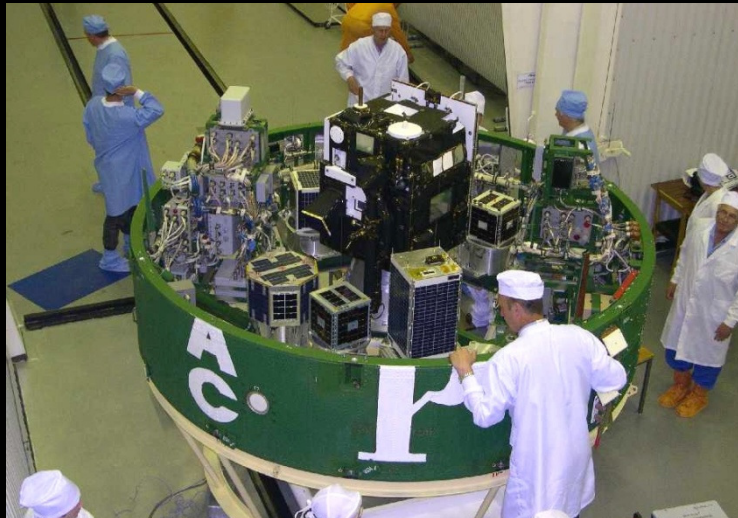




# Detection of Electro-Magnetic Emissions Transmitted from Earthquake Regions

- French microsatellite (150kg)
- Launched in June 2004
- Yet operational today
- Polar orbit, heliosynchrone, 700km





## Scientific payload

- IMSC AC magnetic field [0.2, 20] kHz
- ICE DC/AC electric field up to 3.3 MHz
- IAP Thermal ion plasma [0, 20 eV]
- ISL Langmuir probe [-7, 7] V
- IDP Energetic electrons [0.1, 1] MeV



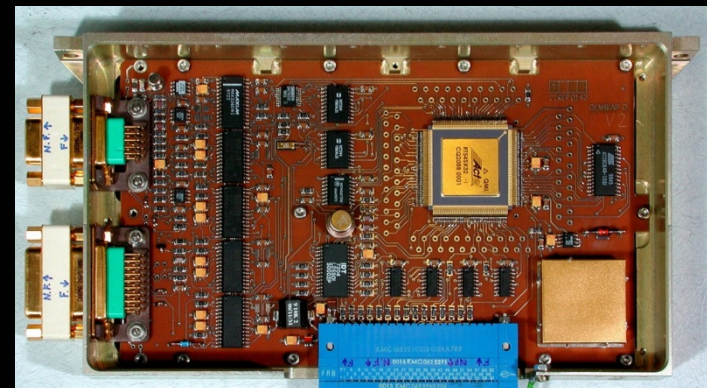
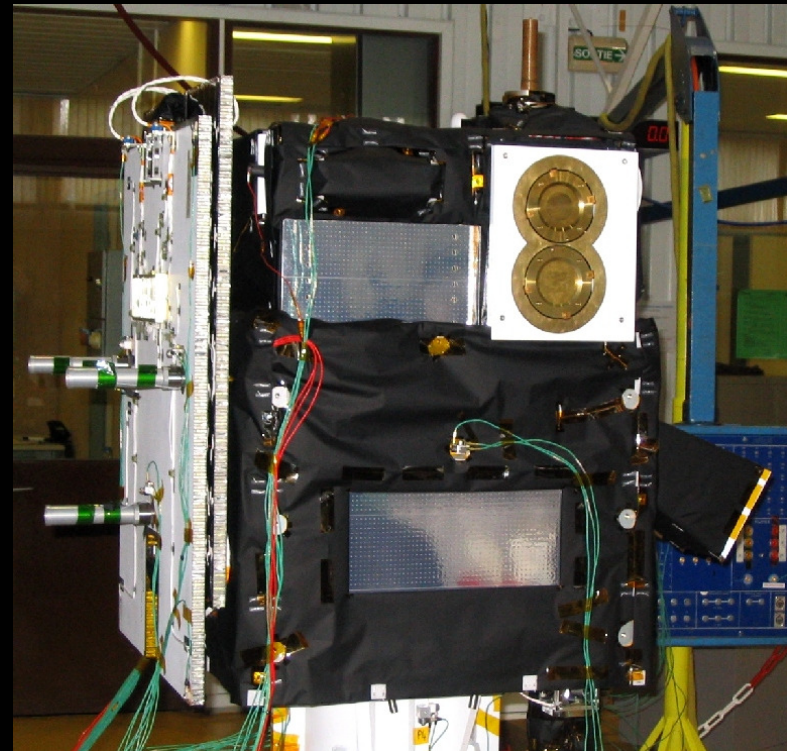




# IAP instrument

IAP:

- Ion retarding analyzer:
  - ion energy [0, 20 eV]
  - ion mass/charge ( $H^+$ ,  $He^+$ ,  $O^+$  etc.)
  - ion temperature
- Ion direction analyzer





## ICE instrument

- ICE :
- electric field dipole antenna
- 3 axis
- frequency range: DC to 3MHz
- dynamics: few  $\mu\text{V}/\text{m}$  to few  $\text{V}/\text{m}$

