

Status of RICO Satellite Data

Greg Stossmeister
UCAR/JOSS

Table 6.9 Browse Products provided in the JOSS Field Catalog				
Instrument	Channel/Product	Spatial Resolution	Temporal Resolution	File Format
GOES-12	1	1 km	30 min, 15 SRSO	gif (Image)
	3,4	4 km	30 min, 15 SRSO	gif (Image)
	Ch2-Ch4	4 km	30 min, 15 SRSO	gif (Image)
MODIS	1,2	250 m	As available	gif (Image)
	Color Composite	500 m	As available	gif (Image)
QuikSCAT	Winds	25 km	2x Daily	png (Image)
AVHRR-GOES	SST Composite	6 km	3 hourly	gif (NESDIS)
GOES	Cloud Drift Winds	Low-level Upper-level	6 hourly	gif (CIMMS)
Polar Orbiting	Overpass Times	-	-	Table
	Overpass Swaths	-	-	gif (Image)

www.joss.ucar.edu/rico/catalog



Table 6.8 Satellite Data Archived by JOSS

Instrument	Channel/ Product	Archived Resolution	Units	File Format	Comments
GOES-12	1	1, 4 km	Albedo	HDF,TDF	Raw data is not saved from GOES, only calibrated units.
	2	4 km	Temp(C)	HDF,TDF	
	3	4 km	Temp(C)	HDF,TDF	
	4	4 km	Temp(C)	HDF,TDF	
	6	4 km	Temp(C)	HDF,TDF	
FY-1D	1-10	1 km	Albedo, Temp	CHRPT	IMA/Trinidad
SeaWiFS	1-8	1 km	Albedo	SWHRPT	IMA/Trinidad
AVHRR	1-5	1 km	Raw	HRPT	IMA/Trinidad
DMSP-OLS	VIS, IR	2.5 km	Calibrated	GeoTIFF	NGDC



GOES TDF → HDF Conversion

HDF Requirements (Satellite Working Group)

- Sector definitions will be the same as used in the catalog

1km sector (Vis Channel)

Projection – Mercator

Domain Width – 898.9 km

Domain Height – 798.5 km

Center Latitude – 17° 45' N

Center Longitude – 60° W

4km sector (All 5 Channels)

