

MI3DLSR_2 is the Multi-angle Imaging SpectroRadiometer (MISR) Level 3 Component Global Land Regional public Product covering a day version 2. It contains a daily statistical summary of directional hemispherical reflectance (DHR), photosynthetically active spectral region (DHR-PAR), DHR for near-infrared band (DHR-NIR), fractional absorbed photosynthetically active radiation (FPAR), DHR-based normalized difference vegetation index (NDVI) and land surface bidirectional reflectance factor (BRF) model parameters. It is classified into six vegetated and one non-vegetated types.

This data product is a global summary of the Level 2 land/surface parameters of interest averaged over a day and reported on a geographic grid, with resolution of 0.5 degree by 0.5 degree. Data collection for this product is complete. The data are for distinct regions associated with associated field campaigns. The MISR instrument consists of nine pushbroom cameras which measure radiance in four spectral bands. Global coverage is achieved in nine days. The cameras are arranged with one camera pointing toward the nadir, four cameras pointing forward, and four cameras pointing aftward. It takes seven minutes for all nine cameras to view the same surface location. The view angles relative to the surface reference ellipsoid, are 0, 26.1, 45.6, 60.0, and 70.5 degrees. The spectral band shapes are nominally Gaussian, centered at 443, 555, 670, and 865 nm.

MI3MLSR_2 is the Multi-angle Imaging SpectroRadiometer (MISR) Level 3 Component Global Land Regional public Product covering a month version 2. It contains a daily statistical summary of average directional hemispherical reflectance (DHR), DHR for photosynthetically active spectral region (DHR-PAR), fractional absorbed photosynthetically active radiation (FPAR), leaf area index (LAI), and normalized difference vegetation index (NDVI) model parameters. Data collection for this product was complete in August 2007.

MISR itself is an instrument designed to view Earth with cameras pointed in 9 different directions. As the instrument flies overhead, each piece of Earth's surface below is successively imaged by all 9 cameras, in each of 4 wavelengths (blue, green, red, and near-infrared). The goal of MISR is to improve our understanding of the affects of sunlight on Earth, as well as distinguish different types of clouds, particles and surfaces. Specifically, MISR monitors the monthly, seasonal, and long-term trends in three areas: 1) amount and type of atmospheric particles (aerosols), including those formed by natural sources and by human activities; 2) amounts, types, and heights of clouds, and 3) distribution of land surface cover, including vegetation canopy structure.