

Section: Data & Applications II

CARMEN 1 Data Availability

Marcelo E. Colazo

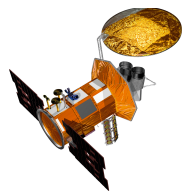
Understanding
the Interaction
Between Ocean
Circulation, the
Water Cycle,
and Climate by
Measuring
Ocean Salinity



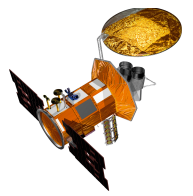
Aquarius/SAC-D



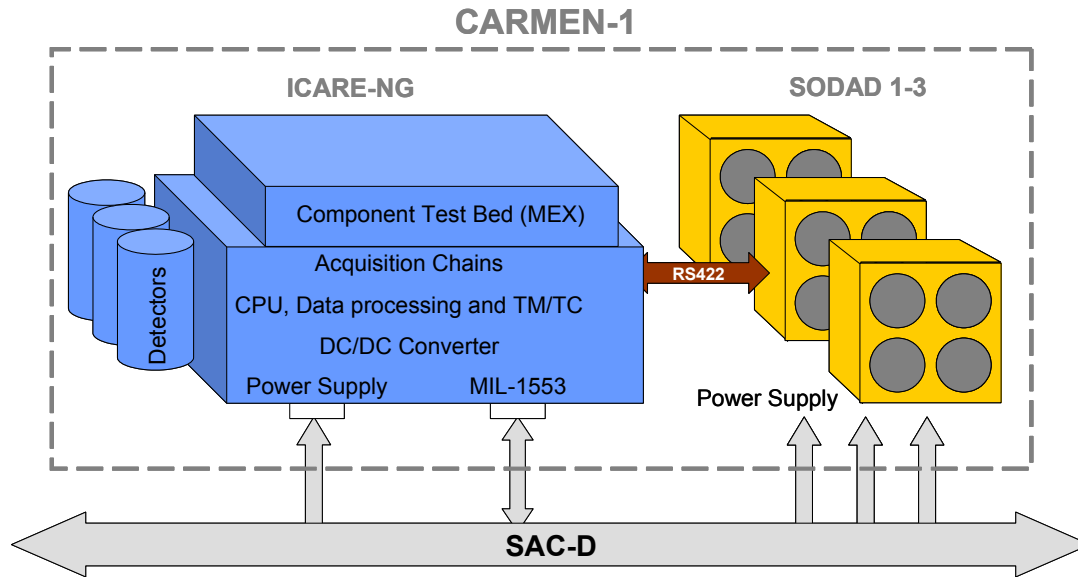
**10th Aquarius /SAC-D Science Meeting
Buenos Aires, Argentina
November 17-19, 2015**



1. CARMEN-1 Overview
2. Level 1 Data Format
3. CONAE Level 2 Products
4. CONAE Level 3 Products
5. CARMEN-1 Products Web Page

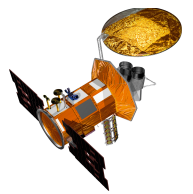


CARMEN-1 is the mission name for an “instrument” composed by ICARE-NG, 3 SODAD units and their interconnection data harness aboard SAC-D satellite.



