MINX Document 2

Tools for Ordering and Viewing MISR Data

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Jet Propulsion Laboratory, California Institute of Technology,
Raytheon Company and Columbus Technologies and Services, Inc.

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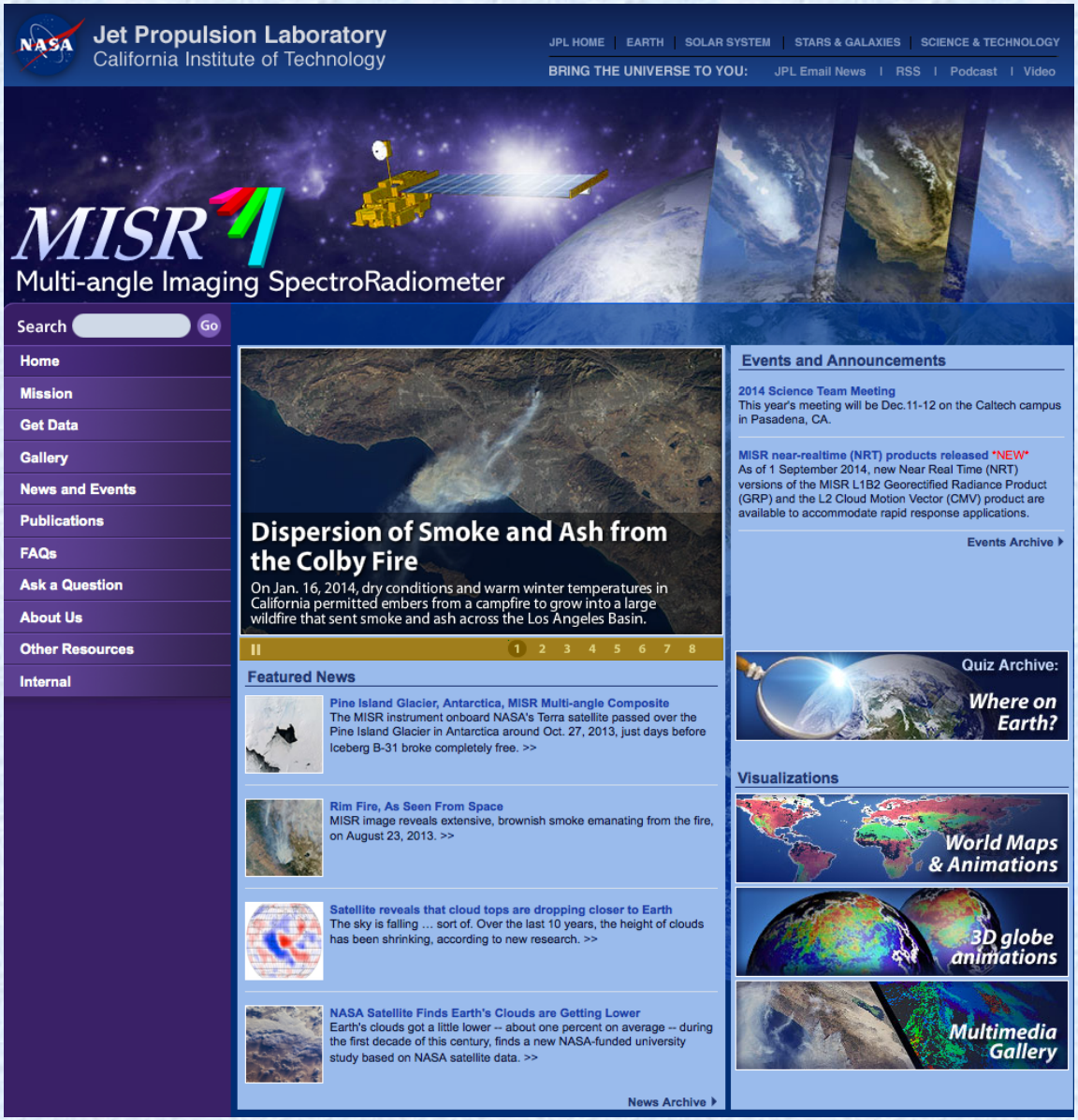
Government sponsorship acknowledged.

Contents

- Useful MISR websites
- Browse tool
- Data pool (ftp)
- Order and customization tool
- Other tools

http://misr.jpl.nasa.gov/



https://eosweb.larc.nasa.gov/project/misr/misr_table

Home » MISR Data and Information

MISR Data and Information

The Multi-angle Imaging SpectroRadiometer (MISR) was successfully launched into sun-synchronous polar orbit aboard Terra, NASA's first Earth Observing System (EOS) spacecraft, on December 18, 1999. MISR measurements are designed to improve our understanding of the Earth's environment and climate. Viewing the sunlit Earth simultaneously at nine widely-spaced angles, MISR provides radiometrically and geometrically calibrated images in four spectral bands at each of the angles. Spatial sampling of 275 and 1100 meters is provided on a global basis. The MISR FAQ and Observation Concept have more details about the MISR instrument. All MISR data products are available in HDF-EOS format, and select products are available in netCDF format.

Level 3 Products | Level 2 Products | Level 1 Products | Near Real Time Products | Ancillary Products | Special Data Products | Documentation

This is the documentation page

Project Links
- New Project Quality
- Current Project Quality
- New Data Product Content (DPS)
- Current Data Product Content (DPS)
- MISR Home Page
- MISR publications
- Join MISR News List

Relevant Links
- Tropical Cyclone Information
- Terra Spacecraft Record
- Feature Articles: Articles featuring MISR data products
- MISR Announcements
- View All MISR Imagery

Introductory Material
- Frequently Asked Questions
- Project Handbook
- Overview
- Observation Concept
- How to obtain MISR data (PPT)
- Workshop Presentations

Guide Documents
- Science Data Product Guide (PDF)

Tools
- Tools for working with the data
- MISR Paths (kml) (get Google Earth)

