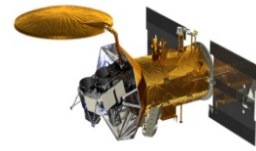


AQUARIUS/SAC-D Summary of AO Argentina Projects



Project Number and Title: Validation of data from the SAC-D / AQUARIUS mission: Application to the knowledge of vegetation water stress

Institution: Instituto de Hidrología de Llanuras (CIC-UNCPBA-Municipio de Azul), Comisión de Investigaciones Científicas de Buenos Aires (CIC), Centro de Estudios Hidro-Ambientales(CENEHA)-Universidad Nacional del Litoral

Number of Researchers: 8



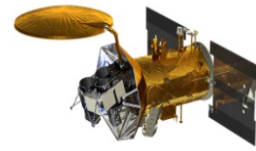
Acquired equipments: CO2 H2O Analyzer Licor, Data logger, Net radiometer, Soil flux plate, Tower.



Field campaign:

- Continuous monitoring of 2012-2014 crop campaigns
- International mission (CIUCISMOS) for validation of SMOS soil moisture products and surface temperature (CONAE-IHLLA-Univ. de Valencia). 2013.





Publications/Congress:

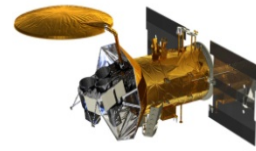
Journals:

- Niclòs, R. Rivas, R., García-Santos, V., Doña, C., Valor, E., Holzman, M., Bayala, M., Carmona, F., Ocampo, D., Soldano, A., Thibeault, M., 2015. "SMOS soil moisture product validation in croplands". IEEE transactions on geoscience and remote sensing PP (99): 1-14.
- Carmona F., Rivas R., Caselles V. 2013. Estimation of daytime downward longwave radiation under clear and cloudy skies conditions over a sub-humid region. Theoretical and Applied Climatology. January 2014, Volume 115, Issue 1-2, pp 281-295.
- Bayala M., Rivas R. 2014. Enhanced sharpening procedures on edge difference and water stress index basis over heterogeneous landscape of sub-humid region. The Egyptian Journal of Remote Sensing and Space Sciences

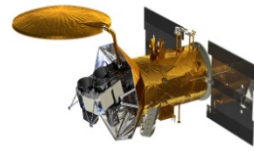
Congress:

- *Niclos, R., Rivas, R., García-Santos, V., Doña, C., Valor, E., Holzman, M., Bayala, M., Carmona, F., Ocampo, D., Thibeault, M., Soldano, A., 2013. SMOS soil moisture product validation in croplands. ESA Living Planet Symposium, septiembre de 2013, Edimburgo-Reino Unido.*





- *Rivas, R., Niclós, R., Santos García, V., Doña, C., Caselles, V., Holzman, M., Bayala, M., Carmona, F., Ocampo, D., Thibeault, M. y Soldano, A., 2013.* Validación de datos de humedad de suelo SMOS en la región pampeana argentina. Temas actuales de la hidrología subterránea. VI Seminario Hispano-Latinoamericano sobre Temas Actuales de la Hidrología Subterránea, La Plata, septiembre de 2013. Editorial Edulp, ISBN 978-987-1985-03-06, 225-230 pp.
- *Niclòs, R., Rivas, R., Sánchez, J.M., García-Santos, V., Doña, C., Valor, E., Holzman, M., Bayala, M.I., Carmona, F., Ocampo, D., Soldano, A. and Thibeault, M. 2014.* Validation of the SMOS-MIRAS Soil Moisture Product (SML2UDP) in the Pampean Region of Argentina. European Geosciences Union General Assembly 2014. Vienna Austria, Session HS6.2, ESA's SMOS and NASA's SMAP missions: providing global observations of soil moisture and ocean salinity and beyond, Vol. 16, EGU2014-7408, 2014. ISSN: 1029-700

**Other:*****Completed doctoral thesis using data from acquired equipment:***

- General model for net radiation estimation using satellite images (Facundo Carmona)
- Soil moisture estimation and the relationship with crop yield (Mauro Holzman)

Completed master thesis using data from acquired equipment:

- Enhanced sharpening procedures of radiative temperature (Martín Bayala)

Master thesis in final stage:

- Simulation of surface temperature (NIRS-MODTRAN) (José Pasapera). CONAE-IHLLA

