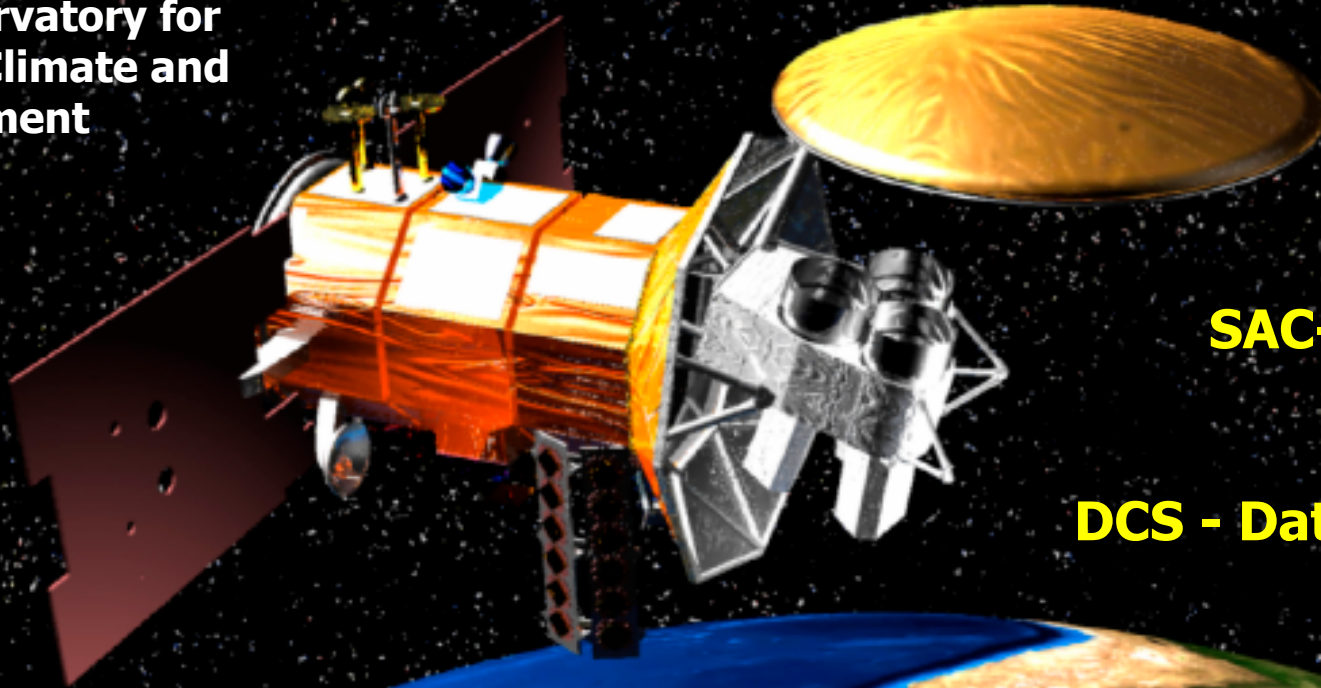




SAC-D/Aquarius



**An Observatory for
Ocean, Climate and
Environment**

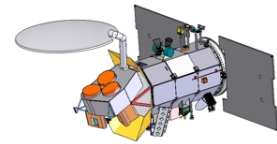


SAC-D/Aquarius

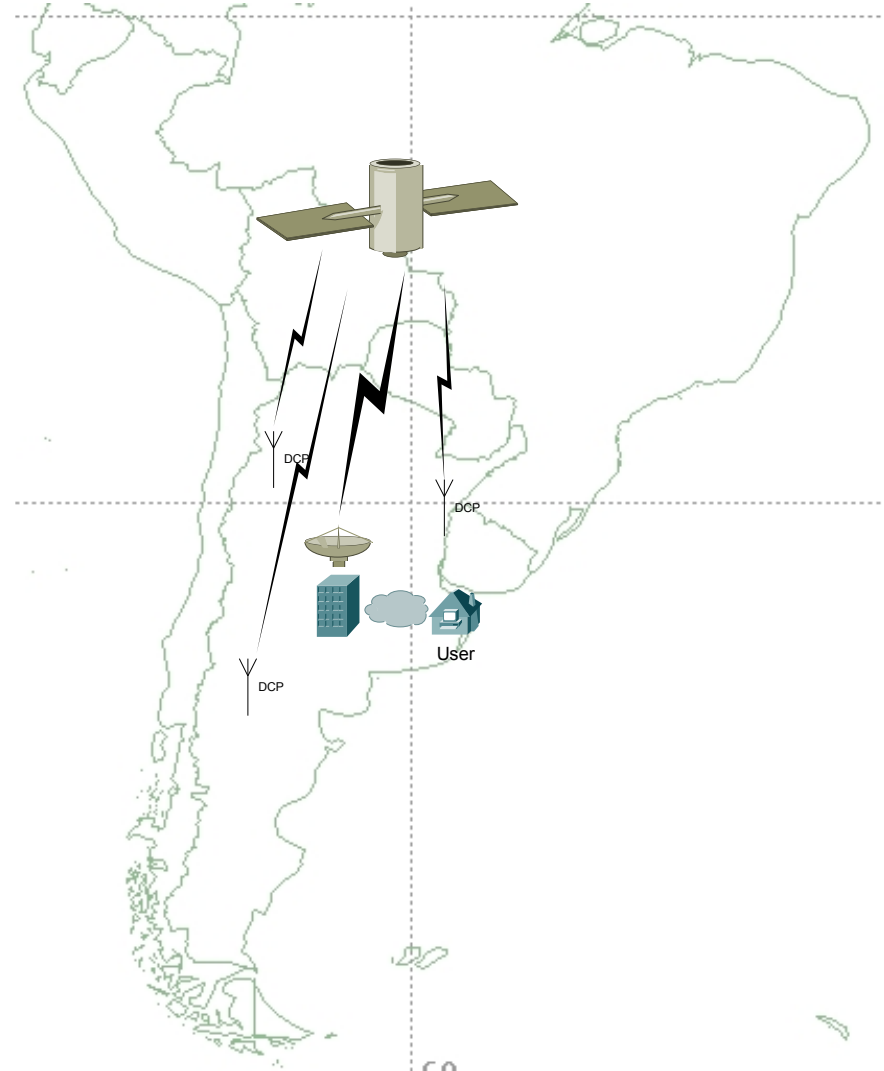
**DCS - Data Collection
System**

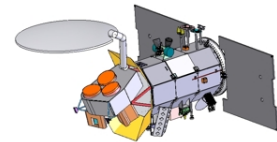
**Gustavo Mercado
CONAE**

***10th Aquarius SAC-D Science Meeting
Buenos Aires – November 17 – 19, 2015***

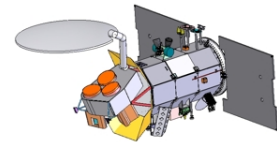


- Data Collection Platform
- Instrument on board Observatory
- TT&C Ground Station
- Pre Processing and Distribution Center
