

JPL EXPORT ADMINISTRATION DOCUMENT REVIEW RECORD
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Log #: 11681-11700

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

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

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

**Date Received:** Apr-16-2012

**Document Title/Description:** ISSM changes from revision 11681 to revision 11700

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

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

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

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

**Reviewed by ISSM Export Transfer Liaison:** Dr. Eric Larour      **Date:** Apr-16-2012



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)

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**Change #1** with diff file ISSM-11684-11685.diff:

Function name:

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

Export determination: 6.

Rationale: Using new delete routines to fix segfault

**Change #2** with diff file ISSM-11685-11686.diff:

Function name:

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

Export determination: 6.

Rationale: Using new delete routines to fix segfault M /issm/trunk-jpl/src/mex/CreateNodalConstraints/CreateNodalConstraints.cpp

M /issm/trunk-jpl/src/mex/InputUpdateFromSolution/InputUpdateFromSolution.cpp

M /issm/trunk-jpl/src/mex/Mergesolutionfromftog/Mergesolutionfromftog.cpp

M /issm/trunk-jpl/src/mex/Reduceload/Reduceload.cpp M /issm/trunk-jpl/src/mex/Reducevectortof/Reducevectortof.cpp

M /issm/trunk-jpl/src/mex/Reducevectortogs/Reducevectortogs.cpp M /issm/trunk-

jpl/src/mex/Solver/Solver.cpp M /issm/trunk-jpl/src/mex/SystemMatrices/SystemMatrices.cpp

M /issm/trunk-jpl/src/mex/UpdateDynamicConstraints/UpdateDynamicConstraints.cpp

Added xdeletes instead of deletes for vectors and matrices

**Change #3** with diff file ISSM-11686-11687.diff:

Function name:

M /issm/trunk-jpl/src/mex/CreateNodalConstraints/CreateNodalConstraints.cpp

M /issm/trunk-jpl/src/mex/InputUpdateFromSolution/InputUpdateFromSolution.cpp

M /issm/trunk-jpl/src/mex/Mergesolutionfromftog/Mergesolutionfromftog.cpp

M /issm/trunk-jpl/src/mex/Reduceload/Reduceload.cpp M /issm/trunk-jpl/src/mex/Reducevectortof/Reducevectortof.cpp

M /issm/trunk-jpl/src/mex/Reducevectortogs/Reducevectortogs.cpp M /issm/trunk-

jpl/src/mex/Solver/Solver.cpp M /issm/trunk-jpl/src/mex/SystemMatrices/SystemMatrices.cpp

M /issm/trunk-jpl/src/mex/UpdateDynamicConstraints/UpdateDynamicConstraints.cpp

Export determination: 6.

Rationale: Added xdeletes instead of deletes for vectors and matrices M /issm/trunk-jpl/src/c/modules/Solverx/Solverx.cpp Fixed seg fault (obvious)

**Change #4** with diff file ISSM-11687-11688.diff:

Function name:

M /issm/trunk-jpl/src/c/modules/Solverx/Solverx.cpp  
Export determination: 6.  
Rationale: Fixed seg fault (obvious) M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp  
Fixed infinite loop

**Change #5** with diff file ISSM-11688-11689.diff:

Function name:  
M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp  
Export determination: 6.  
Rationale: Fixed infinite loop M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp  
minor

**Change #6** with diff file ISSM-11689-11690.diff:

Function name:  
M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp  
Export determination: 6.  
Rationale: minor M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp minor

**Change #7** with diff file ISSM-11690-11691.diff:

Function name:  
M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp  
Export determination: 6.  
Rationale: minor M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp  
Changed to xdelete

**Change #8** with diff file ISSM-11691-11692.diff:

Function name:  
M /issm/trunk-jpl/src/c/modules/SystemMatricesx/SystemMatricesx.cpp  
Export determination: 6.  
Rationale: Changed to xdelete M /issm/trunk-jpl/src/c/shared/Alloc/alloc.cpp  
temporary fix