Detailed Theory
- Algorithm Theoretical Basis Documents

https://eosweb.larc.nasa.gov/tools/

Tool	Description	Data Products	Data Format	Software Language
HDF Data Manipulation Software	Applications to open a Hierarchical Data Format (HDF) file	N/A	N/A	Various
HDF-EOS to GIS Format (HEG) Conversion Tool	Reformat, re-project and perform stitching/mosaicing and subsetting operations on HDF-EOS objects	L1B2, L2	Stacked-block	Various
HDFView and HDF-EOS plug-in	Tool for browsing and editing NCSA HDF4 and HDF5 files	L1B2, L2, L3	Stacked-block, Conventional, HDF-EOS Grid (L3 only)	Various
AirMISR Coregistration Tool	Used to determine the location of the L2AS Land Surface Product footprint within the L1B2 Georectified Radiance Product data area.	L1B2/L2AS	N/A	IDL
MISR Browse Tool	Easy access to ellipsoid projected true-color images for each camera reduced to 2.2 km resolution	Browse	N/A	N/A
MISR Orbit/Date Conversion	Interactive interface for converting dates to MISR Orbit number and Orbit numbers to dates	N/A	N/A	N/A
MISR Lat/Lon to Path/Block Conversion	Interactive interface for obtaining MISR paths based on latitude and longitude	L1, L2	N/A	N/A
MISR Toolkit	Simplified programming interface for Level 1B2, Level 2, and Ancillary products	L1B2, L2, Ancillary	Stacked-block, Conventional	Various
MISR ENVI Tool	Geolocates and visualizes MISR TOA radiance, Terrain and Ellipsoid projected products and the Level 2 Land BRF parameter	L1B2, L2 (BRF only)	Stacked-block	ENVI
ENVI SOM Instructions	Instructions for setting Space Oblique Mercator map information in ENVI version 4.0	L1B2, L2	Conventional	ENVI
misr_view	Visualizes MISR TOA radiances, aerosol, surface, and cloud data products	L1B2, L2	Stacked-block	IDL, IDLVM
hdfscan	Visualize and explore MISR data products	L1B2, L2, L3	Stacked-block, HDF-EOS Grid (L3 only)	Multiple
HDF-to-Binary Converter and Radiance/BRF Calculation	HDFDUMP extracts data from a HDF-EOS grid format file (Level 1B2 and Level 2 files) and writes unformatted binary files	L1B2, L2	Stacked-block	FORTRAN 90
IDL Utilities	Routines for extracting data and metadata from Level 1B2, Level 2, and Level 3 products	L1B2, L2, L3	Stacked-block, HDF-EOS Grid (L3 only)	IDL
misr_time	Calculates the block center times for MISR Level 1B2 files	L1B2	Stacked-block	IDL, IDLVM
Conversion to ASCII	Routines to write parameters from MISR Level 1B2 or AGP data files to a set of ASCII formatted files	L1B2, AGP	Stacked-block	IDL, IDLVM
MISR Data Versioning Index	Index of data versions for the MISR products	N/A	N/A	N/A
MISR Data Processing	Links to production reports, collections and processing status, and the terra spacecraft record.	N/A	N/A	N/A
Unidata software for manipulating or displaying netCDF data	References to software packages for manipulating or displaying netCDF data	L3	netCDF	Various
MISR INteractive eXplorer (MINX)	Interactive application for visualizing Level 1B2 data and for retrieving plume heights and wind velocities from wildfire smoke, volcanic and dust plumes	L1B2, GP_GMP and AGP required; TC_CLASSIFIERS and AS_AEROSOL recommended	Stacked-block	IDL, C

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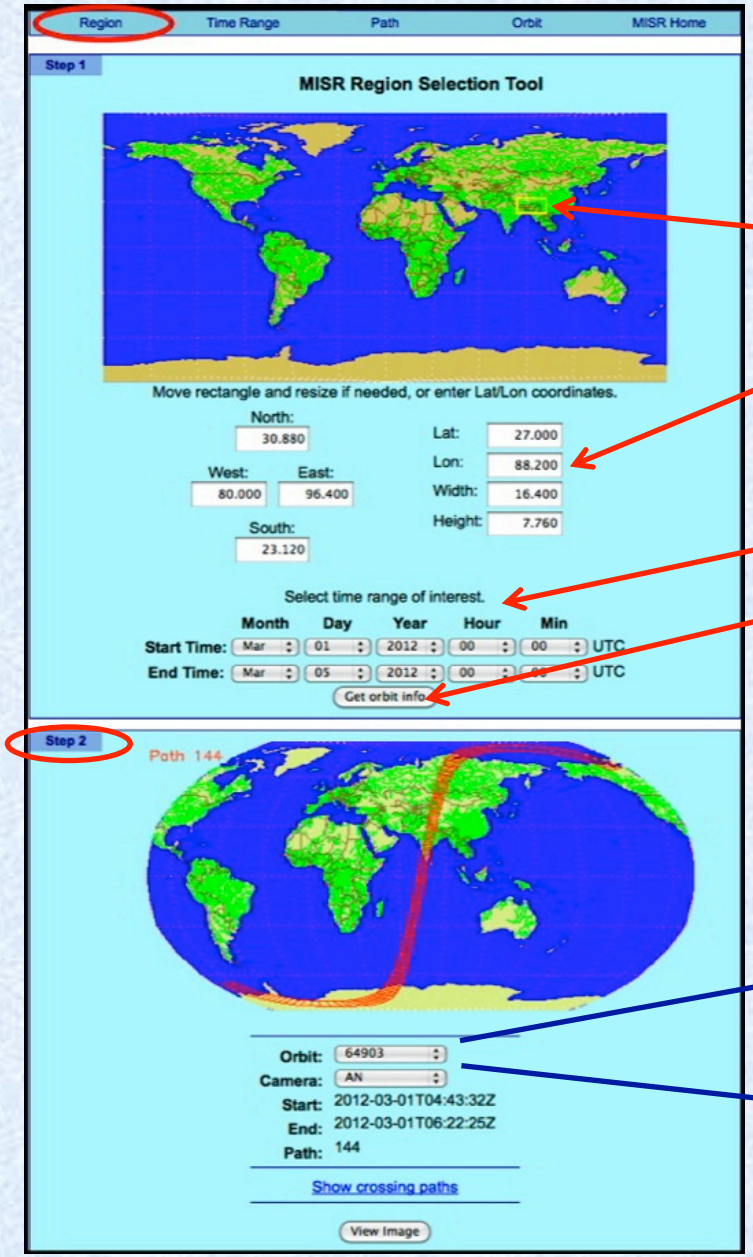
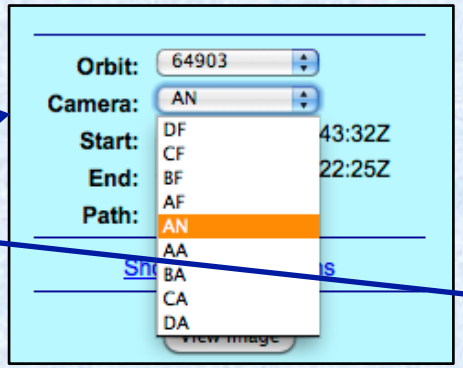
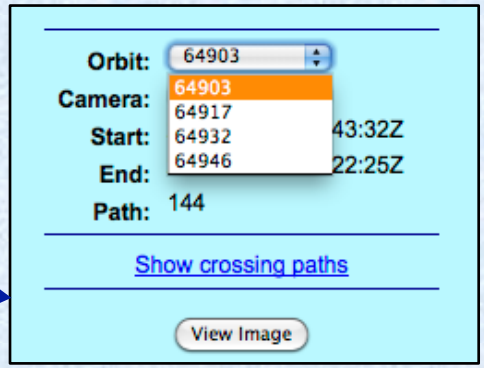
Browse Tool – 1

