

JPL EXPORT ADMINISTRATION DOCUMENT REVIEW RECORD
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Log #: 25834-26739

(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:** 21-Dec-PM

**Document Title/Description:** ISSM changes from revision 25834 to revision 26739

**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:** 21-Dec-PM



**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-25835-25836.diff:

Function name:

M /issm/trunk-jpl

Export determination: 6.

Rationale: merged trunk and trunk-jpl

**Change #2** with diff file ISSM-25837-25838.diff:

Function name:

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

Export determination: 6.

Rationale: Block revision 25836 from being merged into trunk-jpl

**Change #3** with diff file ISSM-25838-25839.diff:

Function name:

M /issm/trunk-jpl/configure.ac

Export determination: 6.

Rationale: CHG: updated version number

**Change #4** with diff file ISSM-25839-25840.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

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

M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/cores/movingfront\_core.cpp  
M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim  
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/test/Archives/Archive540.arch  
M /issm/trunk-jpl/test/Archives/Archive541.arch M /issm/trunk-jpl/test/Archives/Archive804.arch  
M /issm/trunk-jpl/test/Archives/Archive805.arch M /issm/trunk-jpl/test/NightlyRun/test540.m  
M /issm/trunk-jpl/test/NightlyRun/test541.m M /issm/trunk-jpl/test/NightlyRun/test804.m  
M /issm/trunk-jpl/test/NightlyRun/test805.m M /issm/trunk-jpl/test/NightlyRun/test806.m  
M /issm/trunk-jpl/test/NightlyRun/test808.m M /issm/trunk-jpl/test/NightlyRun/test809.m  
Export determination: 6.

Rationale: CHG: move the calving laws out from LevelsetAnalysis. The advection velocity in LevelsetAnalysis is now defined by MovingFrontalVxEnum and MovingFrontalVyEnum.

**Change #5** with diff file ISSM-25840-25841.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/modules/Calvingx/Calvingx.cpp  
M /issm/trunk-jpl/src/c/modules/Calvingx/Calvingx.h M /issm/trunk-jpl/src/c/modules/modules.h

Export determination: 6.

Rationale: BUG: fixed compilation error after updating

**Change #6** with diff file ISSM-25841-25842.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-valgrind  
D /issm/trunk-jpl/jenkins/ross-debian.linux-trunk M /issm/trunk-jpl/test/NightlyRun/test540.py  
M /issm/trunk-jpl/test/NightlyRun/test541.py M /issm/trunk-jpl/test/NightlyRun/test804.py  
M /issm/trunk-jpl/test/NightlyRun/test805.py M /issm/trunk-jpl/test/NightlyRun/test806.py  
M /issm/trunk-jpl/test/NightlyRun/test808.py M /issm/trunk-jpl/test/NightlyRun/test809.py  
A /issm/trunk-jpl/test/NightlyRun/test809.py (from /issm/trunk-jpl/test/NightlyRun/test808.py:25839)

Export determination: 6.

Rationale: CHG: MATLAB -i Python; missing comment char; clean up

**Change #7** with diff file ISSM-25842-25843.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: change the default maximum migration rate in the levelset

function to be 1e12, instead of 3000 for VM and none for the rest.

**Change #8** with diff file ISSM-25843-25844.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: MATLAB -> Python

**Change #9** with diff file ISSM-25844-25845.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/calving.py A /issm/trunk-jpl/src/m/classes/calvingcrevassedepth.py

Export determination: 6.

Rationale: CHG: MATLAB -> Python; clean up

**Change #10** with diff file ISSM-25845-25846.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test809.py

Export determination: 6.

Rationale: BUG: Index offset

**Change #11** with diff file ISSM-25846-25847.diff:

Function name:

M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-parallel-static-with\_tests.sh

M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-parallel-static.sh M /issm/trunk-

jpl/externalpackages/netcdf/install-4.7-parallel-with\_tests.sh M /issm/trunk-jpl/externalpackages/netcdf/install-

4.7-parallel.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-with\_tests.sh

Export determination: 6.

Rationale: CHG: Clean up

**Change #12** with diff file ISSM-25847-25848.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Added constant to easily redefine path to external packages

**Change #13** with diff file ISSM-25848-25849.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test905.m

Export determination: 6.

Rationale: CHG: removing output

**Change #14** with diff file ISSM-25849-25850.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-

mac-full-valgrind M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-

matlab.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-matlab.sh

M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: CHG: Minor path and documentation corrections

**Change #15** with diff file ISSM-25850-25851.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test350.py

Export determination: 6.

Rationale: BUG: oshostname include

**Change #16** with diff file ISSM-25851-25852.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/Gembx.cpp M /issm/trunk-

jpl/test/Archives/Archive243.arch M /issm/trunk-jpl/test/Archives/Archive244.arch

M /issm/trunk-jpl/test/Archives/Archive252.arch M /issm/trunk-jpl/test/Archives/Archive253.arch

Export determination: 6.

Rationale: CHG: rework on GEMB grain growth

**Change #17** with diff file ISSM-25852-25853.diff:

Function name:

M /issm/trunk-jpl/etc/environment.csh  
Export determination: 6.  
Rationale: CHG: for csh use set for ISSM EXT DIR

**Change #18** with diff file ISSM-25853-25854.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test243.m M /issm/trunk-jpl/test/NightlyRun/test243.py  
M /issm/trunk-jpl/test/NightlyRun/test252.m M /issm/trunk-jpl/test/NightlyRun/test252.py

Export determination: 6.

Rationale: CHG: update some tols for GEMB

**Change #19** with diff file ISSM-25854-25855.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: schoof inversion HO and FS

**Change #20** with diff file ISSM-25855-25856.diff:

Function name:

A /issm/trunk-jpl/externalpackages/chaco/install-mac-sierra.sh (from /issm/trunk-jpl/externalpackages/chaco/install-macosx64-sierra.sh:25854) D /issm/trunk-jpl/externalpackages/chaco/install-macosx64-sierra.sh D /issm/trunk-jpl/externalpackages/chaco/install-macosx64.sh  
M /issm/trunk-jpl/externalpackages/chaco/install.sh A /issm/trunk-jpl/externalpackages/chaco/patches/Makefile.macosx64-sierra.patch (from /issm/trunk-jpl/externalpackages/chaco/patches/Makefile.macosx64-sierra.patch:25854) D /issm/trunk-jpl/externalpackages/chaco/patches/Makefile.macosx64-sierra.patch

Export determination: 6.

Rationale: CHG: Applying path to Mac config; clean up

**Change #21** with diff file ISSM-25856-25857.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-mac-static.sh

Export determination: 6.

Rationale: CHG: Fix for GMT on macOS binaries

**Change #22** with diff file ISSM-25857-25858.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Fix for GMT on macOS binaries

**Change #23** with diff file ISSM-25858-25859.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Converting find -i ls to avoid warnings under zsh

**Change #24** with diff file ISSM-25859-25860.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Silencing no matches under zsh

**Change #25** with diff file ISSM-25860-25861.diff:

Function name:

M /issm/trunk-jpl/externalpackages/autotools/install.sh M /issm/trunk-jpl/externalpackages/boost/install-1.7-linux-static.sh M /issm/trunk-jpl/externalpackages/boost/install-1.7-linux-valgrind.sh M /issm/trunk-jpl/externalpackages/boost/install-1.7-linux.sh M /issm/trunk-jpl/externalpackages/boost/install-1.7-mac-static.sh M /issm/trunk-jpl/externalpackages/boost/install-1.7-mac.sh M /issm/trunk-jpl/externalpackages/chaco/install.sh M /issm/trunk-jpl/externalpackages/cmake/install.sh M /issm/trunk-jpl/externalpackages/curl/install-7-linux-static.sh M /issm/trunk-jpl/externalpackages/curl/install-7-linux-with\_tests.sh M /issm/trunk-jpl/externalpackages/curl/install-7-linux.sh M /issm/trunk-jpl/externalpackages/curl/install-7-mac-static.sh M /issm/trunk-jpl/externalpackages/curl/install-7-mac.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-mac-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-mac.sh D /issm/trunk-jpl/externalpackages/gdal/install-3-netcdf-static.sh D /issm/trunk-jpl/externalpackages/gdal/install-3-netcdf.sh D /issm/trunk-jpl/externalpackages/gdal/install-3-python-netcdf-static.sh

D /issm/trunk-jpl/externalpackages/gdal/install-3-python-netcdf.sh A /issm/trunk-jpl/externalpackages/gdal/install-3-python-static.sh (from /issm/trunk-jpl/externalpackages/gdal/install-3-python-netcdf-static.sh:25859) M /issm/trunk-jpl/externalpackages/gdal/install-3-python.sh A /issm/trunk-jpl/externalpackages/gdal/install-3-static.sh (from /issm/trunk-jpl/externalpackages/gdal/install-3-netcdf-static.sh:25859) M /issm/trunk-jpl/externalpackages/gdal/install-3.sh D /issm/trunk-jpl/externalpackages/gmsh/configs/4.5.6/mac D /issm/trunk-jpl/externalpackages/gmsh/configs/4.7.0/mac D /issm/trunk-jpl/externalpackages/gmsh/install-4-linux-python-static.sh D /issm/trunk-jpl/externalpackages/gmsh/install-4-linux-static.sh D /issm/trunk-jpl/externalpackages/gmsh/install-4-mac-python-static.sh D /issm/trunk-jpl/externalpackages/gmsh/install-4-mac-static.sh A /issm/trunk-jpl/externalpackages/gmsh/install-4-static.sh (from /issm/trunk-jpl/externalpackages/gmsh/install-4-mac-static.sh:25854) M /issm/trunk-jpl/externalpackages/gmsh/install-4.sh D /issm/trunk-jpl/externalpackages/gmsh/install-mac-precompiled.sh D /issm/trunk-jpl/externalpackages/gmsh/install-win64-precompiled.sh M /issm/trunk-jpl/externalpackages/gmt/configs/6.0 M /issm/trunk-jpl/externalpackages/gmt/install-6-linux-static.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-linux.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-mac.sh D /issm/trunk-jpl/externalpackages/gmt/install-mac-precompiled.sh D /issm/trunk-jpl/externalpackages/gmt/install-win64-precompiled.sh M /issm/trunk-jpl/externalpackages/gshhg/install.sh M /issm/trunk-jpl/externalpackages/gsl/install-javascript.sh M /issm/trunk-jpl/externalpackages/gsl/install-static.sh M /issm/trunk-jpl/externalpackages/gsl/install.sh M /issm/trunk-jpl/externalpackages/m1qn3/install.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-parallel-static-with\_tests.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-parallel-static.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-parallel-with\_tests.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-parallel.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7-with\_tests.sh M /issm/trunk-jpl/externalpackages/netcdf/install-4.7.sh D /issm/trunk-jpl/externalpackages/petsc/install-3.12-linux-solid\_earth-static.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-linux-static.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-linux.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-mac-static.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-mac.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2-static-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2-static.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2.sh D /issm/trunk-jpl/externalpackages/proj/install.sh A /issm/trunk-jpl/externalpackages/semic/configs A /issm/trunk-jpl/externalpackages/semic/configs/surface\_ (from /issm/trunk-jpl/externalpackages/semic/surface\_physics.f90.patch:25859) M /issm/trunk-jpl/externalpackages/semic/install.sh D /issm/trunk-jpl/externalpackages/semic/surface\_physics M /issm/trunk-jpl/externalpackages/triangle/install-linux-javascript.sh M /issm/trunk-jpl/externalpackages/triangle/install-linux-static.sh M /issm/trunk-jpl/externalpackages/triangle/install-mac-static.sh M /issm/trunk-jpl/externalpackages/triangle/install-mac.sh M /issm/trunk-jpl/externalpackages/triangle/makefi M /issm/trunk-jpl/externalpackages/valgrind/install-mac.sh M /issm/trunk-jpl/jenkins/aws-amazon linux-solid\_earth M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-matlab M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-python M /issm/trunk-jpl/jenkins/pine\_island-mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-valgrind M /issm/trunk-jpl/jenkins/pine\_island-mac-python M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth M /issm/trunk-

jpl/jenkins/ross-debian\_linux-binaries-matlab M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-dakota M /issm/trunk-jpl/jenkins/ross-debian\_linux-full M /issm/trunk-jpl/jenkins/ross-debian\_linux-full-valgrind M /issm/trunk-jpl/jenkins/ross-debian\_linux-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth M /issm/trunk-jpl/src/m/coordsystems/gmtmask.m M /issm/trunk-jpl/src/m/coordsystems/gmtmask.py M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplane  
Export determination: 6.  
Rationale: CHG: Simplification of installation script customization needs: should be able to simply set PREFIX in most cases

**Change #26** with diff file ISSM-25861-25862.diff:

Function name:

M /issm/trunk-jpl/externalpackages/triangle/configs/makefile M /issm/trunk-jpl/externalpackages/triangle/install-linux-static.sh M /issm/trunk-jpl/externalpackages/triangle/install-linux.sh

Export determination: 6.

Rationale: BUG: Bad copy/paste

**Change #27** with diff file ISSM-25862-25863.diff:

Function name:

M /issm/trunk-jpl/jenkins/ross-debian\_linux-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth

Export determination: 6.

Rationale: BUG: Path to Gmsh install script

**Change #28** with diff file ISSM-25863-25864.diff:

Function name:

M /issm/trunk-jpl/externalpackages/triangle/install-linux-javascript.sh

Export determination: 6.

Rationale: BUG: Unbound var

**Change #29** with diff file ISSM-25864-25865.diff:

Function name:

M /issm/trunk-jpl/externalpackages/triangle/install-linux-javascript.sh

Export determination: 6.

Rationale: BUG: fixing prefix

**Change #30** with diff file ISSM-25865-25866.diff:

Function name:

M /issm/trunk-jpl/jenkins/ross-debian\_linux-javascript

Export determination: 6.

Rationale: BUG: Paths to GSL and Triangle

**Change #31** with diff file ISSM-25866-25867.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Path to Gmsh

**Change #32** with diff file ISSM-25868-25869.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh M /issm/trunk-jpl/externalpackages/curl/install-7-linux-static.sh M /issm/trunk-jpl/externalpackages/curl/install-7-linux-with\_tests.sh

M /issm/trunk-jpl/externalpackages/curl/install-7-linux.sh M /issm/trunk-jpl/externalpackages/curl/install-7-mac-static.sh M /issm/trunk-jpl/externalpackages/curl/install-7-mac.sh M /issm/trunk-jpl/externalpackages/gmt/configs/6/static/cmake/ConfigUser.static.cmake M /issm/trunk-jpl/externalpackages/gmt/install-6-mac-static.sh

Export determination: 6.

Rationale: BUG: Fix for cURL + GMT on macOS binaries

**Change #33** with diff file ISSM-25869-25870.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: updating description of the stabilization schemes

**Change #34** with diff file ISSM-25870-25871.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/damage.js M /issm/trunk-jpl/src/m/classes/damage.m  
M /issm/trunk-jpl/src/m/classes/damage.py M /issm/trunk-jpl/src/m/classes/masstransport.js  
Export determination: 6.  
Rationale: CHG: updating stabilization scheme names

**Change #35** with diff file ISSM-25871-25872.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: updating greenplanet class

**Change #36** with diff file ISSM-25872-25873.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/InterpFromGrid.cpp

Export determination: 6.

Rationale: CHG: minor

**Change #37** with diff file ISSM-25873-25874.diff:

Function name:

M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-python.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: BUG: Need special handling of svn calls in the context of the Jenkins 'Execute shell'

**Change #38** with diff file ISSM-25874-25875.diff:

Function name:

M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-python.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: CHG: Refinement of macOS packaging and signing scripts

**Change #39** with diff file ISSM-25875-25876.diff:

Function name:

M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-python.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/sign-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: CHG: Refinement of macOS Binaries packaging and signing scripts (again)

**Change #40** with diff file ISSM-25876-25877.diff:

Function name:

M /issm/trunk-jpl/externalpackages/dakota/configs/6.2/BuildDakotaCustom.cmake.pfe.patch

M /issm/trunk-jpl/externalpackages/dakota/configs/6.2/CMakeLists.txt.pfe.patch

M /issm/trunk-jpl/externalpackages/dakota/install-6.2-pleiades.sh M /issm/trunk-jpl/externalpackages/triangle/install-pleiades.sh M /issm/trunk-jpl/m4/issm\_options.m4

Export determination: 6.

Rationale: CHG: install scripts for pfe dakota with newest pfe configuration

**Change #41** with diff file ISSM-25877-25878.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Need to update MATLAB licenses (temp change to get builds green again)

**Change #42** with diff file ISSM-25878-25879.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Bad commit

**Change #43** with diff file ISSM-25879-25880.diff:

Function name:

M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package-mac/package-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: CHG: More adjustments to macOS packaging scripts

**Change #44** with diff file ISSM-25880-25881.diff:

Function name:

M /issm/trunk-jpl/sign-mac/sign-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/sign-mac/sign-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: CHG: Adding multiple attempts to SVN checkout/commit as JPL firewalls block SSL connections intermittently

**Change #45** with diff file ISSM-25881-25882.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries-python

Export determination: 6.

Rationale: BUG: Path to GDAL install script

**Change #46** with diff file ISSM-25882-25883.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor

**Change #47** with diff file ISSM-25883-25884.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: do not save by default IceMaskNodeActivationEnum

**Change #48** with diff file ISSM-25884-25885.diff:

Function name:

A /issm/trunk-jpl/packagegers/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh

A /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/packagegers/mac/package-issm-mac-binaries-matlab.sh A /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: CHG: Split macOS packaging into multiple scripts

**Change #49** with diff file ISSM-25885-25886.diff:

Function name:

D /issm/trunk-jpl/packagegers/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh

D /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh D /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: BUG: Bad permissions

**Change #50** with diff file ISSM-25886-25887.diff:

Function name:

A /issm/trunk-jpl/packagegers/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh

A /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh A /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: BUG: Bad permissions

**Change #51** with diff file ISSM-25887-25888.diff:

Function name:

M /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: BUG: Need to export credentials from execute shell block

**Change #52** with diff file ISSM-25888-25889.diff:

Function name:

M /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: CHG: Testing availability of credentials env vars

**Change #53** with diff file ISSM-25889-25890.diff:

Function name:

M /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: CHG: Trying another method for accessing credentials env vars in called scripts

**Change #54** with diff file ISSM-25890-25891.diff:

Function name:

M /issm/trunk-jpl/packagegers/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: BUG: Credentials are not stored after checkout

**Change #55** with diff file ISSM-25891-25892.diff:

Function name:

M /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries-matlab.sh

Export determination: 6.

Rationale: BUG: Credentials are not stored after checkout

**Change #56** with diff file ISSM-25892-25893.diff:

Function name:

A /issm/trunk-jpl/externalpackages/dakota/configs/6.2/BuildDakotaCustom.cmake.discover20.patch

Export determination: 6.

Rationale: CHG: discover patch for dakota

**Change #57** with diff file ISSM-25893-25894.diff:

Function name:

A /issm/trunk-jpl/packagegers/mac/commit\_for\_signing-issm-mac-binaries-python.sh

(from /issm/trunk-jpl/packagegers/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh:25890)

M /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-matlab.sh A /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-python.sh (from /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-matlab.sh:25891) M /issm/trunk-jpl/package/mac/package-issm-mac-binaries-python.sh D /issm/trunk-jpl/package/mac/transfer-issm-mac-binaries-matlab.sh A /issm/trunk-jpl/package/mac/transfer-issm-mac-binaries.sh  
Export determination: 6.  
Rationale: CHG: Split up macOS binaries Python packaging into multiple scripts as well; generalized transfer script

**Change #58** with diff file ISSM-25894-25895.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.7-discover.sh

Export determination: 6.

Rationale: CHG: revert to include discover install script

**Change #59** with diff file ISSM-25895-25896.diff:

Function name:

M /issm/trunk-jpl/package/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh

M /issm/trunk-jpl/package/mac/commit\_for\_signing-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: BUG: Need to break on success now that we're not setting a control variable

**Change #60** with diff file ISSM-25896-25897.diff:

Function name:

A /issm/trunk-jpl/package/linux/complete-issm-linux-binaries-matlab.sh (from /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-matlab.sh:25894) A /issm/trunk-jpl/package/linux/complete-issm-linux-binaries-python.sh (from /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-matlab.sh:25894) M /issm/trunk-jpl/package/linux/package-issm-linux-binaries-matlab.sh M /issm/trunk-jpl/package/linux/package-issm-linux-binaries-python.sh D /issm/trunk-jpl/package/linux/package-issm-linux-binaries-solid\_earth.sh D /issm/trunk-jpl/package/linux/package-issm-linux-binaries-with\_dakota.sh D /issm/trunk-jpl/package/linux/package-issm-linux-binaries.sh A /issm/trunk-jpl/package/linux/transfer-issm-linux-binaries.sh (from /issm/trunk-jpl/package/mac/transfer-issm-mac-binaries.sh:25894) M /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-python.sh M /issm/trunk-jpl/package/mac/package-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package/mac/package-issm-

mac-binaries-python.sh M /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries.sh  
Export determination: 6.  
Rationale: CHG: Similar packaging script modifications for Linux binaries; clean  
up

**Change #61** with diff file ISSM-25897-25898.diff:

Function name:

D /issm/trunk-jpl/packagegers/linux/transfer-issm-linux-binaries.sh D /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries.sh

Export determination: 6.

Rationale: CHG: Fixing permissions

**Change #62** with diff file ISSM-25898-25899.diff:

Function name:

A /issm/trunk-jpl/packagegers/linux/transfer-issm-linux-binaries.sh A /issm/trunk-jpl/packagegers/mac/transfer-issm-mac-binaries.sh

Export determination: 6.

Rationale: CHG: Fixing permissions

**Change #63** with diff file ISSM-25899-25900.diff:

Function name:

A /issm/trunk-jpl/externalpackages/boost/configs/1.55/reverse\_iterator.hpp.patch

A /issm/trunk-jpl/externalpackages/petsc/install-3.12-lonestar.sh

Export determination: 6.

Rationale: CHG: add some updates for lonestar petsc and boost build

**Change #64** with diff file ISSM-25900-25901.diff:

Function name:

M /issm/trunk-jpl/packagegers/linux/complete-issm-linux-binaries-matlab.sh M /issm/trunk-jpl/packagegers/linux/complete-issm-linux-binaries-python.sh M /issm/trunk-jpl/packagegers/linux/package-issm-linux-binaries-matlab.sh M /issm/trunk-jpl/packagegers/linux/package-issm-linux-binaries-python.sh M /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/packagegers/mac/complete-issm-mac-binaries-python.sh M /issm/trunk-jpl/packagegers/mac/package-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/packagegers/mac/package-issm-mac-binaries-python.sh

Export determination: 6.  
Rationale: CHG: Missing clean up and directory creation

**Change #65** with diff file ISSM-25901-25902.diff:

Function name:

M /issm/trunk-jpl/package/mac/commit\_for\_signing-issm-mac-binaries-matlab.sh

M /issm/trunk-jpl/package/mac/commit\_for\_signing-issm-mac-binaries-python.sh

M /issm/trunk-jpl/package/mac/package-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: CHG: Need to validate unsigned repo; clean up

**Change #66** with diff file ISSM-25902-25903.diff:

Function name:

M /issm/trunk-jpl/package/linux/package-issm-linux-binaries-matlab.sh M /issm/trunk-

jpl/package/linux/package-issm-linux-binaries-python.sh

Export determination: 6.

Rationale: BUG: Syntax

**Change #67** with diff file ISSM-25903-25904.diff:

Function name:

M /issm/trunk-jpl/package/linux/complete-issm-linux-binaries-matlab.sh M

/issm/trunk-jpl/package/linux/complete-issm-linux-binaries-python.sh M /issm/trunk-

jpl/package/mac/complete-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package/mac/complete-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: BUG: Proper collection of exit codes from individual scripts

**Change #68** with diff file ISSM-25904-25905.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Writing to file named '1' rather than redirecting stdout

**Change #69** with diff file ISSM-25905-25906.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removing some xNew to speed up code

**Change #70** with diff file ISSM-25906-25907.diff:

Function name:

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

Export determination: 6.

Rationale: ADD: New dataset download script

**Change #71** with diff file ISSM-25907-25908.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: update ls5 modules

**Change #72** with diff file ISSM-25908-25909.diff:

Function name:

M /issm/trunk-jpl/packagers/mac/package-issm-mac-binaries-python.sh

Export determination: 6.

Rationale: BUG: Missing copy of entitlements file

**Change #73** with diff file ISSM-25909-25910.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Needed output directory in call to unzip

**Change #74** with diff file ISSM-25910-25911.diff:

Function name:

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

Export determination: 6.  
Rationale: CHG: cosmetics

**Change #75** with diff file ISSM-25911-25912.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: minor, rheology law not needed anymore since it is a param

**Change #76** with diff file ISSM-25912-25913.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: add break to speed up calculation

**Change #77** with diff file ISSM-25913-25914.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Merging (ba)sh environment -i csh

**Change #78** with diff file ISSM-25914-25915.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: always display aValue for GEMB

**Change #79** with diff file ISSM-25915-25916.diff:

Function name:

M /issm/trunk-jpl/examples/AMR/runme.m M /issm/trunk-jpl/examples/EsaGRACE/runme.m

M /issm/trunk-jpl/examples/EsaWahr/runme.m M /issm/trunk-jpl/examples/Functions/grace.m

M /issm/trunk-jpl/examples/Greenland/runme.m D /issm/trunk-jpl/examples/ISMIP/CheatyIsmipA.par

D /issm/trunk-jpl/examples/ISMIP/CheatyIsmipF.par D /issm/trunk-jpl/examples/ISMIP/CheatyRunme.m  
 M /issm/trunk-jpl/examples/ISMIP/runme.m M /issm/trunk-jpl/examples/IceBridge/Greenland.par  
 M /issm/trunk-jpl/examples/IceBridge/runme.m M /issm/trunk-jpl/examples/Inversion/runme.m  
 M /issm/trunk-jpl/examples/Jakobshavn/runme.m M /issm/trunk-jpl/examples/LcurveAnalysis/runme.m  
 M /issm/trunk-jpl/examples/Pig/runme.m M /issm/trunk-jpl/examples/Pig2/runme.m  
 M /issm/trunk-jpl/examples/PigSensitivity/runme.m M /issm/trunk-jpl/examples/SlrFarrell/runme.m  
 M /issm/trunk-jpl/examples/SlrGRACE/runme.m M /issm/trunk-jpl/examples/SlrGRACE\_NIMS/runme.m  
 M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m M /issm/trunk-jpl/examples/shakti/runme.m A /issm/trunk-jpl/jenkins/examples\_tests.sh A  
 /issm/trunk-jpl/jenkins/pine\_island-mac-examples (from /issm/trunk-jpl/jenkins/pine\_island-mac-full:25827) M /issm/trunk-jpl/test/NightlyRun/test418.m  
 Export determination: 6.  
 Rationale: CHG: Initial commit of changes for example build; clean up

**Change #80** with diff file ISSM-25916-25917.diff:  
 Function name:  
 M /issm/trunk-jpl/jenkins/jenkins.sh  
 Export determination: 6.  
 Rationale: CHG: Initial commit of changes for examples build

**Change #81** with diff file ISSM-25917-25918.diff:  
 Function name:  
 M /issm/trunk-jpl/jenkins/jenkins.sh  
 Export determination: 6.  
 Rationale: BUG: Missed two edits

**Change #82** with diff file ISSM-25918-25919.diff:  
 Function name:  
 M /issm/trunk-jpl/test/NightlyRun/test418.m  
 Export determination: 6.  
 Rationale: BUG: Reverting changes to results from partitioner

**Change #83** with diff file ISSM-25919-25920.diff:  
 Function name:  
 M /issm/trunk-jpl/jenkins/pine\_island-mac-examples

Export determination: 6.  
Rationale: BUG: Path to MATLAB

**Change #84** with diff file ISSM-25920-25921.diff:  
Function name:  
M /issm/trunk-jpl/src/m/partition/partitioner.m M /issm/trunk-jpl/test/NightlyRun/test418.m  
M /issm/trunk-jpl/test/NightlyRun/test418.py  
Export determination: 6.  
Rationale: BUG: Correcting assignment of output from partitioner

**Change #85** with diff file ISSM-25921-25922.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/pine\_island-mac-examples  
Export determination: 6.  
Rationale: BUG: Path to external packages

**Change #86** with diff file ISSM-25922-25923.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/pine\_island-mac-examples  
Export determination: 6.  
Rationale: BUG: Path to external packages

**Change #87** with diff file ISSM-25923-25924.diff:  
Function name:  
M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m M /issm/trunk-jpl/test/NightlyRun/test417.m  
Export determination: 6.  
Rationale: CHG: Committing changes to UQ example (still need to modify plotting of partitions); minor adjustment to output assignment

**Change #88** with diff file ISSM-25924-25925.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/examples\_tests.sh M /issm/trunk-jpl/jenkins/jenkins.sh

Export determination: 6.  
Rationale: CHG: Minor clean up

**Change #89** with diff file ISSM-25925-25926.diff:

Function name:  
M /issm/trunk-jpl/jenkins/examples\_tests.sh  
Export determination: 6.  
Rationale: BUG: Bad commit

**Change #90** with diff file ISSM-25926-25927.diff:

Function name:  
M /issm/trunk-jpl/jenkins/examples\_tests.sh M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: BUG: Need to export MATLAB\_PATH so that it is available to examples\_tests; not running UQ example until it is fixed

**Change #91** with diff file ISSM-25927-25928.diff:

Function name:  
M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: BUG: Corrected handling of examples tests logs

**Change #92** with diff file ISSM-25928-25929.diff:

Function name:  
M /issm/trunk-jpl/scripts/DownloadExamplesDatasets.sh  
Export determination: 6.  
Rationale: BUG: Corrected redirection of list of files to download

**Change #93** with diff file ISSM-25929-25930.diff:

Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/m/plot/applyoptions.m  
M /issm/trunk-jpl/src/m/plot/plotdoc.m M /issm/trunk-jpl/src/m/plot/plotdoc.py  
Export determination: 6.

Rationale: CHG: Changes to plotting of partition overlay; minor clean up

**Change #94** with diff file ISSM-25930-25931.diff:

Function name:

M /issm/trunk-jpl/jenkins/examples\_tests.sh

Export determination: 6.

Rationale: CHG: Turning on UQ example test

**Change #95** with diff file ISSM-25931-25932.diff:

Function name:

A /issm/trunk-jpl/packagegers/linux/test-issm-linux-binaries-solid\_earth.sh (from /issm/trunk-jpl/scripts/test-issm-linux-binaries-solid\_earth.sh:25930) A /issm/trunk-jpl/packagegers/linux/test-issm-linux-binaries-with\_dakota.sh (from /issm/trunk-jpl/scripts/test-issm-linux-binaries-with\_dakota.sh:25930) A /issm/trunk-jpl/packagegers/linux/test-issm-linux-binaries.sh (from /issm/trunk-jpl/scripts/test-issm-linux-binaries.sh:25930) D /issm/trunk-jpl/scripts/installExternalPackages.sh D /issm/trunk-jpl/scripts/test-issm-linux-binaries-solid\_earth.sh D /issm/trunk-jpl/scripts/test-issm-linux-binaries-with\_dakota.sh D /issm/trunk-jpl/scripts/test-issm-linux-binaries.sh

Export determination: 6.

Rationale: CHG: Clean up

**Change #96** with diff file ISSM-25932-25933.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: use curl first for download

**Change #97** with diff file ISSM-25933-25934.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: gemb C should be  $i \cdot 0$

**Change #98** with diff file ISSM-25934-25935.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: trying to remove some dynamic memory allocation of Gauss points

**Change #99** with diff file ISSM-25935-25936.diff:

Function name:

A /issm/trunk-jpl/src/m/solvers/asmstokesoptions.m

Export determination: 6.

Rationale: NEW: asm solver for FS; settings verified with ISMIP-HOM ExpC, 5km

**Change #100** with diff file ISSM-25936-25937.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed a bug in the Nitsche method, where the viscosity should not be multiplied by 2 in the assembly. Also, some improvement in the coding of GLS, but nothing really changed for GLS.

**Change #101** with diff file ISSM-25937-25938.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: upgraded slr solver parameters etc to comply with the new formulation

**Change #102** with diff file ISSM-25938-25939.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: transient runs fixed

**Change #103** with diff file ISSM-25939-25940.diff:

Function name:

M /issm/trunk-jpl/examples/SlrGRACE\_NIMS/runme.m

Export determination: 6.

Rationale: CHG: upgraded the script to comply with new solid earth formalism

**Change #104** with diff file ISSM-25940-25941.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/ad/rescalegradient.m

Export determination: 6.

Rationale: CHG: fixing wrong size of vectors

**Change #105** with diff file ISSM-25941-25942.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/m/classes/stressbalance.m

Export determination: 6.

Rationale: CHG: New feature controls vertical velocity options, such as incompressible assumption, internal deformation, and combination of both assumption.

**Change #106** with diff file ISSM-25942-25943.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/m/classes/stressbalance.m

Export determination: 6.

Rationale: BUG: fixing Inwoo's commit

**Change #107** with diff file ISSM-25943-25944.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added collapse for Josh's friction law

**Change #108** with diff file ISSM-25944-25945.diff:

Function name:

A /issm/trunk-jpl/externalpackages/fisoc A /issm/trunk-jpl/externalpackages/fisoc/install.sh

Export determination: 6.

Rationale: CHG: added fisoc

**Change #109** with diff file ISSM-25945-25946.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/cores/stressbalance\_core.cpp

Export determination: 6.

Rationale: CHG: use rotated coordinate system for Nitsches method, tested with ISMIP A-D, works for MINIcondensed and P1P1GLS. This implementation is currently only available for 3D FS.

**Change #110** with diff file ISSM-25946-25947.diff:

Function name:

M /issm/trunk-jpl/jenkins/examples\_tests.sh

Export determination: 6.

Rationale: BUG: Modifications to use gnu-sed on Pine Island under zsh

**Change #111** with diff file ISSM-25947-25948.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/MasstransportAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.h

D /issm/trunk-jpl/src/c/analyses/SealevelriseAnalysis.cpp D /issm/trunk-jpl/src/c/analyses/SealevelriseAnalysis.h

M /issm/trunk-jpl/src/c/analyses/analyses.h M /issm/trunk-jpl/src/c/classes/Dakota/IssmParallelDirectApp.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

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/CorePointerFromSolutionEnum.cpp M /issm/trunk-jpl/src/c/cores/cores.h

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

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

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

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

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

/issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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  
A /issm/trunk-jpl/src/m/classes/additionalsolidearthsolution.m A /issm/trunk-jpl/src/m/classes/mmeadditional  
solidearthsolution.m A /issm/trunk-jpl/src/m/classes/mmeofflinesolidearthsolution.m  
A /issm/trunk-jpl/src/m/classes/offlinesolidearthsolution.m M /issm/trunk-jpl/src/m/classes/solidearth.m  
M /issm/trunk-jpl/src/m/classes/solidearthsolution.m

Export determination: 6.

Rationale: CHG: created external forcings for solid earth. Completely reorganized the sealevel change core (in particular now we have a clean split between the external forcings, the grd core and the dynamic steric core). Also, we reorganized and renamed the grd components and cores. From eutatic, we now have: barystatic core, sal core, deformation core. No more diagnostics. We also allow the external forcings to be mmes. Lots of cosmetic name changes (rise- $\zeta$  change for ex.).

**Change #112** with diff file ISSM-25948-25949.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2003.m  
M /issm/trunk-jpl/test/NightlyRun/test2004.m

Export determination: 6.

Rationale: Updating tests 2002, 2003, 2004 to the new enums

**Change #113** with diff file ISSM-25949-25950.diff:

Function name:

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

Export determination: 6.

Rationale: Renaming Sealevelrise  $\zeta$  Sealevelchange in solve

**Change #114** with diff file ISSM-25950-25951.diff:

Function name:

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

Export determination: 6.

Rationale: More renaming in test2010 and ismodelselfconsistent from Sealevelrise to Sealevelchange

**Change #115** with diff file ISSM-25951-25952.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2010.m

Export determination: 6.

