.m:17515) A /issm/trunk-jpl/src/m/shp/shp2exp.py  
Export determination: 6.

Rationale: NEW: python version of shp2exp. renamed matlab version for consistency of capitalization with other shp functions

**Change #982** with diff file ISSM-17543-17544.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Numerics/GaussPoints.cpp M /issm/trunk-jpl/src/c/shared/Numerics/GaussPoints.h  
Export determination: 6.

Rationale: NEW: added gauss points for segments up to 7 order

**Change #983** with diff file ISSM-17544-17545.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive104.nc M /issm/trunk-jpl/test/Archives/Archive124.nc  
M /issm/trunk-jpl/test/Archives/Archive204.nc M /issm/trunk-jpl/test/Archives/Archive211.nc  
M /issm/trunk-jpl/test/Archives/Archive215.nc M /issm/trunk-jpl/test/Archives/Archive220.nc  
M /issm/trunk-jpl/test/Archives/Archive221.nc M /issm/trunk-jpl/test/Archives/Archive503.nc  
M /issm/trunk-jpl/test/Archives/Archive507.nc M /issm/trunk-jpl/test/Archives/Archive511.nc  
M /issm/trunk-jpl/test/Archives/Archive702.nc M /issm/trunk-jpl/test/Archives/Archive703.nc  
Export determination: 6.



Rationale: CHG: updated archives NR

**Change #984** with diff file ISSM-17545-17546.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim

Export determination: 6.

Rationale: CHG: syncing enums

**Change #985** with diff file ISSM-17546-17547.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

A /issm/trunk-jpl/src/c/shared/Numerics/NewtonSolveDnorm.cpp M /issm/trunk-

jpl/src/c/shared/Numerics/numerics.h

Export determination: 6.

Rationale: NEW: done with NewtonSolve

**Change #986** with diff file ISSM-17547-17548.diff:

Function name:

M /issm/trunk-jpl/src/m/materials/paterson.py

Export determination: 6.

Rationale: BUG: fixed paterson to accept scalar temperature

**Change #987** with diff file ISSM-17548-17549.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/shared/Matrix/MatrixUtils.cpp M /issm/trunk-jpl/src/c/shared/Matrix/matrix.h

Export determination: 6.

Rationale: CHG: done with updating tau and d

**Change #988** with diff file ISSM-17549-17550.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp

Export determination: 6.

Rationale: CHG: done with updating tau and d

**Change #989** with diff file ISSM-17550-17551.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive435.nc

Export determination: 6.

Rationale: CHG: minor for new gauss points

**Change #990** with diff file ISSM-17551-17552.diff:

Function name:

M /issm/trunk-jpl/src/m/interp/averaging.py A /issm/trunk-jpl/src/m/interp/holefiller.py

Export determination: 6.

Rationale: NEW: python module for filling holes in data using k nearest neighbors

**Change #991** with diff file ISSM-17552-17553.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive510.nc

Export determination: 6.

Rationale: CHG: minor updated archive

**Change #992** with diff file ISSM-17553-17554.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/shared/Numerics/Newton M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp A /issm/trunk-jpl/src/m/enum/AugmentedLagrangianREnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: CHG: done with first version of XTH algorithm

**Change #993** with diff file ISSM-17554-17555.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim  
Export determination: 6.  
Rationale: CHG: Syncing enums

**Change #994** with diff file ISSM-17555-17556.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.cpp M /issm/trunk-jpl/src/c/classes/Vertex.cpp  
M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Transient/UpdateElementsTransient.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/geometry.m  
M /issm/trunk-jpl/src/m/classes/geometry.py M /issm/trunk-jpl/src/m/classes/masstransport.m  
M /issm/trunk-jpl/src/m/classes/masstransport.py A /issm/trunk-jpl/src/m/enum/BaseEnum.m  
D /issm/trunk-jpl/src/m/enum/BathymetryEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
A /issm/trunk-jpl/src/m/enum/QmuBaseEnum.m D /issm/trunk-jpl/src/m/enum/QmuBedEnum.m  
M /issm/trunk-jpl/test/NightlyRun/test110.m M /issm/trunk-jpl/test/NightlyRun/test110.py  
M /issm/trunk-jpl/test/NightlyRun/test111.m M /issm/trunk-jpl/test/NightlyRun/test111.py  
M /issm/trunk-jpl/test/NightlyRun/test1208.m M /issm/trunk-jpl/test/NightlyRun/test1208.py  
M /issm/trunk-jpl/test/NightlyRun/test122.m M /issm/trunk-jpl/test/NightlyRun/test122.py  
M /issm/trunk-jpl/test/NightlyRun/test124.m M /issm/trunk-jpl/test/NightlyRun/test1501.m  
M /issm/trunk-jpl/test/NightlyRun/test1501.py M /issm/trunk-jpl/test/NightlyRun/test1502.m  
M /issm/trunk-jpl/test/NightlyRun/test1502.py M /issm/trunk-jpl/test/NightlyRun/test208.m  
M /issm/trunk-jpl/test/NightlyRun/test208.py M /issm/trunk-jpl/test/NightlyRun/test209.m  
M /issm/trunk-jpl/test/NightlyRun/test209.py M /issm/trunk-jpl/test/NightlyRun/test210.m  
M /issm/trunk-jpl/test/NightlyRun/test210.py M /issm/trunk-jpl/test/NightlyRun/test211.m  
M /issm/trunk-jpl/test/NightlyRun/test211.py M /issm/trunk-jpl/test/NightlyRun/test222.m  
M /issm/trunk-jpl/test/NightlyRun/test222.py M /issm/trunk-jpl/test/NightlyRun/test223.m  
M /issm/trunk-jpl/test/NightlyRun/test223.py M /issm/trunk-jpl/test/NightlyRun/test224.m  
M /issm/trunk-jpl/test/NightlyRun/test224.py M /issm/trunk-jpl/test/NightlyRun/test225.m

M /issm/trunk-jpl/test/NightlyRun/test225.py M /issm/trunk-jpl/test/NightlyRun/test226.m  
M /issm/trunk-jpl/test/NightlyRun/test226.py M /issm/trunk-jpl/test/NightlyRun/test227.m  
M /issm/trunk-jpl/test/NightlyRun/test227.py M /issm/trunk-jpl/test/NightlyRun/test228.m  
M /issm/trunk-jpl/test/NightlyRun/test228.py M /issm/trunk-jpl/test/NightlyRun/test229.m  
M /issm/trunk-jpl/test/NightlyRun/test229.py M /issm/trunk-jpl/test/NightlyRun/test230.m  
M /issm/trunk-jpl/test/NightlyRun/test230.py M /issm/trunk-jpl/test/NightlyRun/test231.m  
M /issm/trunk-jpl/test/NightlyRun/test231.py M /issm/trunk-jpl/test/NightlyRun/test233.m  
M /issm/trunk-jpl/test/NightlyRun/test233.py M /issm/trunk-jpl/test/NightlyRun/test236.m  
M /issm/trunk-jpl/test/NightlyRun/test236.py M /issm/trunk-jpl/test/NightlyRun/test237.m  
M /issm/trunk-jpl/test/NightlyRun/test237.py M /issm/trunk-jpl/test/NightlyRun/test3010.m  
M /issm/trunk-jpl/test/NightlyRun/test3010.py M /issm/trunk-jpl/test/NightlyRun/test3110.m  
M /issm/trunk-jpl/test/NightlyRun/test3110.py M /issm/trunk-jpl/test/NightlyRun/test314.m  
M /issm/trunk-jpl/test/NightlyRun/test314.py M /issm/trunk-jpl/test/NightlyRun/test315.m  
M /issm/trunk-jpl/test/NightlyRun/test315.py M /issm/trunk-jpl/test/NightlyRun/test316.m  
M /issm/trunk-jpl/test/NightlyRun/test316.py M /issm/trunk-jpl/test/NightlyRun/test317.m  
M /issm/trunk-jpl/test/NightlyRun/test317.py M /issm/trunk-jpl/test/NightlyRun/test323.m  
M /issm/trunk-jpl/test/NightlyRun/test323.py M /issm/trunk-jpl/test/NightlyRun/test324.m  
M /issm/trunk-jpl/test/NightlyRun/test324.py M /issm/trunk-jpl/test/NightlyRun/test327.m  
M /issm/trunk-jpl/test/NightlyRun/test327.py M /issm/trunk-jpl/test/NightlyRun/test328.m  
M /issm/trunk-jpl/test/NightlyRun/test328.py M /issm/trunk-jpl/test/NightlyRun/test329.m  
M /issm/trunk-jpl/test/NightlyRun/test329.py M /issm/trunk-jpl/test/NightlyRun/test408.m  
M /issm/trunk-jpl/test/NightlyRun/test408.py M /issm/trunk-jpl/test/NightlyRun/test409.m  
M /issm/trunk-jpl/test/NightlyRun/test409.py M /issm/trunk-jpl/test/NightlyRun/test424.m  
M /issm/trunk-jpl/test/NightlyRun/test424.py M /issm/trunk-jpl/test/NightlyRun/test425.m  
M /issm/trunk-jpl/test/NightlyRun/test425.py M /issm/trunk-jpl/test/NightlyRun/test426.m  
M /issm/trunk-jpl/test/NightlyRun/test426.py M /issm/trunk-jpl/test/NightlyRun/test427.m  
M /issm/trunk-jpl/test/NightlyRun/test427.py M /issm/trunk-jpl/test/NightlyRun/test435.m  
M /issm/trunk-jpl/test/NightlyRun/test504.m M /issm/trunk-jpl/test/NightlyRun/test504.py  
M /issm/trunk-jpl/test/NightlyRun/test505.m M /issm/trunk-jpl/test/NightlyRun/test505.py  
M /issm/trunk-jpl/test/NightlyRun/test506.m M /issm/trunk-jpl/test/NightlyRun/test506.py  
M /issm/trunk-jpl/test/NightlyRun/test507.m M /issm/trunk-jpl/test/NightlyRun/test507.py  
M /issm/trunk-jpl/test/NightlyRun/test703.m

Export determination: 6.

Rationale: NEW: renamed Bed -j Base in src/c (matlab to be done)

**Change #995** with diff file ISSM-17556-17557.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/mesh3dprisms.m A /issm/trunk-jpl/src/m/classes/mesh3dprisms.py

Export determination: 6.

Rationale: NEW: added mesh3dprisms

**Change #996** with diff file ISSM-17557-17558.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test1108.m

Export determination: 6.

Rationale: CHG: minor removed verbose of solution

**Change #997** with diff file ISSM-17558-17559.diff:

Function name:

D /issm/trunk-jpl/src/m/classes/mesh.m D /issm/trunk-jpl/src/m/classes/mesh.py

M /issm/trunk-jpl/src/m/classes/mesh2d.py M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m

M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/model.m

M /issm/trunk-jpl/src/m/classes/model.py A /issm/trunk-jpl/src/m/classes/oldclasses/mesh.m

(from /issm/trunk-jpl/src/m/classes/mesh.m:17553) M /issm/trunk-jpl/src/m/mesh/argusmesh.m

M /issm/trunk-jpl/src/m/mesh/bamg.m M /issm/trunk-jpl/src/m/mesh/bamg.py

M /issm/trunk-jpl/src/m/mesh/meshconvert.m M /issm/trunk-jpl/src/m/mesh/meshconvert.py

M /issm/trunk-jpl/src/m/mesh/rifts/meshaddrifts.m M /issm/trunk-jpl/src/m/mesh/rifts/meshprocessoutsid

M /issm/trunk-jpl/src/m/mesh/rifts/meshprocessoutsiderifts.py M /issm/trunk-

jpl/src/m/mesh/rifts/meshprocessrifts.m M /issm/trunk-jpl/src/m/mesh/rifts/meshprocessrifts.py

M /issm/trunk-jpl/src/m/mesh/squaremesh.m M /issm/trunk-jpl/src/m/mesh/squaremesh.py

M /issm/trunk-jpl/src/m/mesh/triangle.m M /issm/trunk-jpl/src/m/mesh/triangle.py

M /issm/trunk-jpl/src/m/mesh/triangle2dvertical.m M /issm/trunk-jpl/src/m/parameterization/contourenvel

M /issm/trunk-jpl/src/m/parameterization/contourenvelope.py

Export determination: 6.

Rationale: NEW: removed old mesh classes, use subclasses instead

**Change #998** with diff file ISSM-17559-17560.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/modellist.m

M /issm/trunk-jpl/src/m/classes/rifts.m M /issm/trunk-jpl/src/m/classes/rifts.py

M /issm/trunk-jpl/src/m/classes/spheremesh.m M /issm/trunk-jpl/src/m/classes/thermal.m

M /issm/trunk-jpl/src/m/classes/thermal.py M /issm/trunk-jpl/src/m/contrib/ecco/PropagateFlagsUntilDist

M /issm/trunk-jpl/src/m/contrib/hack/tres.m M /issm/trunk-jpl/src/m/contrib/massbalance/divergence.m

M /issm/trunk-jpl/src/m/contrib/massbalance/outflux.m M /issm/trunk-jpl/src/m/exp/contourlevelzero.m

M /issm/trunk-jpl/src/m/geometry/slope.m M /issm/trunk-jpl/src/m/geometry/slope.py

M /issm/trunk-jpl/src/m/interp/SectionValues.m M /issm/trunk-jpl/src/m/interp/averaging.m

M /issm/trunk-jpl/src/m/interp/averaging.py M /issm/trunk-jpl/src/m/inversions/velocitymisfit.m

M /issm/trunk-jpl/src/m/mech/analyticaldamage.m M /issm/trunk-jpl/src/m/mech/backstressfrominversion.

