

JPL EXPORT ADMINISTRATION DOCUMENT REVIEW RECORD
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Log #: 17984-18295

(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:** Jul-30-2014

**Document Title/Description:** ISSM changes from revision 17984 to revision 18295

**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:** Jul-30-2014



**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)
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**Change #1** with diff file ISSM-17984-17985.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: add timestepping enum

**Change #2** with diff file ISSM-17985-17986.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: add timestepping enum

**Change #3** with diff file ISSM-17987-17988.diff:

Function name:

M /issm/trunk-jpl

Export determination: 6.

Rationale: merged trunk and trunk-jpl

**Change #4** with diff file ISSM-17990-17991.diff:

Function name:

M /issm/trunk-jpl M /issm/trunk-jpl/src M /issm/trunk-jpl/test

Export determination: 6.  
Rationale: Block revision 17989 from being merged into trunk-jpl

**Change #5** with diff file ISSM-17991-17992.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: add checks for nan

**Change #6** with diff file ISSM-17992-17993.diff:

Function name:  
A /issm/trunk-jpl/src/m/enum/TimesteppingInterpForcingsEnum.m  
Export determination: 6.  
Rationale: CHG: add timestepping enum

**Change #7** with diff file ISSM-17993-17994.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp 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/ColorCe  
A /issm/trunk-jpl/src/java/build/gui\_elements/CombinedPanel\$1.class A /issm/trunk-jpl/src/java/build/gui\_elements/CombinedPanel\$Type.class A /issm/trunk-jpl/src/java/build/gui\_elements/C  
A /issm/trunk-jpl/src/java/build/gui\_elements/ControlledPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/DecimalPanel.class A /issm/trunk-jpl/src/java/build/gui\_elements/Duplicato  
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/Inte  
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  
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  
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/file 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/mydocuments.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/SelectionPanel.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/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/filesave.png A /issm/trunk-jpl/src/java/src/resources/icons/fileopen.png A /issm/trunk-jpl/src/java/src/resources/icons/ini\_open.png 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/viewmag.png A /issm/trunk-jpl/src/java/src/resources/icons/xml\_open.png

Export determination: 6.

Rationale: CHG: back to normal

**Change #8** with diff file ISSM-17994-17995.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed typo

**Change #9** with diff file ISSM-17995-17996.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am D /issm/trunk-jpl/src/c/modules/AverageFilterx

D /issm/trunk-jpl/src/c/modules/EdgeDetectionx D /issm/trunk-jpl/src/c/modules/HoleFillerx

M /issm/trunk-jpl/src/c/modules/modules.h D /issm/trunk-jpl/src/wrappers/AverageFilter

D /issm/trunk-jpl/src/wrappers/EdgeDetection D /issm/trunk-jpl/src/wrappers/HoleFiller

D /issm/trunk-jpl/src/wrappers/InternalFront M /issm/trunk-jpl/src/wrappers/matlab/Makefile.am

Export determination: 6.

Rationale: DEL: removing modules that are never used

**Change #10** with diff file ISSM-17999-18000.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive230.nc M /issm/trunk-jpl/test/Archives/Archive231.nc

A /issm/trunk-jpl/test/Archives/Archive238.nc A /issm/trunk-jpl/test/Archives/Archive239.nc

A /issm/trunk-jpl/test/Archives/Archive336.nc A /issm/trunk-jpl/test/Archives/Archive337.nc

A /issm/trunk-jpl/test/Archives/Archive338.nc A /issm/trunk-jpl/test/Archives/Archive339.nc

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

Export determination: 6.

Rationale: CHG: change name of SMB test variable

**Change #11** with diff file ISSM-18000-18001.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/SMBcomponents.m A /issm/trunk-jpl/src/m/classes/SMBcomponents.py

A /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.m A /issm/trunk-jpl/src/m/classes/SMBmeltcompone

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

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

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

jpl/src/m/enum/SurfaceforcingsAccumulationEnum.m A /issm/trunk-jpl/src/m/enum/SurfaceforcingsEvapor  
A /issm/trunk-jpl/src/m/enum/SurfaceforcingsMeltEnum.m A /issm/trunk-jpl/src/m/enum/SurfaceforcingsR  
A /issm/trunk-jpl/src/m/enum/SurfaceforcingsRunoffEnum.m  
Export determination: 6.  
Rationale: NEW: add SMB components and interpolation option

**Change #12** with diff file ISSM-18001-18002.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/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/Inputs/TransientInput.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/C  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.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: implementation of SMB components and interpolation option

**Change #13** with diff file ISSM-18002-18003.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.m A /issm/trunk-jpl/test/NightlyRun/test238.m  
A /issm/trunk-jpl/test/NightlyRun/test238.py A /issm/trunk-jpl/test/NightlyRun/test239.m  
A /issm/trunk-jpl/test/NightlyRun/test239.py A /issm/trunk-jpl/test/NightlyRun/test336.m  
A /issm/trunk-jpl/test/NightlyRun/test336.py A /issm/trunk-jpl/test/NightlyRun/test337.m  
A /issm/trunk-jpl/test/NightlyRun/test337.py A /issm/trunk-jpl/test/NightlyRun/test338.m  
A /issm/trunk-jpl/test/NightlyRun/test338.py A /issm/trunk-jpl/test/NightlyRun/test339.m  
A /issm/trunk-jpl/test/NightlyRun/test339.py

Export determination: 6.

Rationale: NEW: tests for SMB components and interpolation option

**Change #14** with diff file ISSM-18003-18004.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.cpp M /issm/trunk-  
jpl/src/c/analyses/Balancethickness2Analysis.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/FemModel.cpp

M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/cores/control\_core.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Control/UpdateElementsAndMaterialsControl.cpp  
Export determination: 6.  
Rationale: CHG: working on balancethickness2

**Change #15** with diff file ISSM-18005-18006.diff:  
Function name:  
M /issm/trunk-jpl/src/m/mesh/squaremesh.py  
Export determination: 6.  
Rationale: BUG: missing mesh2d import

**Change #16** with diff file ISSM-18006-18007.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.py  
Export determination: 6.  
Rationale: BUG: import new SMB classes

**Change #17** with diff file ISSM-18007-18008.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/SMBcomponents.py M /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.  
Export determination: 6.  
Rationale: BUG: marshalled wrong enum

**Change #18** with diff file ISSM-18008-18009.diff:  
Function name:  
A /issm/trunk-jpl/src/m/classes/inversionvalidation.m  
Export determination: 6.  
Rationale: NEW: added inversionvalidation.m to validation inversion gradients

**Change #19** with diff file ISSM-18009-18010.diff:  
Function name:  
M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/cores/WrapperCorePointerFromSolutionEnum.  
A /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp M /issm/trunk-jpl/src/c/cores/cores.h



M /issm/trunk-jpl/src/c/modules/ModelProcessorx/Control/CreateParametersControl.cpp  
Export determination: 6.  
Rationale: NEW: added adjoint validation test

**Change #20** with diff file ISSM-18010-18011.diff:

Function name:  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp  
Export determination: 6.  
Rationale: CHG: added output

**Change #21** with diff file ISSM-18011-18012.diff:

Function name:  
M /issm/trunk-jpl/src/m/mech/backstressfrominversion.m M /issm/trunk-jpl/src/m/mech/backstressfrominversion.m  
A /issm/trunk-jpl/src/m/mech/calcbckstress.m A /issm/trunk-jpl/src/m/mech/calcbckstress.py  
Export determination: 6.  
Rationale: NEW: function to calculate basic analytical backstress (e.g. without an inversion)

**Change #22** with diff file ISSM-18012-18013.diff:

Function name:  
M /issm/trunk-jpl/src/m/plot/applyoptions.py M /issm/trunk-jpl/src/m/plot/checkplotoptions.py  
Export determination: 6.  
Rationale: BUG: a couple minor python plotting bugs

**Change #23** with diff file ISSM-18024-18025.diff:

Function name:  
M /issm/trunk-jpl/test/NightlyRun/test239.m M /issm/trunk-jpl/test/NightlyRun/test239.py  
M /issm/trunk-jpl/test/NightlyRun/test337.m M /issm/trunk-jpl/test/NightlyRun/test337.py  
M /issm/trunk-jpl/test/NightlyRun/test339.m M /issm/trunk-jpl/test/NightlyRun/test339.py  
Export determination: 6.  
Rationale: CHG: relaxing tolerances of python tests

**Change #24** with diff file ISSM-18025-18026.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: CHG: added support for Balancethickness2MisfitEnum

**Change #25** with diff file ISSM-18026-18027.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test415.m M /issm/trunk-jpl/test/NightlyRun/test415.py  
M /issm/trunk-jpl/test/NightlyRun/test435.m  
Export determination: 6.  
Rationale: CHG: relaxing tolerances

**Change #26** with diff file ISSM-18027-18028.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp  
Export determination: 6.  
Rationale: CHG: fixed AD compile

**Change #27** with diff file ISSM-18028-18029.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp  
Export determination: 6.  
Rationale: CHG: fixed AD compile

**Change #28** with diff file ISSM-18029-18030.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp  
Export determination: 6.  
Rationale: CHG: fixed AD compile

**Change #29** with diff file ISSM-18030-18031.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp

Export determination: 6.  
Rationale: CHG: fixed AD compile

**Change #30** with diff file ISSM-18031-18032.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: BUG: fixed marshalling of elementinterp as an enum

**Change #31** with diff file ISSM-18032-18033.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/damage.m  
Export determination: 6.  
Rationale: BUG: fixing python copy/paste

**Change #32** with diff file ISSM-18033-18034.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: working on P2 implementation for DamageEvolution

**Change #33** with diff file ISSM-18034-18035.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: numvertices should be numnodes

**Change #34** with diff file ISSM-18035-18036.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: CHG: fixing cost function

**Change #35** with diff file ISSM-18036-18037.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/Balancethickness2Analysis.cpp

Export determination: 6.