**Change #9** with diff file ISSM-11692-11693.diff:

Function name:  
M /issm/trunk-jpl/src/c/shared/Alloc/alloc.cpp  
Export determination: 6.  
Rationale: temporary fix M /issm/trunk-jpl/src/c/shared/Alloc/alloc.cpp Do  
not delete Matrix and Object. Matlab API bug

**Change #10** with diff file ISSM-11693-11694.diff:

Function name:  
M /issm/trunk-jpl/src/c/shared/Alloc/alloc.cpp  
Export determination: 6.  
Rationale: Do not delete Matrix and Object. Matlab API bug M /issm/trunk-jpl/src/c/shared/Alloc/alloc.cpp Improved quick fix, going back to Mathieu's  
bug fix

**Change #11** with diff file ISSM-11694-11695.diff:

Function name:

M /issm/trunk-jpl/src/c/shared/Alloc/alloc.cpp

Export determination: 6.

Rationale: Improved quick fix, going back to Mathieu's bug fix M /issm/trunk-

jpl/src/c/Container/Elements.cpp M /issm/trunk-jpl/src/c/Container/Parameters.cpp

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

M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/io/Matlab/FetchMatlabData.cpp

M /issm/trunk-jpl/src/c/io/Matlab/WriteMatlabData.cpp M /issm/trunk-jpl/src/c/io/Matlab/matlabio.h

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

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

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

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

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

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

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

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

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

jpl/src/c/modules/ControlInputGetGradientx/ControlInputGetGradientx.cpp M

/issm/trunk-jpl/src/c/modules/ControlInputGetGradientx/ControlInputGetGradientx.h

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

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

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

jpl/src/c/modules/GetVectorFromControlInputsx/GetVectorFromControlInputsx.cpp

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

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

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

M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.cpp M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.h

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

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

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

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

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

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

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

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

M /issm/trunk-jpl/src/c/modules/InterpFromMesh2dx/InterpFromMesh2dx.cpp

M /issm/trunk-jpl/src/c/modules/InterpFromMesh2dx/InterpFromMesh2dx.h

M /issm/trunk-jpl/src/c/modules/InterpFromMesh2dx/InterpFromMesh2dxt.cpp

M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh2dx/InterpFromMeshToMesh2dx.cpp

M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh3dx/InterpFromMeshToMesh3dx.cpp

M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh3dx/InterpFromMeshToMesh3dx.h

M /issm/trunk-jpl/src/c/modules/Orthx/Orthx.cpp M /issm/trunk-jpl/src/c/modules/Orthx/Orthx.h