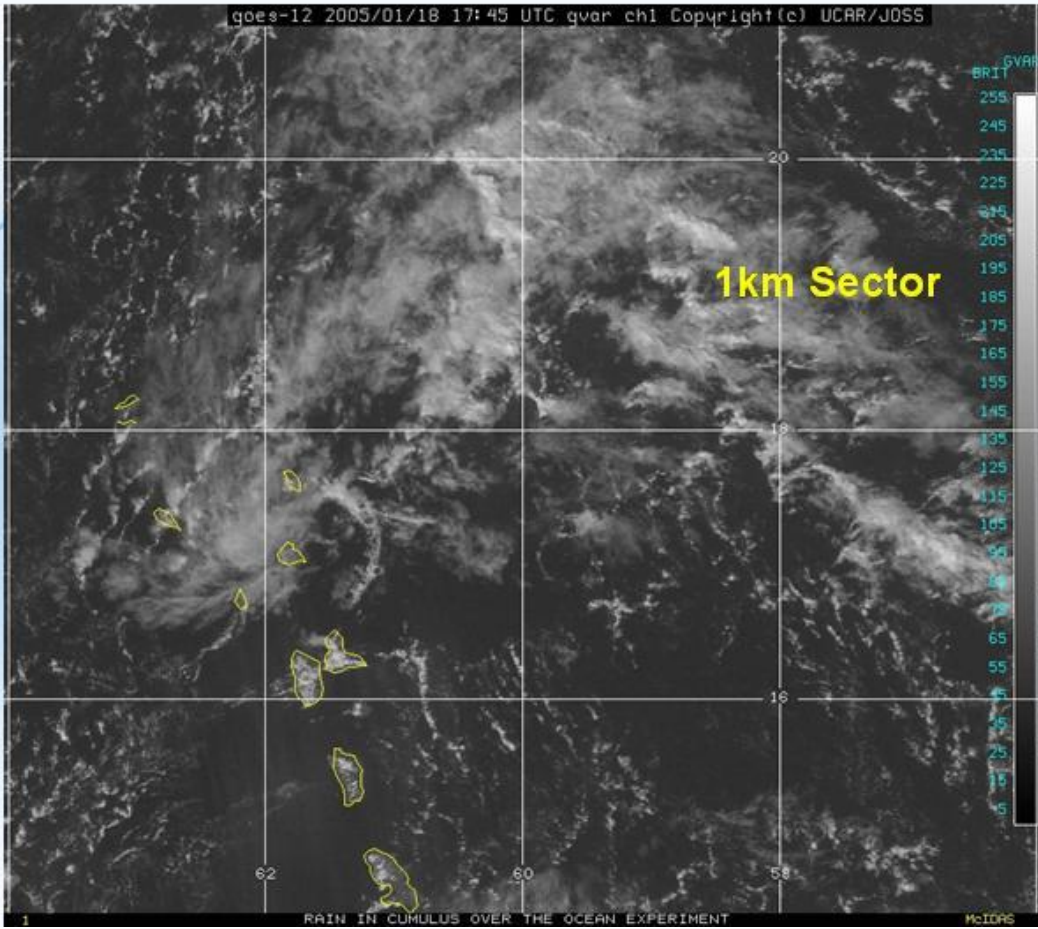
Projection – Mercator

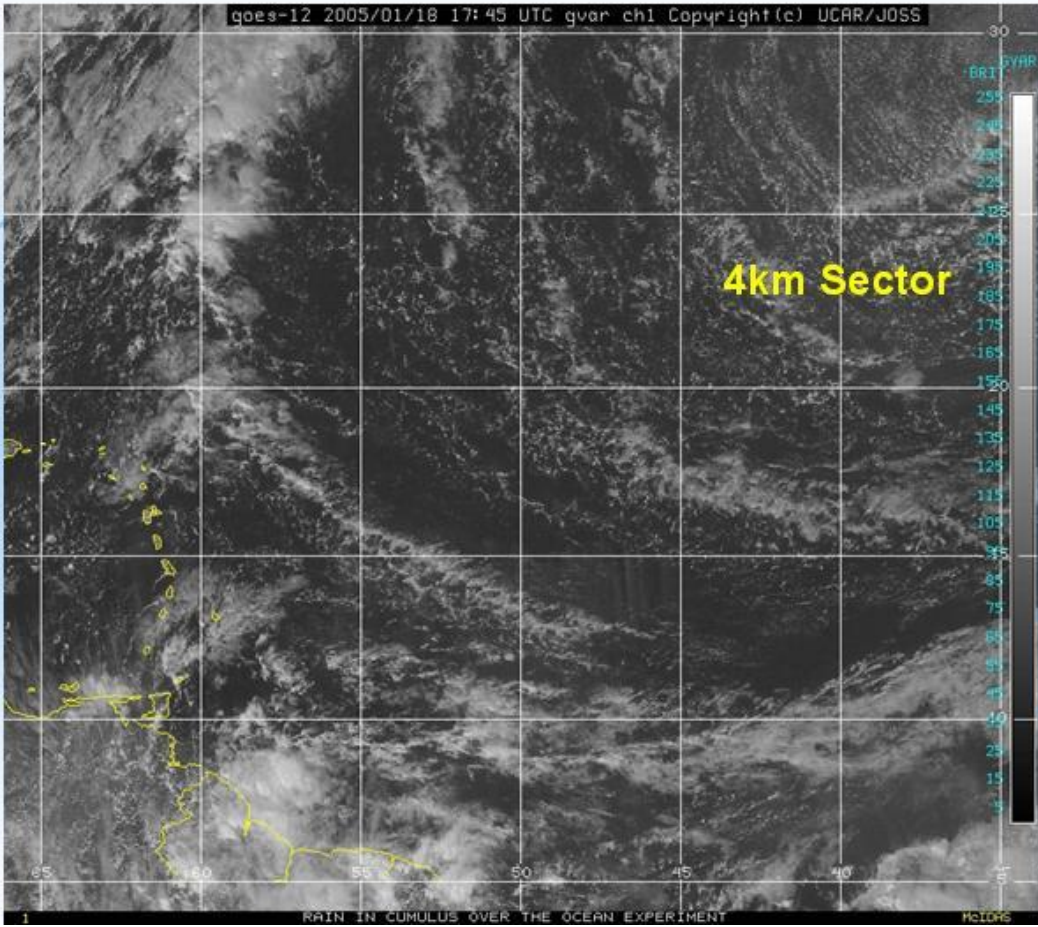
Domain Width – 3591.3 km

Domain Height – 3166.32 km

Center Latitude – 17° 45' N

Center Longitude – 50° W





GOES TDF → HDF Conversion (cont.)

Process:

- Determine HDF dataset requirements
- Produce sample files to ensure files meets PI requirements

Available on anonymous ftp site:

[ftp.joss.ucar.edu/pub/download/stoss/rico/1km_sample.hdf](ftp://joss.ucar.edu/pub/download/stoss/rico/1km_sample.hdf)

[ftp.joss.ucar.edu/pub/download/stoss/rico/4km_sample.hdf](ftp://joss.ucar.edu/pub/download/stoss/rico/4km_sample.hdf)

[ftp.joss.ucar.edu/pub/download/stoss/rico/sample_readme.txt](ftp://joss.ucar.edu/pub/download/stoss/rico/sample_readme.txt)

- PI validation of HDF samples
- Begin file format conversion based on date priorities
 - if there are none, work backwards beginning on 1/24/2005
 - convert all data files (24hrs/day) between 11/24/2005-1/24/2005

GOES TDF → HDF Conversion (cont.)

Process (cont.):

- Load converted datasets into RICO Data Archive
 - preferred access method? – tape? ftp?
 - 48-130 passes per day (.5-1.3 Gbytes/day/sector gzip'ed)