Rationale: BUG: fixing memory leak

**Change #36** with diff file ISSM-18037-18038.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.cpp

Export determination: 6.

Rationale: BUG: fixing Adjoint RHS

**Change #37** with diff file ISSM-18039-18040.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/Balancethickness2Analysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp

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

M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.cpp

Export determination: 6.

Rationale: NEW: added support for P0Interpolation

**Change #38** with diff file ISSM-18041-18042.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: damagelaw is now an integer to facilitate switching between different laws

**Change #39** with diff file ISSM-18042-18043.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: CHG: updated NR for new damage law format

**Change #40** with diff file ISSM-18043-18044.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: updated damage class for new law format

**Change #41** with diff file ISSM-18044-18045.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: initialize as NaN only for arrays

**Change #42** with diff file ISSM-18045-18046.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed consistency check

**Change #43** with diff file ISSM-18049-18050.diff:

Function name:

A /issm/trunk-jpl/externalpackages/dakota/install-5.2-discover.sh

Export determination: 6.

Rationale: CHG: Install 5.2 for discover

**Change #44** with diff file ISSM-18050-18051.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.2-discover-intel13.sh

Export determination: 6.

Rationale: NEW: add compile eith new intel

**Change #45** with diff file ISSM-18052-18053.diff:

Function name:

D /issm/trunk-jpl/src/ad/todo D /issm/trunk-jpl/src/ad/wrappers.txt

Export determination: 6.  
Rationale: DEL: removing some outdated files

**Change #46** with diff file ISSM-18053-18054.diff:  
Function name:  
M /issm/trunk-jpl/src/dox/issm.dox D /issm/trunk-jpl/src/perl  
Export determination: 6.  
Rationale: DEL: not needed anymore

**Change #47** with diff file ISSM-18054-18055.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.cpp  
Export determination: 6.  
Rationale: CHG: simplifying adjoint

**Change #48** with diff file ISSM-18055-18056.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.h 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/Balancethickness2Analysis.cpp M /issm/trunk-jpl/src/c/analyses/Balancethickness2Analysis.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.h 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.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.h 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/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.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.h  
M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h  
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.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/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.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/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/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.h  
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.h  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h  
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: CHG: working on migrating gradients to adjoints

**Change #51** with diff file ISSM-18058-18059.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.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: CHG: working on moving gradient to adjoint





**Change #56** with diff file ISSM-18063-18064.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Nodes.cpp M /issm/trunk-jpl/src/c/classes/Profiler.cpp  
M /issm/trunk-jpl/src/c/classes/Segment.h M /issm/trunk-jpl/src/c/classes/Vertex.cpp  
M /issm/trunk-jpl/src/c/classes/Vertices.cpp M /issm/trunk-jpl/src/c/classes/matrix/ElementVector.cpp  
M /issm/trunk-jpl/src/c/datastructures/DataSet.cpp M /issm/trunk-jpl/src/c/kml/KMLFileReadUtils.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Attribute.cpp M /issm/trunk-jpl/src/c/kml/KML\_ColorStyle.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Comment.cpp M /issm/trunk-jpl/src/c/kml/KML\_Container.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Document.cpp M /issm/trunk-jpl/src/c/kml/KML\_Feature.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_File.cpp M /issm/trunk-jpl/src/c/kml/KML\_Folder.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Geometry.cpp M /issm/trunk-jpl/src/c/kml/KML\_GroundOverlay.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Icon.cpp M /issm/trunk-jpl/src/c/kml/KML\_LatLonBox.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_LineString.cpp M /issm/trunk-jpl/src/c/kml/KML\_LineStyle.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_LinearRing.cpp M /issm/trunk-jpl/src/c/kml/KML\_MultiGeometry.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Object.cpp M /issm/trunk-jpl/src/c/kml/KML\_Overlay.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Placemark.cpp M /issm/trunk-jpl/src/c/kml/KML\_Point.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_PolyStyle.cpp M /issm/trunk-jpl/src/c/kml/KML\_Polygon.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_Style.cpp M /issm/trunk-jpl/src/c/kml/KML\_StyleSelector.cpp  
M /issm/trunk-jpl/src/c/kml/KML\_SubStyle.cpp M /issm/trunk-jpl/src/c/kml/KML\_Unknown.cpp  
M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.cpp  
M /issm/trunk-jpl/src/c/modules/Krigingx/Krigingx.cpp M /issm/trunk-jpl/src/c/modules/Krigingx/pKrigingx.cpp  
M /issm/trunk-jpl/src/c/shared/Elements/DrainageFunctionWaterfraction.cpp  
M /issm/trunk-jpl/src/c/shared/Matrix/MatrixUtils.cpp M /issm/trunk-jpl/src/c/shared/Numerics/GaussPoi  
M /issm/trunk-jpl/src/c/shared/Numerics/Synchronize.sh M /issm/trunk-jpl/src/c/shared/Numerics/Verbosi  
M /issm/trunk-jpl/src/c/shared/TriMesh/TriMeshUtils.cpp M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiD  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiSparseMat.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiV  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmSeqVec.h M /issm/trunk-jpl/src/c/toolkits/objects/Matrix.h  
M /issm/trunk-jpl/src/c/toolkits/objects/Vector.h M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscMat.  
M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscVec.cpp

Export determination: 6.

Rationale: CHG: removed some FUNCTION folds, moved to function declara-  
tion

**Change #57** with diff file ISSM-18064-18065.diff:

Function name:

M /issm/trunk-jpl/src/c/bamg/AdjacentTriangle.cpp M /issm/trunk-jpl/src/c/bamg/BamgGeom.cpp  
M /issm/trunk-jpl/src/c/bamg/BamgMesh.cpp M /issm/trunk-jpl/src/c/bamg/BamgOpts.cpp  
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/CrackedEdge.cpp M /issm/trunk-jpl/src/c/bamg/Curve.cpp

M /issm/trunk-jpl/src/c/bamg/Direction.cpp M /issm/trunk-jpl/src/c/bamg/Edge.cpp  
M /issm/trunk-jpl/src/c/bamg/EigenMetric.cpp M /issm/trunk-jpl/src/c/bamg/GeomEdge.cpp  
M /issm/trunk-jpl/src/c/bamg/GeomSubDomain.cpp M /issm/trunk-jpl/src/c/bamg/GeomVertex.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/Metric.cpp  
M /issm/trunk-jpl/src/c/bamg/SetOfE4.cpp M /issm/trunk-jpl/src/c/bamg/SubDomain.cpp  
M /issm/trunk-jpl/src/c/bamg/Triangle.cpp M /issm/trunk-jpl/src/c/bamg/VertexOnEdge.cpp  
M /issm/trunk-jpl/src/c/bamg/VertexOnGeom.cpp M /issm/trunk-jpl/src/c/bamg/VertexOnVertex.cpp  
M /issm/trunk-jpl/src/c/classes/Constraints/Constraints.cpp M /issm/trunk-jpl/src/c/classes/Constraints/Constraints.h M /issm/trunk-jpl/src/c/classes/Constraints/SpcDynamic.cpp  
M /issm/trunk-jpl/src/c/classes/Constraints/SpcStatic.cpp M /issm/trunk-jpl/src/c/classes/Constraints/SpcStatic.h  
M /issm/trunk-jpl/src/c/classes/Contour.h M /issm/trunk-jpl/src/c/classes/Contours.cpp  
M /issm/trunk-jpl/src/c/classes/DependentObject.cpp M /issm/trunk-jpl/src/c/classes/DofIndexing.cpp  
M /issm/trunk-jpl/src/c/classes/ExternalResults/Results.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Hook.cpp M /issm/trunk-jpl/src/c/classes/IndependentObject.cpp 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/DatasetInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/DoubleInput.cpp 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/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/SegInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.cpp  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/IoModel.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp  
M /issm/trunk-jpl/src/c/classes/Loads/Loads.cpp M /issm/trunk-jpl/src/c/classes/Loads/Numericalflux.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Loads/Penpair.cpp  
M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.cpp M /issm/trunk-jpl/src/c/classes/Massfluxatgate.h M /issm/trunk-jpl/src/c/classes/Materials/Materials.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matrice.cpp  
M /issm/trunk-jpl/src/c/classes/Materials/Matpar.cpp M /issm/trunk-jpl/src/c/classes/Misfit.h M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/classes/Options/OptionUtilities.cpp  
M /issm/trunk-jpl/src/c/classes/Options/Options.cpp M /issm/trunk-jpl/src/c/classes/Params/BoolParam.cpp M /issm/trunk-jpl/src/c/classes/Params/DataSetParam.cpp M /issm/trunk-jpl/src/c/classes/Params/DoubleParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/DoubleMatParam.cpp M /issm/trunk-jpl/src/c/classes/Params/DoubleParam.cpp M /issm/trunk-jpl/src/c/classes/Params/DoubleTransientMatParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/DoubleVecParam.cpp M /issm/trunk-jpl/src/c/classes/Params/FileParam.cpp M /issm/trunk-jpl/src/c/classes/Params/IntMatParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/IntParam.cpp M /issm/trunk-jpl/src/c/classes/Params/IntVecParam.cpp M /issm/trunk-jpl/src/c/classes/Params/MatrixParam.cpp M /issm/trunk-jpl/src/c/classes/Params/Paramet.cpp  
M /issm/trunk-jpl/src/c/classes/Params/StringArrayParam.cpp M /issm/trunk-jpl/src/c/classes/Params/StringParam.cpp M /issm/trunk-jpl/src/c/classes/Params/TransientParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/VectorParam.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussPenta.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussSeg.cpp M /issm/trunk-jpl/src/c/classes/gauss/GaussTetra.cpp  
M /issm/trunk-jpl/src/c/classes/gauss/GaussTria.cpp M /issm/trunk-jpl/src/c/classes/kriging/ExponentialVariogram.cpp M /issm/trunk-jpl/src/c/classes/kriging/GaussianVariogram.cpp M /issm/trunk-jpl/src/c/classes/kriging/Observation.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/Observations.cpp M /issm/trunk-jpl/src/c/classes/kriging/PowerVariogram.cpp M /issm/trunk-jpl/src/c/classes/kriging/Quadtree.cpp M /issm/trunk-jpl/src/c/classes/kriging/SphericalVariogram.cpp  
M /issm/trunk-jpl/src/c/classes/matrix/ElementMatrix.cpp