- Users

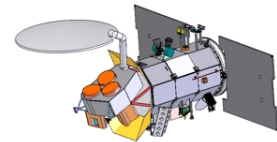




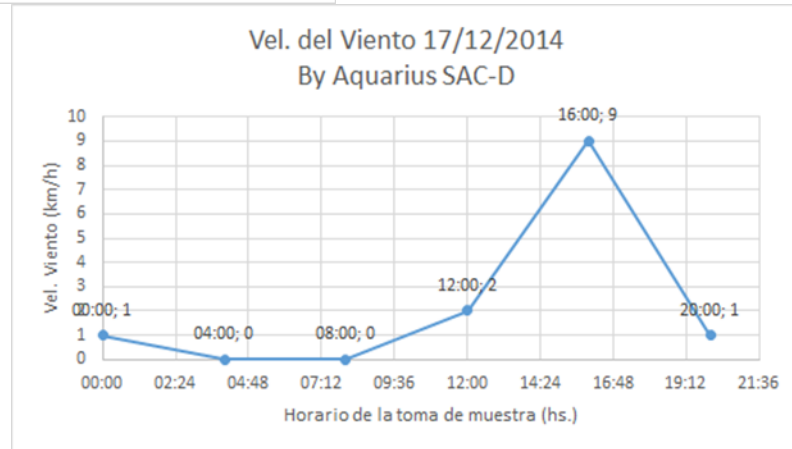
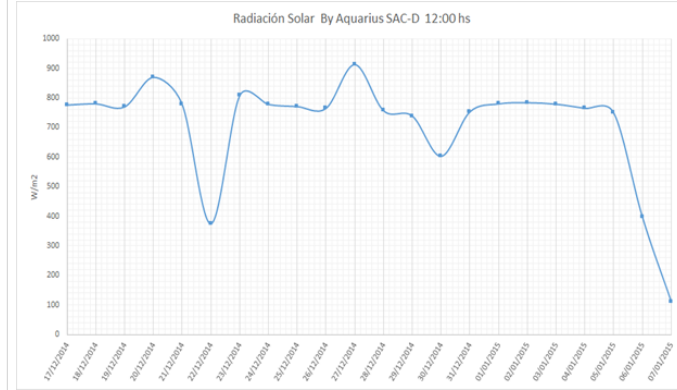
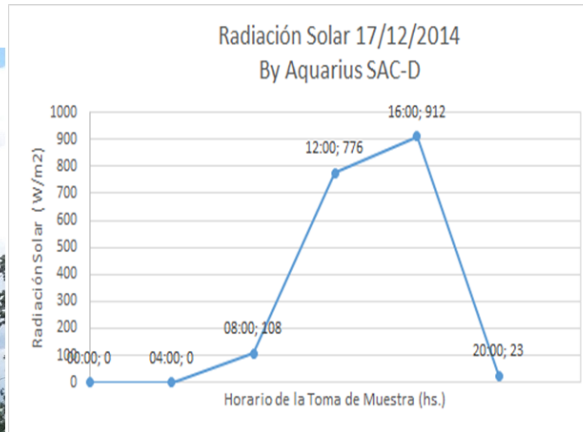
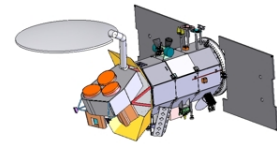
System	Argentine DCS
Mission	SAC-D (Environmental Data Collection)
Coverage	National / Regional
Operational Mode	Store and Forward
Routing	Falda del Carmen
Proc and Dist Center	Falda del Carmen
Platform Density	200 (maximum at Argentine territory)
Platform Operation	Random transmission (30 to 220 sec period)
Revisit	2/4 contacts per day
Footprint	2300 Km