Rationale: More renaming in test2010 and ismodelselfconsistent from Sealevelrise to Sealevelchange

**Change #116** with diff file ISSM-25952-25953.diff:

Function name:

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

Export determination: 6.

Rationale: More renaming in ismodelselfconsistent from Sealevelrise to Sealevelchange

**Change #117** with diff file ISSM-25953-25954.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing compilation, temporary fix

**Change #118** with diff file ISSM-25954-25955.diff:

Function name:

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

M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/modules/InputUpdateFromD

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

Export determination: 6.

Rationale: CHG: fixed issue of Dkota dependence in the definition of MmeToInputFromId.

**Change #119** with diff file ISSM-25955-25956.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: switchin to sla and sea level change solutions.

**Change #120** with diff file ISSM-25956-25957.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/classes/FemModel.h M /issm/trunk-jpl/src/c/cores/cores.h  
M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
A /issm/trunk-jpl/src/c/main/issm\_slc.cpp D /issm/trunk-jpl/src/c/main/issm\_slr.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessors/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/additionalsolidearthsolution.m M /issm/trunk-jpl/src/m/classes/clusters/generic.m M /issm/trunk-jpl/src/m/classes/clusters/localpfe.m  
M /issm/trunk-jpl/src/m/classes/clusters/pfe.m M /issm/trunk-jpl/src/m/classes/dsl.m  
M /issm/trunk-jpl/src/m/classes/dslmme.m M /issm/trunk-jpl/src/m/classes/geometry.m  
M /issm/trunk-jpl/src/m/classes/giamme.m M /issm/trunk-jpl/src/m/classes/lovenumbers.m  
M /issm/trunk-jpl/src/m/classes/matdamageice.m M /issm/trunk-jpl/src/m/classes/matenhancedice.m  
M /issm/trunk-jpl/src/m/classes/matestar.m M /issm/trunk-jpl/src/m/classes/matrice.m  
M /issm/trunk-jpl/src/m/classes/mmeadditionalsolidearthsolution.m M /issm/trunk-jpl/src/m/classes/mmeofflinesolidearthsolution.m M /issm/trunk-jpl/src/m/classes/nodalvalue.m  
M /issm/trunk-jpl/src/m/classes/offlinesolidearthsolution.m M /issm/trunk-jpl/src/m/classes/qmstatistics.m  
M /issm/trunk-jpl/src/m/classes/rotational.m M /issm/trunk-jpl/src/m/classes/sealevelmodel.m  
D /issm/trunk-jpl/src/m/classes/slr.m M /issm/trunk-jpl/src/m/classes/solidearth.m  
M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/src/m/classes/surfaceload.m  
M /issm/trunk-jpl/src/m/classes/toolkits.m M /issm/trunk-jpl/src/m/classes/transient.m  
M /issm/trunk-jpl/src/m/solve/solveslm.m M /issm/trunk-jpl/test/NightlyRun/GetIds.py  
M /issm/trunk-jpl/test/NightlyRun/runme.m M /issm/trunk-jpl/test/NightlyRun/runme.py  
M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2002.py  
M /issm/trunk-jpl/test/NightlyRun/test2003.m M /issm/trunk-jpl/test/NightlyRun/test2003.py  
M /issm/trunk-jpl/test/NightlyRun/test2004.m M /issm/trunk-jpl/test/NightlyRun/test2005.m  
M /issm/trunk-jpl/test/NightlyRun/test2005.py M /issm/trunk-jpl/test/NightlyRun/test2006.m  
M /issm/trunk-jpl/test/NightlyRun/test2006.py M /issm/trunk-jpl/test/NightlyRun/test2010.m  
M /issm/trunk-jpl/test/NightlyRun/test2010.py M /issm/trunk-jpl/test/NightlyRun/test2020.m  
M /issm/trunk-jpl/test/NightlyRun/test2021.m

Export determination: 6.

Rationale: CHG: changing sea level rise to sea level change. Mostly cosmetic.

**Change #121** with diff file ISSM-25957-25958.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: simple fix.

**Change #122** with diff file ISSM-25958-25959.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/shared/io/Marshalling/ M /issm/trunk-jpl/src/m/classes/mmeadditionalssolidearthsolution.m M /issm/trunk-jpl/src/m/classes/mmeofflinesolidearthsolution.m M /issm/trunk-jpl/src/m/classes/surfaceload.m

Export determination: 6.

Rationale: CHG: switched to rates on solidearth surafce loads.

**Change #123** with diff file ISSM-25959-25960.diff:

Function name:

M /issm/trunk-jpl/examples/ISMIP/runme.m D /issm/trunk-jpl/externalpackages/autotools/install-debian-linux.sh A /issm/trunk-jpl/externalpackages/autotools/install-linux.sh M /issm/trunk-jpl/externalpackages/cmake/install.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-linux-static.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-linux.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-mac-static.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-mac.sh M /issm/trunk-jpl/jenkins/aws-amazon\_linux-solid\_earth M /issm/trunk-jpl/jenkins/jenkins.sh M /issm/trunk-jpl/jenkins/pine\_island-mac-examples M /issm/trunk-jpl/jenkins/ross-debian\_linux-adolc-ampioff M /issm/trunk-jpl/jenkins/ross-debian\_linux-adolc-ampion M /issm/trunk-jpl/jenkins/ross-debian\_linux-basic M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries-matlab M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-codipack M /issm/trunk-jpl/jenkins/ross-debian\_linux-dakota M /issm/trunk-jpl/jenkins/ross-debian\_linux-full M /issm/trunk-jpl/jenkins/ross-debian\_linux-full-valgrind M /issm/trunk-jpl/jenkins/ross-debian\_linux-gia M /issm/trunk-jpl/jenkins/ross-debian\_linux-iceocean M /issm/trunk-jpl/jenkins/ross-debian\_linux-javascript M /issm/trunk-jpl/jenkins/ross-debian\_linux-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth

Export determination: 6.

Rationale: CHG: Various pending minor fixes

**Change #124** with diff file ISSM-25960-25961.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/modules/InputUpdateFromDakotax/InputUpdateFromDakotax.cpp M /issm/trunk-jpl/src/m/classes/surfaceload.m

Export determination: 6.  
Rationale: CHG: Partial fixes for SLC

**Change #125** with diff file ISSM-25961-25962.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Quick patch for SLC under Python

**Change #126** with diff file ISSM-25962-25963.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/dsl.py M /issm/trunk-jpl/src/m/classes/giamme.py

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

Export determination: 6.

Rationale: CHG: More patches for SLC under Python

**Change #127** with diff file ISSM-25963-25964.diff:

Function name:

M /issm/trunk-jpl/jenkins/aws-amazon\_linux-solid\_earth M /issm/trunk-jpl/jenkins/pine\_island-  
mac-solid\_earth M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth

Export determination: 6.

Rationale: CHG: Updated benchmark names

**Change #128** with diff file ISSM-25964-25965.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Trying to bring jUnit reports back online for examples

**Change #129** with diff file ISSM-25965-25966.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Different grep for backspace char

**Change #130** with diff file ISSM-25966-25967.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: perl to remove backspace chars from log

**Change #131** with diff file ISSM-25967-25968.diff:

Function name:

M /issm/trunk-jpl/externalpackages/gdal/install-3-python-static.sh M /issm/trunk-jpl/externalpackages/gdal/install-3-python.sh M /issm/trunk-jpl/externalpackages/gdal/install-3-static.sh M /issm/trunk-jpl/externalpackages/gdal/install-3.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2-static-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2-static.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-6.2.sh

Export determination: 6.

Rationale: BUG: Corrected path to external package server

**Change #132** with diff file ISSM-25968-25969.diff:

Function name:

M /issm/trunk-jpl/externalpackages/gdal/install-1.10-macosx64.sh M /issm/trunk-jpl/externalpackages/gdal/install-1.11.2-macosx64.sh M /issm/trunk-jpl/externalpackages/mpich/install-3.2-mac-static.sh M /issm/trunk-jpl/externalpackages/sqlite/install.sh

Export determination: 6.

Rationale: BUG: Corrected path to external package server

**Change #133** with diff file ISSM-25969-25970.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor

**Change #134** with diff file ISSM-25970-25971.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/frictioncoulomb2.m

Export determination: 6.

Rationale: CHG: added frictioncoulomb2.m

**Change #135** with diff file ISSM-25971-25972.diff:

Function name:

M /issm/trunk-jpl/externalpackages/gmsh/install-3.sh M /issm/trunk-jpl/externalpackages/gmsh/install-4-static.sh M /issm/trunk-jpl/externalpackages/gmsh/install-4.sh

Export determination: 6.

Rationale: CHG: Added step to link lib -j, lib64 under RHEL.

**Change #136** with diff file ISSM-25972-25973.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removed code not needed

**Change #137** with diff file ISSM-25973-25974.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.h  
M /issm/trunk-jpl/src/m/classes/frictioncoulomb2.m

Export determination: 6.

Rationale: CHG: added coulomb limited friction

**Change #138** with diff file ISSM-25974-25975.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/m/classes/frictioncoulomb2.m

Export determination: 6.

Rationale: CHG: moving coefficient to C

**Change #139** with diff file ISSM-25975-25976.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/io/Marshalling/IoCodeConversions.cpp

Export determination: 6.

Rationale: CHG: fixed coulomb inversion

**Change #140** with diff file ISSM-25976-25977.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/io/Marshalling/IoCodeConversions.cpp

Export determination: 6.

Rationale: BUG: corrected enum

**Change #141** with diff file ISSM-25977-25978.diff:

Function name:

D /issm/trunk-jpl/externalpackages/shell2junit/README M /issm/trunk-jpl/externalpackages/shell2junit/in

D /issm/trunk-jpl/externalpackages/shell2junit/install.sh.old D /issm/trunk-jpl/externalpackages/shell2junit/in

D /issm/trunk-jpl/externalpackages/shell2junit/shell2junit-1.0.0.zip M /issm/trunk-

jpl/jenkins/jenkins.sh

Export determination: 6.

Rationale: CHG: New install script; clean up

**Change #142** with diff file ISSM-25978-25979.diff:

Function name:

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

A /issm/trunk-jpl/externalpackages/shell2junit/install.sh.old A /issm/trunk-jpl/externalpackages/shell2junit/in

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

jpl/externalpackages/shell2junit/shell2junit-1.0.0.zip

Export determination: 6.

Rationale: BUG: Reverting changes to shell2junit while working out further bugs

**Change #143** with diff file ISSM-25979-25980.diff:

Function name:

D /issm/trunk-jpl/externalpackages/shell2junit/README M /issm/trunk-jpl/externalpackages/shell2junit/in

D /issm/trunk-jpl/externalpackages/shell2junit/install.sh.old D /issm/trunk-jpl/externalpackages/shell2junit/in

D /issm/trunk-jpl/externalpackages/shell2junit/shell2junit-1.0.0.zip M /issm/trunk-jpl/jenkins/jenkins.sh  
Export determination: 6.  
Rationale: BUG: Fix for shell2junit updates

**Change #144** with diff file ISSM-25980-25981.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/shell2junit/install.sh  
Export determination: 6.  
Rationale: BUG: Bad commit from local copy

**Change #145** with diff file ISSM-25981-25982.diff:  
Function name:  
M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m  
Export determination: 6.  
Rationale: BUG: Last plot was not working

**Change #146** with diff file ISSM-25982-25983.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/autotools/install-linux.sh A /issm/trunk-jpl/externalpackages/autotools/install-mac.sh M /issm/trunk-jpl/externalpackages/autotools/install-win.sh D /issm/trunk-jpl/externalpackages/autotools/install.sh M /issm/trunk-jpl/jenkins/linux64\_caladan\_ad M /issm/trunk-jpl/jenkins/linux64\_caladan\_ampi M /issm/trunk-jpl/jenkins/pine\_island-mac-adolc-ampion M /issm/trunk-jpl/jenkins/pine\_island-mac-basic M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-matlab M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-python M /issm/trunk-jpl/jenkins/pine\_island-mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-mac-examples M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-valgrind M /issm/trunk-jpl/jenkins/pine\_island-mac-python M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth  
Export determination: 6.  
Rationale: CHG: Cleanup

**Change #147** with diff file ISSM-25983-25984.diff:  
Function name:

M /issm/trunk-jpl/examples/PigSensitivity/runme.m M /issm/trunk-jpl/jenkins/examples\_tests.sh  
M /issm/trunk-jpl/jenkins/ross-debian\_linux-full  
Export determination: 6.  
Rationale: CHG: Updates to Pig Sensitivity example; cleanup

**Change #148** with diff file ISSM-25984-25985.diff:

Function name:  
M /issm/trunk-jpl/jenkins/examples\_tests.sh  
Export determination: 6.  
Rationale: CHG: Disabling Pig2 check

**Change #149** with diff file ISSM-25985-25986.diff:

Function name:  
A /issm/trunk-jpl/examples/Mesh/runme.m  
Export determination: 6.  
Rationale: ADD: Missing runme

**Change #150** with diff file ISSM-25986-25987.diff:

Function name:  
M /issm/trunk-jpl/examples/AMR/runme.m M /issm/trunk-jpl/examples/EsaGRACE/runme.m  
M /issm/trunk-jpl/examples/EsaWahr/runme.m M /issm/trunk-jpl/examples/Greenland/runme.m  
M /issm/trunk-jpl/examples/ISMIP/runme.m M /issm/trunk-jpl/examples/IceBridge/runme.m  
M /issm/trunk-jpl/examples/Inversion/runme.m M /issm/trunk-jpl/examples/Jakobshavn/runme.m  
M /issm/trunk-jpl/examples/LcurveAnalysis/runme.m D /issm/trunk-jpl/examples/Mesh/runme.m  
M /issm/trunk-jpl/examples/Pig/runme.m M /issm/trunk-jpl/examples/Pig2/runme.m  
M /issm/trunk-jpl/examples/PigSensitivity/runme.m M /issm/trunk-jpl/examples/SlrFarrell/runme.m  
M /issm/trunk-jpl/examples/SlrGRACE/runme.m M /issm/trunk-jpl/examples/SlrGRACE\_NIMS/runme.m  
M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m M /issm/trunk-jpl/examples/shakti/runme.m M /issm/trunk-jpl/jenkins/examples\_tests.sh  
Export determination: 6.  
Rationale: CHG: Cleanup

**Change #151** with diff file ISSM-25987-25988.diff:

Function name:  
M /issm/trunk-jpl/examples/UncertaintyQuantification/runme.m

Export determination: 6.

Rationale: CHG: Reordering of steps; added caxis bounds to sensitivity plots

**Change #152** with diff file ISSM-25988-25989.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: Minor formatting

**Change #153** with diff file ISSM-25989-25990.diff:

Function name:

M /issm/trunk-jpl/externalpackages/gmt/install-6-linux-static.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-linux.sh

Export determination: 6.

Rationale: CHG: Need to link lib64 -j lib under RHEL

**Change #154** with diff file ISSM-25990-25991.diff:

Function name:

M /issm/trunk-jpl/externalpackages/autotools/install-win.sh

Export determination: 6.

Rationale: BUG: AUTOMAKE\_MIN\_VER needs to be defined for patch

**Change #155** with diff file ISSM-25991-25992.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Need to start with just step 1 so that example test driver works correctly

**Change #156** with diff file ISSM-25992-25993.diff:

Function name:

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

Export determination: 6.  
Rationale: adding PREM builder for materials('litho')

**Change #157** with diff file ISSM-25993-25994.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: add options for Alex's newest Albedo scheme for GEMB

**Change #158** with diff file ISSM-25995-25996.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/issm/IssmAbsVec.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiVec.h

M /issm/trunk-jpl/src/c/toolkits/issm/IssmSeqVec.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmVec.h

M /issm/trunk-jpl/src/c/toolkits/objects/Vector.h

Export determination: 6.

Rationale: CGH: adding elementwise multiplication and power for vectors

**Change #159** with diff file ISSM-25996-25997.diff:

Function name:

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

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

Export determination: 6.

Rationale: NEW: add new class sampling to model for stochastic sampling capability

**Change #160** with diff file ISSM-25997-25998.diff:

Function name:

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

M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/Gembx.cpp M /issm/trunk-

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

jpl/src/c/shared/Enum/Enum.vim 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/StringTo

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

Export determination: 6.

Rationale: CHG: implement inputs for gardner albedo scheme

**Change #161** with diff file ISSM-25998-25999.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/Gembx.cpp

Export determination: 6.

Rationale: CHG: minor comment update

**Change #162** with diff file ISSM-25999-26000.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/Gembx.cpp

Export determination: 6.

Rationale: CHG: pass in direct and diffuse SW if aIdx is 1

**Change #163** with diff file ISSM-26000-26001.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/analyses/SamplingAnalysis.cpp

A /issm/trunk-jpl/src/c/analyses/SamplingAnalysis.h M /issm/trunk-jpl/src/c/analyses/analyses.h

Export determination: 6.

Rationale: NEW: add new analysis SamplingAnalysis for stochastic sampler

**Change #164** with diff file ISSM-26001-26002.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Update GradientJ in SamplingAnalysis

**Change #165** with diff file ISSM-26002-26003.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

Export determination: 6.

Rationale: CGH: add new enums for sampling capacity

**Change #166** with diff file ISSM-26003-26004.diff:

Function name:

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

Export determination: 6.

Rationale: CGH: Update sampling analysis Input2 to Input and gauss- $\rightarrow$ begin()  
to gauss- $\rightarrow$ next()

**Change #167** with diff file ISSM-26004-26005.diff:

Function name:

M /issm/trunk-jpl/m4/analyses.m4 M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SamplingAnalysis.cpp

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

M /issm/trunk-jpl/src/c/cores/CorePointerFromSolutionEnum.cpp M /issm/trunk-jpl/src/c/cores/cores.h

A /issm/trunk-jpl/src/c/cores/sampling\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

A /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/src/c/solutionsequences/solutionsequences.h

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

Export determination: 6.

Rationale: NEW: add core sampling\_core and solution solver solutionsequence\_sampling for sampling capability

**Change #168** with diff file ISSM-26005-26006.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: delete InsertSample in solutionsequence\_sampling.cpp

**Change #169** with diff file ISSM-26006-26007.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/transient.m

Export determination: 6.

Rationale: CGH: updating matlab classes initialization and transient for transient sampling

**Change #170** with diff file ISSM-26007-26008.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/transient.m

Export determination: 6.

Rationale: CGH: remove matlab classes initialization and transient for transient sampling

**Change #171** with diff file ISSM-26008-26009.diff:

Function name:

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

Export determination: 6.

Rationale: CGH: remove matlab classes initialization for transient sampling

**Change #172** with diff file ISSM-26009-26010.diff:

Function name:

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

Export determination: 6.

Rationale: CGH: add isampling for transient sampling

**Change #173** with diff file ISSM-26010-26011.diff:

Function name:

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

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

Export determination: 6.

Rationale: NEW: add sampling to transient core

**Change #174** with diff file ISSM-26011-26012.diff:

Function name:

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

Export determination: 6.

Rationale: CGH: add isampling for transient sampling (python)

**Change #175** with diff file ISSM-26012-26013.diff:

Function name:

A /issm/trunk-jpl/src/m/sampling.py

Export determination: 6.

Rationale: NEW: add python file for sampling class

**Change #176** with diff file ISSM-26013-26014.diff:

Function name:

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

M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.py M /issm/trunk-jpl/src/m/sampling.py M /issm/trunk-jpl/src/m/solve/solve.py

Export determination: 6.

Rationale: NEW: add sampling capability for python

**Change #177** with diff file ISSM-26014-26015.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fix minor issue in checkfield in initialization.py

**Change #178** with diff file ISSM-26015-26016.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fix issue with sampling.py

**Change #179** with diff file ISSM-26016-26017.diff:

Function name:

D /issm/trunk-jpl/src/m/sampling.py

Export determination: 6.

Rationale: CGH: remove sr/m/sampling.py

**Change #180** with diff file ISSM-26017-26018.diff:

Function name:  
M /issm/trunk-jpl/src/m/classes/sampling.py  
Export determination: 6.  
Rationale: BUG: fix issue with sampling.py

**Change #181** with diff file ISSM-26018-26019.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/sampling.py  
Export determination: 6.  
Rationale: BUG: fix issue with sampling.py

**Change #182** with diff file ISSM-26019-26020.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/sampling.py  
Export determination: 6.  
Rationale: BUG: fix issue with sampling.py

**Change #183** with diff file ISSM-26020-26021.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/sampling.py  
Export determination: 6.  
Rationale: BUG: fix issue with sampling.py

**Change #184** with diff file ISSM-26021-26022.diff:  
Function name:  
M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.py  
Export determination: 6.  
Rationale: BUG: fix issue with ismodelselfconsistent.py

**Change #185** with diff file ISSM-26022-26023.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/sampling.py  
Export determination: 6.

Rationale: CGH: add requested outputs in sampling.py

**Change #186** with diff file ISSM-26023-26024.diff:

Function name:

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

Export determination: 6.

Rationale: CGH: checkfield samplingbeta only for sampling.robin

**Change #187** with diff file ISSM-26024-26025.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive127.arch A /issm/trunk-jpl/test/Archives/Archive128.arch

A /issm/trunk-jpl/test/Archives/Archive129.arch A /issm/trunk-jpl/test/NightlyRun/test127.m

A /issm/trunk-jpl/test/NightlyRun/test128.m A /issm/trunk-jpl/test/NightlyRun/test129.m

Export determination: 6.

Rationale: NEW: add nightly runs test127, test128, test129 for sampling capability

**Change #188** with diff file ISSM-26025-26026.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive127.arch M /issm/trunk-jpl/test/NightlyRun/test127.m

M /issm/trunk-jpl/test/NightlyRun/test128.m

Export determination: 6.

Rationale: CGH: Modifications of Nightly runs for sampling capability

**Change #189** with diff file ISSM-26026-26027.diff:

Function name:

D /issm/trunk-jpl/test/Archives/Archive127.arch D /issm/trunk-jpl/test/Archives/Archive128.arch

D /issm/trunk-jpl/test/Archives/Archive129.arch D /issm/trunk-jpl/test/NightlyRun/test127.m

D /issm/trunk-jpl/test/NightlyRun/test128.m D /issm/trunk-jpl/test/NightlyRun/test129.m

Export determination: 6.

Rationale: BUG: deleting Nightly runs 127, 128, 129

**Change #190** with diff file ISSM-26027-26028.diff:

Function name:  
M /issm/trunk-jpl/examples/ISMIP/IsmipF.par  
Export determination: 6.  
Rationale: CHG: make text consistent with solution on website

**Change #191** with diff file ISSM-26028-26029.diff:  
Function name:  
M /issm/trunk-jpl/examples/ISMIP/runme.m  
Export determination: 6.  
Rationale: CHG: explain the find logic more explicitly in the ISMIP comments

**Change #192** with diff file ISSM-26029-26030.diff:  
Function name:  
M /issm/trunk-jpl/examples/ISMIP/IsmipF.par M /issm/trunk-jpl/jenkins/examples\_tests.sh  
Export determination: 6.  
Rationale: CHG: Synchronizing parametrization file and test driver

**Change #193** with diff file ISSM-26030-26031.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/examples\_tests.sh  
Export determination: 6.  
Rationale: CHG: Synchronizing parametrization file and test driver

**Change #194** with diff file ISSM-26031-26032.diff:  
Function name:  
M /issm/trunk-jpl/examples/ISMIP/runme.m  
Export determination: 6.  
Rationale: CHG: minor update to ISMIP

**Change #195** with diff file ISSM-26032-26033.diff:  
Function name:  
M /issm/trunk-jpl/examples/ISMIP/runme.m M /issm/trunk-jpl/jenkins/examples\_tests.sh  
Export determination: 6.

Rationale: CHG: Updated comments

**Change #196** with diff file ISSM-26033-26034.diff:

Function name:

M /issm/trunk-jpl/examples/ISMIP/IsmipF.par

Export determination: 6.

Rationale: CHG: minor

**Change #197** with diff file ISSM-26034-26035.diff:

Function name:

M /issm/trunk-jpl/Makefile.am M /issm/trunk-jpl/configure.ac M /issm/trunk-jpl/etc/environment.sh A /issm/trunk-jpl/externalpackages/blas/configs/3.8 A /issm/trunk-jpl/externalpackages/blas/configs/3.8/win A /issm/trunk-jpl/externalpackages/blas/configs/3.8/win/msys2/gcc A /issm/trunk-jpl/externalpackages/blas/configs/3.8/win/msys2/gcc/Makefile A /issm/trunk-jpl/externalpackages/blas/configs/3.8/win/msys2/gcc/make.inc A /issm/trunk-jpl/externalpackages/blas/configs/3.8/win/msys2/mingw64 A /issm/trunk-jpl/externalpackages/blas/configs/3.8/win/msys2/mingw64/make.inc A /issm/trunk-jpl/externalpackages/blas/install-3-win-msys2-gcc.sh A /issm/trunk-jpl/externalpackages/blas/install-3-win-msys2-mingw.sh A /issm/trunk-jpl/externalpackages/chaco/configs/win A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64 A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/Makefile A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/Makefile.patch A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/main A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/main/interface.c A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/util A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/util/bail.c A /issm/trunk-jpl/externalpackages/lapack/configs/3.9 A /issm/trunk-jpl/externalpackages/lapack/configs/3.9/win/msys2 A /issm/trunk-jpl/externalpackages/lapack/configs/3.9/win/msys2/mingw A /issm/trunk-jpl/externalpackages/lapack/configs/3.9/win/msys2/mingw/install-3-win-msys2-gcc.sh A /issm/trunk-jpl/externalpackages/lapack/configs/3.9/win/msys2/mingw/install-3-win-msys2-mingw.sh A /issm/trunk-jpl/externalpackages/metis/configs/5.1/win A /issm/trunk-jpl/externalpackages/metis/configs/5.1/win/msys2/GKlib A /issm/trunk-jpl/externalpackages/metis/configs/5.1/win/msys2/GKlib/gk\_arch.h A /issm/trunk-jpl/externalpackages/metis/configs/5.1/win/msys2/GKlib/gk\_getopt.h A /issm/trunk-jpl/externalpackages/metis/configs/5.1/win/msys2/Makefile A /issm/trunk-jpl/externalpackages/metis/install-5-win-msys2-gcc.sh A /issm/trunk-jpl/externalpackages/metis/install-5-win-msys2-

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A /issm/trunk-jpl/externalpackages/scalapack/configs/2.1/win/msys2/mingw64/msmpi  
 A /issm/trunk-jpl/externalpackages/scalapack/configs/2.1/win/msys2/mingw64/msmpi/BLACS  
 A /issm/trunk-jpl/externalpackages/scalapack/configs/2.1/win/msys2/mingw64/msmpi/BLACS/SRC  
 A /issm/trunk-jpl/externalpackages/scalapack/configs/2.1/win/msys2/mingw64/msmpi/BLACS/SRC/src-  
 C.c.in A /issm/trunk-jpl/externalpackages/scalapack/configs/2.1/win/msys2/mingw64/msmpi/CMakeLists.tx  
 A /issm/trunk-jpl/externalpackages/scalapack/install-2-win-msys2-gcc-msmpi.sh  
 A /issm/trunk-jpl/externalpackages/scalapack/install-2-win-msys2-mingw-msmpi.sh  
 A /issm/trunk-jpl/externalpackages/triangle/configs/win A /issm/trunk-jpl/externalpackages/triangle/configs  
 A /issm/trunk-jpl/externalpackages/triangle/configs/win/msys2/gcc A /issm/trunk-  
 jpl/externalpackages/triangle/configs/win/msys2/gcc/configure.make A /issm/trunk-  
 jpl/externalpackages/triangle/configs/win/msys2/mingw64 A /issm/trunk-jpl/externalpackages/triangle/confi  
 A /issm/trunk-jpl/externalpackages/triangle/install-win-msys2-gcc.sh A /issm/trunk-  
 jpl/externalpackages/triangle/install-win-msys2-mingw.sh M /issm/trunk-jpl/jenkins/jenkins.sh  
 A /issm/trunk-jpl/jenkins/ross-win-msys2-gcc-msmpi-basic A /issm/trunk-jpl/jenkins/ross-  
 win-msys2-mingw-msmpi-basic M /issm/trunk-jpl/m4/issm\_options.m4 A /issm/trunk-  
 jpl/scripts/win-msys2-create\_local\_msmapi\_dir.sh M /issm/trunk-jpl/src/c/Makefile.am  
 M /issm/trunk-jpl/src/c/shared/io/Comm/IssmComm.cpp M /issm/trunk-jpl/src/c/shared/io/Print/PrintfFu  
 M /issm/trunk-jpl/src/c/toolkits/ToolkitOptions.cpp M /issm/trunk-jpl/src/m/classes/clusters/generic.m  
 M /issm/trunk-jpl/src/m/classes/clusters/localpfe.m M /issm/trunk-jpl/src/m/classes/clusters/pfe.m  
 M /issm/trunk-jpl/src/m/dev/devpath.m A /issm/trunk-jpl/src/m/os/ismingw.m  
 M /issm/trunk-jpl/src/m/os/issmscpin.m M /issm/trunk-jpl/src/m/os/issmscpout.m  
 M /issm/trunk-jpl/src/m/os/issmssh.m M /issm/trunk-jpl/src/m/os/oshostname.m  
 M /issm/trunk-jpl/src/m/solve/loadresultsfromdisk.m M /issm/trunk-jpl/src/wrappers/Triangle/Triangle.h  
 M /issm/trunk-jpl/src/wrappers/javascript/Makefile.am M /issm/trunk-jpl/src/wrappers/matlab/Makefile.am  
 M /issm/trunk-jpl/src/wrappers/matlab/include/wrapper\_macros.h M /issm/trunk-  
 jpl/src/wrappers/python/Makefile.am  
 Export determination: 6.  
 Rationale: CHG: Modifications to build system and additional configurations  
 in support of Windows 10 MSYS2 MinGW build

**Change #198** with diff file ISSM-26035-26036.diff:

Function name:

M /issm/trunk-jpl/externalpackages/codipack/install.sh M /issm/trunk-jpl/externalpackages/medipack/install  
 M /issm/trunk-jpl/jenkins/linux64\_caladan M /issm/trunk-jpl/jenkins/linux64\_caladan\_ampi  
 M /issm/trunk-jpl/jenkins/pine\_island-mac-adolc-ampion M /issm/trunk-jpl/jenkins/pine\_island-  
 mac-basic M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-matlab M /issm/trunk-  
 jpl/jenkins/pine\_island-mac-binaries-python M /issm/trunk-jpl/jenkins/pine\_island-  
 mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-mac-examples M /issm/trunk-  
 jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-  
 valgrind M /issm/trunk-jpl/jenkins/pine\_island-mac-python M /issm/trunk-jpl/jenkins/pine\_island-  
 mac-solid\_earth M /issm/trunk-jpl/jenkins/ross-debian\_linux-adolc-ampioff M  
 /issm/trunk-jpl/jenkins/ross-debian\_linux-adolc-ampion M /issm/trunk-jpl/jenkins/ross-  
 debian\_linux-basic M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries M /issm/trunk-

jpl/jenkins/ross-debian\_linux-binaries-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-codipack M /issm/trunk-jpl/jenkins/ross-debian\_linux-dakota M /issm/trunk-jpl/jenkins/ross-debian\_linux-full M /issm/trunk-jpl/jenkins/ross-debian\_linux-full-valgrind M /issm/trunk-jpl/jenkins/ross-debian\_linux-gia M /issm/trunk-jpl/jenkins/ross-debian\_linux-iceocean M /issm/trunk-jpl/jenkins/ross-debian\_linux-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth  
 Export determination: 6.  
 Rationale: CHG: Added now separate —with-parmetis-dir option to configs; medipack/codipack source is now expanded to src directory

**Change #199** with diff file ISSM-26036-26037.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh M /issm/trunk-jpl/m4/issm\_options.m4  
 M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/wrappers/Triangle/Triangle.h  
 M /issm/trunk-jpl/src/wrappers/javascript/Makefile.am M /issm/trunk-jpl/src/wrappers/matlab/Makefile.am  
 M /issm/trunk-jpl/src/wrappers/matlab/include/wrapper\_macros.h M /issm/trunk-jpl/src/wrappers/python/Makefile.am

Export determination: 6.

Rationale: CHG: Reverting temporarily

**Change #200** with diff file ISSM-26037-26038.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: trying to fix Solid Earth run

**Change #201** with diff file ISSM-26038-26039.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing inversion of drag SSA elementwise

**Change #202** with diff file ISSM-26039-26040.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh A /issm/trunk-jpl/externalpackages/mingw-

mex A /issm/trunk-jpl/externalpackages/mingw-mex/README A /issm/trunk-jpl/externalpackages/mingw-mex/configuremingw.p A /issm/trunk-jpl/externalpackages/msmpi A /issm/trunk-jpl/externalpackages/msmpi/install.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.14-win-msys2-mingw-msmpi.sh M /issm/trunk-jpl/jenkins/ross-win-msys2-mingw-msmpi-basic M /issm/trunk-jpl/src/m/classes/clusters/generic.m M /issm/trunk-jpl/src/m/solve/waitonlock.m  
Export determination: 6.  
Rationale: CHG: Modified configuration files for Windows build; external packages for MS-MPI and MinGW MEX; minor clean up

**Change #203** with diff file ISSM-26040-26041.diff:

Function name:

D /issm/trunk-jpl/scripts/win-msys2-create\_local\_msmpi\_dir.sh

Export determination: 6.

Rationale: CHG: Modified configuration files for Windows build; external packages for MS-MPI and MinGW MEX; minor clean up

**Change #204** with diff file ISSM-26041-26042.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineAntarctica.m

Export determination: 6.

Rationale: CHG: can provide path to dataset

**Change #205** with diff file ISSM-26042-26043.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineAntarctica.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineGreenland.m

Export determination: 6.

