



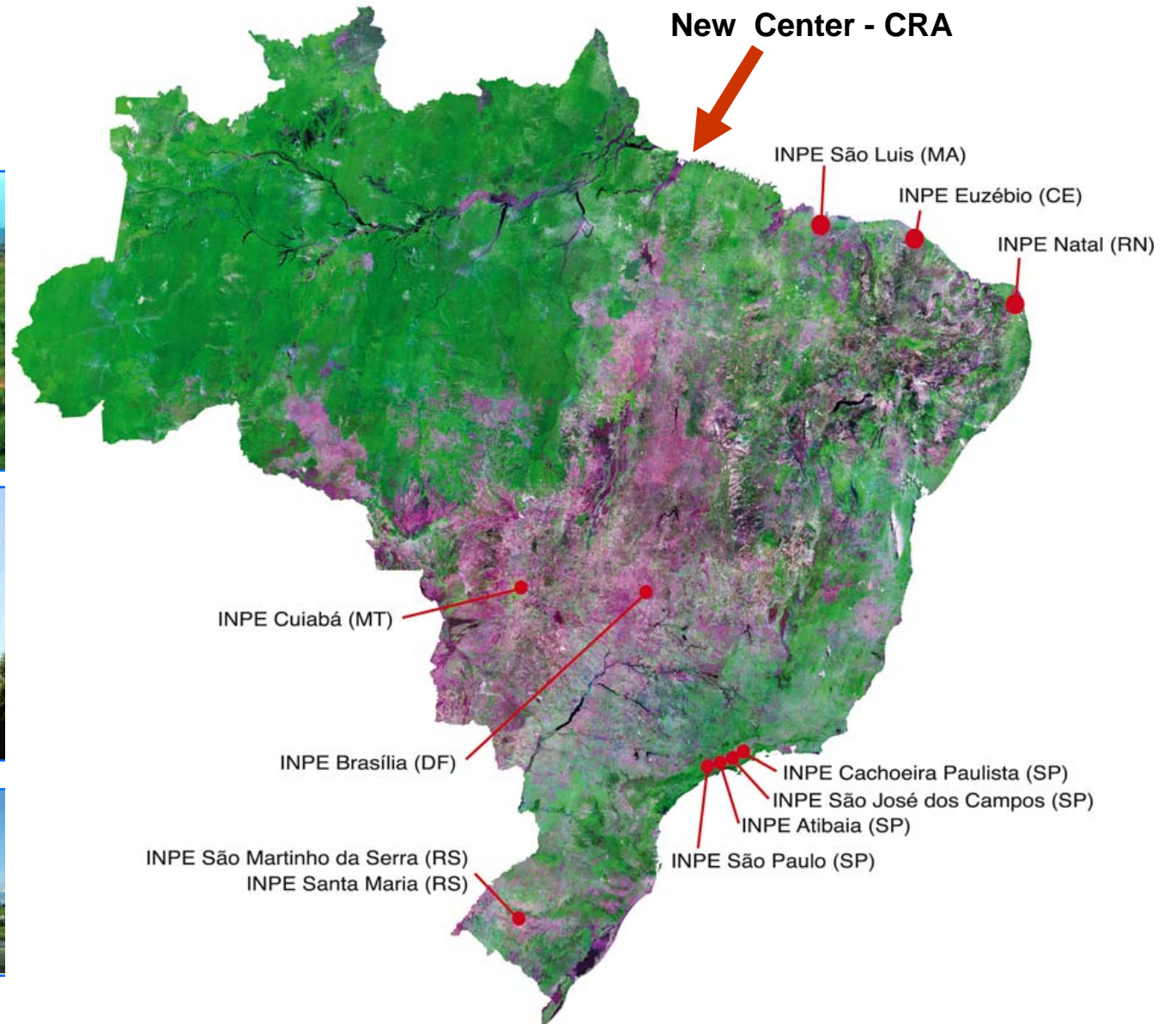
MINISTÉRIO DA CIÊNCIA E TECNOLOGIA
INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS

The SABIA-Mar Mission

Marco Antonio Chamon



Facilities





Aerial view of INPE in S. J. Campos



Area: 247.478 m²
Buildings: 71.487 m²



Integration and Test Laboratory





Purpose

The SABIA-MAR mission was conceived to provide information and products to studies of ocean ecosystems, carbon cycling, marine habitats mapping, coastal hazards, and coastal land cover/land use.