M /issm/trunk-jpl/src/m/mech/damagefrominversion.m M /issm/trunk-jpl/src/m/mech/mechanicalproperties

M /issm/trunk-jpl/src/m/mech/strainrateuncert.m M /issm/trunk-jpl/src/m/mech/thomasparams.m

M /issm/trunk-jpl/src/m/mesh/bamg.m M /issm/trunk-jpl/src/m/mesh/bamg.py

M /issm/trunk-jpl/src/m/partition/AreaAverageOntoPartition.m M /issm/trunk-jpl/src/m/partition/partitioner.m M /issm/trunk-jpl/src/m/plot/plot\_basaldrag.m  
M /issm/trunk-jpl/src/m/plot/plot\_edges.m M /issm/trunk-jpl/src/m/plot/plot\_icefront.m  
M /issm/trunk-jpl/src/m/plot/plot\_penalties.m M /issm/trunk-jpl/src/m/plot/plot\_qmu\_mass\_flux\_segments.m  
M /issm/trunk-jpl/src/m/plot/plot\_referential.m M /issm/trunk-jpl/src/m/plot/plot\_section.m  
M /issm/trunk-jpl/src/m/plot/plot\_segments.m M /issm/trunk-jpl/src/m/plot/plot\_tensor\_components.m  
M /issm/trunk-jpl/src/m/plot/plot\_tensor\_principal.m M /issm/trunk-jpl/src/m/plot/plot\_tensor\_principalaxi  
M /issm/trunk-jpl/src/m/plot/plot\_transient\_results.m M /issm/trunk-jpl/src/m/plot/processmesh.py  
Export determination: 6.  
Rationale: CHG: changing some md.mesh.dimension

**Change #999** with diff file ISSM-17560-17561.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp

Export determination: 6.

Rationale: CHG: do not load meshvertexonbed if mesh is 2d

**Change #1000** with diff file ISSM-17561-17562.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessors/CreateFaces.cpp

Export determination: 6.

Rationale: CHG: Fixing dirichlet for P2 and P2xP4

**Change #1001** with diff file ISSM-17562-17563.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mesh2d.m M /issm/trunk-jpl/src/m/classes/mesh2d.py

M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m

M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: BUG: spctemperature were not set correctly because 2d meshes do not have vertexonsurface anymore

**Change #1002** with diff file ISSM-17563-17564.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

M /issm/trunk-jpl/src/m/classes/rifts.py M /issm/trunk-jpl/src/m/classes/thermal.py

Export determination: 6.

Rationale: BUG: fixing some tests now that subclasses are used for md.mesh

**Change #1003** with diff file ISSM-17564-17565.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp

M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/m/classes/model.m

M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: BUG: fixing some issues related to mesh subclasses

**Change #1004** with diff file ISSM-17565-17566.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: BUG: fixing extract 3D

**Change #1005** with diff file ISSM-17566-17567.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: CHG: fixed load of old mesh classes

**Change #1006** with diff file ISSM-17567-17568.diff:

Function name:

A /issm/trunk-jpl/src/m/boundaryconditions/PattynSMB.m A /issm/trunk-

jpl/src/m/boundaryconditions/PattynSMB.py

Export determination: 6.

Rationale: CHG: generate SMB in Antarctica from simple semi-empirical considerations.

**Change #1007** with diff file ISSM-17568-17569.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/applyoptions.m

Export determination: 6.

Rationale: CHG: added marker size option

**Change #1008** with diff file ISSM-17569-17570.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/waitonlock.m M /issm/trunk-jpl/src/m/solve/waitonlock.py

Export determination: 6.

Rationale: CHG: shortening wait on lock.

**Change #1009** with diff file ISSM-17570-17571.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp

Export determination: 6.

Rationale: CHG: fixed issues with AD compile.

**Change #1010** with diff file ISSM-17571-17572.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/waitonlock.m

Export determination: 6.

Rationale: BUG: fixing waitonlock for acenet

**Change #1011** with diff file ISSM-17572-17573.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp A /issm/trunk-jpl/src/m/enum/ContactEnum.m

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: NEW: new GL migration option for FS based on contact mechanics



**Change #1012** with diff file ISSM-17573-17574.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test435.m

Export determination: 6.

Rationale: CHG: minor tolerances

**Change #1013** with diff file ISSM-17574-17575.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/waitonlock.py

Export determination: 6.

Rationale: BUG: fixed gethostname

**Change #1014** with diff file ISSM-17575-17576.diff:

Function name:

A /issm/trunk-jpl/src/m/miscellaneous/vorticity.m

Export determination: 6.

Rationale: NEW: added vorticity.m

**Change #1015** with diff file ISSM-17576-17577.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processmesh.m

Export determination: 6.

Rationale: BUG: fixed processmesh for 2d meshes

**Change #1016** with diff file ISSM-17577-17578.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processmesh.m

Export determination: 6.

Rationale: BUG: fixed processmesh for 2d meshes

**Change #1017** with diff file ISSM-17578-17579.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processmesh.m

Export determination: 6.  
Rationale: CHG: fixed simple name bug.

**Change #1018** with diff file ISSM-17579-17580.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx  
M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.h  
M /issm/trunk-jpl/src/m/classes/groundingline.m M /issm/trunk-jpl/src/m/classes/groundingline.py

Export determination: 6.

Rationale: NEW: added FS contact method for GL (not implemented yet)

**Change #1019** with diff file ISSM-17580-17581.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: NEW: added FS contact method for GL (not implemented yet)

**Change #1020** with diff file ISSM-17581-17582.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processmesh.py

Export determination: 6.

Rationale: BUG: missed import of MatlabFuncs

**Change #1021** with diff file ISSM-17582-17583.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: some minor details in FS contact migration

**Change #1022** with diff file ISSM-17583-17584.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: BUG: fixing compilation

**Change #1023** with diff file ISSM-17584-17585.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: NEW: fixing constraints at the bed for grounded free surface bed

**Change #1024** with diff file ISSM-17585-17586.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalanceThicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalanceThicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalanceVelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MassTransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressBalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressBalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressBalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp

Export determination: 6.

Rationale: CHG: renaming OnBed OnBase for consistency

**Change #1025** with diff file ISSM-17586-17587.diff:

Function name:

D /issm/trunk-jpl/CMakeLists.txt D /issm/trunk-jpl/m4/issm\_options.cmake

D /issm/trunk-jpl/src/CMakeLists.txt D /issm/trunk-jpl/src/c/CMakeLists.txt

Export determination: 6.

Rationale: CHG: removing cmake files, Gil is giving up the idea

**Change #1026** with diff file ISSM-17587-17588.diff:

Function name:

A /issm/trunk-jpl/src/m/coordsystems/ll2xy.py

Export determination: 6.

Rationale: NEW: python version of ll2xy

**Change #1027** with diff file ISSM-17588-17589.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.py M /issm/trunk-jpl/src/m/parameterization/contourenvelope.py

Export determination: 6.

Rationale: BUG: class mesh does not exist anymore

**Change #1028** with diff file ISSM-17589-17590.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m

Export determination: 6.

Rationale: BUG: fixed mesh3dprisms constructor

**Change #1029** with diff file ISSM-17590-17591.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/geometry.m M /issm/trunk-jpl/src/m/classes/geometry.py

M /issm/trunk-jpl/src/m/classes/groundingline.m M /issm/trunk-jpl/src/m/classes/groundingline.py

M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

M /issm/trunk-jpl/src/m/contrib/hydrology/effectivepressure.m M /issm/trunk-

jpl/src/m/geometry/ThicknessCorrection.m M /issm/trunk-jpl/src/m/interp/ProfileValues.m

M /issm/trunk-jpl/src/m/interp/SectionValues.m M /issm/trunk-jpl/src/m/mech/basalstress.m

M /issm/trunk-jpl/src/m/plot/plot\_basaldrag.m M /issm/trunk-jpl/test/NightlyRun/test217.m

M /issm/trunk-jpl/test/NightlyRun/test217.py M /issm/trunk-jpl/test/NightlyRun/test218.m

M /issm/trunk-jpl/test/NightlyRun/test223.m M /issm/trunk-jpl/test/NightlyRun/test223.py  
M /issm/trunk-jpl/test/NightlyRun/test225.m M /issm/trunk-jpl/test/NightlyRun/test225.py  
M /issm/trunk-jpl/test/NightlyRun/test3015.m M /issm/trunk-jpl/test/NightlyRun/test3015.py  
M /issm/trunk-jpl/test/NightlyRun/test3020.m M /issm/trunk-jpl/test/NightlyRun/test3020.py  
M /issm/trunk-jpl/test/NightlyRun/test423.m M /issm/trunk-jpl/test/NightlyRun/test423.py  
M /issm/trunk-jpl/test/NightlyRun/test424.m M /issm/trunk-jpl/test/NightlyRun/test424.py  
M /issm/trunk-jpl/test/NightlyRun/test425.m M /issm/trunk-jpl/test/NightlyRun/test425.py  
M /issm/trunk-jpl/test/NightlyRun/test426.m M /issm/trunk-jpl/test/NightlyRun/test426.py  
M /issm/trunk-jpl/test/NightlyRun/test427.m M /issm/trunk-jpl/test/NightlyRun/test427.py  
M /issm/trunk-jpl/test/NightlyRun/test435.m M /issm/trunk-jpl/test/NightlyRun/test511.m  
M /issm/trunk-jpl/test/NightlyRun/test511.py M /issm/trunk-jpl/test/NightlyRun/test701.m  
M /issm/trunk-jpl/test/NightlyRun/test702.m M /issm/trunk-jpl/test/NightlyRun/test703.m  
M /issm/trunk-jpl/test/Par/79North.par M /issm/trunk-jpl/test/Par/79North.py  
M /issm/trunk-jpl/test/Par/GiaBenchmarksAB.par M /issm/trunk-jpl/test/Par/GiaBenchmarksCD.par  
M /issm/trunk-jpl/test/Par/ISMIPA.par M /issm/trunk-jpl/test/Par/ISMIPA.py  
M /issm/trunk-jpl/test/Par/ISMIPB.par M /issm/trunk-jpl/test/Par/ISMIPB.py  
M /issm/trunk-jpl/test/Par/ISMIPC.par M /issm/trunk-jpl/test/Par/ISMIPC.py  
M /issm/trunk-jpl/test/Par/ISMIPD.par M /issm/trunk-jpl/test/Par/ISMIPD.py  
M /issm/trunk-jpl/test/Par/ISMIPE.par M /issm/trunk-jpl/test/Par/ISMIPE.py  
M /issm/trunk-jpl/test/Par/ISMIPF.par M /issm/trunk-jpl/test/Par/ISMIPF.py  
M /issm/trunk-jpl/test/Par/Pig.par M /issm/trunk-jpl/test/Par/Pig.py M /issm/trunk-  
jpl/test/Par/RoundSheetEISMINT.par M /issm/trunk-jpl/test/Par/RoundSheetEISMINT.py  
M /issm/trunk-jpl/test/Par/RoundSheetShelf.par M /issm/trunk-jpl/test/Par/RoundSheetShelf.py  
M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.par M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.py  
M /issm/trunk-jpl/test/Par/SquareEISMINT.par M /issm/trunk-jpl/test/Par/SquareEISMINT.py  
M /issm/trunk-jpl/test/Par/SquareSheetConstrained.par M /issm/trunk-jpl/test/Par/SquareSheetConstrained.py  
M /issm/trunk-jpl/test/Par/SquareSheetShelf.par M /issm/trunk-jpl/test/Par/SquareSheetShelf.py  
M /issm/trunk-jpl/test/Par/SquareShelf.par M /issm/trunk-jpl/test/Par/SquareShelf.py  
M /issm/trunk-jpl/test/Par/SquareShelf2.par M /issm/trunk-jpl/test/Par/SquareShelf2.py  
M /issm/trunk-jpl/test/Par/SquareShelfConstrained.par M /issm/trunk-jpl/test/Par/SquareShelfConstrained.py  
M /issm/trunk-jpl/test/Par/SquareThermal.par M /issm/trunk-jpl/test/Par/SquareThermal.py  
M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py  
Export determination: 6.  
Rationale: CHG: WARNING: md.geometry.bed is now md.geometry.base and  
bathymetry is bed

**Change #1030** with diff file ISSM-17591-17592.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/waitonlock.m

Export determination: 6.