Export determination: 6.  
Rationale: DEL: removed all FUNCTIONs

**Change #58** with diff file ISSM-18065-18066.diff:

Function name:

A /issm/trunk-jpl/externalpackages/android/android-ndk/android\_aux.sh A /issm/trunk-jpl/externalpackages/android/android-ndk/installNDK-linux-x86.sh A /issm/trunk-jpl/externalpackages/android/android-sdk/installSDK-linux-x86.sh

Export determination: 6.

Rationale: CHG: new scripts for ubuntu.

**Change #59** with diff file ISSM-18067-18068.diff:

Function name:

M /issm/trunk-jpl/src/m/miscellaneous/prctile\_issm.m

Export determination: 6.

Rationale: CHG: remove transp

**Change #60** with diff file ISSM-18068-18069.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/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.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/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/Tria.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/cores/thermal\_core.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/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToString.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnum.cpp 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/groundingline.m  
M /issm/trunk-jpl/src/m/classes/groundingline.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/model.m  
M /issm/trunk-jpl/src/m/classes/model.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/hack/tres.m

A /issm/trunk-jpl/src/m/enum/BasalforcingsFloatingiceMeltingRateEnum.m A  
 /issm/trunk-jpl/src/m/enum/BasalforcingsGroundediceMeltingRateEnum.m M  
 /issm/trunk-jpl/src/m/enum/EnumDefinitions.py M /issm/trunk-jpl/src/m/mech/steadystateiceshelftemp.m  
 M /issm/trunk-jpl/src/m/mech/steadystateiceshelftemp.py M /issm/trunk-jpl/test/NightlyRun/test108.m  
 M /issm/trunk-jpl/test/NightlyRun/test108.py M /issm/trunk-jpl/test/NightlyRun/test109.m  
 M /issm/trunk-jpl/test/NightlyRun/test109.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/test1301.m  
 M /issm/trunk-jpl/test/NightlyRun/test1301.py M /issm/trunk-jpl/test/NightlyRun/test206.m  
 M /issm/trunk-jpl/test/NightlyRun/test206.py M /issm/trunk-jpl/test/NightlyRun/test207.m  
 M /issm/trunk-jpl/test/NightlyRun/test207.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/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/test227.m  
 M /issm/trunk-jpl/test/NightlyRun/test227.py M /issm/trunk-jpl/test/NightlyRun/test232.m  
 M /issm/trunk-jpl/test/NightlyRun/test232.py M /issm/trunk-jpl/test/NightlyRun/test233.m  
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 M /issm/trunk-jpl/test/NightlyRun/test237.py M /issm/trunk-jpl/test/NightlyRun/test3008.m  
 M /issm/trunk-jpl/test/NightlyRun/test3008.py M /issm/trunk-jpl/test/NightlyRun/test3009.m  
 M /issm/trunk-jpl/test/NightlyRun/test3009.py M /issm/trunk-jpl/test/NightlyRun/test3108.m  
 M /issm/trunk-jpl/test/NightlyRun/test3108.py M /issm/trunk-jpl/test/NightlyRun/test3109.m  
 M /issm/trunk-jpl/test/NightlyRun/test3109.py M /issm/trunk-jpl/test/NightlyRun/test312.m  
 M /issm/trunk-jpl/test/NightlyRun/test312.py M /issm/trunk-jpl/test/NightlyRun/test313.m  
 M /issm/trunk-jpl/test/NightlyRun/test313.py M /issm/trunk-jpl/test/NightlyRun/test315.m  
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 M /issm/trunk-jpl/test/NightlyRun/test406.py M /issm/trunk-jpl/test/NightlyRun/test407.m  
 M /issm/trunk-jpl/test/NightlyRun/test407.py M /issm/trunk-jpl/test/NightlyRun/test409.m  
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 M /issm/trunk-jpl/test/NightlyRun/test410.py M /issm/trunk-jpl/test/NightlyRun/test411.m  
 M /issm/trunk-jpl/test/NightlyRun/test411.py M /issm/trunk-jpl/test/NightlyRun/test415.m  
 M /issm/trunk-jpl/test/NightlyRun/test415.py M /issm/trunk-jpl/test/NightlyRun/test416.m  
 M /issm/trunk-jpl/test/NightlyRun/test416.py M /issm/trunk-jpl/test/NightlyRun/test435.m  
 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  
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 M /issm/trunk-jpl/test/NightlyRun/test513.m M /issm/trunk-jpl/test/NightlyRun/test513.py

M /issm/trunk-jpl/test/NightlyRun/test515.m M /issm/trunk-jpl/test/NightlyRun/test515.py  
 M /issm/trunk-jpl/test/NightlyRun/test516.m M /issm/trunk-jpl/test/NightlyRun/test516.py  
 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/RoundSheetShelf.par  
 M /issm/trunk-jpl/test/Par/RoundSheetShelf.py M /issm/trunk-jpl/test/Par/SquareEISMINT.par  
 M /issm/trunk-jpl/test/Par/SquareEISMINT.py M /issm/trunk-jpl/test/Par/SquareSheetShelf.par  
 M /issm/trunk-jpl/test/Par/SquareSheetShelf.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/ValleyGlacierShelf.par  
 Export determination: 6.  
 Rationale: NEW: reorganizing basal melting

**Change #61** with diff file ISSM-18069-18070.diff:

Function name:

M /issm/trunk-jpl/test/Par/RoundSheetShelf.py

Export determination: 6.

Rationale: BUG: minor typo

**Change #62** with diff file ISSM-18070-18071.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: temporary change to check nightly runs

**Change #63** with diff file ISSM-18071-18072.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive424.nc M /issm/trunk-jpl/test/Archives/Archive425.nc

Export determination: 6.

Rationale: CHG: archives grounding line with no code (no more grounding\_line melting)

**Change #64** with diff file ISSM-18072-18073.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive803.nc M /issm/trunk-jpl/test/Archives/Archive805.nc

Export determination: 6.  
Rationale: CHG: minor archives

**Change #65** with diff file ISSM-18073-18074.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.m  
Export determination: 6.  
Rationale: BUG: forgot to update unit conversion for new basal melting fields

**Change #66** with diff file ISSM-18074-18075.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: separaring grounded and floating melting rates where appropriate

**Change #67** with diff file ISSM-18075-18076.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.h  
Export determination: 6.  
Rationale: CHG: minor cosmetics

**Change #68** with diff file ISSM-18076-18077.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/src/m/classes/inversionvalidation.m M /issm/trunk-jpl/src/m/classes/m1qn3inversion.m  
M /issm/trunk-jpl/src/m/parameterization/setflowequation.m M /issm/trunk-jpl/src/m/parameterization/setflowequation.py M /issm/trunk-jpl/src/m/plot/plot\_elementstype.m  
Export determination: 6.  
Rationale: CHG: renumbering L1L2

**Change #69** with diff file ISSM-18077-18078.diff:

Function name:

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  
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

Export determination: 6.

Rationale: CHG: removed elementonbase/surface

**Change #70** with diff file ISSM-18078-18079.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/PentaRef.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/SegRef.cpp M /issm/trunk-jpl/src/c/classes/Elements/SegRef.h  
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/Elements/TetraRef.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/classes/Elements/TriaRef.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/TetraInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.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/Loads/Numericalflux.cpp

Export determination: 6.

Rationale: CHG: moved element\_type to element rather than reference element

**Change #71** with diff file ISSM-18079-18080.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: cosmetics

**Change #72** with diff file ISSM-18082-18083.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive111.nc M /issm/trunk-jpl/test/Archives/Archive124.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/Archive233.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/Archive426.nc M /issm/trunk-jpl/test/Archives/Archive427.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/Archive509.nc  
M /issm/trunk-jpl/test/Archives/Archive513.nc M /issm/trunk-jpl/test/Archives/Archive802.nc  
M /issm/trunk-jpl/test/Archives/Archive803.nc

Export determination: 6.

Rationale: CHG: new archives for basal melting

**Change #73** with diff file ISSM-18083-18084.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive508.nc M /issm/trunk-jpl/test/NightlyRun/test508.m

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

Export determination: 6.

Rationale: CHG: fixed nightly run that was failing

**Change #74** with diff file ISSM-18084-18085.diff:

Function name:

M /issm/trunk-jpl/jenkins/windows

Export determination: 6.

Rationale: CHG: removed development option from windows

**Change #75** with diff file ISSM-18085-18086.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive303.nc M /issm/trunk-jpl/test/Archives/Archive306.nc

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

Export determination: 6.

