Córdoba Ground Station
CONAE - Argentina

Marcelo Colazo
Estación Terrena Córdoba
CONAE
mcolazo@conae.gov.ar
+54 3547 431018
http://www.conae.gov.ar

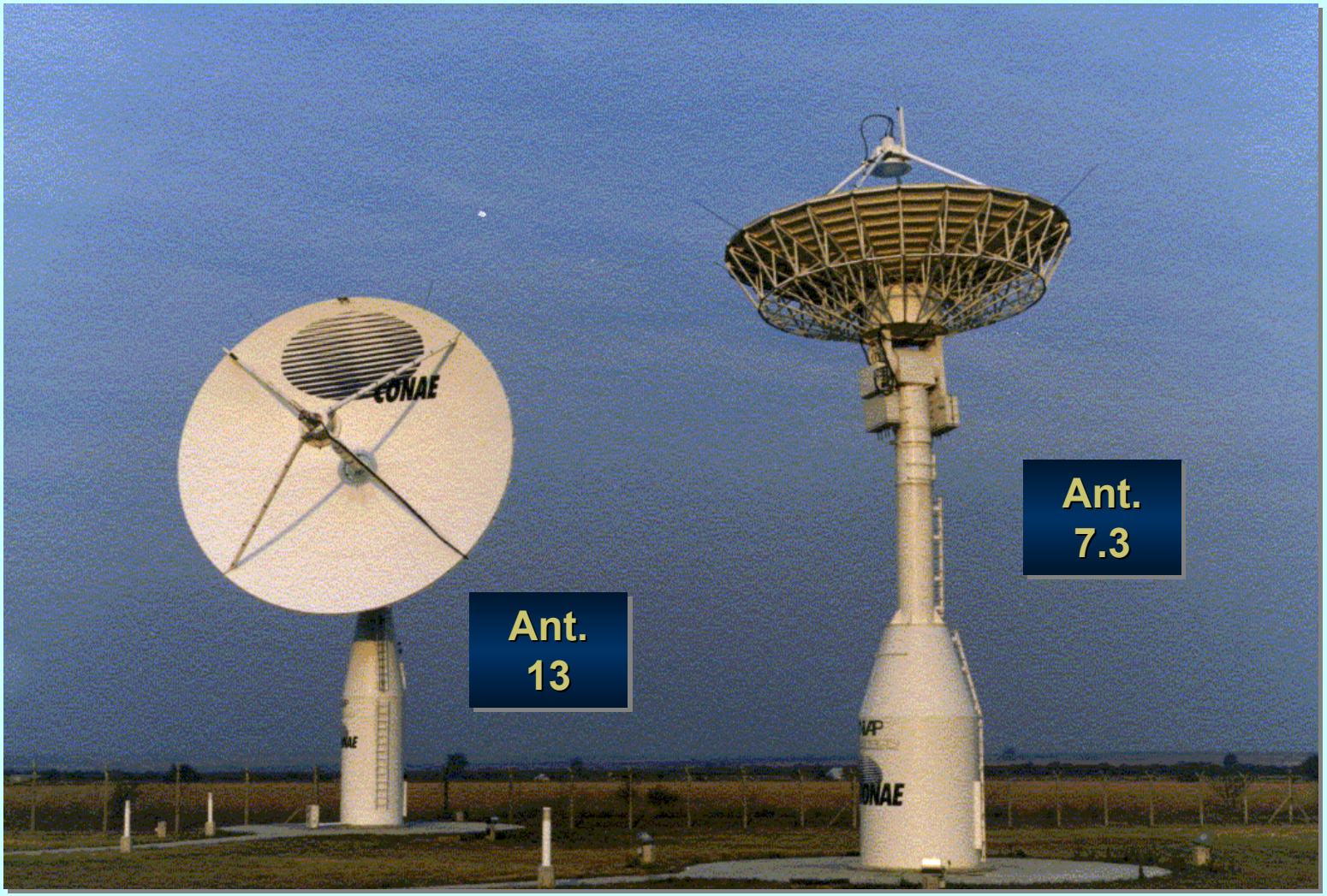
CONAE Ground Station

- Overview of facilities and operations
- AVHRR Data Ingestion and Production

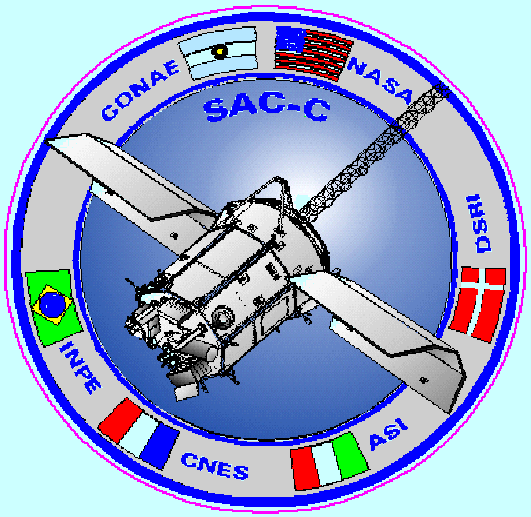
- The installation of Cordoba Ground Station started in September 1996. It became operational in March 1997, with the reception of satellite data from Landsat 5, ERS 1/2, and SPOT 1/2.

- At present the Station adquires data from 16 satellites and deliveries an average of 1000 high-level products a month. With the recently installed new processing system, in the short term it will be possible to produce around 3000 products.