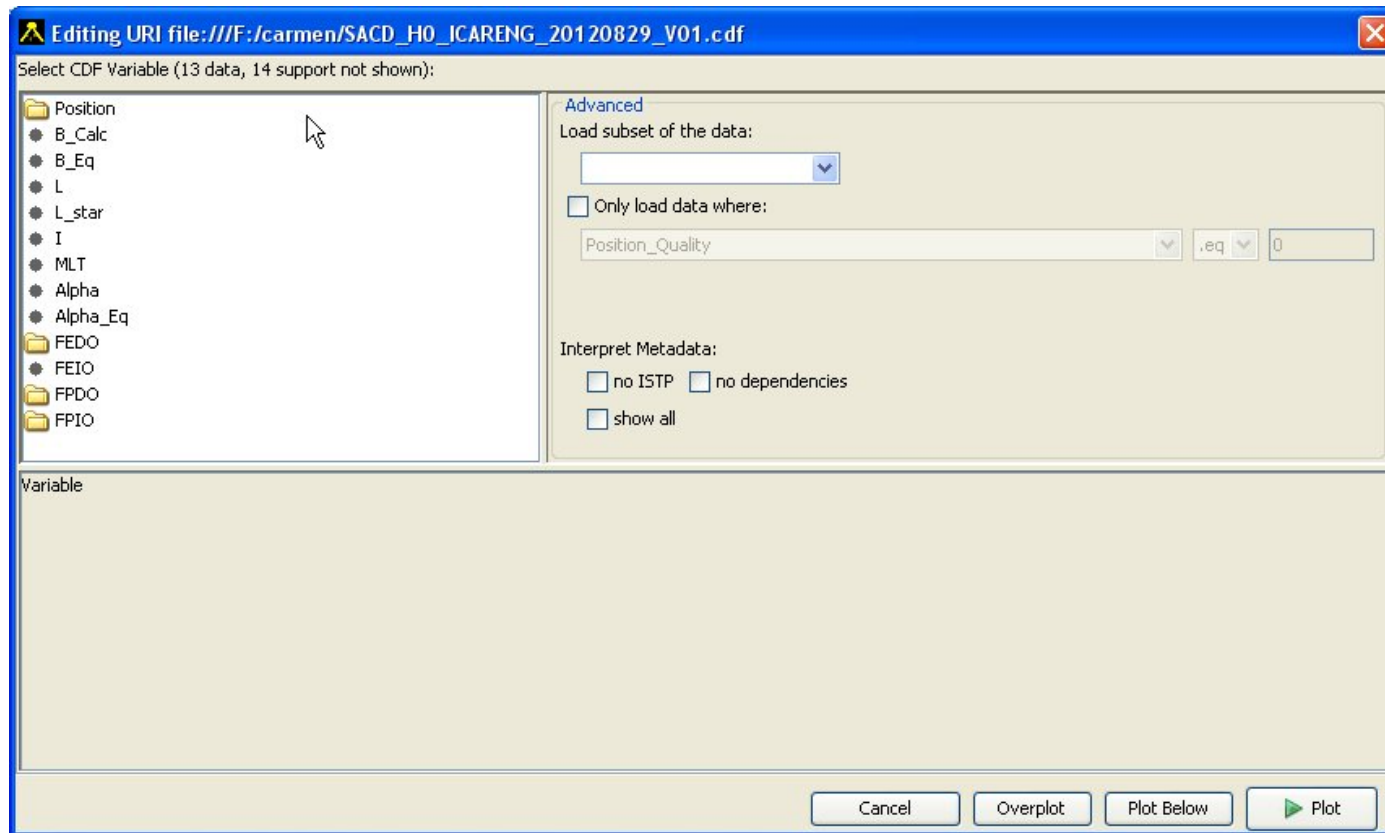
ICARE-NG is a dedicated instrument to study the influence of space radiation on advanced components

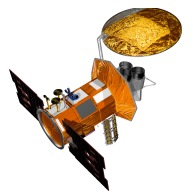
SODAD detectors are dedicated instruments to study micrometeoroids and micro orbital debris in space environment.



The CARMEN 1 Level 1 Data files are available in CDF Format.