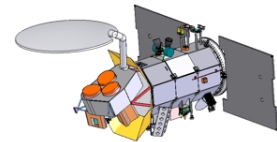


Message type	Argos Compatible
Message Size	46 bytes Maximum useful data 32 bytes
Tx Message duration	Max 920 ms
DCP position	none (GPS optional)
Reliability	CRC (optional)
Uplink	UHF 401.55 MHz
Data Security	N/A
Platform compatible	Argos Compatible
User access delay	< 1day
Simultaneous message received	1 max



Institution	Department	Type of Service Required	Data Logger	Set of sensors	Amount of Stations	Station Location
CONAE	DCS Admin	Testing	Proprietary for Test	N/A	2	Mendoza City
Universidad Nacional de la Plata - UNLP	Faculty of Engineering	Testing	Proprietary for Test	N/A	2	La Plata City
Escuela ORT	Buenos Aires ORT school	Educational Experience	Davies Avant Pro	environmental	1	Buenos Aires ORT school
Instituto Antártico Argentino	Glaciology Department	Glaciology	Own Design	environmental	2	Glaciers in Antarctica
Universidad de Tucumán	Ionosphere Laboratory	ionospheric communications	own design	own	1+	Tucumán City
UTN - Mendoza and IANIGLA Conicet	Department of Electronics	Harsh Environment	SADA-SAT data logger (designed and built by UTN for IANIGLA)	radiation and environmental	2+	Patagonian forest - El Chaltén - Lago del Desierto
CNIA-INTA	Climate and Water Institute	Agronomy and Meteorology	Nimbus Data Logger (INTA)	Agronomy and Meteorology	2+	Castelar and nationwide
Departamento General de Irrigación - Mendoza	ICT Office	Flow in Irrigation Systems	IT&T data logger	flow	10+	Irrigation Canal System - Mendoza





Visualizador de Estaciones | Datos Diarios | Datos Históricos | Estadística

Visualizador de Estaciones

Visualizador de Estaciones

1 Seleccione una Estación Buscar:

Visualizando Solo ubicación [Cambiar](#)

Capa Base

- Google relieve
- Google Satelital
- Google Callejero
- Google Híbrido

Capas superpuestas

- Division departamental
- Convencionales
- Automáticas sin conexión
- Automáticas en línea

- Automática en línea
- Automática Sin Conexión
- Convencional
- Con Alertas Vigentes

[Informar de un error de Maps](#)

