



Antenna Chetumal: System and Data

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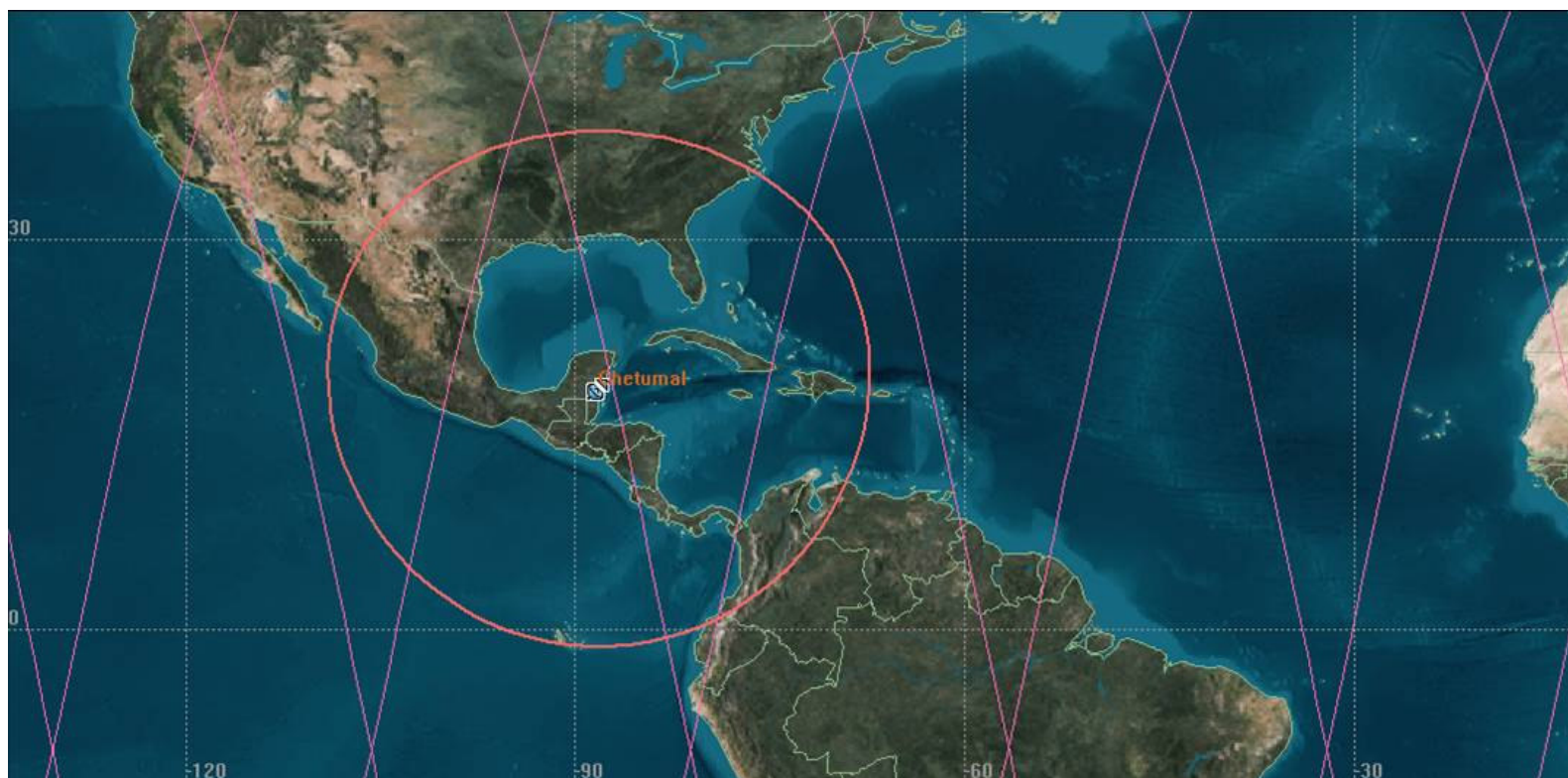
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Chetumal Station: Geographical Location

- Visibility circle for medium EO orbit height (example: IRS-Cartosat)