Rationale: CHG: forgot to update to archives

**Change #76** with diff file ISSM-18087-18088.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.py

Export determination: 6.

Rationale: BUG: forgot to change unit conversion of results in python

**Change #77** with diff file ISSM-18089-18090.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed issue for users of csh and tcsh shell. Needed to add n at end of line. Also created a new field 'shell' in the generic cluster, which defaults to '/bin/sh'. This field can be changed to '/bin/csh'.

**Change #78** with diff file ISSM-18090-18091.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor python tolerance

**Change #79** with diff file ISSM-18091-18092.diff:

Function name:

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

D /issm/trunk-jpl/test/NightlyRun/temp291.m D /issm/trunk-jpl/test/NightlyRun/temp291.py

A /issm/trunk-jpl/test/NightlyRun/test291.m A /issm/trunk-jpl/test/NightlyRun/test291.py

Export determination: 6.

Rationale: NEW: committed P4z test

**Change #80** with diff file ISSM-18092-18093.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive291.nc M /issm/trunk-jpl/test/NightlyRun/test291.m

M /issm/trunk-jpl/test/NightlyRun/test291.py

Export determination: 6.

Rationale: NEW: added archive for P4z test

**Change #81** with diff file ISSM-18093-18094.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRa  
A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatex/.deps A /issm/trunk-  
jpl/src/c/modules/FloatingiceMeltingRatex/.deps/.dirstamp A /issm/trunk-jpl/src/c/modules/FloatingiceMe  
A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatex/.deps/libISSMCore.a-  
FloatingiceMeltingRatex.Po A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatex/.deps/libISSMRose.a-  
FloatingiceMeltingRatex.r2cpp.Po A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatex/.dirstamp  
A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatex/FloatingiceMeltingRatex.cpp  
A /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatex/FloatingiceMeltingRatex.h  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp 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/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo  
M /issm/trunk-jpl/src/m/classes/basalforcings.m M /issm/trunk-jpl/src/m/classes/basalforcings.py  
A /issm/trunk-jpl/src/m/classes/linearbasalforcings.m A /issm/trunk-jpl/src/m/enum/BasalforcingsDeepwater  
A /issm/trunk-jpl/src/m/enum/BasalforcingsDeepwaterMeltingRateEnum.m A  
/issm/trunk-jpl/src/m/enum/BasalforcingsEnum.m A /issm/trunk-jpl/src/m/enum/BasalforcingsUpperwater  
M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py A /issm/trunk-jpl/src/m/enum/FloatingMeltRateEnum.  
A /issm/trunk-jpl/src/m/enum/LinearFloatingMeltRateEnum.m  
Export determination: 6.  
Rationale: BEW: adding new class for floating ice melt rate

**Change #82** with diff file ISSM-18094-18095.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: forgot to add Floating melt rate module

**Change #83** with diff file ISSM-18095-18096.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/IdToName.m A /issm/trunk-jpl/test/NightlyRun/test292.m

Export determination: 6.

Rationale: NEW: added NR for floating melt rate parameteriation

**Change #84** with diff file ISSM-18096-18097.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: forgot class changes

**Change #85** with diff file ISSM-18097-18098.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive292.nc

Export determination: 6.

Rationale: NEW: archive for test 292

**Change #86** with diff file ISSM-18099-18100.diff:

Function name:

D /issm/trunk-jpl/src/c/modules/FloatingIceMeltingRatex/.deps

Export determination: 6.

Rationale: CHG: should not be under svn

**Change #87** with diff file ISSM-18100-18101.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removed duplicate DamageEvolution

**Change #88** with diff file ISSM-18101-18102.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solve.py

Export determination: 6.

Rationale: CHG: introduced option to bypass on consistency check.

**Change #89** with diff file ISSM-18102-18103.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/matlab/Makefile.am M /issm/trunk-jpl/src/wrappers/python/Makefile.am

Export determination: 6.

Rationale: CHG: prevent automake from complaining about subdir options

**Change #90** with diff file ISSM-18103-18104.diff:

Function name:

M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solve.py

Export determination: 6.

Rationale: CHG: always check, reversing bug introduced in previous attempt to unhook consistency checks when not necessary.

**Change #91** with diff file ISSM-18104-18105.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/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/FemModel.cpp

Export determination: 6.

Rationale: CHG: moved vx vy vz max,min,abs to module

**Change #92** with diff file ISSM-18105-18106.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: ignoring some files

**Change #93** with diff file ISSM-18106-18107.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive292.nc

Export determination: 6.

Rationale: CHG: better archive

**Change #94** with diff file ISSM-18107-18108.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/python/Makefile.am

Export determination: 6.

Rationale: BUG: cannot use subdir options for python

**Change #95** with diff file ISSM-18108-18109.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/IdToName.py  
Export determination: 6.  
Rationale: NEW: adding last NR in python test list

**Change #96** with diff file ISSM-18109-18110.diff:  
Function name:  
M /issm/trunk-jpl/src/m/interp/interp.py  
Export determination: 6.  
Rationale: BUG: wrong array size for nearest neighbors

**Change #97** with diff file ISSM-18110-18111.diff:  
Function name:  
A /issm/trunk-jpl/test/NightlyRun/test292.py  
Export determination: 6.  
Rationale: CHG: added test292 for python

**Change #98** with diff file ISSM-18111-18112.diff:  
Function name:  
A /issm/trunk-jpl/src/m/classes/linearbasalforcings.py  
Export determination: 6.  
Rationale: BUG: forgot to add linearbasalforcings class in python

**Change #99** with diff file ISSM-18112-18113.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive801.nc  
Export determination: 6.  
Rationale: CHG: minor trying to debug NR 801

**Change #100** with diff file ISSM-18113-18114.diff:  
Function name:  
M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.  
Rationale: BUG: forgot to update ValleyGlacier par file in python

**Change #101** with diff file ISSM-18114-18115.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive801.nc  
Export determination: 6.  
Rationale: BUG: reverting back old archive

**Change #102** with diff file ISSM-18115-18116.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/linearbasalforcings.py M /issm/trunk-jpl/test/NightlyRun/test292.py  
Export determination: 6.  
Rationale: BUG: test 292.py now running

**Change #103** with diff file ISSM-18116-18117.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/linearbasalforcings.py  
Export determination: 6.  
Rationale: BUG: similar values in default parameters for matlab and python

**Change #104** with diff file ISSM-18117-18118.diff:  
Function name:  
M /issm/trunk-jpl/examples/SquareIceShelf/Front.exp  
Export determination: 6.  
Rationale: CHG: make front closer to boundary to avoid MUMPS crash

**Change #105** with diff file ISSM-18118-18119.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.h  
Export determination: 6.  
Rationale: NEW: added Min function

**Change #106** with diff file ISSM-18119-18120.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: NEW: added support for matlab 2014+ mex

**Change #107** with diff file ISSM-18120-18121.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/windows  
Export determination: 6.  
Rationale: CHG: excluding development and FS runs

**Change #108** with diff file ISSM-18121-18122.diff:  
Function name:  
M /issm/trunk-jpl/test/Par/RoundSheetShelf.par  
Export determination: 6.  
Rationale: BUG: typo

**Change #109** with diff file ISSM-18122-18123.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/Krigingx/Krigingx.h M /issm/trunk-jpl/src/c/modules/Krigingx/pKrigingx  
Export determination: 6.  
Rationale: CHG: renaming process2 for shared library

**Change #110** with diff file ISSM-18123-18124.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/FloatingIceMeltingRatex  
Export determination: 6.  
Rationale: CHG: getting svn to ignore some files

**Change #111** with diff file ISSM-18124-18125.diff:  
Function name:  
M /issm/trunk-jpl/src/c/Makefile.am D /issm/trunk-jpl/src/c/shared/MemOps/MemOps.cpp



M /issm/trunk-jpl/src/c/shared/MemOps/MemOps.h D /issm/trunk-jpl/src/c/shared/Numerics/isnan.cpp  
M /issm/trunk-jpl/src/c/shared/Numerics/isnan.h  
Export determination: 6.  
Rationale: CHG: moved some code from CPP to H so that ranlib does not complain about no symbol found

**Change #112** with diff file ISSM-18125-18126.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/shared/MemOps/MemOps.cpp  
M /issm/trunk-jpl/src/c/shared/MemOps/MemOps.h A /issm/trunk-jpl/src/c/shared/Numerics/isnan.cpp  
M /issm/trunk-jpl/src/c/shared/Numerics/isnan.h  
Export determination: 6.