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

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

M /issm/trunk-jpl/src/c/modules/PointCloudFindNeighborsx/PointCloudFindNeighborsxt.cpp  
M /issm/trunk-jpl/src/c/modules/SetControlInputsFromVectorx/SetControlInputsFromVectorx.cpp  
M /issm/trunk-jpl/src/c/modules/SetControlInputsFromVectorx/SetControlInputsFromVectorx.h  
M /issm/trunk-jpl/src/c/modules/Solverx/Solverx.cpp M /issm/trunk-jpl/src/c/modules/Solverx/Solverx.h  
M /issm/trunk-jpl/src/c/modules/StringToEnumx/StringToEnumx.cpp M /issm/trunk-jpl/src/c/modules/SystemMatrixesx/SystemMatrixesx.cpp M /issm/trunk-jpl/src/c/modules/UpdateVertexPo  
M /issm/trunk-jpl/src/c/objects/ElementResults/BoolElementResult.cpp M /issm/trunk-jpl/src/c/objects/ElementResults/BoolElementResult.h M /issm/trunk-jpl/src/c/objects/ElementResults/Do  
M /issm/trunk-jpl/src/c/objects/ElementResults/ElementResult.h M /issm/trunk-jpl/src/c/objects/ElementResults/PentaP1ElementResult.cpp M /issm/trunk-jpl/src/c/objects/ElementResults/PentaP1ElementResult.h M /issm/trunk-jpl/src/c/objects/ElementResults/TriaP1ElementResult.h M /issm/trunk-jpl/src/c/objects/Elements/Element.h M /issm/trunk-jpl/src/c/objects/Elements/Penta.cpp M /issm/trunk-jpl/src/c/objects/Elements/Penta.h M /issm/trunk-jpl/src/c/objects/Elements/Tria.cpp M /issm/trunk-jpl/src/c/objects/Elements/Tria.h M /issm/trunk-jpl/src/c/objects/ExternalResults/PetscVecExternalResult.h M /issm/trunk-jpl/src/c/objects/FemModel.cpp M /issm/trunk-jpl/src/c/objects/Inputs/BoolInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/BoolInput.h M /issm/trunk-jpl/src/c/objects/Inputs/ControlInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/ControlInput.h M /issm/trunk-jpl/src/c/objects/Inputs/DatasetInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/DoubleInput.h M /issm/trunk-jpl/src/c/objects/Inputs/Input.h M /issm/trunk-jpl/src/c/objects/Inputs/IntInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/IntInput.h M /issm/trunk-jpl/src/c/objects/Inputs/PentaP1Input.cpp M /issm/trunk-jpl/src/c/objects/Inputs/PentaP1Input.h M /issm/trunk-jpl/src/c/objects/Inputs/TransientInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/objects/Inputs/TriaP1Input.cpp M /issm/trunk-jpl/src/c/objects/Inputs/TriaP1Input.h M /issm/trunk-jpl/src/c/objects/Materials/Material.h M /issm/trunk-jpl/src/c/objects/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/objects/Materials/Matrice.h M /issm/trunk-jpl/src/c/objects/Materials/Matpar.h M /issm/trunk-jpl/src/c/objects/Node.cpp M /issm/trunk-jpl/src/c/objects/Node.h M /issm/trunk-jpl/src/c/objects/Numerics/Matrix.cpp M /issm/trunk-jpl/src/c/objects/Numerics/Matrix.h M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp M /issm/trunk-jpl/src/c/objects/Numerics/Vector.h M /issm/trunk-jpl/src/c/objects/Params/BoolParam.h M /issm/trunk-jpl/src/c/objects/Params/DoubleMatArrayParam.h M /issm/trunk-jpl/src/c/objects/Params/DoubleMatParam.h M /issm/trunk-jpl/src/c/objects/Params/DoubleParam.h M /issm/trunk-jpl/src/c/objects/Params/DoubleVecParam.h M /issm/trunk-jpl/src/c/objects/Params/FileParam.h M /issm/trunk-jpl/src/c/objects/Params/IntMatParam.h M /issm/trunk-jpl/src/c/objects/Params/IntParam.h M /issm/trunk-jpl/src/c/objects/Params/IntVecParam.h M /issm/trunk-jpl/src/c/objects/Params/MatrixParam.cpp A /issm/trunk-jpl/src/c/objects/Params/MatrixParam.h D /issm/trunk-jpl/src/c/objects/Params/PetscMatParam.h D /issm/trunk-jpl/src/c/objects/Params/PetscVecParam.h D /issm/trunk-jpl/src/c/objects/Params/PetscVecParam.h M /issm/trunk-jpl/src/c/objects/Params/StringParam.h A /issm/trunk-jpl/src/c/objects/Params/VectorParam.h A /issm/trunk-jpl/src/c/objects/Params/VectorParam.h M /issm/trunk-jpl/src/c/objects/Vertex.h M /issm/trunk-jpl/src/c/objects/Vertex.h M /issm/trunk-jpl/src/c/shared/Exp/IsInPoly.cpp M /issm/trunk-jpl/src/c/shared/Exp/exp.h M /issm/trunk-jpl/src/c/shared/Matlab/ModuleBoot.cpp A /issm/trunk-jpl/src/c/shared/Numerics/Options.h M /issm/trunk-jpl/src/c/shared/Numerics/PetscOptionsFromAnalysis.cpp M /issm/trunk-jpl/src/c/shared/Numerics/numerics.h M /issm/trunk-jpl/src/c/solutions/convergence.cpp