Rationale: CHG: added some documentation and made sure that interpBedmachine Ant and Green are similar

**Change #206** with diff file ISSM-26043-26044.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineAntarctica.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineGreenland.m

Export determination: 6.  
Rationale: CHG: minor

**Change #207** with diff file ISSM-26044-26045.diff:

Function name:

M /issm/trunk-jpl/jenkins/jenkins.sh M /issm/trunk-jpl/m4/issm\_options.m4  
M /issm/trunk-jpl/src/c/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: Recommitting changes for Windows build (tested on macOS now)

**Change #208** with diff file ISSM-26045-26046.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Missing Windows control structures

**Change #209** with diff file ISSM-26046-26047.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Fix for Dakota linked missing symbols

**Change #210** with diff file ISSM-26047-26048.diff:

Function name:

M /issm/trunk-jpl/m4/analyses.m4 M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/AdjointBalancethickness2Analysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.h M /issm/trunk-jpl/src/c/analyses/Analysis.h M /issm/trunk-jpl/src/c/analyses/Balancethickness2Analysis.cpp M /issm/trunk-jpl/src/c/analyses/Balancethickness2Analysis.h M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.c 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/BalancethicknessSoftA

M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.h M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DepthAverageAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.h M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.h M /issm/trunk-jpl/src/c/analyses/EsaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/EsaAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ExtrudeFromTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.h M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.h M /issm/trunk-jpl/src/c/analyses/GLheightadvectionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GLheightadvectionAnalysis.h D /issm/trunk-jpl/src/c/analyses/GiaAnalysis.cpp D /issm/trunk-jpl/src/c/analyses/GiaAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyGlaDSAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyGlaDSAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyPismAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyPismAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.h M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.h A /issm/trunk-jpl/src/c/analyses/HydrologyTwsAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/HydrologyTwsAnalysis.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/LoveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LoveAnalysis.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 A /issm/trunk-jpl/src/c/analyses/OceantransportAnalysis.cpp A /issm/trunk-jpl/src/c/analyses/OceantransportAnalysis.h M /issm/trunk-jpl/src/c/analyses/SamplingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SamplingAnalysis.h M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmbAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmbAnalysis.h M /issm/trunk-jpl/src/c/analyses/SmoothAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmoothAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceSIAAnalysis.h M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.h M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/ThermalAnalysis.h M /issm/trunk-jpl/src/c/analyses/UzawaPressureAnalysis.cpp M /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/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  
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/Inputs/Inputs.cpp M /issm/trunk-jpl/src/c/classes/Inputs/Inputs.h  
M /issm/trunk-jpl/src/c/classes/IoModel.cpp M /issm/trunk-jpl/src/c/classes/Profiler.h  
M /issm/trunk-jpl/src/c/cores/CorePointerFromSolutionEnum.cpp M /issm/trunk-jpl/src/c/cores/cores.h M /issm/trunk-jpl/src/c/cores/esa\_core.cpp D /issm/trunk-jpl/src/c/cores/gia\_core.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp  
M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp A /issm/trunk-jpl/src/c/cores/oceantransport\_core.cpp  
M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/main/issm.cpp M /issm/trunk-jpl/src/c/main/issm\_slc.cpp  
M /issm/trunk-jpl/src/c/modules/InputUpdateFromDakotax/InputUpdateFromDakotax.cpp  
A /issm/trunk-jpl/src/c/modules/MmeToInputFromIdx A /issm/trunk-jpl/src/c/modules/MmeToInputFromIdx.h  
A /issm/trunk-jpl/src/c/modules/MmeToInputFromIdx/MmeToInputFromIdx.h  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/shared/io/Marshalling/  
M /issm/trunk-jpl/src/c/shared/io/Marshalling/IoCodeConversions.h M /issm/trunk-jpl/src/m/boundaryconditions/SetIceSheetBC.m M /issm/trunk-jpl/src/m/classes/dsl.m  
M /issm/trunk-jpl/src/m/classes/dslmme.m M /issm/trunk-jpl/src/m/classes/fourierlove.m  
M /issm/trunk-jpl/src/m/classes/geometry.m D /issm/trunk-jpl/src/m/classes/giaivins.js  
D /issm/trunk-jpl/src/m/classes/giaivins.m D /issm/trunk-jpl/src/m/classes/giaivins.py  
D /issm/trunk-jpl/src/m/classes/giamme.m D /issm/trunk-jpl/src/m/classes/giamme.py  
M /issm/trunk-jpl/src/m/classes/hydrologyshreve.m A /issm/trunk-jpl/src/m/classes/hydrologytws.m  
M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/lovenumbers.m  
M /issm/trunk-jpl/src/m/classes/matdamageice.m M /issm/trunk-jpl/src/m/classes/matenhancedice.m  
M /issm/trunk-jpl/src/m/classes/materials.m M /issm/trunk-jpl/src/m/classes/matestar.m  
M /issm/trunk-jpl/src/m/classes/matrice.m M /issm/trunk-jpl/src/m/classes/model.m  
M /issm/trunk-jpl/src/m/classes/sealevelmodel.m M /issm/trunk-jpl/src/m/classes/solidearth.m  
M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/src/m/classes/transient.m  
M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.m M /issm/trunk-jpl/src/m/dev/devpath.m M /issm/trunk-jpl/src/m/plot/radarpower.m M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solveslm.m M /issm/trunk-jpl/test/NightlyRun/test2001.m M /issm/trunk-jpl/test/Par/SquareSheetConstrained.par  
Export determination: 6.

Rationale: CHG: huge commit on solid earth capability rewrite. Complete cleanup of the sea level core. New mass transport capabilities for ocean and tws. No more giacore. GiaIvins folded into the sea level core. Debugging of Materials.

**Change #211** with diff file ISSM-26048-26049.diff:

Function name:  
M /issm/trunk-jpl/src/c/modules/MmeToInputFromIdx/MmeToInputFromIdx.cpp  
Export determination: 6.  
Rationale: CHG: fixed issue with misname.

**Change #212** with diff file ISSM-26049-26050.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.h  
Export determination: 6.  
Rationale: CHG: removing GIA shielding.

**Change #213** with diff file ISSM-26050-26051.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
Export determination: 6.  
Rationale: CHG: moving from GIA to SEALEVEL

**Change #214** with diff file ISSM-26051-26052.diff:  
Function name:  
M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp  
Export determination: 6.  
Rationale: CHG: minor

**Change #215** with diff file ISSM-26052-26053.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.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/Profiler.h  
Export determination: 6.  
Rationale: CHG: removed HAVE\_GIA directives.

**Change #216** with diff file ISSM-26053-26054.diff:

Function name:

M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.par M /issm/trunk-jpl/test/Par/ValleyGlacierShelf.py

Export determination: 6.

Rationale: CHG: isgia not needed anymore.

**Change #217** with diff file ISSM-26054-26055.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2005.m M /issm/trunk-jpl/test/NightlyRun/test2005.py

M /issm/trunk-jpl/test/NightlyRun/test2006.m M /issm/trunk-jpl/test/NightlyRun/test2006.py

M /issm/trunk-jpl/test/NightlyRun/test801.m M /issm/trunk-jpl/test/NightlyRun/test801.py

M /issm/trunk-jpl/test/NightlyRun/test802.m M /issm/trunk-jpl/test/NightlyRun/test802.py

M /issm/trunk-jpl/test/NightlyRun/test803.m M /issm/trunk-jpl/test/NightlyRun/test803.py

M /issm/trunk-jpl/test/NightlyRun/test804.m M /issm/trunk-jpl/test/NightlyRun/test804.py

M /issm/trunk-jpl/test/NightlyRun/test805.m M /issm/trunk-jpl/test/NightlyRun/test805.py

M /issm/trunk-jpl/test/NightlyRun/test806.m M /issm/trunk-jpl/test/NightlyRun/test806.py

M /issm/trunk-jpl/test/NightlyRun/test807.m M /issm/trunk-jpl/test/NightlyRun/test807.py

M /issm/trunk-jpl/test/NightlyRun/test808.m M /issm/trunk-jpl/test/NightlyRun/test808.py

M /issm/trunk-jpl/test/NightlyRun/test809.m M /issm/trunk-jpl/test/NightlyRun/test809.py

Export determination: 6.

Rationale: CHG: removed isgia flag.

**Change #218** with diff file ISSM-26055-26056.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: wrong type of iscoupler, should be int instead of bool.

**Change #219** with diff file ISSM-26056-26057.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing AD

**Change #220** with diff file ISSM-26057-26058.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.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/main/esmfbinders.cpp  
 Export determination: 6.  
 Rationale: CHG: fixed some valgrind stuff

**Change #221** with diff file ISSM-26058-26059.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: accidental commit

**Change #222** with diff file ISSM-26059-26060.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetIceSheetBC.m M /issm/trunk-jpl/src/m/boundaryconditions/SetIceSheetBC.py M /issm/trunk-jpl/src/m/classes/dsl.m M /issm/trunk-jpl/src/m/classes/dsl.py M /issm/trunk-jpl/src/m/classes/dslmme.m M /issm/trunk-jpl/src/m/classes/dslmme.py M /issm/trunk-jpl/src/m/classes/fourierlove.m M /issm/trunk-jpl/src/m/classes/fourierlove.py M /issm/trunk-jpl/src/m/classes/geometry.m M /issm/trunk-jpl/src/m/classes/geometry.py M /issm/trunk-jpl/src/m/classes/hydrologydc.py M /issm/trunk-jpl/src/m/classes/hydrologyshreve.m M /issm/trunk-jpl/src/m/classes/hydrologyshreve.py M /issm/trunk-jpl/src/m/classes/hydrologytwos.m A /issm/trunk-jpl/src/m/classes/hydrologytwos.py M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/matdamageice.m M /issm/trunk-jpl/src/m/classes/matdamageice.py M /issm/trunk-jpl/src/m/classes/matenhancedice.m M /issm/trunk-jpl/src/m/classes/matenhancedice.py M /issm/trunk-jpl/src/m/classes/materials.m M /issm/trunk-jpl/src/m/classes/materials.py M /issm/trunk-jpl/src/m/classes/matestar.m M /issm/trunk-jpl/src/m/classes/matestar.py M /issm/trunk-jpl/src/m/classes/matice.m M /issm/trunk-jpl/src/m/classes/matice.py M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/model.py M /issm/trunk-jpl/src/m/classes/sealevelmodel.m M /issm/trunk-jpl/src/m/classes/sealevelmodel.py M /issm/trunk-jpl/src/m/classes/surfaceload.m M /issm/trunk-jpl/src/m/classes/transient.m M /issm/trunk-jpl/src/m/classes/transient.py M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.m M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.py A /issm/trunk-jpl/src/m/plot/radarpower.py M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solve.py M /issm/trunk-jpl/src/m/solve/solveslm.m A /issm/trunk-jpl/src/m/solve/solveslm.py M /issm/trunk-jpl/test/NightlyRun/test2001.m M /issm/trunk-jpl/test/NightlyRun/test2001.py

Export determination: 6.

Rationale: CHG: MATLAB -i Python API translations for recent SE changes; clean up

**Change #223** with diff file ISSM-26060-26061.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Missing Python translation; clean up

**Change #224** with diff file ISSM-26061-26062.diff:

Function name:

M /issm/trunk-jpl/src/m/solvers/mumpsnoneoptions.py M /issm/trunk-jpl/src/m/solvers/mumpsoptions.py

Export determination: 6.

Rationale: BUG: fix to the toolkit writing of mumps options

**Change #225** with diff file ISSM-26062-26063.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Call to function size; missing end

**Change #226** with diff file ISSM-26063-26064.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/defleurian/netCDF/export\_netCDF.py M /issm/trunk-jpl/src/m/io/loadvars.py

Export determination: 6.

Rationale: CHG: update to netCDF import export

**Change #227** with diff file ISSM-26064-26065.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Typo

**Change #228** with diff file ISSM-26065-26066.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Missed class member variable removal; clean up

**Change #229** with diff file ISSM-26066-26067.diff:

Function name:

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

M /issm/trunk-jpl/src/m/parameterization/parameterize.py M /issm/trunk-jpl/test/Par/SquareSheetConstra

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

Export determination: 6.

Rationale: BUG: Missing initialize member function; removed GIA from parameterization file; clean up

**Change #230** with diff file ISSM-26067-26068.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2002.m

Export determination: 6.

Rationale: CHG: Removed references to solidearth.surfaceload; committing so Eric can advise on solution type

**Change #231** with diff file ISSM-26068-26069.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2002.m

Export determination: 6.

Rationale: CHG: Reverting changes as Eric and Lambert are still working on SE tests

**Change #232** with diff file ISSM-26069-26070.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removing Ivins Echo statements.

**Change #233** with diff file ISSM-26070-26071.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: making sure delta thickness is computed correctly.

**Change #234** with diff file ISSM-26071-26072.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added DeepEcho(int enum\_type) capability

**Change #235** with diff file ISSM-26072-26073.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed segfault.

**Change #236** with diff file ISSM-26073-26074.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.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/IoModel.cpp  
M /issm/trunk-jpl/src/c/classes/IoModel.h M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
M /issm/trunk-jpl/src/c/modules/InputUpdateFromConstantx/InputUpdateFromConstantx.cpp  
M /issm/trunk-jpl/src/c/modules/InputUpdateFromConstantx/InputUpdateFromConstantx.h  
M /issm/trunk-jpl/test/NightlyRun/test2001.m

Export determination: 6.

Rationale: CHG: fixed test2001 by modifying the mass transport core. Now create inputs directly in the core, not the MassTransportAnalysis::InputUpdateFromSolution.

Also need a new IoModel::InputToConstant routine.

**Change #237** with diff file ISSM-26074-26075.diff:

Function name:  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
Export determination: 6.  
Rationale: CHG: removing debugging statements.

**Change #238** with diff file ISSM-26075-26076.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyTwsAnalysis.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
M /issm/trunk-jpl/test/NightlyRun/test2001.m  
Export determination: 6.  
Rationale: CHG: removed GIA rates from the test2001 archives. Transferred new SolidEarthUpdates logic to tws mass transport.

**Change #239** with diff file ISSM-26076-26077.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/OceantransportAnalysis.cpp M /issm/trunk-jpl/src/c/cores/oceantransport\_core.cpp  
Export determination: 6.  
Rationale: CHG: transferred SolidEarthIceUpdates and SolidEarthWaterUpdates to OceantransportAnalysis and oceantransport\_core using a SolidEarthOceanUpdates.

**Change #240** with diff file ISSM-26077-26078.diff:

Function name:  
M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2003.m  
M /issm/trunk-jpl/test/NightlyRun/test2004.m  
Export determination: 6.  
Rationale: update of slc tests to new structure: loads are now in masstransport.spcthickness, solution is now Transient, added configuration in solidearth.settings, initialiselevel now in initialization.sealevel

**Change #241** with diff file ISSM-26078-26079.diff:

Function name:  
M /issm/trunk-jpl/test/NightlyRun/test2001.m

Export determination: 6.  
Rationale: CHG: took out high verbose level.

**Change #242** with diff file ISSM-26079-26080.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: avoid looking for vertex on base if you are a Mesh 3D Surface domain type

**Change #243** with diff file ISSM-26080-26081.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/sealevelmodel.m  
Export determination: 6.  
Rationale: BUG: wrong syntax

**Change #244** with diff file ISSM-26081-26082.diff:  
Function name:  
M /issm/trunk-jpl/src/m/dev/issmversion.m M /issm/trunk-jpl/src/m/dev/issmversion.py  
Export determination: 6.  
Rationale: CHG: we are in 2021 now...

**Change #245** with diff file ISSM-26082-26083.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: CHG: mumps requires parmetis

**Change #246** with diff file ISSM-26083-26084.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/frictioncoulomb2.m M /issm/trunk-jpl/src/m/classes/model.m  
Export determination: 6.  
Rationale: CHG: fixing load with changing class names and fields

**Change #247** with diff file ISSM-26084-26085.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/depthaverage\_core.cpp  
Export determination: 6.  
Rationale: CHG: added exception for 3Dsurface domain type.

**Change #248** with diff file ISSM-26085-26086.diff:  
Function name:  
M /issm/trunk-jpl/src/c/cores/extrudefrombase\_core.cpp  
Export determination: 6.  
Rationale: CHG: added exception for 3Dsurface domain type.

**Change #249** with diff file ISSM-26086-26087.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: added exception for 3Dsurface domain type.

**Change #250** with diff file ISSM-26087-26088.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test2001.m  
Export determination: 6.  
Rationale: reverting to 3 cpus

**Change #251** with diff file ISSM-26088-26089.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: removing debug statements.

**Change #252** with diff file ISSM-26089-26090.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/cores/extrudefromtop\_core.cpp

Export determination: 6.

Rationale: BUG: fixing segfault in 3d surface

**Change #253** with diff file ISSM-26090-26091.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/BalancevelocityAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/FreeSurfaceTopAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/GLheightadvectionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCEfficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyDCInefficientAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/L2ProjectionEPLAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MeltingAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Cfdragcoeffabsgrad.cpp M /issm/trunk-jpl/src/c/classes/Cfsurfacelogvel.cpp M /issm/trunk-jpl/src/c/classes/Cfsurfacesquare.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h M /issm/trunk-jpl/src/c/classes/Elements/Seg.cpp M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/modules/DragCoefficientAbsGradient.cpp M /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatePicox/FloatingiceMeltingRatePicox.cpp M /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRateTex/FloatingiceMeltingRateTex.cpp M /issm/trunk-jpl/src/c/modules/RheologyBbarAbsGradientx/RheologyBbarAbsGradientx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceAbsVelMisfitx/SurfaceAbsVelMisfitx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceAverageVelMisfitx/SurfaceAverageVelMisfitx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceLogVelMisfitx/SurfaceLogVelMisfitx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceLogVxVyMisfitx/SurfaceLogVxVyMisfitx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceRelVelMisfitx/SurfaceRelVelMisfitx.cpp

Export determination: 6.

Rationale: CHG: automatically delete collapsed element without looking at domain type

**Change #254** with diff file ISSM-26091-26092.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/Vertex.cpp  
Export determination: 6.  
Rationale: CHG: fixing some things for test2002

**Change #255** with diff file ISSM-26092-26093.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Adjustments for Windows builds

**Change #256** with diff file ISSM-26093-26094.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/configs/3.14 A /issm/trunk-jpl/externalpackages/petsc/configs/3.14

A /issm/trunk-jpl/externalpackages/petsc/configs/3.14/win/msys2 A /issm/trunk-

jpl/externalpackages/petsc/configs/3.14/win/msys2/mingw64 A /issm/trunk-

jpl/externalpackages/petsc/configs/3.14/win/msys2/mingw64/config A /issm/trunk-

jpl/externalpackages/petsc/configs/3.14/win/msys2/mingw64/config/configure.py

M /issm/trunk-jpl/externalpackages/petsc/install-3.14-win-msys2-mingw-msmpi.sh

Export determination: 6.

Rationale: CHG: Adjustments for Windows builds

**Change #257** with diff file ISSM-26094-26095.diff:

Function name:

M /issm/trunk-jpl/externalpackages/petsc/install-3.14-win-msys2-mingw-msmpi.sh

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

Export determination: 6.

Rationale: CHG: Fix for bad control; clean up

**Change #258** with diff file ISSM-26095-26096.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Stupid typo

**Change #259** with diff file ISSM-26096-26097.diff:

Function name:

M /issm/trunk-jpl/src/m/io/loadvars.py

Export determination: 6.

Rationale: CHG:change to the nc loader to take into account saved field that do not exist anymore.

**Change #260** with diff file ISSM-26097-26098.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: fixed issue with unfound MatLitho.

**Change #261** with diff file ISSM-26098-26099.diff:

Function name:

A /issm/trunk-jpl/test/SandBox/test2002.m

Export determination: 6.

Rationale: CHG test to allow transition from svn repo 26083 to ne wclean repo.

**Change #262** with diff file ISSM-26099-26100.diff:

Function name:

M /issm/trunk-jpl/m4/analyses.m4 M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/EnumToAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/OceantransportAnalysis.cpp

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

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

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

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

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

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

A /issm/trunk-jpl/src/c/modules/ElementCoordinatesx A /issm/trunk-jpl/src/c/modules/ElementCoordinatesx.h

A /issm/trunk-jpl/src/c/modules/ElementCoordinatesx/ElementCoordinatesx.h

M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim

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

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

M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/solidearth.m

M /issm/trunk-jpl/test/NightlyRun/test2002.m

Export determination: 6.

Rationale: CHG: new ElementCoordinatesx module, use for an optimized version of the sea level core. Many bug fixes to get test2002 to run.

**Change #263** with diff file ISSM-26100-26101.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2003.m

Export determination: 6.

Rationale: CHG: adapting to new framework.

**Change #264** with diff file ISSM-26101-26102.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: trying to fix AD and rewrote some portions of the code

**Change #265** with diff file ISSM-26102-26103.diff:

Function name:

M /issm/trunk-jpl/jenkins/linux64\_caladan\_ad M /issm/trunk-jpl/jenkins/linux64\_caladan\_ampi

M /issm/trunk-jpl/jenkins/pine\_island-mac-adolc-ampion M /issm/trunk-jpl/jenkins/ross-

debian\_linux-adolc-ampioff M /issm/trunk-jpl/jenkins/ross-debian\_linux-adolc-

ampion M /issm/trunk-jpl/jenkins/ross-debian\_linux-codipack M /issm/trunk-

jpl/jenkins/ross-debian\_linux-javascript M /issm/trunk-jpl/jenkins/windows M

/issm/trunk-jpl/jenkins/windows-par M /issm/trunk-jpl/jenkins/windows\_static

Export determination: 6.

Rationale: CHG: Gia does not exist anymore, replaced by Sealevelchange

**Change #266** with diff file ISSM-26103-26104.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: moveing Element Coordinate outside of sealevel stuff

**Change #267** with diff file ISSM-26104-26105.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing AD with Sealevel change

**Change #268** with diff file ISSM-26105-26106.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: GIA -> SEALEVELCHANGE

**Change #269** with diff file ISSM-26106-26107.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: memory leak

**Change #270** with diff file ISSM-26107-26108.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added test on size to avoid segmentation faults

**Change #271** with diff file ISSM-26108-26109.diff:

Function name:

M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth

Export determination: 6.

Rationale: CHG: Activating 2002 + 2003 on Linux.

**Change #272** with diff file ISSM-26109-26110.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: ommit full extent of modules not needed by Ivins model GIA computations.

**Change #273** with diff file ISSM-26110-26111.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp  
A /issm/trunk-jpl/src/c/classes/BarystaticContributions.cpp A /issm/trunk-jpl/src/c/classes/BarystaticContributions.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  
M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/classes.h  
M /issm/trunk-jpl/src/c/cores/cores.h M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/c/toolkits/issm/IssmAbsVec.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiVec.h  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmSeqVec.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmVec.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/PetscVec.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscVec.h  
M /issm/trunk-jpl/src/c/toolkits/petsc/patches/petscpatches.h  
M /issm/trunk-jpl/test/NightlyRun/test2004.m

Export determination: 6.

Rationale: CHG: new synthesis of the GRD module in sealevelchange\_core using the new approach for convolutions.

**Change #274** with diff file ISSM-26111-26112.diff:

Function name:

A /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToMPISerial.cpp

Export determination: 6.

Rationale: CHG: missing file.

**Change #275** with diff file ISSM-26112-26113.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/objects/Matrix.h

Export determination: 6.

Rationale: BUG: calling the right method

**Change #276** with diff file ISSM-26113-26114.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: not needed.

**Change #277** with diff file ISSM-26114-26115.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: had taken out these routines which are needed!

**Change #278** with diff file ISSM-26115-26116.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: new methods implemented.

**Change #279** with diff file ISSM-26116-26117.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removed debug statement.

**Change #280** with diff file ISSM-26117-26118.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/toolkits/objects/Matrix.h

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

M /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToMPISerial.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToMPISerial.h

M /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToSerial.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToSerial.h

M /issm/trunk-jpl/src/c/toolkits/petsc/patches/VecToMPISerial.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/patches/VecToMPISerial.h

Export determination: 6.

Rationale: BUG: fixing problem with matrix

**Change #281** with diff file ISSM-26118-26119.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

Export determination: 6.

Rationale: CHG: moving some enums from inputs to params.

**Change #282** with diff file ISSM-26119-26120.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: rearranging sea level optimized core.

**Change #283** with diff file ISSM-26120-26121.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/Synchronize.sh

Export determination: 6.

Rationale: CHG: remove analysis update.

**Change #284** with diff file ISSM-26121-26122.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/classes/BarystaticContributions.cpp

M /issm/trunk-jpl/src/c/classes/BarystaticContributions.h 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.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/Input.h M /issm/trunk-jpl/src/c/classes/Inputs/Inputs.cpp

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

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

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

M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim

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/test/NightlyRun/test2004.m

Export determination: 6.

Rationale: CHG: fully fleshed out implementation of the new sea level convolution based on element load distribution across the cluster.

**Change #285** with diff file ISSM-26122-26123.diff:

Function name:

M /issm/trunk-jpl/src/c

Export determination: 6.

Rationale: CHG: ignore issm\_slc

**Change #286** with diff file ISSM-26123-26124.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Check for zsh usage before running setopt

**Change #287** with diff file ISSM-26124-26125.diff:

Function name:

M /issm/trunk-jpl/configure.ac

Export determination: 6.

Rationale: CHG: Restoring preferred compiler orders

**Change #288** with diff file ISSM-26125-26126.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: MEALPix pix2ang needed for test2020

**Change #289** with diff file ISSM-26126-26127.diff:

Function name:

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

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

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

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

Export determination: 6.

Rationale: CHG: fixing bugs in optimized sea level core. Running side by side with optim flag.

**Change #290** with diff file ISSM-26127-26128.diff:  
Function name:  
M /issm/trunk-jpl/src/m/io/loadvars.py  
Export determination: 6.  
Rationale: BUG: fix to netCDF load to deal with old files

**Change #291** with diff file ISSM-26128-26129.diff:  
Function name:  
M /issm/trunk-jpl/src/m/io/loadvars.py  
Export determination: 6.  
Rationale: BUG: fix to netCDF load to deal with old files

**Change #292** with diff file ISSM-26129-26130.diff:  
Function name:  
M /issm/trunk-jpl/src/m/io/loadvars.py  
Export determination: 6.  
Rationale: BUG: fix to netCDF load to deal with old files

**Change #293** with diff file ISSM-26130-26131.diff:  
Function name:  
M /issm/trunk-jpl/src/m/io/loadvars.py  
Export determination: 6.  
Rationale: BUG: setting back Debug flag to False

**Change #294** with diff file ISSM-26131-26132.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/AdjointBalancethicknessAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Node.cpp  
M /issm/trunk-jpl/src/c/classes/Node.h M /issm/trunk-jpl/src/c/classes/Nodes.cpp  
M /issm/trunk-jpl/src/c/classes/matrix/ElementMatrix.cpp M /issm/trunk-jpl/src/c/classes/matrix/ElementVector.cpp  
M /issm/trunk-jpl/src/c/classes/matrix/ElementVector.h M /issm/trunk-jpl/src/c/toolkits/issm/Bucket.h M /issm/trunk-jpl/src/c/toolkits/petsc/objects/PetscVec.cpp  
M /issm/trunk-jpl/src/c/toolkits/petsc/patches/NewMat.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/patches/NewVec.cpp  
Export determination: 6.

Rationale: CHG: big simplification here: we now carry the vectors of fset and sset using the same size as gset, with -1 when they are not in the right set.  
Example: old\_fset = [1 2 3], new\_fset=[1 -1 2 3 -1 -1]; enjoy

**Change #295** with diff file ISSM-26132-26133.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: working on mono layer HO

**Change #296** with diff file ISSM-26133-26134.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: working on mono layer HO

**Change #297** with diff file ISSM-26134-26135.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: working on mono layer HO

**Change #298** with diff file ISSM-26135-26136.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/toolkits/issm/IssmDenseMat  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmSeqVec.h  
Export determination: 6.  
Rationale: BUG: fixing DenseMat with new indices

**Change #299** with diff file ISSM-26136-26137.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Node.cpp  
Export determination: 6.

Rationale: BUG: fixing allocation of doflists with copy

**Change #300** with diff file ISSM-26137-26138.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: working on mono layer HO

**Change #301** with diff file ISSM-26138-26139.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: reverting melt parameterization

**Change #302** with diff file ISSM-26139-26140.diff:

Function name:

D /issm/trunk-jpl/externalpackages/lapack/configs/3.9 M /issm/trunk-jpl/jenkins/ross-debian\_linux-dakota M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth

Export determination: 6.

Rationale: CHG: Cleanup

**Change #303** with diff file ISSM-26140-26141.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Correcting warning about autom4ke variable names; clean up

**Change #304** with diff file ISSM-26141-26142.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: working on mono layer HO

**Change #305** with diff file ISSM-26142-26143.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Sean's updates

**Change #306** with diff file ISSM-26143-26144.diff:

Function name:

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

M /issm/trunk-jpl/src/c/classes/matrix/ElementVector.h

Export determination: 6.

Rationale: CHG: removing some useless fields

**Change #307** with diff file ISSM-26144-26145.diff:

Function name:

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

M /issm/trunk-jpl/src/c/classes/Loads/Moulin.cpp M /issm/trunk-jpl/src/c/classes/Loads/Neumannflux.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/Node.cpp M /issm/trunk-jpl/src/c/classes/Node.h

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

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

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

Export determination: 6.

Rationale: CHG: simplifying node as well

**Change #308** with diff file ISSM-26145-26146.diff:

Function name:

M /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/Makefile

D /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/Makefile.patch

A /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/util/seconds.c

A /issm/trunk-jpl/externalpackages/chaco/install-win-msys2-mingw.sh M /issm/trunk-

jpl/jenkins/ross-win-msys2-mingw-msmpi-basic

Export determination: 6.

Rationale: CHG: Remaining packages for Windows basic build

**Change #309** with diff file ISSM-26146-26147.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: various bug fixes.

**Change #310** with diff file ISSM-26147-26148.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: very serious/crippling bug fix.

**Change #311** with diff file ISSM-26148-26149.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: working on mono layer HO

**Change #312** with diff file ISSM-26149-26150.diff:

Function name:

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

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

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

M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/modules/ElementCoordinates

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

Export determination: 6.

Rationale: CHG: ElementCoordinatesx now also returns areas. BarystaticContributions bsl components have right sign . Tria: idem + debugged Geometry-Optim G which was not synced with the variable area.

**Change #313** with diff file ISSM-26150-26151.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing syntax

**Change #314** with diff file ISSM-26151-26152.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed barystatic average.

**Change #315** with diff file ISSM-26152-26153.diff:

Function name:

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

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

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

M /issm/trunk-jpl/src/c/classes/SealevelMasks.h M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp

Export determination: 6.

Rationale: CHG: SealevelMasks is not working on nel, but rather on local number of elements! sealevelchange\_core and Tria.cpp: need a routine to shift only on ocean for mass conservation.

**Change #316** with diff file ISSM-26153-26154.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: no dummy required.

**Change #317** with diff file ISSM-26154-26155.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test339.m M /issm/trunk-jpl/test/NightlyRun/test339.py

Export determination: 6.

Rationale: CHG: Eased tolerances

**Change #318** with diff file ISSM-26155-26156.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/gauss/GaussTria.cpp  
M /issm/trunk-jpl/src/c/cores/stressbalance\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim  
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: working on mono layer HO - not fully tested

**Change #319** with diff file ISSM-26156-26157.diff:

Function name:

M /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/Makefile  
M /issm/trunk-jpl/externalpackages/chaco/configs/win/msys2/mingw64/src/code/util/seconds.c  
M /issm/trunk-jpl/externalpackages/semic/install.sh M /issm/trunk-jpl/jenkins/ross-  
win-msys2-mingw-msmpi-basic M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-  
jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/modules/Chacox/chaco\_seconds.cpp  
M /issm/trunk-jpl/test/NightlyRun/IdFromString.m

Export determination: 6.

Rationale: CHG: Further configuration changes to make Chaco work under  
MSYS2 MinGW; moved SEMIC libraries to /lib; changed awk for cut in IdFrom-  
String as there seems to be a quoting issues under Windows and/or MSYS2;  
expanded Windows Basic build test suite

**Change #320** with diff file ISSM-26157-26158.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: missing Bed in inputs!

**Change #321** with diff file ISSM-26158-26159.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed old code issues with masks in sea level core.

**Change #322** with diff file ISSM-26159-26160.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive131.arch A /issm/trunk-jpl/test/Archives/Archive132.arch  
A /issm/trunk-jpl/test/Archives/Archive133.arch A /issm/trunk-jpl/test/Archives/Archive491.arch  
A /issm/trunk-jpl/test/Archives/Archive492.arch A /issm/trunk-jpl/test/Archives/Archive493.arch  
A /issm/trunk-jpl/test/Archives/Archive494.arch A /issm/trunk-jpl/test/Archives/Archive495.arch  
A /issm/trunk-jpl/test/NightlyRun/test131.m A /issm/trunk-jpl/test/NightlyRun/test131.py  
A /issm/trunk-jpl/test/NightlyRun/test132.m A /issm/trunk-jpl/test/NightlyRun/test132.py  
A /issm/trunk-jpl/test/NightlyRun/test133.m A /issm/trunk-jpl/test/NightlyRun/test133.py  
A /issm/trunk-jpl/test/NightlyRun/test491.m A /issm/trunk-jpl/test/NightlyRun/test491.py  
A /issm/trunk-jpl/test/NightlyRun/test492.m A /issm/trunk-jpl/test/NightlyRun/test492.py  
A /issm/trunk-jpl/test/NightlyRun/test493.m A /issm/trunk-jpl/test/NightlyRun/test493.py  
A /issm/trunk-jpl/test/NightlyRun/test494.m A /issm/trunk-jpl/test/NightlyRun/test494.py  
A /issm/trunk-jpl/test/NightlyRun/test495.m A /issm/trunk-jpl/test/NightlyRun/test495.py

Export determination: 6.

Rationale: ADD: added tests to check stabilization schemes for mass transport equation

**Change #323** with diff file ISSM-26160-26161.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: better error message:

**Change #324** with diff file ISSM-26161-26162.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added super cool function to refine 4x a mesh automatically

**Change #325** with diff file ISSM-26162-26163.diff:

Function name:

M /issm/trunk-jpl/examples/Inversion/runme.m M /issm/trunk-jpl/jenkins/examples\_tests.sh

Export determination: 6.

Rationale: CHG: Minor formatting

**Change #326** with diff file ISSM-26163-26164.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test494.py

Export determination: 6.

Rationale: CHG: Corrected tolerances

**Change #327** with diff file ISSM-26164-26165.diff:

Function name:

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

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

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

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

Export determination: 6.

Rationale: CHG: test2002 replicated between old and new code.

**Change #328** with diff file ISSM-26165-26166.diff:

Function name:

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

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

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

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

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

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

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

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

M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/test/NightlyRun/test2001.m

M /issm/trunk-jpl/test/NightlyRun/test2002.m

Export determination: 6.

Rationale: CHG: hooking the new optimized code and removing the old one.

Moving everything away from FemModel into the sea level core (including Ivins deformation model).

**Change #329** with diff file ISSM-26166-26167.diff:

Function name:

A /issm/trunk-jpl/src/m/contrib/dlcheng/zoneaverage.m

Export determination: 6.

Rationale: ADD: initial zoneaverage function for distance/area weighted averaging of fields using another field.

**Change #330** with diff file ISSM-26167-26168.diff:

Function name:

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

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

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

Export determination: 6.

Rationale: CHG: fixing AD with new LevelsetAverage

**Change #331** with diff file ISSM-26168-26169.diff:

Function name:

M /issm/trunk-jpl/jenkins/ross-win-msys2-mingw-msmpi-basic M /issm/trunk-

jpl/src/m/classes/clusters/generic.m

Export determination: 6.

Rationale: CHG: Deactivating tests for restart under Windows (for now)

**Change #332** with diff file ISSM-26169-26170.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test494.m M /issm/trunk-jpl/test/NightlyRun/test494.py

Export determination: 6.

Rationale: CHG: Eased tolerances

**Change #333** with diff file ISSM-26170-26171.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: implemented transientinput marshall

**Change #334** with diff file ISSM-26171-26172.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Better library discovery for Python installed via Homebrew

**Change #335** with diff file ISSM-26172-26173.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added support for DatasetInput

**Change #336** with diff file ISSM-26173-26174.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test494.m M /issm/trunk-jpl/test/NightlyRun/test494.py

Export determination: 6.

Rationale: CHG: Eased tolerances

**Change #337** with diff file ISSM-26174-26175.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed

**Change #338** with diff file ISSM-26175-26176.diff:

Function name:

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

Export determination: 6.

Rationale: BUG:fixed a bug to get NaN when using Schoof law with AD

**Change #339** with diff file ISSM-26176-26177.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test494.m M /issm/trunk-jpl/test/NightlyRun/test494.py

Export determination: 6.

Rationale: CHG: Eased tolerances

**Change #340** with diff file ISSM-26177-26178.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removing smb\_core call from hydr as it is dealt with differently now

**Change #341** with diff file ISSM-26178-26179.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/dslmme.py M /issm/trunk-jpl/src/m/classes/lovenumbers.py

M /issm/trunk-jpl/src/m/classes/nodalvalue.py M /issm/trunk-jpl/src/m/classes/rotational.py

M /issm/trunk-jpl/src/m/classes/solidearthsettings.py M /issm/trunk-jpl/src/m/classes/surfaceload.py

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

M /issm/trunk-jpl/src/m/contrib/defleurian/netCDF/export\_netCDF.py M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.py

Export determination: 6.

Rationale: CHG: minor syntax

**Change #342** with diff file ISSM-26179-26180.diff:

Function name:

D /issm/trunk-jpl/src/m/classes/clusters/stallo.m D /issm/trunk-jpl/src/m/classes/clusters/stallo.py

Export determination: 6.

Rationale: CHG: decomissioned clusters

**Change #343** with diff file ISSM-26180-26181.diff:

Function name:

M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py

Export determination: 6.

Rationale: CHG: adding range type to some functions type possibilities

**Change #344** with diff file ISSM-26181-26182.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: adding special case for ints

**Change #345** with diff file ISSM-26182-26183.diff:

Function name:

M /issm/trunk-jpl/src/m/plot/plotmodel.py

Export determination: 6.