Due to the Station excellent localization, it is possible to regularly acquire satellite data from Argentina, Chile, Bolivia, Paraguay and Uruguay, together with important part of Peru and Brazil.


Ant.
13
Ant.
7.3

SAC-C Mission Control Center and Data Adquisition and Processing Area



SAC-C cameras

- **MMRS: Multispectral Medium Resolution Scanner**
  Resolution: 175m
  Observed Swath: 360km
- **HRTC: High Resolution Pancromatic Camera**
  Resolution: 35m
  Observed Swath: 90km
- **HSTC: High Sensibility Technical Camera**
  Resolution: 300m
  Observed Swath: 700km

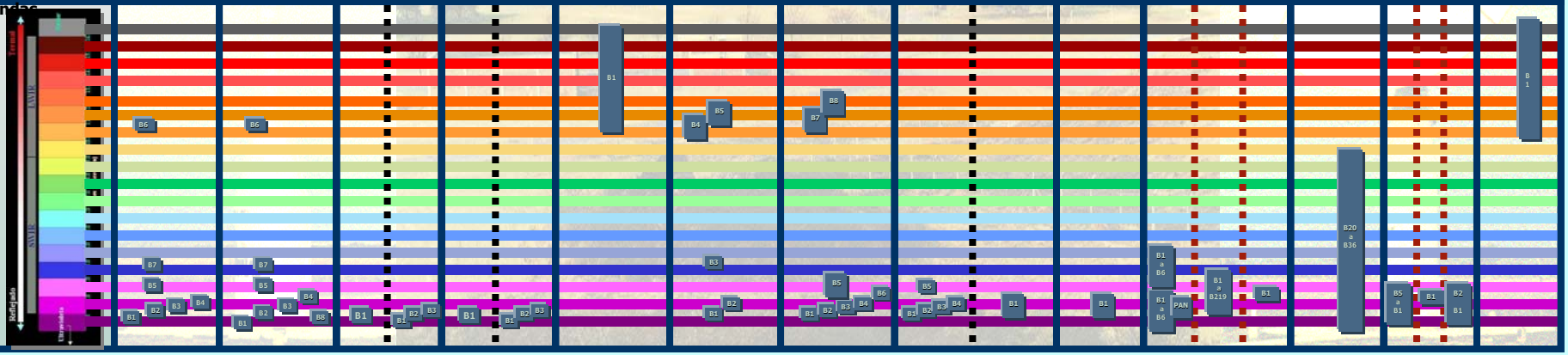
2 modes of adquisition:
Real Time and Storage Mode

SAC-C, launched in 2000 is member of the morning constellation for Earth observation joinly with : Land-sat 7, EO-1 y Terra