M /issm/trunk-jpl/src/c/solutions/gradient\_core.cpp M /issm/trunk-jpl/src/c/solutions/issm.cpp  
A /issm/trunk-jpl/src/c/toolkits/double A /issm/trunk-jpl/src/c/toolkits/double/MatlabMatrixToDoubleMat  
A /issm/trunk-jpl/src/c/toolkits/double/MatlabVectorToDoubleVector.cpp A  
/issm/trunk-jpl/src/c/toolkits/double/double.h A /issm/trunk-jpl/src/c/toolkits/mpi/patches/DetermineLoc  
M /issm/trunk-jpl/src/c/toolkits/mpi/patches/MPI\_Boundariesfromrange.cpp  
M /issm/trunk-jpl/src/c/toolkits/mpi/patches/MPI\_Lowerrow.cpp M /issm/trunk-  
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A /issm/trunk-jpl/src/c/toolkits/petsc/patches/ISSMToPetscInsertMode.cpp A  
/issm/trunk-jpl/src/c/toolkits/petsc/patches/ISSMToPetscNormMode.cpp M /issm/trunk-  
jpl/src/c/toolkits/petsc/patches/MatPartition.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToSer  
D /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatlabMatrixToDoubleMatrix.cpp  
D /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatlabVectorToDoubleVector.cpp  
M /issm/trunk-jpl/src/c/toolkits/petsc/patches/NewMat.cpp M /issm/trunk-  
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M /issm/trunk-jpl/src/c/toolkits/petsc/patches/VecToMPISerial.cpp M /issm/trunk-  
jpl/src/c/toolkits/petsc/patches/petscpatches.h M /issm/trunk-jpl/src/c/toolkits/petsc/petscincludes.h  
M /issm/trunk-jpl/src/c/toolkits/plapack/plapackincludes.h M /issm/trunk-jpl/src/c/toolkits/toolkits.h  
A /issm/trunk-jpl/src/c/toolkits/toolkitsenums.h A /issm/trunk-jpl/src/m/enum/MatrixParamEnum.m  
D /issm/trunk-jpl/src/m/enum/PetscMatParamEnum.m D /issm/trunk-jpl/src/m/enum/PetscVecParamEnu  
A /issm/trunk-jpl/src/m/enum/VectorParamEnum.m M /issm/trunk-jpl/src/mex/ComputeBasalStress/Comp  
M /issm/trunk-jpl/src/mex/ContourToMesh/ContourToMesh.cpp M /issm/trunk-  
jpl/src/mex/ContourToNodes/ContourToNodes.cpp M /issm/trunk-jpl/src/mex/ControlInputGetGradient/C  
M /issm/trunk-jpl/src/mex/GetVectorFromInputs/GetVectorFromInputs.cpp M  
/issm/trunk-jpl/src/mex/Gradj/Gradj.cpp M /issm/trunk-jpl/src/mex/InterpFromGridToMesh/InterpFromG  
M /issm/trunk-jpl/src/mex/InterpFromMesh2d/InterpFromMesh2d.cpp M /issm/trunk-  
jpl/src/mex/InterpFromMeshToMesh3d/InterpFromMeshToMesh3d.cpp M /issm/trunk-  
jpl/src/mex/Makefile.am M /issm/trunk-jpl/src/mex/Orth/Orth.cpp M /issm/trunk-  
jpl/src/mex/PointCloudFindNeighbors/PointCloudFindNeighbors.cpp M /issm/trunk-  
jpl/src/mex/ResetCoordinateSystem/ResetCoordinateSystem.cpp M /issm/trunk-  
jpl/src/mex/Solver/Solver.cpp Completed separation of Petsc from ISSM. Ma-  
trix and Vector are now the vehicles for Mat and Vec objects when running with  
Petsc, or double\* when running with a custom made type of matrix (still to be  
finished).

