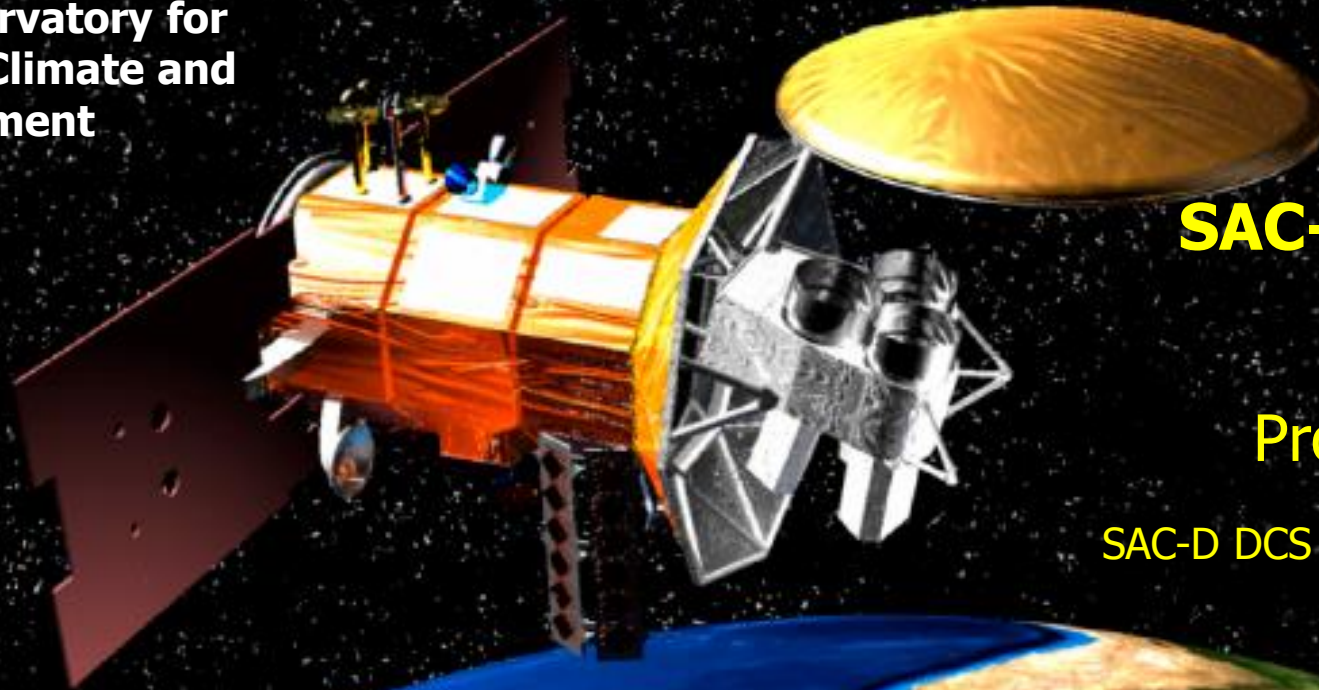




# SAC-D/Aquarius



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

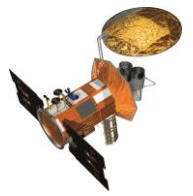


**SAC-D/Aquarius**

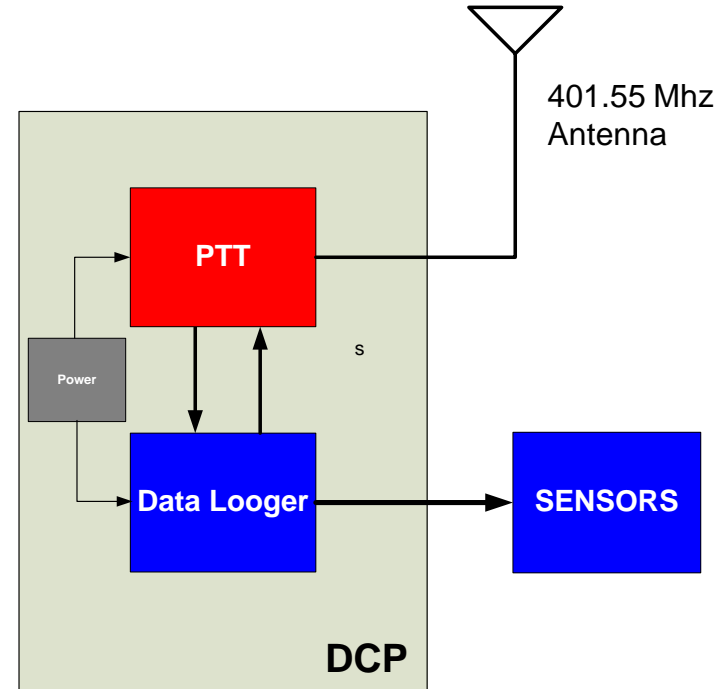
**Progress in DCS**

**SAC-D DCS IE Gustavo Mercado**

***8th Aquarius SAC-D Science Meeting  
Buenos Aires – November 12-14, 2013***



**DCS main components**  
Source CONAE



**DCP Data Collection Platform block diagram**  
Source UNLP

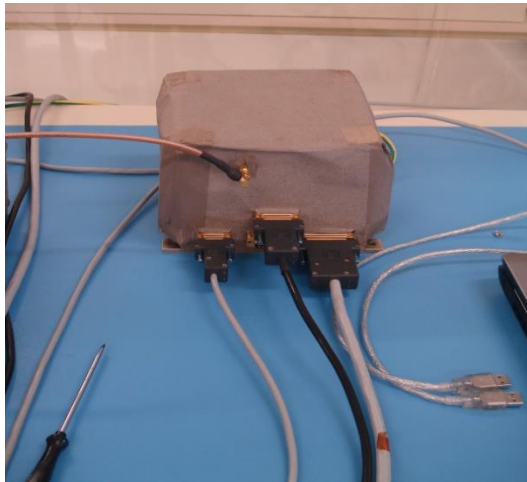


<b>Institution</b>	<b>Escuela Técnica ORT Argentina</b>
<b>Office/Group</b>	<b>Electronic Lab</b>
<b>Program/Project</b>	<b>Teaching satellite technology</b>