Comisión Nacional de Actividades Espaciales

MISION													
Origen	USA	USA	FRANCIA	FRANCIA	EUROPA	USA	USA	ARGENTINA	ISRAEL	USA	USA	INDIA	CANADA
Instrumento	TM	ETM	HRV Pan / HRV XS	HRV Pan / HRV XS	AMI SAR	HRPT	SeaWIFS	MMRS / HRTC	CCD	ALI / HYP / ATC	MODIS	LISS / PAN / WIFS	SAR
Altitud	706 Km	705 Km	823 Km	823 Km	786 Km	824 Km	705 Km	707 Km	480 Km	705 Km	705 Km	817 Km	793 a 821 km
Revisita	16 Días	16 Días	26 Días	26 Días	32 Días	2 A 4 POR día	1 Día	2 a 9 Días	2 a 4 Días	16 Días	16 Días	5 a 24 Días	6 Días
Ancho de Cobertura	185 Km	185 Km	60 Km	60 Km	99 Km	3000 Km	2800 Km	360 Km / 90 Km	12Km	30 Km / 8 Km / 185 Km	2330 Km	148 Km / 370 Km / 1744 Km	45 a 500 Km
Resolución Espacial	30 mts	30 mts. (V.IR) 15 mts. (Pan)	10 mts / 30 mts	10 mts / 30 mts	26 mts	1100 mts	1130 mts	175 mts / 35 mts	2 mts	30 mts. (V.IR) 10 mts. (Pan)	Banda 1 a 2 - 250 mts. Banda 3 a 7 - 500 mts. Banda 8 a 36 - 1000 mts.	23 mts / 56 mts / 188 mts	8 a 100 mts
Cant. de Bandas	7	8	1 / 3	1 / 3	1	5	8	5 / 1		10 / 220 / 1	36	5 / 1 / 2	1

Resolución Espectral

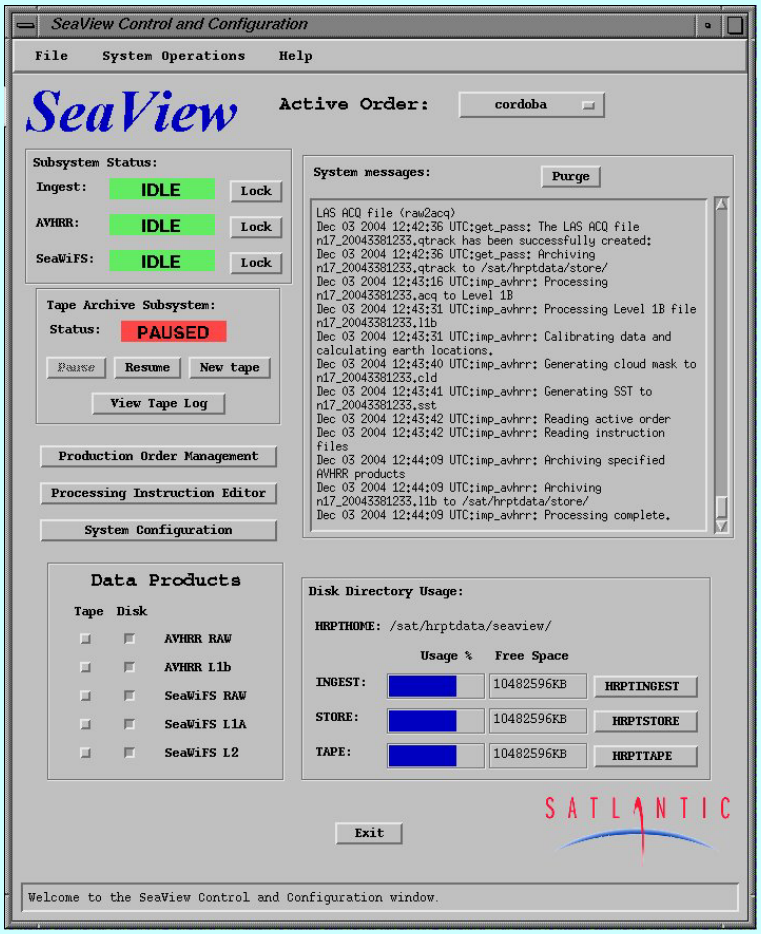


2 4-feet antennas
For NOAA HRPT and
Seawifs Data
Ingestion

Cordoba Ground Station HRPT Ingestion system

Quorum system running on a PC Intel 486 under DOS.

Ingestion can be done on local disk or network disk and then processed on an Origin 3000 Server.