Rationale: BUG: fixed for pfe interactive=0

**Change #1031** with diff file ISSM-17592-17593.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test423.m M /issm/trunk-jpl/test/NightlyRun/test423.py

M /issm/trunk-jpl/test/NightlyRun/test424.m M /issm/trunk-jpl/test/NightlyRun/test424.py

M /issm/trunk-jpl/test/NightlyRun/test425.m M /issm/trunk-jpl/test/NightlyRun/test425.py

M /issm/trunk-jpl/test/NightlyRun/test427.m M /issm/trunk-jpl/test/NightlyRun/test427.py

M /issm/trunk-jpl/test/NightlyRun/test435.m

Export determination: 6.

Rationale: CHG: fixed GL tests

**Change #1032** with diff file ISSM-17593-17594.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/groundingline.py

Export determination: 6.

Rationale: BUG: fixed grounding line migration type

**Change #1033** with diff file ISSM-17594-17595.diff:

Function name:

M /issm/trunk-jpl/test/Par/RoundSheetShelf.py M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: BUG: fixed bathymetry:

**Change #1034** with diff file ISSM-17595-17596.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test426.py

Export determination: 6.

Rationale: CHG: minor

**Change #1035** with diff file ISSM-17596-17597.diff:

Function name:

A /issm/trunk-jpl/src/m/interp/interp.py

Export determination: 6.

Rationale: NEW: python interpolation module. Largely analogous to existing Interp routines but adds new functionality (piecewise cubic spline interpolation, guaranteed to be continuously differentiable), radial interpolation for smoothing,

etc. Still needs more thorough testing.

**Change #1036** with diff file ISSM-17597-17598.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processdata.m M /issm/trunk-jpl/src/m/plot/processdata.py

M /issm/trunk-jpl/src/m/plot/processmesh.py

Export determination: 6.

Rationale: BUG: some fixes for new mesh handling

**Change #1037** with diff file ISSM-17598-17599.diff:

Function name:

M /issm/trunk-jpl/src/m/interp/interp.py

Export determination: 6.

Rationale: CHG: subset the input data for better efficiency, mask out nan's since they corrupt the spline calculation

**Change #1038** with diff file ISSM-17599-17600.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test426.m

Export determination: 6.

Rationale: CHG: fixed bathymetry

**Change #1039** with diff file ISSM-17600-17601.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAna

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cp

M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Constraints/SpcDynam

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoMode

Export determination: 6.

Rationale: NEW: relaxed constrain for free surface bed when floating, and removed +1 shift in dof for constraints (really a headache), use C convention all over now

**Change #1040** with diff file ISSM-17601-17602.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test237.py

Export determination: 6.

Rationale: BUG: fixed initial temperatures

**Change #1041** with diff file ISSM-17602-17603.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/contourenvelope.py

Export determination: 6.

Rationale: BUG: do not use mesh variable

**Change #1042** with diff file ISSM-17603-17604.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp

Export determination: 6.

Rationale: NEW: added convergence test for LA Theta algorithm

**Change #1043** with diff file ISSM-17604-17605.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: for FS, do not reinterpolate results on P1 inputs, keep the same interpolation

**Change #1044** with diff file ISSM-17605-17606.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp

Export determination: 6.

Rationale: CHG: fixing depth averaging for non P1 input



**Change #1045** with diff file ISSM-17606-17607.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive104.nc M /issm/trunk-jpl/test/Archives/Archive204.nc  
M /issm/trunk-jpl/test/Archives/Archive211.nc M /issm/trunk-jpl/test/Archives/Archive215.nc  
M /issm/trunk-jpl/test/Archives/Archive220.nc M /issm/trunk-jpl/test/Archives/Archive221.nc  
M /issm/trunk-jpl/test/Archives/Archive290.nc M /issm/trunk-jpl/test/Archives/Archive308.nc  
M /issm/trunk-jpl/test/Archives/Archive322.nc M /issm/trunk-jpl/test/Archives/Archive404.nc  
M /issm/trunk-jpl/test/Archives/Archive421.nc M /issm/trunk-jpl/test/Archives/Archive422.nc  
M /issm/trunk-jpl/test/Archives/Archive503.nc M /issm/trunk-jpl/test/Archives/Archive507.nc  
M /issm/trunk-jpl/test/Archives/Archive510.nc M /issm/trunk-jpl/test/Archives/Archive511.nc

Export determination: 6.

Rationale: CHG: updating FS archives: now keep vx and vy on actual interpolation (do not use P1)

**Change #1046** with diff file ISSM-17607-17608.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive124.nc M /issm/trunk-jpl/test/Archives/Archive211.nc  
M /issm/trunk-jpl/test/Archives/Archive701.nc M /issm/trunk-jpl/test/Archives/Archive702.nc  
M /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: CHG: updating archives now that FS does not reinterpolate to P1

**Change #1047** with diff file ISSM-17608-17609.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp

Export determination: 6.

Rationale: BUG: fixed some memory leaks/delete problems

**Change #1048** with diff file ISSM-17609-17610.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp

Export determination: 6.

Rationale: CHG: InputUpdateFromSolution do not assume a P1 finite element anymore

**Change #1049** with diff file ISSM-17610-17611.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStress.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py M /issm/trunk-jpl/src/m/classes/oldclasses/mesh.m M /issm/trunk-jpl/src/m/classes/stressbalance.m M /issm/trunk-jpl/src/m/classes/stressbalance.py M /issm/trunk-jpl/src/m/consistency/checkfield.m M /issm/trunk-jpl/src/m/consistency/checkfield.py M /issm/trunk-jpl/src/m/contrib/bamg/yams.m M /issm/trunk-jpl/src/m/contrib/dassflow/importgmsh.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/MeshElementonbaseEnum.m D /issm/trunk-jpl/src/m/enum/MeshElementonbedEnum.m A /issm/trunk-jpl/src/m/enum/MeshVertexonbaseEnum.m D /issm/trunk-jpl/src/m/enum/MeshVertexonbedEnum.m M /issm/trunk-jpl/src/m/mesh/bamgflowband.m M /issm/trunk-jpl/test/NightlyRun/test1101.m M /issm/trunk-jpl/test/NightlyRun/test1101.py M /issm/trunk-jpl/test/NightlyRun/test1102.m M /issm/trunk-jpl/test/NightlyRun/test1102.py M /issm/trunk-jpl/test/NightlyRun/test1103.m M /issm/trunk-jpl/test/NightlyRun/test1103.py M /issm/trunk-jpl/test/NightlyRun/test1104.m M /issm/trunk-jpl/test/NightlyRun/test1104.py M /issm/trunk-jpl/test/NightlyRun/test1105.m M /issm/trunk-jpl/test/NightlyRun/test1105.py M /issm/trunk-jpl/test/NightlyRun/test1107.m M /issm/trunk-jpl/test/NightlyRun/test1107.py M /issm/trunk-jpl/test/NightlyRun/test1108.m M /issm/trunk-jpl/test/NightlyRun/test1108.py M /issm/trunk-jpl/test/NightlyRun/test1109.m M /issm/trunk-jpl/test/NightlyRun/test1110.m M /issm/trunk-jpl/test/NightlyRun/test1205.m M /issm/trunk-jpl/test/NightlyRun/test1205.py

M /issm/trunk-jpl/test/NightlyRun/test1206.m M /issm/trunk-jpl/test/NightlyRun/test1206.py  
M /issm/trunk-jpl/test/NightlyRun/test1207.m M /issm/trunk-jpl/test/NightlyRun/test1207.py  
M /issm/trunk-jpl/test/NightlyRun/test1208.m M /issm/trunk-jpl/test/NightlyRun/test1208.py  
M /issm/trunk-jpl/test/NightlyRun/test1302.m M /issm/trunk-jpl/test/NightlyRun/test1302.py  
M /issm/trunk-jpl/test/NightlyRun/test1303.m M /issm/trunk-jpl/test/NightlyRun/test1303.py  
M /issm/trunk-jpl/test/NightlyRun/test703.m  
Export determination: 6.  
Rationale: NEW: renamed onbed -i onbase

**Change #1050** with diff file ISSM-17611-17612.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/oldclasses/mesh.m  
Export determination: 6.  
Rationale: CHG: do not update old class

**Change #1051** with diff file ISSM-17612-17613.diff:  
Function name:  
M /issm/trunk-jpl/src/m/shp/shp2exp.py  
Export determination: 6.  
Rationale: BUG: fixed shp2exp for point shapefiles

**Change #1052** with diff file ISSM-17613-17614.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive280.nc M /issm/trunk-jpl/test/Archives/Archive285.nc  
M /issm/trunk-jpl/test/Archives/Archive450.nc M /issm/trunk-jpl/test/Archives/Archive455.nc  
Export determination: 6.  
Rationale: CHG: updating archives now that we do not reinterpolate results on  
P1

**Change #1053** with diff file ISSM-17614-17615.diff:  
Function name:  
M /issm/trunk-jpl/src/m/exp/expread.py  
Export determination: 6.  
Rationale: corrected help text for python usage

**Change #1054** with diff file ISSM-17615-17616.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp

Export determination: 6.

Rationale: CHG: added  $1/\sqrt{2}$  factor in effective straine rate for flow band models

**Change #1055** with diff file ISSM-17616-17617.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive701.nc M /issm/trunk-jpl/test/Archives/Archive702.nc

M /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: CHG: updating FS archives: now keep vx and vy on actual interpolation (do not use P1)

**Change #1056** with diff file ISSM-17617-17618.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plotmodel.py M /issm/trunk-jpl/src/m/plot/processdata.py

Export determination: 6.

Rationale: CHG: fill nan's by default since matplotlib doesn't handle them

**Change #1057** with diff file ISSM-17618-17619.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processdata.py

Export determination: 6.

Rationale: better default fill value for nan's

**Change #1058** with diff file ISSM-17619-17620.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionseq

Export determination: 6.

Rationale: CHG: added initial guess when u=0 and number of non linear iterations from md.stressbalance

**Change #1059** with diff file ISSM-17621-17622.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: fixing some memory leaks

**Change #1060** with diff file ISSM-17622-17623.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/analyticaldamage.py A /issm/trunk-jpl/src/m/mech/backstressfrominversion.

A /issm/trunk-jpl/src/m/mech/damagefrominversion.py M /issm/trunk-jpl/src/m/mech/mechanicalproperties

A /issm/trunk-jpl/src/m/mech/thomasparams.py

Export determination: 6.

Rationale: python-izing some mech functions

**Change #1061** with diff file ISSM-17623-17624.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/SegRef.cpp

Export determination: 6.

Rationale: BUG: use only x to compute Jacobian (1d model do not use 3d coordinates)

**Change #1062** with diff file ISSM-17624-17625.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/damagefrominversion.py

Export determination: 6.

Rationale: BUG: fixed problem for vector vs. array in damage calcs

**Change #1063** with diff file ISSM-17625-17626.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive702.nc M /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: CHG: updated flow line archives

**Change #1064** with diff file ISSM-17626-17627.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h

Export determination: 6.

Rationale: CHG: trying to make `_DEVELOPMENT_` variable defined

**Change #1065** with diff file ISSM-17627-17628.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp M /issm/trunk-jpl/src/c/toolkits/mpi/issmmmpi.h

Export determination: 6.

Rationale: CHG: working on templating MPI calls

**Change #1066** with diff file ISSM-17628-17629.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.

Rationale: CHG: fixing Dstar

**Change #1067** with diff file ISSM-17629-17630.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/shared/Numerics/NewtonSolveDnorm.cpp M /issm/trunk-jpl/src/c/shared/Numerics/numerics.h

Export determination: 6.

Rationale: CHG: fixing Newton algo with first guess

**Change #1068** with diff file ISSM-17630-17631.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #1069** with diff file ISSM-17631-17632.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: BUG: fixed problem with matlab mex extension when matlab is installed after automakererun

**Change #1070** with diff file ISSM-17632-17633.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/damage.py  
Export determination: 6.  
Rationale: BUG: fixed indent error in output marshalling for damage

**Change #1071** with diff file ISSM-17633-17634.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: NEW: first version of contact GL criterion

**Change #1072** with diff file ISSM-17634-17635.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: minor, no need to declare basis variable

**Change #1073** with diff file ISSM-17635-17636.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/applyoptions.py M /issm/trunk-jpl/src/m/plot/plot\_unit.py  
Export determination: 6.  
Rationale: CHG: better default handling of colormap in python plots

**Change #1074** with diff file ISSM-17636-17637.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.

Rationale: CHG: (1) add constraint on  $v_y$  if  $\text{levelset} == 0$  (2) GL migration only allowed for the first grounded element that touches the GL

**Change #1075** with diff file ISSM-17637-17638.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

Export determination: 6.

Rationale: CHG: constrain  $v_z$  on FS if  $\text{levelset} = 0$

**Change #1076** with diff file ISSM-17638-17639.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: using max instead of min of  $\text{Groundedicelevelset}$  to test if element is contact with GL

**Change #1077** with diff file ISSM-17639-17640.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive702.nc M /issm/trunk-jpl/test/Archives/Archive703.nc

Export determination: 6.

