

Remote Sensing: Fundamentals and Applications

HYDAP Conference Part 4



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Access

- The following table presents a list of available satellite sensors, any associated cost, how to search for the data, and whether sample data are available
- Listed are only the most commonly used data for land surface studies

Satellite	Sensors	Data Center	Policy	Search Tool	Sample Data?
ADEOS-1	AVNIR-1	RESTEC	cost	Search Service	sample images
ALOS	AVNIR-2	RESTEC	cost	AUIG, CROSS	yes
CBERS-1	CCD, IRMSS	CBERS Page	some free	CDSR	open archive
CBERS-2	CCD, IRMSS	CBERS Page	most free	CDSR	open archive
CBERS-2B	CCD	CBERS Page	most free	CDSR	open archive
EO-1	ALI, Hyperion	EROS	cost	GloVis	yes
IRS-1A	LISS-I, LISS-II	NRSC	cost	Int Resellers	no
IRS-1B	LISS-I, LISS-II	NRSC	cost	Int Resellers	no
IRS-1C	LISS-III A	NRSC	cost	Int Resellers	yes
IRS-1D	LISS-III A	NRSC	cost	Int Resellers	yes
IRS-P2	LISS-III A	NRSC	cost	Int Resellers	yes
IRS-P6	LISS-IIIB, AWiFS	NRSC	cost	Int Resellers	yes
JERS-1	OPS	RESTEC	cost	Search Service	sample images
Landsat 1	MSS	EROS, other	free	EE GloVis, ESDI	open archive
Landsat 2	MSS	EROS, other	free	EE GloVis, ESDI	open archive
Landsat 3	MSS-B	EROS, other	free	EE GloVis, ESDI	open archive
Landsat 4	MSS, TM	EROS, other	free	EE GloVis, ESDI	open archive
Landsat 5	MSS, TM	EROS, other	free	EE GloVis, ESDI	open archive
Landsat 7	ETM+	EROS, other	free	EE GloVis, ESDI	open archive
SAC-C	HRTC	CONAE	free	SAC-C Catalog	open archive
SPOT-1	HRV	SPOT Image	cost	SIRIUS	sample images
SPOT-2	HRV	SPOT Image	cost	SIRIUS	sample images
SPOT-3	HRV	SPOT Image	cost	SIRIUS	sample images
SPOT-4	HRVIR	SPOT Image	cost	SIRIUS	sample images
SPOT-5	HRG	SPOT Image	cost	SIRIUS	yes
Terra	ASTER	LPDAAC	cost	GloVis, GDS, WIST	yes

GEOSS

- The Global Earth Observing System of Systems (GEOSS) allows searching for many of these resources through its GEO Portal
- <http://www.geoportal.org/>