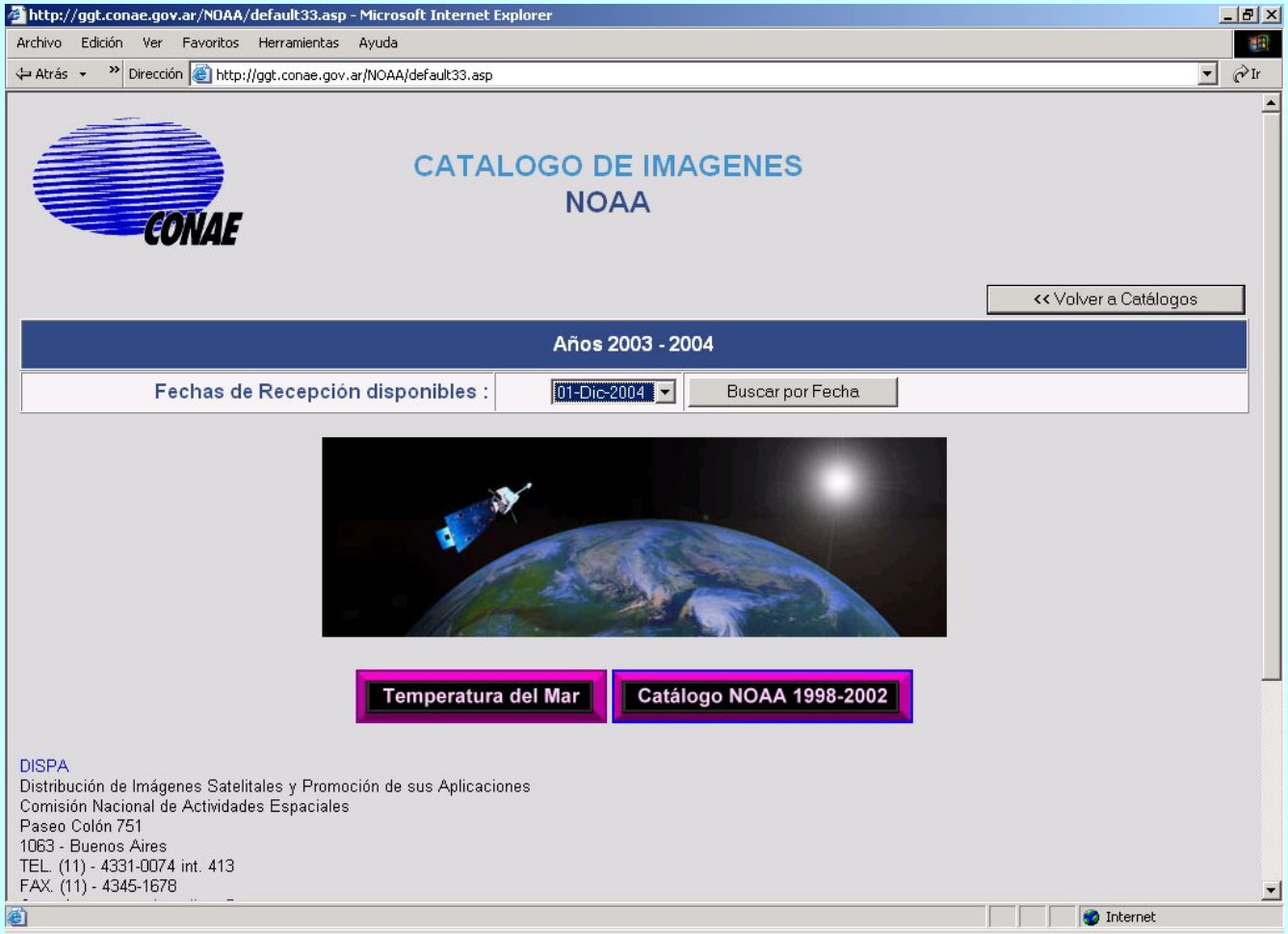
AVHRR Level 1B Generation

Level 1B is produced using SeaView running on a SGI Origin 3000.
SST Product is also generated.
Mean time for a pass to be processed: 3 minutes.
The products are compressed and sent to the CONAE Headquarters in Buenos Aires via FTP using a 14 Mbps link.
Metadata and Quicklook are generated for the catalogue.