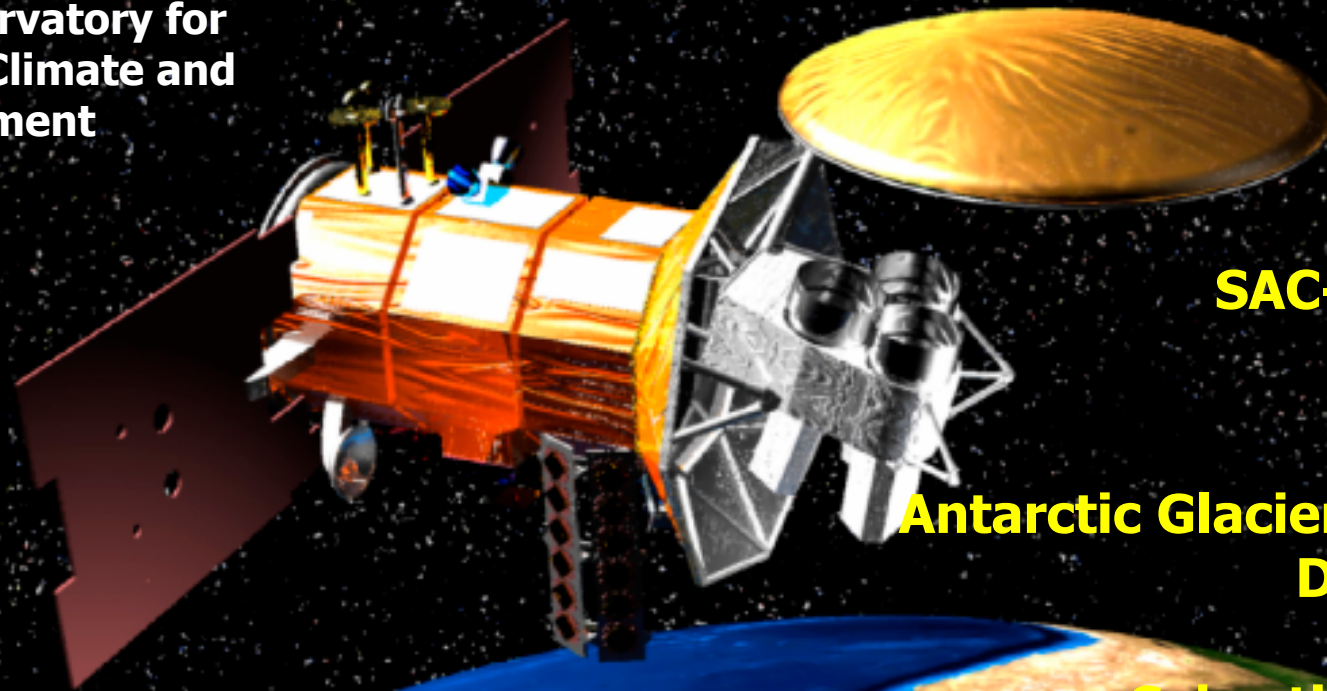




SAC-D/Aquarius



**An Observatory for
Ocean, Climate and
Environment**



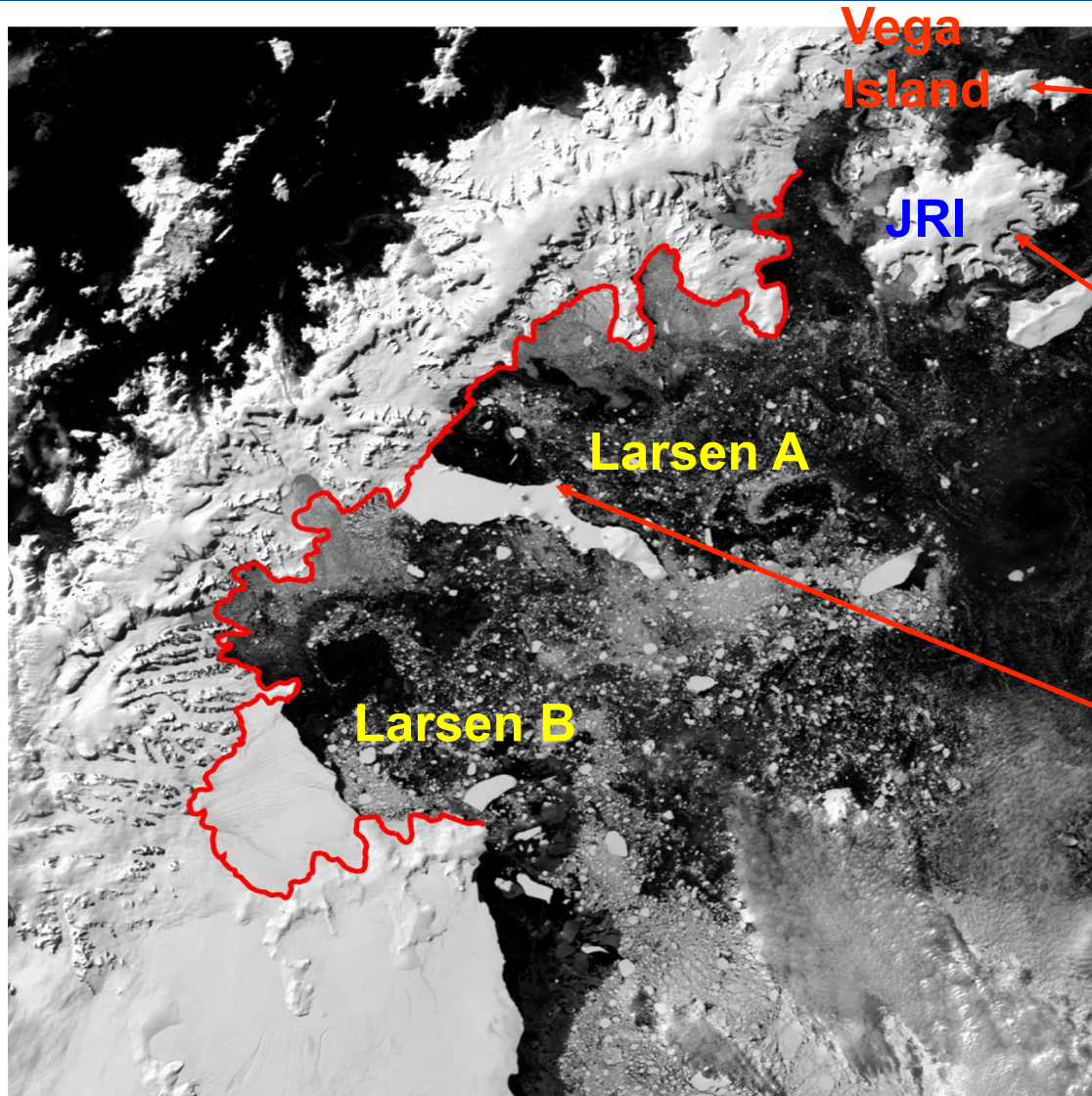
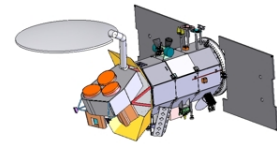
SAC-D/Aquarius