**Change #12** with diff file ISSM-11695-11696.diff:

Function name:

M /issm/trunk-jpl/src/c/Container/Elements.cpp M /issm/trunk-jpl/src/c/Container/Parameters.cpp  
M /issm/trunk-jpl/src/c/Container/Parameters.h M /issm/trunk-jpl/src/c/EnumDefinitions/EnumDefinitions  
M /issm/trunk-jpl/src/c/Makefile.am M /issm/trunk-jpl/src/c/io/Matlab/FetchMatlabData.cpp  
M /issm/trunk-jpl/src/c/io/Matlab/WriteMatlabData.cpp M /issm/trunk-jpl/src/c/io/Matlab/matlabio.h  
M /issm/trunk-jpl/src/c/modules/AverageOntoPartitionx/AverageOntoPartitionx.cpp  
M /issm/trunk-jpl/src/c/modules/ComputeBasalStressx/ComputeBasalStressx.cpp  
M /issm/trunk-jpl/src/c/modules/ComputeBasalStressx/ComputeBasalStressx.h  
M /issm/trunk-jpl/src/c/modules/ComputeStrainRatex/ComputeStrainRatex.cpp  
M /issm/trunk-jpl/src/c/modules/ComputeStrainRatex/ComputeStrainRatex.h  
M /issm/trunk-jpl/src/c/modules/ContourToMeshx/ContourToMeshx.cpp M /issm/trunk-

jpl/src/c/modules/ContourToMeshx/ContourToMeshx.h M /issm/trunk-jpl/src/c/modules/ContourToMeshx  
 M /issm/trunk-jpl/src/c/modules/ContourToNodesx/ContourToNodesx.cpp M  
 /issm/trunk-jpl/src/c/modules/ContourToNodesx/ContourToNodesx.h M /issm/trunk-  
 jpl/src/c/modules/ControlInputGetGradientx/ControlInputGetGradientx.cpp M  
 /issm/trunk-jpl/src/c/modules/ControlInputGetGradientx/ControlInputGetGradientx.h  
 M /issm/trunk-jpl/src/c/modules/ControlInputSetGradientx/ControlInputSetGradientx.cpp  
 M /issm/trunk-jpl/src/c/modules/ControlInputSetGradientx/ControlInputSetGradientx.h  
 M /issm/trunk-jpl/src/c/modules/EnumToStringx/EnumToStringx.cpp M /issm/trunk-  
 jpl/src/c/modules/GetVectorFromControlInputsx/GetVectorFromControlInputsx.cpp  
 M /issm/trunk-jpl/src/c/modules/GetVectorFromControlInputsx/GetVectorFromControlInputsx.h  
 M /issm/trunk-jpl/src/c/modules/GetVectorFromInputsx/GetVectorFromInputsx.cpp  
 M /issm/trunk-jpl/src/c/modules/GetVectorFromInputsx/GetVectorFromInputsx.h  
 M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.cpp M /issm/trunk-jpl/src/c/modules/Gradjx/Gradjx.h  
 M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.cpp  
 M /issm/trunk-jpl/src/c/modules/GroundinglineMigrationx/GroundinglineMigrationx.h  
 M /issm/trunk-jpl/src/c/modules/InputUpdateFromVectorDakotax/InputUpdateFromVectorDakotax.cpp  
 M /issm/trunk-jpl/src/c/modules/InputUpdateFromVectorDakotax/InputUpdateFromVectorDakotax.h  
 M /issm/trunk-jpl/src/c/modules/InputUpdateFromVectorx/InputUpdateFromVectorx.cpp  
 M /issm/trunk-jpl/src/c/modules/InputUpdateFromVectorx/InputUpdateFromVectorx.h  
 M /issm/trunk-jpl/src/c/modules/InterpFromGridToMeshx/InterpFromGridToMeshx.cpp  
 M /issm/trunk-jpl/src/c/modules/InterpFromGridToMeshx/InterpFromGridToMeshx.h  
 M /issm/trunk-jpl/src/c/modules/InterpFromMesh2dx/InterpFromMesh2dx.cpp  
 M /issm/trunk-jpl/src/c/modules/InterpFromMesh2dx/InterpFromMesh2dx.h  
 M /issm/trunk-jpl/src/c/modules/InterpFromMesh2dx/InterpFromMesh2dxt.cpp  
 M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh2dx/InterpFromMeshToMesh2dx.cpp  
 M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh3dx/InterpFromMeshToMesh3dx.cpp  
 M /issm/trunk-jpl/src/c/modules/InterpFromMeshToMesh3dx/InterpFromMeshToMesh3dx.h  
 M /issm/trunk-jpl/src/c/modules/Orthx/Orthx.cpp M /issm/trunk-jpl/src/c/modules/Orthx/Orthx.h  
 M /issm/trunk-jpl/src/c/modules/PointCloudFindNeighborsx/PointCloudFindNeighborsx.cpp  
 M /issm/trunk-jpl/src/c/modules/PointCloudFindNeighborsx/PointCloudFindNeighborsx.h  
 M /issm/trunk-jpl/src/c/modules/PointCloudFindNeighborsx/PointCloudFindNeighborsxt.cpp  
 M /issm/trunk-jpl/src/c/modules/SetControlInputsFromVectorx/SetControlInputsFromVectorx.cpp  
 M /issm/trunk-jpl/src/c/modules/SetControlInputsFromVectorx/SetControlInputsFromVectorx.h  
 M /issm/trunk-jpl/src/c/modules/Solverx/Solverx.cpp M /issm/trunk-jpl/src/c/modules/Solverx/Solverx.h  
 M /issm/trunk-jpl/src/c/modules/StringToEnumx/StringToEnumx.cpp M /issm/trunk-  
 jpl/src/c/modules/SystemMatrixesx/SystemMatrixesx.cpp M /issm/trunk-jpl/src/c/modules/UpdateVertexPo  
 M /issm/trunk-jpl/src/c/objects/ElementResults/BoolElementResult.cpp M /issm/trunk-  
 jpl/src/c/objects/ElementResults/BoolElementResult.h M /issm/trunk-jpl/src/c/objects/ElementResults/Do  
 M /issm/trunk-jpl/src/c/objects/ElementResults/ElementResult.h M /issm/trunk-  
 jpl/src/c/objects/ElementResults/PentaP1ElementResult.cpp M /issm/trunk-  
 jpl/src/c/objects/ElementResults/PentaP1ElementResult.h M /issm/trunk-jpl/src/c/objects/ElementResults  
 M /issm/trunk-jpl/src/c/objects/ElementResults/TriaP1ElementResult.h M /issm/trunk-  
 jpl/src/c/objects/Elements/Element.h M /issm/trunk-jpl/src/c/objects/Elements/Penta.cpp  
 M /issm/trunk-jpl/src/c/objects/Elements/Penta.h M /issm/trunk-jpl/src/c/objects/Elements/Tria.cpp  
 M /issm/trunk-jpl/src/c/objects/Elements/Tria.h M /issm/trunk-jpl/src/c/objects/ExternalResults/PetscVec  
 M /issm/trunk-jpl/src/c/objects/ExternalResults/PetscVecExternalResult.h M