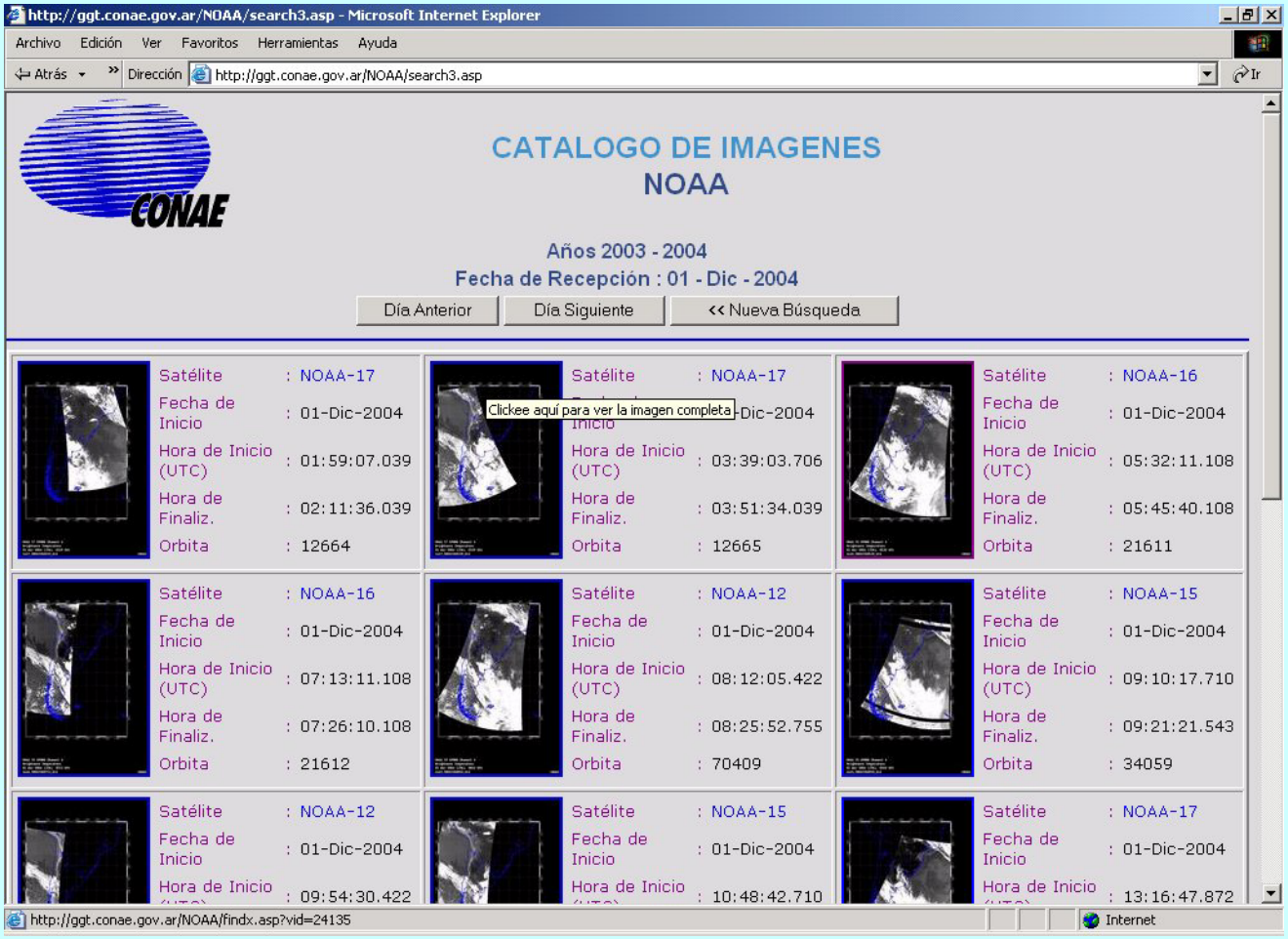
CONAE Home Page, http://www.conae.gov.ar

