PATCH TEST REPORT

ECS System Integration and Test

Patch ID: PATCH_6A08_DPL_HEG.02A	**Patch Installation Date:** 12/16/03 **Location/Mode(s):** PVC OPS	**Lead Engineer:** John Corbett

NCR Ids/Name **(If not shown below):**	**Patch Footprint/Affected Subsystems:** HEG

Test Objectives **(Functional/Performance/Regression/Fault Recovery)/New Functionality/Ops Concept(s):**
Verify NCRs/install

Test Location/Modes/Tools: PVC- OPS	**Test Date:** 12/16/03
Test Support Personnel:John Corbett **Development POC:** Cid Pradera, Ray Milburn, Sharon Ni and Abe Taaheri **NCR Submitter(s) POC:**	**Other Test Requirements**:

Required Completion Date : 12/18/03
Planned Completion Time/Date: 12/17/03

Test Approach **(By NCR, if applicable) NOTE: Detailed NCR verification steps/info should be entered in DDTS.**

NCR#	Inputs/Actions:	Outputs/ Expected Results:	Pass/Fail Not Tested	Comments:
38085	- "hegtool.exe output files are overwritten for two simultaneous runs"	No impact on datapool HEG.	P	Inspection of EcDlHEGFrontend.DEBUGLOGs show only the –h input parameter used.
38149	- "Invalid HEG reprojection choices are shown for swath data"	Inspection of DlCollections table shows correct choice of data structure in hdfObjectType for HEGable data types/versions. Valid reprojection choices presented for swath data.	P	
38259	- "DP-HEG changed AST_L1B Pixel Size After Subsetting." - Run AST_L1B.003 granule with local granule ID = AST_L1B_00307292001100121_08072001130913.hdf, dbID = 2014098328 - Select GeoTIFF Geographic projection. - Subset with values UL = (38.0, 14.75) and LR = (37.75, 15.0)	When viewed in ENVI, image is not distorted. Correct number of rows and columns are calculated. Correct pixel resolution.	P	RunID 0000000000000102
38260	- "DP-HEG and stand-alone HEG corrupt AST_L1B data" - Run with AST_L1B.003 granule quatar2.hdf, dbID = 2014366740. - Select GeoTIFF Geographic projection.	Production of 15 tif files free of rainbow strips over saturated high value areas.	P	Run ID 0000000000000113. Output identical to output produced in DEV04 (order ID 0055) as viewed in ENVI by Sharon Ni.
38630	- "Output array dimensions match subset dimensions for subset w/no conversion." - Run with MOD10A2.004 granule with local granuleID = MOD10A2.A2003001.h24v03.004.2003012103558.hdf, dbID =	Production of 2 hdf files, one for each band, with spacial extent same as original granule.	P	RunID 0000000000000101

	2014366760. - Subset using values UL = (90.0, -180.0) and LR = (-90.0, 180.0).			
38647	- "Units incorrect for geographic in embedded metadata" - Run with MI1B2E.001 granule with local granuleID = MISR_AM1_GPR_ELLIPSOID_GM_P041_0001040_AF_02.hdf, dbID = 2014336757. - Select HDF Geographic projection.	The following additional attributes present in all hdf files. 1. Projection = Geographic. 2. Projection parameters = all zeros (default) 3. Grid resampling method = nearest neighbor resampling. 4. Data Columns and Data Rows set. 5. Upper left and lower right corner values set and units in DMS degrees. 6. X and Y pixel size set and units in decimal degrees.	P	RunID 0000000000000114
38648	- "Add additional attributes to embedded metadata" - Run with AST_L1B.003 granule quatar2.hdf, dbID = 2014366740. - Select HDF Geographic projection.	The following additional attributes present in all hdf files. 7. Pointing angles group extracted from input file. 8. Extraction of SolarDirection values from input file and insert the two values into with the attribute names Solar_Azimuth_Angle and Solar_Elevation_Angle respectively. 9. Extraction of MapOrientationAngle value from input file. 10. Projection = Geographic. 11. Projection parameters = all zeros (default) 12. Grid resampling method = nearest neighbor resampling. 13. Data Columns and Data Rows set. 14. Upper left and lower right corner values set and units in DMS degrees. 15. X and Y pixel size set and units in decimal degrees.	P	RunID 0000000000000105
38649	- "Add additional attributes in external metadatafile." - Run with MOD09GHK.003 granule with local granuleID MOD09GHK.A2003123.h11v05.003.2002128130140.hdf, dbID = 2014366756. - Select HDF-UTM projection.	The following additional attributes present in all hdf.met files. 1. Projection = UTM 2. Projection parameters = all zeros (default) 3. Grid resampling method = nearest neighbor resampling. 4. Data Columns and Data Rows set. 5. Upper left and lower right corner values set and units in meters. 6. X and Y pixel size set and units in meters.	P	Run ID 0000000000000106
38652	- "Need to be able to convert MODIS to GeoTiff" - Run with MOD10A2.004 granule with local granuleID = MOD10A2.A2003001.h24v03.004.2003012103558.hdf, dbID = 2014366760. - Select GeoTiff Sinusoidal projection.	Successful execution of HEG for this projection.	P	RunID 0000000000000107
Regression test	- Run MIL2ASAE.001 granule with local granule ID = MISR_AM1_AS_AEROSOL_P187_O008476_F05_0012.hdf, dbID = 2014198468.			

	- Select GeoTIFF Geographic projection. - Subset granule using SPATIAL_SUBSET_UL_CORNER = (37.807719047 13.917583847) SPATIAL_SUBSET_LR_CORNER = (35.905121972 19.980871326) - Compare results to 0000000000000045.	Successfully execution of HEG Output same as that produced in 0000000000000045.	P	RunID 0000000000000109
Regression test	- Run MIL2ASLS.001 granule with local granule ID = MISR_AM1_AS_LAND_P187_O008476_F03_0011.hdf , dbID 2014169079. - Select GeoTIFF Geographic projection. - Compare results to 0000000000000046.	Successfully execution of HEG Output same as that produced in 0000000000000046.	P	RunID 0000000000000110
Regression test	- Run MI1B2E.001 granule with local granule ID = MISR_AM1_GRP_ELLIPSOID_GM_P187_O008476_AN_F02_0017.hdf, dbID = 2014098329. - Select GeoTIFF Geographic projection. - Compare results to 0000000000000043.	Successfully execution of HEG Output same as that produced in 0000000000000046.	P	RunID 0000000000000111
Regression test	- Run MOD10A1.004 granule with local granule ID = MOD10A1.A2003246.h13v01.004.2003258033003.hdf, dbID = 2014114067 - Select GeoTIFF Geographic projection. - Compare results to 0000000000000052.	Successfully execution of HEG Output same as that produced in 0000000000000052.	P	RunId 0000000000000108
Regression test	- Run AST_L1B.003 granule with local granule ID = AST_L1B_00307292001100121_08072001130913.hdf, dbID = 2014098328 - Select GeoTIFF Geographic projection. - Compare results to 0000000000000050.	Successfully execution of HEG Output same as that produced in 0000000000000046.	P	RunId 0000000000000112

List of Artifacts/Attachments (Procedures/data/etc.):

Signature of Lead Engineer: _____ **Completion Date:**