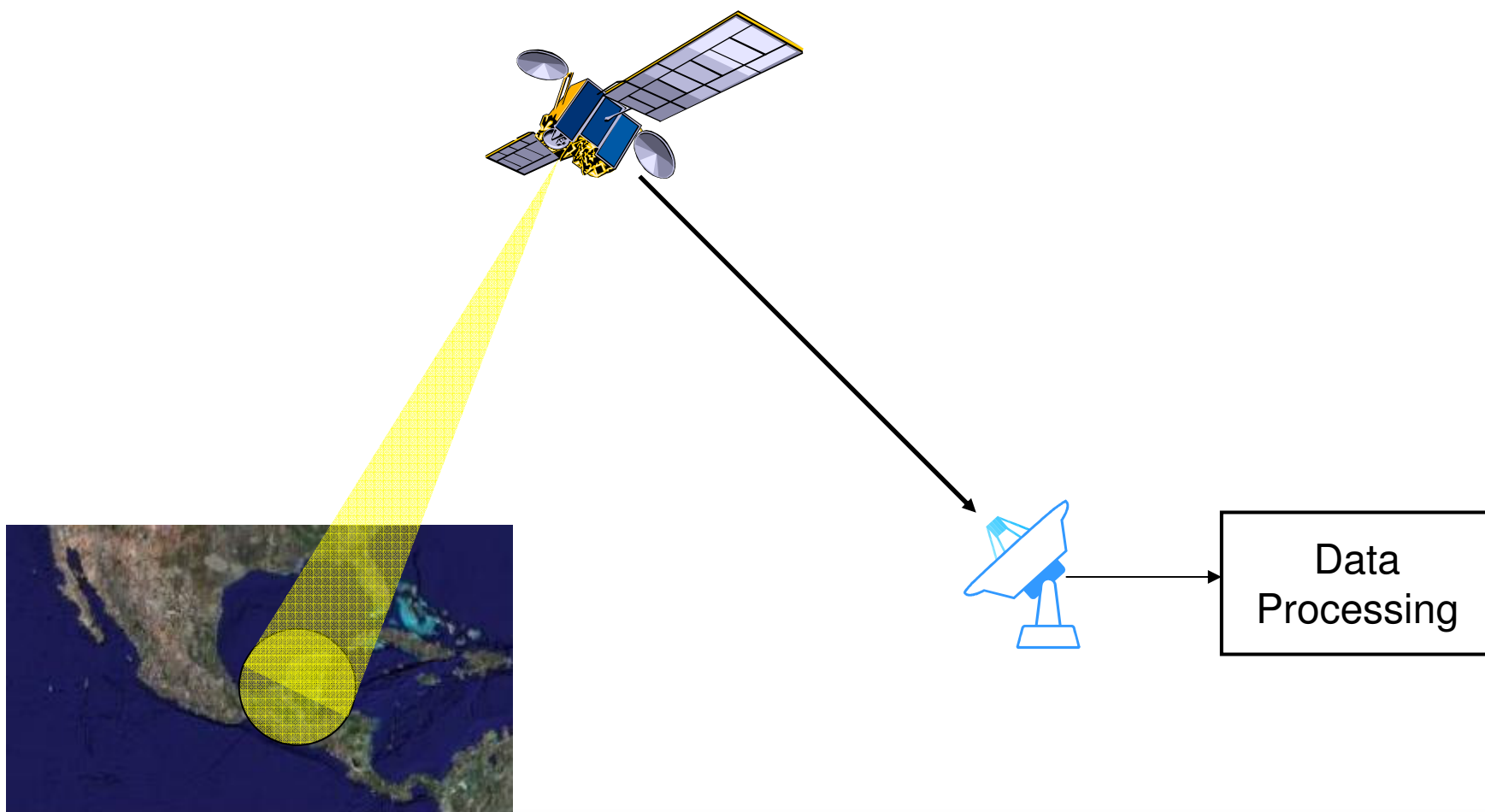
Chetumal Station: Geographical Location

➤ Location advantages:

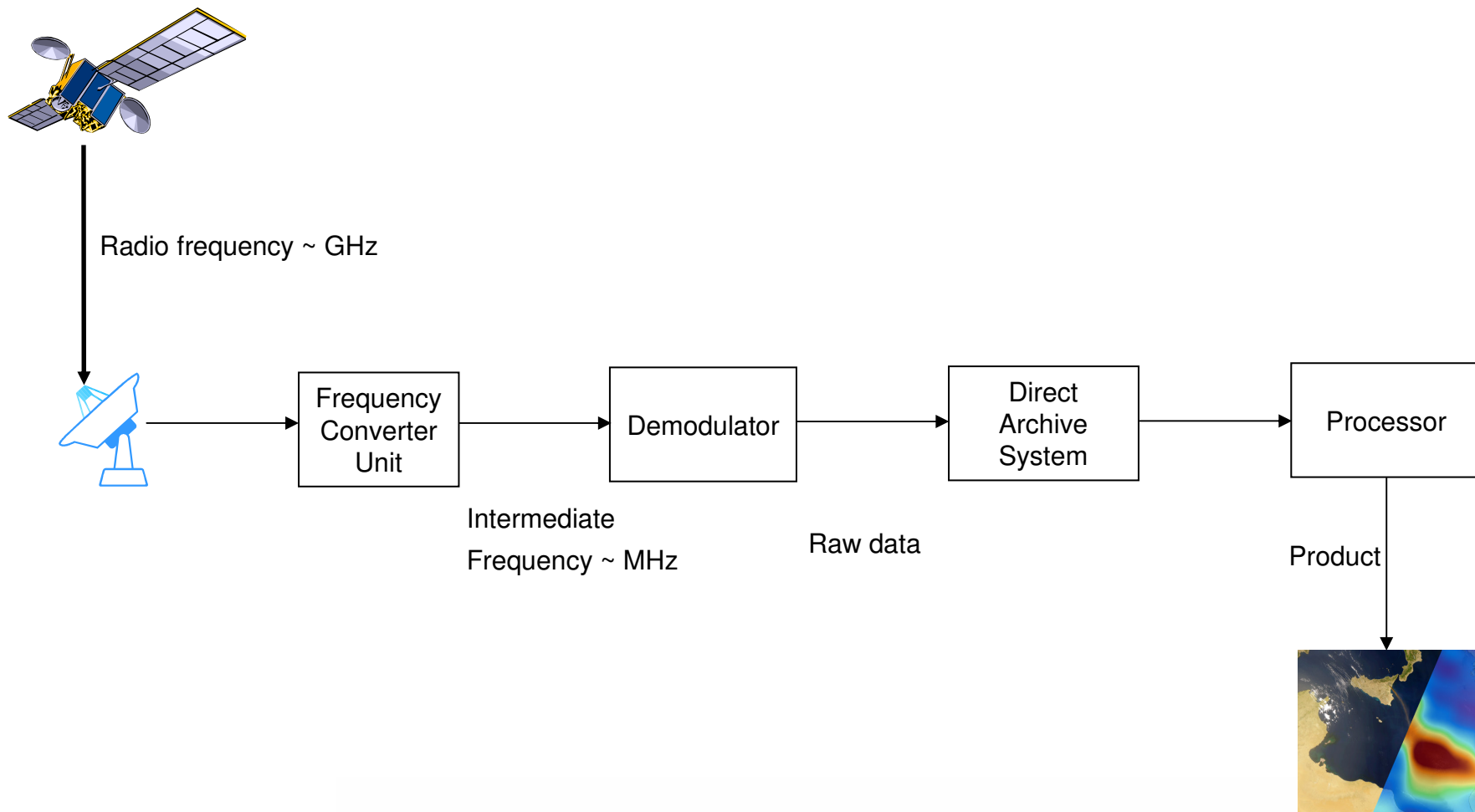
- Site location: 18,5°N 88,2°W
 - Central America and Caribbean sea are covered in real time
 - Yucatan Peninsula: plain relief

- Alternative site to existing ones

Chetumal Station: data acquisition



Chetumal Station: basic data flow diagram





Chetumal Station: location

ECOSUR campus (El colegio de la frontera sur)





