

National Aeronautics and Space Administration

Jet Propulsion Laboratory
California Institute of Technology
Pasadena, California

Panspectral Fourier Transform Spectrometer (PanFTS)

PanFTS will combine the functionality of several instruments e.g. TES, GOSAT, Sciamachy

Wide spectral coverage (0.27 – 15 μm) permits simultaneous observations by reflected sunlight and thermal emission (day/night)

Pollutants

O₃, CO, NO₂, HCHO, NH₃

Greenhouse Gases

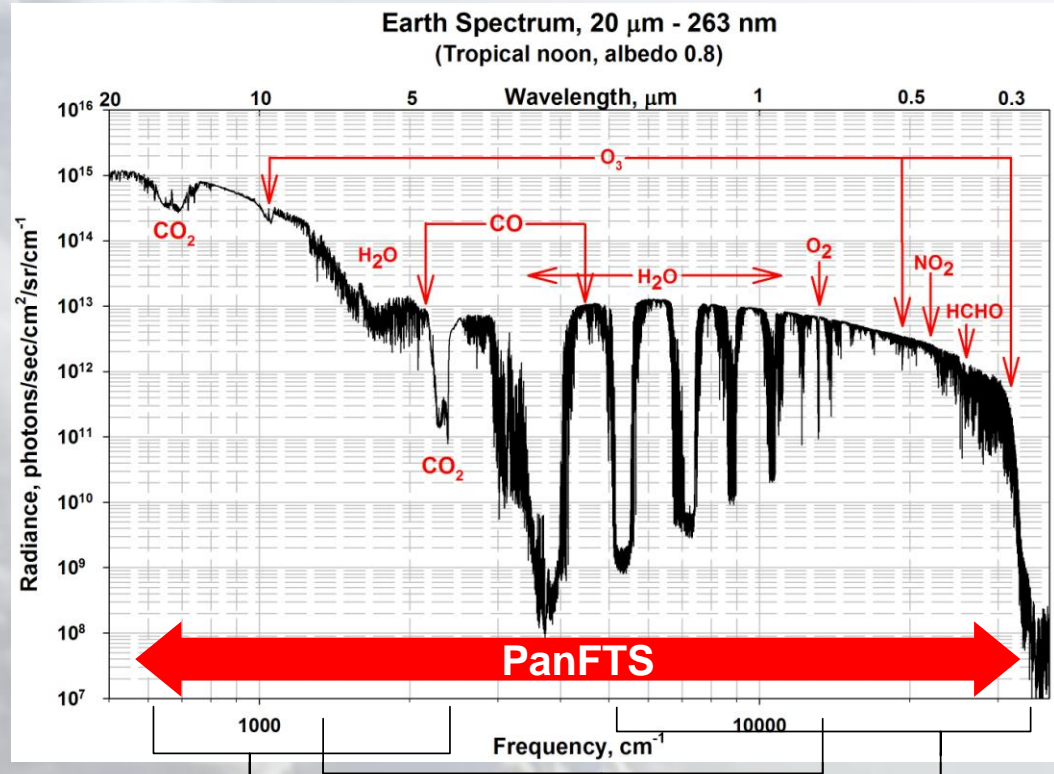
CO₂, CH₄, N₂O, O₃, H₂O

Tracers

HDO, N₂O, O₂, O₄

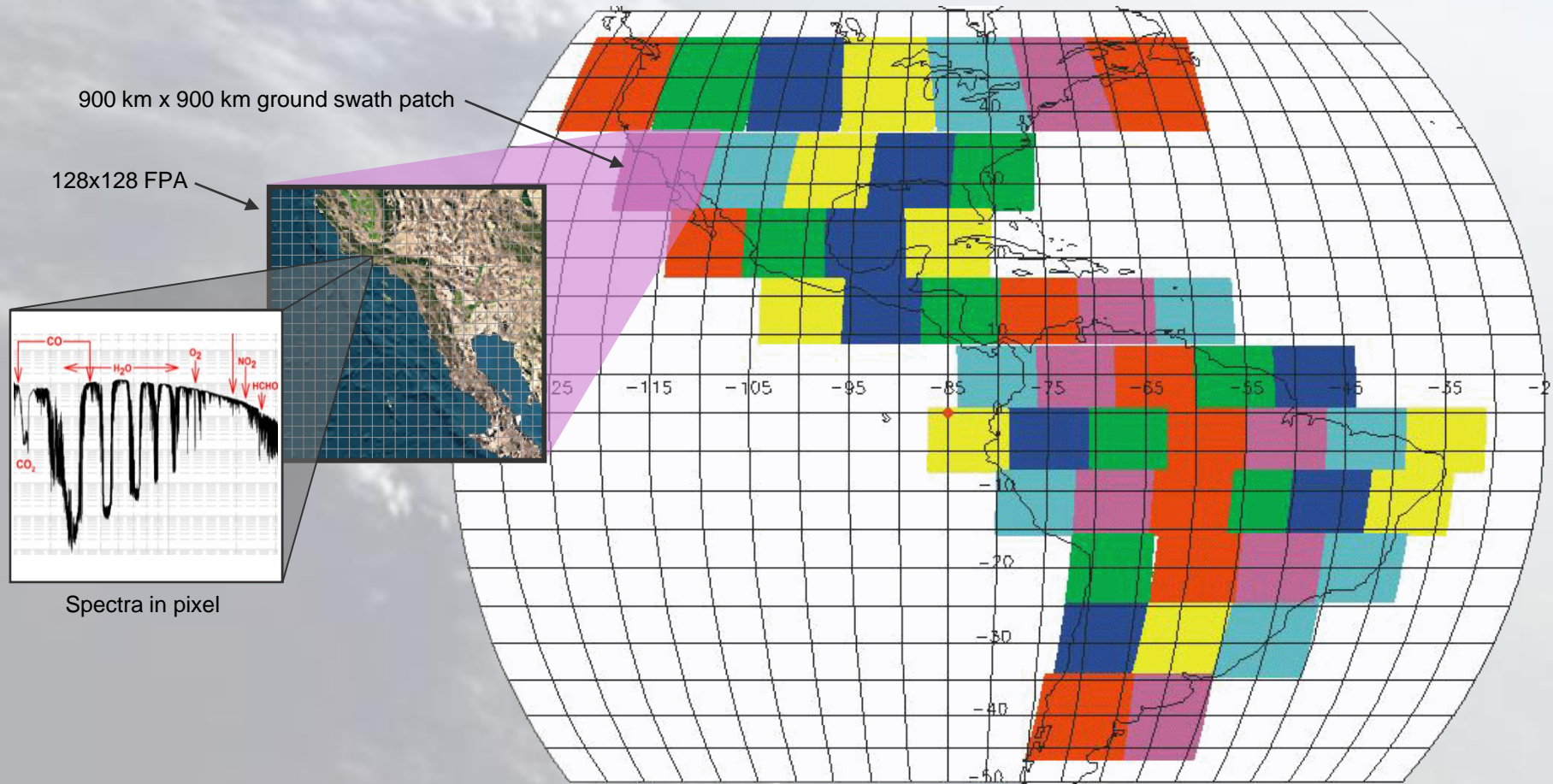
Ocean Color

250 m pixel size:
visible channel





PanFTS Observing Scenario



- Geostationary orbit near 80 W longitude
- Sequential imaging of 49 patches
- 900 km x 900 km IFOV using 128x128 pixel array (7 km resolution)