Rationale: CHG: better subplot handling

**Change #346** with diff file ISSM-26183-26184.diff:

Function name:

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

D /issm/trunk-jpl/src/m/classes/clusters/vilje.m D /issm/trunk-jpl/src/m/classes/clusters/vilje.py

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

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

M /issm/trunk-jpl/src/m/dev/devpath.py M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m

M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py M /issm/trunk-

jpl/src/m/miscellaneous/normfit\_issm.py M /issm/trunk-jpl/src/m/partition/partitioner.py

M /issm/trunk-jpl/src/m/qmu/dakota\_out\_parse.py M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.py

Export determination: 6.

Rationale: CHG: cleaning decomissioned clusters

**Change #347** with diff file ISSM-26184-26185.diff:

Function name:

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

(from /issm/trunk-jpl/src/m/classes/clusters/hexagon.py:26182) A /issm/trunk-

jpl/src/m/classes/clusters/vilje.m (from /issm/trunk-jpl/src/m/classes/clusters/vilje.m:26182)

A /issm/trunk-jpl/src/m/classes/clusters/vilje.py (from /issm/trunk-jpl/src/m/classes/clusters/vilje.py:26182)

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

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

M /issm/trunk-jpl/src/m/dev/devpath.py M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m

M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py M /issm/trunk-

jpl/src/m/miscellaneous/normfit\_issm.py M /issm/trunk-jpl/src/m/partition/partitioner.py

M /issm/trunk-jpl/src/m/plot/plotmodel.py M /issm/trunk-jpl/src/m/qmu/dakota\_out\_parse.py

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

Export determination: 6.

Rationale: BUG:reverting unwanted changes

**Change #348** with diff file ISSM-26185-26186.diff:

Function name:

D /issm/trunk-jpl/src/m/classes/clusters/hexagon.py D /issm/trunk-jpl/src/m/classes/clusters/vilje.m

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

Export determination: 6.

Rationale: CHG: cleaning decomissioned clusters

**Change #349** with diff file ISSM-26186-26187.diff:

Function name:

M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py

Export determination: 6.

Rationale: BUG: range seems to be an issue, reverting for now

**Change #350** with diff file ISSM-26187-26188.diff:

Function name:

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

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

/issm/trunk-jpl/src/m/classes/friction.py M /issm/trunk-jpl/src/m/classes/frictionschoof.m

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

Export determination: 6.

Rationale: CHG: added possibility to couple with fricton schoof

**Change #351** with diff file ISSM-26188-26189.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineAntarctica.m

Export determination: 6.

Rationale: BUG: fixing path

**Change #352** with diff file ISSM-26189-26190.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test494.m M /issm/trunk-jpl/test/NightlyRun/test494.py

Export determination: 6.

Rationale: CHG: Eased tolerances

**Change #353** with diff file ISSM-26190-26191.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Create optional output directory for examples datasets if it does not already exist

**Change #354** with diff file ISSM-26191-26192.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor

**Change #355** with diff file ISSM-26192-26193.diff:

Function name:

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

jpl/src/c/shared/Enum/Enum.vim 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/flowequation.m M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.m

Export determination: 6.

Rationale: CHG: working on Mono Layer. Keeping Shear velocities in inputs (VxShear/VyShear). VxBase/VyBase are now Vx/Vy

**Change #356** with diff file ISSM-26193-26194.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: change python file too

**Change #357** with diff file ISSM-26194-26195.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor

**Change #358** with diff file ISSM-26195-26196.diff:

Function name:

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

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

M /issm/trunk-jpl/src/m/classes/timesteppingadaptive.m M /issm/trunk-jpl/src/m/classes/timesteppingadap

Export determination: 6.

Rationale: CHG: added cycle through forcing field, not implemented in C++  
yet

**Change #359** with diff file ISSM-26196-26197.diff:

Function name:

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

M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/classes/Params/TransientA

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

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

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

/issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

Export determination: 6.

Rationale: CHG: preparing for cycling forcing

**Change #360** with diff file ISSM-26197-26198.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added cycling inputs

**Change #361** with diff file ISSM-26198-26199.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test493.m M /issm/trunk-jpl/test/NightlyRun/test493.py

Export determination: 6.

Rationale: CHG: Eased tolerances

**Change #362** with diff file ISSM-26199-26200.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp  
Export determination: 6.  
Rationale: CHG: hack for Nicole

**Change #363** with diff file ISSM-26200-26201.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp  
Export determination: 6.  
Rationale: CHG: added comment

**Change #364** with diff file ISSM-26201-26202.diff:  
Function name:  
M /issm/trunk-jpl/src/Makefile.am D /issm/trunk-jpl/src/mobile  
Export determination: 6.  
Rationale: CHG: not needed anymore

**Change #365** with diff file ISSM-26202-26203.diff:  
Function name:  
M /issm/trunk-jpl/src/m/exp/expcontourlevelzero.m  
Export determination: 6.  
Rationale: CHG: minor more doc

**Change #366** with diff file ISSM-26203-26204.diff:  
Function name:  
M /issm/trunk-jpl/configure.ac  
Export determination: 6.  
Rationale: CHG: no more mobile

**Change #367** with diff file ISSM-26204-26205.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim  
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/solve/parseresultsfromdisk.py  
 M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.py  
 Export determination: 6.  
 Rationale: CHG: working on MLHO, adding new Enums: vxBase, vyBase, vxSurface, vySurface

**Change #368** with diff file ISSM-26205-26206.diff:  
 Function name:  
 M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp  
 Export determination: 6.  
 Rationale: CHG: working on mlho: computing vertically averaged velocities

**Change #369** with diff file ISSM-26206-26207.diff:  
 Function name:  
 M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.h  
 Export determination: 6.  
 Rationale: BUG: fixing friction computation for MLHO

**Change #370** with diff file ISSM-26207-26208.diff:  
 Function name:  
 M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp  
 Export determination: 6.  
 Rationale: CGH:minor change in seed for transient sampling

**Change #371** with diff file ISSM-26208-26209.diff:  
 Function name:  
 M /issm/trunk-jpl/examples/SlrGRACE/runme.m M /issm/trunk-jpl/examples/SlrGRACE\_NIMS/runme.m  
 M /issm/trunk-jpl/src/c/analyses/SmbAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp  
 M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/Gembx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/SMBcomponents.m M /issm/trunk-jpl/src/m/classes/SMBcomponents.py

M /issm/trunk-jpl/src/m/classes/SMBforcing.m M /issm/trunk-jpl/src/m/classes/SMBforcing.py  
M /issm/trunk-jpl/src/m/classes/SMBgemb.m M /issm/trunk-jpl/src/m/classes/SMBgemb.py  
M /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.m M /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.py  
M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/timestepping.m  
M /issm/trunk-jpl/src/m/classes/timestepping.py M /issm/trunk-jpl/src/m/classes/timesteppingadaptive.m  
M /issm/trunk-jpl/src/m/classes/timesteppingadaptive.py M /issm/trunk-jpl/test/NightlyRun/test240.m  
M /issm/trunk-jpl/test/NightlyRun/test240.py M /issm/trunk-jpl/test/NightlyRun/test241.m  
M /issm/trunk-jpl/test/NightlyRun/test241.py M /issm/trunk-jpl/test/NightlyRun/test242.m  
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M /issm/trunk-jpl/test/NightlyRun/test247.py M /issm/trunk-jpl/test/NightlyRun/test252.m  
M /issm/trunk-jpl/test/NightlyRun/test252.py M /issm/trunk-jpl/test/NightlyRun/test253.m  
M /issm/trunk-jpl/test/NightlyRun/test253.py M /issm/trunk-jpl/test/NightlyRun/test292.m  
M /issm/trunk-jpl/test/NightlyRun/test292.py M /issm/trunk-jpl/test/NightlyRun/test3201.m  
M /issm/trunk-jpl/test/NightlyRun/test3202.m M /issm/trunk-jpl/test/NightlyRun/test3480.m  
M /issm/trunk-jpl/test/NightlyRun/test3481.m M /issm/trunk-jpl/test/NightlyRun/test352.m  
M /issm/trunk-jpl/test/NightlyRun/test352.py M /issm/trunk-jpl/test/NightlyRun/test353.m  
M /issm/trunk-jpl/test/NightlyRun/test353.py M /issm/trunk-jpl/test/NightlyRun/test354.m  
M /issm/trunk-jpl/test/NightlyRun/test354.py

Export determination: 6.

Rationale: CHG: clean up GEMB, change interp\_forcings to interp\_forcing, isclimatology is now cycle\_forcing

**Change #372** with diff file ISSM-26209-26210.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMBcomponents.m M /issm/trunk-jpl/src/m/classes/SMBforcing.m  
M /issm/trunk-jpl/src/m/classes/SMBgemb.m M /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.m  
M /issm/trunk-jpl/src/m/classes/model.m

Export determination: 6.

Rationale: BUG: isclimatology not transferring correctly to cycle\_forcing from SMB in old models

**Change #373** with diff file ISSM-26210-26211.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: removing Smb MassBalance Clim enum

**Change #374** with diff file ISSM-26211-26212.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/install.sh

Export determination: 6.

Rationale: BUG: Temporary freeze of MITgcm until inconsistency with repo head is resolved

**Change #375** with diff file ISSM-26212-26213.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Correction to default install path

**Change #376** with diff file ISSM-26213-26214.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing solid earth loader

**Change #377** with diff file ISSM-26214-26215.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: remove quotation marks that csh on pfe does not like

**Change #378** with diff file ISSM-26215-26216.diff:

Function name:

M /issm/trunk-jpl/externalpackages/dakota/configs/6.2/BuildDakotaCustom.cmake.pfe.patch

M /issm/trunk-jpl/externalpackages/dakota/install-6.2-pleiades.sh

Export determination: 6.

Rationale: CHG: use dakota shared libs and update mpi libraries on pfe build

**Change #379** with diff file ISSM-26216-26217.diff:

Function name:  
M /issm/trunk-jpl/test/MITgcm/install.sh  
Export determination: 6.  
Rationale: CHG: Reverting to using repo head

**Change #380** with diff file ISSM-26217-26218.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive4001.arch  
Export determination: 6.  
Rationale: FIX: updating ice-ocean archive

**Change #381** with diff file ISSM-26218-26219.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive4002.arch  
Export determination: 6.  
Rationale: FIX: new archive test4002

**Change #382** with diff file ISSM-26219-26220.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/applyoptions.m  
Export determination: 6.  
Rationale: CHG: new contours rendering routine.

**Change #383** with diff file ISSM-26220-26221.diff:  
Function name:  
M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m  
Export determination: 6.  
Rationale: CHG: make sure gmshplanet returns a round planet :) Not a tessalated set of triangle planar faces.

**Change #384** with diff file ISSM-26221-26222.diff:  
Function name:  
M /issm/trunk-jpl/src/m/exp/contourlevelzero.m

Export determination: 6.  
Rationale: CHG: extended to a 3D plot type.

**Change #385** with diff file ISSM-26222-26223.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Dakota/IssmParallelDirectApplicInterface.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.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 A /issm/trunk-jpl/src/c/classes/SealevelGeometry.cpp  
A /issm/trunk-jpl/src/c/classes/SealevelGeometry.h D /issm/trunk-jpl/src/c/classes/SealevelMasks.h  
M /issm/trunk-jpl/src/c/classes/classes.h A /issm/trunk-jpl/src/c/cores/WrapperPreCorePointerFromSolution  
M /issm/trunk-jpl/src/c/cores/cores.h M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/modules/ElementCoordinates/El  
M /issm/trunk-jpl/src/c/modules/ElementCoordinates/ElementCoordinates.h  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/StringTo  
M /issm/trunk-jpl/src/m/classes/constants.m M /issm/trunk-jpl/src/m/classes/solidearthsettings.m  
M /issm/trunk-jpl/test/Archives/Archive2002.arch A /issm/trunk-jpl/test/Archives/Archive2011.arch  
M /issm/trunk-jpl/test/NightlyRun/test2002.m A /issm/trunk-jpl/test/NightlyRun/test2011.m

Export determination: 6.

Rationale: CHG: Mathieu, here it is, just one year too late :) or one year early depending on how you see it. Dakota: pre core capability, for things called only once prior to sampling, which could not be called in the ModelProcessorx. SealevelGeometry now used to optimize structures passed between sea level cores. SealevelMasks: gone. Mask logic now moved to the geometry core in the sea level solution. We now compute barycentres of loads, for elements that can be intersected by up to two levelsets. Allows for loading differentially for hydro, ice, bp and ocean loads. Essentially a sub-element parameterization of sea level solver.

**Change #386** with diff file ISSM-26223-26224.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/DamageEvolutionAnalysis.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
M /issm/trunk-jpl/src/c/classes/SealevelGeometry.cpp M /issm/trunk-jpl/src/c/classes/SealevelGeometry.h  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_fct.cpp

Export determination: 6.

Rationale: CHG: trying to fix Eric's commit

**Change #387** with diff file ISSM-26224-26225.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: trying to fix Eric's commit

**Change #388** with diff file ISSM-26225-26226.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: adding .constants.gravitational\_constant to python class

**Change #389** with diff file ISSM-26226-26227.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp M /issm/trunk-jpl/test/Archives/Archive352.arch

M /issm/trunk-jpl/test/Archives/Archive353.arch M /issm/trunk-jpl/test/Archives/Archive354.arch

Export determination: 6.

Rationale: CHG: allow for cycle\_forcing before first forcing stamp

**Change #390** with diff file ISSM-26227-26228.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/classes/Elements/Element.h

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

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

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

A /issm/trunk-jpl/src/c/classes/GrdLoads.h M /issm/trunk-jpl/src/c/classes/classes.h

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

Export determination: 6.

Rationale: CHG: lumping all loads into a new class GrdLoads.

**Change #391** with diff file ISSM-26228-26229.diff:

Function name:

A /issm/trunk-jpl/src/m/contrib/tsantos/integrate\_field.m

Export determination: 6.

Rationale: ADD: function to integrate a field over a 2d mesh

**Change #392** with diff file ISSM-26229-26230.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/offlinesolidearthsolution.m M /issm/trunk-jpl/src/m/classes/solidearthsetting

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

Export determination: 6.

Rationale: CHG: basic checks + rate computation.

**Change #393** with diff file ISSM-26230-26231.diff:

Function name:

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

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

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

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

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

Export determination: 6.

Rationale: CHG: speed up of the convolutions by 2/3.

**Change #394** with diff file ISSM-26231-26232.diff:

Function name:

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

jpl/src/m/classes/dsl.m M /issm/trunk-jpl/src/m/classes/dslmme.m M /issm/trunk-

jpl/src/m/classes/mmeadditionalsolidearthsolution.m M /issm/trunk-jpl/src/m/classes/mmeofflinesolidearths

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

Export determination: 6.

Rationale: dsl class: no need to check consistency if transient.isoceantransport=0;

solidearthsolution subclasses: fixing marshall for external.nature

**Change #395** with diff file ISSM-26232-26233.diff:

Function name:

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

Export determination: 6.  
Rationale: Adding support for rotationnal feedback in bed Up, East, North

**Change #396** with diff file ISSM-26233-26234.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/m/classes/fourierlove.m

M /issm/trunk-jpl/src/m/classes/lovenumbers.m M /issm/trunk-jpl/src/m/classes/materials.m

Export determination: 6.

Rationale: adding new formalism for lovenumbers

**Change #397** with diff file ISSM-26234-26235.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LoveAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Materials/Matlitho.cpp

M /issm/trunk-jpl/src/c/classes/Materials/Matlitho.h M /issm/trunk-jpl/src/c/modules/ModelProcessor/Cr

Export determination: 6.

Rationale: adding new formalism for lovenumbers

**Change #398** with diff file ISSM-26235-26236.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2084.m

Export determination: 6.

Rationale: updating test2084 for fourierlove

**Change #399** with diff file ISSM-26236-26237.diff:

Function name:

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

Export determination: 6.

Rationale: adding new formalism for lovenumbers

**Change #400** with diff file ISSM-26237-26238.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor

**Change #401** with diff file ISSM-26238-26239.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: typo in GErotm1,2,3 and pole singularity in function Sealevelchange-GeometryInitial

**Change #402** with diff file ISSM-26239-26240.diff:

Function name:

M /issm/trunk-jpl/externalpackages/emscripten/install.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.12-linux.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.13-pleiades.sh

M /issm/trunk-jpl/externalpackages/petsc/install-3.14-linux.sh

Export determination: 6.

Rationale: CHG: Varied clean up

**Change #403** with diff file ISSM-26240-26241.diff:

Function name:

D /issm/trunk-jpl/externalpackages/dakota/configs/6.2/mac/packages A /issm/trunk-jpl/externalpackages/dakota/configs/6.2/packages/VPISparseGrid (from /issm/trunk-jpl/externalpackages/dakota/configs/6.2/mac/packages/VPISparseGrid:26238) M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-mac-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-mac.sh

Export determination: 6.

Rationale: CHG: Linux installation with newer versions of GCC need patch used in macOS installation of Dakota

**Change #404** with diff file ISSM-26241-26242.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/basalforcings.py M /issm/trunk-jpl/src/m/classes/initialization.m

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

Export determination: 6.

Rationale: CHG: fixing initialization.sealevel to be a time series

**Change #405** with diff file ISSM-26242-26243.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LoveAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/ExternalResults/Generic  
M /issm/trunk-jpl/src/c/cores/love\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/shared/Numerics/types.  
M /issm/trunk-jpl/src/m/classes/fourierlove.m M /issm/trunk-jpl/src/m/solve/loadresultfromdisk.m  
M /issm/trunk-jpl/test/NightlyRun/test2084.m

Export determination: 6.

Rationale: CHG: implemented templated version of the love\_core routine, to allow for IssmComplex and (IssmQuad tuypes in the future). Created new IssmComplex type.

**Change #406** with diff file ISSM-26243-26244.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Numerics/types.h

Export determination: 6.

Rationale: BUG: fixing CoDiPack

**Change #407** with diff file ISSM-26244-26245.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Numerics/types.h

Export determination: 6.

Rationale: BUG: fixing CoDiPack

**Change #408** with diff file ISSM-26245-26246.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/cores/love\_core.cpp

Export determination: 6.

Rationale: CHG: fixing some love stuff

**Change #409** with diff file ISSM-26246-26247.diff:

Function name:

A /issm/trunk-jpl/externalpackages/dakota/configs/6.2/packages/queso A /issm/trunk-jpl/externalpackages/dakota/configs/6.2/packages/queso/src A /issm/trunk-jpl/externalpackages/dakota/configs/6.2/packages/queso/src/misc/src A /issm/trunk-jpl/externalpackages/dakota/configs/6.2/packages/queso/src/misc/src/1DQuadrature.C M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-mac-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-mac.sh D /issm/trunk-jpl/externalpackages/gmt/configs/6/cmake A /issm/trunk-jpl/externalpackages/gmt/configs/6/linux/cmake A /issm/trunk-jpl/externalpackages/gmt/configs/6/linux/cmake/ConfigUser.cmake A /issm/trunk-jpl/externalpackages/gmt/configs/6/mac/cmake (from /issm/trunk-jpl/externalpackages/gmt/configs/6/cmake:26245) D /issm/trunk-jpl/externalpackages/gmt/configs/6/static/cmake/ConfigUser.static.cmake A /issm/trunk-jpl/externalpackages/gmt/configs/6/static/linux A /issm/trunk-jpl/externalpackages/gmt/configs/6/static/linux/cmake/ConfigUser.static.cmake A /issm/trunk-jpl/externalpackages/gmt/configs/6/static/mac A /issm/trunk-jpl/externalpackages/gmt/configs/6/static/mac/cmake A /issm/trunk-jpl/externalpackages/gmt/configs/6/static/mac/cmake/ConfigUser.static.cmake:26245) M /issm/trunk-jpl/externalpackages/gmt/install-6-linux-static.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-linux.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-mac-static.sh M /issm/trunk-jpl/externalpackages/gmt/install-6-mac.sh

Export determination: 6.

Rationale: CHG: Modifications to support newer versions of GCC/GFortran

**Change #410** with diff file ISSM-26247-26248.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing compiler warnings

**Change #411** with diff file ISSM-26248-26249.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2003.m

A /issm/trunk-jpl/test/NightlyRun/test2007.m

Export determination: 6.

Rationale: NEW: test 2007 for class offlinesolidearth solution. CHG: updated tests 2002, 2003 for the new sealevelchange core.

**Change #412** with diff file ISSM-26249-26250.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: in love\_core: dydx was not reinitialized at each call of yi\_derivatives;  
la, mu not properly handled in all cases in GetEarthRheology

**Change #413** with diff file ISSM-26250-26251.diff:

Function name:

M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux-static.sh M /issm/trunk-jpl/externalpackages/dakota/install-6.2-linux.sh

Export determination: 6.

Rationale: CHG: Removing fortran flag until testing server copy of gfortran is updated

**Change #414** with diff file ISSM-26251-26252.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Numerics/types.h

Export determination: 6.

Rationale: CHG: temporary fix for ADOLC, acomplex is not defined

**Change #415** with diff file ISSM-26252-26253.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am A /issm/trunk-jpl/src/c/classes/Cflevelsetmisfit.cpp

A /issm/trunk-jpl/src/c/classes/Cflevelsetmisfit.h M /issm/trunk-jpl/src/c/classes/classes.h

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

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h A /issm/trunk-jpl/src/m/classes/cflevelsetmisfit.m

M /issm/trunk-jpl/src/m/classes/cfsurfacelogvel.m M /issm/trunk-jpl/src/m/classes/cfsurfacesquare.m

Export determination: 6.

Rationale: NEW: add an output definition for computing the misfit between  
two levelset functions

**Change #416** with diff file ISSM-26253-26254.diff:

Function name:

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

Export determination: 6.  
Rationale: BUG: problem when multiple marshalled Double have the same name

**Change #417** with diff file ISSM-26254-26255.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Cflevelsetmisfit.cpp  
Export determination: 6.  
Rationale: CHG: implemented marshall for CfLevelset

**Change #418** with diff file ISSM-26255-26256.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Cflevelsetmisfit.cpp  
M /issm/trunk-jpl/src/c/datastructures/DataSet.cpp A /issm/trunk-jpl/test/Archives/Archive3203.arch  
A /issm/trunk-jpl/test/NightlyRun/test3203.m  
Export determination: 6.  
Rationale: CHG: add marshall and a test for the levelset misfit output definition

**Change #419** with diff file ISSM-26256-26257.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Cflevelsetmisfit.h  
Export determination: 6.  
Rationale: CHG: Revert LevelsetAnalysis.cpp to r26254 and remove unnecessary variables in Cflevelsetmisfit

**Change #420** with diff file ISSM-26257-26258.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive2002.arch M /issm/trunk-jpl/test/Archives/Archive2003.arch  
Export determination: 6.  
Rationale: CHG: Updated archives

**Change #421** with diff file ISSM-26258-26259.diff:  
Function name:

M /issm/trunk-jpl/examples/EsaGRACE/runme.m M /issm/trunk-jpl/examples/EsaWahr/runme.m  
M /issm/trunk-jpl/examples/Functions/grace.m M /issm/trunk-jpl/examples/SlrFarrell/runme.m  
M /issm/trunk-jpl/examples/SlrGRACE/runme.m  
Export determination: 6.  
Rationale: CHG: slrGRACE and associated function updated up to steps 5

**Change #422** with diff file ISSM-26259-26260.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: steps 6 and 7 are updated. some aspects are still unclear, e.g., whether GRACE monthly solutions should be cumsum'ed

**Change #423** with diff file ISSM-26260-26261.diff:

Function name:

D /issm/trunk-jpl/examples/SlrGRACE\_NIMS

Export determination: 6.

Rationale: DEL: this was adapted from SlrGRACE for the NIMS workshop, tailored to the Korean folks. I don't think we should keep it here

**Change #424** with diff file ISSM-26261-26262.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: looks like cumsum is not needed for GRACE data, but Cum-Blsc should be plotted instead of Blsc

**Change #425** with diff file ISSM-26262-26263.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth A /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth-lambert (from /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth:26261)

M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth

Export determination: 6.

Rationale: CHG: New Jenkins script and removal of failing tests from SE builds so that Lambert can continue to debug

**Change #426** with diff file ISSM-26263-26264.diff:

Function name:

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

Export determination: 6.

Rationale: minor

**Change #427** with diff file ISSM-26264-26265.diff:

Function name:

A /issm/trunk-jpl/src/m/contrib/adhikari/wahr.m

Export determination: 6.

Rationale: NEW: a semi-analytic function to compute 3D crustal motion due to a disc load

**Change #428** with diff file ISSM-26265-26266.diff:

Function name:

D /issm/trunk-jpl/examples/Functions/wahr.m

Export determination: 6.

Rationale: DEL: this function is now moved to m/contrib/adhikari

**Change #429** with diff file ISSM-26266-26267.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/adhikari/wahr.m

Export determination: 6.

Rationale: minor

**Change #430** with diff file ISSM-26267-26268.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/adhikari/wahr.m

Export determination: 6.

Rationale: minor

**Change #431** with diff file ISSM-26268-26269.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2002.m

Export determination: 6.

Rationale: CHG: viscous field on test2002.

**Change #432** with diff file ISSM-26269-26270.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2003.m

Export determination: 6.

Rationale: CHG: missing viscous field.

**Change #433** with diff file ISSM-26270-26271.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth M /issm/trunk-jpl/jenkins/ross-

debian\_linux-solid\_earth M /issm/trunk-jpl/test/Archives/Archive2002.arch M

/issm/trunk-jpl/test/Archives/Archive2003.arch

Export determination: 6.

Rationale: CHG: Updated archives; modified test suites

**Change #434** with diff file ISSM-26271-26272.diff:

Function name:

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

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

M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

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

M /issm/trunk-jpl/test/Archives/Archive243.arch M /issm/trunk-jpl/test/NightlyRun/test243.m

M /issm/trunk-jpl/test/NightlyRun/test243.py

Export determination: 6.

Rationale: CHG: add rain and refreeze outputs to GEMB, update melt to not have rain included

**Change #435** with diff file ISSM-26272-26273.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
M /issm/trunk-jpl/src/c/classes/Elements/Seg.h M /issm/trunk-jpl/src/c/classes/Elements/Tetra.h  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/Elements/Tria.h  
M /issm/trunk-jpl/src/c/cores/love\_core.cpp M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/lovenumbers.m M /issm/trunk-jpl/src/m/classes/solidearthsettings.m  
A /issm/trunk-jpl/test/NightlyRun/test2090.m  
Export determination: 6.  
Rationale: CHG: visco elastic solid-Earth/sea-level solver now activated.

**Change #436** with diff file ISSM-26273-26274.diff:

Function name:  
M /issm/trunk-jpl/packageagers/linux/complete-issm-linux-binaries-matlab.sh M /issm/trunk-jpl/packageagers/linux/complete-issm-linux-binaries-python.sh  
Export determination: 6.  
Rationale: CHG: Ensure that Linux binaries are written with .tar.gz extension

**Change #437** with diff file ISSM-26274-26275.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.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/mmeadditionalssolidearthsolution.m  
M /issm/trunk-jpl/src/m/classes/mmeofflinesolidearthsolution.m M /issm/trunk-jpl/src/m/classes/solidearthsolution.m M /issm/trunk-jpl/test/NightlyRun/test2007.m  
A /issm/trunk-jpl/test/NightlyRun/test2008.m  
Export determination: 6.  
Rationale: CHG: removing BarystaticSealevel field from SolidEarth External solution. NEW: test2008 for additionalssolidearthsolution class

**Change #438** with diff file ISSM-26275-26276.diff:

Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: BUG: minus sign missing in polenudge exponent in SealevelchangeInitialGeometry

**Change #439** with diff file ISSM-26276-26277.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing CoDiPack on greenplanet

**Change #440** with diff file ISSM-26277-26278.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing bad for loop variable repeating another one

**Change #441** with diff file ISSM-26278-26279.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing CoDiPack

**Change #442** with diff file ISSM-26279-26280.diff:

Function name:

A /issm/trunk-jpl/src/m/contrib/adhikari/miscellaneous A /issm/trunk-jpl/src/m/contrib/adhikari/miscellaneous

Export determination: 6.

Rationale: NEW: some useful miscellaneous functions

**Change #443** with diff file ISSM-26280-26281.diff:

Function name:

D /issm/trunk-jpl/src/m/contrib/adhikari/miscellaneous/fractionYear2Datetime.m

Export determination: 6.

Rationale: DEL: duplicate function

**Change #444** with diff file ISSM-26281-26282.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Massfluxatgate.h M /issm/trunk-jpl/src/c/datastructures/DataSet.cpp

Export determination: 6.

Rationale: BUG: fixing Massfluxgate in AD when using checkpoint

**Change #445** with diff file ISSM-26282-26283.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: temporary fix

**Change #446** with diff file ISSM-26283-26284.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/classes/BarystaticContributions.cpp M /issm/trunk-jpl/src/c/classes/BarystaticContributions.h M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/test/Data/lmb\_temporal.mat M /issm/trunk-jpl/test/NightlyRun/test2090.m

Export determination: 6.

Rationale: CHG: grdcore viscous mode now computes the delta\_deformation between two calls rather than the total deformation, in line with elastic mode. BUG: Fixing issues related to viscous stack & resetting barystatic contribs every call in order to shift sealevel fields by the delta\_barycontrib instead of cumulated barycontrib.

**Change #447** with diff file ISSM-26284-26285.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2090.m

Export determination: 6.

Rationale: BUG: typo in test2090

**Change #448** with diff file ISSM-26285-26286.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/BarystaticContributions.cpp M /issm/trunk-jpl/src/c/classes/BarystaticContributions.h M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp

Export determination: 6.

Rationale: CHG: easier way to reset barystatic contributors.

**Change #449** with diff file ISSM-26286-26287.diff:

Function name:

M /issm/trunk-jpl/examples/EsaGRACE/runme.m M /issm/trunk-jpl/examples/EsaWahr/runme.m

Export determination: 6.

Rationale: BUG: Corrected default value of ‘steps’ that jenkins/examples\_tests.sh expects; minor formatting cleanup

**Change #450** with diff file ISSM-26287-26288.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing bad commit

**Change #451** with diff file ISSM-26288-26289.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: grace function requires info about whether we want to map data on the vertices or elemental centroids

**Change #452** with diff file ISSM-26289-26290.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Corrected default value of ‘steps’ that jenkins/examples\_tests.sh expects

**Change #453** with diff file ISSM-26290-26291.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed ice-ocean BC for MLHO

**Change #454** with diff file ISSM-26291-26292.diff:

Function name:

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

Export determination: 6.

Rationale: lonestar cluster, correctly calculate number of cpus requested

**Change #455** with diff file ISSM-26292-26293.diff:

Function name:

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

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

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

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

Export determination: 6.

Rationale: CHG: added viscosity computation for Mono Layer Higher Order model, and added penalty methods for L1L2 and Mono Layer model

**Change #456** with diff file ISSM-26293-26294.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing Thiago's dim that should be an int and not an Issm-Double

**Change #457** with diff file ISSM-26294-26295.diff:

Function name:

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

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

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

M /issm/trunk-jpl/src/c/classes/Materials/Matestar.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/Matlitho.h

Export determination: 6.

Rationale: CHG: updated viscosity computation for MLHO: now we have 4 expressions obtained by numerical integration (it is more consistent).

**Change #458** with diff file ISSM-26295-26296.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added check to make sure each partition has at least one element, otherwise we get weird error messages

**Change #459** with diff file ISSM-26296-26297.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/EsaAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SealevelchangeAnalysis.

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

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

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

M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinition

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

M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/test/NightlyRun/test2001.m

M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2003.m

M /issm/trunk-jpl/test/NightlyRun/test2004.m M /issm/trunk-jpl/test/NightlyRun/test2005.m

M /issm/trunk-jpl/test/NightlyRun/test2006.m M /issm/trunk-jpl/test/NightlyRun/test2007.m

M /issm/trunk-jpl/test/NightlyRun/test2008.m M /issm/trunk-jpl/test/NightlyRun/test2010.m

M /issm/trunk-jpl/test/NightlyRun/test2011.m M /issm/trunk-jpl/test/NightlyRun/test2090.m

Export determination: 6.

Rationale: BUG: BarystaticLoad was considering coastline elements that were fully covered by ice as also fully grounded; CHG: lots of renaming in sealevelchange\_core & analysis; CHG: it is now possible to compute GRD with Barystatic contributions & ocean mass but without sea-level loading

**Change #460** with diff file ISSM-26297-26298.diff:

Function name:

A /issm/trunk-jpl/test/Data/SlcTestMesh.mat

Export determination: 6.

Rationale: NEW:Precomputed mesh for SLC tests to circumvent compability issue of gmsh across platforms

**Change #461** with diff file ISSM-26298-26299.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive2001.arch M /issm/trunk-jpl/test/Archives/Archive2002.arch

M /issm/trunk-jpl/test/Archives/Archive2003.arch M /issm/trunk-jpl/test/Archives/Archive2005.arch

A /issm/trunk-jpl/test/Archives/Archive2007.arch A /issm/trunk-jpl/test/Archives/Archive2008.arch  
M /issm/trunk-jpl/test/Archives/Archive2010.arch M /issm/trunk-jpl/test/Archives/Archive2011.arch  
A /issm/trunk-jpl/test/Archives/Archive2090.arch  
Export determination: 6.  
Rationale: CHG: Updated archives

**Change #462** with diff file ISSM-26299-26300.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/geometry.m M /issm/trunk-jpl/src/m/classes/geometry.py  
M /issm/trunk-jpl/src/m/classes/materials.m M /issm/trunk-jpl/src/m/classes/materials.py  
M /issm/trunk-jpl/src/m/classes/solidearth.m M /issm/trunk-jpl/src/m/classes/solidearth.py  
M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/src/m/classes/solidearthsettings.py  
M /issm/trunk-jpl/test/NightlyRun/test2001.m M /issm/trunk-jpl/test/NightlyRun/test2001.py  
Export determination: 6.  
Rationale: CHG: test2001 MATLAB -j Python; clean up

**Change #463** with diff file ISSM-26300-26301.diff:

Function name:

M /issm/trunk-jpl/src/m/array/arrayoperations.js M /issm/trunk-jpl/src/m/classes/SMBforcing.js  
M /issm/trunk-jpl/src/m/classes/amr.js M /issm/trunk-jpl/src/m/classes/balancethickness.js  
M /issm/trunk-jpl/src/m/classes/calving.js M /issm/trunk-jpl/src/m/classes/constants.js  
M /issm/trunk-jpl/src/m/classes/flowequation.js M /issm/trunk-jpl/src/m/classes/fourierlove.js  
M /issm/trunk-jpl/src/m/classes/friction.js M /issm/trunk-jpl/src/m/classes/geometry.js  
M /issm/trunk-jpl/src/m/classes/groundingline.js M /issm/trunk-jpl/src/m/classes/initialization.js  
M /issm/trunk-jpl/src/m/classes/inversion.js M /issm/trunk-jpl/src/m/classes/issmsettings.js  
M /issm/trunk-jpl/src/m/classes/levelset.js M /issm/trunk-jpl/src/m/classes/mask.js  
M /issm/trunk-jpl/src/m/classes/mesh3dprisms.js M /issm/trunk-jpl/src/m/classes/qmu.js  
M /issm/trunk-jpl/src/m/classes/slr.js M /issm/trunk-jpl/src/m/classes/stressbalance.js  
M /issm/trunk-jpl/src/m/classes/thermal.js M /issm/trunk-jpl/src/m/classes/timestepping.js  
M /issm/trunk-jpl/src/m/classes/trans.js M /issm/trunk-jpl/src/m/plot/applyoptions.js  
A /issm/trunk-jpl/src/m/plot/plot\_contour.js M /issm/trunk-jpl/src/m/plot/plot\_manager.js  
M /issm/trunk-jpl/src/m/plot/plot\_mesh.js M /issm/trunk-jpl/src/m/plot/plot\_overlay.js  
M /issm/trunk-jpl/src/m/plot/plot\_quiver.js M /issm/trunk-jpl/src/m/plot/plot\_transient\_movie.js  
M /issm/trunk-jpl/src/m/plot/plot\_unit.js M /issm/trunk-jpl/src/m/plot/plotdoc.js  
M /issm/trunk-jpl/src/m/plot/plotmodel.js M /issm/trunk-jpl/src/m/solve/WriteData.js  
M /issm/trunk-jpl/src/m/solve/solve.js  
Export determination: 6.  
Rationale: CHG (JS): Large update of JS classes in for solid earth/sea level solver.