**DCS
Antarctic Glacier Monitoring
Data Logging**

**Sebastián Marinsek
Instituto Antártico Argentino
Dirección Nacional del Antártico**

***10th Aquarius SAC-D Science Meeting
Buenos Aires – November 17 – 19, 2015***

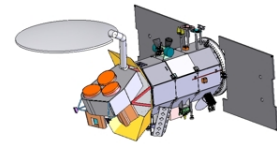
Antarctic Peninsula



Bahía del
Diablo
Glacier

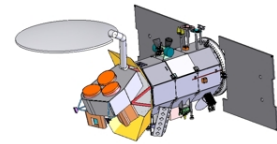
Gourdon
Glacier

Matienzo
Station
(Argentina)



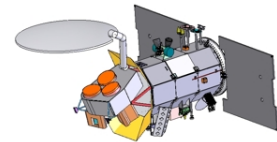
First Installation in Antarctica Gourdon Glacier – 2014



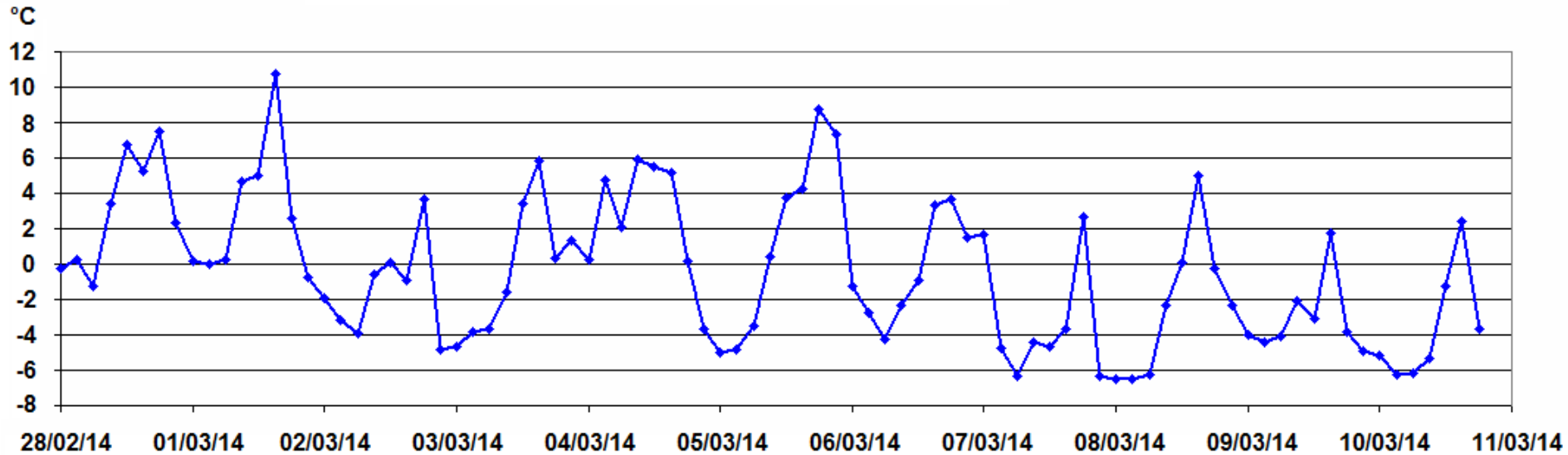


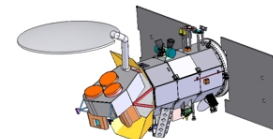
First Installation in Antarctica Gourdon Glacier – 2014





