

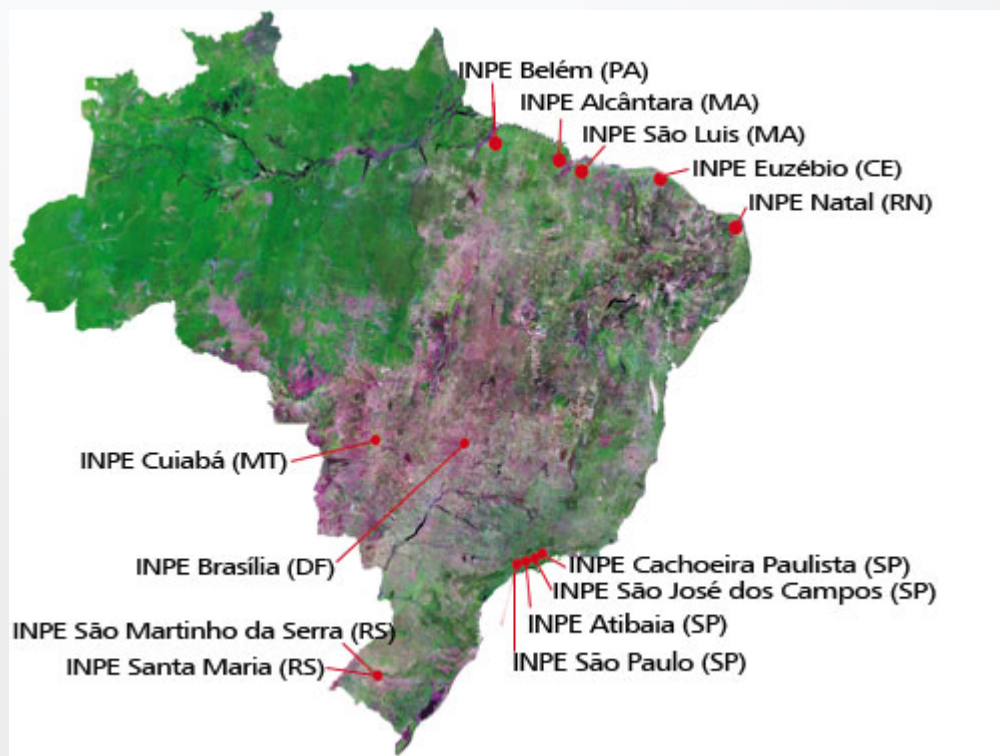


MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E INOVAÇÃO
INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS

BRAZIL-SPECIFIC TECHNICAL SOLUTIONS FOR DATA ACCESS, EXCHANGE, AND ARCHIVING GOES-R and JPSS



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Status of satellite data reception



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AT CUIABA INPE Facilities, receiving of the following satellite data are fully operational:

S-NPP

TERRA

AQUA

METOp-B

NOAA -18 and NOAA-19

Landsat-8

Landsat-7 (recorded data is relayed to USGS)

ResourceSat-2

CBERS-4

exception - FENGYUN-3 (data only being recorded)

Status of satellite data reception



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AT CACHOEIRA PAULISTA INPE Facilities, receiving of the following satellite data are fully operational:

METOp-B

NOAA -18 and NOAA-19

GOES-13

MSG-10 (temporarily recording of 3 hourly data-HRIT)

Status of satellite data reception



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For DBNet (RARS) - (under INPE Coordination):

3a) Sounding data (AMSU-A; MHS and HIRS) and AVHRR being operationally provided by INMET Receiving Station (Brasilia), from METop-B and NOAA-18 and NOAA-19 Satellites.

3b) Sounding data (AMSU-A; MHS and HIRS) and AVHRR being operationally provided by INPE Receiving Stations in Cuiabá and Cachoeira Paulista, from METop-B and NOAA-18 and NOAA-19 Satellites.

OBS: Data from IASI instrument (METOP-B) and ATMS /CrIS instruments (S-NPP) only being recorded (not yet processed; only few tests were done)

Status of planning to receive new data

A Basic Project ("Terms of Reference") have been prepared by INPE, to subsidize, yet in 2016, an International Bid for purchasing a complete GOES-R Receiving and Processing Station. Station suppliers are being contacted for provision of preliminary proposals. (CEPAGRI, INMET and SIMEPAR is planning to buy a station)

UK Company DARTCOM has just been contracted by INPE-FUNCATE (through BNDES financing funds) to supply the following Receiving Stations:


- 2(two) Band L Complete Tracking, Receiving and Processing Stations compatible with NOAA, METOP and FENGYUN 3 Satellites

- 2(two) Band X Complete Tracking, Receiving and Processing Stations compatible with S-NPP, TERRA, AQUA, and FENGYUN 3 Satellites.

1(one) Band L, and 1(one) Band X Station to be installed in CUIABA.

1(one) Band L, and 1(one) Band X Station to be installed in CACHOEIRA PAULISTA

by Feb-2017 is the planned date for the Equipment to be shipped to INPE-Brasil from UK, and by early April-2017 should start its operational phase.

As soon as the Band L Station becomes operational in CUIABA and Cachoeira Paulista, the actual operational NOAA/METOP Station will be installed to INPE Facilities in NATAL (RGN), and NATAL  improve DBNet (RARS) Global Network.

Status of planning to receive new data

GOES-R EQUIPMENT SPECIFICATION - Available

A) ITENS TO BE PURCHASED:

B) EQUIPMENT ESPECIFICATION AND DETAILED DESCRIPTION:

B1) Antenna / RF System with the following characteristics:

B2) High efficiency scalar waveguide feed / amplifier, dual polarized, pressurized, coupled to a downconverter, with the following characteristics:

B3) L-Band Receiver / Demodulator:

B4) Workstation for GRB data ingestion (CADUS format) and Level 1b data extraction, with the following minimum requirements:

B5) Front-End Software (FES):

B6) Workstation for the processing and visualization of Level-2 products, configured within the following minimum requirements:

B7) Application software:

B.7.1) ABI Products:

B.7.2) GLM Product:

B.7.3) SEISS Products:

B.7.4) MAG Product:

B.7.5) EXIS Products:

B.7.6) SUVI Product:

B.8) Mounting rack:

B.9) A remote GPS antenna receiving system:

B.10) A technical services and support package:

Status of planning to receive new data



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Terrestrial Access – EUMETSAT – testing protocols and infra-structure -> receive MSG and produce Channels combinations images

Terrestrial Access – NOAA – waiting system information to start tests.

Applications with satellite data involvement

Different products are being developed using GOES-R and JPSS satellite images:

- ***Images (differences, sandwich, highlight temperature)***
- ***Cloud Drift Winds***
- ***Cloud tracking***
- ***Fire detection***
- ***Thunderstorm classification***

***When INPE all process will be operational the Products and Images will be available trough:
Web, ftp and GNC-A***

Needs for capacity building and training



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- ✓ GOES-R pre-processing software
- ✓ GOES-R calibration, navigation, image construction (how image is built)
- ✓ GOES-R lightning – instrument, pre-processing
- ✓ GOES-R Space weather products (formats, product derivation, products)