**Change #464** with diff file ISSM-26301-26302.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/getlovenumbers.py M /issm/trunk-jpl/src/m/classes/amr.m M /issm/trunk-jpl/src/m/classes/amr.py M /issm/trunk-jpl/src/m/classes/dsl.m M /issm/trunk-jpl/src/m/classes/dsl.py M /issm/trunk-jpl/src/m/classes/fourierlove.m M /issm/trunk-jpl/src/m/classes/fourierlove.py M /issm/trunk-jpl/src/m/classes/geometry.py M /issm/trunk-jpl/src/m/classes/hydrologyshreve.m M /issm/trunk-jpl/src/m/classes/hydrologyshreve.py M /issm/trunk-jpl/src/m/classes/initialization.m M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/lovenumbers.m M /issm/trunk-jpl/src/m/classes/lovenumbers.py M /issm/trunk-jpl/src/m/classes/materials.m M /issm/trunk-jpl/src/m/classes/materials.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/sampling.m M /issm/trunk-jpl/src/m/classes/sampling.py M /issm/trunk-jpl/src/m/classes/solidearth.m M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/src/m/classes/solidearthsettings.py A /issm/trunk-jpl/src/m/classes/solidearthsolution.py M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py M /issm/trunk-jpl/src/m/miscellaneous/PythonFuncs.py M /issm/trunk-jpl/src/m/solve/marshall.m M /issm/trunk-jpl/src/m/solve/marshall.py M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2002.py

Export determination: 6.

Rationale: CHG: test2002 MATLAB -j, Python; clean up

**Change #465** with diff file ISSM-26302-26303.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: reshape(-1, 1) should work but doesn't

**Change #466** with diff file ISSM-26303-26304.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/timestepping.m M /issm/trunk-jpl/src/m/classes/timestepping.py M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2002.py M /issm/trunk-jpl/test/NightlyRun/test2003.m M /issm/trunk-jpl/test/NightlyRun/test2003.py

Export determination: 6.

Rationale: CHG: More translation; test2003.py

**Change #467** with diff file ISSM-26304-26305.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: minor

**Change #468** with diff file ISSM-26305-26306.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/flowequation.js M /issm/trunk-jpl/src/m/classes/fourierlove.js

M /issm/trunk-jpl/src/m/classes/friction.js A /issm/trunk-jpl/src/m/classes/frontalforcings.js

M /issm/trunk-jpl/src/m/classes/geometry.js M /issm/trunk-jpl/src/m/classes/groundingline.js

M /issm/trunk-jpl/src/m/classes/levelset.js A /issm/trunk-jpl/src/m/classes/materials.js

M /issm/trunk-jpl/src/m/classes/mesh3dsurface.js M /issm/trunk-jpl/src/m/classes/model.js

A /issm/trunk-jpl/src/m/classes/sampling.js D /issm/trunk-jpl/src/m/classes/trans.js

A /issm/trunk-jpl/src/m/classes/transient.js (from /issm/trunk-jpl/src/m/classes/trans.js:26304)

M /issm/trunk-jpl/src/m/classes/verbose.js M /issm/trunk-jpl/src/m/solve/WriteData.js

Export determination: 6.

Rationale: CHG (JS): Fixes and updates for remaining JS classes for solid earth/sea-level-solver/test2002.

**Change #469** with diff file ISSM-26306-26307.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/materials.js

Export determination: 6.

Rationale: CHG (JS): materials.js default parameters fix.

**Change #470** with diff file ISSM-26307-26308.diff:

Function name:

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

M /issm/trunk-jpl/src/m/classes/rotational.m M /issm/trunk-jpl/src/m/classes/sealevelmodel.m

M /issm/trunk-jpl/src/m/classes/sealevelmodel.py M /issm/trunk-jpl/src/m/classes/solidearth.m

M /issm/trunk-jpl/src/m/classes/solidearth.py M /issm/trunk-jpl/src/m/classes/solidearthsolution.m

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

Export determination: 6.

Rationale: CHG: Pending minor cleanup

**Change #471** with diff file ISSM-26308-26309.diff:

Function name:

A /issm/trunk-jpl/src/m/boundaryconditions/getlovenumbers.js M /issm/trunk-jpl/src/m/classes/dsl.js M /issm/trunk-jpl/src/m/classes/hydrologyshreve.js M /issm/trunk-jpl/src/m/classes/masstransport.js M /issm/trunk-jpl/src/m/classes/materials.js M /issm/trunk-jpl/src/m/classes/materials.py M /issm/trunk-jpl/src/m/classes/model.js A /issm/trunk-jpl/src/m/classes/rotational.js A /issm/trunk-jpl/src/m/classes/sealevelmodel.js A /issm/trunk-jpl/src/m/classes/solidearth.js A /issm/trunk-jpl/src/m/classes/solidearthsettings.js A /issm/trunk-jpl/src/m/classes/solidearthsolution.js A /issm/trunk-jpl/src/m/geometry/planetradius.js A /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.js

Export determination: 6.

Rationale: CHG: MATLAB -i JS

**Change #472** with diff file ISSM-26309-26310.diff:

Function name:

A /issm/trunk-jpl/src/m/solvers/mumpsoptions.js

Export determination: 6.

Rationale: CHG: mumpsoptions.js

**Change #473** with diff file ISSM-26310-26311.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/hydrologyshreve.m M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.js

Export determination: 6.

Rationale: CHG: Incorporated other functions from Dan; added more functionality to ones/zeros; pending minor cleanup

**Change #474** with diff file ISSM-26311-26312.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/MemOps/MemOps.h

Export determination: 6.

Rationale: CHG: optimize xMemCpy by calling memcpy

**Change #475** with diff file ISSM-26312-26313.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/materials.js

Export determination: 6.

Rationale: CHG: Diff merge of materials class

**Change #476** with diff file ISSM-26313-26314.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/MemOps/MemOps.h

Export determination: 6.

Rationale: BUG: fixing ADOLC that does not like memcpy

**Change #477** with diff file ISSM-26314-26315.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: use any instead of contains for older matlabs

**Change #478** with diff file ISSM-26315-26316.diff:

Function name:

M /issm/trunk-jpl/externalpackages/dakota/configs/6.2/linux/cmake/BuildDakotaCustom.cmake

Export determination: 6.

Rationale: CHG: some linux need MPI\_EXTRA\_LIBRARY for queso

**Change #479** with diff file ISSM-26316-26317.diff:

Function name:

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

Export determination: 6.

Rationale: NEW: offlinesolidearth for python

**Change #480** with diff file ISSM-26317-26318.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/dsl.py M /issm/trunk-jpl/src/m/classes/dslmme.py

M /issm/trunk-jpl/src/m/classes/lovenumbers.py M /issm/trunk-jpl/src/m/classes/matdamageice.py

M /issm/trunk-jpl/src/m/classes/matenhancedice.py M /issm/trunk-jpl/src/m/classes/matestar.py

M /issm/trunk-jpl/src/m/classes/nodalvalue.py M /issm/trunk-jpl/src/m/classes/rotational.py

M /issm/trunk-jpl/src/m/classes/slr.py M /issm/trunk-jpl/src/m/classes/solidearth.py

M /issm/trunk-jpl/src/m/classes/solidearthsettings.py M /issm/trunk-jpl/src/m/classes/solidearthsolution.m  
M /issm/trunk-jpl/src/m/classes/solidearthsolution.py M /issm/trunk-jpl/src/m/classes/surfaceload.py  
Export determination: 6.  
Rationale: BUG: Name change issues, SealevelRISE to SealevelCHANGE, and  
other python fixes

**Change #481** with diff file ISSM-26318-26319.diff:  
Function name:  
M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.py  
Export determination: 6.  
Rationale: BUG: More SealevelRISE to SealevelCHANGE stuff

**Change #482** with diff file ISSM-26319-26320.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/dsl.py  
Export determination: 6.  
Rationale: BUG: fixing checkconsistency returns

**Change #483** with diff file ISSM-26320-26321.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/EnthalpyAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.c  
Export determination: 6.  
Rationale: CHG: removing ToMPISerial

**Change #484** with diff file ISSM-26321-26322.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test455.m M /issm/trunk-jpl/test/NightlyRun/test455.py  
Export determination: 6.  
Rationale: CHG: Eased tolerances

**Change #485** with diff file ISSM-26322-26323.diff:  
Function name:  
A /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.js M /issm/trunk-jpl/src/m/plot/plot\_contour.js

Export determination: 6.  
Rationale: CHG (JS): plot\_contour bug fix. ADD (JS): gmshplanet.js.

**Change #486** with diff file ISSM-26323-26324.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.cpp  
Export determination: 6.  
Rationale: CHG: better echo function for transient inputs

**Change #487** with diff file ISSM-26324-26325.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: use Pid instead of Sid to improve scaling

**Change #488** with diff file ISSM-26325-26326.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/SetActiveNodesLSMx/SetActiveNodesLSMx.cpp  
Export determination: 6.  
Rationale: CHG: use Pid instead of Sid to improve scaling

**Change #489** with diff file ISSM-26326-26327.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp  
Export determination: 6.  
Rationale: CHG: added MICI, commented out for now

**Change #490** with diff file ISSM-26327-26328.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateElementsVerticesAndMaterials.cpp  
Export determination: 6.  
Rationale: CHG: fixing compiler warning

**Change #491** with diff file ISSM-26328-26329.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor

**Change #492** with diff file ISSM-26329-26330.diff:

Function name:

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

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

jpl/src/c/analyses/HydrologyPismAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.cp

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

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

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

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

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

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

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

Export determination: 6.

Rationale: CHG: moving IsFloating to IsAllFloating

**Change #493** with diff file ISSM-26330-26331.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/aurora.m M /issm/trunk-jpl/src/m/classes/clusters/camhpc.m

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

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

M /issm/trunk-jpl/src/m/classes/clusters/hpc.m M /issm/trunk-jpl/src/m/classes/clusters/hpc\_simba.m

M /issm/trunk-jpl/src/m/classes/clusters/lonestar.m M /issm/trunk-jpl/src/m/classes/clusters/maui.m

M /issm/trunk-jpl/src/m/classes/clusters/pfe.m M /issm/trunk-jpl/src/m/classes/clusters/pfe.py

M /issm/trunk-jpl/src/m/classes/clusters/sherlock.m M /issm/trunk-jpl/src/m/classes/clusters/tetralith.m

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

Export determination: 6.

Rationale: CHG: Bringing pfe.py up to date (will ping Basile about this); clean up

**Change #494** with diff file ISSM-26332-26333.diff:

Function name:

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

M /issm/trunk-jpl/src/m/classes/clusters/aurora.m M /issm/trunk-jpl/src/m/classes/clusters/camhpc.m  
M /issm/trunk-jpl/src/m/classes/clusters/castor.m M /issm/trunk-jpl/src/m/classes/clusters/cloud.m  
M /issm/trunk-jpl/src/m/classes/clusters/cosmos.m M /issm/trunk-jpl/src/m/classes/clusters/cyclone.py  
M /issm/trunk-jpl/src/m/classes/clusters/discover.m A /issm/trunk-jpl/src/m/classes/clusters/discover.py  
M /issm/trunk-jpl/src/m/classes/clusters/fram.py M /issm/trunk-jpl/src/m/classes/clusters/gemini.m  
M /issm/trunk-jpl/src/m/classes/clusters/generic.py M /issm/trunk-jpl/src/m/classes/clusters/generic\_static.  
M /issm/trunk-jpl/src/m/classes/clusters/generic\_static.py M /issm/trunk-jpl/src/m/classes/clusters/greenpla  
M /issm/trunk-jpl/src/m/classes/clusters/hpc.m M /issm/trunk-jpl/src/m/classes/clusters/hpc\_simba.m  
M /issm/trunk-jpl/src/m/classes/clusters/local.m M /issm/trunk-jpl/src/m/classes/clusters/localpfe.m  
M /issm/trunk-jpl/src/m/classes/clusters/lonestar.m M /issm/trunk-jpl/src/m/classes/clusters/maui.m  
M /issm/trunk-jpl/src/m/classes/clusters/pfe.m M /issm/trunk-jpl/src/m/classes/clusters/pfe.py  
M /issm/trunk-jpl/src/m/classes/clusters/pollux.m M /issm/trunk-jpl/src/m/classes/clusters/raijin.m  
M /issm/trunk-jpl/src/m/classes/clusters/saga.py M /issm/trunk-jpl/src/m/classes/clusters/sherlock.m  
M /issm/trunk-jpl/src/m/classes/clusters/tetralith.m M /issm/trunk-jpl/src/m/classes/clusters/yellowstone.m  
M /issm/trunk-jpl/src/m/dev/ISSM.py M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py  
M /issm/trunk-jpl/src/m/os/issmscpin.py M /issm/trunk-jpl/src/m/os/issmscpout.m  
M /issm/trunk-jpl/src/m/os/issmscpout.py M /issm/trunk-jpl/src/m/os/issmssh.py  
M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.py M /issm/trunk-jpl/src/m/solve/waitonlock.py  
Export determination: 6.  
Rationale: CHG: Translation of discover.m -i py; additional MATLAB builtin  
function translations; cleanup

**Change #495** with diff file ISSM-26333-26334.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/pfe.py

Export determination: 6.

Rationale: BUG: Minor

**Change #496** with diff file ISSM-26334-26335.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: add collapse of md.materials.rheology\_E

**Change #497** with diff file ISSM-26335-26336.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.14-discover.sh

Export determination: 6.

Rationale: CHG: new petsc for discover

**Change #498** with diff file ISSM-26336-26337.diff:

Function name:

M /issm/trunk-jpl/externalpackages/triangle/install-discover.sh

Export determination: 6.

Rationale: CHG: update discover triangle install

**Change #499** with diff file ISSM-26337-26338.diff:

Function name:

A /issm/trunk-jpl/externalpackages/dakota/install-6.2-discover.sh (from /issm/trunk-jpl/externalpackages/dakota/install-6.2-intel20-discover.sh:26335) D /issm/trunk-jpl/externalpackages/dakota/install-6.2-intel15-discover.sh D /issm/trunk-jpl/externalpackages/dakota/install-6.2-intel16-discover.sh D /issm/trunk-jpl/externalpackages/dakota/install-6.2-intel20-discover.sh M /issm/trunk-jpl/m4/issm\_options.m4

Export determination: 6.

Rationale: CHG: update discover compile and dakota

**Change #500** with diff file ISSM-26338-26339.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: update python launch on discover

**Change #501** with diff file ISSM-26339-26340.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: qmu should check nprocs function not np, since not all clusters have np

**Change #502** with diff file ISSM-26340-26341.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: check version of dakota

**Change #503** with diff file ISSM-26341-26342.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Class method nprocs needs to be defined

**Change #504** with diff file ISSM-26342-26343.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: helpers missing

**Change #505** with diff file ISSM-26343-26344.diff:

Function name:

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

jpl/externalpackages/petsc/install-3.13-pleiades.sh A /issm/trunk-jpl/jenkins/pleiades-

basic M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/Makefile.am

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

Export determination: 6.

Rationale: CHG: Adding jenkins script for Pleiades (can be run with jenkins.sh to automatically install packages, configure, and install); now checking first for VERSION file to get Dakota version; missing ParMETIS includes in Makefile.am; clean up

**Change #506** with diff file ISSM-26344-26345.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/cloud.m A /issm/trunk-jpl/src/m/classes/clusters/cloud.py

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

M /issm/trunk-jpl/src/m/classes/clusters/fram.py M /issm/trunk-jpl/src/m/classes/clusters/pfe.m

M /issm/trunk-jpl/src/m/classes/clusters/pfe.py M /issm/trunk-jpl/src/m/classes/clusters/saga.py

M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py M /issm/trunk-

jpl/src/m/miscellaneous/MatlabFuncs.py M /issm/trunk-jpl/src/m/solve/solve.py  
M /issm/trunk-jpl/src/m/solve/waitonlock.m M /issm/trunk-jpl/src/m/solve/waitonlock.py  
M /issm/trunk-jpl/src/wrappers/javascript/Makefile.am  
Export determination: 6.  
Rationale: CHG: Revised pleiades.oy download dialog; various pending minor  
fixes; cleanup

**Change #507** with diff file ISSM-26345-26346.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/waitonlock.py  
Export determination: 6.  
Rationale: BUG: Commenting out check of subprocess error for now

**Change #508** with diff file ISSM-26346-26347.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/clusters/generic.js  
Export determination: 6.  
Rationale: CHG: Uncommitted changes to issm-binaries.js -j partial

**Change #509** with diff file ISSM-26347-26348.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/waitonlock.py  
Export determination: 6.  
Rationale: CHG: Error check works in testing under Debian Linux

**Change #510** with diff file ISSM-26348-26349.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/emscripten/install.sh  
Export determination: 6.  
Rationale: BUG: It appears that 'git pull' is no longer working on existing  
installation

**Change #511** with diff file ISSM-26349-26350.diff:

Function name:  
M /issm/trunk-jpl/externalpackages/emscripten/install.sh  
Export determination: 6.  
Rationale: BUG: Committed with wrong PREFIX path

**Change #512** with diff file ISSM-26350-26351.diff:

Function name:  
M /issm/trunk-jpl/test/NightlyRun/runme.m M /issm/trunk-jpl/test/NightlyRun/runme.py  
Export determination: 6.  
Rationale: BUG: Corrected parsing of test number from file name

**Change #513** with diff file ISSM-26351-26352.diff:

Function name:  
M /issm/trunk-jpl/src/m/classes/materials.m M /issm/trunk-jpl/src/m/classes/materials.py  
Export determination: 6.  
Rationale: CHG: Removing print

**Change #514** with diff file ISSM-26352-26353.diff:

Function name:  
M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.m M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIceSheetBC.py M /issm/trunk-jpl/src/m/classes/offlinesolidearthsolution.py M /issm/trunk-jpl/src/m/classes/offlinesolidearthsolution.py M /issm/trunk-jpl/src/m/classes/qmu/dakota\_method/dmeth\_params\_write.m M /issm/trunk-jpl/src/m/classes/qmu/dakota\_method/dmeth\_params\_write.py M /issm/trunk-jpl/src/m/classes/sealevelmodel.m M /issm/trunk-jpl/src/m/classes/sealevelmodel.py M /issm/trunk-jpl/src/m/classes/slr.py M /issm/trunk-jpl/src/m/classes/solidearthsolution.py M /issm/trunk-jpl/src/m/dev/devpath.py M /issm/trunk-jpl/src/m/materials/nye.m M /issm/trunk-jpl/src/m/materials/nye.py M /issm/trunk-jpl/src/m/mech/steadystateiceshelftemp.py 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/processdata.m M /issm/trunk-jpl/src/m/plot/processdata.py  
Export determination: 6.  
Rationale: CHG: Cleanup of warning messages

**Change #515** with diff file ISSM-26353-26354.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/generic.py M /issm/trunk-jpl/src/m/classes/clusters/pfe.py  
M /issm/trunk-jpl/src/m/classes/issmsettings.py M /issm/trunk-jpl/src/m/classes/model.py  
M /issm/trunk-jpl/src/m/classes/solidearthsettings.py M /issm/trunk-jpl/src/m/coordsystems/gdaltransform.py  
M /issm/trunk-jpl/src/m/dev/devpath.py M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py  
M /issm/trunk-jpl/src/m/plot/googlemaps.m M /issm/trunk-jpl/src/m/plot/plot\_manager.py  
M /issm/trunk-jpl/src/m/plot/plot\_overlay.py M /issm/trunk-jpl/src/m/plot/radarpower.m  
M /issm/trunk-jpl/src/m/solve/solve.m M /issm/trunk-jpl/src/m/solve/solve.py  
M /issm/trunk-jpl/src/m/solve/waitonlock.m M /issm/trunk-jpl/src/m/solve/waitonlock.py  
M /issm/trunk-jpl/test/NightlyRun/runme.py

Export determination: 6.

Rationale: CHG: Checking on cluster type rather than name in waitonlock.py;  
silencing cluster settings warnings by default; formatting; cleanup

**Change #516** with diff file ISSM-26354-26355.diff:

Function name:

M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m

Export determination: 6.

Rationale: CHG: Consistent mesh generation on macOS and Linux

**Change #517** with diff file ISSM-26355-26356.diff:

Function name:

A /issm/trunk-jpl/src/m/classes/clusters/frontera.m

Export determination: 6.

Rationale: CHG: added frontera TACC cluster

**Change #518** with diff file ISSM-26356-26357.diff:

Function name:

A /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/julia.vim A /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/juliadoc.vim

Export determination: 6.

Rationale: CHG: added julia syntax

**Change #519** with diff file ISSM-26357-26358.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: minor changes to frontera

**Change #520** with diff file ISSM-26358-26359.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth M /issm/trunk-jpl/package/linux/package-issm-linux-binaries-matlab.sh M /issm/trunk-jpl/package/linux/package-issm-linux-binaries-python.sh D /issm/trunk-jpl/package/linux/test-issm-linux-binaries-solid\_earth.sh D /issm/trunk-jpl/package/linux/test-issm-linux-binaries-with\_dakota.sh D /issm/trunk-jpl/package/linux/test-issm-linux-binaries.sh M /issm/trunk-jpl/package/mac/test-issm-mac-binaries-matlab.sh M /issm/trunk-jpl/package/mac/test-issm-mac-binaries-python.sh M /issm/trunk-jpl/src/m/archive/arch.py M /issm/trunk-jpl/src/m/boundaryconditions/SetIceSheetBC.py M /issm/trunk-jpl/src/m/boundaryconditions/SetMarineIce M /issm/trunk-jpl/src/m/classes/SMBcomponents.m M /issm/trunk-jpl/src/m/classes/SMBcomponents.py M /issm/trunk-jpl/src/m/classes/SMBforcing.py M /issm/trunk-jpl/src/m/classes/SMBgemb.m M /issm/trunk-jpl/src/m/classes/SMBgemb.py M /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.m M /issm/trunk-jpl/src/m/classes/SMBmeltcomponents.py M /issm/trunk-jpl/src/m/classes/basalforcings.m M /issm/trunk-jpl/src/m/classes/basalforcings.py M /issm/trunk-jpl/src/m/classes/clusters/generic.py M /issm/trunk-jpl/src/m/classes/constants.py M /issm/trunk-jpl/src/m/classes/dsl.m M /issm/trunk-jpl/src/m/classes/dsl.py M /issm/trunk-jpl/src/m/classes/dslmme.m M /issm/trunk-jpl/src/m/classes/dslmme.py M /issm/trunk-jpl/src/m/classes/fourierlove.py M /issm/trunk-jpl/src/m/classes/geometry.py M /issm/trunk-jpl/src/m/classes/groundingline.py M /issm/trunk-jpl/src/m/classes/initialization.py M /issm/trunk-jpl/src/m/classes/issmsettings.py M /issm/trunk-jpl/src/m/classes/levelset.m M /issm/trunk-jpl/src/m/classes/levelset.py M /issm/trunk-jpl/src/m/classes/lovenumbers.py M /issm/trunk-jpl/src/m/classes/matdamageice.m M /issm/trunk-jpl/src/m/classes/matdamageice.py M /issm/trunk-jpl/src/m/classes/matenhancedice.m M /issm/trunk-jpl/src/m/classes/matenhancedice.py M /issm/trunk-jpl/src/m/classes/materials.m M /issm/trunk-jpl/src/m/classes/materials.py M /issm/trunk-jpl/src/m/classes/matestar.m M /issm/trunk-jpl/src/m/classes/matestar.py M /issm/trunk-jpl/src/m/classes/matice.js M /issm/trunk-jpl/src/m/classes/matice.m M /issm/trunk-jpl/src/m/classes/matice.py M /issm/trunk-jpl/src/m/classes/model.m M /issm/trunk-jpl/src/m/classes/plumebasalforcings.py M /issm/trunk-jpl/src/m/classes/rotational.m M /issm/trunk-jpl/src/m/classes/rotational.py M /issm/trunk-jpl/src/m/classes/sealevelmodel.m M /issm/trunk-jpl/src/m/classes/sealevelmodel.py M /issm/trunk-jpl/src/m/classes/solidearth.m M /issm/trunk-jpl/src/m/classes/solidearth.py M /issm/trunk-jpl/src/m/classes/solidearthsettings.m M /issm/trunk-jpl/src/m/classes/solidearthsettings.py M /issm/trunk-jpl/src/m/classes/solidearthsolution.m M /issm/trunk-jpl/src/m/classes/solidearthsolution.py M /issm/trunk-jpl/src/m/classes/stressbalance.m M /issm/trunk-jpl/src/m/classes/stressbalance.py M /issm/trunk-jpl/src/m/classes/surfaceload.m M /issm/trunk-jpl/src/m/classes/surfaceload.py M /issm/trunk-jpl/src/m/classes/transient.m M /issm/trunk-jpl/src/m/classes/transient.py M /issm/trunk-jpl/src/m/classes/verbose.py M /issm/trunk-jpl/src/m/consistency/ismodelselfconsistent.py M /issm/trunk-jpl/src/m/coordsystems/ll2xy.py M /issm/trunk-jpl/src/m/coordsystems/xy2ll.py

M /issm/trunk-jpl/src/m/materials/cuffey.py M /issm/trunk-jpl/src/m/materials/paterson.py  
M /issm/trunk-jpl/src/m/mech/mechanicalproperties.m M /issm/trunk-jpl/src/m/mech/mechanicalproperties  
M /issm/trunk-jpl/src/m/mesh/bamg.py M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m  
M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py M /issm/trunk-jpl/src/m/miscellaneous/pretty\_print.m  
M /issm/trunk-jpl/src/m/plot/checkplotoptions.py M /issm/trunk-jpl/src/m/solve/loadresultfromdisk.py  
M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.py M /issm/trunk-jpl/src/m/solve/loadresultsfromdisk.py  
M /issm/trunk-jpl/src/m/solve/marshall.m M /issm/trunk-jpl/src/m/solve/marshall.py  
M /issm/trunk-jpl/src/m/solve/parseresultsfromdisk.py M /issm/trunk-jpl/src/m/solve/solve.m  
M /issm/trunk-jpl/src/m/solve/solve.py M /issm/trunk-jpl/src/m/solve/solveslm.m  
M /issm/trunk-jpl/src/m/solve/solveslm.py M /issm/trunk-jpl/test/Archives/Archive2002.arch  
M /issm/trunk-jpl/test/Archives/Archive2003.arch M /issm/trunk-jpl/test/Archives/Archive2005.arch  
M /issm/trunk-jpl/test/Archives/Archive2007.arch M /issm/trunk-jpl/test/Archives/Archive2008.arch  
M /issm/trunk-jpl/test/Archives/Archive2010.arch M /issm/trunk-jpl/test/Archives/Archive2011.arch  
M /issm/trunk-jpl/test/Archives/Archive2021.arch M /issm/trunk-jpl/test/Archives/Archive2090.arch  
M /issm/trunk-jpl/test/Archives/Archive2101.arch M /issm/trunk-jpl/test/NightlyRun/test2001.py  
M /issm/trunk-jpl/test/NightlyRun/test2002.m M /issm/trunk-jpl/test/NightlyRun/test2002.py  
M /issm/trunk-jpl/test/NightlyRun/test2003.m M /issm/trunk-jpl/test/NightlyRun/test2003.py  
M /issm/trunk-jpl/test/NightlyRun/test2004.m M /issm/trunk-jpl/test/NightlyRun/test2004.py  
M /issm/trunk-jpl/test/NightlyRun/test2005.m M /issm/trunk-jpl/test/NightlyRun/test2005.py  
M /issm/trunk-jpl/test/NightlyRun/test2006.m M /issm/trunk-jpl/test/NightlyRun/test2006.py  
M /issm/trunk-jpl/test/NightlyRun/test2007.m M /issm/trunk-jpl/test/NightlyRun/test2008.m  
M /issm/trunk-jpl/test/NightlyRun/test2010.m M /issm/trunk-jpl/test/NightlyRun/test2010.py  
M /issm/trunk-jpl/test/NightlyRun/test2011.m M /issm/trunk-jpl/test/NightlyRun/test2021.m  
M /issm/trunk-jpl/test/NightlyRun/test2084.m M /issm/trunk-jpl/test/NightlyRun/test2084.py  
M /issm/trunk-jpl/test/NightlyRun/test2090.m M /issm/trunk-jpl/test/NightlyRun/test2101.m  
M /issm/trunk-jpl/test/NightlyRun/test2101.py M /issm/trunk-jpl/test/Par/SquareSheetConstrained.py  
Export determination: 6.  
Rationale: CHG: Completed MATLAB -j Python updates for SE; archive updates now that GMSH can be used on macOS and Linux; various minor bug fixes; formatting; cleanup

**Change #521** with diff file ISSM-26359-26360.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMBgemb.py M /issm/trunk-jpl/src/m/classes/dsl.py

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

Export determination: 6.

Rationale: BUG: Member initialization; removed print statement; missing include

**Change #522** with diff file ISSM-26360-26361.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Missing variadic args

**Change #523** with diff file ISSM-26361-26362.diff:

Function name:

M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth M /issm/trunk-jpl/packagers/linux/package-  
issm-linux-binaries-matlab.sh M /issm/trunk-jpl/packagers/linux/package-issm-  
linux-binaries-python.sh M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.m

M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py

Export determination: 6.

Rationale: BUG: Gmsh only produces \*similar\* meshes at certain resolutions with changes. reverting to excluding tests that call gmshplanet under Linux for now. Will add precomputed mesh for Python later and reactivate tests.

**Change #524** with diff file ISSM-26362-26363.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: P0 controls now working in 3d

**Change #525** with diff file ISSM-26363-26364.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: cannot handle P0 controls

**Change #526** with diff file ISSM-26364-26365.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/taoinversion.m

Export determination: 6.

Rationale: CHG: deal with P0 controls and md.mesh.scale\_factor

**Change #527** with diff file ISSM-26365-26366.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Commented out input bin file save

**Change #528** with diff file ISSM-26366-26367.diff:

Function name:

A /issm/trunk-jpl/externalpackages/mplapack A /issm/trunk-jpl/externalpackages/mplapack/install-0-linux.sh

Export determination: 6.

Rationale: ADD: External package directory and install script for MPLAPACK

**Change #529** with diff file ISSM-26367-26368.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh A /issm/trunk-jpl/externalpackages/proj/install-8.sh M /issm/trunk-jpl/src/c/modules/CoordinateSystemTransformx/CoordinateSystemTransformx.cpp  
M /issm/trunk-jpl/src/m/modules/CoordTransform.m M /issm/trunk-jpl/src/wrappers/CoordTransform/CoordTransform.cpp  
M /issm/trunk-jpl/src/wrappers/CoordTransform/CoordTransform.h

Export determination: 6.

Rationale: BUG: Corrected CoordTransform; added install script for PROJ 8

**Change #530** with diff file ISSM-26368-26369.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Forgot fence for major version 8

**Change #531** with diff file ISSM-26369-26370.diff:

Function name:

M /issm/trunk-jpl/etc/environment.sh A /issm/trunk-jpl/externalpackages/libtiff

A /issm/trunk-jpl/externalpackages/libtiff/install-4-mac.sh D /issm/trunk-jpl/externalpackages/proj/install-6.2-static-with\_tests.sh D /issm/trunk-jpl/externalpackages/proj/install-6.2-static.sh  
D /issm/trunk-jpl/externalpackages/proj/install-6.2-with\_tests.sh D /issm/trunk-jpl/externalpackages/proj/install-6.2.sh A /issm/trunk-jpl/externalpackages/proj/install-8-static-with\_tests.sh (from /issm/trunk-jpl/externalpackages/proj/install-6.2-static-with\_tests.sh:26368) A /issm/trunk-jpl/externalpackages/proj/install-8-static.sh (from /issm/trunk-jpl/externalpackages/proj/install-6.2-static.sh:26368)  
A /issm/trunk-jpl/externalpackages/proj/install-8-with\_tests.sh (from /issm/trunk-jpl/externalpackages/proj/install-6.2-with\_tests.sh:26368) M /issm/trunk-jpl/externalpackages/proj/install-8.sh M /issm/trunk-jpl/jenkins/aws-amazon\_linux-solid\_earth M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-matlab M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-python M /issm/trunk-jpl/jenkins/pine\_island-mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-mac-examples M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-valgrind M /issm/trunk-jpl/jenkins/pine\_island-mac-python M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth-lambert M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries-matlab M /issm/trunk-jpl/jenkins/ross-debian\_linux-binaries-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-dakota M /issm/trunk-jpl/jenkins/ross-debian\_linux-full M /issm/trunk-jpl/jenkins/ross-debian\_linux-full-valgrind M /issm/trunk-jpl/jenkins/ross-debian\_linux-python M /issm/trunk-jpl/jenkins/ross-debian\_linux-solid\_earth  
Export determination: 6.  
Rationale: CHG: Cleanup following switch to PROJ 8

**Change #532** with diff file ISSM-26370-26371.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Constraints/SpcDynamic.cpp M /issm/trunk-jpl/src/c/classes/Constraints/SpcDynamic.h M /issm/trunk-jpl/src/c/modules/IoModelToConstraintsx/IoModelToConstraintsx.cpp  
Export determination: 6.

Rationale: CHG: adding value to SpcDynamic constructor

**Change #533** with diff file ISSM-26371-26372.diff:

Function name:

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

Rationale: CHG: adding value to SpcDynamic constructor

**Change #534** with diff file ISSM-26372-26373.diff:

Function name:  
M /issm/trunk-jpl/src/m/interp/averaging.py  
Export determination: 6.  
Rationale: CHG: flatten only takes char inputs or none

**Change #535** with diff file ISSM-26373-26374.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/organizer.py  
Export determination: 6.  
Rationale: BUG: organizer not checking correct string value

**Change #536** with diff file ISSM-26374-26375.diff:  
Function name:  
A /issm/trunk-jpl/src/m/exp/contourlevelzero.py A /issm/trunk-jpl/src/m/parameterization/reinitializelevels  
Export determination: 6.  
Rationale: NEW: add some helpful python versions of routines

**Change #537** with diff file ISSM-26375-26376.diff:  
Function name:  
M /issm/trunk-jpl/src/m/modules/ExpToLevelSet.py  
Export determination: 6.  
Rationale: CHG: check for str, got error on basestring

**Change #538** with diff file ISSM-26376-26377.diff:  
Function name:  
M /issm/trunk-jpl/src/m/interp/averaging.m M /issm/trunk-jpl/src/m/interp/averaging.py  
Export determination: 6.  
Rationale: CHG: update comment and clean up python averaging

**Change #539** with diff file ISSM-26377-26378.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/Makefile.am  
M /issm/trunk-jpl/src/wrappers/javascript/Makefile.am M /issm/trunk-jpl/src/wrappers/python/Makefile.am

Export determination: 6.  
Rationale: CHG: Config changes when compiling against Python 3; cleanup

**Change #540** with diff file ISSM-26378-26379.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/proj/install-8-static-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-8-static.sh M /issm/trunk-jpl/externalpackages/proj/install-8-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-8.sh  
Export determination: 6.  
Rationale: CHG: Adding sqlite lib flag back in

**Change #541** with diff file ISSM-26379-26380.diff:  
Function name:  
A /issm/trunk-jpl/externalpackages/petsc/install-3.15-mac-arm.sh  
Export determination: 6.  
Rationale: NEW: petsc 3.15 for mac arm

**Change #542** with diff file ISSM-26380-26381.diff:  
Function name:  
M /issm/trunk-jpl/src/c/Makefile.am  
Export determination: 6.  
Rationale: BUG: Bad commit

**Change #543** with diff file ISSM-26381-26382.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/proj/install-8-static-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-8-static.sh M /issm/trunk-jpl/externalpackages/proj/install-8-with\_tests.sh M /issm/trunk-jpl/externalpackages/proj/install-8.sh  
Export determination: 6.  
Rationale: BUG: disable-tiff, not disable-libtiff

**Change #544** with diff file ISSM-26382-26383.diff:  
Function name:

A /issm/trunk-jpl/src/m/plot/colormaps/turbo.m  
Export determination: 6.  
Rationale: NEW: colormap based on Jet scheme

**Change #545** with diff file ISSM-26383-26384.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solvers/asmoptions.py  
Export determination: 6.  
Rationale: CHG: asmoptions needs to return a dictionary object

**Change #546** with diff file ISSM-26384-26385.diff:  
Function name:  
M /issm/trunk-jpl/m4/issm\_options.m4  
Export determination: 6.  
Rationale: CHG adding SHP conditional compilation

**Change #547** with diff file ISSM-26385-26386.diff:  
Function name:  
M /issm/trunk-jpl/src/wrappers/matlab/Makefile.am  
Export determination: 6.  
Rationale: CHG adding SHP conditional compilation

**Change #548** with diff file ISSM-26386-26387.diff:  
Function name:  
M /issm/trunk-jpl/src/m/modules/ShpRead.m  
Export determination: 6.  
Rationale: CHG: fixing doc

**Change #549** with diff file ISSM-26387-26388.diff:  
Function name:  
M /issm/trunk-jpl/src/wrappers/ShpRead/ShpRead.cpp  
Export determination: 6.  
Rationale: CHG: added support for pointZ

**Change #550** with diff file ISSM-26388-26389.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: models with no mesh (LoveSolution) could not run with the new partitionning routine

**Change #551** with diff file ISSM-26389-26390.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: python match spc check in matlab

**Change #552** with diff file ISSM-26390-26391.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fix indent

**Change #553** with diff file ISSM-26391-26392.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: matrice can handle rheology\_B of python len 1 or more now

**Change #554** with diff file ISSM-26392-26393.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: should place AM\_CONDITIONAL outside of if

**Change #555** with diff file ISSM-26393-26394.diff:

Function name:

M /issm/trunk-jpl/externalpackages/m1qn3/install.sh A /issm/trunk-jpl/externalpackages/m1qn3/patch  
A /issm/trunk-jpl/externalpackages/m1qn3/patch/m1qn3.f.patch A /issm/trunk-  
jpl/externalpackages/m1qn3/patch/m1qn3.f.patch.orig

Export determination: 6.