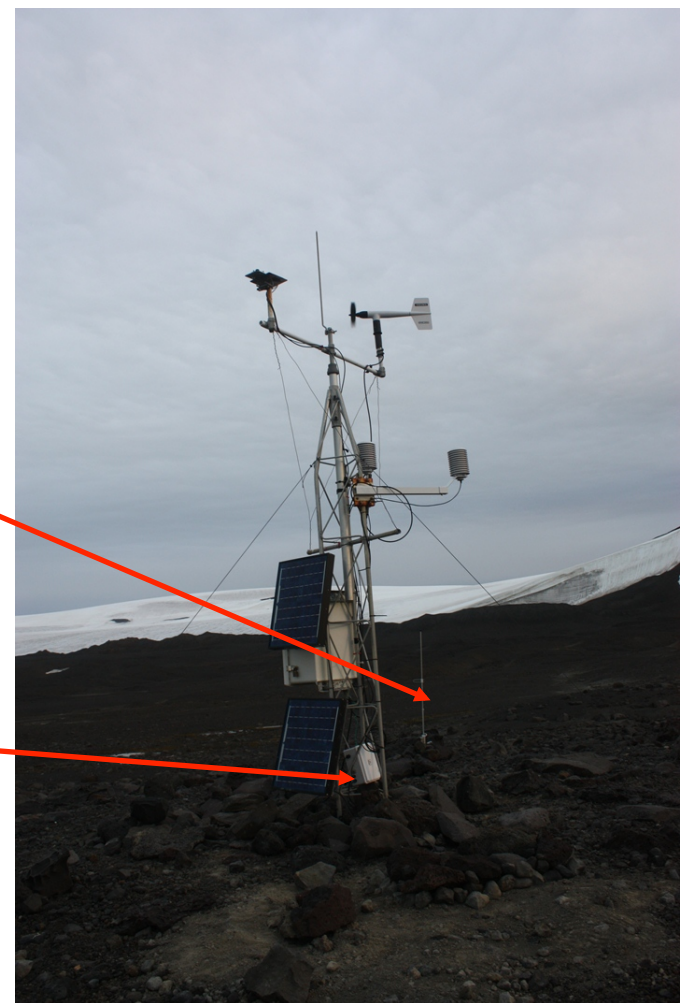
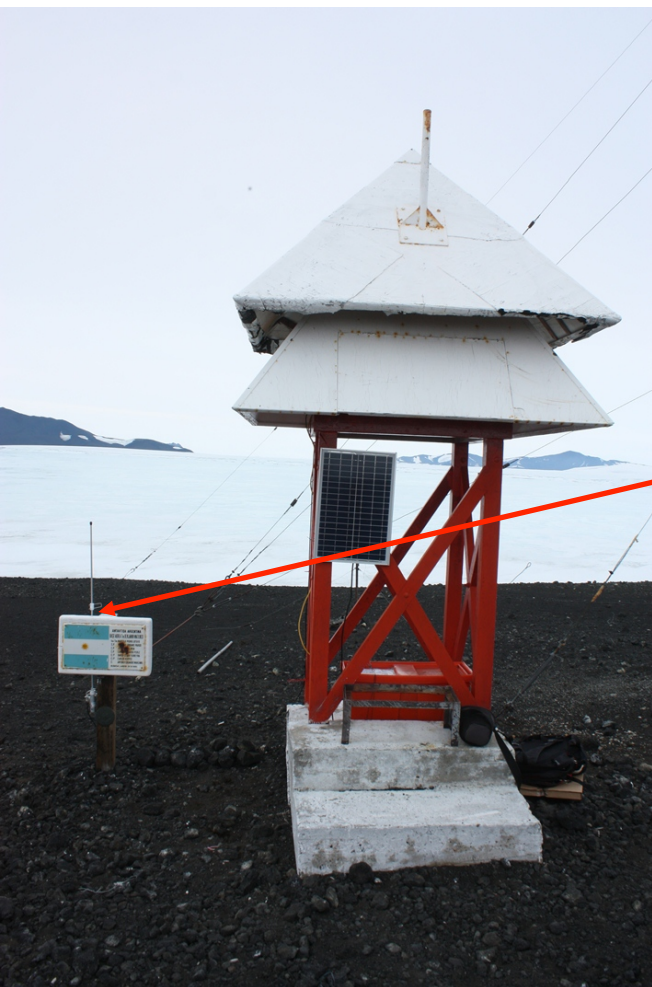
First Temperature Data Received Gourdon Glacier – 2014