Rationale: CHG: reverting back, AD does not compile like that (multiple definitions)

**Change #113** with diff file ISSM-18126-18127.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp  
Export determination: 6.  
Rationale: CHG: added Enum to IsEnum

**Change #114** with diff file ISSM-18127-18128.diff:

Function name:

M /issm/trunk-jpl/src/m/parameterization/setflowequation.m M /issm/trunk-jpl/src/m/parameterization/setflowequation.py  
Export determination: 6.  
Rationale: CHG: minor typo name of routine

**Change #115** with diff file ISSM-18128-18129.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/cores/control\_core.cpp M /issm/trunk-jpl/src/c/cores/controlm1qn3\_core.cpp  
M /issm/trunk-jpl/src/c/cores/controltao\_core.cpp M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp  
M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/Cc  
M /issm/trunk-jpl/src/c/modules/SetControlInputsFromVectorx/SetControlInputsFromVectorx.cpp

M /issm/trunk-jpl/src/c/modules/SetControlInputsFromVectorx/SetControlInputsFromVectorx.h  
M /issm/trunk-jpl/src/c/shared/Numerics/BrentSearch.cpp M /issm/trunk-jpl/src/c/shared/Numerics/OptPa  
M /issm/trunk-jpl/src/c/shared/Numerics/numerics.h M /issm/trunk-jpl/src/m/classes/inversion.m  
Export determination: 6.  
Rationale: NEW: working on BrentSearch interface to make it tao like

**Change #116** with diff file ISSM-18129-18130.diff:  
Function name:  
M /issm/trunk-jpl/AUTHORS  
Export determination: 6.  
Rationale: CHG: changed mathieu's email address

**Change #117** with diff file ISSM-18130-18131.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/ControlInputSetGradientx/ControlInputSetGradientx.h  
Export determination: 6.  
Rationale: BUG: fixing AD compile

**Change #118** with diff file ISSM-18131-18132.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/control\_core.cpp  
Export determination: 6.  
Rationale: BUG: fixing steadystate runs

**Change #119** with diff file ISSM-18132-18133.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/control\_core.cpp  
Export determination: 6.  
Rationale: CHG: no need to get FS

**Change #120** with diff file ISSM-18133-18134.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive322.nc

Export determination: 6.  
Rationale: CHG: no more orthogonalization

**Change #121** with diff file ISSM-18134-18135.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/cores/control\_core.cpp  
M /issm/trunk-jpl/src/c/cores/cores.h D /issm/trunk-jpl/src/c/cores/gradient\_core.cpp  
M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.cpp D /issm/trunk-jpl/src/c/modules/Orthx  
M /issm/trunk-jpl/src/c/modules/modules.h

Export determination: 6.

Rationale: DEL: removed some modules not needed anymore

**Change #122** with diff file ISSM-18135-18136.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/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
D /issm/trunk-jpl/src/c/modules/ControlInputGetGradientx D /issm/trunk-jpl/src/c/modules/ControlInputScaleGradientx  
M /issm/trunk-jpl/src/c/modules/modules.h

Export determination: 6.

Rationale: DEL: removed some modules not needed anymore

**Change #123** with diff file ISSM-18136-18137.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: CHG: working on a new damage evolution source term

**Change #124** with diff file ISSM-18137-18138.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/control\_core.cpp M /issm/trunk-jpl/src/c/shared/Numerics/BrentSearch.cpp

Export determination: 6.

Rationale: CHG: better display of Brent search inversion

**Change #125** with diff file ISSM-18138-18139.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/control\_core.cpp M /issm/trunk-jpl/test/Archives/Archive212.nc  
M /issm/trunk-jpl/test/Archives/Archive213.nc M /issm/trunk-jpl/test/Archives/Archive214.nc  
M /issm/trunk-jpl/test/Archives/Archive215.nc M /issm/trunk-jpl/test/Archives/Archive272.nc  
M /issm/trunk-jpl/test/Archives/Archive319.nc M /issm/trunk-jpl/test/Archives/Archive320.nc  
M /issm/trunk-jpl/test/Archives/Archive321.nc M /issm/trunk-jpl/test/Archives/Archive322.nc  
M /issm/trunk-jpl/test/Archives/Archive415.nc M /issm/trunk-jpl/test/Archives/Archive416.nc  
M /issm/trunk-jpl/test/Archives/Archive511.nc M /issm/trunk-jpl/test/Archives/Archive512.nc  
M /issm/trunk-jpl/test/Archives/Archive513.nc

Export determination: 6.

Rationale: CHG: do not need to call another time forward run after gradient

**Change #126** with diff file ISSM-18139-18140.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 M /issm/trunk-jpl/src/c/classes/Elements/TetraRef.h

Export determination: 6.

Rationale: CHG: added some capabilities

**Change #127** with diff file ISSM-18140-18141.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: forgot last marker

**Change #128** with diff file ISSM-18141-18142.diff:

Function name:

M /issm/trunk-jpl/src/m/mech/basalstress.m M /issm/trunk-jpl/src/m/plot/plotdoc.m

Export determination: 6.

Rationale: CHG: minor better documentation for basalstress function and plot

**Change #129** with diff file ISSM-18142-18143.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed split from prisms to tets

**Change #130** with diff file ISSM-18143-18144.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: some functionalities required for Nathan's algorithm in 3d

**Change #131** with diff file ISSM-18147-18148.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed case when elements->Size()==0

**Change #132** with diff file ISSM-18148-18149.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Matrix/MatrixUtils.cpp M /issm/trunk-jpl/src/c/shared/Matrix/matrix.h

Export determination: 6.

Rationale: NEW: implemeted matrix inversion

**Change #133** with diff file ISSM-18149-18150.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed AD compilation

**Change #134** with diff file ISSM-18150-18151.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: reverting back analytical test

**Change #135** with diff file ISSM-18151-18152.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixed allocation required in 3d for four-field FS

**Change #136** with diff file ISSM-18152-18153.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.cpp  
Export determination: 6.  
Rationale: BUG: fixed memory leak

**Change #137** with diff file ISSM-18153-18154.diff:  
Function name:  
A /issm/trunk-jpl/src/m/contrib/bamg/gmsh3d.m  
Export determination: 6.  
Rationale: NEW: added gmsh3d.m

**Change #138** with diff file ISSM-18157-18158.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plot\_BC.m  
Export determination: 6.  
Rationale: CHG: handle 2d meshes.

**Change #139** with diff file ISSM-18158-18159.diff:  
Function name:  
A /issm/trunk-jpl/externalpackages/dakota/install-5.3.1-macosx64\_mavericks.sh  
Export determination: 6.  
Rationale: CHG: add new install for mavericks

**Change #140** with diff file ISSM-18159-18160.diff:

Function name:

A /issm/trunk-jpl/externalpackages/boost/configs A /issm/trunk-jpl/externalpackages/boost/configs/1.55

A /issm/trunk-jpl/externalpackages/boost/configs/1.55/cas128strong.hpp.patch

A /issm/trunk-jpl/externalpackages/boost/configs/1.55/gcc-atomic.hpp.patch A

/issm/trunk-jpl/externalpackages/boost/install-1.49-linux.sh (from /issm/trunk-jpl/externalpackages/boost/install.sh:18012) A /issm/trunk-jpl/externalpackages/boost/install-1.55-macosx-mavericks.sh R /issm/trunk-jpl/externalpackages/boost/install.sh

Export determination: 6.

Rationale: CHG: add new install for mavericks

**Change #141** with diff file ISSM-18160-18161.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: add dakota 3.1 for mac

**Change #142** with diff file ISSM-18161-18162.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Matrix/MatrixUtils.cpp

Export determination: 6.

Rationale: CHG: comment out check of determinant

**Change #143** with diff file ISSM-18162-18163.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_unit.m

Export determination: 6.

Rationale: CHG: tetras in plot elements

**Change #144** with diff file ISSM-18163-18164.diff:

Function name:

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

Export determination: 6.  
Rationale: BUG: change coordinate system for floating ice as well

**Change #145** with diff file ISSM-18164-18165.diff:  
Function name:  
M /issm/trunk-jpl/etc/environment.sh  
Export determination: 6.  
Rationale: CHG: add path for dynlib DAKOTA

**Change #146** with diff file ISSM-18165-18166.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test513.m M /issm/trunk-jpl/test/NightlyRun/test513.py  
Export determination: 6.  
Rationale: CHG: relaxed tolerances

**Change #147** with diff file ISSM-18166-18167.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.m  
Export determination: 6.  
Rationale: BUG: wrong filed collapsed

**Change #148** with diff file ISSM-18167-18168.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test322.m M /issm/trunk-jpl/test/NightlyRun/test322.py  
Export determination: 6.  
Rationale: CHG: relaxed tolerances

**Change #149** with diff file ISSM-18168-18169.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test337.m M /issm/trunk-jpl/test/NightlyRun/test337.py  
Export determination: 6.  
Rationale: CHG: relaxed tolerances



**Change #150** with diff file ISSM-18169-18170.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/balancethickness2.m M /issm/trunk-jpl/src/m/classes/inversion.m

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

Export determination: 6.

Rationale: CHG: working on new bed topography algorithm

**Change #151** with diff file ISSM-18170-18171.diff:

Function name:

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/classes/gauss/GaussTria.cpp M /issm/trunk-jpl/src/c/modules/IOModelToConstraint

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/EnumToString.cpp

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 D /issm/trunk-jpl/src/m/enum/BasalforcingsMeltingRateC

D /issm/trunk-jpl/src/m/enum/BasalforcingsMeltingRateEnum.m M /issm/trunk-

jpl/src/m/enum/EnumDefinitions.py D /issm/trunk-jpl/src/m/enum/GroundinglineMeltingRateEnum.m

A /issm/trunk-jpl/src/m/enum/P2bubbleEnum.m A /issm/trunk-jpl/src/m/enum/P2bubblecondensedEnum.m

Export determination: 6.

Rationale: NEW: added P2bubble element, to be debugged

**Change #152** with diff file ISSM-18171-18172.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/m/classes/flowequation.m

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

Export determination: 6.

Rationale: NEW: P2bubble in 3d

**Change #153** with diff file ISSM-18172-18173.diff:

Function name:

M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/c.vim

Export determination: 6.

Rationale: CHG: syncing Enums

**Change #154** with diff file ISSM-18173-18174.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/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp  
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/EnumToStringx.cpp  
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

Export determination: 6.

Rationale: NEW: added CrouzeixRaviart elements in FS

**Change #155** with diff file ISSM-18174-18175.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/InterpFromGridToMesh/InterpFromGridToMesh.cpp

Export determination: 6.