Rationale: CHG: saved archive now that  $v_z$  Dirichlet is applied at the GL

**Change #1078** with diff file ISSM-17640-17641.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/applyoptions.py M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: CHG: better handling of colormap and clim, added options to specify the color when data falls outside the range specified by clim

**Change #1079** with diff file ISSM-17641-17642.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/modules/GroundinglineMigration



Export determination: 6.  
Rationale: CHG: added GL Migration in 3d, testing required

**Change #1080** with diff file ISSM-17642-17643.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/transient.py  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py D /issm/trunk-jpl/src/m/enum/TransientIsdamageEnum.m  
A /issm/trunk-jpl/src/m/enum/TransientIsdamageevolutionEnum.m M /issm/trunk-jpl/src/m/interp/averaging.py

Export determination: 6.

Rationale: CHG: added damage evolution analysis to transient run

**Change #1081** with diff file ISSM-17643-17644.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: CHG: minor, index for colorbar saturation not needed here

**Change #1082** with diff file ISSM-17644-17645.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/transient.m

Export determination: 6.

Rationale: BUG: fixed a couple bugs in matlab code for damage evolution analysis in transient

**Change #1083** with diff file ISSM-17645-17646.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp

Export determination: 6.

Rationale: CHG: forgot to remove print statement from debugging

**Change #1084** with diff file ISSM-17646-17647.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: only load Vz in 3d models

**Change #1085** with diff file ISSM-17647-17648.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: tau must be stored in Dev Stress

**Change #1086** with diff file ISSM-17648-17649.diff:  
Function name:  
M /issm/trunk-jpl/src/m/coordsystems/xy2ll.py  
Export determination: 6.  
Rationale: minor bug in xy2ll if statement

**Change #1087** with diff file ISSM-17649-17650.diff:  
Function name:  
A /issm/trunk-jpl/src/m/plot/colormaps/cmptools.py  
Export determination: 6.  
Rationale: NEW: module for modifying matplotlib colormaps, for now just contains a function to truncate an existing colormap to desired interval

**Change #1088** with diff file ISSM-17650-17651.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/shared/Numerics/NewtonSolveDnorm.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.cpp  
Export determination: 6.  
Rationale: NEW: done with X-TH LA

**Change #1089** with diff file ISSM-17651-17652.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp A /issm/trunk-jpl/src/m/enum/AugmentedLagra

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: NEW: added new enum

**Change #1090** with diff file ISSM-17652-17653.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/shared/FSanalytics/fsanalytics.cpp M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.l

Export determination: 6.

Rationale: NEW: added friction fonction to test analytical solutions

**Change #1091** with diff file ISSM-17653-17654.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la.th

Export determination: 6.

Rationale: CHG: separating update tau and d

**Change #1092** with diff file ISSM-17654-17655.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_manager.py A /issm/trunk-jpl/src/m/plot/plot\_overlay.py

M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: NEW: overlay plotting capability in python

**Change #1093** with diff file ISSM-17655-17656.diff:

Function name:

M /issm/trunk-jpl/src/m/interp/interp.py

Export determination: 6.

Rationale: added option to plot data for inspecting holes before spline interpolation

**Change #1094** with diff file ISSM-17656-17657.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_overlay.py

Export determination: 6.

Rationale: CHG: check whether geotiff is a 3-band rgb raster; if so, convert to single band greyscale

**Change #1095** with diff file ISSM-17657-17658.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_overlay.py

Export determination: 6.

Rationale: BUG: ensure result of max is a float

**Change #1096** with diff file ISSM-17659-17660.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp M /issm/trunk-jpl/src/m/classes/flowequation.m

M /issm/trunk-jpl/src/m/classes/flowequation.py

Export determination: 6.

Rationale: NEW: added r and theta as model parameters in md.flowequations

**Change #1097** with diff file ISSM-17660-17661.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/IoModel.cpp

Export determination: 6.

Rationale: CHG: reverting to initial version

**Change #1098** with diff file ISSM-17661-17662.diff:

Function name:

M /issm/trunk-jpl/src/m/solvers/mumpsoptions.m

Export determination: 6.

Rationale: CHG: make sure // matlab reordering is used

**Change #1099** with diff file ISSM-17662-17663.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/petsc/patches/NewVec.cpp

Export determination: 6.

Rationale: CHG: no need to initialize vector with 0, this is done automatically

**Change #1100** with diff file ISSM-17663-17664.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test204.m M /issm/trunk-jpl/test/NightlyRun/test204.py

M /issm/trunk-jpl/test/NightlyRun/test335.m M /issm/trunk-jpl/test/NightlyRun/test419.m

M /issm/trunk-jpl/test/NightlyRun/test419.py M /issm/trunk-jpl/test/NightlyRun/test427.m

M /issm/trunk-jpl/test/NightlyRun/test427.py M /issm/trunk-jpl/test/NightlyRun/test435.m

M /issm/trunk-jpl/test/NightlyRun/test455.m M /issm/trunk-jpl/test/NightlyRun/test455.py

M /issm/trunk-jpl/test/NightlyRun/test702.m M /issm/trunk-jpl/test/NightlyRun/test804.m

M /issm/trunk-jpl/test/NightlyRun/test804.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #1101** with diff file ISSM-17664-17665.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp

Export determination: 6.

Rationale: CHG: trying to fix AD compilation

**Change #1102** with diff file ISSM-17665-17666.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/mpi/issmmpi.h

Export determination: 6.

Rationale: CHG: trying to fix AD compilation

**Change #1103** with diff file ISSM-17666-17667.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test274.m M /issm/trunk-jpl/test/NightlyRun/test435.m  
Export determination: 6.  
Rationale: CHG: minor tolerances

**Change #1104** with diff file ISSM-17667-17668.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/tao/install-2.2.sh  
Export determination: 6.  
Rationale: CHG: use tao-2.2.2 instead of tao-2.2-pre1

**Change #1105** with diff file ISSM-17668-17669.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/Krigingx/pKrigingx.cpp  
Export determination: 6.  
Rationale: NEW: added distance output for pKriging

**Change #1106** with diff file ISSM-17669-17670.diff:  
Function name:  
M /issm/trunk-jpl/src/c/toolkits/mpi/issmmapi.h  
Export determination: 6.  
Rationale: CHG: removing template that makes AD mpi off crash

**Change #1107** with diff file ISSM-17670-17671.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: for clarity, explicitly define dim variable for use in viscosity calc

**Change #1108** with diff file ISSM-17671-17672.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h

M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
Export determination: 6.  
Rationale: CHG: moving some stuff from Tria to Element

**Change #1109** with diff file ISSM-17672-17673.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp

Export determination: 6.

Rationale: BUG: GetVectorFromInputs needs to call GetInputListOnVertices

**Change #1110** with diff file ISSM-17674-17675.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/Analysis.h  
M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/BalancethicknessSoftAnalysis.h M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.h  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.h

M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.h M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.h M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeshdeformationAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/IOModel.cpp M /issm/trunk-jpl/src/c/classes/IOModel.h M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/classes/Vertex.cpp M /issm/trunk-jpl/src/c/classes/Vertex.h M /issm/trunk-jpl/src/c/cores/bedslope\_core.cpp M /issm/trunk-jpl/src/c/cores/levelsetfunctionslope\_core.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp M /issm/trunk-jpl/src/c/cores/surfaceslope\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/IOModelToConstraintsx/IOModelToConstraintsx.cpp M /issm/trunk-jpl/src/c/modules/MeshPartitionx/MeshPartitionx.h M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateEdges.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateFaces.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateNodes.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateSingleNodeToElementConnectivity.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/EdgesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/ElementsAndVerticesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/FacesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/ModelProcessox.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/boundaryconditions/SetIceShelfBC.py M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m M /issm/trunk-jpl/src/m/boundaryconditions/SetMar M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/damage.py M /issm/trunk-jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/mesh2d.m M /issm/trunk-jpl/src/m/classes/mesh2d.py M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py M /issm/trunk-jpl/src/m/classes/modellist.m M /issm/trunk-jpl/src/m/classes/modellist.py M /issm/trunk-jpl/src/m/classes/rifts.m M /issm/trunk-jpl/src/m/classes/rifts.py M /issm/trunk-jpl/src/m/classes/stressbalance.m M /issm/trunk-jpl/src/m/classes/stressbalance.py M /issm/trunk-jpl/src/m/classes/thermal.m M /issm/trunk-jpl/src/m/classes/thermal.py M /issm/trunk-jpl/src/m/contrib/ecco/PropagateFlagsUntilDist M /issm/trunk-jpl/src/m/contrib/hack/tres.m M /issm/trunk-jpl/src/m/contrib/massbalance/divergence.m



M /issm/trunk-jpl/src/m/contrib/massbalance/outflux.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
A /issm/trunk-jpl/src/m/enum/MeshDimEnum.m A /issm/trunk-jpl/src/m/enum/MeshXDimEnum.m  
M /issm/trunk-jpl/src/m/exp/contourlevelzero.m M /issm/trunk-jpl/src/m/extrusion/DepthAverage.m  
M /issm/trunk-jpl/src/m/extrusion/project2d.m M /issm/trunk-jpl/src/m/extrusion/project3d.m  
M /issm/trunk-jpl/src/m/extrusion/project3d.py M /issm/trunk-jpl/src/m/geometry/slope.m  
M /issm/trunk-jpl/src/m/geometry/slope.py M /issm/trunk-jpl/src/m/interp/SectionValues.m  
M /issm/trunk-jpl/src/m/interp/averaging.m M /issm/trunk-jpl/src/m/interp/averaging.py  
M /issm/trunk-jpl/src/m/inversions/velocitymisfit.m M /issm/trunk-jpl/src/m/mech/analyticaldamage.m  
M /issm/trunk-jpl/src/m/mech/backstressfrominversion.m M /issm/trunk-jpl/src/m/mech/damagefrominvers  
M /issm/trunk-jpl/src/m/mech/mechanicalproperties.m M /issm/trunk-jpl/src/m/mech/strainrateuncert.m  
M /issm/trunk-jpl/src/m/mech/thomasparams.m M /issm/trunk-jpl/src/m/mesh/bamg.m  
M /issm/trunk-jpl/src/m/mesh/bamg.py M /issm/trunk-jpl/src/m/miscellaneous/vorticity.m  
M /issm/trunk-jpl/src/m/parameterization/contourenvelope.m M /issm/trunk-  
jpl/src/m/parameterization/contourenvelope.py M /issm/trunk-jpl/src/m/parameterization/setflowequation.m  
M /issm/trunk-jpl/src/m/partition/AreaAverageOntoPartition.m M /issm/trunk-  
jpl/src/m/partition/partitioner.m M /issm/trunk-jpl/src/m/plot/applyoptions.m  
M /issm/trunk-jpl/src/m/plot/plot\_basaldrag.m M /issm/trunk-jpl/src/m/plot/plot\_edges.m  
M /issm/trunk-jpl/src/m/plot/plot\_icefront.m M /issm/trunk-jpl/src/m/plot/plot\_penalties.m  
M /issm/trunk-jpl/src/m/plot/plot\_qmu\_mass\_flux\_segments.m M /issm/trunk-  
jpl/src/m/plot/plot\_referential.m M /issm/trunk-jpl/src/m/plot/plot\_section.m  
M /issm/trunk-jpl/src/m/plot/plot\_segments.m M /issm/trunk-jpl/src/m/plot/plot\_tensor\_components.m  
M /issm/trunk-jpl/src/m/plot/plot\_tensor\_principal.m M /issm/trunk-jpl/src/m/plot/plot\_tensor\_principalaxi  
M /issm/trunk-jpl/src/m/plot/plot\_transient\_results.m M /issm/trunk-jpl/src/m/plot/processdata.m  
M /issm/trunk-jpl/src/m/plot/processmesh.m M /issm/trunk-jpl/src/m/plot/processmesh.py  
M /issm/trunk-jpl/src/wrappers/MeshPartition/MeshPartition.cpp  
Export determination: 6.  
Rationale: CHG: renamed meshtype-¿meshxdim (Extended Dimension) and  
added meshdim (2 or 3) and meshtype (Tria Penta Tetra)

**Change #1111** with diff file ISSM-17675-17676.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: BUG: fixing split to tetras

**Change #1112** with diff file ISSM-17676-17677.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setflowequation.m

Export determination: 6.

Rationale: BUG: FS is allowed for 2d vertical meshes

**Change #1113** with diff file ISSM-17677-17678.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/gslib/gslib.m

Export determination: 6.

Rationale: CHG: making gslib more flexible with additional input params

**Change #1114** with diff file ISSM-17678-17679.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la\_theta.cpp

Export determination: 6.

Rationale: NEW: convergence test on Vx for now

**Change #1115** with diff file ISSM-17679-17680.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.c

M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp

Export determination: 6.

Rationale: BUG: fixing GetVectorFromInputs, which assumes P1 interpolation only

**Change #1116** with diff file ISSM-17680-17681.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

M /issm/trunk-jpl/src/c/classes/Elements/Tria.h

Export determination: 6.

Rationale: CHG: do not compute stress tensor for a 2d horiz mesh, new function to compute deviatoric stress

**Change #1117** with diff file ISSM-17681-17682.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: CHG: renamed meshtype-¿meshxdim for consistency (though meshxdim is a bit confusing, sounds like the x-dimension)

**Change #1118** with diff file ISSM-17682-17683.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stressbalance.py

Export determination: 6.