https://eosweb.larc.nasa.gov/MISRBR/



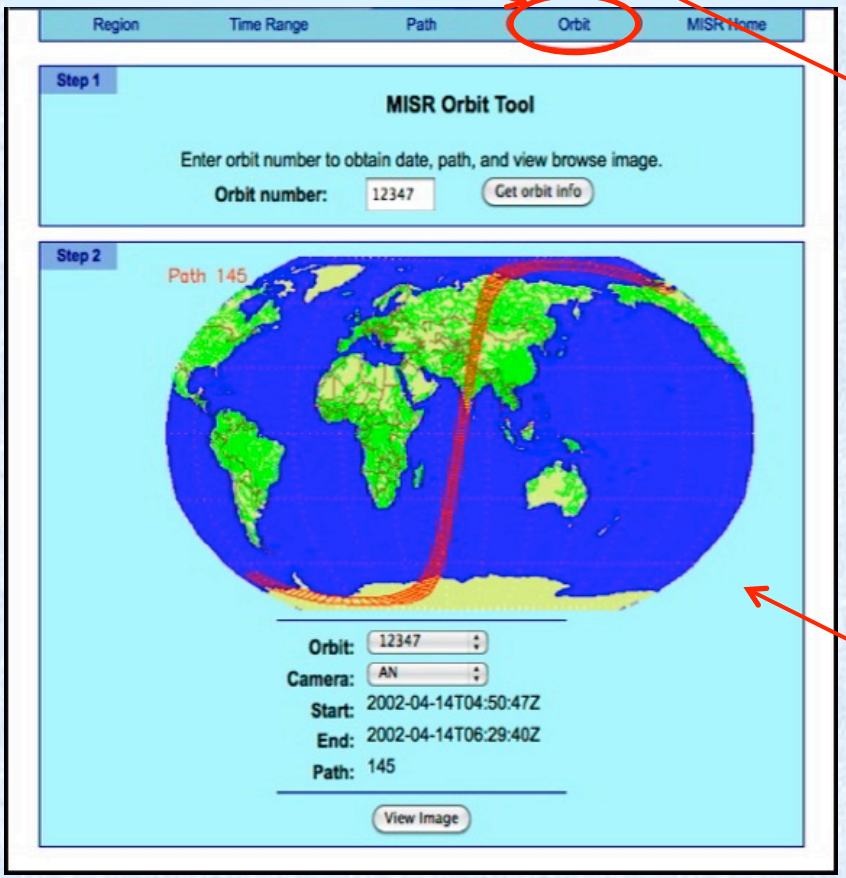
- Use mouse to fit yellow rectangle over area of interest
- Or specify rectangle Lat/Lon coordinates in text boxes either by edge coordinates or by center coordinates and size
- Enter starting and ending date and time
- Clicking "Get Orbit Info" opens Step 2
- Then select a camera and an orbit from the dropdown list boxes
- Finally click "View Image" to continue

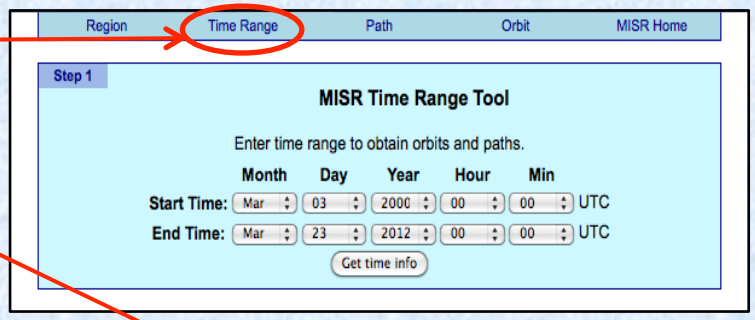


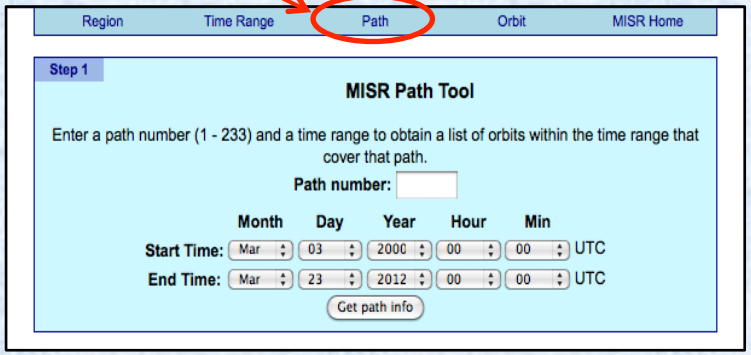


Browse Tool – 2

Three additional options for finding orbits: Orbit number, Path number, Time Range





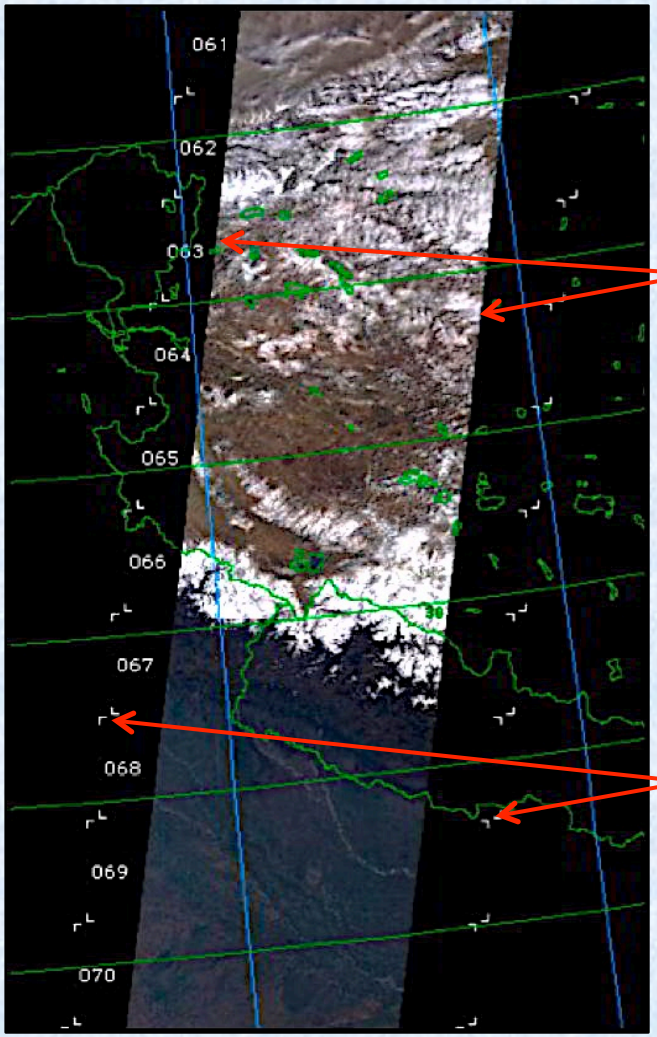


All four options produce the same map display and Orbit and Camera dropdown lists in Step 2