Catalogues of data adquired at Cordoba Ground Station

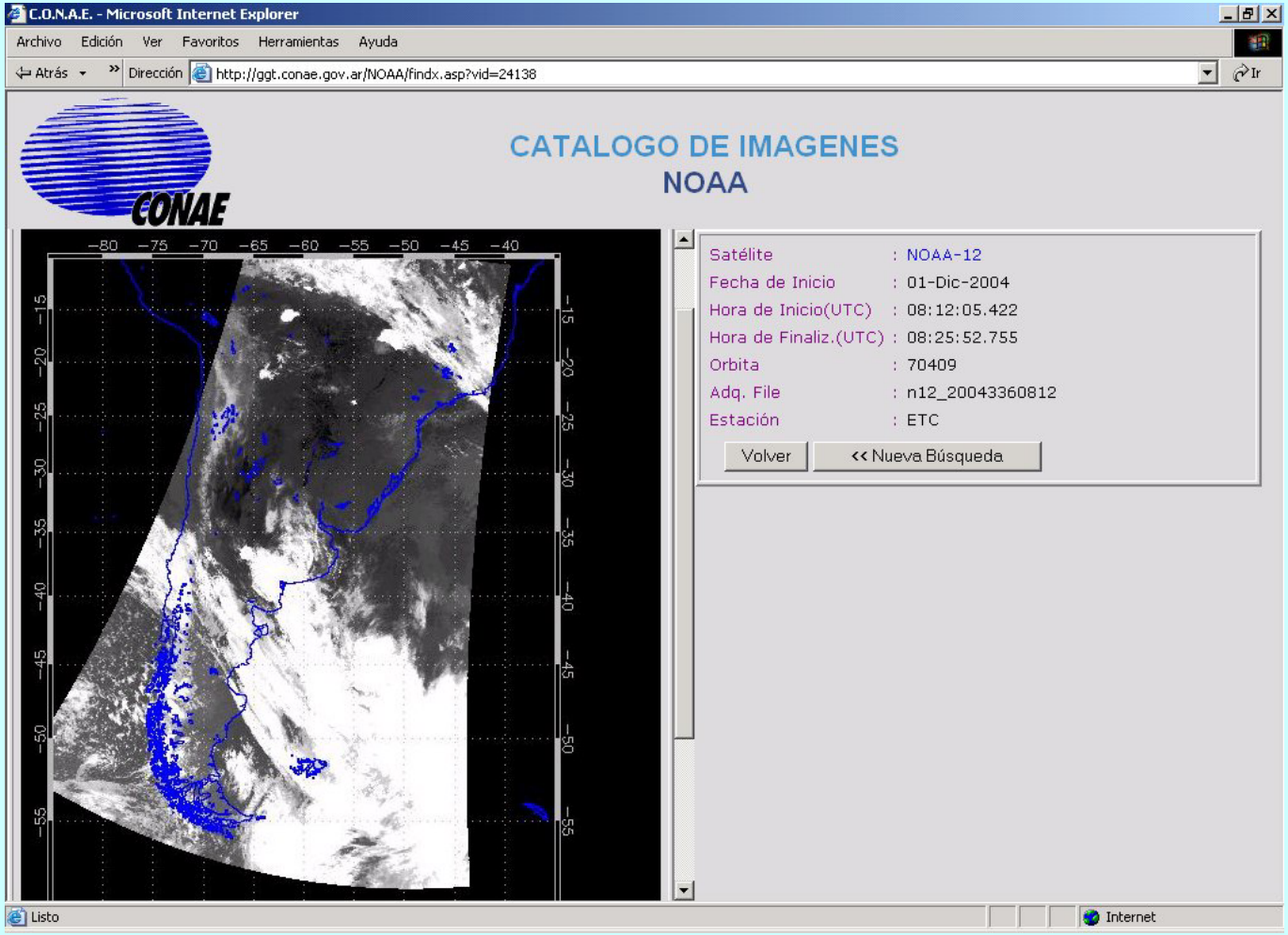
Catalogue for NOAA Data



Catalogue for NOAA Data



Catalogue for NOAA Data



Archive

HRPT data received since 1998

HRPT and 1B files are stored in CDs

Around 4000 CDs are the archive of NOAA data.

Data can be requested by users via DISPA office at Headquarters in Buenos Aires and delivered via FTP or CD.