Timetable:

- 17,212 files ~280 Gbytes to process
- Complete conversion will take several months
- Data will be available as it is converted
- Status updates can be put on the RICO web pages regularly

RICO Satellite Working Group



Bob Rauber	(Univ. of Illinois)
Harry Ochs	(Univ. of Illinois)
Bjorn Stevens	(UCLA)
Bart Geerts	(Univ. of Wyoming)
Larry DiGirolamo	(Univ. of Illinois)
Eric Snodgrass	(Univ. of Illinois)
Steve Krueger	(Univ. of Utah)
Philip Austin	(Univ. of B.C.)
Paquita Zuidema	(Univ. of Miami)
Rob Wood	(Univ. of Washington)
Greg Stossmeister	(JOSS/EOL)
Steve Williams	(JOSS/EOL)

rico-satellite@joss.ucar.edu

MISR/MODIS Data

MISR RICO Web Site –

http://eosweb.larc.nasa.gov/PRODOCS/misr/rico/table_rico.html

MISR Image Archive (Not yet complete) –

<http://eosweb.larc.nasa.gov/PRODOCS/misr/rico/imagery/daily/>

MODIS Data Archive –

<http://disc.gsfc.nasa.gov/data/>

Questions, comments, priority dates, status updates,
polar orbiter (AVHRR, SeaWiFS, FY-1D, DMSP)
questions:

gstoss@ucar.edu

MISR/MODIS questions:

Larry DiGirolamo – larry@atmos.uiuc.edu





UCAR Office Of Programs
Joint Office for Science Support