Browse Tool - 3

Operation menu

- Resolution of **enlarged** image is 2.2 km / pixel
- Resolution of **shrunken** image is 4.4 km / pixel



Limits of data swath ~75% of block width

Block corner markers

Browse image at enlarged resolution (2.2 km/pixel)

Block 1

Actual Extent of browse image

Entire swath is scrollable

Block 180

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Data Pool – 1

ftp://l5eil01.larc.nasa.gov/MISR/

Index of ftp://l4ftl01.larc.nasa.gov/MISR/

Up to higher level directory

Name	Size	Last Modified
MB2LME.002		10/28/10 12:00:00 AM
MB2LMT.002		10/28/10 12:00:00 AM
MI1AC.001		10/28/10 12:00:00 AM
MI1AC.002		10/28/10 12:00:00 AM
MI1AENG1.001		10/28/10 12:00:00 AM
MI1AENG1.002		10/28/10 12:00:00 AM
MI1AMOT.001		10/28/10 12:00:00 AM
MI1AMOT.003		10/28/10 12:00:00 AM
MI1ANAV.001		10/28/10 12:00:00 AM
MI1ANAV.002		10/28/10 12:00:00 AM
MI1AOBC.001		10/28/10 12:00:00 AM
MI1AOBC.002		10/28/10 12:00:00 AM
MI1B1.001		10/28/10 12:00:00 AM
MI1B1.002		10/28/10 12:00:00 AM
MI1B2E.001		10/28/10 12:00:00 AM
MI1B2E.002		10/28/10 12:00:00 AM
MI1B2E.003		10/28/10 12:00:00 AM
MI1B2T.001		10/28/10 12:00:00 AM
MI1B2T.002		10/28/10 12:00:00 AM
MI1B2T.003		10/28/10 12:00:00 AM
MI3DAEF.002		10/28/10 12:00:00 AM
MI3DAENF.002		10/28/10 12:00:00 AM
MI3DAER.002		10/28/10 12:00:00 AM
MI3DALF.002		10/28/10 12:00:00 AM
MI3DALNF.002		10/28/10 12:00:00 AM
MI3DCDF.002		10/28/10 12:00:00 AM
MI3DCDNF.002		10/28/10 12:00:00 AM
MI3DCLDN.002		10/28/10 12:00:00 AM
MI3DLSF.002		10/28/10 12:00:00 AM
MI3DLSNF.002		10/28/10 12:00:00 AM
MI3DLSR.002		10/28/10 12:00:00 AM
MI3DRDF.002		10/28/10 12:00:00 AM

Click ESDT name and version number

- ftp site for immediate download of entire MISR product files (no subsets available)
- If your internet connection is not fast, use the MISR order tool instead and subset files to reduce volume
- Earth Science Data Type names (ESDT) are needed to identify products in data pool
- Click the desired ESDT name with the latest version number

MISR Product Name	ESDT Name
GRP_ELLIPSOID_GM	MI1B2E
GRP_ELLIPSOID_LM	MB2LME
GRP_TERRAIN_GM	MI1B2T
GRP_TERRAIN_LM	MB2LMT
GRP_RCCM_GM	MIRCCM
GRP_RCCM_LM	MIRCCMF
GP_GMP	MIB2GEOP
AS_AEROSOL	MIL2ASAE
AS_AEROSOL_FIRSTLOOK	MIL2ASAF
AS_LAND	MIL2ASLS
AS_LAND_FIRSTLOOK	MIL2ASLF
TC_STEREO	MIL2TCST
TC_STEREO_FIRSTLOOK	MIL2TCSF
TC_CLASSIFIERS	MIL2TCCL
TC_CLASSIFIERS_FIRSTLOOK	MIL2TCCF
TC_ALBEDO	MIL2TCAL
TC_ALBEDO_FIRSTLOOK	MIL2TCAF
AGP	MIANCAGP
GRP_ELLIPSOID_BR	MISBR

Data Pool - 2

Orbit data are listed by day of the year

Index of ftp://l4ftl01.larc.nasa.gov/MISR/MI1B2T.003/

Up to higher level directory

Name	Size	Last Modified	
2000.02.24		4/14/11	12:00:00 AM
2000.02.25		6/20/09	12:00:00 AM
2000.02.26		4/14/11	12:00:00 AM
2000.02.27		6/20/09	12:00:00 AM
2000.02.28		12/30/09	12:00:00 AM
2000.02.29		6/20/09	12:00:00 AM
2000.03.01		4/14/11	12:00:00 AM
2000.03.02		12/29/09	12:00:00 AM
2000.03.03		6/20/09	12:00:00 AM
2000.03.04		12/30/09	12:00:00 AM
2000.03.05		6/20/09	12:00:00 AM
2000.03.06		12/30/09	12:00:00 AM
2000.03.07		12/30/09	12:00:00 AM
2000.03.08		12/30/09	12:00:00 AM
2000.03.09		12/30/09	12:00:00 AM
2000.03.10		6/20/09	12:00:00 AM
2000.03.11		12/29/09	12:00:00 AM
2000.03.12		12/30/09	12:00:00 AM
2000.03.13		12/30/09	12:00:00 AM
2000.03.14		6/20/09	12:00:00 AM
2000.03.15		12/30/09	12:00:00 AM
2000.03.16		12/30/09	12:00:00 AM
2000.03.17		6/20/09	12:00:00 AM
2000.03.18		12/29/09	12:00:00 AM
2000.03.19		6/19/09	12:00:00 AM
2000.03.20		4/14/11	12:00:00 AM
2000.03.21		6/19/09	12:00:00 AM
2000.03.22		12/30/09	12:00:00 AM
2000.03.23		12/30/09	12:00:00 AM
2000.03.24		12/30/09	12:00:00 AM
2000.03.25		12/30/09	12:00:00 AM
2000.03.26		12/30/09	12:00:00 AM
2000.03.27		6/19/09	12:00:00 AM
2000.03.28		12/30/09	12:00:00 AM

Click selected date

Ellipsoid browse imagery (.jpg) is included at the top of the list for all products

Clicking on browse file name displays orbit image

Index of ftp://l4ftl01.larc.nasa.gov/MISR/MI1B2T.003/2000.03.20/

Up to higher level directory

Name	Size	Last Modified	
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_AA_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_AF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_AN_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_BA_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_BF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_CA_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_CF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_DA_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P003_O001358_DF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P019_O001359_AA_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P019_O001359_AF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P019_O001359_AN_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P019_O001359_BA_F03_0024.jpg		6/19/09	12:00:00 AM

Click selected files to download

All 9 camera radiance files are needed (.xml files are not needed)