Rationale: CHG: fix compiler warning

**Change #556** with diff file ISSM-26394-26395.diff:

Function name:

D /issm/trunk-jpl/externalpackages/m1qn3/patch/m1qn3.f.patch.orig

Export determination: 6.

Rationale: CHG: fix compiler warning

**Change #557** with diff file ISSM-26395-26396.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Elements/PddSurfaceMassBalance.cpp M /issm/trunk-  
jpl/test/Archives/Archive236.arch M /issm/trunk-jpl/test/Archives/Archive237.arch  
M /issm/trunk-jpl/test/Archives/Archive245.arch M /issm/trunk-jpl/test/Archives/Archive247.arch

Export determination: 6.

Rationale: CHG: remove smb scaling by 95 percent since we don't know where  
the logic for it came from

**Change #558** with diff file ISSM-26396-26397.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive238.arch M /issm/trunk-jpl/test/Archives/Archive239.arch  
M /issm/trunk-jpl/test/Archives/Archive240.arch

Export determination: 6.

Rationale: CHG: update del018 archives

**Change #559** with diff file ISSM-26397-26398.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: cast time to int

**Change #560** with diff file ISSM-26398-26399.diff:

Function name:

M /issm/trunk-jpl/src/m/coordsystems/ll2xy.py

Export determination: 6.

Rationale: CHG: need to check length of array, not array value

**Change #561** with diff file ISSM-26399-26400.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added axes option

**Change #562** with diff file ISSM-26400-26401.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.15-discovery.sh

Export determination: 6.

Rationale: NEW: added install-3.15-discovery.sh for Dartmouth discovery

**Change #563** with diff file ISSM-26401-26402.diff:

Function name:

M /issm/trunk-jpl/src/m/coordsystems/ll2xy.py

Export determination: 6.

Rationale: CHG: ll2xy python should check for arguments and not default to Antarctica

**Change #564** with diff file ISSM-26402-26403.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive247.arch M /issm/trunk-jpl/test/NightlyRun/test247.m

M /issm/trunk-jpl/test/NightlyRun/test247.py

Export determination: 6.

Rationale: CHG: lower test resolution to 180km

**Change #565** with diff file ISSM-26403-26404.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: update to newest sea level class

**Change #566** with diff file ISSM-26404-26405.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: add selfattraction

**Change #567** with diff file ISSM-26405-26406.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.15-pleiades.sh

Export determination: 6.

Rationale: NEW: configure petsc 3.25 pleiades

**Change #568** with diff file ISSM-26406-26407.diff:

Function name:

M /issm/trunk-jpl/externalpackages/petsc/install-3.13-pleiades.sh M /issm/trunk-jpl/externalpackages/petsc/install-3.15-pleiades.sh

Export determination: 6.

Rationale: CHG: minor added `-with-make-np=20`

**Change #569** with diff file ISSM-26407-26408.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/matice.py M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py

Export determination: 6.

Rationale: CHG: some updates for test2003 to run

**Change #570** with diff file ISSM-26408-26409.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/runme.m  
Export determination: 6.  
Rationale: CHG: use any instead of contains for older matlabs

**Change #571** with diff file ISSM-26409-26410.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/runme.m  
Export determination: 6.  
Rationale: CHG: fix the call to any for older matlabs

**Change #572** with diff file ISSM-26410-26411.diff:  
Function name:  
M /issm/trunk-jpl/src/m/mesh/planet/gmsh/gmshplanet.py  
Export determination: 6.  
Rationale: BUG: fix python gmsh issues

**Change #573** with diff file ISSM-26411-26412.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/GLheightadvectionAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: memory leak. fixing Bprime never used

**Change #574** with diff file ISSM-26412-26413.diff:  
Function name:  
M /issm/trunk-jpl/src/c/modules/FloatingiceMeltingRatePicox/FloatingiceMeltingRatePicox.cpp  
Export determination: 6.  
Rationale: BUG: memory leak, fixed basal element problem

**Change #575** with diff file ISSM-26413-26414.diff:  
Function name:  
A /issm/trunk-jpl/externalpackages/petsc/install-3.15-babylon.sh  
Export determination: 6.  
Rationale: NEW: petsc install with ifort and icc for babylon

**Change #576** with diff file ISSM-26414-26415.diff:

Function name:

M /issm/trunk-jpl/externalpackages/codipack/install.sh M /issm/trunk-jpl/externalpackages/medipack/install

M /issm/trunk-jpl/jenkins/ross-debian\_linux-codipack

Export determination: 6.

Rationale: BUG: Should be unpacking to install/.

**Change #577** with diff file ISSM-26415-26416.diff:

Function name:

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

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

jpl/src/wrappers/matlab/Makefile.am

Export determination: 6.

Rationale: BUG: Fixes for PROJ on Jenkins macOS build node

**Change #578** with diff file ISSM-26416-26417.diff:

Function name:

A /issm/trunk-jpl/externalpackages/proj/install-6.sh

Export determination: 6.

Rationale: BUG: Fixes for PROJ on Jenkins macOS build node

**Change #579** with diff file ISSM-26417-26418.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-

mac-examples M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth M /issm/trunk-

jpl/jenkins/pine\_island-mac-solid\_earth-lambert

Export determination: 6.

Rationale: BUG: Fixes for PROJ on Jenkins macOS build node

**Change #580** with diff file ISSM-26418-26419.diff:

Function name:

M /issm/trunk-jpl/externalpackages/proj/install-6.sh

Export determination: 6.  
Rationale: CHG: Need to disable liftoff

**Change #581** with diff file ISSM-26419-26420.diff:  
Function name:  
A /issm/trunk-jpl/src/m/classes/clusters/smce\_eis.py  
Export determination: 6.  
Rationale: ADD: Initial commit of cluster class for SMCE EIS pilot study

**Change #582** with diff file ISSM-26420-26421.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: added new stabilization schemes for levelset transport

**Change #583** with diff file ISSM-26421-26422.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/levelset.js M /issm/trunk-jpl/src/m/classes/levelset.m  
M /issm/trunk-jpl/src/m/classes/levelset.py  
Export determination: 6.  
Rationale: CHG: added new stabilization schemes for levelset transport

**Change #584** with diff file ISSM-26422-26423.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive801.arch  
Export determination: 6.  
Rationale: CHG: new archive now that Streamline Upwinding works

**Change #585** with diff file ISSM-26423-26424.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceAnaly  
Export determination: 6.  
Rationale: BUG: minor

**Change #586** with diff file ISSM-26424-26425.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: bad commit revert back

**Change #587** with diff file ISSM-26425-26426.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive805.arch

Export determination: 6.

Rationale: CHG: new archive now that Streamline Upwinding works

**Change #588** with diff file ISSM-26426-26427.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-adolc-ampion M /issm/trunk-jpl/jenkins/pine\_island-mac-basic M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-matlab M /issm/trunk-jpl/jenkins/pine\_island-mac-binaries-python M /issm/trunk-jpl/jenkins/pine\_island-mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-mac-examples M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-valgrind M /issm/trunk-jpl/jenkins/pine\_island-mac-python M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth-lambert

Export determination: 6.

Rationale: CHG: New version of gcc on Pine Island

**Change #589** with diff file ISSM-26427-26428.diff:

Function name:

M /issm/trunk-jpl/externalpackages/autotools/install-linux.sh M /issm/trunk-jpl/externalpackages/autotools/install-mac.sh M /issm/trunk-jpl/externalpackages/autotools/install-win.sh

Export determination: 6.

Rationale: CHG: Latest version of m4

**Change #590** with diff file ISSM-26428-26429.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-adolc-ampion M /issm/trunk-jpl/jenkins/pine\_island-mac-basic M /issm/trunk-jpl/jenkins/pine\_island-mac-dakota M /issm/trunk-jpl/jenkins/pine\_island-mac-examples M /issm/trunk-jpl/jenkins/pine\_island-mac-full M /issm/trunk-jpl/jenkins/pine\_island-mac-full-valgrind M /issm/trunk-jpl/jenkins/pine\_island-mac-python M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth-lambert

Export determination: 6.

Rationale: BUG: Inconsistent download of MUMPS: reverting to PETSc 3.12

**Change #591** with diff file ISSM-26429-26430.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive801.arch

Export determination: 6.

Rationale: CHG: new streamline upwinding scheme

**Change #592** with diff file ISSM-26430-26431.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-solid\_earth

Export determination: 6.

Rationale: BUG: Missed a revert

**Change #593** with diff file ISSM-26431-26432.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/build.sh

Export determination: 6.

Rationale: fixed mitgcm compilation on babylon

**Change #594** with diff file ISSM-26432-26433.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/FemModel.cpp M /issm/trunk-jpl/src/c/classes/IoModel.cpp  
M /issm/trunk-jpl/src/c/cores/ad\_core.cpp M /issm/trunk-jpl/src/c/cores/controladm1qn3\_core.cpp  
M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp M /issm/trunk-jpl/src/c/cores/transient\_core.cpp  
M /issm/trunk-jpl/src/c/shared/io/Marshalling/Marshalling.cpp M /issm/trunk-jpl/src/c/shared/io/Marshalling/Marshalling.h M /issm/trunk-jpl/src/c/toolkits/codipack/CoDiPackCommon

M /issm/trunk-jpl/src/c/toolkits/gsl/DenseGslSolve.cpp M /issm/trunk-jpl/src/c/toolkits/mpi/issmmmpi.h  
M /issm/trunk-jpl/src/c/toolkits/mumps/MumpsSolve.cpp  
Export determination: 6.  
Rationale: CHG: working on integrating CoDiPack 2.0, still not working

**Change #595** with diff file ISSM-26433-26434.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/codipack/CoDiPackCommon.hpp M /issm/trunk-jpl/src/c/toolkits/gsl/DenseGslSolve.cpp M /issm/trunk-jpl/src/c/toolkits/mumps/MumpsSolve.cpp  
Export determination: 6.

Rationale: CHG: transitioning to CoDiPack v2.0

**Change #596** with diff file ISSM-26434-26435.diff:

Function name:

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

Rationale: BUG: fixing levelset SUPG

**Change #597** with diff file ISSM-26435-26436.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/clusters/smce\_eis.py M /issm/trunk-jpl/src/m/classes/model.py  
M /issm/trunk-jpl/src/m/solve/waitonlock.py  
Export determination: 6.

Rationale: CHG: Updates to SMCE cluster class to properly download results;  
waitonlock now supports ID file; minor formatting

**Change #598** with diff file ISSM-26436-26437.diff:

Function name:

A /issm/trunk-jpl/externalpackages/muq A /issm/trunk-jpl/externalpackages/muq/install.sh  
Export determination: 6.

Rationale: NEW: added muq

**Change #599** with diff file ISSM-26437-26438.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive127.arch A /issm/trunk-jpl/test/Archives/Archive128.arch  
A /issm/trunk-jpl/test/Archives/Archive129.arch A /issm/trunk-jpl/test/NightlyRun/test127.m  
A /issm/trunk-jpl/test/NightlyRun/test127.py A /issm/trunk-jpl/test/NightlyRun/test128.m  
A /issm/trunk-jpl/test/NightlyRun/test128.py A /issm/trunk-jpl/test/NightlyRun/test129.m  
A /issm/trunk-jpl/test/NightlyRun/test129.py

Export determination: 6.

Rationale: NEW: adding NR tests for MOLHO formulation (MLHO)

**Change #600** with diff file ISSM-26438-26439.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive248.arch A /issm/trunk-jpl/test/Archives/Archive249.arch  
A /issm/trunk-jpl/test/Archives/Archive254.arch A /issm/trunk-jpl/test/NightlyRun/test248.m  
A /issm/trunk-jpl/test/NightlyRun/test248.py A /issm/trunk-jpl/test/NightlyRun/test249.m  
A /issm/trunk-jpl/test/NightlyRun/test249.py A /issm/trunk-jpl/test/NightlyRun/test254.m  
A /issm/trunk-jpl/test/NightlyRun/test254.py

Export determination: 6.

Rationale: NEW: NR tests for MLHO

**Change #601** with diff file ISSM-26439-26440.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive255.arch A /issm/trunk-jpl/test/Archives/Archive256.arch  
A /issm/trunk-jpl/test/Archives/Archive330.arch A /issm/trunk-jpl/test/Archives/Archive332.arch  
A /issm/trunk-jpl/test/Archives/Archive446.arch A /issm/trunk-jpl/test/Archives/Archive447.arch  
A /issm/trunk-jpl/test/Archives/Archive448.arch A /issm/trunk-jpl/test/Archives/Archive449.arch  
A /issm/trunk-jpl/test/NightlyRun/test255.m A /issm/trunk-jpl/test/NightlyRun/test255.py  
A /issm/trunk-jpl/test/NightlyRun/test256.m A /issm/trunk-jpl/test/NightlyRun/test256.py  
A /issm/trunk-jpl/test/NightlyRun/test330.m A /issm/trunk-jpl/test/NightlyRun/test330.py  
A /issm/trunk-jpl/test/NightlyRun/test332.m A /issm/trunk-jpl/test/NightlyRun/test332.py  
A /issm/trunk-jpl/test/NightlyRun/test446.m A /issm/trunk-jpl/test/NightlyRun/test446.py  
A /issm/trunk-jpl/test/NightlyRun/test447.m A /issm/trunk-jpl/test/NightlyRun/test447.py  
A /issm/trunk-jpl/test/NightlyRun/test448.m A /issm/trunk-jpl/test/NightlyRun/test448.py  
A /issm/trunk-jpl/test/NightlyRun/test449.m A /issm/trunk-jpl/test/NightlyRun/test449.py

Export determination: 6.

Rationale: NEW: NR tests for MLHO

**Change #602** with diff file ISSM-26440-26441.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive518.arch A /issm/trunk-jpl/test/Archives/Archive519.arch  
A /issm/trunk-jpl/test/Archives/Archive810.arch A /issm/trunk-jpl/test/Archives/Archive811.arch  
A /issm/trunk-jpl/test/Archives/Archive812.arch A /issm/trunk-jpl/test/NightlyRun/test518.m  
A /issm/trunk-jpl/test/NightlyRun/test518.py A /issm/trunk-jpl/test/NightlyRun/test519.m  
A /issm/trunk-jpl/test/NightlyRun/test519.py A /issm/trunk-jpl/test/NightlyRun/test810.m  
A /issm/trunk-jpl/test/NightlyRun/test810.py A /issm/trunk-jpl/test/NightlyRun/test811.m  
A /issm/trunk-jpl/test/NightlyRun/test811.py A /issm/trunk-jpl/test/NightlyRun/test812.m  
A /issm/trunk-jpl/test/NightlyRun/test812.py

Export determination: 6.

Rationale: NEW: NR test for HO

**Change #603** with diff file ISSM-26441-26442.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: parsing averaged velocity (MLHO)

**Change #604** with diff file ISSM-26442-26443.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/test/Archives/Archive447.arch M /issm/trunk-jpl/test/Archives/Archive518.arch  
M /issm/trunk-jpl/test/Archives/Archive519.arch

Export determination: 6.

Rationale: BUG: fixed error in MLHO tests and the forcing term of the calving front when bed is above sea level

**Change #605** with diff file ISSM-26443-26444.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: rewriting/reorganizing crevasse depth law

**Change #606** with diff file ISSM-26444-26445.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/calvingcrevassedepth.m M /issm/trunk-jpl/src/m/classes/calvingcrevassedep

Export determination: 6.  
Rationale: NEW: added calving\_threshold

**Change #607** with diff file ISSM-26445-26446.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

Export determination: 6.

Rationale: CHG: added one enum

**Change #608** with diff file ISSM-26446-26447.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Missing checkconsistency case

**Change #609** with diff file ISSM-26447-26448.diff:

Function name:

M /issm/trunk-jpl/jenkins/ross-win-msys2-mingw-msmpi-basic

Export determination: 6.

Rationale: BUG: Skipping test because it has restart

**Change #610** with diff file ISSM-26448-26449.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: made Crevasse depth more efficient by removing ToMPISerial

**Change #611** with diff file ISSM-26449-26450.diff:

Function name:

A /issm/trunk-jpl/test/MITgcm/code\_4003/shelfice\_step\_icemass.F

Export determination: 6.

Rationale: adding unmodified shelfice\_step\_icemass.F

**Change #612** with diff file ISSM-26450-26451.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: rewriting a bit

**Change #613** with diff file ISSM-26451-26452.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: wrong check on crevasse depth threshold

**Change #614** with diff file ISSM-26452-26453.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/code\_4003/SHELFICE\_OPTIONS.h M /issm/trunk-

jpl/test/MITgcm/code\_4003/packages.conf M /issm/trunk-jpl/test/MITgcm/code\_4003/shelfice\_step\_icemass.F

M /issm/trunk-jpl/test/MITgcm/coupling\_rules.txt A /issm/trunk-jpl/test/MITgcm/input\_4003/data.shelfice

M /issm/trunk-jpl/test/NightlyRun/test4003.m

Export determination: 6.

Rationale: first attempt to modify test4003 for remeshing has not been tested and debugged yet

**Change #615** with diff file ISSM-26453-26454.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/code\_4003/shelfice\_step\_icemass.F

Export determination: 6.

Rationale: adding a missing THEN

**Change #616** with diff file ISSM-26454-26455.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test4002.m

Export determination: 6.

Rationale: CHG: no grounding line in test4002

**Change #617** with diff file ISSM-26455-26456.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/basalforcingsismip6.m

Export determination: 6.

Rationale: CHG: add size option in checkconsistency for basalforcingsismip6.m

**Change #618** with diff file ISSM-26456-26457.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test4002.m

Export determination: 6.

Rationale: CHG: no grounding line migration in test4002

**Change #619** with diff file ISSM-26457-26458.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.h  
M /issm/trunk-jpl/src/c/modules/SurfaceAbsVelMisfitx/SurfaceAbsVelMisfitx.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceAverageVelMisfitx/SurfaceAverageVelMisfitx.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceLogVelMisfitx/SurfaceLogVelMisfitx.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceLogVxVyMisfitx/SurfaceLogVxVyMisfitx.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceRelVelMisfitx/SurfaceRelVelMisfitx.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h

Export determination: 6.

Rationale: CHG: add VxSurface, VxBase, VySurface, VyBase to all 2D models: SSA, L1L2 and MLHO. Modified friction and misfit functions to use these variables instead of Vx and Vy.

**Change #620** with diff file ISSM-26458-26459.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed basal velocities if 2d model with SSA

**Change #621** with diff file ISSM-26459-26460.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed basal velocities if 2d model with SSA

**Change #622** with diff file ISSM-26460-26461.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixed basal velocities if 2d model with SSA

**Change #623** with diff file ISSM-26461-26462.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added migration max to crevasse depth law

**Change #624** with diff file ISSM-26462-26463.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive809.arch

Export determination: 6.

Rationale: CHG: updated archive now that we fixed the factor 2 in CD law

**Change #625** with diff file ISSM-26463-26464.diff:

Function name:

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

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

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

Export determination: 6.

Rationale: CHG: use Friction.cpp to take care of the choice of basal velocity, set the pointers of the inputs as public attributes of Friction, provide functions to fetch the basal velocities that used for calculating the friction

**Change #626** with diff file ISSM-26464-26465.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/test/Archives/Archive809.arch

Export determination: 6.

Rationale: CHG: fixing crevasse depth law: missing factor 2

**Change #627** with diff file ISSM-26465-26466.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing memory leak

**Change #628** with diff file ISSM-26466-26467.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: update to int double

**Change #629** with diff file ISSM-26467-26468.diff:

Function name:

A /issm/trunk-jpl/src/jl A /issm/trunk-jpl/src/jl/exp.jl A /issm/trunk-jpl/src/jl/issm.jl

A /issm/trunk-jpl/src/jl/triangle.jl

Export determination: 6.

Rationale: CHG: very preliminary julia stuff

**Change #630** with diff file ISSM-26468-26469.diff:

Function name:

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

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

jpl/src/c/analyses/HydrologyGlaDSAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/HydrologyShreveAnalysis.

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

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

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

jpl/src/c/analyses/SealevelchangeAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/SmbAnalysis.cpp

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

jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/classes/AmrBamg.cpp  
 M /issm/trunk-jpl/src/c/classes/AmrNeopz.cpp M /issm/trunk-jpl/src/c/classes/BarystaticContributions.cpp  
 M /issm/trunk-jpl/src/c/classes/Cfsurfacelogvel.cpp M /issm/trunk-jpl/src/c/classes/Dakota/IssmParallelDir  
 M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
 M /issm/trunk-jpl/src/c/classes/Elements/Tria.cpp M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
 M /issm/trunk-jpl/src/c/classes/GrdLoads.cpp M /issm/trunk-jpl/src/c/classes/Inputs/ControlInput.cpp  
 M /issm/trunk-jpl/src/c/classes/Inputs/TransientInput.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/Materials/Matrice.cpp  
 M /issm/trunk-jpl/src/c/classes/Node.cpp M /issm/trunk-jpl/src/c/classes/SealevelGeometry.cpp  
 M /issm/trunk-jpl/src/c/cores/WrapperPreCorePointerFromSolutionEnum.cpp  
 M /issm/trunk-jpl/src/c/cores/adjointstressbalance\_core.cpp M /issm/trunk-jpl/src/c/cores/balancethickness  
 M /issm/trunk-jpl/src/c/cores/control\_core.cpp M /issm/trunk-jpl/src/c/cores/dakota\_core.cpp  
 M /issm/trunk-jpl/src/c/cores/esa\_core.cpp M /issm/trunk-jpl/src/c/cores/hydrology\_core.cpp  
 M /issm/trunk-jpl/src/c/cores/love\_core.cpp M /issm/trunk-jpl/src/c/cores/masstransport\_core.cpp  
 M /issm/trunk-jpl/src/c/cores/movingfront\_core.cpp M /issm/trunk-jpl/src/c/cores/oceantransport\_core.cpp  
 M /issm/trunk-jpl/src/c/cores/sealevelchange\_core.cpp M /issm/trunk-jpl/src/c/main/esmfbinders.cpp  
 M /issm/trunk-jpl/src/c/main/issm.cpp M /issm/trunk-jpl/src/c/modules/FrontalForcingsx/FrontalForcingsx  
 M /issm/trunk-jpl/src/c/modules/InputUpdateFromConstantx/InputUpdateFromConstantx.cpp  
 M /issm/trunk-jpl/src/c/modules/InputUpdateFromDakotax/InputUpdateFromDakotax.cpp  
 M /issm/trunk-jpl/src/c/modules/MmeToInputFromIdx/MmeToInputFromIdx.cpp  
 M /issm/trunk-jpl/src/c/modules/ModelProcessors/Control/UpdateElementsAndMaterialsControl.cpp  
 M /issm/trunk-jpl/src/c/modules/ModelProcessors/CreateOutputDefinitions.cpp  
 M /issm/trunk-jpl/src/c/modules/ModelProcessors/CreateParameters.cpp M  
 /issm/trunk-jpl/src/c/modules/OutputResultsx/OutputResultsx.cpp M /issm/trunk-  
 jpl/src/c/modules/QmuStatisticsx/QmuStatisticsx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance  
 M /issm/trunk-jpl/src/c/shared/Elements/PddSurfaceMassBalanceSicopolis.cpp  
 M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_nonlinear.cpp M  
 /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_schurcg.cpp M /issm/trunk-  
 jpl/src/c/toolkits/codipack/ampi\_interface.cpp M /issm/trunk-jpl/src/c/toolkits/gsl/DenseGslSolve.cpp  
 Export determination: 6.  
 Rationale: CHG: removing extraneous lines

**Change #631** with diff file ISSM-26469-26470.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/ExtrapolationAnalysis.h M /issm/trunk-jpl/src/c/classes/AmrBamg.h  
 M /issm/trunk-jpl/src/c/classes/BarystaticContributions.h M /issm/trunk-jpl/src/c/classes/Cfdragcoeffabsgra  
 M /issm/trunk-jpl/src/c/classes/Cflevelsetmisfit.h M /issm/trunk-jpl/src/c/classes/Cfsurfacelogvel.h  
 M /issm/trunk-jpl/src/c/classes/Cfsurfacesquare.h M /issm/trunk-jpl/src/c/classes/Dakota/IssmParallelDirec  
 M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/ElementHoo  
 M /issm/trunk-jpl/src/c/classes/ExternalResults/GenericExternalResult.h M /issm/trunk-  
 jpl/src/c/classes/Inputs/DatasetInput.h M /issm/trunk-jpl/src/c/classes/Masscon.h  
 M /issm/trunk-jpl/src/c/classes/Massconaxpby.h M /issm/trunk-jpl/src/c/classes/Massfluxatgate.h  
 M /issm/trunk-jpl/src/c/classes/Misfit.h M /issm/trunk-jpl/src/c/classes/Numberedcostfunction.h

M /issm/trunk-jpl/src/c/classes/Options/Option.h M /issm/trunk-jpl/src/c/classes/Profiler.h  
M /issm/trunk-jpl/src/c/classes/Radar.h M /issm/trunk-jpl/src/c/classes/SealevelGeometry.h  
M /issm/trunk-jpl/src/c/classes/kriging/Covertree.h M /issm/trunk-jpl/src/c/classes/kriging/ExponentialVar  
M /issm/trunk-jpl/src/c/classes/kriging/PowerVariogram.h M /issm/trunk-jpl/src/c/classes/kriging/Quadtree  
M /issm/trunk-jpl/src/c/classes/kriging/SphericalVariogram.h M /issm/trunk-  
jpl/src/c/modules/ConstraintsStatex/ConstraintsStateLocal.h M /issm/trunk-  
jpl/src/c/modules/GetVectorFromInputsx/GetVectorFromInputsx.h M /issm/trunk-  
jpl/src/c/modules/InputUpdateFromDakotax/InputUpdateFromDakotax.h M /issm/trunk-  
jpl/src/c/modules/MeshPartitionx/MeshPartitionx.h M /issm/trunk-jpl/src/c/shared/Matrix/matrix.h  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiSparseMat.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpi  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmSeqVec.h M /issm/trunk-jpl/src/c/toolkits/issm/SparseRow.h  
Export determination: 6.  
Rationale: CHG: removing extraneous lines

**Change #632** with diff file ISSM-26470-26471.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixed constructor of Friction for dim with different data types

**Change #633** with diff file ISSM-26471-26472.diff:

Function name:

M /issm/trunk-jpl/src/jl/issm.jl M /issm/trunk-jpl/src/jl/triangle.jl

Export determination: 6.

Rationale: CHG: slow progress...

**Change #634** with diff file ISSM-26472-26473.diff:

Function name:

M /issm/trunk-jpl/src/jl/exp.jl M /issm/trunk-jpl/src/jl/issm.jl A /issm/trunk-  
jpl/src/jl/plotmodel.jl M /issm/trunk-jpl/src/jl/triangle.jl

Export determination: 6.

Rationale: CHG: working on plotmodel

**Change #635** with diff file ISSM-26473-26474.diff:

Function name:

M /issm/trunk-jpl/src/jl/exp.jl M /issm/trunk-jpl/src/jl/plotmodel.jl  
Export determination: 6.  
Rationale: CHG: minor

**Change #636** with diff file ISSM-26474-26475.diff:

Function name:  
M /issm/trunk-jpl/src/m/coordsystems/ll2xy.m  
Export determination: 6.  
Rationale: BUG: Corrected help message

**Change #637** with diff file ISSM-26475-26476.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/AdjointHorizAnalysis.cpp  
Export determination: 6.  
Rationale: BUG: the coefficient of SurfaceAverageVelMisfit in PVector is 1

**Change #638** with diff file ISSM-26476-26477.diff:

Function name:  
M /issm/trunk-jpl/src/c/Makefile.am  
Export determination: 6.  
Rationale: BUG: moving TRIANGLEINCL ahead of PETSCINCL to avoid compatibility issues with PETSc's own triangle.h header file

**Change #639** with diff file ISSM-26477-26478.diff:

Function name:  
M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/SmbAnalysis.cpp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.h  
M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/c/shared/Matrix/MatrixU  
M /issm/trunk-jpl/src/c/shared/Matrix/matrix.h A /issm/trunk-jpl/src/c/shared/Random  
A /issm/trunk-jpl/src/c/shared/Random/random.cpp A /issm/trunk-jpl/src/c/shared/Random/random.h  
M /issm/trunk-jpl/src/c/shared/io/Marshalling/ToCodeConversions.cpp A /issm/trunk-

jpl/src/m/classes/SMBautoregression.m

Export determination: 6.

Rationale: autoregression SMB module, Random utilities, Cholesky decomposition

**Change #640** with diff file ISSM-26478-26479.diff:

Function name:

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

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

M /issm/trunk-jpl/src/c/classes/Materials/Material.h M /issm/trunk-jpl/src/c/classes/Materials/Matestar.cp

M /issm/trunk-jpl/src/c/classes/Materials/Matestar.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/Matlitho.h

M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp M /issm/trunk-jpl/src/m/classes/inversion.m

A /issm/trunk-jpl/test/Archives/Archive333.arch A /issm/trunk-jpl/test/Archives/Archive334.arch

A /issm/trunk-jpl/test/NightlyRun/test333.m A /issm/trunk-jpl/test/NightlyRun/test333.py

A /issm/trunk-jpl/test/NightlyRun/test334.m A /issm/trunk-jpl/test/NightlyRun/test334.py

Export determination: 6.

Rationale: NEW: add adjoint MLHO for friction and rheology

**Change #641** with diff file ISSM-26479-26480.diff:

Function name:

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

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

Export determination: 6.

Rationale: CHG: fixing style and AD after Vincent's commit

**Change #642** with diff file ISSM-26480-26481.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: MATLAB -> Python

**Change #643** with diff file ISSM-26481-26482.diff:

Function name:

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

Export determination: 6.  
Rationale: CHG: cosmetics

**Change #644** with diff file ISSM-26482-26483.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/modules/OceanExchangeData/OceanExchangeData.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.cpp  
M /issm/trunk-jpl/src/c/shared/Matrix/MatrixUtils.cpp M /issm/trunk-jpl/src/c/shared/Random/random.cpp

Export determination: 6.

Rationale: CHG: compliance with ISSM coding guidelines, random noise computation uniform accross CPUs in Smbautoregression, remove duplicate code in OceanExchangeData

**Change #645** with diff file ISSM-26483-26484.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp M /issm/trunk-jpl/src/c/modules/ModelProcessor/ModelProcessor.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/c/shared/Random/random.cpp M /issm/trunk-jpl/src/c/shared/Random/random.h  
M /issm/trunk-jpl/src/m/classes/SMBautoregression.m

Export determination: 6.

Rationale: NEW: randomflag allows to use fixed random seed in random.cpp, zero-initialization of smbspin for SmbAutoregression

**Change #646** with diff file ISSM-26484-26485.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing AD

**Change #647** with diff file ISSM-26485-26486.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing AD

**Change #648** with diff file ISSM-26486-26487.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMBautoregression.m A /issm/trunk-jpl/src/m/classes/SMBautoregression.

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

Export determination: 6.

Rationale: CHG: MATLAB -i Python; clean up

**Change #649** with diff file ISSM-26487-26488.diff:

Function name:

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

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

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

M /issm/trunk-jpl/src/m/classes/frontalforcingsrignot.m A /issm/trunk-jpl/test/Archives/Archive257.arch

A /issm/trunk-jpl/test/Archives/Archive542.arch A /issm/trunk-jpl/test/NightlyRun/test257.m

A /issm/trunk-jpl/test/NightlyRun/test542.m

Export determination: 6.

Rationale: CHG: adding Nightly runs for frontalforcingsrignot and SMBautoregression, changed frontalforcingsrignot basin\_id variable to be element-specific

**Change #650** with diff file ISSM-26488-26489.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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

Export determination: 6.

Rationale: CHG: added Enums for Aleah

**Change #651** with diff file ISSM-26489-26490.diff:

Function name:

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

jpl/src/c/cores/hydrology\_core.cpp

Export determination: 6.

Rationale: CHG: added second derivative calculation for Aleah

**Change #652** with diff file ISSM-26490-26491.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: changed the creep closure term in SHAKTI to reduce the nonlinearity and help convergence

**Change #653** with diff file ISSM-26491-26492.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: includes diffusivity-like term for gap height - this is an experiment

**Change #654** with diff file ISSM-26492-26493.diff:

Function name:

M /issm/trunk-jpl/src/jl/issm.jl M /issm/trunk-jpl/src/jl/plotmodel.jl

Export determination: 6.

Rationale: CHG: done with archread, phew

**Change #655** with diff file ISSM-26493-26494.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: MATLAB to Python; clean up

**Change #656** with diff file ISSM-26494-26495.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive350.arch

Export determination: 6.

Rationale: CHG: changed the numerics of creep closure term in SHAKTI and

experimental diffusivity term

**Change #657** with diff file ISSM-26495-26496.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.c  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/modules/FrontalForcingsx/Fro  
M /issm/trunk-jpl/src/c/modules/FrontalForcingsx/FrontalForcingsx.h M /issm/trunk-  
jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.cpp M /issm/trunk-  
jpl/src/c/shared/Enum/Enum.vim 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/StringTo  
M /issm/trunk-jpl/src/c/shared/io/Marshalling/IoCodeConversions.cpp A /issm/trunk-  
jpl/src/m/classes/frontalforcingsrignotautoregression.m M /issm/trunk-jpl/test/Archives/Archive257.arch  
M /issm/trunk-jpl/test/Archives/Archive542.arch A /issm/trunk-jpl/test/Archives/Archive543.arch  
M /issm/trunk-jpl/test/NightlyRun/test257.m M /issm/trunk-jpl/test/NightlyRun/test542.m  
A /issm/trunk-jpl/test/NightlyRun/test543.m

Export determination: 6.

