

JPL EXPORT ADMINISTRATION DOCUMENT REVIEW RECORD

Log #: 12261-12280

(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: Jun-1-2012

Document Title/Description: ISSM changes from revision 12261 to revision 12280

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

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:** Jun-1-2012



JPL Export Administration Form TBS June 29, 2011

Disposition:

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

Change #1 with diff file ISSM-12261-12262.diff:

Function name:

M /issm/trunk-jpl/src/c/EnumDefinitions/Synchronize.sh

Export determination: 6.

Rationale: Added MaximumNumberOfEnums matlab file to check Enum Sync
M /issm/trunk-jpl/src/c/EnumDefinitions/Synchronize.sh Simplified Synchronize

Change #2 with diff file ISSM-12262-12263.diff:

Function name:

M /issm/trunk-jpl/src/c/EnumDefinitions/Synchronize.sh

Export determination: 6.

Rationale: Simplified Synchronize A /issm/trunk-jpl/src/m/enum/MaximumNumberOfEnums.m
Added MaximumNumberOfEnums.m

Change #3 with diff file ISSM-12263-12264.diff:

Function name:

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

Export determination: 6.

Rationale: Added MaximumNumberOfEnums.m M /issm/trunk-jpl/src/c/EnumDefinitions/Synchronize.sh
Fixed issue with matlab files

Change #4 with diff file ISSM-12264-12265.diff:

Function name:

M /issm/trunk-jpl/src/c/EnumDefinitions/Synchronize.sh

Export determination: 6.

Rationale: Fixed issue with matlab files M /issm/trunk-jpl/src/c/objects/IoModel.cpp
M /issm/trunk-jpl/src/c/objects/IoModel.h M /issm/trunk-jpl/src/m/model/marshall.m
Added check that Enums are synchronized between matlab's interface and compiled code

Change #5 with diff file ISSM-12265-12266.diff:

Function name:

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

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

Export determination: 6.

Rationale: Added check that Enums are synchronized between matlab's interface and compiled code M /issm/trunk-jpl/src/c/EnumDefinitions/EnumDefinitions.h

Added convergence flag for reaching maximum iteration number

Change #6 with diff file ISSM-12266-12267.diff:

Function name:

M /issm/trunk-jpl/src/c/EnumDefinitions/EnumDefinitions.h

Export determination: 6.

Rationale: Added convergence flag for reaching maximum iteration number

A /issm/trunk-jpl/src/m/enum/MaxIterationConvergenceFlagEnum.m Added convergence flag for reaching maximum number of iterations

Change #7 with diff file ISSM-12267-12268.diff:

Function name:

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

Export determination: 6.

Rationale: Added convergence flag for reaching maximum number of iterations

M /issm/trunk-jpl/src/m/enum/MaximumNumberOfEnums.m Added convergence flag for reaching maximum number of iterations

Change #8 with diff file ISSM-12268-12269.diff:

Function name:

M /issm/trunk-jpl/src/m/enum/MaximumNumberOfEnums.m

Export determination: 6.

Rationale: Added convergence flag for reaching maximum number of iterations

M /issm/trunk-jpl/src/c/modules/EnumToStringx/EnumToStringx.cpp Added convergence flag for reaching maximum number of iterations

Change #9 with diff file ISSM-12269-12270.diff:

Function name:

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

Export determination: 6.

Rationale: Added convergence flag for reaching maximum number of iterations

M /issm/trunk-jpl/src/c/modules/StringToEnumx/StringToEnumx.cpp Added convergence flag for reaching maximum number of iterations

Change #10 with diff file ISSM-12270-12271.diff:

Function name:

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

Export determination: 6.

Rationale: Added convergence flag for reaching maximum number of iterations

M /issm/trunk-jpl/src/c/solvers/solver_newton.cpp M /issm/trunk-jpl/src/c/solvers/solver_nonlinear.cpp

First attempt at adding convergence flag: (i.e. whether loop exited due to convergence criteria or maximum number of iterations). Not sure if Addobject(

new BoolExternalResults _) is correct or will it end up duplicating this field in the results in multiple solves within a solution sequence? I have not checked-in thermal_nonlinear.cpp or stokescoupling_nonlinear.cpp since I am not using these yet...Will be testing, but feel free to change

Change #11 with diff file ISSM-12271-12272.diff:

Function name:

M /issm/trunk-jpl/src/c/solvers/solver_newton.cpp M /issm/trunk-jpl/src/c/solvers/solver_nonlinear.cpp

Export determination: 6.

Rationale: First attempt at adding convergence flag: (i.e. whether loop exited due to convergence criteria or maximum number of iterations). Not sure if Addobject(new BoolExternalResults _) is correct or will it end up duplicating this field in the results in multiple solves within a solution sequence? I have not checked-in thermal_nonlinear.cpp or stokescoupling_nonlinear.cpp since I am not using these yet...Will be testing, but feel free to change M /issm/trunk-jpl/src/c/objects/Elements/Tria.cpp M /issm/trunk-jpl/src/c/objects/Numerics/ElementVector.cpp M /issm/trunk-jpl/src/c/objects/Numerics/ElementVector.h Fixed BIG error in prognostic: melting rate correction was never defined

Change #12 with diff file ISSM-12272-12273.diff:

Function name:

M /issm/trunk-jpl/src/c/objects/Elements/Tria.cpp M /issm/trunk-jpl/src/c/objects/Numerics/ElementVect

M /issm/trunk-jpl/src/c/objects/Numerics/ElementVector.h

Export determination: 6.

Rationale: Fixed BIG error in prognostic: melting rate correction was never defined M /issm/trunk-jpl/src/c/Container/Observations.cpp M /issm/trunk-jpl/src/c/objects/Kriging/Observation.cpp M /issm/trunk-jpl/src/c/objects/Kriging/Observation.h M /issm/trunk-jpl/src/c/objects/Kriging/Quadtree.cpp M /issm/trunk-jpl/src/c/objects/Kriging/Quadtree.h Added observation averaging

Change #13 with diff file ISSM-12273-12274.diff:

Function name:

M /issm/trunk-jpl/src/c/Container/Observations.cpp M /issm/trunk-jpl/src/c/objects/Kriging/Observation.c

M /issm/trunk-jpl/src/c/objects/Kriging/Observation.h M /issm/trunk-jpl/src/c/objects/Kriging/Quadtree.c

M /issm/trunk-jpl/src/c/objects/Kriging/Quadtree.h

Export determination: 6.

Rationale: Added observation averaging