Note that the An camera file is much larger than the others

MISR_AM1_GRP_ELLIPSOID_BR_GM_P220_O001357_CF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P220_O001357_DA_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_ELLIPSOID_BR_GM_P220_O001357_DF_F03_0024.jpg		6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_AA_F03_0024.hdf	111580 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_AA_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_AF_F03_0024.hdf	111109 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_AF_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_AN_F03_0024.hdf	331402 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_AN_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_BA_F03_0024.hdf	112514 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_BA_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_BF_F03_0024.hdf	111959 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_BF_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_CA_F03_0024.hdf	112385 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_CA_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_CF_F03_0024.hdf	113117 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_CF_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_DA_F03_0024.hdf	112341 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_DA_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_DF_F03_0024.hdf	113072 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P003_O001358_DF_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P019_O001359_AA_F03_0024.hdf	93363 KB	6/19/09	12:00:00 AM
MISR_AM1_GRP_TERRAIN_GM_P019_O001359_AA_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
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MISR_AM1_GRP_TERRAIN_GM_P019_O001359_AF_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM
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MISR_AM1_GRP_TERRAIN_GM_P019_O001359_AN_F03_0024.hdf.xml	5 KB	6/19/09	12:00:00 AM

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MISR Order and Customization Tool – 1

http://l0dup05.larc.nasa.gov/MISR/cgi-bin/MISR/main.cgi

As of March 31, 2015, in order to access the MISR Order tool, you will first need to register on the Earthdata URS website. Add the MISR Order Tool application, log out and go to the above website a second time to login and have access to the Order Tool.

The ASDC was directed to move the login function to the Earthdata URS (EOSDIS User Registration System) https://urs.earthdata.nasa.gov/. Starting March 31st, you will need to register there if you don't have an account already.

Login with URS

Introduction

The MISR Order and Customization tool enables a more sophisticated approach to selecting and ordering MISR data by date, time and geolocation.

We highly encourage that you send us your feedback using the URL at the bottom of the page; every bit of feedback will allow us to address issues and add enhancements in future releases.

This web app is collaborative effort of the MISR and ASDC Data Management Teams.

Minimum Requirements

- JavaScript enabled
- CSS enabled
- HTML cookies enabled
- JAVA enabled

Supported Web Browsers

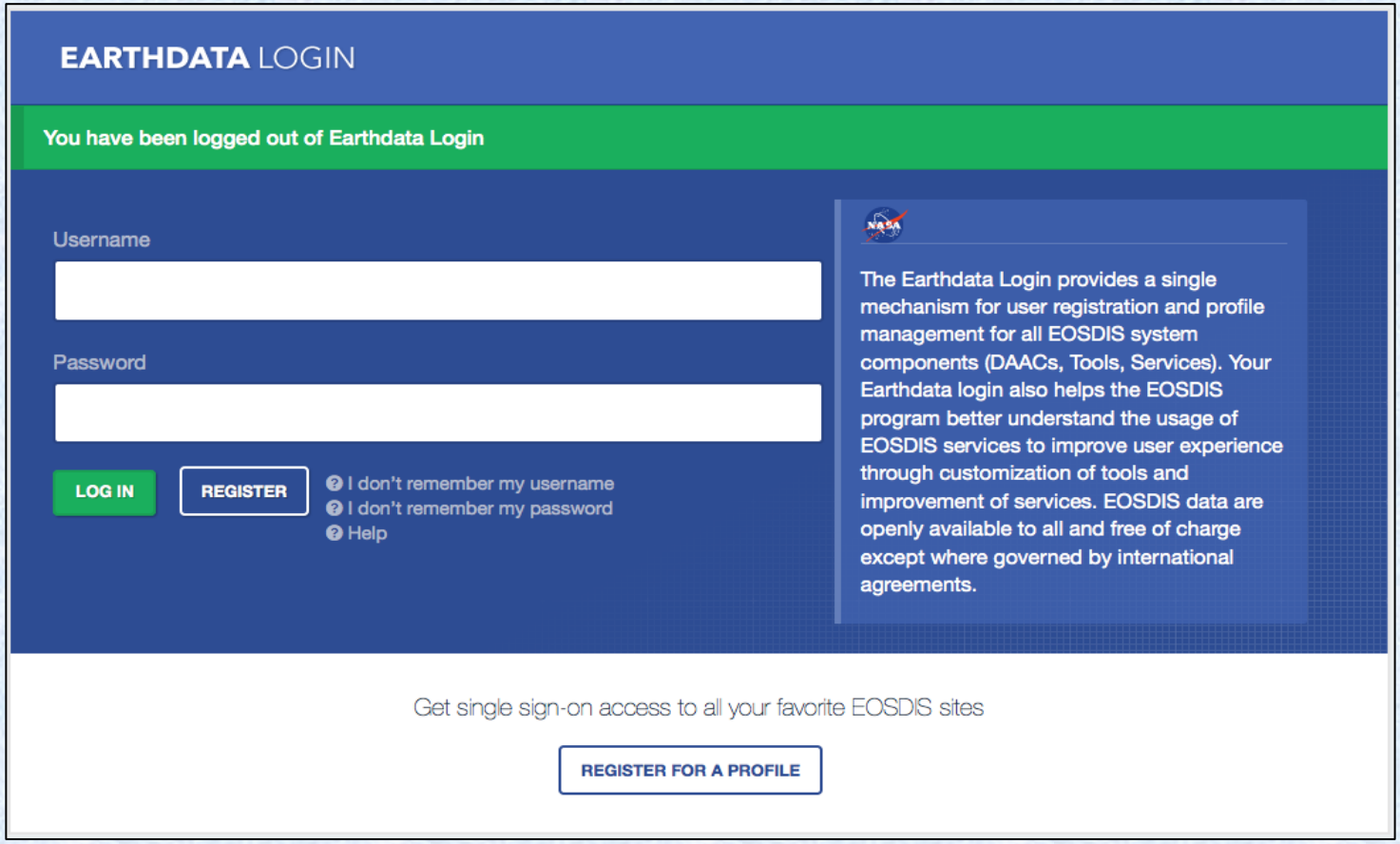
This web application was developed and optimized for modern HTML4/JavaScript/CSS-enabled web browsers. The following browsers are known to work with this web application:

- Internet Explorer 8+ ; some issues with IE 11 have been reported.
- Safari 3+
- Chrome 9+
- Firefox 3.6+
- Opera 9.6+

Internet Explorer 8+ is supported. IE versions less than 8 do not fully support CSS and JavaScript standards. Using such versions may lead to quirky browser behavior. Unfortunately, we cannot provide support for these browsers.

Other HTML4 browsers with JavaScript and CSS may work, but cannot be guaranteed at this time. Please check this web site for future updates on improvements and revisions.