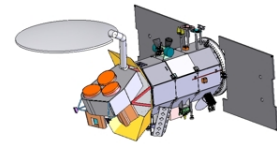
2015 New Systems

Matienzo Station – Bahía del Diablo Glacier



PTT Antenna

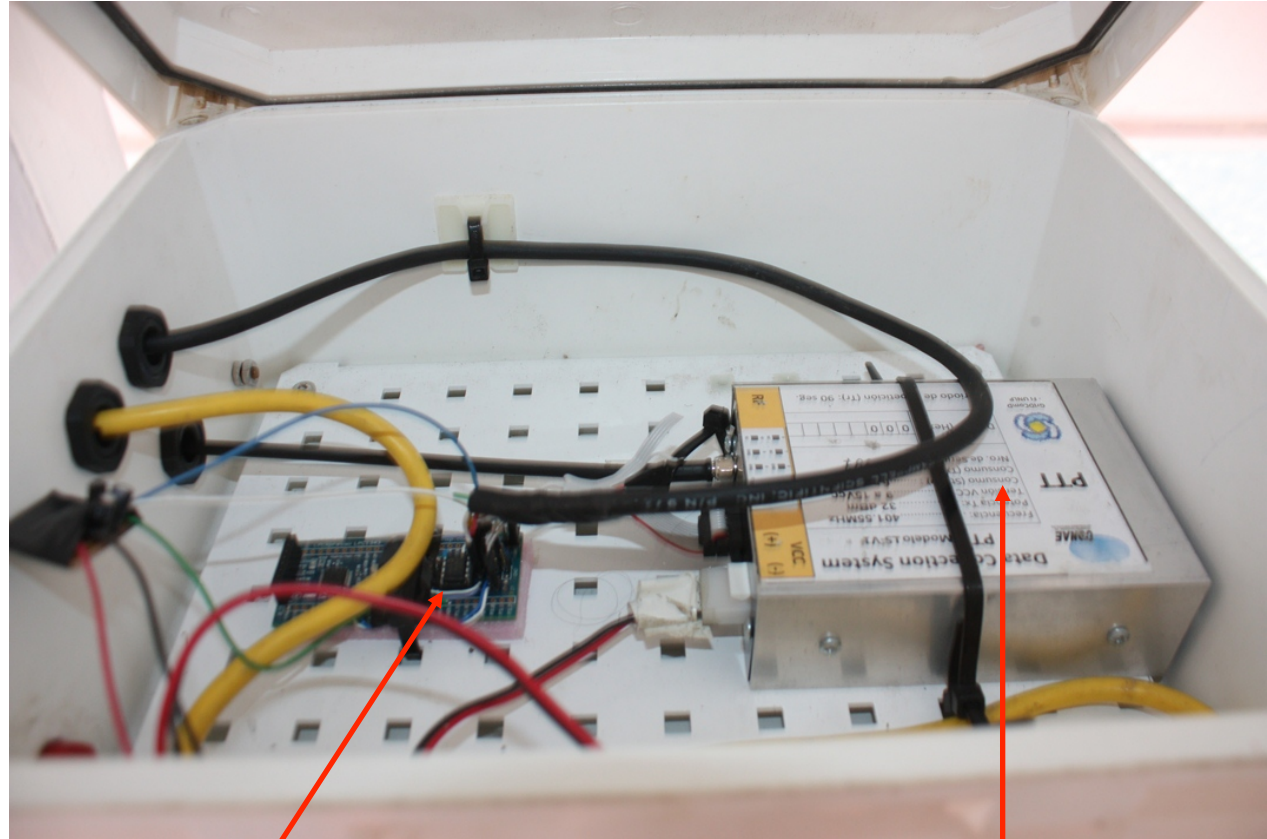
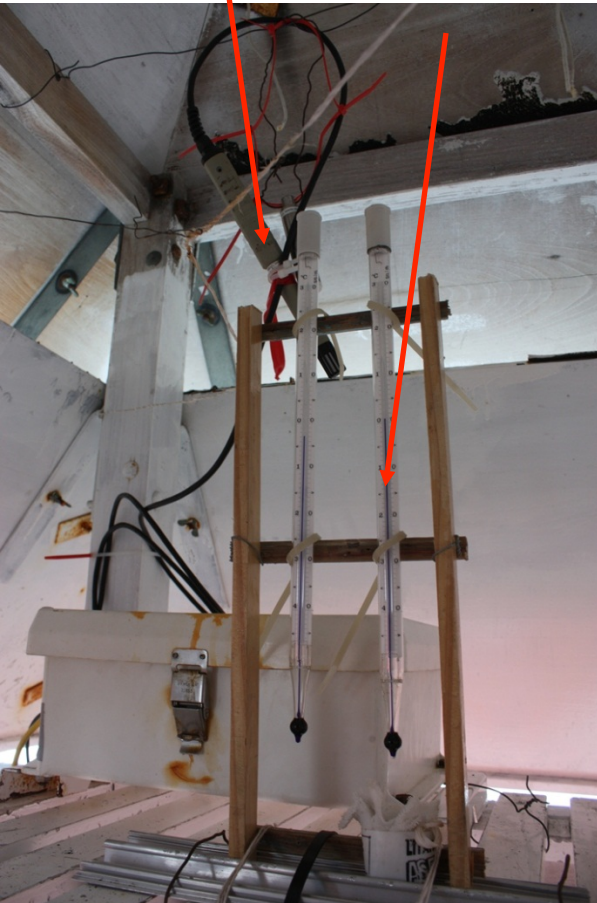
Acquisition
Board
and
PTT



Temperature
and Humidity
Sensor

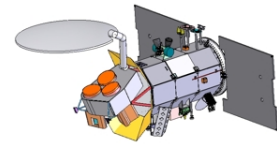
Acquisition Board – PTT Calibration Thermometers