SAC-C data also kept on CD, the other data on DLT

Applications

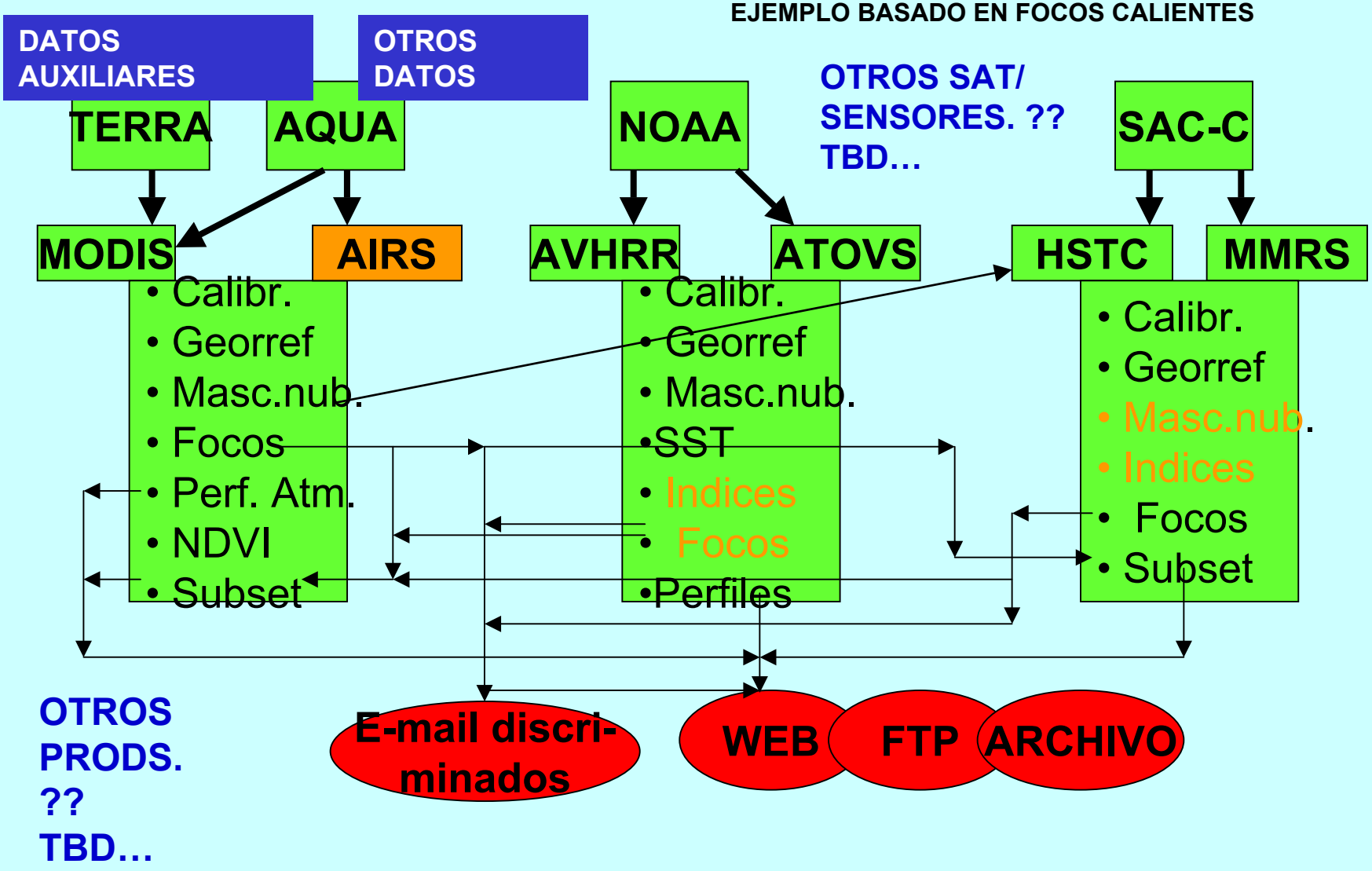
Development of Level 2 applicaction to integrate with MODIS

and SAC-C products

Automatization of the products generation.

Near Real Time delivery to users.

EJEMPLO BASADO EN FOCOS CALIENTES



Thank you!