/issm/trunk-jpl/src/c/objects/FemModel.cpp M /issm/trunk-jpl/src/c/objects/Inputs/BoolInput.cpp  
 M /issm/trunk-jpl/src/c/objects/Inputs/BoolInput.h M /issm/trunk-jpl/src/c/objects/Inputs/ControlInput.c  
 M /issm/trunk-jpl/src/c/objects/Inputs/ControlInput.h M /issm/trunk-jpl/src/c/objects/Inputs/DatasetInput  
 M /issm/trunk-jpl/src/c/objects/Inputs/DoubleInput.cpp M /issm/trunk-jpl/src/c/objects/Inputs/DoubleInput  
 M /issm/trunk-jpl/src/c/objects/Inputs/Input.h M /issm/trunk-jpl/src/c/objects/Inputs/IntInput.cpp  
 M /issm/trunk-jpl/src/c/objects/Inputs/IntInput.h M /issm/trunk-jpl/src/c/objects/Inputs/PentaP1Input.cp  
 M /issm/trunk-jpl/src/c/objects/Inputs/PentaP1Input.h M /issm/trunk-jpl/src/c/objects/Inputs/TransientIn  
 M /issm/trunk-jpl/src/c/objects/Inputs/TransientInput.h M /issm/trunk-jpl/src/c/objects/Inputs/TriaP1Inp  
 M /issm/trunk-jpl/src/c/objects/Inputs/TriaP1Input.h M /issm/trunk-jpl/src/c/objects/Materials/Material.l  
 M /issm/trunk-jpl/src/c/objects/Materials/Matrice.cpp M /issm/trunk-jpl/src/c/objects/Materials/Matrice.h  
 M /issm/trunk-jpl/src/c/objects/Materials/Matpar.h M /issm/trunk-jpl/src/c/objects/Node.cpp  
 M /issm/trunk-jpl/src/c/objects/Node.h M /issm/trunk-jpl/src/c/objects/Numerics/Matrix.cpp  
 M /issm/trunk-jpl/src/c/objects/Numerics/Matrix.h M /issm/trunk-jpl/src/c/objects/Numerics/Vector.cpp  
 M /issm/trunk-jpl/src/c/objects/Numerics/Vector.h M /issm/trunk-jpl/src/c/objects/Params/BoolParam.h  
 M /issm/trunk-jpl/src/c/objects/Params/DoubleMatArrayParam.h M /issm/trunk-  
 jpl/src/c/objects/Params/DoubleMatParam.h M /issm/trunk-jpl/src/c/objects/Params/DoubleParam.h  
 M /issm/trunk-jpl/src/c/objects/Params/DoubleVecParam.h M /issm/trunk-  
 jpl/src/c/objects/Params/FileParam.h M /issm/trunk-jpl/src/c/objects/Params/IntMatParam.h  
 M /issm/trunk-jpl/src/c/objects/Params/IntParam.h M /issm/trunk-jpl/src/c/objects/Params/IntVecParam  
 A /issm/trunk-jpl/src/c/objects/Params/MatrixParam.cpp A /issm/trunk-jpl/src/c/objects/Params/MatrixF  
 M /issm/trunk-jpl/src/c/objects/Params/Param.h D /issm/trunk-jpl/src/c/objects/Params/PetscMatParam.  
 D /issm/trunk-jpl/src/c/objects/Params/PetscMatParam.h D /issm/trunk-jpl/src/c/objects/Params/PetscVe  
 D /issm/trunk-jpl/src/c/objects/Params/PetscVecParam.h M /issm/trunk-jpl/src/c/objects/Params/StringA  
 M /issm/trunk-jpl/src/c/objects/Params/StringParam.h A /issm/trunk-jpl/src/c/objects/Params/VectorPara  
 A /issm/trunk-jpl/src/c/objects/Params/VectorParam.h M /issm/trunk-jpl/src/c/objects/Vertex.cpp  
 M /issm/trunk-jpl/src/c/objects/Vertex.h M /issm/trunk-jpl/src/c/objects/objects.h  
 M /issm/trunk-jpl/src/c/shared/Exp/IsInPoly.cpp M /issm/trunk-jpl/src/c/shared/Exp/exp.h  
 M /issm/trunk-jpl/src/c/shared/Matlab/ModuleBoot.cpp A /issm/trunk-jpl/src/c/shared/Numerics/Options  
 M /issm/trunk-jpl/src/c/shared/Numerics/PetscOptionsFromAnalysis.cpp M /issm/trunk-  
 jpl/src/c/shared/Numerics/numerics.h M /issm/trunk-jpl/src/c/solutions/convergence.cpp  
 M /issm/trunk-jpl/src/c/solutions/gradient\_core.cpp M /issm/trunk-jpl/src/c/solutions/issm.cpp  
 A /issm/trunk-jpl/src/c/toolkits/double A /issm/trunk-jpl/src/c/toolkits/double/MatlabMatrixToDoubleMat  
 A /issm/trunk-jpl/src/c/toolkits/double/MatlabVectorToDoubleVector.cpp A  
 /issm/trunk-jpl/src/c/toolkits/double/double.h A /issm/trunk-jpl/src/c/toolkits/mpi/patches/DetermineLoc  
 M /issm/trunk-jpl/src/c/toolkits/mpi/patches/MPI\_Boundariesfromrange.cpp  
 M /issm/trunk-jpl/src/c/toolkits/mpi/patches/MPI\_Lowerrow.cpp M /issm/trunk-  
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 A /issm/trunk-jpl/src/c/toolkits/petsc/patches/ISSMToPetscInsertMode.cpp A  
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 jpl/src/c/toolkits/petsc/patches/MatPartition.cpp M /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatToSer  
 D /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatlabMatrixToDoubleMatrix.cpp  
 D /issm/trunk-jpl/src/c/toolkits/petsc/patches/MatlabVectorToDoubleVector.cpp  
 M /issm/trunk-jpl/src/c/toolkits/petsc/patches/NewMat.cpp M /issm/trunk-  
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 M /issm/trunk-jpl/src/c/toolkits/petsc/patches/VecToMPISerial.cpp M /issm/trunk-  
 jpl/src/c/toolkits/petsc/patches/petscpatches.h M /issm/trunk-jpl/src/c/toolkits/petsc/petscincludes.h