Basic requirements

Global coverage – open ocean

Regional coverage – coastal zones

Visible, near infrared (NIR), thermal

Daily revisit time for open ocean

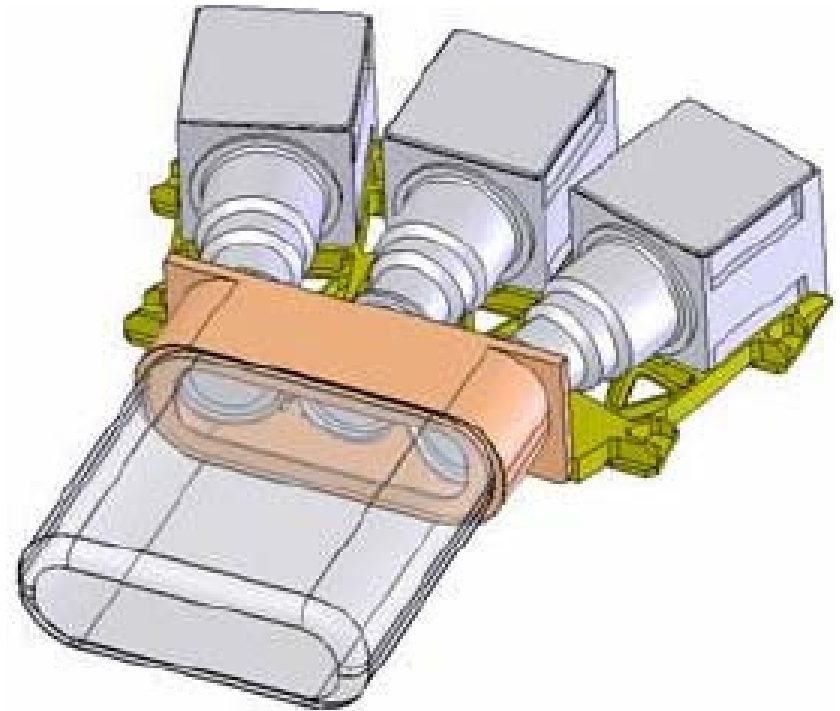
Detailed imaging for coastal zones



Global Camera