Rationale: CHG: added bilinear interpolation to help display:

**Change #156** with diff file ISSM-18175-18176.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed divergence that was only integrating on base (+ added 2d case)

**Change #157** with diff file ISSM-18176-18177.diff:

Function name:

M /issm/trunk-jpl/test/Exp/SquareFront.exp

Export determination: 6.

Rationale: BUG: more restrictive on front to avoid crash

**Change #158** with diff file ISSM-18177-18178.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive701.nc M /issm/trunk-jpl/test/NightlyRun/test701.m

Export determination: 6.

Rationale: CHG: testing more 2d FS elements

**Change #159** with diff file ISSM-18179-18180.diff:

Function name:

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.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h A /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.cpp  
A /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.h M /issm/trunk-jpl/src/c/analyses/analyses.h  
M /issm/trunk-jpl/src/c/classes/Elements/PentaRef.cpp 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/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp M /issm/trunk-jpl/src/c/cores/AnalysisConfiguration.  
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/EnumToStringx.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp A /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h 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/LATaylorHoodEnum.m  
A /issm/trunk-jpl/src/m/enum/UzawaPressureAnalysisEnum.m

Export determination: 6.

Rationale: NEW: starting to implement pressure augmentation

**Change #160** with diff file ISSM-18180-18181.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: forgot to add Enum

**Change #161** with diff file ISSM-18181-18182.diff:

Function name:

M /issm/trunk-jpl/m4/analyses.m4

Export determination: 6.

Rationale: BUG: committed analysis.m4 with UsawaPressure

**Change #162** with diff file ISSM-18182-18183.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/TriaRef.cpp  
Export determination: 6.  
Rationale: BUG: starting to debug LATaylorHood

**Change #163** with diff file ISSM-18183-18184.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: correction to epl gradient and modif in transfer scheme

**Change #164** with diff file ISSM-18184-18185.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: debugging LATaylorHood

**Change #165** with diff file ISSM-18185-18186.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/flowequation.m  
Export determination: 6.  
Rationale: BUG: minor wrong name of element

**Change #166** with diff file ISSM-18186-18187.diff:  
Function name:  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la.cpp  
Export determination: 6.  
Rationale: BUG: fixed leaks in LATaylorHood

**Change #167** with diff file ISSM-18187-18188.diff:  
Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: fixing LATaylorHood

**Change #168** with diff file ISSM-18188-18189.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: forgot  $r$  in  $r B^T B$

**Change #169** with diff file ISSM-18189-18190.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive701.nc M /issm/trunk-jpl/test/NightlyRun/test701.m  
Export determination: 6.  
Rationale: BUG: the archive was wrong (probably for analytical test)

**Change #170** with diff file ISSM-18190-18191.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.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/cores/control\_core.cpp  
Export determination: 6.  
Rationale: CHG: minor

**Change #171** with diff file ISSM-18191-18192.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: should not transform coordinates for augmented pressure

**Change #172** with diff file ISSM-18192-18193.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.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 StrainRate to element

**Change #173** with diff file ISSM-18193-18194.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/cores/adjointbalancethickness2\_core.cpp  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp

Export determination: 6.

Rationale: BUG: BalancethicknessAparentMassbalance was not in Isiinput

**Change #174** with diff file ISSM-18194-18195.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/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/NewDamageEnum.m M /issm/trunk-jpl/src/m/plot/plotmodel.py

Export determination: 6.

Rationale: NEW: working on damage calculation from stress balance solution

**Change #175** with diff file ISSM-18195-18196.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: debugging LATH

**Change #176** with diff file ISSM-18196-18197.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: improving lagrange pressure

**Change #177** with diff file ISSM-18197-18198.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: names in augmented lagrangian

**Change #178** with diff file ISSM-18198-18199.diff:

Function name:

A /issm/trunk-jpl/examples/Data A /issm/trunk-jpl/examples/Data/Download.sh

A /issm/trunk-jpl/examples/Greenland A /issm/trunk-jpl/examples/Greenland/DomainOutline.exp

A /issm/trunk-jpl/examples/Greenland/Greenland.par A /issm/trunk-jpl/examples/Greenland/Jak\_grounded

A /issm/trunk-jpl/examples/Greenland/Jak\_outline.exp A /issm/trunk-jpl/examples/Greenland/Models

A /issm/trunk-jpl/examples/Greenland/runme.m A /issm/trunk-jpl/examples/ISMIP

A /issm/trunk-jpl/examples/ISMIP/CheatyIsmipA.par A /issm/trunk-jpl/examples/ISMIP/CheatyIsmipF.pa

A /issm/trunk-jpl/examples/ISMIP/CheatyRunme.m A /issm/trunk-jpl/examples/ISMIP/IsmipA.par

A /issm/trunk-jpl/examples/ISMIP/IsmipF.par A /issm/trunk-jpl/examples/ISMIP/Models

A /issm/trunk-jpl/examples/ISMIP/runme.m A /issm/trunk-jpl/examples/IceflowModels

A /issm/trunk-jpl/examples/IceflowModels/Contour.exp A /issm/trunk-jpl/examples/IceflowModels/EISMIN

A /issm/trunk-jpl/examples/IceflowModels/RoundFront.exp A /issm/trunk-jpl/examples/IceflowModels/Squa

A /issm/trunk-jpl/examples/IceflowModels/SquareFront.exp A /issm/trunk-jpl/examples/IceflowModels/Squa

A /issm/trunk-jpl/examples/IceflowModels/eismint.m A /issm/trunk-jpl/examples/IceflowModels/runme.m

A /issm/trunk-jpl/examples/Inversion A /issm/trunk-jpl/examples/Inversion/DomainOutline.exp

A /issm/trunk-jpl/examples/Inversion/Front.exp A /issm/trunk-jpl/examples/Inversion/Square.par

A /issm/trunk-jpl/examples/Inversion/runme.m A /issm/trunk-jpl/examples/Pig

A /issm/trunk-jpl/examples/Pig/06PIG\_Application.pdf A /issm/trunk-jpl/examples/Pig/CheatSheet.m

A /issm/trunk-jpl/examples/Pig/DomainOutline.bkp A /issm/trunk-jpl/examples/Pig/DomainOutline.exp

A /issm/trunk-jpl/examples/Pig/Models A /issm/trunk-jpl/examples/Pig/Pig.par

A /issm/trunk-jpl/examples/Pig/PigRegion.m A /issm/trunk-jpl/examples/Pig/runme.m

A /issm/trunk-jpl/examples/UncertaintyQuantification A /issm/trunk-jpl/examples/UncertaintyQuantification

A /issm/trunk-jpl/examples/UncertaintyQuantification/MassFluxes A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux1.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux10.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux11.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux12.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux13.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux14.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux15.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux2.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux3.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux4.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux5.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux6.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux7.exp A /issm/trunk-

jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux8.exp A /issm/trunk-jpl/examples/UncertaintyQuantification/MassFluxes/MassFlux9.exp A /issm/trunk-jpl/examples/UncertaintyQuantification/Models A /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m  
Export determination: 6.  
Rationale: Done with tutorials

**Change #179** with diff file ISSM-18199-18200.diff:  
Function name:  
D /issm/trunk-jpl/examples/Pig/06PIG\_Application.pdf  
Export determination: 6.  
Rationale: DEL: not needed

**Change #180** with diff file ISSM-18200-18201.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test701.m  
Export determination: 6.  
Rationale: BUG: changed name of augmented lagrangian parameter in matlab

**Change #181** with diff file ISSM-18201-18202.diff:  
Function name:  
M /issm/trunk-jpl/examples/Jakobshavn/Jks.par M /issm/trunk-jpl/examples/Jakobshavn/runme.m  
Export determination: 6.  
Rationale: CHG: update Jks for new Data directory

**Change #182** with diff file ISSM-18202-18203.diff:  
Function name:  
M /issm/trunk-jpl/examples/Pig/CheatSheet.m M /issm/trunk-jpl/examples/Pig/Pig.par  
M /issm/trunk-jpl/examples/Pig/PigRegion.m M /issm/trunk-jpl/examples/Pig/runme.m  
Export determination: 6.  
Rationale: CHG: update runmes for tutorials

**Change #183** with diff file ISSM-18203-18204.diff:  
Function name:



M /issm/trunk-jpl/examples/ISMIP/CheatyIsmipA.par M /issm/trunk-jpl/examples/ISMIP/CheatyIsmipF.pa  
M /issm/trunk-jpl/examples/ISMIP/CheatyRunme.m M /issm/trunk-jpl/examples/ISMIP/runme.m  
M /issm/trunk-jpl/examples/Inversion/runme.m M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m  
Export determination: 6.  
Rationale: CHG: update runmes for tutorials

**Change #184** with diff file ISSM-18204-18205.diff:  
Function name:  
M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m  
Export determination: 6.  
Rationale: CHG: update UQ runme

**Change #185** with diff file ISSM-18205-18206.diff:  
Function name:  
M /issm/trunk-jpl/examples/Greenland/Greenland.par M /issm/trunk-jpl/examples/Greenland/runme.m  
M /issm/trunk-jpl/examples/Jakobshavn/Jks.par M /issm/trunk-jpl/examples/Pig/Pig.par  
Export determination: 6.  
Rationale: CHG: Greenland and melting rates

**Change #186** with diff file ISSM-18206-18207.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/autotools/install.sh  
Export determination: 6.  
Rationale: CHG: upgradint to newest version

**Change #187** with diff file ISSM-18207-18208.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_la.cpp  
Export determination: 6.  
Rationale: BUG: fixing Uzawa pressure

**Change #188** with diff file ISSM-18208-18209.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.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/solutionsequences.cpp M /issm/trunk-jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py A /issm/trunk-jpl/src/m/enum/AugmentedLagrangianRhopEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py

Export determination: 6.