MISR Order and Customization Tool – 2



- **MISR data are freely available**
- **Due to MISR file sizes, download bandwidth is the main concern**
- **Unlike the Data Pool the Order Tool supports extracting <u>subsets</u> of MISR products which can result in much smaller download volumes**

MISR Order and Customization Tool – 3

When the Camera button is checked, the multiple-selection listbox shown above is presented

If you have selected any products that have a separate data file for each of MISR's 9 cameras (e.g. Level 1B2 Ellipsoid or Terrain data), be sure to highlight all 9 cameras

MISR Order and Customization Tool – 4

Step 2a: ***Select at least one of the following Search Criteria***

Temporal Search

Search type: Date/Time Day of Year/Time Orbit Non-Consecutive Date

Valid for dates greater than February 23, 2000.

Start time: Mar 27 2012 00:00:00

End time: Mar 27 2012 23:59:59

Spatial Search

Temporal Search

Search type: Date/Time Day of Year/Time Orbit Non-Consecutive Date

Valid for dates greater than 2000 54.

Start: **Year:** 2012 **Day:** 86 **Hour:** 00 **Min:** 00 **Sec:** 00

End: **Year:** 2012 **Day:** 86 **Hour:** 23 **Min:** 59 **Sec:** 59

Spatial Search

Temporal Search

Search type: Date/Time Day of Year/Time Orbit Non-Consecutive Date

Valid for orbits greater than 954.

Orbits: *

Tip: Use commas to separate orbits, and dashes to indicate ranges of orbits. *More format help*

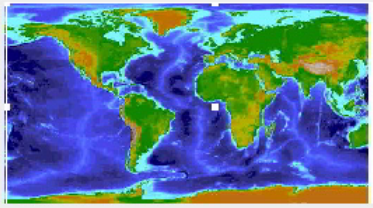
Orbit/Date Conversion Tool

Spatial Search

Temporal search options

Spatial Search

Search type: Map Geographic Bounds Path EOS Validation Sites



90.0 N

180.0 W 180.0 E

90.0 S

Zoom In Zoom Out

Spatial Search

Search type: Map Geographic Bounds Path EOS Validation Sites

North 90.0

West -180.0 180.0 **East**

-90.0 **South**

Spatial Search

Search type: Map Geographic Bounds Path EOS Validation Sites

Paths:

Tip: Use commas to separate paths, and dashes to indicate ranges of paths. *More format help*

Lat/Lon to Path/Block Conversion Tool

Spatial search options

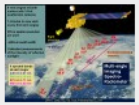
MISR Order and Customization Tool – 5

Step 2b: ***Select Optional Search Criteria***

☑ **Camera**

AA
AF
AN
BA
BF
CA
CF
DA
DF

Arrangement of Cameras



Search | Reset

Click and drag to select all cameras if level 1B2 files are included in order

Select all of these and proceed

Step 3: ***Select Data Products to Display***

Customizable Data Products:

Data Product	File Count
☑ MISR Level-2 Aerosol Parameters - MIL2ASAE	1
☑ MISR Level-1B2 Geometric Parameters - MIB2GEOP	1
☑ MISR Level-1B2 Global Mode Terrain-projected Radiance - MI1B2T	9

Display Selected Customizable Data Products

Found 11 files. This page (1) displays 1 to 11

Step 4: ***Select Files to Order***

Check desired files individually or click here to select all files

(Sort results by column heading)

Filename	Start Date	Stop Date	Size (MB)	Orbit	Path	Version ID	Camera	ESDT
☑ MISR_AM1_GP_GMP_P113_O012345_F03_0013.hdf	2002-04-14 01:49:00	2002-04-14 02:46:00	10.62	12345	113	13	N/A	MIB2GEOP
☑ MISR_AM1_AS_AEROSOL_P113_O012345_F12_0022.hdf	2002-04-14 01:49:00	2002-04-14 02:46:00	31.06	12345	113	22	N/A	MIL2ASAE
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_DF_F03_0024.hdf	2002-04-14 01:49:00	2002-04-14 02:38:00	116.08	12345	113	24	DF	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_CF_F03_0024.hdf	2002-04-14 01:50:00	2002-04-14 02:40:00	118.10	12345	113	24	CF	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_BF_F03_0024.hdf	2002-04-14 01:51:00	2002-04-14 02:40:00	118.16	12345	113	24	BF	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_AF_F03_0024.hdf	2002-04-14 01:52:00	2002-04-14 02:41:00	117.29	12345	113	24	AF	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_AN_F03_0024.hdf	2002-04-14 01:53:00	2002-04-14 02:42:00	352.88	12345	113	24	AN	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_AA_F03_0024.hdf	2002-04-14 01:53:00	2002-04-14 02:43:00	119.23	12345	113	24	AA	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_BA_F03_0024.hdf	2002-04-14 01:54:00	2002-04-14 02:44:00	119.11	12345	113	24	BA	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_CA_F03_0024.hdf	2002-04-14 01:55:00	2002-04-14 02:44:00	118.62	12345	113	24	CA	MI1B2T
☑ MISR_AM1_GRP_TERRAIN_GM_P113_O012345_DA_F03_0024.hdf	2002-04-14 01:56:00	2002-04-14 02:45:00	117.06	12345	113	24	DA	MI1B2T

Select All Files | Clear All Selections

("Select All Files" and "Clear All Selections" applies across the entire search results.)

Search Results Page: 1

Save this search as: | Save Search

Step 5: ***Add Files in Cart***

FAQ: What is customization?

Subset/Customize Selected Files OR Add Files to Cart

Order files with a subset of blocks in an additional step

or

Order files containing entire orbit

MISR Order and Customization Tool – 6

Step 6. ***Select Files to Customize***

Files

MISR_AM1_GP_GMP_P113_O012345_F03_0013.hdf
MISR_AM1_AS_AEROSOL_P113_O012345_F12_0022.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_DF_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_BF_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_DA_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_BA_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_AN_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_AF_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_CA_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_AA_F03_0024.hdf
MISR_AM1_GRP_TERRAIN_GM_P113_O012345_CF_F03_0024.hdf

Click and drag to select all files

Select Customization Options

Step 7a. ***Subset Files (decreases file size)***

Only one data product at a time can be subset by parameter.
To subset additional data products return to the search results and select the next data product.

Spatial Subset

Temporal Subset

Step 7b. ***Add fields to output (increases file size)***

Add Latitude Longitude Layers to output

Unpack and unscale all applicable fields

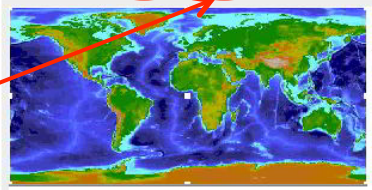
Some parameters are packed and scaled to reduce file size. This option expands packed data values and converts (unscales) them to floating point values.

"Block" option is simplest

This image shows result of selecting "Map" option

Spatial Subset

Subset type: Block Map Geographic Bounds



90.0 N
180.0 W 180.0 E
90.0 S

Zoom In Zoom Out

Temporal Subset

Subset type: Time

File information.

Valid for dates greater than February 23, 2000.