Rationale: CHG: added class frontalforcingsrignotautoregression (autoregressive calculation of thermal\_forcing), autoregression routine in Element.cpp is now generic, corrected nightly runs 257 and 542, added nightly run 543

**Change #658** with diff file ISSM-26496-26497.diff:

Function name:

A /issm/trunk-jpl/externalpackages/petsc/install-3.16-linux.sh

Export determination: 6.

Rationale: CHG: added newest version of PETSc

**Change #659** with diff file ISSM-26497-26498.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: small constant for gap diffusivity like term

**Change #660** with diff file ISSM-26498-26499.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive350.arch

Export determination: 6.  
Rationale: CHG: updated with small constant diffusivity

**Change #661** with diff file ISSM-26499-26500.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: changed pow syntax in diffusivity term

**Change #662** with diff file ISSM-26500-26501.diff:  
Function name:  
M /issm/trunk-jpl/src/jl/issm.jl A /issm/trunk-jpl/src/jl/issmenums.jl A /issm/trunk-jpl/src/jl/parameterization.jl A /issm/trunk-jpl/src/jl/solve.jl A /issm/trunk-jpl/src/jl/test101.jl M /issm/trunk-jpl/src/jl/triangle.jl  
Export determination: 6.  
Rationale: NEW: added more files

**Change #663** with diff file ISSM-26501-26502.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp M /issm/trunk-jpl/src/c/classes/Elements/Penta.h  
Export determination: 6.  
Rationale: ADD: 3D MLHO,  $V_x$  and  $V_y$  are recovered from  $v_{base}$  and  $v_{shear}$  according to the formulation

**Change #664** with diff file ISSM-26502-26503.diff:  
Function name:  
A /issm/trunk-jpl/test/Archives/Archive335.arch A /issm/trunk-jpl/test/NightlyRun/test335.m A /issm/trunk-jpl/test/NightlyRun/test335.py  
Export determination: 6.  
Rationale: ADD: 3D MLHO test, this may fail on MacOS

**Change #665** with diff file ISSM-26503-26504.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing memory leak

**Change #666** with diff file ISSM-26504-26505.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive335.arch

Export determination: 6.

Rationale: BUG: fix test 3D MLHO

**Change #667** with diff file ISSM-26505-26506.diff:

Function name:

A /issm/trunk-jpl/externalpackages/vim/addons/vim/autoload/LaTeXtoUnicode.vim

A /issm/trunk-jpl/externalpackages/vim/addons/vim/autoload/generate\_latex\_symbols\_table.jl

A /issm/trunk-jpl/externalpackages/vim/addons/vim/autoload/julia A /issm/trunk-jpl/externalpackages/vim/addons/vim/autoload/julia/doc.vim A /issm/trunk-jpl/externalpackages/vim/addons/vim/autoload/julia.vim A /issm/trunk-jpl/externalpackages/vim/addons/vim/autoload/julia\_latex\_symbols.vim

A /issm/trunk-jpl/externalpackages/vim/addons/vim/doc/generate\_latex\_symbols\_table.jl

A /issm/trunk-jpl/externalpackages/vim/addons/vim/doc/julia-vim-L2U-table.txt

A /issm/trunk-jpl/externalpackages/vim/addons/vim/doc/julia-vim-L2U.txt A /issm/trunk-jpl/externalpackages/vim/addons/vim/doc/julia-vim.txt A /issm/trunk-jpl/externalpackages/vim/addons/vim/ftdetect A /issm/trunk-jpl/externalpackages/vim/addons/vim/ftdetect

A /issm/trunk-jpl/externalpackages/vim/addons/vim/ftplugin A /issm/trunk-jpl/externalpackages/vim/addons/vim/ftplugin/julia.vim A /issm/trunk-jpl/externalpackages/vim/addons/vim/indent/julia.vim A /issm/trunk-jpl/externalpackages/vim/addons/vim/keymap A /issm/trunk-jpl/externalpackages/vim/addons/vim/keymap/latex2unicode\_utf-8.vim M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/julia.vim M /issm/trunk-jpl/externalpackages/vim/addons/vim/syntax/juliadoc.vim M /issm/trunk-jpl/externalpackages/vim/addons/vimrc

Export determination: 6.

Rationale: CHG: added julia files

**Change #668** with diff file ISSM-26506-26507.diff:

Function name:  
A /issm/trunk-jpl/test/NightlyRun/test134.m  
Export determination: 6.  
Rationale: ADD: Added test to check test134

**Change #669** with diff file ISSM-26507-26508.diff:  
Function name:  
A /issm/trunk-jpl/test/Archives/Archive134.arch  
Export determination: 6.  
Rationale: ADD: Added test to check test134

**Change #670** with diff file ISSM-26508-26509.diff:  
Function name:  
M /issm/trunk-jpl/jenkins/pine\_island-mac-basic  
Export determination: 6.  
Rationale: CHG: Currently disabling tests that depend on random number generation

**Change #671** with diff file ISSM-26509-26510.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test134.m  
Export determination: 6.  
Rationale: BUG: remove plotmodel from test134

**Change #672** with diff file ISSM-26510-26511.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: took out experimental diffusion term for now

**Change #673** with diff file ISSM-26511-26512.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive350.arch

Export determination: 6.  
Rationale: CHG: updated test 350 with current SHAKTI code

**Change #674** with diff file ISSM-26512-26513.diff:  
Function name:  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch  
Export determination: 6.  
Rationale: BUG: try random generator with Mersenne Twister

**Change #675** with diff file ISSM-26513-26514.diff:  
Function name:  
D /issm/trunk-jpl/test/Archives/Archive134.arch D /issm/trunk-jpl/test/NightlyRun/test134.m  
Export determination: 6.  
Rationale: BUG: Remove Nightlyrun134

**Change #676** with diff file ISSM-26514-26515.diff:  
Function name:  
M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp  
Export determination: 6.  
Rationale: CHG: Implement a pseudo-random number generator for Gaussian variables in solutionsequence\_sampling.cpp

**Change #677** with diff file ISSM-26515-26516.diff:  
Function name:  
A /issm/trunk-jpl/test/NightlyRun/test134.m  
Export determination: 6.  
Rationale: ADD: Added test to check test134

**Change #678** with diff file ISSM-26516-26517.diff:  
Function name:  
R /issm/trunk-jpl/test/Archives/Archive124.arch  
Export determination: 6.

Rationale: CHG: Archive 124

**Change #679** with diff file ISSM-26517-26518.diff:

Function name:

D /issm/trunk-jpl/test/NightlyRun/test134.m

Export determination: 6.

Rationale: BUG: Remove Nightlyrun134

**Change #680** with diff file ISSM-26518-26519.diff:

Function name:

M /issm/trunk-jpl/src/jl/issm.jl M /issm/trunk-jpl/src/jl/solve.jl

Export determination: 6.

Rationale: CHG: minor

**Change #681** with diff file ISSM-26519-26520.diff:

Function name:

A /issm/trunk-jpl/src/m/plot/colormaps/cmocean.m

Export determination: 6.

Rationale: CHG: added cmocean

**Change #682** with diff file ISSM-26520-26521.diff:

Function name:

A /issm/trunk-jpl/test/NightlyRun/test134.m

Export determination: 6.

Rationale: ADD: Added test134 to check for sampling capability

**Change #683** with diff file ISSM-26521-26522.diff:

Function name:

A /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: ADD: Added test134 to check for sampling capability

**Change #684** with diff file ISSM-26522-26523.diff:

Function name:

A /issm/trunk-jpl/src/jl/classes.jl M /issm/trunk-jpl/src/jl/issm.jl M /issm/trunk-jpl/src/jl/parameterization.jl M /issm/trunk-jpl/src/jl/plotmodel.jl M /issm/trunk-jpl/src/jl/solve.jl M /issm/trunk-jpl/src/jl/test101.jl M /issm/trunk-jpl/src/jl/triangle.jl  
A /issm/trunk-jpl/src/jl/utis.jl

Export determination: 6.

Rationale: CHG: changing the structure and done with ModelProcessor

**Change #685** with diff file ISSM-26523-26524.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/controladm1qn3\_core.cpp

Export determination: 6.

Rationale: CHG: fixed memory leak

**Change #686** with diff file ISSM-26524-26525.diff:

Function name:

M /issm/trunk-jpl/externalpackages/valgrind/issm.supp

Export determination: 6.

Rationale: Adding some linux exceptions

**Change #687** with diff file ISSM-26525-26526.diff:

Function name:

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

M /issm/trunk-jpl/src/c/datastructures/DataSet.cpp

Export determination: 6.

Rationale: CHG: added Marshall to Cfsurfacesquare

**Change #688** with diff file ISSM-26526-26527.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp

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

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

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

M /issm/trunk-jpl/src/c/modules/modules.h M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim

M /issm/trunk-jpl/src/c/shared/Enum/EnumDefinitions.h M /issm/trunk-jpl/src/c/shared/Enum/EnumToSt  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/SMBautoregres  
M /issm/trunk-jpl/src/m/classes/frontalforcingsrignotautoregression.m M /issm/trunk-  
jpl/src/m/classes/model.m A /issm/trunk-jpl/src/m/classes/stochasticforcing.m  
A /issm/trunk-jpl/src/m/miscellaneous/supportedstochforcings.m M /issm/trunk-  
jpl/test/Archives/Archive257.arch M /issm/trunk-jpl/test/Archives/Archive543.arch  
M /issm/trunk-jpl/test/NightlyRun/test257.m M /issm/trunk-jpl/test/NightlyRun/test543.m  
Export determination: 6.  
Rationale: CHG: matlab stochasticforcing class, update of SMBautoregression  
and FrontalForcingsRignotAutoregression, no noise in AutoregressionInit

**Change #689** with diff file ISSM-26527-26528.diff:

Function name:

A /issm/trunk-jpl/src/c/modules/StochasticForcingx A /issm/trunk-jpl/src/c/modules/StochasticForcingx/St  
A /issm/trunk-jpl/src/c/modules/StochasticForcingx/StochasticForcingx.h

Export determination: 6.

Rationale: BUG: forgot to add new files in previous commit

**Change #690** with diff file ISSM-26528-26529.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: forgot to add header file in previous commits

**Change #691** with diff file ISSM-26529-26530.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: should not divide by 0 (detected with CoDiPack)

**Change #692** with diff file ISSM-26530-26531.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive226.arch M /issm/trunk-jpl/test/Archives/Archive323.arch

M /issm/trunk-jpl/test/Archives/Archive324.arch

Export determination: 6.

Rationale: CHG: updated archive to avoid division by 0

**Change #693** with diff file ISSM-26531-26532.diff:

Function name:

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

M /issm/trunk-jpl/test/Archives/Archive335.arch

Export determination: 6.

Rationale: NEW: use P1xP4 for 3D MLHO

**Change #694** with diff file ISSM-26532-26533.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stochasticforcing.m M /issm/trunk-jpl/test/Archives/Archive257.arch

M /issm/trunk-jpl/test/Archives/Archive542.arch M /issm/trunk-jpl/test/Archives/Archive543.arch

M /issm/trunk-jpl/test/NightlyRun/test257.m M /issm/trunk-jpl/test/NightlyRun/test542.m

M /issm/trunk-jpl/test/NightlyRun/test543.m

Export determination: 6.

Rationale: CHG: cleaning-up stochasticforcing.m, removing supportedstochfor-  
ings.m, correcting tests 257,542,543

**Change #695** with diff file ISSM-26533-26534.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: prevent CoDiPack from complaining about power of a negative  
number

**Change #696** with diff file ISSM-26534-26535.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/io/Marshalling/Marshalling.cpp

Export determination: 6.

Rationale: CHG: checking for NaNs

**Change #697** with diff file ISSM-26535-26536.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineGreenland.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpJoughinCompositeGreenland.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpSeaRISE.m

Export determination: 6.

Rationale: CHG:change to use totten

**Change #698** with diff file ISSM-26536-26537.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineAntarctica.m

Export determination: 6.

Rationale: CHG: adjustment for totten

**Change #699** with diff file ISSM-26537-26538.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: adjustment for totten

**Change #700** with diff file ISSM-26538-26539.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Patch to get unrelated Python tests passing again

**Change #701** with diff file ISSM-26539-26540.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: Need to check on field type before taking length

**Change #702** with diff file ISSM-26540-26541.diff:

Function name:

M /issm/trunk-jpl/src/m/modules/ExpToLevelSet.m  
Export determination: 6.  
Rationale: ADD: exp to levelset can handle multiple records

**Change #703** with diff file ISSM-26541-26542.diff:  
Function name:  
M /issm/trunk-jpl/src/m/modules/ExpToLevelSet.m  
Export determination: 6.  
Rationale: CHG:indentation

**Change #704** with diff file ISSM-26542-26543.diff:  
Function name:  
M /issm/trunk-jpl/test/MITgcm/code/packages.conf M /issm/trunk-jpl/test/MITgcm/code\_4003/SIZE.h  
Export determination: 6.  
Rationale: cosmetic chnages

**Change #705** with diff file ISSM-26543-26544.diff:  
Function name:  
M /issm/trunk-jpl/test/MITgcm/code\_4003/DIAGNOSTICS\_SIZE.h M /issm/trunk-jpl/test/NightlyRun/test4003.m  
Export determination: 6.  
Rationale: moving from verification/shelfice\_remeshing to verification/shelfice\_2d\_remesh

**Change #706** with diff file ISSM-26544-26545.diff:  
Function name:  
M /issm/trunk-jpl/test/MITgcm/code/CPP\_EEOPTIONS.h M /issm/trunk-jpl/test/MITgcm/code/do\_oceanic\_phys.F M /issm/trunk-jpl/test/MITgcm/code/eeboot\_minimal.F  
M /issm/trunk-jpl/test/MITgcm/code/packages.conf M /issm/trunk-jpl/test/MITgcm/code\_4003/CPP\_EEOPTIONS.h  
M /issm/trunk-jpl/test/MITgcm/code\_4003/CPP\_OPTIONS.h M /issm/trunk-jpl/test/MITgcm/code\_4003/DIAGNOSTICS\_SIZE.h M /issm/trunk-jpl/test/MITgcm/code\_4003/DIAG\_OPTIONS.h  
M /issm/trunk-jpl/test/MITgcm/code\_4003/OBCS\_OPTIONS.h M /issm/trunk-jpl/test/MITgcm/code\_4003/SIZE.h D /issm/trunk-jpl/test/MITgcm/code\_4003/STREAMICE\_OPTIONS.h  
M /issm/trunk-jpl/test/MITgcm/code\_4003/do\_oceanic\_phys.F M /issm/trunk-jpl/test/MITgcm/code\_4003/eeboot\_minimal.F M /issm/trunk-jpl/test/MITgcm/code\_4003/packages.conf  
M /issm/trunk-jpl/test/MITgcm/code\_4003/shelfice\_step\_icemass.F

Export determination: 6.  
Rationale: updating code and code\_4003 to MITgcm checkpoint68c+

**Change #707** with diff file ISSM-26545-26546.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/code\_4003/SIZE.h M /issm/trunk-jpl/test/MITgcm/input\_4003/data  
M /issm/trunk-jpl/test/MITgcm/input\_4003/data.shelfice M /issm/trunk-jpl/test/MITgcm/input\_4003/data\_  
M /issm/trunk-jpl/test/MITgcm/input\_4003/eedata M /issm/trunk-jpl/test/MITgcm/input\_4003/eedata\_unc  
M /issm/trunk-jpl/test/NightlyRun/test4003.m

Export determination: 6.

Rationale: working on steps 1-6 of test4003

**Change #708** with diff file ISSM-26546-26547.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: make levelset work for every case (dynamic and forced)

**Change #709** with diff file ISSM-26547-26548.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: was not compiling

**Change #710** with diff file ISSM-26548-26549.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: was not compiling

**Change #711** with diff file ISSM-26549-26550.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stochasticforcing.m M /issm/trunk-jpl/test/Archives/Archive257.arch

Export determination: 6.

Rationale: BUG: fixed use of self.covariance in stochasticforcing.m

**Change #712** with diff file ISSM-26550-26551.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/SmbAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cpp  
M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/Gembx.cpp M /issm/trunk-jpl/src/c/modules/SurfaceMassBalance/SurfaceMassBalance.h M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/SMBgemb.m M /issm/trunk-jpl/src/m/classes/SMBgemb.py

Export determination: 6.

Rationale: CHG: update how we deal with emissivity, giving user more options to change value on wet snow/ice, and when grain size exceeds a threshold value.

Add option to run with a bias correction to outgoing long wave radiation.

**Change #713** with diff file ISSM-26551-26552.diff:

Function name:

A /issm/trunk-jpl/src/m/coordsystems/laea\_inv.m

Export determination: 6.

Rationale: NEW: added lambert to lat lon

**Change #714** with diff file ISSM-26552-26553.diff:

Function name:

M /issm/trunk-jpl/src/c/toolkits/issm/IssmDenseMat.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiDenseMat.h  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiSparseMat.h M /issm/trunk-jpl/src/c/toolkits/issm/IssmMpiSparseVec.h  
M /issm/trunk-jpl/src/c/toolkits/issm/IssmSeqVec.h

Export determination: 6.

Rationale: BUG: prevent compiler from complaining about missing output

**Change #715** with diff file ISSM-26553-26554.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/SMBautoregression.py M /issm/trunk-jpl/src/m/classes/calvingvonmises.py  
M /issm/trunk-jpl/src/m/classes/frontalforcingsrignot.py M /issm/trunk-jpl/src/m/classes/frontalforcingsrignot.py  
A /issm/trunk-jpl/src/m/classes/frontalforcingsrignotautoregression.py M /issm/trunk-jpl/src/m/classes/frontalforcingsrignotautoregression.py

jpl/src/m/classes/stochasticforcing.m M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
M /issm/trunk-jpl/src/m/miscellaneous/MatlabFuncs.py M /issm/trunk-jpl/src/m/solve/WriteData.py  
M /issm/trunk-jpl/test/NightlyRun/runme.py M /issm/trunk-jpl/test/NightlyRun/test257.m  
A /issm/trunk-jpl/test/NightlyRun/test257.py M /issm/trunk-jpl/test/NightlyRun/test542.m  
A /issm/trunk-jpl/test/NightlyRun/test542.py M /issm/trunk-jpl/test/NightlyRun/test543.m  
A /issm/trunk-jpl/test/NightlyRun/test543.py  
Export determination: 6.  
Rationale: CHG: MATLAB -> Python translations; clean up

**Change #716** with diff file ISSM-26554-26555.diff:

Function name:

A /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp A /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampler.m  
M /issm/trunk-jpl/test/Archives/Archive134.arch  
Export determination: 6.  
Rationale: NEW: add pseudo-random number generators + use in solutionsequence\_sampler.cpp

**Change #717** with diff file ISSM-26555-26556.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp A /issm/trunk-jpl/src/m/boundaryconditions/SetMLHOBBC.m  
A /issm/trunk-jpl/src/m/boundaryconditions/SetMLHOBBC.m M /issm/trunk-jpl/src/m/classes/flowequation.m M /issm/trunk-jpl/src/m/classes/stressbalance.m  
M /issm/trunk-jpl/src/m/classes/stressbalance.py M /issm/trunk-jpl/src/m/extrusion/project3d.m  
M /issm/trunk-jpl/src/m/extrusion/project3d.py M /issm/trunk-jpl/test/NightlyRun/test127.m  
M /issm/trunk-jpl/test/NightlyRun/test127.py M /issm/trunk-jpl/test/NightlyRun/test128.m  
M /issm/trunk-jpl/test/NightlyRun/test128.py M /issm/trunk-jpl/test/NightlyRun/test129.m  
M /issm/trunk-jpl/test/NightlyRun/test129.py M /issm/trunk-jpl/test/NightlyRun/test248.m  
M /issm/trunk-jpl/test/NightlyRun/test248.py M /issm/trunk-jpl/test/NightlyRun/test249.m  
M /issm/trunk-jpl/test/NightlyRun/test249.py M /issm/trunk-jpl/test/NightlyRun/test254.m  
M /issm/trunk-jpl/test/NightlyRun/test254.py M /issm/trunk-jpl/test/NightlyRun/test255.m  
M /issm/trunk-jpl/test/NightlyRun/test255.py M /issm/trunk-jpl/test/NightlyRun/test256.m  
M /issm/trunk-jpl/test/NightlyRun/test256.py M /issm/trunk-jpl/test/NightlyRun/test330.m  
M /issm/trunk-jpl/test/NightlyRun/test330.py M /issm/trunk-jpl/test/NightlyRun/test332.m  
M /issm/trunk-jpl/test/NightlyRun/test332.py M /issm/trunk-jpl/test/NightlyRun/test333.m  
M /issm/trunk-jpl/test/NightlyRun/test333.py M /issm/trunk-jpl/test/NightlyRun/test334.m  
M /issm/trunk-jpl/test/NightlyRun/test334.py M /issm/trunk-jpl/test/NightlyRun/test335.m  
M /issm/trunk-jpl/test/NightlyRun/test335.py M /issm/trunk-jpl/test/NightlyRun/test446.m  
M /issm/trunk-jpl/test/NightlyRun/test446.py M /issm/trunk-jpl/test/NightlyRun/test447.m  
M /issm/trunk-jpl/test/NightlyRun/test447.py M /issm/trunk-jpl/test/NightlyRun/test448.m

M /issm/trunk-jpl/test/NightlyRun/test448.py M /issm/trunk-jpl/test/NightlyRun/test449.m  
M /issm/trunk-jpl/test/NightlyRun/test449.py M /issm/trunk-jpl/test/NightlyRun/test518.m  
M /issm/trunk-jpl/test/NightlyRun/test518.py M /issm/trunk-jpl/test/NightlyRun/test519.m  
M /issm/trunk-jpl/test/NightlyRun/test519.py M /issm/trunk-jpl/test/NightlyRun/test810.m  
M /issm/trunk-jpl/test/NightlyRun/test810.py M /issm/trunk-jpl/test/NightlyRun/test811.m  
M /issm/trunk-jpl/test/NightlyRun/test811.py M /issm/trunk-jpl/test/NightlyRun/test812.m  
M /issm/trunk-jpl/test/NightlyRun/test812.py

Export determination: 6.

Rationale: ADD: shear boundary conditions for MLHO. To keep the tests as they were, all the shear boundary conditions are set to nan.

**Change #718** with diff file ISSM-26556-26557.diff:

Function name:

M /issm/trunk-jpl/m4/issm\_options.m4 M /issm/trunk-jpl/src/c/classes/FemModel.cpp  
M /issm/trunk-jpl/src/c/classes/IOModel.cpp M /issm/trunk-jpl/src/c/cores/ad\_core.cpp  
M /issm/trunk-jpl/src/c/cores/controladm1qn3\_core.cpp M /issm/trunk-jpl/src/c/cores/controlvalidation\_core.cpp  
M /issm/trunk-jpl/src/c/cores/transient\_core.cpp M /issm/trunk-jpl/src/c/shared/io/Marshalling/Marshalling.cpp  
M /issm/trunk-jpl/src/c/shared/io/Marshalling/Marshalling.h M /issm/trunk-jpl/src/c/toolkits/codipack/CoDiPackCommon.hpp M /issm/trunk-jpl/src/c/toolkits/gsl/DenseGslSolve.cpp  
M /issm/trunk-jpl/src/c/toolkits/mpi/issmmpi.h M /issm/trunk-jpl/src/c/toolkits/mumps/MumpsSolve.cpp

Export determination: 6.

Rationale: CHG: can now run with CoDiPack 1.9 and 2.0

**Change #719** with diff file ISSM-26557-26558.diff:

Function name:

M /issm/trunk-jpl/src/m/extrusion/project3d.py

Export determination: 6.

Rationale: BUG:fix error for polynomial degree projection in python code

**Change #720** with diff file ISSM-26558-26559.diff:

Function name:

A /issm/trunk-jpl/examples/AMR/mismip.py A /issm/trunk-jpl/examples/AMR/runme.py

Export determination: 6.

Rationale: NEW: adding AMR tutorial in Python

**Change #721** with diff file ISSM-26559-26560.diff:

Function name:

A /issm/trunk-jpl/examples/Greenland/CheatSheet.py A /issm/trunk-jpl/examples/Greenland/Greenland.py

A /issm/trunk-jpl/examples/Greenland/runme.py

Export determination: 6.

Rationale: NEW: adding Greenland tutorial in Python

**Change #722** with diff file ISSM-26560-26561.diff:

Function name:

A /issm/trunk-jpl/examples/Inversion/Square.py A /issm/trunk-jpl/examples/Inversion/runme.py

Export determination: 6.

Rationale: NEW: adding Inversion tutorial in Python

**Change #723** with diff file ISSM-26561-26562.diff:

Function name:

A /issm/trunk-jpl/examples/ISMIP/IsmipA.py A /issm/trunk-jpl/examples/ISMIP/IsmipF.py

A /issm/trunk-jpl/examples/ISMIP/runme.py

Export determination: 6.

Rationale: NEW: adding ISMIP tutorial in Python

**Change #724** with diff file ISSM-26562-26563.diff:

Function name:

A /issm/trunk-jpl/examples/Mesh/circles.py A /issm/trunk-jpl/examples/Mesh/shock.py

Export determination: 6.

Rationale: NEW: adding Mesh tutorial in Python

**Change #725** with diff file ISSM-26563-26564.diff:

Function name:

A /issm/trunk-jpl/examples/SquareIceShelf/Square.py A /issm/trunk-jpl/examples/SquareIceShelf/runme.py

Export determination: 6.

Rationale: NEW: adding SquareIceShelf tutorial in Python

**Change #726** with diff file ISSM-26564-26565.diff:

Function name:  
M /issm/trunk-jpl/examples/shakti/moulin.py  
Export determination: 6.  
Rationale: CHG: minor

**Change #727** with diff file ISSM-26565-26566.diff:  
Function name:  
M /issm/trunk-jpl/src/wrappers/python/io/FetchPythonData.cpp  
Export determination: 6.  
Rationale: NEW: adding some single precision import

**Change #728** with diff file ISSM-26566-26567.diff:  
Function name:  
M /issm/trunk-jpl/src/m/contrib/defleurian/netCDF/export\_netCDF.py  
Export determination: 6.  
Rationale: NEW: update to deal with AMR models

**Change #729** with diff file ISSM-26567-26568.diff:  
Function name:  
M /issm/trunk-jpl/src/m/io/loadvars.py  
Export determination: 6.  
Rationale: BUG removing a print

**Change #730** with diff file ISSM-26568-26569.diff:  
Function name:  
M /issm/trunk-jpl/src/m/modules/InterpFromGridToMesh.py  
Export determination: 6.  
Rationale: CHG:squeeze before return

**Change #731** with diff file ISSM-26569-26570.diff:  
Function name:  
M /issm/trunk-jpl/src/m/plot/colormaps/demmap.py M /issm/trunk-jpl/src/m/plot/plotmodel.py  
M /issm/trunk-jpl/src/m/plot/processdata.py M /issm/trunk-jpl/src/m/plot/processmesh.py

Export determination: 6.  
Rationale: CHG:modification to enable AMR plotting

**Change #732** with diff file ISSM-26570-26571.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/clusters/saga.py  
Export determination: 6.  
Rationale: CHG try scp rather than fail on it

**Change #733** with diff file ISSM-26571-26572.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/damage.py  
Export determination: 6.  
Rationale: CHG: do not extrude damage if it is not here

**Change #734** with diff file ISSM-26572-26573.diff:  
Function name:  
M /issm/trunk-jpl/src/m/contrib/defleurian/paraview/exportVTK.py  
Export determination: 6.  
Rationale: NEW:dealing with export on sparse stepping

**Change #735** with diff file ISSM-26573-26574.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/model.py  
Export determination: 6.  
Rationale: CHG minor formatting

**Change #736** with diff file ISSM-26574-26575.diff:  
Function name:  
M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sa  
Export determination: 6.  
Rationale: CHG: write pseudrandom number generators as a namespace

**Change #737** with diff file ISSM-26575-26576.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence.sa

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #738** with diff file ISSM-26576-26577.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence.sa

M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #739** with diff file ISSM-26577-26578.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #740** with diff file ISSM-26578-26579.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence.sa

M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #741** with diff file ISSM-26579-26580.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch  
Export determination: 6.  
Rationale: BUG: Try to fix bugs on tests

**Change #742** with diff file ISSM-26580-26581.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #743** with diff file ISSM-26581-26582.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #744** with diff file ISSM-26582-26583.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #745** with diff file ISSM-26583-26584.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #746** with diff file ISSM-26584-26585.diff:

Function name:

M /issm/trunk-jpl/src/m/boundaryconditions/SetMLHOBBC.py M /issm/trunk-jpl/test/NightlyRun/test127.py

Export determination: 6.

Rationale: BUG:fix to MLHOBBC and test127

**Change #747** with diff file ISSM-26585-26586.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing a division by 0 in CoDiPack

**Change #748** with diff file ISSM-26586-26587.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp

Export determination: 6.

Rationale: CHG: change names of random generators

**Change #749** with diff file ISSM-26587-26588.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: add member functions for random generators in a separate file

**Change #750** with diff file ISSM-26588-26589.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #751** with diff file ISSM-26589-26590.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: BUG: Try to fix bugs on tests

**Change #752** with diff file ISSM-26590-26591.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: some changes in pseudo-random number generator classes

**Change #753** with diff file ISSM-26591-26592.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs pseudo-random number generators

**Change #754** with diff file ISSM-26592-26593.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs pseudo-random number generators

**Change #755** with diff file ISSM-26593-26594.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: add member functions for random generators in a separate file

**Change #756** with diff file ISSM-26594-26595.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: BUG: Try to fix bugs pseudo-random number generators

**Change #757** with diff file ISSM-26595-26596.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: add member functions for random generators in a separate file

**Change #758** with diff file ISSM-26596-26597.diff:

Function name:

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp  
M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: BUG: Try to fix bugs pseudo-random number generators

**Change #759** with diff file ISSM-26597-26598.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence.sa  
M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: BUG: Try to fix bugs pseudo-random number generators

**Change #760** with diff file ISSM-26598-26599.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: a few changes for random generators

**Change #761** with diff file ISSM-26599-26600.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: a few changes for random generators

**Change #762** with diff file ISSM-26600-26601.diff:

Function name:

M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sampling.cpp M /issm/trunk-jpl/test/Archives/Archive134.arch

Export determination: 6.

Rationale: CHG: update Nightlyrun 134

**Change #763** with diff file ISSM-26601-26602.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: better way if fixing friction singularity when  $v=0$

**Change #764** with diff file ISSM-26602-26603.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: add member functions for random generators in a separate file

**Change #765** with diff file ISSM-26603-26604.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sa

Export determination: 6.

Rationale: CHG: create namespace for pseudo-random number generator

**Change #766** with diff file ISSM-26604-26605.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/modules/FrontalForcingsx/Fro  
M /issm/trunk-jpl/src/c/modules/ModelProcessox/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/modules/StochasticForcingx/StochasticForcingx.cpp M /issm/trunk-  
jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp M /issm/trunk-  
jpl/src/c/shared/Enum/Enum.vim 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/stochasticforcing.m M /issm/trunk-jpl/test/NightlyRun/test257.m  
M /issm/trunk-jpl/test/NightlyRun/test543.m

Export determination: 6.

Rationale: CHG: making stochasticforcing.m more generic, extending stochas-  
ticforcing capability to DefaultCalving

**Change #767** with diff file ISSM-26605-26606.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh2dx/InterpFromMeshToMesh2dx.h

Export determination: 6.

Rationale: CHG: making last argument optional for Julia

**Change #768** with diff file ISSM-26606-26607.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Enum/Synchronize.sh

Export determination: 6.

Rationale: CHG: adding highlighting for Julia

**Change #769** with diff file ISSM-26607-26608.diff:

Function name:

M /issm/trunk-jpl/src/m/solvers/asmoptions.m M /issm/trunk-jpl/src/m/solvers/asmstokesoptions.m

Export determination: 6.

Rationale: CHG: cosmetics

**Change #770** with diff file ISSM-26608-26609.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/modules/FrontalForcingsx/Fro  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/modules/StochasticForcingx/StochasticForcingx.cpp M /issm/trunk-  
jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp M /issm/trunk-  
jpl/src/c/shared/Enum/Enum.vim 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/stochasticforcing.m

Export determination: 6.

Rationale: BUG: reverting Vincent's commit

**Change #771** with diff file ISSM-26609-26610.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test257.m

Export determination: 6.

Rationale: BUG: reverting Vincent's commit

**Change #772** with diff file ISSM-26610-26611.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test543.m

Export determination: 6.

Rationale: BUG: reverting Vincent's commit

**Change #773** with diff file ISSM-26611-26612.diff:

Function name:

A /issm/trunk-jpl/src/c/shared/Enum/Enumjl.vim

Export determination: 6.

Rationale: CHG: added Enums for Julia

**Change #774** with diff file ISSM-26612-26613.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-  
jpl/src/c/shared/Random/randomgenerator.h M /issm/trunk-jpl/src/c/solutionsequences/solutionsequence\_sa

Export determination: 6.  
Rationale: CGH: include linear congruential generator

**Change #775** with diff file ISSM-26613-26614.diff:

Function name:  
M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp  
Export determination: 6.  
Rationale: BUG: include library chrono in randomgenerator.cpp

**Change #776** with diff file ISSM-26614-26615.diff:

Function name:  
M /issm/trunk-jpl/test/MITgcm/build\_4003.sh D /issm/trunk-jpl/test/MITgcm/get\_mitgcm\_dngoldberg.sh  
D /issm/trunk-jpl/test/MITgcm/install\_dngoldberg.sh M /issm/trunk-jpl/test/NightlyRun/test4003.m  
Export determination: 6.  
Rationale: test4003 now uses main MITgcm branch as opposed to dngoldberg  
branch RunUncoupledMITgcm exactly reproduces MITgcm/verification/shelfice\_2d\_remesh

**Change #777** with diff file ISSM-26615-26616.diff:

Function name:  
M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/classes/Elements/Element.cp  
M /issm/trunk-jpl/src/c/classes/Elements/Element.h M /issm/trunk-jpl/src/c/modules/FrontalForcingx/Fro  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/modules/StochasticForcingx/StochasticForcingx.cpp M /issm/trunk-  
jpl/src/c/modules/SurfaceMassBalancex/SurfaceMassBalancex.cpp M /issm/trunk-  
jpl/src/c/shared/Enum/Enum.vim 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/Enumjl.v  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/stochasticforcin  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py M /issm/trunk-jpl/test/NightlyRun/test257.m  
M /issm/trunk-jpl/test/NightlyRun/test257.py M /issm/trunk-jpl/test/NightlyRun/test543.m  
M /issm/trunk-jpl/test/NightlyRun/test543.py  
Export determination: 6.  
Rationale: CHG: making stochasticforcing.m more generic, extending stochas-  
ticforcing capability to DefaultCalving (second attempt)

**Change #778** with diff file ISSM-26616-26617.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CGH: add lognormal, chi-squared, and exponential distributions to pseudo-random generator

**Change #779** with diff file ISSM-26617-26618.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: set md.stochasticforcing.default\_id as dummy if defaults not used

**Change #780** with diff file ISSM-26618-26619.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: fixing bugs in stochasticforcing

**Change #781** with diff file ISSM-26619-26620.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CGH: add student-t distribution to pseudo-random generator

**Change #782** with diff file ISSM-26620-26621.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: set md.stochasticforcing.default\_id as dummy if defaults not used (python syntax fixed)

**Change #783** with diff file ISSM-26621-26622.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/random.cpp M /issm/trunk-jpl/src/c/shared/Random/random.h

M /issm/trunk-jpl/test/Archives/Archive257.arch M /issm/trunk-jpl/test/Archives/Archive543.arch

Export determination: 6.

Rationale: CHG: making random number generation in ISSM dependent on classes of randomgenerator.h (should allow cross-platform tests of stochasticity)

**Change #784** with diff file ISSM-26622-26623.diff:

Function name:

M /issm/trunk-jpl/src/jl/classes.jl M /issm/trunk-jpl/src/jl/solve.jl

Export determination: 6.