Rationale: NEW: added AugmentedLagrangianRhopEnum

**Change #189** with diff file ISSM-18209-18210.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: forgot to add correction term in analytical FS

**Change #190** with diff file ISSM-18210-18211.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: minor should not commit FSanalytical

**Change #191** with diff file ISSM-18211-18212.diff:

Function name:

A /issm/trunk-jpl/src/m/exp/exp2shp.m

Export determination: 6.

Rationale: NEW: exp2shp routine

**Change #192** with diff file ISSM-18212-18213.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: NEW: changes for augmented lagrangian pressure in 3d

**Change #193** with diff file ISSM-18213-18214.diff:

Function name:

M /issm/trunk-jpl/src/m/exp/exp2shp.m

Export determination: 6.

Rationale: CHG: add geometry settings

**Change #194** with diff file ISSM-18214-18215.diff:

Function name:

M /issm/trunk-jpl/examples/Greenland/runme.m

Export determination: 6.

Rationale: CHG: update Greenland runme

**Change #195** with diff file ISSM-18216-18217.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/inversion.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/extrusion/project2d.m

M /issm/trunk-jpl/src/m/extrusion/project2d.py

Export determination: 6.

Rationale: CHG: improved help

**Change #196** with diff file ISSM-18217-18218.diff:

Function name:

A /issm/trunk-jpl/externalpackages/dakota/install-5.3.1-macosx64.sh (from /issm/trunk-jpl/externalpackages/dakota/install-5.3.1-macosx64\_mavericks.sh:18198) D /issm/trunk-jpl/externalpackages/dakota/install-5.3.1-macosx64\_mavericks.sh

Export determination: 6.

Rationale: CHG: move install for all macosx

**Change #197** with diff file ISSM-18218-18219.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: minor problem in FS analytical

**Change #198** with diff file ISSM-18219-18220.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.5-macosx64.sh

Export determination: 6.

Rationale: NEW: petsc 3.5 mac installation script

**Change #199** with diff file ISSM-18220-18221.diff:

Function name:

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

Export determination: 6.

Rationale: CHG; preappend boost

**Change #200** with diff file ISSM-18221-18222.diff:

Function name:

M /issm/trunk-jpl/externalpackages/dakota/install-5.3.1-macosx64.sh

Export determination: 6.

Rationale: CHG: add fortran

**Change #201** with diff file ISSM-18222-18223.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: working on other cost functions

**Change #202** with diff file ISSM-18223-18224.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscSolver.cpp

Export determination: 6.

Rationale: CHG: added support for petsc 3.5

**Change #203** with diff file ISSM-18224-18225.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.cpp

Export determination: 6.  
Rationale: CHG: working on other cost functions

**Change #204** with diff file ISSM-18225-18226.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/controltao\_core.cpp  
Export determination: 6.  
Rationale: NEW: TAO is now provided by petsc 3.5

**Change #205** with diff file ISSM-18226-18227.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: NEW: TAO is now provided by petsc 3.5

**Change #206** with diff file ISSM-18227-18228.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/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/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/flowequation.py  
A /issm/trunk-jpl/src/m/enum/AugmentedLagrangianRholambdaEnum.m A /issm/trunk-jpl/src/m/enum/AugmentedLagrangianRlambdaEnum.m M /issm/trunk-jpl/src/m/enum/EnumDefinitions.py  
Export determination: 6.  
Rationale: NEW: working on Augmented lagrangien sigma nn

**Change #207** with diff file ISSM-18228-18229.diff:  
Function name:  
A /issm/trunk-jpl/configs/config-ios-armv7.sh A /issm/trunk-jpl/configs/config-ios-armv7s.sh A /issm/trunk-jpl/configs/config-ios-simulator.sh A /issm/trunk-jpl/externalpackages/gsl/finite.patch A /issm/trunk-jpl/externalpackages/triangle/configs/ios  
A /issm/trunk-jpl/externalpackages/triangle/configs/ios/configure.make A /issm/trunk-jpl/externalpackages/triangle/install-iosarmv7.sh A /issm/trunk-jpl/externalpackages/triangle/install-iosarmv7s.sh A /issm/trunk-jpl/externalpackages/triangle/install-iosi386.sh  
Export determination: 6.

Rationale: Added iOS cross compiling scripts armv7, armv7s, i386

**Change #208** with diff file ISSM-18229-18230.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test701.m

Export determination: 6.

Rationale: CHG: minor

**Change #209** with diff file ISSM-18230-18231.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.5-linux64.sh M /issm/trunk-jpl/jenkins/imac-012301-gil M /issm/trunk-jpl/jenkins/linux64\_larsen M /issm/trunk-jpl/jenkins/linux64\_murdo

Export determination: 6.

Rationale: CHG: use petsc 3.5 now

**Change #210** with diff file ISSM-18232-18233.diff:

Function name:

M /issm/trunk-jpl/src/wrappers/Makefile.am M /issm/trunk-jpl/src/wrappers/matlab/Makefile.am  
M /issm/trunk-jpl/src/wrappers/python/Makefile.am

Export determination: 6.

Rationale: CHG: duplicating 18231

**Change #211** with diff file ISSM-18233-18234.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.5-pleiades.sh

Export determination: 6.

Rationale: NEW: added petsc 3.5 installation script on pleiades

**Change #212** with diff file ISSM-18234-18235.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test701.m

Export determination: 6.

Rationale: CHG: relaxed tolerances

**Change #213** with diff file ISSM-18235-18236.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: trying to implement augmentation lambda

**Change #214** with diff file ISSM-18236-18237.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: forgot to fix to compilation problems in lagrangian lambda

**Change #215** with diff file ISSM-18237-18238.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/MasstransportAnalysis.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/Constraints/SpcDynamic.cpp M /issm/trunk-jpl/src/c/classes/Constraints/SpcStatic.cpp M /issm/trunk-jpl/src/c/classes/Contour.h M /issm/trunk-jpl/src/c/classes/DofIndexing.cpp M /issm/trunk-jpl/src/c/classes/DofIndexing.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/ElementHook.cpp M /issm/trunk-jpl/src/c/classes/Elements/Elements.cpp M /issm/trunk-jpl/src/c/classes/Elements/Elements.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/FemModel.cpp M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/classes/Hook.cpp M /issm/trunk-jpl/src/c/classes/Hook.h M /issm/trunk-jpl/src/c/classes/Inputs/DatasetInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/PentaInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TetraInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TriaInput.cpp M /issm/trunk-jpl/src/c/classes/Loads/Load.h M /issm/trunk-jpl/src/c/classes/Loads/Loads.cpp M /issm/trunk-jpl/src/c/classes/Loads/Loads.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/Loads/Pengrid.cpp M /issm/trunk-jpl/src/c/classes/Loads/Pengrid.h M /issm/trunk-jpl/src/c/classes/Loads/Penpair.cpp

M /issm/trunk-jpl/src/c/classes/Loads/Penpair.h M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.cpp  
M /issm/trunk-jpl/src/c/classes/Loads/Riftfront.h 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/classes/Misfit.h M /issm/trunk-jpl/src/c/classes/Node.cpp  
M /issm/trunk-jpl/src/c/classes/Node.h M /issm/trunk-jpl/src/c/classes/Params/DoubleParam.cpp  
M /issm/trunk-jpl/src/c/classes/Params/Parameters.cpp M /issm/trunk-jpl/src/c/classes/Profiler.cpp  
M /issm/trunk-jpl/src/c/classes/Profiler.h M /issm/trunk-jpl/src/c/classes/kriging/ExponentialVariogram.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/ExponentialVariogram.h M /issm/trunk-jpl/src/c/classes/kriging/GaussianVariogram.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/GaussianVariogram.h M /issm/trunk-jpl/src/c/classes/kriging/Observation.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/Observation.h M /issm/trunk-jpl/src/c/classes/kriging/PowerVariogram.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/PowerVariogram.h M /issm/trunk-jpl/src/c/classes/kriging/Quadtree.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/Quadtree.h M /issm/trunk-jpl/src/c/classes/kriging/SphericalVariogram.cpp  
M /issm/trunk-jpl/src/c/classes/kriging/SphericalVariogram.h M /issm/trunk-jpl/src/c/cores/DakotaSpawnCore.cpp  
M /issm/trunk-jpl/src/c/cores/damage\_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/thermal\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/datastructures/DataSet.cpp M /issm/trunk-jpl/src/c/datastructures/DataSet.h  
M /issm/trunk-jpl/src/c/main/issm.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElements.cpp  
M /issm/trunk-jpl/src/c/toolkits/issm/Bucket.h  
Export determination: 6.  
Rationale: CHG: create femmodel copy for dakota runs

**Change #216** with diff file ISSM-18238-18239.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: add qmu benchmark to runme

**Change #217** with diff file ISSM-18239-18240.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: element\_type\_list is a int array, should be initialized with 0, not NULL



**Change #218** with diff file ISSM-18240-18241.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/FSanalytics/fsanalytics.cpp  
Export determination: 6.  
Rationale: NEW: analytical solution for Stokes test

**Change #219** with diff file ISSM-18241-18242.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: NEW: preparing friction for LA

**Change #220** with diff file ISSM-18242-18243.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: fixed FS 3d

**Change #221** with diff file ISSM-18243-18244.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/ElementHook.cpp  
Export determination: 6.  
Rationale: BUG: fixed memory leak

**Change #222** with diff file ISSM-18244-18245.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: BUG: fixed memory leaks

**Change #223** with diff file ISSM-18245-18246.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp

Export determination: 6.  
Rationale: CHG: fixed FS 3d

**Change #224** with diff file ISSM-18246-18247.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefiniti  
M /issm/trunk-jpl/src/c/shared/Enum/EnumToStringx.cpp M /issm/trunk-jpl/src/c/shared/Enum/StringTo  
Export determination: 6.  
Rationale: CHG: removing useless Dakota Enums, now that we have Fem-  
Model::Copy

**Change #225** with diff file ISSM-18247-18248.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test417.m  
Export determination: 6.  
Rationale: CHG: set params to direct

**Change #226** with diff file ISSM-18248-18249.diff:  
Function name:  
M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m  
Export determination: 6.  
Rationale: CHG: need direct set for mac

**Change #227** with diff file ISSM-18249-18250.diff:  
Function name:  
M /issm/trunk-jpl/examples/Pig/CheatSheet.m  
Export determination: 6.  
Rationale: BUG: remove org from cheatsheet

**Change #228** with diff file ISSM-18250-18251.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plot\_scatter.m  
Export determination: 6.