Start time: Apr 14 2002 Hour: 01 Min: 56 Sec: 00

End time: Apr 14 2002 Hour: 02 Min: 46 Sec: 00

Step 8. ***Select Output Format***

Output Formats

HDF-EOS stacked-block grid (original)
HDF-EOS conventional grid
MODIS-like file names

FAQ: What is the Space Oblique Mercator (SOM) projection?
FAQ: What is stacked-block format? What is conventional format?
FAQ: Latitude/longitude implications for reformatted data.

Save customization as:

Add Customized Files to Cart Reset

Always choose stacked-block format for files used by MINX

On to next page

MISR Order and Customization Tool – 7

| New Search | Current Search | View Cart/Submit Order |

The customization was placed in your cart.
The tool returns to this page for further customizations, if desired.

Step 1: ***Review Your Orders***

Delete	Order Details	Customization Details
☐	View	View ☐ Remove Customization

Update Cart

Step 2: ***Select Your Delivery Method***

Delivery method: FTP Pull

Order Label (optional):

Submit Order

Once you have submitted your order, you will receive an email with further information.

ATMOSPHERIC SCIENCES DATA CENTER

Order Submitted

MISR

Your order number(s):

614459714

An email notification will be sent to David.L.Nelson@jpl.nasa.gov

We highly recommend that you review the Quality Summaries associated with the ordered data products.

To ensure we are meeting your data ordering needs, please provide feedback on the new MISR Order and Customization Tool larc-asdc-uds@lists.nasa.gov

| New Search |

MISR Information |MISR Tools | ASDC Home Page | Questions/Feedback

You will quickly receive an email acknowledging submission and later, when files are ready to be picked up, an email with instructions for pulling the files over will be sent.

When your order is ready to pick up, follow the instructions in the email.

Contents

- Useful MISR websites
- Browse tool
- Data pool (ftp)
- Order and customization tool
- Other tools

MISRView - 1

- Maps path/orbit to time and date
- Assembles MISR blocks
- Reports Lat/Lon using the AGP
- Displays true color MISR imagery
- Can reproject MISR imagery
- Requires IDL or IDL VM
- Perspective tool
- Band slider tool
- Scroll tool
- Vector overlay tool
- Reprojection tool
- Color / Contrast tools
- Includes documentation

Download MISRView from the Open Channel Foundation website:

http://www.openchannelsoftware.com/projects/MISR_VIEW_5.3

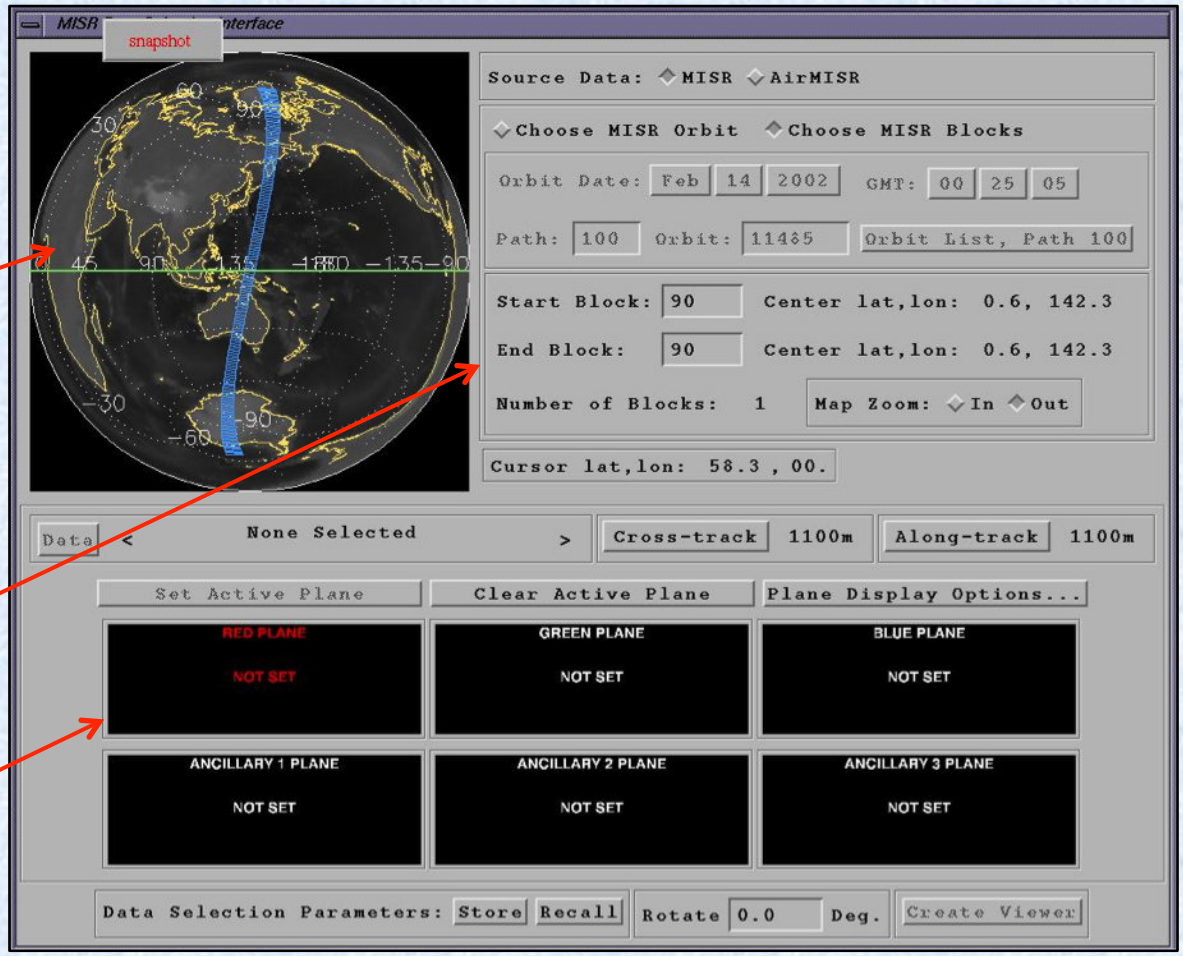
MISRView - 2

Main dialog box

Globe displays currently selected orbit and block range

Controls for selecting orbit, block range, etc.

