Córdoba Ground Station
CONAE - Argentina

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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 acquires data from 16 satellites and delivers 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.
SAC-C Mission Control Center and Data Acquisition and Processing Area

Comisión Nacional de Actividades Espaciales

Miami, Dec 7th 2004

2004 Satellite Direct Readout Conference
SAC-C, launched in 2000 is member of the morning constellation for Earth observation joinly with : Landsat 7, EO-1 y Terra

**SAC-C cameras**

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

2 modes of acquisition:
- Real Time and Storage Mode
## Comisión Nacional de Actividades Espaciales

### MISSION

<table>
<thead>
<tr>
<th>Origen</th>
<th>USA</th>
<th>USA</th>
<th>FRANCIA</th>
<th>FRANCIA</th>
<th>EUROPA</th>
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<th>ISRAEL</th>
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<tbody>
<tr>
<td>Instrumento</td>
<td>TM</td>
<td>ETM</td>
<td>HRV Pan</td>
<td>HRV XS</td>
<td>HRV Pan</td>
<td>HRV XS</td>
<td>AMI SAR</td>
<td>HRPT</td>
<td>SeaWIFS</td>
<td>MMRP</td>
<td>HRTC</td>
<td>CCD</td>
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<td>Altitud</td>
<td>706 Km</td>
<td>705 Km</td>
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<td>Revisit</td>
<td>16 Días</td>
<td>16 Días</td>
<td>26 Dias</td>
<td>26 Dias</td>
<td>32 Dias</td>
<td>2 A 4 POR dia</td>
<td>1 Día</td>
<td>2 a 9 Días</td>
<td>2 a 4 Dias</td>
<td>16 Dias</td>
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<td>5 a 24 Dias</td>
<td>6 Días</td>
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<td>60 Km</td>
<td>99 Km</td>
<td>3000 Km</td>
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<td>30 mts</td>
<td>30 mts (V.IR)</td>
<td>30 mts</td>
<td>30 mts</td>
<td>10 mts</td>
<td>90 mts</td>
<td>1110 mts</td>
<td>1130 mts</td>
<td>175 mts</td>
<td>35 mts</td>
<td>2 mts</td>
<td>30 mts (V.IR)</td>
<td>10 mts (Pan)</td>
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<td>Cant. de Banda</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
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<td>5</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>10</td>
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### Resolution Spectral

- **Banda 1**: 15 mts (Pan)
- **Banda 2**: 10 mts (Pan)
- **Banda 3**: 10 mts (Pan)
- **Banda 4**: 90 mts
- **Banda 5**: 30 mts (V.IR)
- **Banda 6**: 30 mts (V.IR)
- **Banda 7**: 30 mts (V.IR)
- **Banda 8**: 30 mts (V.IR)
- **Banda 9**: 70 mts
- **Banda 10**: 110 mts
- **Banda 11**: 250 mts
- **Banda 12**: 500 mts
- **Banda 13**: 1000 mts

2004 Satellite Direct Readout Conference

Miami, Dec 7th 2004
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.
Comisión Nacional de Actividades Espaciales

Catalogues of data acquired at Cordoba Ground Station
Catalogue for NOAA Data

CATALOGO DE IMAGENES
NOAA

Años 2003 - 2004

Fechas de Recepción disponibles:

Temperatura del Mar  Catálogo NOAA 1998-2002

DISPA
Distribución de Imágenes Satelitales y Promoción de sus Aplicaciones
Comisión Nacional de Actividades Espaciales
Paseo Colon 751
1063 - Buenos Aires
TEL. (11) 4331-0074 int. 413
FAX (11) 4345-1678
Comisión Nacional de Actividades Espaciales

Catalogue for NOAA Data

CATALOGO DE IMAGENES
NOAA

Años 2003 - 2004
Fecha de Recepción : 01 - Dic - 2004

<table>
<thead>
<tr>
<th>Satélite</th>
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<th>Hora de Inicio (UTC)</th>
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Miami, Dec 7th 2004
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 application to integrate with MODIS and SAC-C products

Automatization of the products generation.

Near Real Time delivery to users.
EJEMPLO BASADO EN FOCOS CALIENTES

DATOS AUXILIARES

TERRA
- MODIS
  - Calibr.
  - Georref.
  - Masc.nub.
  - Focos
  - Perf. Atm.
  - NDVI
  - Subset

AQUA
- AIRS
  - Calibr.
  - Georref.
  - Masc.nub.
  - SST
  - Indices
  - Focos
  - Perfiles

NOAA
- AVHRR
  - Calibr.
  - Georref.
  - Masc.nub.
  - SST
  - Indices
  - Focos
  - Perfiles

SAC-C
- ATOVS
  - Calibr.
  - Georref.
  - Masc.nub.
  - Indices
  - Focos
  - Subset

WEB
FTP
ARCHIVO
E-mail discriminados

OTROS DATOS

OTROS SAT/SENSORES. ?? TBD...

OTROS PRODS. ?? TBD...
Thank you!