<http://cdf.gsfc.nasa.gov>

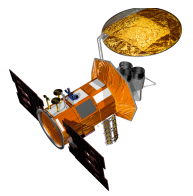




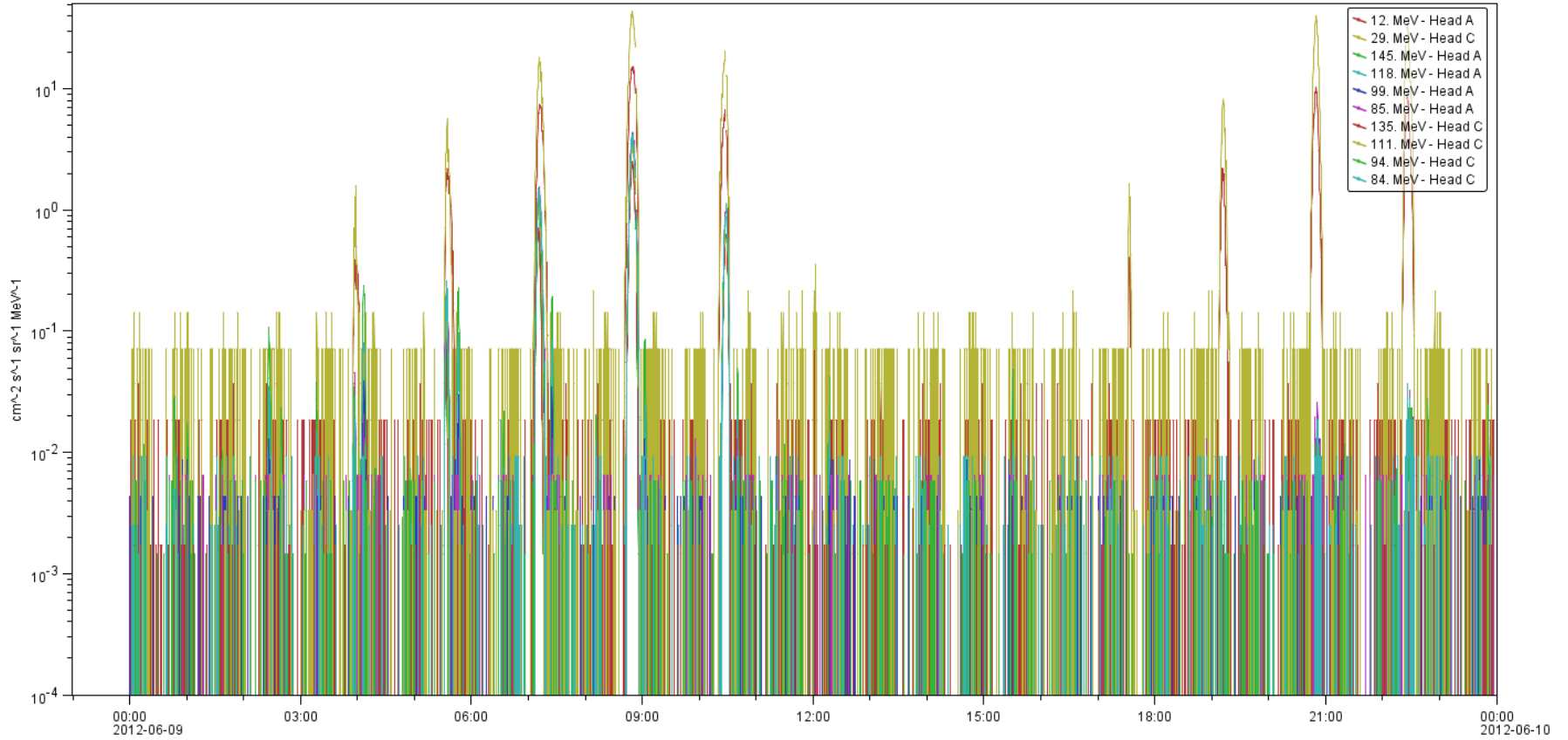
Flux of Particles

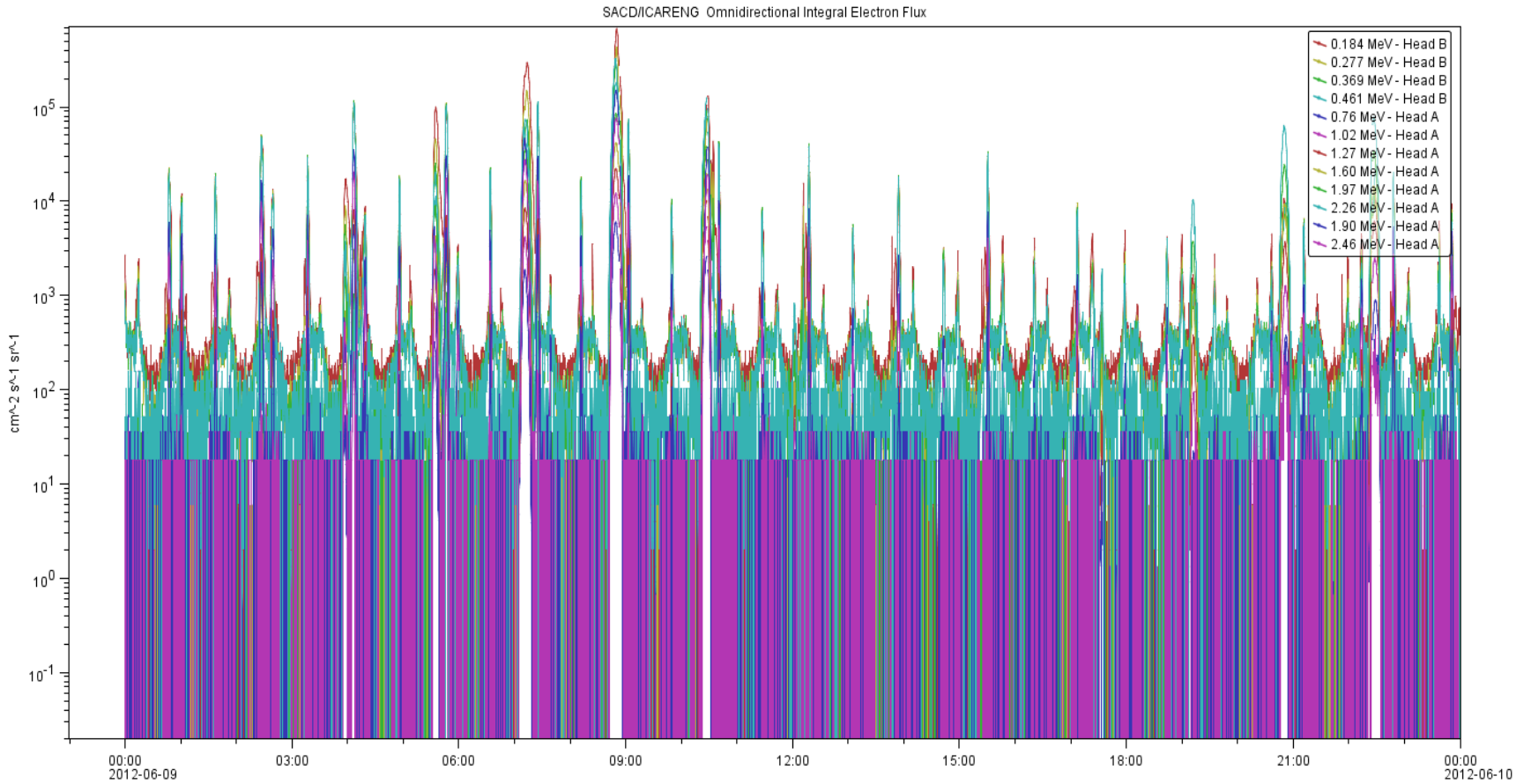
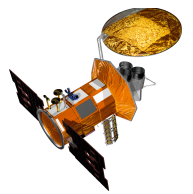
- FPDO: Omni-directional Differential Proton Flux – units: $\text{MeV}^{-1} \text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1}$. Var type = CDF_REAL4
- FPIO: Omni-directional Integral Proton Flux – units: $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1}$. Var type = CDF_REAL4
- FEDO: Omni-directional Differential Electron Flux – units: $\text{MeV}^{-1} \text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1}$. Var type = CDF_REAL4
- FEIO: Omni-directional Integral Electron Flux – units: $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1}$. Var type = CDF_REAL4