Rationale: BUG: forgot parenthesis after meshtype

**Change #1119** with diff file ISSM-17683-17684.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test101.m M /issm/trunk-jpl/test/NightlyRun/test101.py

Export determination: 6.

Rationale: CHG: output DeviatoricStress instead of Stress Tensor

**Change #1120** with diff file ISSM-17684-17685.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: NEW: added Deviatoricstress tensor as available output

**Change #1121** with diff file ISSM-17685-17686.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.py

Export determination: 6.

Rationale: BUG: fixed strcmpi

**Change #1122** with diff file ISSM-17686-17687.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-



M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateFaces.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateNodes.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateSingleNodeToElementConnectivity.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/EdgesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ElementsAndVerticesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/FacesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/boundaryconditions/SetIceShelfBC.py M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m M /issm/trunk-jpl/src/m/boundaryconditions/SetMa M /issm/trunk-jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/mesh2d.m M /issm/trunk-jpl/src/m/classes/mesh2d.py M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py M /issm/trunk-jpl/src/m/classes/modellist.m M /issm/trunk-jpl/src/m/classes/rifts.m M /issm/trunk-jpl/src/m/classes/rifts.py M /issm/trunk-jpl/src/m/classes/stressbalance.m M /issm/trunk-jpl/src/m/classes/stressbalance.py M /issm/trunk-jpl/src/m/classes/thermal.m M /issm/trunk-jpl/src/m/classes/thermal.py M /issm/trunk-jpl/src/m/contrib/ecco/PropagateFlagsUntilDist M /issm/trunk-jpl/src/m/contrib/hack/tres.m M /issm/trunk-jpl/src/m/contrib/massbalance/divergence.m M /issm/trunk-jpl/src/m/contrib/massbalance/outflux.m A /issm/trunk-jpl/src/m/enum/DomainDimensionE A /issm/trunk-jpl/src/m/enum/DomainTypeEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py D /issm/trunk-jpl/src/m/enum/MeshDimEnum.m A /issm/trunk-jpl/src/m/enum/MeshElementtypeEnum.m D /issm/trunk-jpl/src/m/enum/MeshTypeEnum.m D /issm/trunk-jpl/src/m/enum/MeshXDimEnum.m M /issm/trunk-jpl/src/m/exp/contourlevelzero.m M /issm/trunk-jpl/src/m/extrusion/DepthAverage.m M /issm/trunk-jpl/src/m/extrusion/project2d.m M /issm/trunk-jpl/src/m/extrusion/project3d.m M /issm/trunk-jpl/src/m/extrusion/project3d.py M /issm/trunk-jpl/src/m/geometry/slope.m M /issm/trunk-jpl/src/m/geometry/slope.py M /issm/trunk-jpl/src/m/interp/SectionValues.m M /issm/trunk-jpl/src/m/interp/averaging.m M /issm/trunk-jpl/src/m/interp/averaging.py M /issm/trunk-jpl/src/m/inversions/velocitymisfit.m M /issm/trunk-jpl/src/m/mech/analyticaldamage.m M /issm/trunk-jpl/src/m/mech/backstressfrominversion.m M /issm/trunk-jpl/src/m/mech/damagefrominvers M /issm/trunk-jpl/src/m/mech/mechanicalproperties.m M /issm/trunk-jpl/src/m/mech/strainrateuncert.m M /issm/trunk-jpl/src/m/mech/thomasparams.m M /issm/trunk-jpl/src/m/mesh/bamg.m M /issm/trunk-jpl/src/m/mesh/bamg.py M /issm/trunk-jpl/src/m/miscellaneous/vorticity.m M /issm/trunk-jpl/src/m/parameterization/contourenvelope.m M /issm/trunk-jpl/src/m/parameterization/contourenvelope.py M /issm/trunk-jpl/src/m/parameterization/setflowequation.m M /issm/trunk-jpl/src/m/partition/AreaAverageOntoPartition.m M /issm/trunk-jpl/src/m/partition/partitioner.m M /issm/trunk-jpl/src/m/plot/applyoptions.m M /issm/trunk-jpl/src/m/plot/plot\_basaldrag.m M /issm/trunk-jpl/src/m/plot/plot\_edges.m M /issm/trunk-jpl/src/m/plot/plot\_icefront.m M /issm/trunk-jpl/src/m/plot/plot\_penalties.m M /issm/trunk-jpl/src/m/plot/plot\_qmu\_mass\_flux\_segments.m M /issm/trunk-jpl/src/m/plot/plot\_referential.m M /issm/trunk-jpl/src/m/plot/plot\_section.m

M /issm/trunk-jpl/src/m/plot/plot\_segments.m M /issm/trunk-jpl/src/m/plot/plot\_tensor\_components.m  
M /issm/trunk-jpl/src/m/plot/plot\_tensor\_principal.m M /issm/trunk-jpl/src/m/plot/plot\_tensor\_principalaxi  
M /issm/trunk-jpl/src/m/plot/plot\_transient\_results.m M /issm/trunk-jpl/src/m/plot/processdata.m  
M /issm/trunk-jpl/src/m/plot/processmesh.m M /issm/trunk-jpl/src/m/plot/processmesh.py  
M /issm/trunk-jpl/src/wrappers/MeshPartition/MeshPartition.cpp  
Export determination: 6.  
Rationale: CHG: following Chris' suggestions, we adopt the following con-  
vention md.mesh.dimension -> DomainDimensionEnum md.mesh.domaintype -  
-> DomainTypeEnum md.mesh.elementtype->MeshElementTypeEnum

**Change #1123** with diff file ISSM-17687-17688.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m M /issm/trunk-  
jpl/src/m/boundaryconditions/SetMarineIceSheetBC.py M /issm/trunk-jpl/src/m/classes/model.m  
M /issm/trunk-jpl/src/m/contrib/ecco/PropagateFlagsUntilDistance.m M /issm/trunk-  
jpl/src/m/extrusion/DepthAverage.m M /issm/trunk-jpl/src/m/parameterization/contourenvelope.m  
M /issm/trunk-jpl/src/m/parameterization/contourenvelope.py M /issm/trunk-  
jpl/src/m/plot/applyoptions.m M /issm/trunk-jpl/src/m/plot/plot\_edges.m M  
/issm/trunk-jpl/src/m/plot/plot\_icefront.m M /issm/trunk-jpl/src/m/plot/plot\_penalties.m  
M /issm/trunk-jpl/src/m/plot/plot\_qmu\_mass\_flux\_segments.m M /issm/trunk-  
jpl/src/m/plot/plot\_referential.m M /issm/trunk-jpl/src/m/plot/plot\_segments.m  
M /issm/trunk-jpl/src/m/plot/plot\_tensor\_components.m M /issm/trunk-jpl/src/m/plot/plot\_transient\_results  
M /issm/trunk-jpl/src/m/plot/processdata.m M /issm/trunk-jpl/src/m/plot/processmesh.py

Export determination: 6.

Rationale: CHG: replacing some meshtype by meshdimension

**Change #1124** with diff file ISSM-17688-17689.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mesh2d.m M /issm/trunk-jpl/src/m/classes/mesh2d.py  
M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m  
M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m

Export determination: 6.

Rationale: CHG: marshalling domain properties

**Change #1125** with diff file ISSM-17689-17690.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive101.nc M /issm/trunk-jpl/test/NightlyRun/test322.py

Export determination: 6.

Rationale: CHG: fixed nightly runs

**Change #1126** with diff file ISSM-17690-17691.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.cpp

Export determination: 6.

Rationale: BUG: use finitelement instead of element\_type

**Change #1127** with diff file ISSM-17691-17692.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.py

Export determination: 6.

Rationale: BUG: forgot to assign cmap in element plot

**Change #1128** with diff file ISSM-17692-17693.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/IOModel.cpp M /issm/trunk-jpl/src/c/classes/IOModel.h M /issm/trunk-jpl/src/c/modules/IOModelToConstraintsx/IOModelToConstraintsx.cpp M /issm/trunk-jpl/src/c/modules/MeshPartitionx/MeshPartitionx.h M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateElementsVerticesAndMaterials.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateFaces.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateNodes.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/EdgesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/ElementsAndVerticesPartitioning.cpp

Export determination: 6.

Rationale: CHG: starting to change iomodel-¿domaintype to iomodel-¿meshelementtype when necessary (useful for Tetras)

**Change #1129** with diff file ISSM-17693-17694.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-

jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis  
Export determination: 6.  
Rationale: CHG: minor adjustments for Tets

**Change #1130** with diff file ISSM-17694-17695.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
Export determination: 6.  
Rationale: CHG: fixed HO for Tetras

**Change #1131** with diff file ISSM-17695-17696.diff:  
Function name:  
D /issm/trunk-jpl/test/Archives/Archive999.hdf5 D /issm/trunk-jpl/test/Archives/Archive999.nc  
Export determination: 6.  
Rationale: DEL: not needed anymore

**Change #1132** with diff file ISSM-17696-17697.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/processdata.py  
Export determination: 6.  
Rationale: BUG: create copy so that original data is not overwritten by processdata

**Change #1133** with diff file ISSM-17697-17698.diff:  
Function name:  
M /issm/trunk-jpl/src/m/interp/interp.py  
Export determination: 6.  
Rationale: CHG: by default, do not fill nan's using the spline fit, rather mark them using nearest neighbors

**Change #1134** with diff file ISSM-17698-17699.diff:  
Function name:



M /issm/trunk-jpl/src/m/plot/applyoptions.py M /issm/trunk-jpl/src/m/plot/plot\_unit.py  
M /issm/trunk-jpl/src/m/plot/plotmodel.py M /issm/trunk-jpl/src/m/plot/processdata.py  
Export determination: 6.  
Rationale: CHG: misc changes for dealing with nan's when plotting in python

**Change #1135** with diff file ISSM-17699-17700.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m

Export determination: 6.

Rationale: CHG: do not marhall DomainType as Mesh3DtetrasEnum

**Change #1136** with diff file ISSM-17700-17701.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LsfReinitializationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeXAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothedSurfaceSlopeYAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/classes/Vertex.cpp  
M /issm/trunk-jpl/src/c/cores/bedslope\_core.cpp M /issm/trunk-jpl/src/c/cores/levelsetfunctionslope\_core.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp M /issm/trunk-jpl/src/c/cores/surfaceslope\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessor/CreateFaces.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/Partitioning.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessor/FacesPartitioning.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/ModelProcessor.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/mesh2d.py  
M /issm/trunk-jpl/src/m/classes/mesh2dvertical.m M /issm/trunk-jpl/src/m/classes/mesh3dprisms.m  
M /issm/trunk-jpl/src/m/classes/mesh3dprisms.py M /issm/trunk-jpl/src/m/classes/mesh3dtetras.m  
A /issm/trunk-jpl/src/m/enum/Domain2DhorizontalEnum.m A /issm/trunk-  
jpl/src/m/enum/Domain2DverticalEnum.m A /issm/trunk-jpl/src/m/enum/Domain3DEnum.m  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py D /issm/trunk-jpl/src/m/enum/Mesh2DhorizontalEnum  
D /issm/trunk-jpl/src/m/enum/Mesh2DverticalEnum.m D /issm/trunk-jpl/src/m/enum/Mesh3DEnum.m  
D /issm/trunk-jpl/src/m/enum/Mesh3DtetrasEnum.m M /issm/trunk-jpl/src/m/miscellaneous/vorticity.m  
M /issm/trunk-jpl/src/wrappers/MeshPartition/MeshPartition.cpp  
Export determination: 6.  
Rationale: CHG: renamed Mesh3D Domain3D etc and simplified the way we  
get the dimension when possible

**Change #1137** with diff file ISSM-17701-17702.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim  
Export determination: 6.  
Rationale: CHG: syncing Enum

**Change #1138** with diff file ISSM-17702-17703.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test435.m M /issm/trunk-jpl/test/NightlyRun/test702.m  
Export determination: 6.  
Rationale: CHG: relaxed tolerances

**Change #1139** with diff file ISSM-17703-17704.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/mesh2d.m  
Export determination: 6.  
Rationale: BUG: Mesh2d is now Domain2D

**Change #1140** with diff file ISSM-17704-17705.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.cpp

Export determination: 6.  
Rationale: CHG: Assign 1 or -1 for vertices not on bed

**Change #1141** with diff file ISSM-17705-17706.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.cpp  
Export determination: 6.  
Rationale: BUG: reverting back (wrong dynamic allocation and not 3d compatible)

**Change #1142** with diff file ISSM-17706-17707.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/applyoptions.py M /issm/trunk-jpl/src/m/plot/plot\_mesh.py  
Export determination: 6.  
Rationale: BUG: don't try to set default clim when data is empty, such as for a mesh plot

**Change #1143** with diff file ISSM-17707-17708.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.cpp  
Export determination: 6.  
Rationale: CHG: do extrusionfrombase for maskgroundedicelevelset for element not attach to base