<b>Type of Measurement</b>	<b>Meteorological</b>
<b>Datalogger Class</b>	<b>Davis Pro Advantage</b>
<b>DCP Site Location</b>	<b>Buenos Aires City</b>
<b>DCPs Expected</b>	<b>1</b>
<b>Status</b>	<b>Nominal operation</b>

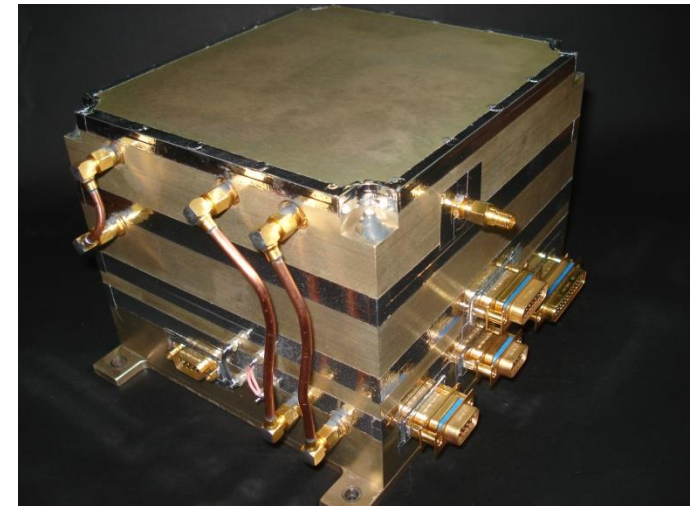




<b>Institution</b>	Universidad Nacional de la Plata
<b>Office/Group</b>	Facultad de Ingeniería - GridComD
<b>Program/Project</b>	DCS Development Contractor
<b>Type of Measurement</b>	DCS system & functional testing
<b>Datalogger Class</b>	Testing prototype
<b>DCP Site Location</b>	La Plata, Buenos Aires province
<b>DCPs Expected</b>	2
<b>Status</b>	Nominal operation