Rationale: CHG: added caxis command

**Change #229** with diff file ISSM-18251-18252.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_elementstype.m

Export determination: 6.

Rationale: CHG: minor

**Change #230** with diff file ISSM-18252-18253.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processdata.m

Export determination: 6.

Rationale: NEW: enable to display structure

**Change #231** with diff file ISSM-18253-18254.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/processdata.m

Export determination: 6.

Rationale: NEW: enable to display structure

**Change #232** with diff file ISSM-18254-18255.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscMat.cpp

Export determination: 6.

Rationale: CHG: added check on allocation

**Change #233** with diff file ISSM-18255-18256.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plot\_transient\_movie.m

Export determination: 6.

Rationale: CHG: can just call plotmodel(md,'data','transient\_movie') now

**Change #234** with diff file ISSM-18256-18257.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/plot\_transient\_movie.m  
Export determination: 6.  
Rationale: CHG: added caxis calculation

**Change #235** with diff file ISSM-18257-18258.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/InputUpdateFromSolutionx/InputUpdateFromSolutionx.cpp  
Export determination: 6.  
Rationale: NEW: added message

**Change #236** with diff file ISSM-18258-18259.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.cpp  
Export determination: 6.  
Rationale: CHG: added message

**Change #237** with diff file ISSM-18259-18260.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: BUG: looking for wrong enum

**Change #238** with diff file ISSM-18260-18261.diff:  
Function name:  
M /issm/trunk-jpl/examples/Pig/runme.m  
Export determination: 6.  
Rationale: CHG: use mdHO to plot in step 7

**Change #239** with diff file ISSM-18261-18262.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4

Export determination: 6.  
Rationale: CHG: removed `-with-gia` option, conflicting with `-with-Gia`

**Change #240** with diff file ISSM-18262-18263.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: dim was not initialized

**Change #241** with diff file ISSM-18263-18264.diff:  
Function name:  
A /issm/trunk-jpl/examples/Greenland/CheatSheet.m M /issm/trunk-jpl/examples/Greenland/runme.m  
Export determination: 6.  
Rationale: CHG: update runme

**Change #242** with diff file ISSM-18264-18265.diff:  
Function name:  
M /issm/trunk-jpl/examples/Greenland/CheatSheet.m M /issm/trunk-jpl/examples/Greenland/runme.m  
Export determination: 6.  
Rationale: CHG: add plot exercise

**Change #243** with diff file ISSM-18265-18266.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/SMBgradients.m  
Export determination: 6.  
Rationale: CHG: add units

**Change #244** with diff file ISSM-18266-18267.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp  
Export determination: 6.  
Rationale: CHG: cleanup gradients

**Change #245** with diff file ISSM-18267-18268.diff:

Function name:

A /issm/trunk-jpl/examples/IceBridge A /issm/trunk-jpl/examples/IceBridge/DomainOutline.exp

A /issm/trunk-jpl/examples/IceBridge/Greenland.par A /issm/trunk-jpl/examples/IceBridge/Greenland\_chea

A /issm/trunk-jpl/examples/IceBridge/Greenland\_noOIB.par A /issm/trunk-

jpl/examples/IceBridge/Jak\_grounded.exp A /issm/trunk-jpl/examples/IceBridge/Jak\_outline.exp

A /issm/trunk-jpl/examples/IceBridge/Models A /issm/trunk-jpl/examples/IceBridge/data\_gaps.exp

A /issm/trunk-jpl/examples/IceBridge/runme.m M /issm/trunk-jpl/examples/Pig/runme.m

M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m

Export determination: 6.

Rationale: NEW: add icebridge tutorial

**Change #246** with diff file ISSM-18268-18269.diff:

Function name:

M /issm/trunk-jpl/examples/Greenland/runme.m

Export determination: 6.

Rationale: CHG: runme move lat lon conversion to step 7

**Change #247** with diff file ISSM-18269-18270.diff:

Function name:

M /issm/trunk-jpl/examples/Pig/runme.m M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m

Export determination: 6.

Rationale: CHG: revert runmes back

**Change #248** with diff file ISSM-18270-18271.diff:

Function name:

M /issm/trunk-jpl/examples/Greenland/CheatSheet.m M /issm/trunk-jpl/examples/Greenland/runme.m

Export determination: 6.

Rationale: CHG: minor typo

**Change #249** with diff file ISSM-18271-18272.diff:

Function name:

M /issm/trunk-jpl/examples/Inversion/runme.m A /issm/trunk-jpl/examples/Inversion/runme2.m

Export determination: 6.

Rationale: CHG: add runme2

**Change #250** with diff file ISSM-18272-18273.diff:

Function name:

A /issm/trunk-jpl/examples/Inversion/CheatSheet.m (from /issm/trunk-jpl/examples/Inversion/runme2.m:18

M /issm/trunk-jpl/examples/Inversion/runme.m D /issm/trunk-jpl/examples/Inversion/runme2.m

Export determination: 6.

Rationale: CHG: update cheatsheet

**Change #251** with diff file ISSM-18273-18274.diff:

Function name:

M /issm/trunk-jpl/examples/Inversion/CheatSheet.m M /issm/trunk-jpl/examples/Inversion/runme.m

Export determination: 6.

Rationale: CHG: add plot

**Change #252** with diff file ISSM-18274-18275.diff:

Function name:

M /issm/trunk-jpl/examples/Inversion/CheatSheet.m M /issm/trunk-jpl/examples/Inversion/runme.m

Export determination: 6.

Rationale: CHG: add plots

**Change #253** with diff file ISSM-18275-18276.diff:

Function name:

M /issm/trunk-jpl/examples/Inversion/CheatSheet.m M /issm/trunk-jpl/examples/Inversion/runme.m

Export determination: 6.

Rationale: CHG: remove caxis

**Change #254** with diff file ISSM-18276-18277.diff:

Function name:

M /issm/trunk-jpl/examples/Inversion/CheatSheet.m

Export determination: 6.

Rationale: CHG: geometry after param

**Change #255** with diff file ISSM-18277-18278.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: working on new damage calculation as a requested output of a Stressbalance solution

**Change #256** with diff file ISSM-18278-18279.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: display and marshall all damage params if isdamage=1, since now damage can be calculated from a Stressbalance

**Change #257** with diff file ISSM-18279-18280.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: forgot to also include matlab damage class

**Change #258** with diff file ISSM-18280-18281.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/FSanlyticals/fsanlyticals.cpp

Export determination: 6.

Rationale: CHG: some analytcal tests for stokes

**Change #259** with diff file ISSM-18281-18282.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: added second augmentation



**Change #260** with diff file ISSM-18282-18283.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: updated damage solution can now be called as a Requested Output of a Stressbalance solution. Requires that the matdamageice class be used with two extra parameters specified (stress\_threshold and c1, a ductility parameter).

**Change #261** with diff file ISSM-18283-18284.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/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: NEW: some functions for P2 elements

**Change #262** with diff file ISSM-18284-18285.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: finished augmentation

**Change #263** with diff file ISSM-18285-18286.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed way to call SigmaNN

**Change #264** with diff file ISSM-18286-18287.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: fixed minor problems

**Change #265** with diff file ISSM-18287-18288.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive701.nc M /issm/trunk-jpl/test/NightlyRun/test701.m  
Export determination: 6.  
Rationale: NEW: added test for new stokes solver

**Change #266** with diff file ISSM-18288-18289.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive701.nc  
Export determination: 6.  
Rationale: CHG: archive saved on thwaites

**Change #267** with diff file ISSM-18289-18290.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/petsc/install-3.5-linux64.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.5-macosx64.sh  
Export determination: 6.  
Rationale: CHG: new installation scripts based on Satish's comments

**Change #268** with diff file ISSM-18290-18291.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: wrong test

**Change #269** with diff file ISSM-18291-18292.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/petsc/install-3.5-pleiades.sh  
Export determination: 6.  
Rationale: CHG: no need to install blas

**Change #270** with diff file ISSM-18293-18294.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/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: added lateral friction for Erkut SSA

**Change #271** with diff file ISSM-18294-18295.diff:

Function name:

A /issm/trunk-jpl/src/m/parameterization/sethydrostaticmask.m A /issm/trunk-jpl/src/m/parameterization/sethydrostaticmask.py

Export determination: 6.

Rationale: NEW: function to determine hydrostatic grounding line position