**Change #1144** with diff file ISSM-17708-17709.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/applyoptions.m  
Export determination: 6.  
Rationale: CHG: using domaintype to choose axis options in plotmodel

**Change #1145** with diff file ISSM-17709-17710.diff:  
Function name:

M /issm/trunk-jpl/src/m/interp/interp.py  
Export determination: 6.  
Rationale: BUG: define x,y coords in centers of grid cells if appropriate

**Change #1146** with diff file ISSM-17710-17711.diff:  
Function name:  
M /issm/trunk-jpl/src/m/interp/interp.py  
Export determination: 6.  
Rationale: CHG: cosmetic

**Change #1147** with diff file ISSM-17711-17712.diff:  
Function name:  
M /issm/trunk-jpl/src/m/interp/interp.py  
Export determination: 6.  
Rationale: minor, adding todo

**Change #1148** with diff file ISSM-17712-17713.diff:  
Function name:  
M /issm/trunk-jpl/src/m/coordsystems/ll2xy.py M /issm/trunk-jpl/src/m/coordsystems/xy2ll.py  
Export determination: 6.  
Rationale: CHG: changed display text for consistency and clarity

**Change #1149** with diff file ISSM-17713-17714.diff:  
Function name:  
M /issm/trunk-jpl/src/m/interp/interp.py  
Export determination: 6.  
Rationale: CHG: cosmetic

**Change #1150** with diff file ISSM-17714-17715.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.py  
Export determination: 6.  
Rationale: BUG: errant end statement

**Change #1151** with diff file ISSM-17715-17716.diff:  
Function name:  
A /issm/trunk-jpl/src/m/mech/robintemperature.py  
Export determination: 6.  
Rationale: NEW: python version of robin temperature calculation

**Change #1152** with diff file ISSM-17716-17717.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plot\_unit.py  
Export determination: 6.  
Rationale: CHG: changed colorlevels for consistency with colormap

**Change #1153** with diff file ISSM-17717-17718.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plot\_vertexnumbering.m  
Export determination: 6.  
Rationale: CHG: fixed plot\_vertexnumbering.m for tetras

**Change #1154** with diff file ISSM-17718-17719.diff:  
Function name:  
A /issm/trunk-jpl/src/m/interp/PointValues.m M /issm/trunk-jpl/src/m/plot/plot\_manager.m  
M /issm/trunk-jpl/src/m/plot/plot\_profile.m A /issm/trunk-jpl/src/m/plot/plot\_vstime.m  
Export determination: 6.  
Rationale: NEW: adding a plotmodel option to plot the values at a point function of time

**Change #1155** with diff file ISSM-17719-17720.diff:  
Function name:  
M /issm/trunk-jpl/src/m/contrib/dassflow/importgmsh.m  
Export determination: 6.  
Rationale: NEW: importgmsh.m now compatible with 3d meshes

**Change #1156** with diff file ISSM-17720-17721.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMB.m M /issm/trunk-jpl/src/m/classes/autodiff.m  
M /issm/trunk-jpl/src/m/classes/balancethickness.m M /issm/trunk-jpl/src/m/classes/basalforcings.m  
M /issm/trunk-jpl/src/m/classes/clusters/generic.m M /issm/trunk-jpl/src/m/classes/constants.m  
M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/debug.m  
M /issm/trunk-jpl/src/m/classes/flaim.m M /issm/trunk-jpl/src/m/classes/flowequation.m  
M /issm/trunk-jpl/src/m/classes/friction.m M /issm/trunk-jpl/src/m/classes/geometry.m  
M /issm/trunk-jpl/src/m/classes/gia.m M /issm/trunk-jpl/src/m/classes/groundingline.m  
M /issm/trunk-jpl/src/m/classes/hydrologyshreve.m M /issm/trunk-jpl/src/m/classes/initialization.m  
M /issm/trunk-jpl/src/m/classes/inversion.m M /issm/trunk-jpl/src/m/classes/mask.m  
M /issm/trunk-jpl/src/m/classes/masstransport.m M /issm/trunk-jpl/src/m/classes/matrice.m  
M /issm/trunk-jpl/src/m/classes/mesh2d.m M /issm/trunk-jpl/src/m/classes/miscellaneous.m  
M /issm/trunk-jpl/src/m/classes/outputdefinition.m M /issm/trunk-jpl/src/m/classes/qmu.m  
M /issm/trunk-jpl/src/m/classes/rifts.m M /issm/trunk-jpl/src/m/classes/settings.m  
M /issm/trunk-jpl/src/m/classes/steadystate.m M /issm/trunk-jpl/src/m/classes/stressbalance.m  
M /issm/trunk-jpl/src/m/classes/thermal.m M /issm/trunk-jpl/src/m/classes/timestepping.m  
M /issm/trunk-jpl/src/m/classes/transient.m M /issm/trunk-jpl/src/m/classes/verbose.m

Export determination: 6.

Rationale: CHG: implemented createxml method for each class.

**Change #1157** with diff file ISSM-17721-17722.diff:

Function name:

A /issm/trunk-jpl/src/m/solve/convert2str.m A /issm/trunk-jpl/src/m/solve/createxml.m

Export determination: 6.

Rationale: NEW: createxml method to create an inishell compatible xml file from a model.

**Change #1158** with diff file ISSM-17722-17723.diff:

Function name:

A /issm/trunk-jpl/src/java A /issm/trunk-jpl/src/java/COPYING A /issm/trunk-jpl/src/java/Changelog\_1.0.0.txt A /issm/trunk-jpl/src/java/License.txt A /issm/trunk-jpl/src/java/MANIFEST.MF A /issm/trunk-jpl/src/java/build A /issm/trunk-jpl/src/java/build/gui\_elements A /issm/trunk-jpl/src/java/build/gui\_elements/AlternativePanel.class  
A /issm/trunk-jpl/src/java/build/gui\_elements/CheckBoxPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/ColorCellRenderer.class A /issm/trunk-jpl/src/java/build/gui\_elements/CombinedPanel\$Type.class A /issm/trunk-jpl/src/java/build/gui\_elements/CombinedPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/ControlPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/DecimalPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/DuplicatorPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/FramePanel.class

A /issm/trunk-jpl/src/java/build/gui\_elements/GUIBuildException.class A /issm/trunk-jpl/src/java/build/gui\_elements/IntegerPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/OptionPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/PathPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/SelectorPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/TextfieldPanel.class A /issm/trunk-jpl/src/java/build/main A /issm/trunk-jpl/src/java/build/main/GUI.class A /issm/trunk-jpl/src/java/build/main/GUIBuilder\$1.class A /issm/trunk-jpl/src/java/build/main/GUIBuilder.class A /issm/trunk-jpl/src/java/build/main/PanelControl.class A /issm/trunk-jpl/src/java/build/main/PanelNode.class A /issm/trunk-jpl/src/java/build/main/XMLHelper.class A /issm/trunk-jpl/src/java/build/resources A /issm/trunk-jpl/src/java/build/resources/config\_schema-0.1.1.xsd A /issm/trunk-jpl/src/java/build/resources/config\_schema.xsd A /issm/trunk-jpl/src/java/build/resources/default\_config.xml A /issm/trunk-jpl/src/java/build/resources/document-export-4.png A /issm/trunk-jpl/src/java/build/resources/document-open-2.png A /issm/trunk-jpl/src/java/build/resources/document-preview.png A /issm/trunk-jpl/src/java/build/resources/icons A /issm/trunk-jpl/src/java/build/resources/icons/advancedsettings.png A /issm/trunk-jpl/src/java/build/resources/icons/fileopen.png A /issm/trunk-jpl/src/java/build/resources/icons/filesave.png A /issm/trunk-jpl/src/java/build/resources/icons/filesaveas.png A /issm/trunk-jpl/src/java/build/resources/icons/ini\_open.png A /issm/trunk-jpl/src/java/build/resources/icons/kgghostview.png A /issm/trunk-jpl/src/java/build/resources/icons/mydocument.png A /issm/trunk-jpl/src/java/build/resources/icons/opensettings.png A /issm/trunk-jpl/src/java/build/resources/icons/readme.txt A /issm/trunk-jpl/src/java/build/resources/icons/reset.png A /issm/trunk-jpl/src/java/build/resources/icons/viewmag.png A /issm/trunk-jpl/src/java/build/resources/icons/xml\_open.png A /issm/trunk-jpl/src/java/build.xml A /issm/trunk-jpl/src/java/dist A /issm/trunk-jpl/src/java/dist/inishell.jar A /issm/trunk-jpl/src/java/doc A /issm/trunk-jpl/src/java/doc/examples A /issm/trunk-jpl/src/java/doc/examples/io.ini A /issm/trunk-jpl/src/java/doc/examples/issm.xml A /issm/trunk-jpl/src/java/doc/examples/meteoio\_config.xml A /issm/trunk-jpl/src/java/doc/examples/min\_example.xml A /issm/trunk-jpl/src/java/doc/examples/snowpack\_config.xml A /issm/trunk-jpl/src/java/inishell.sh A /issm/trunk-jpl/src/java/lib A /issm/trunk-jpl/src/java/lib/miglayout-4.0.jar A /issm/trunk-jpl/src/java/src A /issm/trunk-jpl/src/java/src/gui\_elements A /issm/trunk-jpl/src/java/src/gui\_elements/AlternativePanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/CheckBoxPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/CombinedPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/ControlledPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/DecimalPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/DuplicatorPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/FramePanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/GUIBuildException.java A /issm/trunk-jpl/src/java/src/gui\_elements/IntegerPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/OptionPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/PathPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/SelectorPanel.java A /issm/trunk-jpl/src/java/src/gui\_elements/TextfieldPanel.java A /issm/trunk-jpl/src/java/src/main A /issm/trunk-jpl/src/java/src/main/GUI.java A /issm/trunk-jpl/src/java/src/main/GUIBuilder.java A /issm/trunk-jpl/src/java/src/main/PanelControl.java A /issm/trunk-jpl/src/java/src/main/PanelNode.java A /issm/trunk-jpl/src/java/src/main/XMLHelper.java A /issm/trunk-jpl/src/java/src/resources A /issm/trunk-jpl/src/java/src/resources/config\_schema-0.1.1.xsd A /issm/trunk-jpl/src/java/src/resources/config\_schema.xsd A /issm/trunk-jpl/src/java/src/resources/default\_config.xml A /issm/trunk-jpl/src/java/src/resources/document-export-4.png A /issm/trunk-jpl/src/java/src/resources/document-open-2.png A /issm/trunk-jpl/src/java/src/resources/document-preview.png A /issm/trunk-jpl/src/java/src/resources/document-

jpl/src/java/src/resources/icons A /issm/trunk-jpl/src/java/src/resources/icons/advancedsettings.png  
A /issm/trunk-jpl/src/java/src/resources/icons/file\_ops.xcf A /issm/trunk-jpl/src/java/src/resources/icons/file  
A /issm/trunk-jpl/src/java/src/resources/icons/filesave.png A /issm/trunk-jpl/src/java/src/resources/icons/fi  
A /issm/trunk-jpl/src/java/src/resources/icons/ini\_open.png A /issm/trunk-jpl/src/java/src/resources/icons/i  
A /issm/trunk-jpl/src/java/src/resources/icons/mydocuments.png A /issm/trunk-  
jpl/src/java/src/resources/icons/opensettings.png A /issm/trunk-jpl/src/java/src/resources/icons/readme.txt  
A /issm/trunk-jpl/src/java/src/resources/icons/reset.png A /issm/trunk-jpl/src/java/src/resources/icons/view  
A /issm/trunk-jpl/src/java/src/resources/icons/xml\_open.png  
Export determination: 6.  
Rationale: CHG: inishell project

**Change #1159** with diff file ISSM-17723-17724.diff:

Function name:

M /issm/trunk-jpl/src/java/inishell.sh

Export determination: 6.

Rationale: CHG: improved inishell.sh launch command.

**Change #1160** with diff file ISSM-17724-17725.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: CHG: added collapse function to python model, fixed bug when ini-  
tializing 2d mesh wiped out old mesh before assignment

**Change #1161** with diff file ISSM-17725-17726.diff:

Function name:

M /issm/trunk-jpl/src/m/extrusion/DepthAverage.m A /issm/trunk-jpl/src/m/extrusion/DepthAverage.py

A /issm/trunk-jpl/src/m/extrusion/project2d.py M /issm/trunk-jpl/src/m/extrusion/project3d.py

Export determination: 6.

Rationale: NEW: project2d and DepthAverage functions in python

**Change #1162** with diff file ISSM-17726-17727.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/dassflow/importgmsh.m

Export determination: 6.



Rationale: CHG: fixed surface and base falgs

**Change #1163** with diff file ISSM-17727-17728.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/dassflow/importgmsh.m

Export determination: 6.

Rationale: CHG: fixed boundary

**Change #1164** with diff file ISSM-17728-17729.diff:

Function name:

M /issm/trunk-jpl/configs/config-linux64-skylla.sh

Export determination: 6.

Rationale: added tao in the config file

**Change #1165** with diff file ISSM-17729-17730.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h

Export determination: 6.