Swath: 2200 km

Resolution: 1.1 km



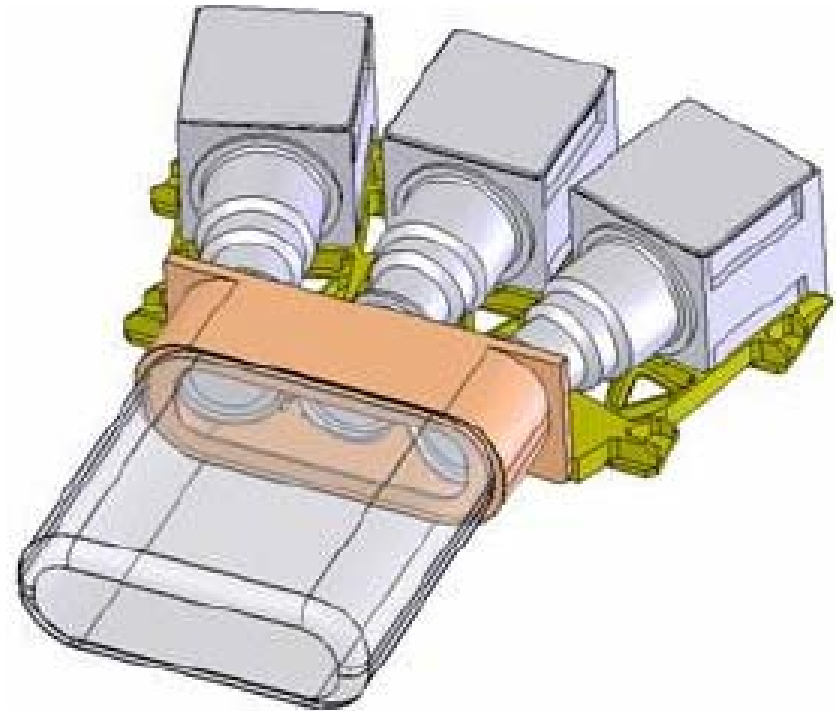
Intended to open ocean coverage



Regional Camera

Swath: 200 km

Resolution: 200 m



Intended to costal region coverage

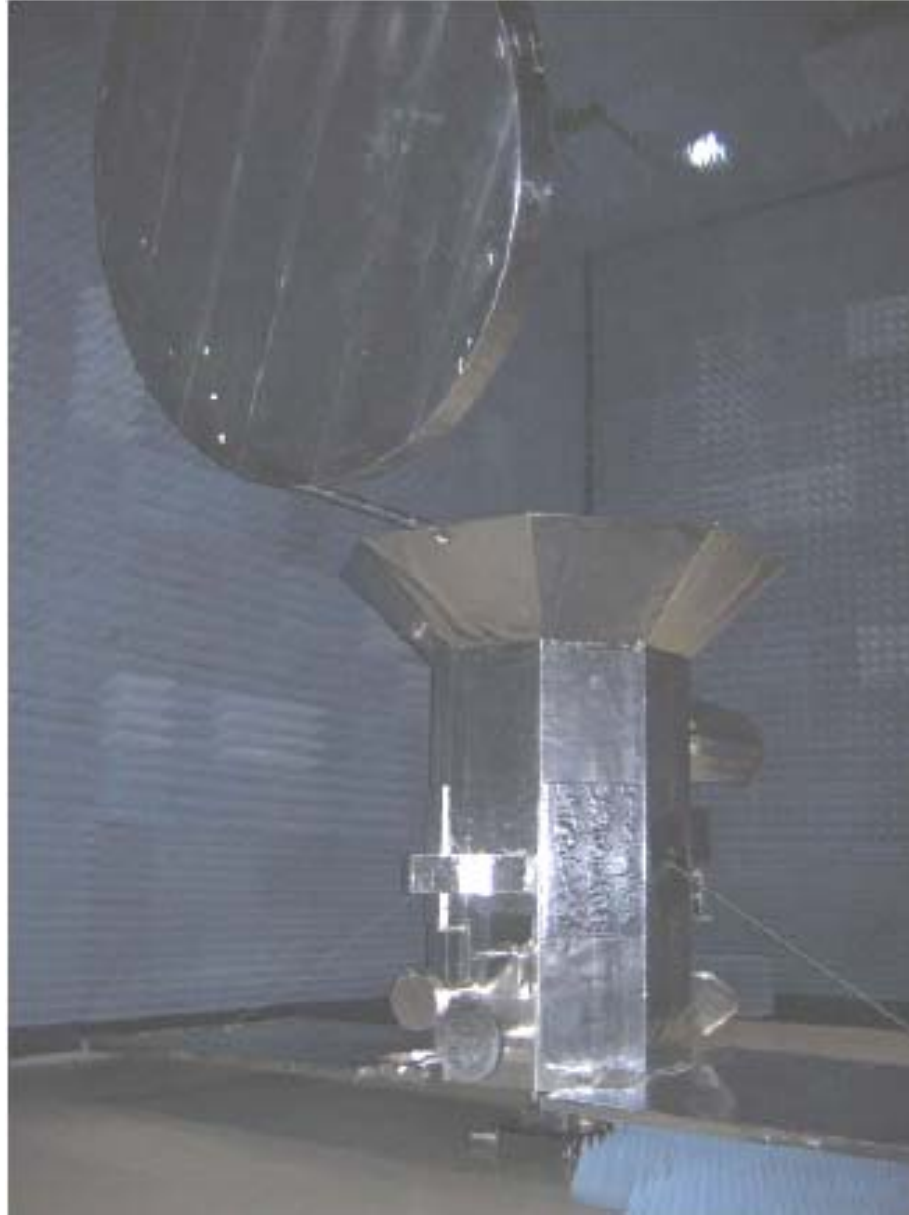


Spectral Bands (μm)

