Brief Regional Product Descriptions

Component Global Georectified Radiance Product (CGGRP):					
MI3DRDR, MI3MRDR, MI3QRDR					
Grid	Field	Data Type	Description		
Georectified Radiance Average	Average	FLOAT32 -9999 = fill	Average radiance value, in $Wm^{-2}sr^{-1}\mu m^{-1}$. This is indexed by y, x, camera, band. Camera has $0 = DF$, $1 = CF$, $2 = BF$, $3 = AF$, $4 = AN$, $5 = AA$, $6 = BA$, $7 = CA$, $8 = DA$. Band is $0 = Blue$ (443 nm), $1 = Green$ (555 nm), $2 = Red$ (670 nm), $3 = Infrared$ (865 nm).		
	Average count	INT32	Count of radiances used in the Average field. Same indices as Average.		
${\it Georectified Radiance Covariance}$	Covariance	FLOAT32 0 = fill	Variance and covariance between the radiances, in the units $W^2m^{-4}sr^{-2}\mu m^{-2}$. Contains only the lower triangular part of the symmetric covariance matrix. Indexed by x, y, and a covariance index. For the covariance index, $0 = \text{Variance}$ of the DF Blue, $1 = \text{Covariance}$ of the DF Blue and DF Green, $2 = \text{Variance}$ of DF Green, and so on.		
	Covariance count	INT32	Count of the radiance pairs that are used in the Covariance. Same indices as Covariance.		
	-	ent Global Aerosol Proc BDAER, MI3MAER, M			
Grid	Field	Data Type	Description		
AerosolParameterAverage	Optical depth average	FLOAT32 -9999 = fill	Average of the aerosol optical depth. Green (555 nm) band. Indexed by y, x.		
	Optical depth average count	INT32	Count of optical depths used in the Optical depth average.		
Component Land Surface Product (CGLS): MI3DLSR, MI3MLSR, MI3QLSR					
Grid	Field	D / ID			
	1 1010	Data Type	Description		
I ID 4 A	DHR average	FLOAT32 -9999 = fill	Average of DHR (Directional Hemispheric Reflectance). Defined as radiance exitance divided by irradiance under illumination from a single direction. Also know as the "black sky" albedo. Indexed by y, x, and band. Band is 0 = Blue (443 nm), 1 = Green (555 nm), 2 = Red (670 nm), 3 = Infrared (865 nm).		
${\bf LandParameter Average}$	DHR average DHR average count	FLOAT32	Average of DHR (Directional Hemispheric Reflectance). Defined as radiance exitance divided by irradiance under illumination from a single direction. Also know as the "black sky" albedo. Indexed by y, x, and band. Band is 0 = Blue (443 nm), 1 = Green (555 nm), 2 = Red (670)		
${\bf Land Parameter Average}$	DHR average DHR average count DHRPAR average	FLOAT32 -9999 = fill INT32 FLOAT32 -9999 = fill	Average of DHR (Directional Hemispheric Reflectance). Defined as radiance exitance divided by irradiance under illumination from a single direction. Also know as the "black sky" albedo. Indexed by y, x, and band. Band is 0 = Blue (443 nm), 1 = Green (555 nm), 2 = Red (670 nm), 3 = Infrared (865 nm). Count of DHR values used in DHR average. Same indices as DHR average. Average of DHR integrated over the Photosynthetically Active Radiation (PAR) band.		
${\bf Land Parameter Average}$	DHR average DHR average count	FLOAT32 -9999 = fill INT32 FLOAT32	Average of DHR (Directional Hemispheric Reflectance). Defined as radiance exitance divided by irradiance under illumination from a single direction. Also know as the "black sky" albedo. Indexed by y, x, and band. Band is 0 = Blue (443 nm), 1 = Green (555 nm), 2 = Red (670 nm), 3 = Infrared (865 nm). Count of DHR values used in DHR average. Same indices as DHR average. Average of DHR integrated over the Photosynthetically Active		



DHR Shortwave approxi-	INT32	Count of DHR Shortwave approximation values used in DHR
mation average count		Shortwave approximation average. Same indices as DHR Short-
		wave approximation average.
	FLOAT32	Average of Fractional absorbed Photosynthetically Active Radia-
FPAR average	-9999 = fill	tion (FPAR). Defined as PAR irradiance absorbed by live vegeta-
		tion divided by incident PAR irradiance. Indexed by y, x.
FPAR average count	INT32	Count of FPAR values used in FPAR average. Same indices as
		FPAR average.
LAI average	FLOAT32	Average of Leaf Area Index (LAI). Indexed by y, x.
	-9999 = fill	
LAI average count	INT32	Count of LAI values used in LAI average. Same indices as LAI
		average.
NDVI average	FLOAT32	Average of Normalized Difference Vegetation Index (NDVI). In-
	-9999 = fill	dexed by y, x.
NDVI average count	INT32	Count of NDVI values used in NDVI average. Same indices as
		NDVI average.