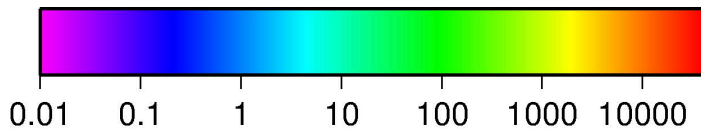
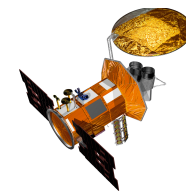
Flux is measured in energy channels up to hundreds of MeV.



SACD/CARENG Omnidirectional Differential Proton Flux

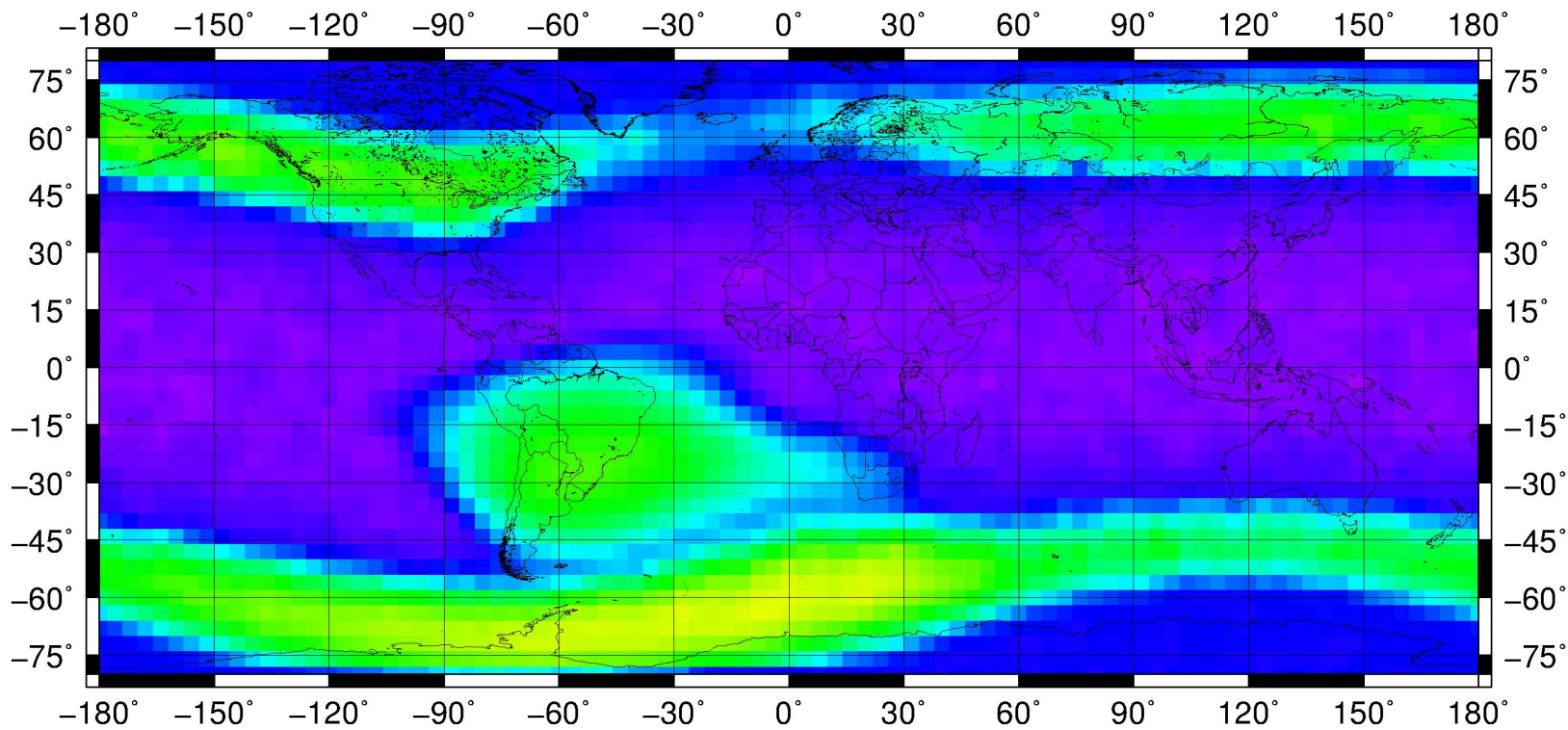


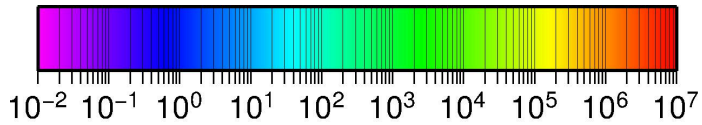
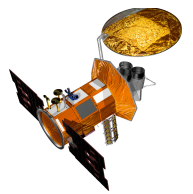