Calibration



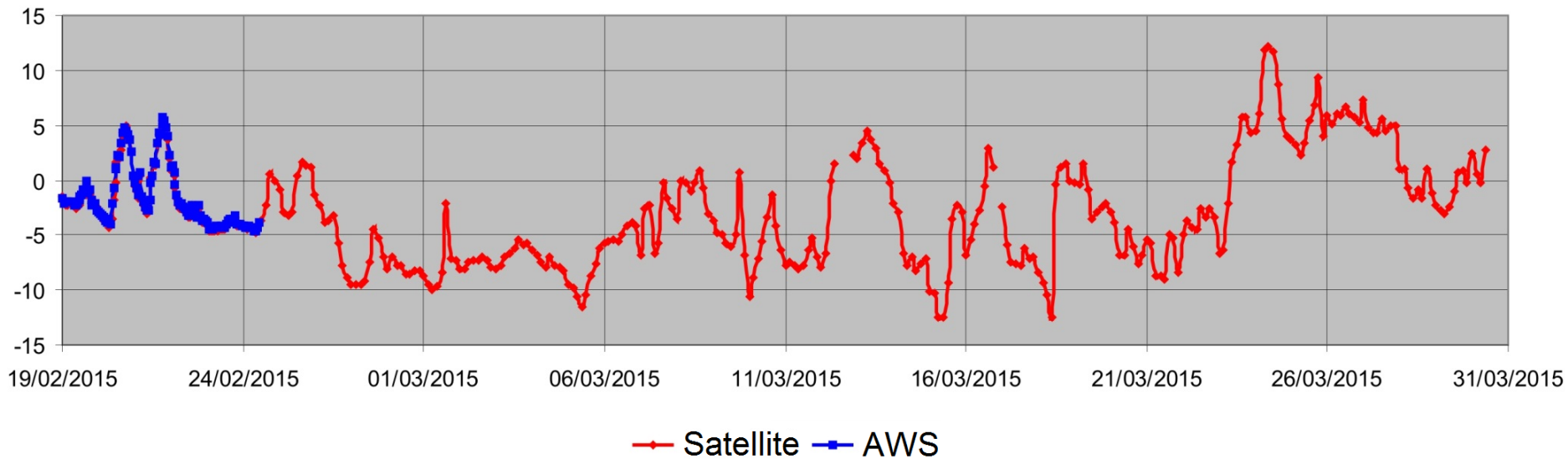
Acquisition
Board

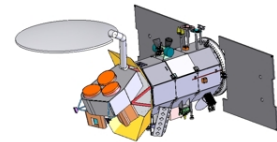
PTT



Bahía del Diablo AWS with data received after last visit

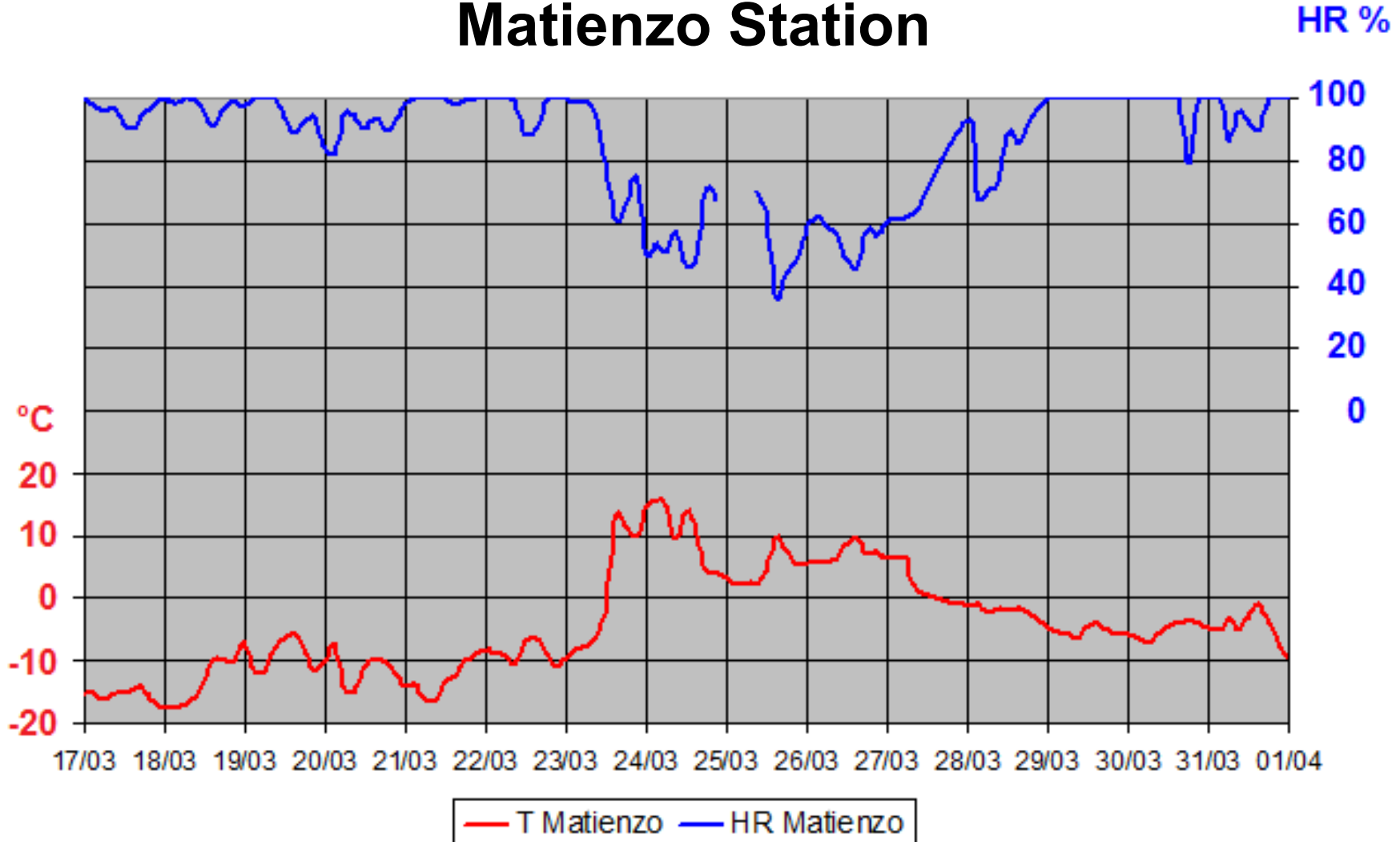
Temperature [°C]

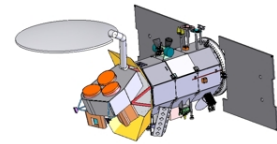




Warm Event – 24/03/2015

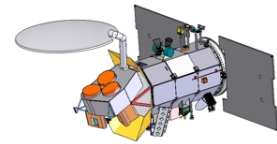
Matienzo Station





Access Difficulties





Thank you for your attention!!

Gustavo Mercado - mercado@conae.gov.ar

Sebastián Marinsek - smarinsek@dna.gov.ar