Rationale: CHG: some progress with Joel

**Change #785** with diff file ISSM-26623-26624.diff:

Function name:

M /issm/trunk-jpl/src/c/cores/controladm1qn3\_core.cpp M /issm/trunk-jpl/src/c/modules/ConfigureObjects

Export determination: 6.

Rationale: CHG: nor needed anymore

**Change #786** with diff file ISSM-26624-26625.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmap2.m M

/issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpGeoid.m M /issm/trunk-

jpl/src/m/contrib/morlighem/modeldata/interpRACMOant.m M /issm/trunk-

jpl/src/m/contrib/morlighem/modeldata/interpSmith2020.m

Export determination: 6.

Rationale: CHG: updating some scripts for totten

**Change #787** with diff file ISSM-26625-26626.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpDTU19MDT.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpREMA.m

Export determination: 6.

Rationale: CHG: added totten support

**Change #788** with diff file ISSM-26626-26627.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: IceVolume() in Tria.cpp and Penta.cpp can account for partial ice coverage of frontal elements (currently disabled using false condition)

**Change #789** with diff file ISSM-26627-26628.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpIBCSO.m M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpMouginotAnt2017.m M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpRTopo2.m

Export determination: 6.

Rationale: CHG: added support for totten

**Change #790** with diff file ISSM-26628-26629.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve.jl

Export determination: 6.

Rationale: CHG: working on MP with Joel

**Change #791** with diff file ISSM-26629-26630.diff:

Function name:

D /issm/trunk-jpl/src/jl/classes.jl D /issm/trunk-jpl/src/jl/exp.jl M /issm/trunk-jpl/src/jl/issm.jl D /issm/trunk-jpl/src/jl/issmenums.jl A /issm/trunk-jpl/src/jl/md  
A /issm/trunk-jpl/src/jl/md/classes.jl (from /issm/trunk-jpl/src/jl/classes.jl:26628)  
A /issm/trunk-jpl/src/jl/md/exp.jl (from /issm/trunk-jpl/src/jl/exp.jl:26628)  
A /issm/trunk-jpl/src/jl/md/parameterization.jl (from /issm/trunk-jpl/src/jl/parameterization.jl:26628)  
A /issm/trunk-jpl/src/jl/md/plotmodel.jl (from /issm/trunk-jpl/src/jl/plotmodel.jl:26628)  
A /issm/trunk-jpl/src/jl/md/triangle.jl (from /issm/trunk-jpl/src/jl/triangle.jl:26628)  
A /issm/trunk-jpl/src/jl/md/utils.jl (from /issm/trunk-jpl/src/jl/utils.jl:26628)  
D /issm/trunk-jpl/src/jl/parameterization.jl D /issm/trunk-jpl/src/jl/plotmodel.jl

A /issm/trunk-jpl/src/jl/solve A /issm/trunk-jpl/src/jl/solve/analyses.jl A /issm/trunk-jpl/src/jl/solve/constraints.jl A /issm/trunk-jpl/src/jl/solve/elements.jl A /issm/trunk-jpl/src/jl/solve/femmodel.jl A /issm/trunk-jpl/src/jl/solve/gauss.jl A /issm/trunk-jpl/src/jl/solve/inputs.jl A /issm/trunk-jpl/src/jl/solve/issmenums.jl (from /issm/trunk-jpl/src/jl/issmenums.jl:26628) A /issm/trunk-jpl/src/jl/solve/modules.jl A /issm/trunk-jpl/src/jl/solve/nodes.jl A /issm/trunk-jpl/src/jl/solve/parameters.jl A /issm/trunk-jpl/src/jl/solve/solve.jl (from /issm/trunk-jpl/src/jl/solve.jl:26628) A /issm/trunk-jpl/src/jl/solve/vertices.jl D /issm/trunk-jpl/src/jl/solve.jl D /issm/trunk-jpl/src/jl/triangle.jl D /issm/trunk-jpl/src/jl/utls.jl  
Export determination: 6.  
Rationale: CHG: reorganized project to make it simpler

**Change #792** with diff file ISSM-26630-26631.diff:  
Function name:  
M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.m  
Export determination: 6.  
Rationale: CHG: better doc

**Change #793** with diff file ISSM-26631-26632.diff:  
Function name:  
M /issm/trunk-jpl/src/m/shp/shp2exp.m  
Export determination: 6.  
Rationale: CHG: better way of handling NaNs

**Change #794** with diff file ISSM-26632-26633.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: take out friction heat from melt rate when gap height is greater than bump height

**Change #795** with diff file ISSM-26633-26634.diff:  
Function name:  
M /issm/trunk-jpl/test/Archives/Archive350.arch  
Export determination: 6.

Rationale: CHG: updated Test 350 with no friction contribution to melt rate when gap height is greater than bump height

**Change #796** with diff file ISSM-26634-26635.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses.jl M /issm/trunk-jpl/src/jl/solve/modules.jl

M /issm/trunk-jpl/src/jl/solve/nodes.jl M /issm/trunk-jpl/src/jl/test101.jl

Export determination: 6.

Rationale: CHG: updated degrees of freedom

**Change #797** with diff file ISSM-26635-26636.diff:

Function name:

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

Export determination: 6.

Rationale: BUG:fixing Stochasticforcing translation

**Change #798** with diff file ISSM-26636-26637.diff:

Function name:

M /issm/trunk-jpl/src/m/extrusion/project3d.py

Export determination: 6.

Rationale: BUG: fixing extrusion for poly type vectors

**Change #799** with diff file ISSM-26637-26638.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test254.py M /issm/trunk-jpl/test/NightlyRun/test255.py

M /issm/trunk-jpl/test/NightlyRun/test257.py M /issm/trunk-jpl/test/NightlyRun/test330.py

M /issm/trunk-jpl/test/NightlyRun/test332.py M /issm/trunk-jpl/test/NightlyRun/test335.py

M /issm/trunk-jpl/test/NightlyRun/test447.py M /issm/trunk-jpl/test/NightlyRun/test449.py

M /issm/trunk-jpl/test/NightlyRun/test519.py M /issm/trunk-jpl/test/NightlyRun/test542.py

M /issm/trunk-jpl/test/NightlyRun/test543.py M /issm/trunk-jpl/test/NightlyRun/test811.py

Export determination: 6.

Rationale: BUG: fixing import for SetMLHOB

**Change #800** with diff file ISSM-26638-26639.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test2001.py M /issm/trunk-jpl/test/NightlyRun/test2003.py  
M /issm/trunk-jpl/test/NightlyRun/test2006.py M /issm/trunk-jpl/test/NightlyRun/test2010.py  
M /issm/trunk-jpl/test/NightlyRun/test2084.py M /issm/trunk-jpl/test/NightlyRun/test257.py  
M /issm/trunk-jpl/test/NightlyRun/test350.py M /issm/trunk-jpl/test/NightlyRun/test356.py  
M /issm/trunk-jpl/test/NightlyRun/test440.py M /issm/trunk-jpl/test/NightlyRun/test444.py  
M /issm/trunk-jpl/test/NightlyRun/test481.py M /issm/trunk-jpl/test/NightlyRun/test540.py  
M /issm/trunk-jpl/test/NightlyRun/test541.py M /issm/trunk-jpl/test/NightlyRun/test542.py  
M /issm/trunk-jpl/test/NightlyRun/test543.py M /issm/trunk-jpl/test/NightlyRun/test804.py  
M /issm/trunk-jpl/test/NightlyRun/test805.py M /issm/trunk-jpl/test/NightlyRun/test806.py  
M /issm/trunk-jpl/test/NightlyRun/test808.py M /issm/trunk-jpl/test/NightlyRun/test809.py  
M /issm/trunk-jpl/test/NightlyRun/test812.py

Export determination: 6.

Rationale: CHG:changing oshostname to gethostname

**Change #801** with diff file ISSM-26639-26640.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test257.py M /issm/trunk-jpl/test/NightlyRun/test812.py

Export determination: 6.

Rationale: BUG: import and matlab function fix

**Change #802** with diff file ISSM-26640-26641.diff:

Function name:

M /issm/trunk-jpl/src/c/analyses/FreeSurfaceBaseAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/LevelsetAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/MasstransportAnalysis.cpp  
M /issm/trunk-jpl/src/c/analyses/StressbalanceAnalysis.cpp M /issm/trunk-jpl/src/c/analyses/StressbalanceVerticalAnalysis.cpp M /issm/trunk-jpl/src/c/modules/StochasticForcingx/StochasticForcingx.cpp  
M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/Enumjl.vim  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/stochasticforcing.cpp  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py D /issm/trunk-jpl/src/m/miscellaneous/supportedstochasticforcings

Export determination: 6.

Rationale: CHG: added stochasticforcing capability for basalforcings.floatingice\_melting\_rate, corrections in stochasticforcing checkconsistency

**Change #803** with diff file ISSM-26641-26642.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.  
Rationale: BUG: fixing python syntax in stochasticforcing.py

**Change #804** with diff file ISSM-26642-26643.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.  
Rationale: BUG: fixing call to methods in stochasticforcing.py

**Change #805** with diff file ISSM-26643-26644.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.  
Rationale: BUG: trying to fix field comparisons in stochasticforcing.py

**Change #806** with diff file ISSM-26644-26645.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.  
Rationale: CHG: field comparisons temporarily commented out in stochasticforcing.py

**Change #807** with diff file ISSM-26645-26646.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.  
Rationale: BUG:fixing stochasticforcing

**Change #808** with diff file ISSM-26646-26647.diff:  
Function name:  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.

Rationale: BUG:removing prints

**Change #809** with diff file ISSM-26647-26648.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: missing mattype

**Change #810** with diff file ISSM-26648-26649.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses.jl M /issm/trunk-jpl/src/jl/solve/elements.jl

M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/nodes.jl

Export determination: 6.

Rationale: CHG: fixed problem with vertices being aliased

**Change #811** with diff file ISSM-26649-26650.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses.jl M /issm/trunk-jpl/src/jl/solve/elements.jl

M /issm/trunk-jpl/src/jl/solve/gauss.jl M /issm/trunk-jpl/src/jl/solve/inputs.jl

M /issm/trunk-jpl/src/jl/solve/solve.jl

Export determination: 6.

Rationale: CHG: done with GetSolutionFromInputs

**Change #812** with diff file ISSM-26650-26651.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: moving EffectivePressure calculation to another function

**Change #813** with diff file ISSM-26651-26652.diff:

Function name:

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

Export determination: 6.  
Rationale: CHG: added calculation of effective pressure

**Change #814** with diff file ISSM-26652-26653.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses.jl M /issm/trunk-jpl/src/jl/solve/elements.jl

M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/nodes.jl

A /issm/trunk-jpl/src/jl/solve/solutionsequences.jl M /issm/trunk-jpl/src/jl/solve/solve.jl

Export determination: 6.

Rationale: CHG: more work on julia solver

**Change #815** with diff file ISSM-26653-26654.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: correction of weights computation in Tria::GetFractionGeometry  
and Penta::GetFractionGeometry2D, TotalSmb can account for partially ice-  
covered elements (feature currently disabled with if(false) condition)

**Change #816** with diff file ISSM-26654-26655.diff:

Function name:

M /issm/trunk-jpl/jenkins/pine\_island-mac-basic

Export determination: 6.

Rationale: CHG: Activating tests that rely on RNG

**Change #817** with diff file ISSM-26655-26656.diff:

Function name:

A /issm/trunk-jpl/src/jl/solve/analyses A /issm/trunk-jpl/src/jl/solve/analyses/analysis.jl

(from /issm/trunk-jpl/src/jl/solve/analyses.jl:26654) A /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceana

D /issm/trunk-jpl/src/jl/solve/analyses.jl A /issm/trunk-jpl/src/jl/solve/elementmatrix.jl

M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl

M /issm/trunk-jpl/src/jl/solve/solve.jl A /issm/trunk-jpl/src/jl/solve/toolkits.jl

Export determination: 6.

Rationale: CHG: reorganizing files

**Change #818** with diff file ISSM-26656-26657.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.cpp M /issm/trunk-jpl/src/c/shared/Random/randomgenerator.h

Export determination: 6.

Rationale: CHG: Fix memory leak issues from randomgenerator

**Change #819** with diff file ISSM-26657-26658.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Random/random.cpp

Export determination: 6.

Rationale: CHG: Fix memory leak issues from randomgenerator

**Change #820** with diff file ISSM-26658-26659.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/elementmatrix.jl M /issm/trunk-jpl/src/jl/solve/nodes.jl

Export determination: 6.

Rationale: CHG: started working on element matrices

**Change #821** with diff file ISSM-26659-26660.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/elements.jl M /issm/trunk-jpl/src/jl/solve/gauss.jl M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/nodes.jl M /issm/trunk-jpl/src/jl/solve/solve.jl A /issm/trunk-jpl/src/jl/solve/utils.jl M /issm/trunk-jpl/src/jl/solve/vertices.jl M /issm/trunk-jpl/src/jl/test101.jl

Export determination: 6.

Rationale: CHG: getting to Jacobian Determinant

**Change #822** with diff file ISSM-26660-26661.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Review and cleanup

**Change #823** with diff file ISSM-26661-26662.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/calvingdev2.m M /issm/trunk-jpl/src/m/classes/calvingvonmises.m  
M /issm/trunk-jpl/src/m/coordsystems/laea.py M /issm/trunk-jpl/src/m/exp/expwrite.py  
M /issm/trunk-jpl/src/m/modules/ExpToLevelSet.py M /issm/trunk-jpl/src/m/shp/shp2exp.m  
M /issm/trunk-jpl/src/m/shp/shp2exp.py M /issm/trunk-jpl/src/m/solve/loadresultsfromcluster.py  
M /issm/trunk-jpl/src/m/solvers/asmoptions.m M /issm/trunk-jpl/src/m/solvers/asmoptions.py  
M /issm/trunk-jpl/src/m/solvers/asmstokesoptions.m A /issm/trunk-jpl/src/m/solvers/asmstokesoptions.py

Export determination: 6.

Rationale: CHG: Pending translations; cleanup

**Change #824** with diff file ISSM-26662-26663.diff:

Function name:

M /issm/trunk-jpl/src/m/exp/expwrite.py

Export determination: 6.

Rationale: CHG: Missed a copy/paste

**Change #825** with diff file ISSM-26663-26664.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: added local directory

**Change #826** with diff file ISSM-26664-26665.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/code\_4003/CPP\_OPTIONS.h M /issm/trunk-jpl/test/MITgcm/code\_4003/DIAGNOSTICS\_SIZE.h M /issm/trunk-jpl/test/MITgcm/code\_4003/SIZE.h  
M /issm/trunk-jpl/test/MITgcm/input\_4003/data A /issm/trunk-jpl/test/MITgcm/input\_4003/data.diagnostics  
A /issm/trunk-jpl/test/MITgcm/input\_4003/data.obcs A /issm/trunk-jpl/test/MITgcm/input\_4003/data.pkg  
M /issm/trunk-jpl/test/NightlyRun/test4003.m

Export determination: 6.

Rationale: test4003 now runs MITgcm/verification/shelfice\_2d\_remesh except that model domain is 3x200 instead of 1x200 and initial conditions are from time step 0 so no pickup files are needed. Coupling with ISSM is work in

progress.

**Change #827** with diff file ISSM-26665-26666.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive543.arch M /issm/trunk-jpl/test/NightlyRun/test543.m

M /issm/trunk-jpl/test/NightlyRun/test543.py

Export determination: 6.

Rationale: CHG: Adjusted test543 to test for several stochasticforcing fields

**Change #828** with diff file ISSM-26666-26667.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Correcting python syntax

**Change #829** with diff file ISSM-26667-26668.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Correcting python syntax (2)

**Change #830** with diff file ISSM-26668-26669.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test543.py

Export determination: 6.

Rationale: CHG: Debugging python test543

**Change #831** with diff file ISSM-26669-26670.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stochasticforcing.py M /issm/trunk-jpl/test/NightlyRun/test543.py

Export determination: 6.

Rationale: CHG: Debugging python test543 (2)

**Change #832** with diff file ISSM-26670-26671.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test543.py

Export determination: 6.

Rationale: CHG: Debugging python test543 (3)

**Change #833** with diff file ISSM-26671-26672.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Correcting basin\_id initialization in stochasticforcing.py

**Change #834** with diff file ISSM-26672-26673.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Correcting dimensions marshalling in stochasticforcing.py

**Change #835** with diff file ISSM-26673-26674.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: Correcting dimensions marshalling in stochasticforcing.py (2)

**Change #836** with diff file ISSM-26674-26675.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stochasticforcing.py M /issm/trunk-jpl/test/NightlyRun/test543.py

Export determination: 6.

Rationale: CHG: Adding FloatingMeltRate to the list of scaled fields in stochasticforcing.py

**Change #837** with diff file ISSM-26675-26676.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/elements.jl A /issm/trunk-jpl/src/jl/solve/matrice.jl M /issm/trunk-jpl/src/jl/solve/solve.jl M /issm/trunk-jpl/src/jl/solve/utils.jl  
Export determination: 6.  
Rationale: CHG: done with nodal function derivatives

**Change #838** with diff file ISSM-26676-26677.diff:

Function name:

M /issm/trunk-jpl/src/c/classes/Loads/Friction.cpp M /issm/trunk-jpl/src/c/classes/Loads/Friction.h  
M /issm/trunk-jpl/src/c/modules/ModelProcessorx/CreateParameters.cpp M  
/issm/trunk-jpl/src/c/modules/StochasticForcingx/StochasticForcingx.cpp M /issm/trunk-jpl/src/c/shared/Enum/Enum.vim 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/Enumjl.v  
M /issm/trunk-jpl/src/c/shared/Enum/StringToEnumx.cpp M /issm/trunk-jpl/src/m/classes/stochasticforcin  
M /issm/trunk-jpl/src/m/classes/stochasticforcing.py A /issm/trunk-jpl/test/Archives/Archive621.arch  
A /issm/trunk-jpl/test/NightlyRun/test621.m A /issm/trunk-jpl/test/NightlyRun/test621.py  
Export determination: 6.

Rationale: NEW: added FrictionWaterPressure to stochasticforcingfields, new functions Friction::IcePressure() and Friction::SubglacialWaterPressure(), clean-up Friction::EffectivePressure()

**Change #839** with diff file ISSM-26677-26678.diff:

Function name:

M /issm/trunk-jpl/src/m/classes/stochasticforcing.py  
Export determination: 6.  
Rationale: BUG: fix python syntax

**Change #840** with diff file ISSM-26678-26679.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test621.py  
Export determination: 6.  
Rationale: CHG: fix python syntax (2)

**Change #841** with diff file ISSM-26679-26680.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test621.py

Export determination: 6.

Rationale: CHG: fix python test621

**Change #842** with diff file ISSM-26680-26681.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpJoughinMosaic.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpRignot2012.m M

/issm/trunk-jpl/src/m/modules/ExpToLevelSet.m

Export determination: 6.

Rationale: CHG: set data path to totten

**Change #843** with diff file ISSM-26681-26682.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-

jpl/src/jl/solve/elementmatrix.jl M /issm/trunk-jpl/src/jl/solve/elements.jl M

/issm/trunk-jpl/src/jl/solve/inputs.jl M /issm/trunk-jpl/src/jl/solve/matice.jl

M /issm/trunk-jpl/src/jl/solve/modules.jl

Export determination: 6.

Rationale: CHG: done with load vector and element stiffness matrix

**Change #844** with diff file ISSM-26682-26683.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-

jpl/src/jl/solve/elementmatrix.jl M /issm/trunk-jpl/src/jl/solve/modules.jl M

/issm/trunk-jpl/src/jl/solve/nodes.jl M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl

M /issm/trunk-jpl/src/jl/solve/solve.jl M /issm/trunk-jpl/src/jl/solve/toolkits.jl

Export determination: 6.

Rationale: CHG: done with ys

**Change #845** with diff file ISSM-26683-26684.diff:

Function name:

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpBedmachineAntarctica.m

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpMouginotAntTimeSeries1973to2018.m

Export determination: 6.

Rationale: CHG: more updates now that we are moving to totten

**Change #846** with diff file ISSM-26684-26685.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: activate updated calculation of IceVolume() and TotalSmb()  
for partially ice-covered elements

**Change #847** with diff file ISSM-26685-26686.diff:

Function name:

M /issm/trunk-jpl/test/Archives/Archive540.arch M /issm/trunk-jpl/test/Archives/Archive541.arch

M /issm/trunk-jpl/test/NightlyRun/test540.m M /issm/trunk-jpl/test/NightlyRun/test540.py

M /issm/trunk-jpl/test/NightlyRun/test541.m M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: NEW: added volume and other scalar checks for test with partially  
ice covered elements

**Change #848** with diff file ISSM-26686-26687.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/nodes.jl M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl M /issm/trunk-jpl/src/jl/solve/toolkits.jl

Export determination: 6.

Rationale: CHG: Done down to first uf, which does not look right

**Change #849** with diff file ISSM-26687-26688.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test540.m M /issm/trunk-jpl/test/NightlyRun/test540.py

M /issm/trunk-jpl/test/NightlyRun/test541.m M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: BUG: fixed minor problem with new scalars in tests

**Change #850** with diff file ISSM-26688-26689.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test540.py

Export determination: 6.

Rationale: FIX: minor typo in python test

**Change #851** with diff file ISSM-26689-26690.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test494.py M /issm/trunk-jpl/test/NightlyRun/test541.m

M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: CHG: minor tolerances

**Change #852** with diff file ISSM-26690-26691.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: CHG: minor tolerance

**Change #853** with diff file ISSM-26691-26692.diff:

Function name:

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

Export determination: 6.

Rationale: CHG: avoid dynamic allocation if not needed

**Change #854** with diff file ISSM-26692-26693.diff:

Function name:

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

Export determination: 6.

Rationale: BUG: fixing problem with indexing of weights

**Change #855** with diff file ISSM-26693-26694.diff:

Function name:

A /issm/trunk-jpl/examples/AMR/runme\_with\_neopz.m  
Export determination: 6.  
Rationale: CHG: adding an example of an AMR simulation using NeoPZ

**Change #856** with diff file ISSM-26694-26695.diff:  
Function name:  
M /issm/trunk-jpl/src/c/classes/Elements/Penta.cpp  
Export determination: 6.  
Rationale: CHG: final bug

**Change #857** with diff file ISSM-26695-26696.diff:  
Function name:  
M /issm/trunk-jpl/externalpackages/neopz/install.sh  
Export determination: 6.  
Rationale: CHG: install a tested version of NeoPZ

**Change #858** with diff file ISSM-26696-26697.diff:  
Function name:  
M /issm/trunk-jpl/src/c/analyses/HydrologyShaktiAnalysis.cpp  
Export determination: 6.  
Rationale: CHG: cleaned up SHAKTI code

**Change #859** with diff file ISSM-26697-26698.diff:  
Function name:  
M /issm/trunk-jpl/test/NightlyRun/test541.m  
Export determination: 6.  
Rationale: CHG: minor tolerance

**Change #860** with diff file ISSM-26698-26699.diff:  
Function name:  
M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/nodes.jl  
M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl M /issm/trunk-jpl/src/jl/solve/toolkits.jl  
Export determination: 6.

Rationale: CHG: done with VecMerge

**Change #861** with diff file ISSM-26699-26700.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/inputs.jl M /issm/trunk-jpl/src/jl/solve/modules.jl

M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl M /issm/trunk-jpl/src/jl/solve/toolkits.jl

Export determination: 6.

Rationale: NEW: done with convergence criterion

**Change #862** with diff file ISSM-26700-26701.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test541.m M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: CHG: minor tolerance again

**Change #863** with diff file ISSM-26701-26702.diff:

Function name:

A /issm/trunk-jpl/src/m/contrib/chenggong A /issm/trunk-jpl/src/m/contrib/chenggong/interpFromMEaSURES

M /issm/trunk-jpl/src/m/contrib/morlighem/modeldata/interpFromGeotiff.m

Export determination: 6.

Rationale: ADD:interpret MEaSURES Greenland Ice velocity to mesh

**Change #864** with diff file ISSM-26702-26703.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-

jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl

M /issm/trunk-jpl/src/jl/solve/solve.jl

Export determination: 6.

Rationale: CHG: started working on output

**Change #865** with diff file ISSM-26703-26704.diff:

Function name:

M /issm/trunk-jpl/src/jl/md/classes.jl M /issm/trunk-jpl/src/jl/md/utils.jl M

/issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/femmodel.jl  
M /issm/trunk-jpl/src/jl/solve/modules.jl A /issm/trunk-jpl/src/jl/solve/results.jl  
M /issm/trunk-jpl/src/jl/solve/solve.jl M /issm/trunk-jpl/src/jl/test101.jl A  
/issm/trunk-jpl/src/jl/test301.jl  
Export determination: 6.  
Rationale: CHG: added results and starting test301 with basal friction

**Change #866** with diff file ISSM-26704-26705.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl A /issm/trunk-jpl/src/jl/solve/friction.jl M /issm/trunk-jpl/src/jl/solve/solve.jl

Export determination: 6.

Rationale: CHG: added friction

**Change #867** with diff file ISSM-26705-26706.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/elements.jl M /issm/trunk-jpl/src/jl/solve/friction.jl

Export determination: 6.

Rationale: CHG: added subelement GL calculation

**Change #868** with diff file ISSM-26706-26707.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/elements.jl

Export determination: 6.

Rationale: CHG: added IsIcefront function

**Change #869** with diff file ISSM-26707-26708.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test541.m M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: CHG: Adjustments to field tolerances

**Change #870** with diff file ISSM-26708-26709.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test541.m M /issm/trunk-jpl/test/NightlyRun/test541.py

Export determination: 6.

Rationale: CHG: Adjustments to field tolerances

**Change #871** with diff file ISSM-26709-26710.diff:

Function name:

M /issm/trunk-jpl/src/jl/md/exp.jl

Export determination: 6.

Rationale: CHG: added ContourToNodes

**Change #872** with diff file ISSM-26710-26711.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/solve/elements.jl M /issm/trunk-jpl/src/jl/solve/gauss.jl M /issm/trunk-jpl/src/jl/solve/solutionsequences.jl

Export determination: 6.

Rationale: NEW: working on ice front, still not working...

**Change #873** with diff file ISSM-26711-26712.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl A /issm/trunk-jpl/src/jl/test201.jl A /issm/trunk-jpl/src/jl/test501.jl

Export determination: 6.

Rationale: CHG: done with ice front

**Change #874** with diff file ISSM-26712-26713.diff:

Function name:

M /issm/trunk-jpl/src/jl/md/utils.jl

Export determination: 6.

Rationale: CHG: fixed interpolation method

**Change #875** with diff file ISSM-26713-26714.diff:

Function name:

M /issm/trunk-jpl/src/jl/md/parameterization.jl M /issm/trunk-jpl/src/jl/test101.jl

M /issm/trunk-jpl/src/jl/test501.jl

Export determination: 6.

Rationale: CHG: fixing some issues for Pig

**Change #876** with diff file ISSM-26714-26715.diff:

Function name:

M /issm/trunk-jpl/src/jl/test501.jl

Export determination: 6.

Rationale: CHG: more change on Pig, still not working, but close

**Change #877** with diff file ISSM-26715-26716.diff:

Function name:

M /issm/trunk-jpl/src/jl/md/classes.jl M /issm/trunk-jpl/src/jl/md/utills.jl

Export determination: 6.

Rationale: CHG: can now import models from MATLAB

**Change #878** with diff file ISSM-26716-26717.diff:

Function name:

M /issm/trunk-jpl/src/jl/md/classes.jl M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl

M /issm/trunk-jpl/src/jl/test101.jl

Export determination: 6.

Rationale: CHG: as usual

**Change #879** with diff file ISSM-26717-26718.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/analyses/stressbalanceanalysis.jl A /issm/trunk-jpl/src/jl/test.jl

Export determination: 6.

Rationale: CHG: done with Pig

**Change #880** with diff file ISSM-26718-26719.diff:

Function name:

M /issm/trunk-jpl/src/jl/solve/modules.jl M /issm/trunk-jpl/src/jl/solve/toolkits.jl

Export determination: 6.

Rationale: CHG: lot more efficient with assembly

**Change #881** with diff file ISSM-26719-26720.diff:

Function name:

M /issm/trunk-jpl/test/MITgcm/code\_4003/cpl\_issm.F M /issm/trunk-jpl/test/MITgcm/input\_4003/data

M /issm/trunk-jpl/test/NightlyRun/test4003.m

Export determination: 6.

Rationale: updated test4003 with 3\*200 domain based on MITgcm/verification/shelfice\_2d\_remesh runs but hangs on step 11: RunCoupledMITgcmISSM

**Change #882** with diff file ISSM-26720-26721.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test4003.m

Export determination: 6.

Rationale: add missing "useCoupler=.TRUE." in eedata much better now:  
MITgcm stops due to EXTREME Pot.Temp :-)

**Change #883** with diff file ISSM-26721-26722.diff:

Function name:

M /issm/trunk-jpl/test/NightlyRun/test4003.m

Export determination: 6.

Rationale: moving ocean boundary to North edge of domain

**Change #884** with diff file ISSM-26722-26723.diff:

Function name:

A /issm/trunk-jpl/test/MITgcm/tools/pcolorcen.m

Export determination: 6.

Rationale: adding pcolorcen.m

**Change #885** with diff file ISSM-26723-26724.diff:

Function name:

M /issm/trunk-jpl/src/jl/issm.jl

Export determination: 6.

Rationale: CHG: exporting some functions to avoid ISSM.

**Change #886** with diff file ISSM-26724-26725.diff:

Function name:

M /issm/trunk-jpl/src/jl/test.jl M /issm/trunk-jpl/src/jl/test101.jl

Export determination: 6.

Rationale: CHG: exporting some functions to avoid ISSM.

**Change #887** with diff file ISSM-26725-26726.diff:

Function name:

A /issm/trunk-jpl/src/jl/core (from /issm/trunk-jpl/src/jl/solve:26724) M /issm/trunk-jpl/src/jl/core/solve.jl M /issm/trunk-jpl/src/jl/issm.jl D /issm/trunk-jpl/src/jl/md  
D /issm/trunk-jpl/src/jl/solve D /issm/trunk-jpl/src/jl/test.jl D /issm/trunk-jpl/src/jl/test101.jl D /issm/trunk-jpl/src/jl/test201.jl D /issm/trunk-jpl/src/jl/test301.jl  
D /issm/trunk-jpl/src/jl/test501.jl A /issm/trunk-jpl/src/jl/tests A /issm/trunk-jpl/src/jl/tests/test.jl (from /issm/trunk-jpl/src/jl/test.jl:26724) A /issm/trunk-jpl/src/jl/tests/test101.jl (from /issm/trunk-jpl/src/jl/test101.jl:26724) A /issm/trunk-jpl/src/jl/tests/test201.jl (from /issm/trunk-jpl/src/jl/test201.jl:26724) A /issm/trunk-jpl/src/jl/tests/test301.jl (from /issm/trunk-jpl/src/jl/test301.jl:26724) A /issm/trunk-jpl/src/jl/tests/test501.jl (from /issm/trunk-jpl/src/jl/test501.jl:26724) A /issm/trunk-jpl/src/jl/usr (from /issm/trunk-jpl/src/jl/md:26724)

Export determination: 6.

Rationale: CHG: moving files around

**Change #888** with diff file ISSM-26726-26727.diff:

Function name:

M /issm/trunk-jpl/src/jl/tests/test.jl M /issm/trunk-jpl/src/jl/tests/test201.jl

M /issm/trunk-jpl/src/jl/usr/plotmodel.jl

Export determination: 6.

Rationale: CHG: fixing namespace issues

**Change #889** with diff file ISSM-26727-26728.diff:

Function name:

M /issm/trunk-jpl/src/jl/core/issmenums.jl M /issm/trunk-jpl/src/jl/core/modules.jl

M /issm/trunk-jpl/src/jl/core/results.jl M /issm/trunk-jpl/src/jl/tests/test.jl

M /issm/trunk-jpl/src/jl/usr/classes.jl M /issm/trunk-jpl/src/jl/usr/plotmodel.jl

Export determination: 6.

Rationale: CHG: more flexible plotmodel

**Change #890** with diff file ISSM-26728-26729.diff:

Function name:

M /issm/trunk-jpl/src/jl/usr/classes.jl

Export determination: 6.

Rationale: CHG: some reorg

**Change #891** with diff file ISSM-26729-26730.diff:

Function name:

M /issm/trunk-jpl/src/jl/core/toolkits.jl

Export determination: 6.

Rationale: CHG: minor

**Change #892** with diff file ISSM-26730-26731.diff:

Function name:

A /issm/trunk-jpl/src/jl/core/analyses/masstransportanalysis.jl M /issm/trunk-

jpl/src/jl/core/analyses/stressbalanceanalysis.jl A /issm/trunk-jpl/src/jl/core/analyses/transientanalysis.jl

M /issm/trunk-jpl/src/jl/core/constraints.jl M /issm/trunk-jpl/src/jl/core/elements.jl

M /issm/trunk-jpl/src/jl/core/femmodel.jl M /issm/trunk-jpl/src/jl/core/modules.jl

M /issm/trunk-jpl/src/jl/core/parameters.jl M /issm/trunk-jpl/src/jl/core/solve.jl

M /issm/trunk-jpl/src/jl/tests/test.jl M /issm/trunk-jpl/src/jl/tests/test101.jl

A /issm/trunk-jpl/src/jl/tests/test208.jl M /issm/trunk-jpl/src/jl/usr/classes.jl

M /issm/trunk-jpl/src/jl/usr/utils.jl

Export determination: 6.

Rationale: CHG: adding mass transport, not quite working yet

**Change #893** with diff file ISSM-26731-26732.diff:

Function name:

M /issm/trunk-jpl/src/jl/core/analyses/masstransportanalysis.jl M /issm/trunk-jpl/src/jl/core/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/core/analyses/transientanalysis.jl  
M /issm/trunk-jpl/src/jl/core/elements.jl M /issm/trunk-jpl/src/jl/core/inputs.jl  
M /issm/trunk-jpl/src/jl/core/modules.jl M /issm/trunk-jpl/src/jl/core/solutionsequences.jl  
M /issm/trunk-jpl/src/jl/core/solve.jl M /issm/trunk-jpl/src/jl/core/toolkits.jl  
Export determination: 6.  
Rationale: CHG: done with transient

**Change #894** with diff file ISSM-26732-26733.diff:

Function name:  
A /issm/trunk-jpl/post-commit-mail-test  
Export determination: 6.  
Rationale: ADD: Testing post commit mail

**Change #895** with diff file ISSM-26733-26734.diff:

Function name:  
D /issm/trunk-jpl/post-commit-mail-test  
Export determination: 6.  
Rationale: DEL: Testing post commit mail

**Change #896** with diff file ISSM-26736-26737.diff:

Function name:  
M /issm/trunk-jpl/src/jl/core/analyses/masstransportanalysis.jl M /issm/trunk-jpl/src/jl/core/analyses/transientanalysis.jl M /issm/trunk-jpl/src/jl/core/elements.jl  
M /issm/trunk-jpl/src/jl/core/modules.jl  
Export determination: 6.  
Rationale: CHG: adding GL migration

**Change #897** with diff file ISSM-26737-26738.diff:

Function name:  
M /issm/trunk-jpl/src/jl/usr/triangle.jl  
Export determination: 6.  
Rationale: CHG: better path to libtriangle

**Change #898** with diff file ISSM-26738-26739.diff:

Function name:

M /issm/trunk-jpl/src/jl/core/analyses/masstransportanalysis.jl M /issm/trunk-jpl/src/jl/core/analyses/stressbalanceanalysis.jl M /issm/trunk-jpl/src/jl/core/elements.jl  
M /issm/trunk-jpl/src/jl/core/inputs.jl M /issm/trunk-jpl/src/jl/core/modules.jl  
M /issm/trunk-jpl/src/jl/core/nodes.jl M /issm/trunk-jpl/src/jl/core/solutionsequences.jl  
M /issm/trunk-jpl/src/jl/core/toolkits.jl

Export determination: 6.

Rationale: CHG: account for passive elements now if the ice levelset crosses the domain