Rationale: CHG: fixed spawn for gmesh tetras

**Change #1166** with diff file ISSM-17730-17731.diff:

Function name:

M /issm/trunk-jpl/src/m/exp/expread.py

Export determination: 6.

Rationale: CHG: use OrderedDict and update rather than list of dicts for python  
expread

**Change #1167** with diff file ISSM-17731-17732.diff:

Function name:

M /issm/trunk-jpl/src/m/exp/expread.py

Export determination: 6.

Rationale: BUG: reverting change, save contours as list of dicts

**Change #1168** with diff file ISSM-17732-17733.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.py

Export determination: 6.

Rationale: BUG: wrong handle for numpy

**Change #1169** with diff file ISSM-17733-17734.diff:

Function name:

M /issm/trunk-jpl/src/m/interp/SectionValues.m A /issm/trunk-jpl/src/m/interp/SectionValues.py

Export determination: 6.

Rationale: NEW: template for python version of SectionValues

**Change #1170** with diff file ISSM-17734-17735.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-

jpl/src/c/cores/AnalysisConfiguration.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessox/Create

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/transient.m

M /issm/trunk-jpl/src/m/classes/transient.py M /issm/trunk-jpl/src/m/contrib/paraview/exportVTK.m

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/TransientIshydrologyEnu

M /issm/trunk-jpl/test/NightlyRun/test3300.m M /issm/trunk-jpl/test/NightlyRun/test332.m

M /issm/trunk-jpl/test/NightlyRun/test333.m M /issm/trunk-jpl/test/NightlyRun/test334.m

M /issm/trunk-jpl/test/NightlyRun/test335.m

Export determination: 6.

Rationale: CHG: adding the hydrology solution to transient

**Change #1171** with diff file ISSM-17735-17736.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-

jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/enum/EnumDefinitions

A /issm/trunk-jpl/src/m/enum/HydrologydcEplMaxThicknessEnum.m

Export determination: 6.

Rationale: BUG: fixing enums

**Change #1172** with diff file ISSM-17736-17737.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: minor fix

**Change #1173** with diff file ISSM-17737-17738.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/ModelProcessorx.cpp  
Export determination: 6.  
Rationale: BUG : fixing model processor for hydromodels

**Change #1174** with diff file ISSM-17738-17739.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h  
M /issm/trunk-jpl/src/m/classes/hydrologydc.m M /issm/trunk-jpl/test/NightlyRun/test3300.m  
M /issm/trunk-jpl/test/NightlyRun/test333.m M /issm/trunk-jpl/test/NightlyRun/test335.m  
Export determination: 6.  
Rationale: NEW: adding a stand alone max limit for epl thickness

**Change #1175** with diff file ISSM-17739-17740.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.cpp  
Export determination: 6.  
Rationale: BUG: fixing windows compile

**Change #1176** with diff file ISSM-17740-17741.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/Numerics/NewtonSolveDnorm.cpp  
Export determination: 6.  
Rationale: BUG: fixing windows compile

**Change #1177** with diff file ISSM-17741-17742.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.cpp

Export determination: 6.

Rationale: BUG: do not add twice the same analysis

**Change #1178** with diff file ISSM-17742-17743.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-

jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h

M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo

M /issm/trunk-jpl/src/m/classes/transient.m M /issm/trunk-jpl/src/m/classes/transient.py

A /issm/trunk-jpl/src/m/enum/EffectivePressureEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.p

Export determination: 6.

Rationale: NEW: adding effective pressure computation within the Hydro

**Change #1179** with diff file ISSM-17743-17744.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/InterpFromMesh2d/InterpFromMesh2d.cpp M

/issm/trunk-jpl/src/wrappers/InterpFromMeshToMesh3d/InterpFromMeshToMesh3d.cpp

M /issm/trunk-jpl/src/wrappers/python/Makefile.am

Export determination: 6.

Rationale: CHG: added python wrapper for InterpFromMeshToMesh3d

**Change #1180** with diff file ISSM-17744-17745.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp

Export determination: 6.

Rationale: BUG: handle D vs. Dbar depending on domaintype

**Change #1181** with diff file ISSM-17745-17746.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/damage.m M /issm/trunk-jpl/src/m/classes/damage.py

Export determination: 6.

Rationale: CHG: default output is D or Dbar depending on domaintype

**Change #1182** with diff file ISSM-17746-17747.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test271.m M /issm/trunk-jpl/test/NightlyRun/test271.py

M /issm/trunk-jpl/test/NightlyRun/test275.m M /issm/trunk-jpl/test/NightlyRun/test275.py

Export determination: 6.

Rationale: BUG: Dbar is now returned for 2dhoriz models

**Change #1183** with diff file ISSM-17747-17748.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test206.m M /issm/trunk-jpl/test/NightlyRun/test206.py

M /issm/trunk-jpl/test/NightlyRun/test209.m M /issm/trunk-jpl/test/NightlyRun/test209.py

M /issm/trunk-jpl/test/NightlyRun/test221.m M /issm/trunk-jpl/test/NightlyRun/test221.py

M /issm/trunk-jpl/test/NightlyRun/test233.m M /issm/trunk-jpl/test/NightlyRun/test233.py

M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py

M /issm/trunk-jpl/test/NightlyRun/test322.m M /issm/trunk-jpl/test/NightlyRun/test410.m

M /issm/trunk-jpl/test/NightlyRun/test410.py M /issm/trunk-jpl/test/NightlyRun/test435.m

M /issm/trunk-jpl/test/NightlyRun/test455.m M /issm/trunk-jpl/test/NightlyRun/test455.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #1184** with diff file ISSM-17748-17749.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/transient.m

Export determination: 6.

Rationale: BUG: fixing requested\_outputs in transient.m

**Change #1185** with diff file ISSM-17749-17750.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/transient.py

Export determination: 6.

Rationale: BUG: fixing requested\_outputs in transient.m

**Change #1186** with diff file ISSM-17750-17751.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.cpp

Export determination: 6.

Rationale: CHG: fixing indices of tetra base that need to be direct

**Change #1187** with diff file ISSM-17751-17752.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4

Export determination: 6.

Rationale: CHG: fixed enable-development macro (nor based on debugging)

**Change #1188** with diff file ISSM-17752-17753.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test209.m M /issm/trunk-jpl/test/NightlyRun/test211.m

M /issm/trunk-jpl/test/NightlyRun/test211.py M /issm/trunk-jpl/test/NightlyRun/test290.m

M /issm/trunk-jpl/test/NightlyRun/test290.py M /issm/trunk-jpl/test/NightlyRun/test333.m

M /issm/trunk-jpl/test/NightlyRun/test335.m M /issm/trunk-jpl/test/NightlyRun/test702.m

Export determination: 6.

Rationale: CHG: relaxing tolerances

**Change #1189** with diff file ISSM-17753-17754.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_larsen M /issm/trunk-jpl/jenkins/linux64\_murdo

M /issm/trunk-jpl/jenkins/linux64\_murdo.ad M /issm/trunk-jpl/jenkins/linux64\_murdo.ampi

Export determination: 6.

Rationale: CHG: enable development

**Change #1190** with diff file ISSM-17754-17755.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: NEW: better split in tetras

**Change #1191** with diff file ISSM-17755-17756.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py

Export determination: 6.

Rationale: CHG: relaxed tolerances:

**Change #1192** with diff file ISSM-17756-17757.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/applyoptions.py A /issm/trunk-jpl/src/m/plot/plot\_contour.py

M /issm/trunk-jpl/src/m/plot/plot\_manager.py M /issm/trunk-jpl/src/m/plot/plot\_overlay.py

M /issm/trunk-jpl/src/m/plot/plotmodel.py

Export determination: 6.

Rationale: working on python plotmodel, added plot\_contour

**Change #1193** with diff file ISSM-17757-17758.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-

jpl/src/c/classes/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h

M /issm/trunk-jpl/src/c/modules/ModelProcessors/CreateElementsVerticesAndMaterials.cpp

M /issm/trunk-jpl/src/c/modules/ModelProcessors/CreateParameters.cpp M

/issm/trunk-jpl/src/c/modules/ModelProcessors/ModelProcessors.cpp M /issm/trunk-

jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp

M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/damage.m

A /issm/trunk-jpl/src/m/classes/matdamageice.m M /issm/trunk-jpl/src/m/classes/model.m

M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/MatdamageiceEnum.m

M /issm/trunk-jpl/src/m/mech/mechanicalproperties.m

Export determination: 6.

Rationale: CHG: stripping damage out of solution if MaterialsType is Mat-  
iceEnum

**Change #1194** with diff file ISSM-17758-17759.diff:

Function name:

A /issm/trunk-jpl/src/m/enum/DamageElementinterpEnum.m

Export determination: 6.

Rationale: CHG: forgot to add enum

**Change #1195** with diff file ISSM-17759-17760.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Material.h M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matrice.h M /issm/trunk-jpl/src/c/classes/Materials/Matpar.h

Export determination: 6.

Rationale: CHG: added IsDamage function to Material class to check for damage in elements

**Change #1196** with diff file ISSM-17760-17761.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/transient\_core.cpp

Export determination: 6.

Rationale: CHG: Do extrusionfrombase for base after GL movement

**Change #1197** with diff file ISSM-17761-17762.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp

Export determination: 6.

Rationale: Set base at bed for grounded element even some nodes is above bed

**Change #1198** with diff file ISSM-17762-17763.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.m M /issm/trunk-jpl/test/NightlyRun/IdToName.py  
M /issm/trunk-jpl/test/NightlyRun/test275.m M /issm/trunk-jpl/test/NightlyRun/test701.m  
M /issm/trunk-jpl/test/NightlyRun/test703.m M /issm/trunk-jpl/test/Par/79North.par  
M /issm/trunk-jpl/test/Par/79North.py M /issm/trunk-jpl/test/Par/GiaBenchmarksAB.par  
M /issm/trunk-jpl/test/Par/GiaBenchmarksCD.par M /issm/trunk-jpl/test/Par/ISMIPA.par  
M /issm/trunk-jpl/test/Par/ISMIPA.py M /issm/trunk-jpl/test/Par/ISMIPB.par  
M /issm/trunk-jpl/test/Par/ISMIPB.py M /issm/trunk-jpl/test/Par/ISMIPC.par  
M /issm/trunk-jpl/test/Par/ISMIPC.py M /issm/trunk-jpl/test/Par/ISMIPD.par  
M /issm/trunk-jpl/test/Par/ISMIPD.py M /issm/trunk-jpl/test/Par/ISMIPE.par  
M /issm/trunk-jpl/test/Par/ISMIPE.py M /issm/trunk-jpl/test/Par/ISMIPF.par  
M /issm/trunk-jpl/test/Par/ISMIPF.py M /issm/trunk-jpl/test/Par/Pig.par M  
/issm/trunk-jpl/test/Par/Pig.py M /issm/trunk-jpl/test/Par/RoundSheetEISMINT.par  
M /issm/trunk-jpl/test/Par/RoundSheetEISMINT.py M /issm/trunk-jpl/test/Par/RoundSheetShelf.par  
M /issm/trunk-jpl/test/Par/RoundSheetShelf.py M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.par  
M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.py M /issm/trunk-jpl/test/Par/SquareEISMINT.par



M /issm/trunk-jpl/test/Par/SquareEISMINT.py M /issm/trunk-jpl/test/Par/SquareSheetConstrained.par  
M /issm/trunk-jpl/test/Par/SquareSheetConstrained.py M /issm/trunk-jpl/test/Par/SquareSheetShelf.par  
M /issm/trunk-jpl/test/Par/SquareSheetShelf.py M /issm/trunk-jpl/test/Par/SquareShelf.par  
M /issm/trunk-jpl/test/Par/SquareShelf.py M /issm/trunk-jpl/test/Par/SquareShelf2.par  
M /issm/trunk-jpl/test/Par/SquareShelf2.py M /issm/trunk-jpl/test/Par/SquareShelfConstrained.par  
M /issm/trunk-jpl/test/Par/SquareShelfConstrained.py M /issm/trunk-jpl/test/Par/SquareThermal.par  
M /issm/trunk-jpl/test/Par/SquareThermal.py M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par  
M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: CHG: unnecessary to specify damage now for anything other than a damage analysis

**Change #1199** with diff file ISSM-17763-17764.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/boundaryconditions/Se  
M /issm/trunk-jpl/src/m/classes/damage.py A /issm/trunk-jpl/src/m/enum/DamageIsdamageEnum.m  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: CHG: python fixes for NR now that it is no longer necessary to specify damage

**Change #1200** with diff file ISSM-17764-17765.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test270.m M /issm/trunk-jpl/test/NightlyRun/test270.py  
M /issm/trunk-jpl/test/NightlyRun/test271.m M /issm/trunk-jpl/test/NightlyRun/test271.py  
M /issm/trunk-jpl/test/NightlyRun/test272.m M /issm/trunk-jpl/test/NightlyRun/test272.py  
M /issm/trunk-jpl/test/NightlyRun/test274.m M /issm/trunk-jpl/test/NightlyRun/test274.py  
M /issm/trunk-jpl/test/NightlyRun/test275.m M /issm/trunk-jpl/test/NightlyRun/test275.py

Export determination: 6.