Set different radiance data channels or products in different color planes

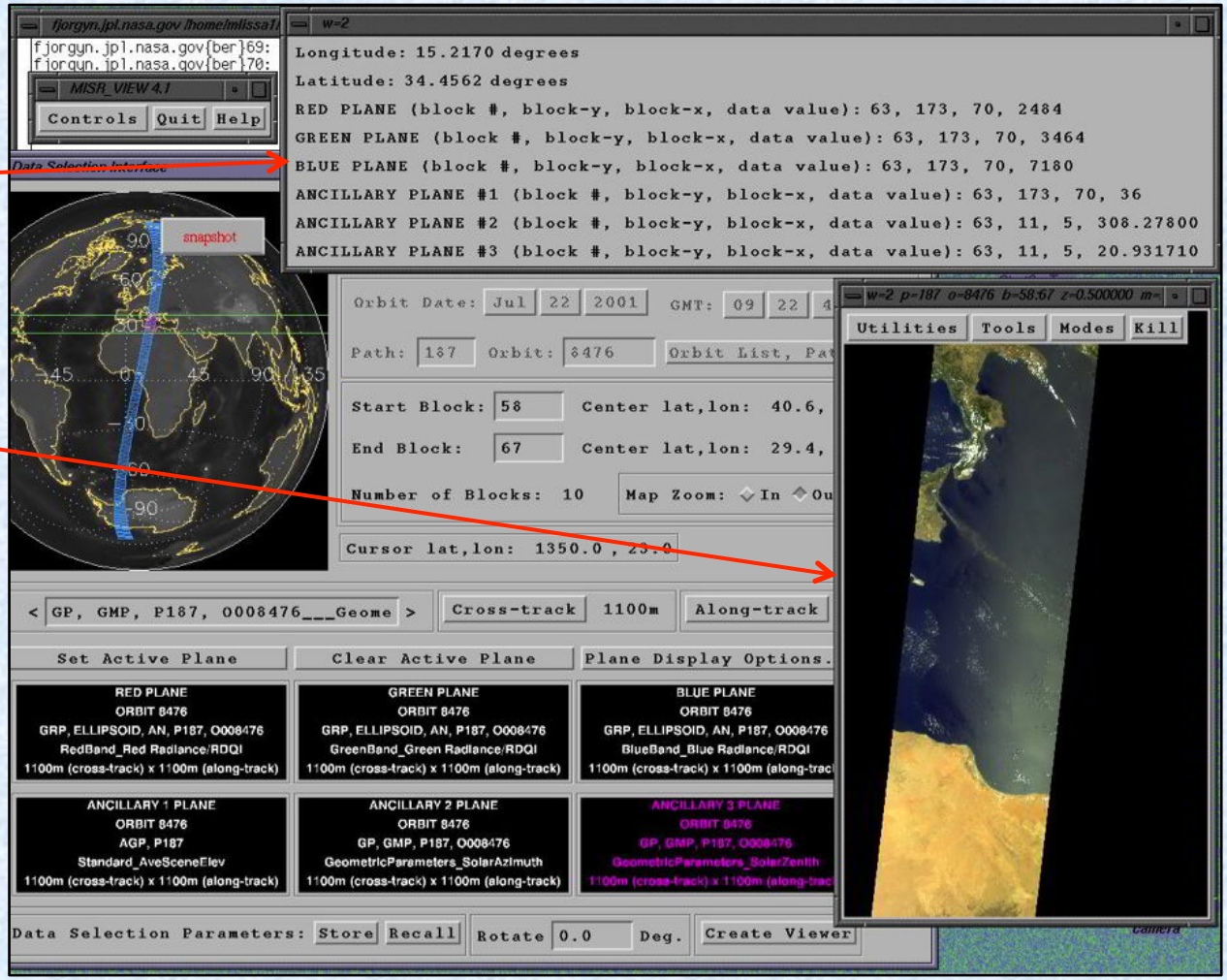


MISRView - 3

Data values at clicked point can be displayed

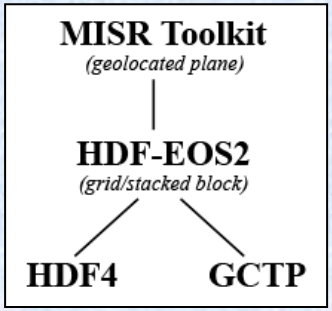
Image resolution and color can be manipulated

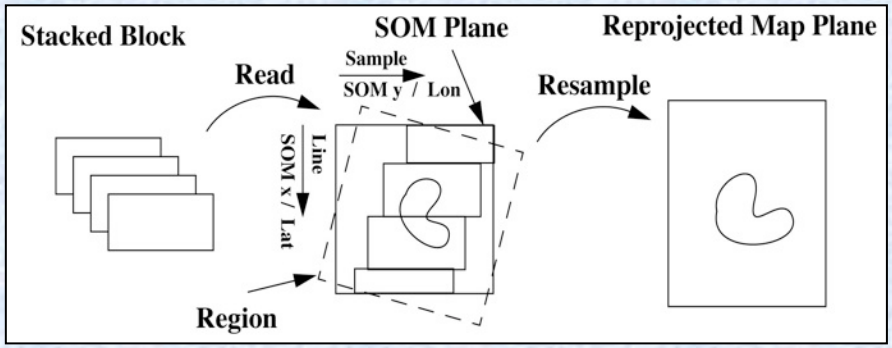
Data from different MISR channels and and/or data products can be assigned to different color planes



MISR Toolkit API - 1

- Library of 'C' functions programmers can link to their Fortran, 'C' or IDL code
- Provides simplified MISR data access and geolocation functionality utilizing metadata available in all MISR products instead of resorting to AGP file lookup
- Reads MISR Level 1B2 and Level 2 products as well as products not in stacked block format
- Unpacks and unscales MISR data and assembles blocks to a geolocated SOM-projected plane
- No other tools available that make use of MISR geolocation metadata AND handle "stacked block" format for all MISR products
- Functionality includes:
  - Perform coordinate conversions between lon, SOM x/y, block/line/sample
  - Compare MISR data with other data sets
  - Querying a MISR product file to retrieve range, file version, file type, grid list, field list (including unpacked and unscaled fields), dimension list, metadata, etc.





Download the MISR Toolkit from the Open Channel Foundation website: http://www.openchannelsoftware.com/projects/MISR_Toolkit

MISR Toolkit API - 2

Partial list of available functions

Region Selection

- MtkSetRegionByUlcLrc()
- MtkSetRegionByLatLonExtent()
- MtkSetRegionByPathBlockRange()

Reading a Geolocated SOM Plane

- MtkReadData()
- MtkReadRaw()
- MtkReadBlockRange()

SOM Plane Coordinate Query

- MtkLSToLatLon()
- MtkLatLonToLS()
- MtkLSToSomXY()
- MtkSomXYToLS()

Orbit/Path Query

- MtkLatLonToPathList()
- MtkRegionToPathList()
- MtkTimeToOrbitPath()
- MtkTimeRangeToOrbitList()
- MtkPathTimeRangeToOrbitList()
- MtkOrbitToPath()

File/Grid/Field Query

- MtkMakeFilename()
- MtkFindFileList()
- MtkFileToGridList()
- MtkFileGridToFieldList()

Coordinate Conversion

- MtkPathToProjParam()
- MtkLatLonToBls()
- MtkBlsToLatLon()
- MtkSomXYToBls()
- MtkBlsToSomXY()
- MtkLatLonToSomXY()
- MtkSomXYToLatLon()

Unit Conversion

- MtkDmsToDd()
- MtkDdToDms()
- MtkDdToRad()
- MtkRadToDd()
- MtkDmsToRad()
- MtkRadToDms()