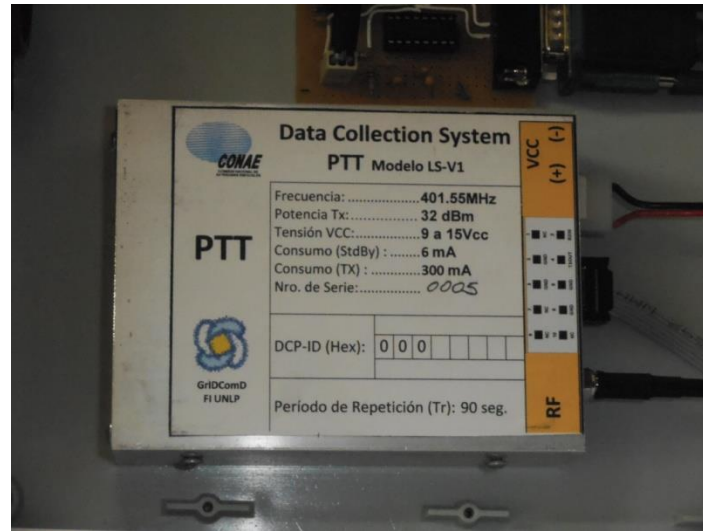


**DCS Instrument –  
Flight model  
development**  
Source UNLP and CONAE





Institution	CONAE
Office/Group	DCS Operation Group
Program/Project	DCS Operational Dev
Type of Measurement	DCS operational testing
Datalogger Class	Testing prototype
DCP Site Location	Mendoza city
DCPs Expected	2
Status	Nominal operation



Source CONAE/UNLP



<b>Institution</b>	<b>CNIA-INTA Castelar</b>
<b>Office/Group</b>	<b>Instituto de Clima y Agua</b>
<b>Program/Project</b>	<b>SIGA - Sistema de Información y Gestión Agrometeorológico</b>
<b>Type of Measurement</b>	<b>Agro Meteorological</b>
<b>Datalogger Class</b>	<b>Nimbus THP</b>
<b>DCP Site Location</b>	<b>Castelar, Buenos Aires Province</b>
<b>DCPs Expected</b>	<b>First DCP for system testing plus 10 for future use</b>
<b>Status</b>	<b>Testing step</b>



Diseño de estaciones agrometeorológicas automáticas Nimbus THP.  
 Por Marcelo C. BELLONI, Mario D'INDIO, Rafael Oscar RODRIGUEZ, Norberto FERNANDEZ, Andres Fernando MOLTONI y Ángel D. BLASÓN



<b>Institution</b>	<b>Universidad Nacional del Tucumán</b>
<b>Office/Group</b>	<b>Telecommunications Lab</b>
<b>Program/Project</b>	<b>Ionospheric Reaserch</b>
<b>Type of Measurement</b>	<b>Llightning detection map</b>
<b>Datalogger Class</b>	<b>Self manufactured</b>
<b>DCP Site Location</b>	<b>Tucuman City</b>
<b>DCPs Expected</b>	<b>First DCP for system testing plus TBD for future use</b>
<b>Status</b>	<b>Testing step</b>

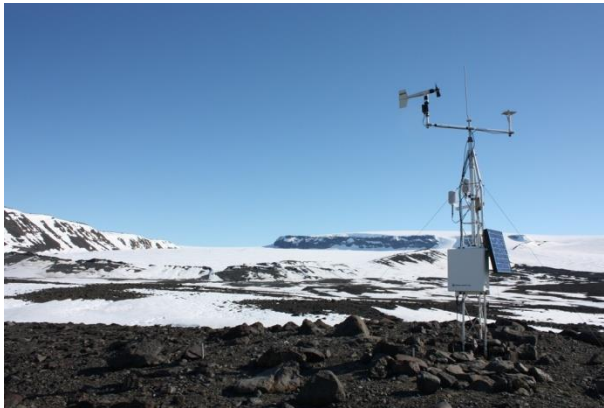


**Classic thunderstorm,  
with lightning. In the  
summer 2013. Argentina.  
Los cocos, province of  
Córdoba.**

Source wikipedia

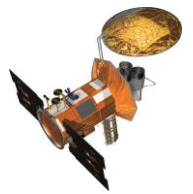


<b>Institution</b>	<b>Instituto Antártico Argentino</b>
<b>Office/Group</b>	<b>División Glaciología</b>
<b>Program/Project</b>	<b>Investigación Remota de Glaciares</b>
<b>Type of Measurement</b>	<b>Meteorological</b>
<b>Datalogger Class</b>	<b>CR10X Measurement and Control System</b>
<b>DCP Site Location</b>	<b>Bahía del Diablo, ubicado en la Isla Vega de la Península Antártica</b>
<b>DCPs Expected</b>	<b>2</b>
<b>Status</b>	<b>MOU signing, interface developing</b>