M /issm/trunk-jpl/src/c/toolkits/plapack/plapackincludes.h M /issm/trunk-jpl/src/c/toolkits/toolkits.h  
A /issm/trunk-jpl/src/c/toolkits/toolkitsenums.h A /issm/trunk-jpl/src/m/enum/MatrixParamEnum.m  
D /issm/trunk-jpl/src/m/enum/PetscMatParamEnum.m D /issm/trunk-jpl/src/m/enum/PetscVecParamEnum.m  
A /issm/trunk-jpl/src/m/enum/VectorParamEnum.m M /issm/trunk-jpl/src/mex/ComputeBasalStress/ComputeBasalStress.cpp  
M /issm/trunk-jpl/src/mex/ContourToMesh/ContourToMesh.cpp M /issm/trunk-jpl/src/mex/ContourToNodes/ContourToNodes.cpp  
M /issm/trunk-jpl/src/mex/GetVectorFromInputs/GetVectorFromInputs.cpp M /issm/trunk-jpl/src/mex/InterpFromGridToMesh/InterpFromGridToMesh.cpp  
M /issm/trunk-jpl/src/mex/InterpFromMesh2d/InterpFromMesh2d.cpp M /issm/trunk-jpl/src/mex/InterpFromMesh3d/InterpFromMesh3d.cpp  
M /issm/trunk-jpl/src/mex/Makefile.am M /issm/trunk-jpl/src/mex/Orth/Orth.cpp M /issm/trunk-jpl/src/mex/PointCloudFindNeighbors/PointCloudFindNeighbors.cpp  
M /issm/trunk-jpl/src/mex/ResetCoordinateSystem/ResetCoordinateSystem.cpp M /issm/trunk-jpl/src/mex/Solver/Solver.cpp

