

## Desarrollo de herramientas de sensoramiento remoto en microondas para la detección de la convección húmeda profunda asociada a fenómenos severos en la región SESA

- [Año de inicio y finalización del proyecto](#)

Financiado en 06/2018 - 06/2020

- [Cuál es la línea de investigación](#)

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- [Quién lo financio o financiara ...](#)

Es un PICT: por lo que financia Agencia Nacional de Promoción Científica y Tecnológica

- [Tipo de entidad ...](#)

Pública

- [Dinero estimado](#)

aprox. 170.000 pesos

- [Resumen](#)

The continental region east of the Andes and covering the north and centre of Argentina, south of Brazil, Paraguay and Uruguay, known as the South Eastern South America (SESA), is known for its large and intense Mesoscale Convective Systems (MCSs). The deep convective systems in this region can lead to severe weather, including intense hail, winds, precipitation, lightning activity, etc. Studies show that SESA stands out as the region with the strongest mesoscale convective systems (MCSs) on Earth. The general objective in the present study is to advance in the development of accurate precipitation measurements from satellite observations in the context of an observational network lacking in both high spatial and temporal resolutions. Space-borne remote sensing of precipitation offers both high spatial resolution and temporal sampling when rapid revisiting time is achieved. The microwave wavelengths specifically have shown good potential to characterize clouds and precipitations. In the present study, the specific objective proposed to tackle this problematic is the development and evaluation of a passive microwave retrieval of precipitation, with a focus on deep moist convection associated with severe weather events. The present work will benefit from unprecedented periods of intensive observation during the RELAMPAGO field campaign during 2018-2019 for further research beyond the present project.