FPIO 90 MeV Head A [cm⁻² s⁻¹ sr⁻¹] Average

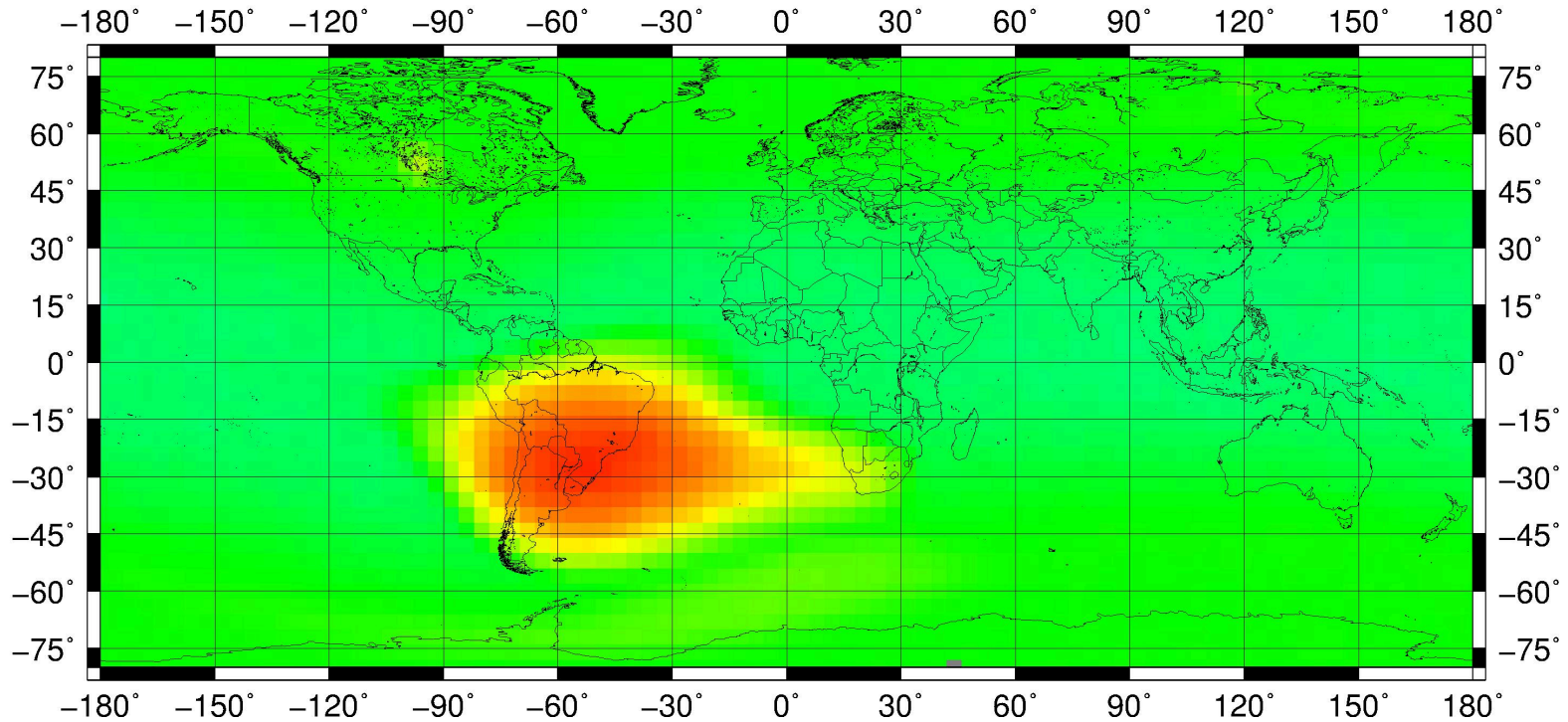
SAC-D / ICARENG 2015/03

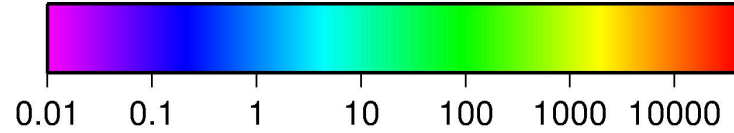
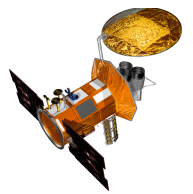