Chetumal Station: disassembly in OP



Chetumal Station: transport



Chetumal Station: erection



Chetumal Station: erection





Chetumal Station: erection





Chetumal Station: erection





Chetumal Station: erection





Chetumal Station: erection





Chetumal Station: erection



3 Weeks!!





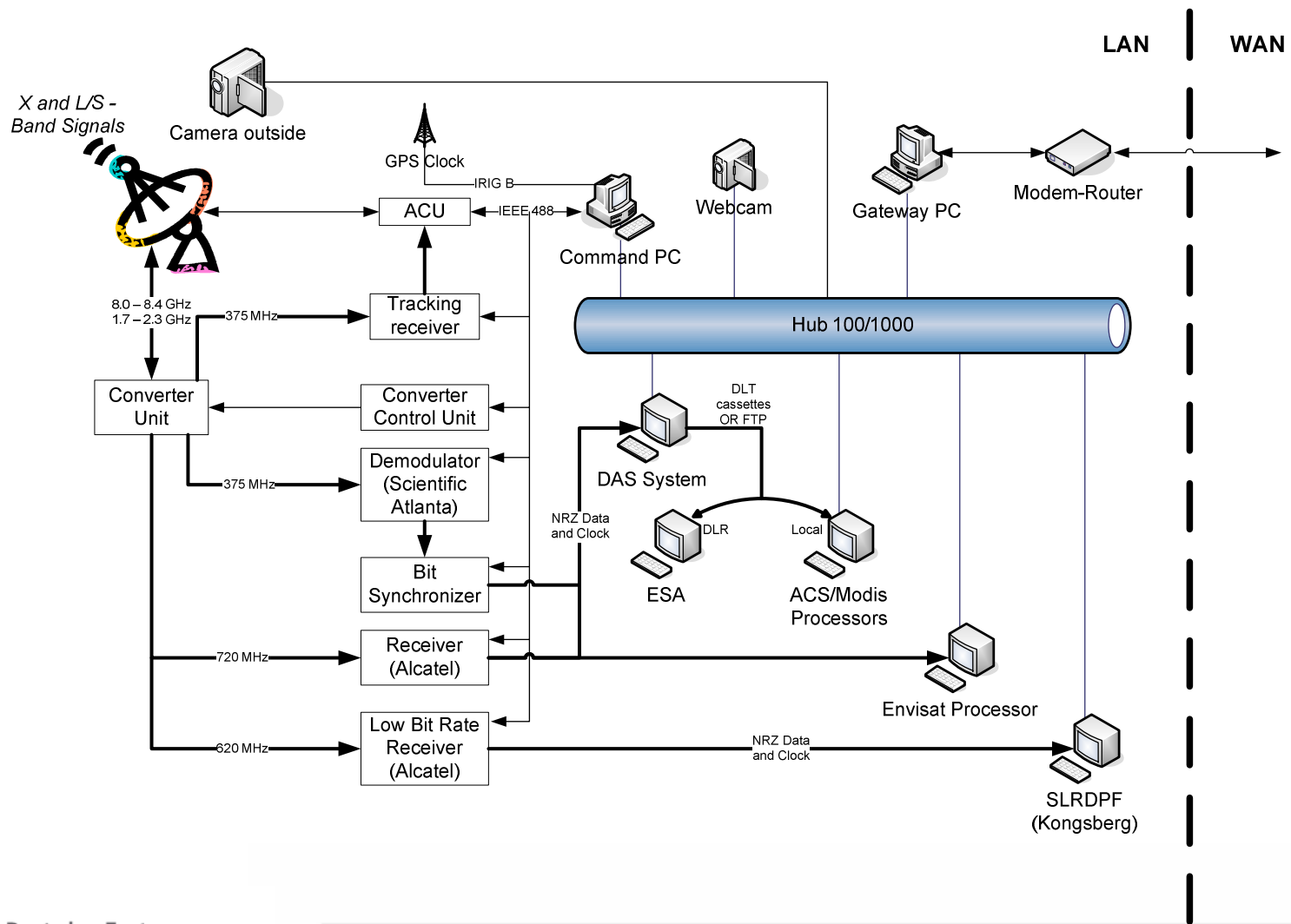
Chetumal Station: antenna system characteristics

- Height: 12 meter
- Weight: ~ 17 ton
- Reflector diameter: 8 meter
- Wind: 200 km/h survival (Hurricane Dean)
- Reception: X/S/L – Band
- Full motion antenna: elevation & azimuth
- Antenna motion: Programme Tracking
- Current data acquisitions:
 - ERS-2 (LBR & HR)
 - Landsat-5
 - Terra

Chetumal Station: HF equipment



Chetumal Station: data flow diagram



Chetumal Station: Current Status of Data Acquisitions

Satellite	Owner	Sensor	Chetumal	HL Proc	Access
ERS-2	ESA	SAR	Acq, Lvl-0	ESA/ Chetumal	Sc: Cat-1
ERS-2	ESA	LBR	Acq, Lvl-2	DLR	free
Landsat-5	USGS	TM	Acq, Lvl-1	USGS	Sc: free
Terra	NASA	Modis	Acq, Lvl-1	Chetumal	free

Sc: Scientific use



Chetumal Station: Status & Further plans

- Maintenance and optimization:
 - Antenna Control Unit
 - Tracking system
 - Landsat 5 processing system

- Upgrades for next missions to be supported
 - ERS-2 Near Real Time facility (to be confirmed)
 - IRS-P6 (to be confirmed)
 - TerraSAR-X to be prepared by end of 2008
 - Minor but important role foreseen for TanDEM-X mission (peak loads)