## MISR Level 3 Land Surface and Aerosol Versioning

## Component Global Land Surface Product (CGLS) and Component Global Aerosol Product (CGAS) - Daily, Monthly, Quarterly, Yearly products

## **Processing Status**

ESDT	Product File Name Prefix	Current Quality Designations				
MIL3DAE, MIL3MAE, MIL3QAE, MIL3YAE, MIL3DAEN, MIL3MAEN, MIL3QAEN, MIL3YAEN	MISR_AM1_CGAS	Stage 2 Validated: AEROSOL - aerosol optical depth (AOD) Stage 1 Validated: AEROSOL - aerosol Angstrom exponent, aerosol single-scattering albedo, AOD due to small, medium, large, spherical, non-spherical particles; LAND - DHRPAR, spectral DHR, FPAR (excluding needleleaf forest biome type), LAI (excluding needleleaf forest biome type), NDVI				
MIL3DLS, MIL3MLS, MIL3QLS, MIL3YLS, MIL3DLSN, MIL3MLSN, MIL3QLSN, MIL3YLSN	MISR_AM1_CGLS	MISR maturity level definitions I Quality Summary L3 Products				

Note: Level 3 is a summary of Level 2. This page covers changes to the Level 3 software itself for each product version, but you should also consult the Aerosol and Land Surface Versioning statement for changes to the Level 2 data being summarized.

Ver. #	Production Start Date	Product Updates	Quality Transition
Current F04_0031 (land), F15_0031 (aerosol)	08/01/2008	The entire mission is being reprocessed at this level.  Data Product Specification Rev R (PDF).  Aerosol product now contains the new fields "Absorbing optical depth" and "Single-scatter albedo". In addition, the field "Optical depth average" has been extended by the new dimension "ParticleType" that gives the optical depths stratified by small, medium, large, spherical and nonspherical particles (in addition to continuing to report the overall optical depth).	
F04_0029 (land), F13_0029 (aerosol)	12/01/2007	Data Product Specification Rev Q (PDF). Added summary of particle properties to the Aerosol summary. This version has been replaced with the later version 0031 (see above).	
F04_0027 (land), F11_0027 (aerosol)	08/01/2007	Data Product Specification Rev P (PDF).  Now have a time dimension in all fields for netCDF files (even though there is only one time value). This was a change requested by data product users to integrate better with existing tools such as vcdat that expect a time dimension.  There are other minor changes in the netCDF file format to better integrate with other tools such as IDL and openDAP (see DPS for details).	
F04_0025 (land), F09_0025 (aerosol)	10/02/2006	Data Product Specification Rev O (PDF). For Aerosol product, optical depth is now reported for all 4 MISR bands (previously only the green band optical depth was reported). Also, optical depth standard deviation is now reported.  Added netCDF version. These products are the same format as the HDF-EOS products except there is one file for each grid resolution. Example file name: MISR_AM1_CGCL_0_5_DEG_JUN_01_2003_F02_0020.nc	
F04_0021 (land), F06_0021 (aerosol)	2/15/2006	Data Product Specification Rev N (PDF). No user visible changes, other than changes in Level 2 data being summarized (see Aerosol and Land Surface Versioning statement).	
F04_0019 (land), F06_0019 (aerosol)	12/01/2005	Data Product Specification Rev N (PDF).  Removed Land data from Greenland and Antartica. It is noted that optical depth blunders in the Level 2 product can frequently occur over snow/ice fields due to low spatial contrast and also as a consequence of inadequate cloud screening. Many such blunders have been observed over Greenland and Antarctica. Therefore, these two geographic areas are currently being excluded in the Level 3 Global Land Product but with the expectation that they will be included at a later date. Note that this is the same change as the one made to the Aerosol product in the previous version.  For both the Aerosol (CGAS) and Land (CGLS) product, this version fixes an error in the "Time of Observation" data, which in the previous version was missing many Level 2 observations. The actual Level 3 averages contained all of these observations, they simply were not being recorded in the "Time of Observation" vdata. The current version does correctly record all the Level 2 observations.	Stage 1 Validated: LAND - DHRPAR, spectral DHR, FPAR (excluding needleleaf forest biome type), LAI (excluding needleleaf forest biome type), NDVI Provisional: LAND - DHR Shortwave
F04_0017 (land), F06_0017 (aerosol)	09/21/2005	Data Product Specification Rev M (PDF). Removed Aerosol data from Greenland and Antartica. It is noted that optical depth blunders in the Level 2 product can frequently occur over snow/ice fields due to low spatial contrast and also as a consequence of inadequate cloud screening. Many such blunders have been observed over Greenland and Antarctica. Therefore, these two geographic areas are currently being excluded in the Level 3 Global Aerosol Product but with the expectation that they will be included at a later date.  No changes were made to Global Land Product (but version number was incremented to track Global Aerosol Product version number).	

F04_0016 (land), F06_0016 (aerosol)	05/13/2005	Data Product Specification Rev M (PDF). Added time information. This contains information about each MISR swath that views a Level 3 pixel.	
F02_0014 (land), F02_0014 (aerosol)	11/28/2004	Data Product Specification Rev L (PDF).  No user visible changes, other than changes in Level 2 data being summarized (see Aerosol and Land Surface Versioning statement).	
F02_0012 (land), F02_0012 (aerosol)		Data Product Specification Rev K (PDF). Added daily Level 3 summaries.	
F02_0010 (land), F02_0010 (aerosol)	12/08/2003	Version F02_0010 has been removed from the archive because it contained radiometric errors.  Do not use!	
F02_0008 (land), F02_0008 (aerosol)		Data Product Specification Rev K (PDF). Update to work with new format of input PGE 9 files.	
Baseline: F01_0006 (land), F02_0006 (aerosol)		Data Product Specification Rev K (PDF). Initial baseline for Level 3 Component Global Aerosol Product (CGAS) and Level 3 Component Global Land Surface Product (CGLS) public release.  New ancillary files:  MISR_AM1_AGP_Pxxx_F01_24.hdf	Stage 2 Validated: AEROSOL - aerosol optical depth Provisional: LAND - DHRPAR, spectral DHR, FPAR, LAI, NDVI Beta: LAND - DHR Shortwave