FEIO Elect. 1.192 MeV Head B [cm⁻² s⁻¹ sr⁻¹] Average

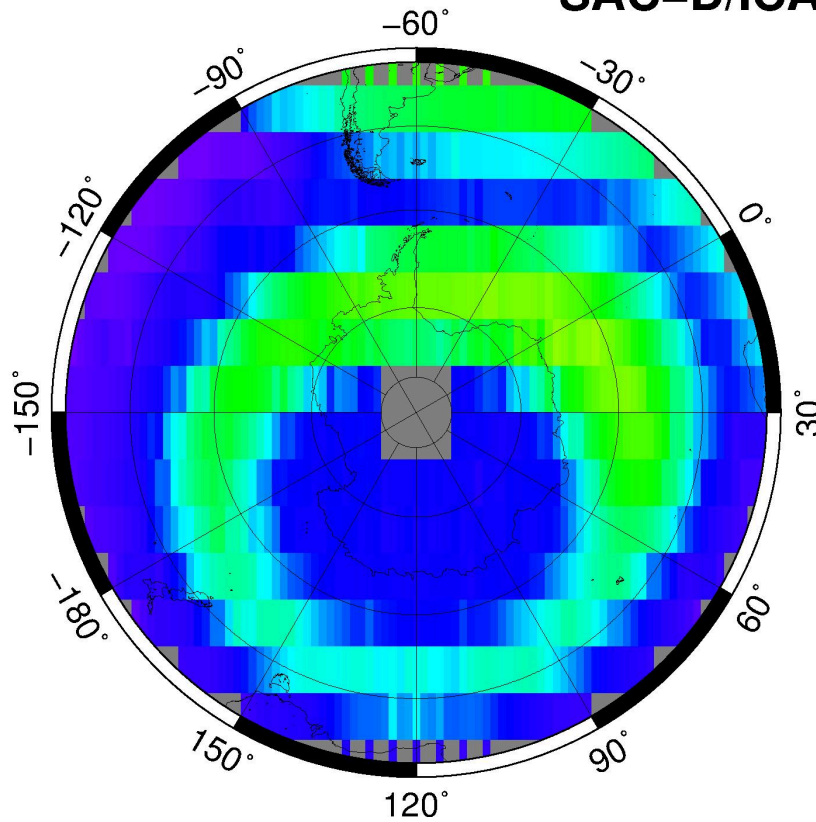
SAC-D / ICARENG 2015/05

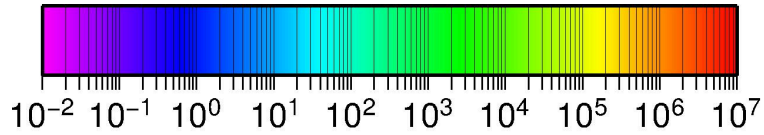
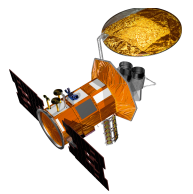




FPIO Prot. 90 MeV Head A [cm⁻² s⁻¹ sr⁻¹] Average

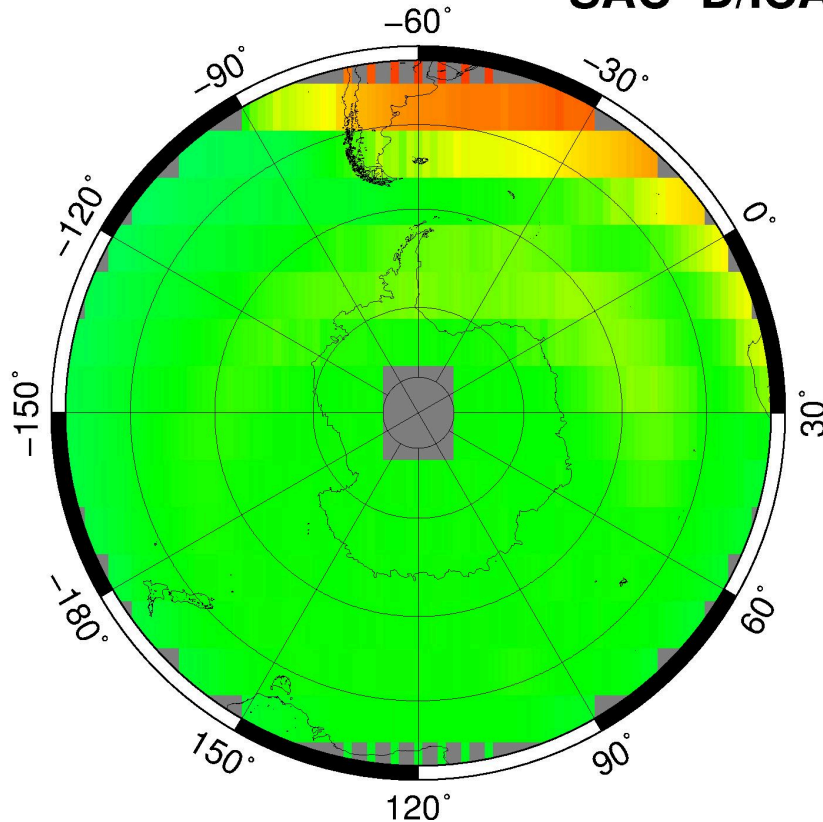
SAC-D/ICARENG 2015/05

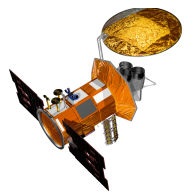




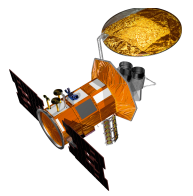
FEIO Elec. 1.192 MeV Head B [cm⁻² s⁻¹ sr⁻¹] Average

SAC-D/ICARENG2015/03





- Informations and examples of these products can be found at CONAE's Web:
- <http://www.conae.gov.ar/index.php/espanol/misiones-satelitales/sac-d/datos-productos/8-conae/789-productos-carmen-1>
- For CARMEN-1 data request contact:
- ssu.atencionUsuarios@conae.gov.ar



Thank you