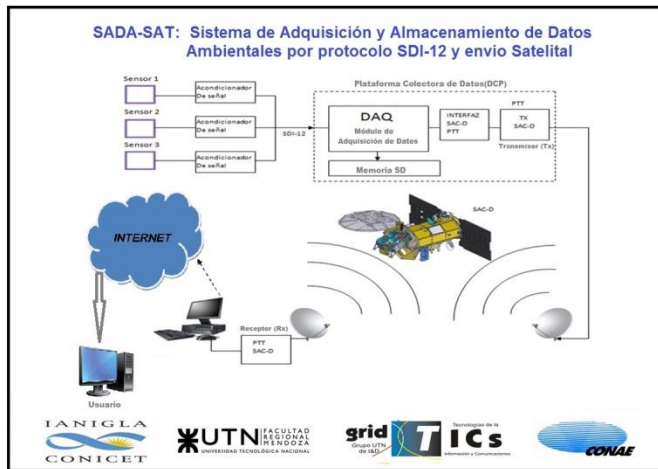


**Estación Meteorológica Glaciar  
Bahía del Diablo – Antártida  
Source Ing. Sebastián Marinsek IAA**



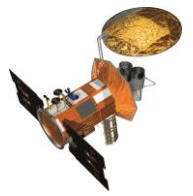


<b>Institution</b>	Universidad Tecnológica Nacional Mendoza - CONICET
<b>Office/Group</b>	Electronic Lab – Ianigla Conicet
<b>Program/Project</b>	Use of Wireless Sensor Networks in Patagonia Forest Research
<b>Type of Measurement</b>	Meteorological
<b>Datalogger Class</b>	SADA Sat
<b>DCP Site Location</b>	El Chalten – Austral Patagonia
<b>DCPs Expected</b>	2
<b>Status</b>	MOU signed – interface developing



**SADA SAT block diagram**  
Source UTN FRM





<b>Institution</b>	<b>Comisión Nacional de Energía Atómica CNEA</b>
<b>Office/Group</b>	<b>International Center for Earth Sciences (ICES)</b>
<b>Program/Project</b>	<b>Vulcanism Research</b>
<b>Type of Measurement</b>	<b>Temp and acoustic measurements in volcano summit</b>
<b>Datalogger Class</b>	<b>TBD</b>
<b>DCP Site Location</b>	<b>Peteroa Volcano, Mendoza Province</b>
<b>DCPs Expected</b>	<b>1</b>
<b>Status</b>	<b>Mou signing, Interface developing</b>



<b>Institution</b>	<b>Subsecretaría de Recursos Hídricos</b>
<b>Office/Group</b>	<b>Dirección Nacional de Conservación y Protección de los Recursos Hídricos</b>
<b>Program/Project</b>	<b>COHIFE – Comité Hidrico Federal</b>
<b>Type of Measurement</b>	<b>Hydro Metereologic, river hydric flow</b>
<b>Datalogger Class</b>	<b>Several types and models</b>
<b>DCP Site Location</b>	<b>Andresito, Santa Fe province</b>
<b>DCPs Expected</b>	<b>First DCP for system testing plus 10 for future use</b>
<b>Status</b>	<b>MOU signing, Interface developing</b>