HOME

ABOUT

HELP

SEARCH GEOS

land

go

MAP VIEWER

GEOPORTAL MAP VIEWER

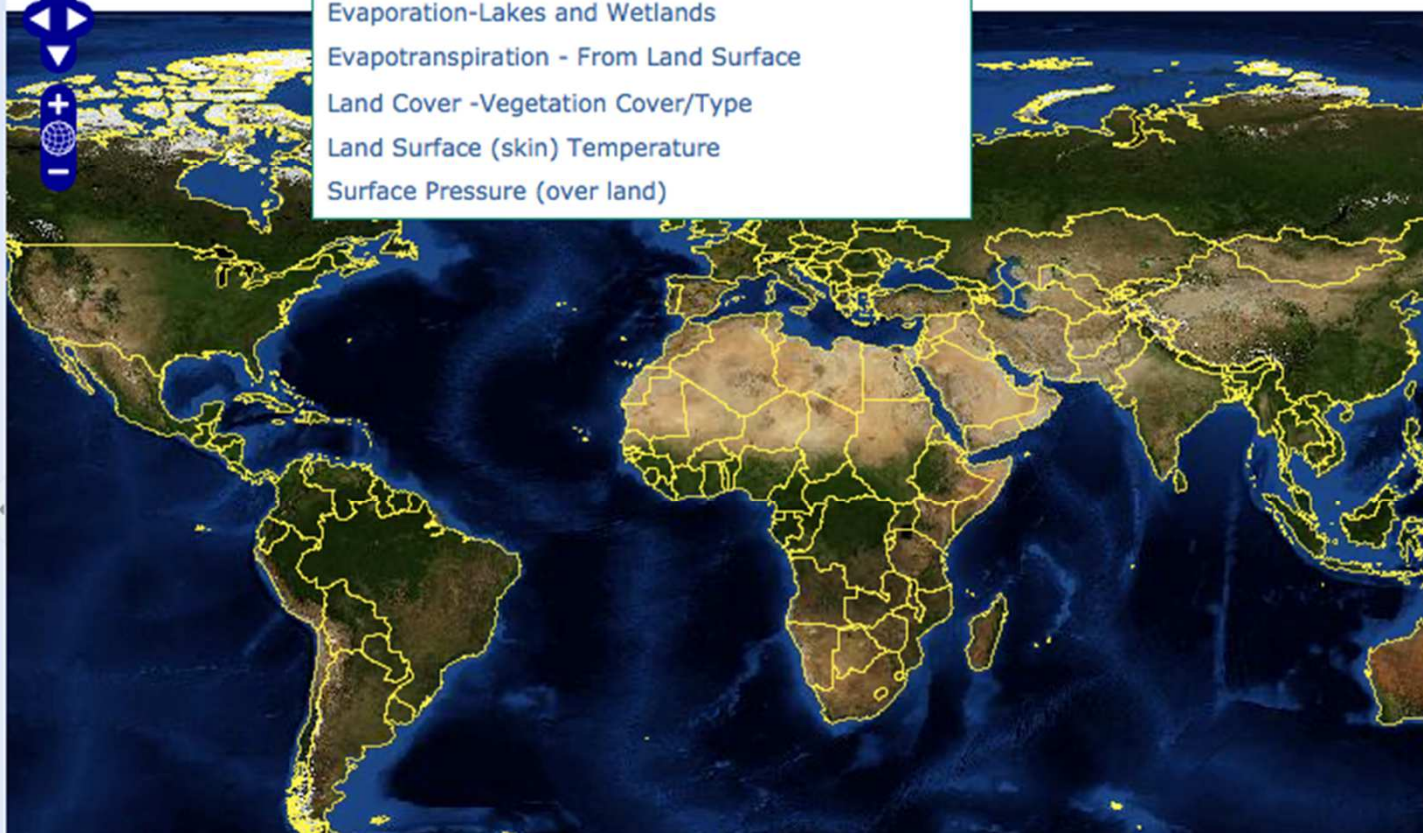
Layer tree

-
- Base Layer
- Overlays
 - ☒ Borders



- Land Cover
- Land Cover Type
- Disturbance(including fire,drought,and land clearing)
- Land Use, Land Cover
- Land Use/Land Cover
- Evaporation-Lakes and Wetlands
- Evapotranspiration - From Land Surface
- Land Cover -Vegetation Cover/Type
- Land Surface (skin) Temperature
- Surface Pressure (over land)

WGS84 (lat/lon)



GEONETCast

- A global network of satellite-based data dissemination systems utilizing geostationary satellite broadcasts and inexpensive ground stations
- Primarily aimed at less developed or remote locales that lack internet
- Available data includes:
 - Meteosat image data, NOAA and EUMETSAT meteorological products, Ocean colour and sea surface temperature products, SPOT vegetation products from VITO

Near-Real Time Data

- Driven by the needs of weather prediction, disaster response and planning, NASA makes preliminary versions of some data available in less than 2.5 hrs from the time of observation.
- Data can be visualized or accessed directly via ftp and web services
- When visualized, can request JPEG, KMZ file for GoogleEarth or GeoTIFF file



Near Real-Time Data ^[1]

Land Atmosphere Near Real-Time Capability for EOS

EOSDIS provides access to near real-time products from the MODIS, OMI, AIRS, and MLS instruments in less than 2.5 hours from observation from the Land and Atmosphere Near real-time Capability for EOS (LANCE). The system supports application users who are interested in monitoring and analyzing a wide variety of natural and man-made phenomena. Data are freely available after self-registration ^[2].



[Download Data](#)



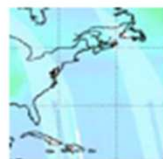
[Visualize Data](#)

Feedback



AIRS & MLS ^[5]

L1 and L2 AIRS products are available from the Aqua spacecraft and, in cooperation with the Science Team, L2 ozone and atmospheric MLS products are available from the Aura spacecraft.



OMI ^[7]

L2 and L3 products are available from the OMI instrument on the Aura spacecraft including ozone columns, aerosols, clouds, surface UV irradiance and Sulfur Dioxide.



^[6]

MODIS Land & Atmosphere ^[6]

A range of Level 1 (L1), L2, and L3 atmosphere and land products are available from the Aqua and Terra spacecraft including aerosols, fire, snow/sea ice, and land surface reflectance and temperature.



^[8]

Rapid Response ^[8]

A wide range of L2 imagery are available from the MODIS, AIRS and OMI instruments through a WMS. All products are also available through a Google-based State-of-the-Earth display.