Export determination: 6.

Rationale: Completed separation of Petsc from ISSM. Matrix and Vector are now the vehicles for Mat and Vec objects when running with Petsc, or double\* when running with a custom made type of matrix (still to be finished). M /issm/trunk-jpl/m4/issm\_options.m4 More leeway in terms of running without petsc support

**Change #13** with diff file ISSM-11696-11697.diff:

Function name:

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

Export determination: 6.

Rationale: More leeway in terms of running without petsc support M /issm/trunk-jpl/configs/config-macosx64-larour-ad.sh M /issm/trunk-jpl/configs/config-macosx64-larour.sh run without petsc

**Change #14** with diff file ISSM-11697-11698.diff:

Function name:

M /issm/trunk-jpl/configs/config-macosx64-larour-ad.sh M /issm/trunk-jpl/configs/config-macosx64-larour.sh

Export determination: 6.

Rationale: run without petsc M /issm/trunk-jpl/cron/configs/macosx64\_larour\_validation Skip bamg

**Change #15** with diff file ISSM-11698-11699.diff:

Function name:

M /issm/trunk-jpl/cron/configs/macosx64\_larour\_validation

Export determination: 6.

Rationale: Skip bamg M /issm/trunk-jpl/src/c/modules/Reduceloadx/Reduceloadx.cpp minor

**Change #16** with diff file ISSM-11699-11700.diff:

Function name:

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

Export determination: 6.

Rationale: minor M /issm/trunk-jpl/src/mex/Reducevectorgtof/Reducevectorgtof.cpp  
cosmetics