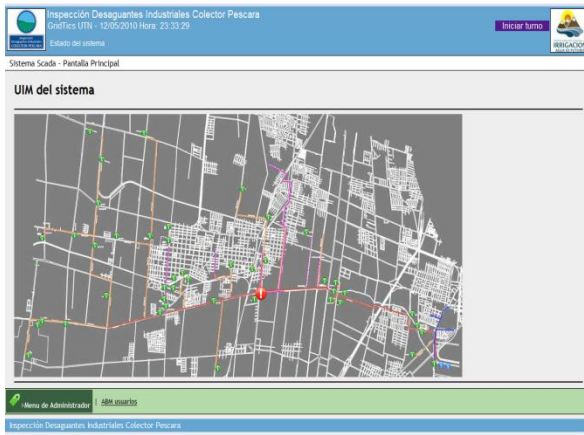
<b>Institution</b>	<b>CONAE</b>
<b>Office/Group</b>	<b>SAOCOM</b>
<b>Program/Project</b>	<b>Saocom ground validation</b>
<b>Type of Measurement</b>	<b>soil moisture</b>
<b>Datalogger Class</b>	<b>PLC 16 IT&amp;T</b>
<b>DCP Site Location</b>	<b>Cordoba province</b>
<b>DCPs Expected</b>	<b>1 plus TBD</b>
<b>Status</b>	<b>Interface developing</b>



<b>Institution</b>	<b>Universidad de Cuyo</b>
<b>Office/Group</b>	<b>IMERIS</b>
<b>Program/Project</b>	<b>SIRGAS-CON-D-Sur</b>
<b>Type of Measurement</b>	<b>air humidity for tropospheric delay study</b>
<b>Datalogger Class</b>	<b>Davis vantage pro</b>
<b>DCP Site Location</b>	<b>La Paz city, Mendoza province</b>
<b>DCPs Expected</b>	<b>1</b>
<b>Status</b>	<b>MOU signing, interface developing</b>



<b>Institution</b>	Departamento General de Irrigación Mendoza
<b>Office/Group</b>	Hydric Monitoring Office
<b>Program/Project</b>	Flow measurement in streams and tributaries
<b>Type of Measurement</b>	hydric flow
<b>Datalogger Class</b>	PLC 16 IT&T
<b>DCP Site Location</b>	Irrigated area of mendoza province
<b>DCPs Expected</b>	First DCP for system testing plus TBD for future use
<b>Status</b>	MOU signing, interface developing



**SCADA Output Display**  
Source DGI



<b>Institution</b>	<b>Instituto Nacional de Investigación y Desarrollo Pesquero (INIDEP)</b>
<b>Office/Group</b>	<b>Gabinete de Hidroacústica</b>
<b>Program/Project</b>	<b>n/a</b>
<b>Type of Measurement</b>	<b>echo sounder, temperature and GPS measurements</b>
<b>Datalogger Class</b>	<b>TBD over fixed sea buoy</b>
<b>DCP Site Location</b>	<b>Argentine Sea near Mar del Plata city</b>
<b>DCPs Expected</b>	<b>1</b>
<b>Status</b>	<b>evaluation of budget</b>

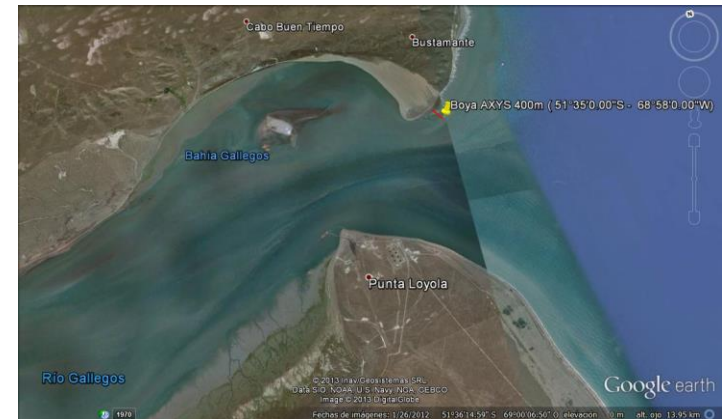


<b>Institution</b>	<b>Universidad Tecnológica Nacional Santa Cruz</b>
<b>Office/Group</b>	<b>Grupo de Energias Renovables</b>
<b>Program/Project</b>	<b>R&amp;D of tidal energy near shore</b>
<b>Type of Measurement</b>	<b>measuring sea currents</b>
<b>Datalogger Class</b>	<b>Axys and Wavescan Buoys</b>
<b>DCP Site Location</b>	<b>Strait of Magellan Southern Argentine Sea</b>
<b>DCPs Expected</b>	<b>2</b>
<b>Status</b>	<b>MOU signing, interface devoloping</b>



**Wavescan Buoy**  
Source Fugro

**Axys buoy**  
location in the  
**Strait of Magellan**  
Source UTN FRSC







## Questions