Rationale: CHG: updating damage runs for new matdamageice class

**Change #1201** with diff file ISSM-17765-17766.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/matdamageice.m A /issm/trunk-jpl/src/m/classes/matdamageice.py

Export determination: 6.

Rationale: BUG: fixes for matdamageice, forgot to include python version

**Change #1202** with diff file ISSM-17766-17767.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.py

Export determination: 6.

Rationale: CHG: reverting change to postpone python handling of vectors/arrays for now

**Change #1203** with diff file ISSM-17767-17768.diff:

Function name:

M /issm/trunk-jpl/test/Par/79North.par M /issm/trunk-jpl/test/Par/79North.py

M /issm/trunk-jpl/test/Par/GiaBenchmarksAB.par M /issm/trunk-jpl/test/Par/GiaBenchmarksCD.par

M /issm/trunk-jpl/test/Par/ISMIPA.par M /issm/trunk-jpl/test/Par/ISMIPA.py

M /issm/trunk-jpl/test/Par/ISMIPB.par M /issm/trunk-jpl/test/Par/ISMIPB.py

M /issm/trunk-jpl/test/Par/ISMIPC.par M /issm/trunk-jpl/test/Par/ISMIPC.py

M /issm/trunk-jpl/test/Par/ISMIPD.par M /issm/trunk-jpl/test/Par/ISMIPD.py

M /issm/trunk-jpl/test/Par/ISMIPE.par M /issm/trunk-jpl/test/Par/ISMIPE.py

M /issm/trunk-jpl/test/Par/ISMIPF.par M /issm/trunk-jpl/test/Par/ISMIPF.py

M /issm/trunk-jpl/test/Par/Pig.par M /issm/trunk-jpl/test/Par/Pig.py M /issm/trunk-

jpl/test/Par/RoundSheetEISMINT.par M /issm/trunk-jpl/test/Par/RoundSheetEISMINT.py

M /issm/trunk-jpl/test/Par/RoundSheetShelf.par M /issm/trunk-jpl/test/Par/RoundSheetShelf.py

M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.par M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.py

M /issm/trunk-jpl/test/Par/SquareEISMINT.par M /issm/trunk-jpl/test/Par/SquareEISMINT.py

M /issm/trunk-jpl/test/Par/SquareSheetConstrained.par M /issm/trunk-jpl/test/Par/SquareSheetConstrained.py

M /issm/trunk-jpl/test/Par/SquareSheetShelf.par M /issm/trunk-jpl/test/Par/SquareSheetShelf.py

M /issm/trunk-jpl/test/Par/SquareShelf.par M /issm/trunk-jpl/test/Par/SquareShelf.py

M /issm/trunk-jpl/test/Par/SquareShelf2.par M /issm/trunk-jpl/test/Par/SquareShelf2.py

M /issm/trunk-jpl/test/Par/SquareShelfConstrained.par M /issm/trunk-jpl/test/Par/SquareShelfConstrained.py

M /issm/trunk-jpl/test/Par/SquareThermal.par M /issm/trunk-jpl/test/Par/SquareThermal.py

M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: BUG: forgot to set isdamage=0 in par files

**Change #1204** with diff file ISSM-17768-17769.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/damage.m

Export determination: 6.

Rationale: BUG: spelling

**Change #1205** with diff file ISSM-17769-17770.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test271.m M /issm/trunk-jpl/test/Par/79North.par  
M /issm/trunk-jpl/test/Par/79North.py M /issm/trunk-jpl/test/Par/GiaBenchmarksAB.par  
M /issm/trunk-jpl/test/Par/GiaBenchmarksCD.par M /issm/trunk-jpl/test/Par/ISMIPA.par  
M /issm/trunk-jpl/test/Par/ISMIPA.py M /issm/trunk-jpl/test/Par/ISMIPB.par  
M /issm/trunk-jpl/test/Par/ISMIPB.py M /issm/trunk-jpl/test/Par/ISMIPC.par  
M /issm/trunk-jpl/test/Par/ISMIPC.py M /issm/trunk-jpl/test/Par/ISMIPD.par  
M /issm/trunk-jpl/test/Par/ISMIPD.py M /issm/trunk-jpl/test/Par/ISMIPE.par  
M /issm/trunk-jpl/test/Par/ISMIPE.py M /issm/trunk-jpl/test/Par/ISMIPF.par  
M /issm/trunk-jpl/test/Par/ISMIPF.py M /issm/trunk-jpl/test/Par/Pig.par M  
/issm/trunk-jpl/test/Par/Pig.py M /issm/trunk-jpl/test/Par/RoundSheetEISMINT.par  
M /issm/trunk-jpl/test/Par/RoundSheetEISMINT.py M /issm/trunk-jpl/test/Par/RoundSheetShelf.par  
M /issm/trunk-jpl/test/Par/RoundSheetShelf.py M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.par  
M /issm/trunk-jpl/test/Par/RoundSheetStaticEISMINT.py M /issm/trunk-jpl/test/Par/SquareEISMINT.par  
M /issm/trunk-jpl/test/Par/SquareEISMINT.py M /issm/trunk-jpl/test/Par/SquareSheetConstrained.par  
M /issm/trunk-jpl/test/Par/SquareSheetConstrained.py M /issm/trunk-jpl/test/Par/SquareSheetShelf.par  
M /issm/trunk-jpl/test/Par/SquareSheetShelf.py M /issm/trunk-jpl/test/Par/SquareShelf.par  
M /issm/trunk-jpl/test/Par/SquareShelf.py M /issm/trunk-jpl/test/Par/SquareShelf2.par  
M /issm/trunk-jpl/test/Par/SquareShelf2.py M /issm/trunk-jpl/test/Par/SquareShelfConstrained.par  
M /issm/trunk-jpl/test/Par/SquareShelfConstrained.py M /issm/trunk-jpl/test/Par/SquareThermal.par  
M /issm/trunk-jpl/test/Par/SquareThermal.py M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par  
M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: CHG: reverting previous change, isdamage=0 is specified by default  
in the damage class, problem was a typo elsewhere...

**Change #1206** with diff file ISSM-17770-17771.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test270.m

Export determination: 6.

Rationale: BUG: missed matdamageice initialization

**Change #1207** with diff file ISSM-17771-17772.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/damage.m

Export determination: 6.

Rationale: CHG: initialize as integer rather than bool

**Change #1208** with diff file ISSM-17772-17773.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test272.py M /issm/trunk-jpl/test/NightlyRun/test274.py

M /issm/trunk-jpl/test/NightlyRun/test275.py

Export determination: 6.

Rationale: CHG: updates to damage NR in python

**Change #1209** with diff file ISSM-17773-17774.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp

Export determination: 6.

Rationale: CHG: fixing indices in Tetra faces

**Change #1210** with diff file ISSM-17774-17775.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: BUG: fixing split of prismatic mesh into tets

**Change #1211** with diff file ISSM-17775-17776.diff:

Function name:

A /issm/trunk-jpl/m4/analyses.m4 M /issm/trunk-jpl/m4/issm\_options.m4

Export determination: 6.

Rationale: NEW: trying to automatically generate analyses.m4

**Change #1212** with diff file ISSM-17776-17777.diff:

Function name:

M /issm/trunk-jpl/m4/analyses.m4 M /issm/trunk-jpl/src/c/shared/Enum/Synchronize.sh

Export determination: 6.

Rationale: NEW: automated analyses.m4 from EnumDefinitions

**Change #1213** with diff file ISSM-17777-17778.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/gia\_core.cpp

Export determination: 6.

Rationale: BUG: fixed compilation

**Change #1214** with diff file ISSM-17778-17779.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/applyoptions.py M /issm/trunk-jpl/src/m/plot/plot\_contour.py

M /issm/trunk-jpl/src/m/plot/plot\_manager.py M /issm/trunk-jpl/src/m/plot/plot\_overlay.py

M /issm/trunk-jpl/src/m/plot/plot\_unit.py M /issm/trunk-jpl/src/m/plot/plotmodel.py

Export determination: 6.

Rationale: CHG: better handling of multiple subplots in python plotmodel, now uses matplotlib's AxesGrid toolkit to specify the axes grid at the beginning of plotting; this ensures better handling of things like aspect ratios, colorbars, and spacing between plots

**Change #1215** with diff file ISSM-17779-17780.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/inversion.m M /issm/trunk-jpl/src/m/classes/inversion.py

Export determination: 6.

Rationale: BUG: fixing problem with cost function being marshalled (data is changing as it is converted)

**Change #1216** with diff file ISSM-17780-17781.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/inversion.py

Export determination: 6.

Rationale: BUG: fixed matrix renumbering

**Change #1217** with diff file ISSM-17781-17782.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test421.m M /issm/trunk-jpl/test/NightlyRun/test421.py

M /issm/trunk-jpl/test/NightlyRun/test513.m M /issm/trunk-jpl/test/NightlyRun/test513.py

Export determination: 6.

Rationale: CHG: relaxing some tolerances

**Change #1218** with diff file ISSM-17782-17783.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/process\_solve\_options.m M /issm/trunk-jpl/src/m/solve/process\_solve\_options.

M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solve.py

Export determination: 6.

Rationale: CHG: simplifying solve options

**Change #1219** with diff file ISSM-17783-17784.diff:

Function name:

A /issm/trunk-jpl/externalpackages/gmsh A /issm/trunk-jpl/externalpackages/gmsh/install.sh

Export determination: 6.

Rationale: NEW: added gmsh

**Change #1220** with diff file ISSM-17784-17785.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/process\_solve\_options.m

Export determination: 6.

Rationale: BUG: Solution is 8 characters long

**Change #1221** with diff file ISSM-17785-17786.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_section.m

Export determination: 6.

Rationale: BUG: fixed plot\_section for given layer

**Change #1222** with diff file ISSM-17786-17787.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_section.m

Export determination: 6.

Rationale: BUG: fixed plot\_section for given layer

**Change #1223** with diff file ISSM-17787-17788.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test209.m M /issm/trunk-jpl/test/NightlyRun/test209.py  
M /issm/trunk-jpl/test/NightlyRun/test322.m M /issm/trunk-jpl/test/NightlyRun/test322.py  
M /issm/trunk-jpl/test/NightlyRun/test435.m  
Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #1224** with diff file ISSM-17788-17789.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test211.m M /issm/trunk-jpl/test/NightlyRun/test211.py  
Export determination: 6.  
Rationale: CHG: relaxing tolerances

**Change #1225** with diff file ISSM-17789-17790.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/gmsh/install.sh  
Export determination: 6.  
Rationale: CHG: better installation script

**Change #1226** with diff file ISSM-17790-17791.diff:  
Function name:  
D /issm/trunk-jpl/src/m/solve/process\_solve\_options.m D /issm/trunk-jpl/src/m/solve/process\_solve\_options.py  
M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solve.py  
Export determination: 6.  
Rationale: CHG: removed process\_solve\_options

**Change #1227** with diff file ISSM-17791-17792.diff:  
Function name:  
M /issm/trunk-jpl/src/m/qmu/preqmu.m  
Export determination: 6.  
Rationale: CHG: updating preqmu

**Change #1228** with diff file ISSM-17792-17793.diff:  
Function name:

M /issm/trunk-jpl/src/m/qmu/preqmu.m  
Export determination: 6.  
Rationale: BUG: no more process\_solve\_options

**Change #1229** with diff file ISSM-17793-17794.diff:  
Function name:  
M /issm/trunk-jpl/src/m/contrib/bamg/YamsCall.m  
Export determination: 6.  
Rationale: CHG: no more z in yams mesh2d

**Change #1230** with diff file ISSM-17794-17795.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/solve.m  
Export determination: 6.  
Rationale: CHG: options is not a struct anymore

**Change #1231** with diff file ISSM-17795-17796.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateNodes.cpp  
Export determination: 6.  
Rationale: CHG: OneLayerP4 working with P1 pressure

**Change #1232** with diff file ISSM-17796-17797.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test285.m M /issm/trunk-jpl/test/NightlyRun/test285.py  
M /issm/trunk-jpl/test/NightlyRun/test403.m  
Export determination: 6.  
Rationale: CHG: relaxing some tolerances

**Change #1233** with diff file ISSM-17797-17798.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h



M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h  
M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringToEnum.cpp  
Export determination: 6.  
Rationale: NEW: added sigma.nn in outputs

**Change #1234** with diff file ISSM-17798-17799.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/solve.py

Export determination: 6.

Rationale: BUG: no more process\_solve\_options

**Change #1235** with diff file ISSM-17799-17800.diff:

Function name:

M /issm/trunk-jpl/examples/Jakobshavn/Jks.par M /issm/trunk-jpl/examples/Jakobshavn/runme.m

M /issm/trunk-jpl/examples/SquareIceShelf/Square.par

Export determination: 6.

Rationale: CHG: bed is now base

**Change #1236** with diff file ISSM-17800-17801.diff:

Function name:

M /issm/trunk-jpl/configure.ac

Export determination: 6.

Rationale: CHG: increasing version number for sync