The data products available in this directory are derived from Direct Broadcast Telemetry and are intended for applications which prioritize timeliness of the data over data quality. Signal artifacts and other acquisition issues can cause gaps in the data and some calibration techniques for some products may produce slight variations in reflectance values when compared to standard NASA products.

Directory structure for Deepwater Horizon Oil Spill remote sensing data
MODIS/ most recent JPEG and TIFF files generated from MODIS telemetry by MAGIC DBRS
MODIS/Archive/ JPEG and TIFF files generated during previous days beginning May 5, 2010
MVISR/ most recent JPEG and TIFF files generated from MVISR telemetry by MAGIC DBRS
MVISR/Archive/ JPEG and TIFF files generated during previous days beginning May 6, 2010
Parent Directory/ returns user from current directory to immediate parent directory

Main Sensor directories are refreshed daily. The MODIS L1b data products are generally available within 30 minutes following satellite overpass. The MODIS crefl jpeg products, which attempt to reduce atmospheric scattering, are typically available about 50 minutes after the satellite overpass. MVISR products are typically available within about 20 minutes following satellite overpass.

Terra overflights usually occur around 16:30 UTC +/- 45 minutes (MODIS).
Aqua overflights usually occur around 19:00 UTC +/- 45 minutes (MODIS).

FengYun (FY)1-D overflights usually occur around 21:40 UTC +/- 45 minutes (MVISR).

File naming convention
2-character satellite designation:
- fd = Chinese polar orbiter FY-1D (late afternoon)
- a1 = NASA Aqua (mid-afternoon)
- t1 = NASA Terra (mid-morning)

8-digit date stamp: yyyymmdd, where y = year, m = month, d = day
4-digit time stamp: hhmm, where h = hour, m = minute in Coordinated Universal Time (UTC). To convert to local time in Central Daylight, subtract 5 hours. Measured from the start of the pass acquisition from which the Gulf region scene was extracted.
multi-character data product tag: See sensor specific metadata in accompanying sensor related documents for explanation
location designator: gulf-geo, the entire Gulf of Mexico basin
nominal ground sample distance designator at center of scene:
- 1km = 1 kilometer nominal pixel size
- 500m = 500 meter nominal pixel size
- 250m = 250 meter nominal pixel size

3-character file suffix:
- .tif = TIFF (not GeoTIFF)
- .tfw = ESRI world file
- .jpg = JPEG
- .jgw = ESRI world file

Data products:
3-band visible color composite JPEGs of MODIS (Bands 1, 4, and 3) and MVISR (Bands 1, 9, and 7) data with accompanying world file (jgw or tfw). Each JPEG is stamped with file name in upper left corner. Data can be viewed in any standard browser or image viewer. With world file, each JPEG is geo-referenced for GIS display. The coordinate system is geographic decimal degrees with the WGS 84 datum.

Multi-band TIFFs of MODIS and MVISR data for use in GIS, remote sensing or image processing environment. Use world file to geo-reference. The coordinate system is geographic latitude and longitude with the WGS 84 datum.

Data extents in geographic coordinates (Latitude x Longitude):
Upper Left Corner: 30.47592 x -98.09755 Upper Right Corner: 30.47592 x -80.60245
Centroid: 24.3 x -89.35
Lower Left Corner: 18.12408 x -98.09755 Lower Right Corner: 18.12408 x -80.60245

The accuracy of the MODIS product registration is typically about 250m. For the MVISR data, the satellite position is predicted and the viewing geometry is not well known. Consequently, the error in the data geolocation may be on the order of tens of kilometers.

Detailed information included in sensor specific metadata posted in respective sensor subdirectories.

All data posted on this site reside in the public domain and can be shared.
Please credit The University of Texas at Austin Center for Space Research.

Please address questions or comments to magicdbrs@csr.utexas.edu.