•(0.380)	•0.680
•0.412	•0.710
•0.443	•0.750 (or 0.765)
•0.490	•0.865
•0.510 (or 0.531)	•(1.010)
•0.555	
•0.620	•3.8
•0.665	•10.8
	•11.8



Platform





Sensors

Main instruments

- Global camera
- Regional camera

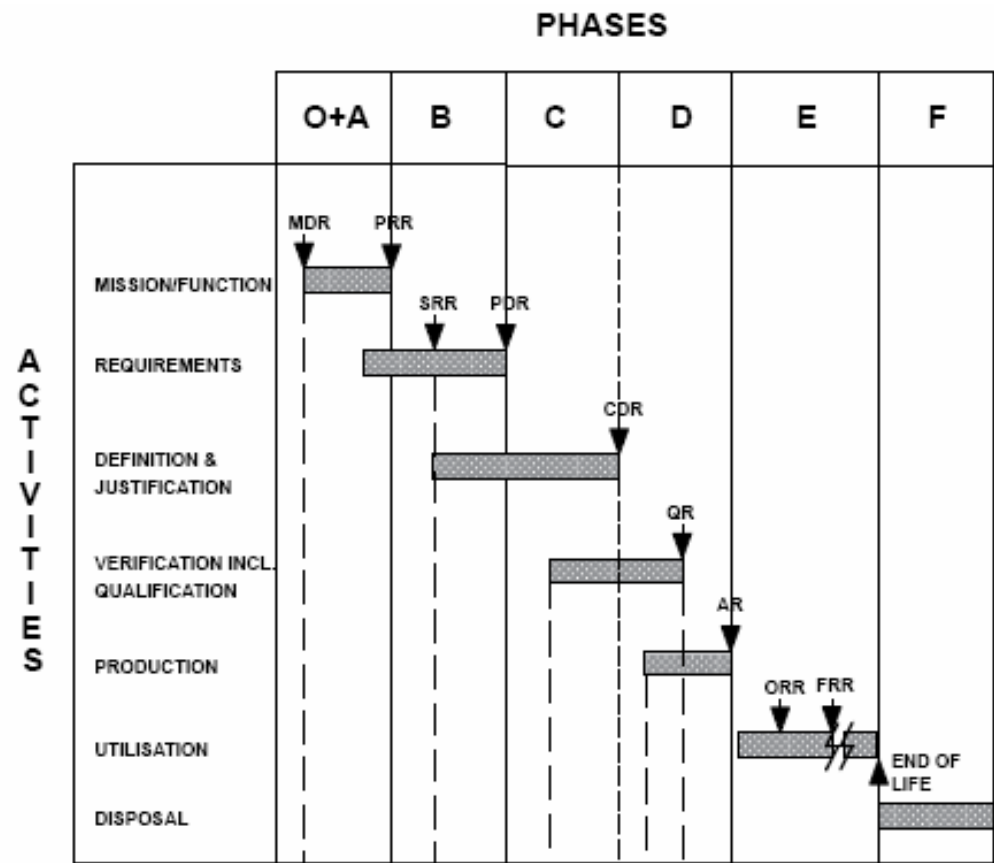
Secondary payloads

- SST camera
- Land imaging camera



Schedule

- 5 years from now
- 9 months for Phase 0/A





Understanding Global Change



**source:
IGBP**

How is the Earth's environment changing, and what are the consequences for human civilization?

A photograph showing the Earth rising over the horizon of the Moon's surface. The Earth is a bright blue and white sphere, partially obscured by the dark, cratered horizon of the Moon. The foreground is the brown, dusty surface of the Moon, covered in numerous small craters and lunar maria. The sky is a deep, dark black.

Thank you !

Courtesy: Guy Brasseur, NCAR, EUA