Europe_3_01 Subsets

[Return to Subsets](#)

Date: 11/13/2012

[prev](#)[Usage Guidelines](#)

Date: 2012/318 - 11/13

Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m

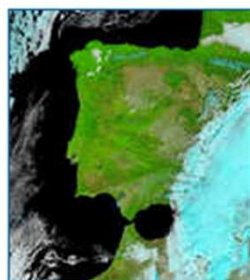


True Color

Satellite: Terra

Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m



7-2-1

Satellite: Terra

Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m



3-6-7

Satellite: Terra

Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m



NDVI

Satellite: Terra

Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m



True Color

Satellite: Aqua

Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m



7-2-1

Satellite: Aqua

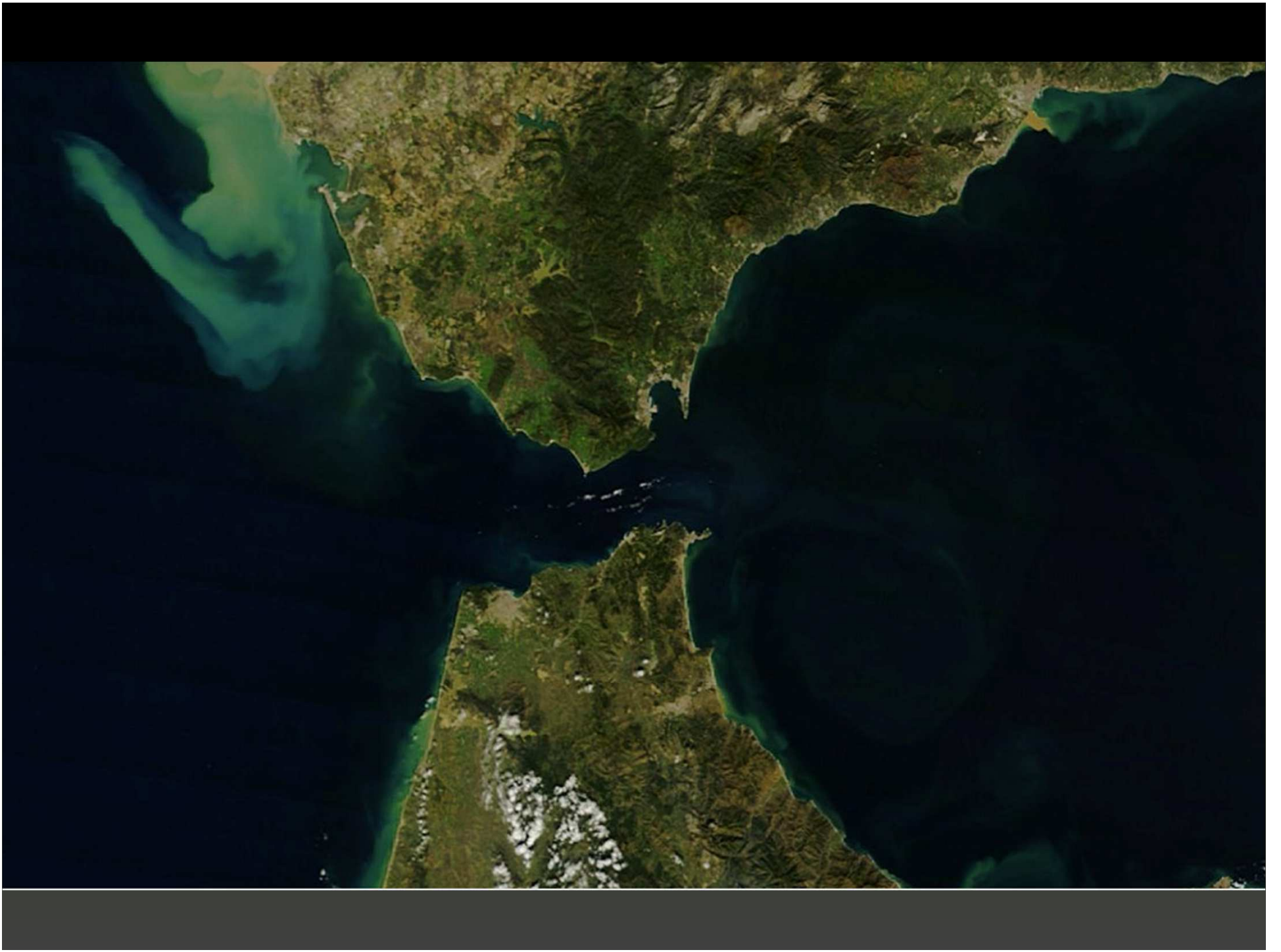
Date: 2012/318 - 11/13

Pixel size: 2km | 1km | 500m | 250m



NDVI

Satellite: Aqua





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