RELAMPAGO: following CHUVA steps....

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Southeastern South America is crossed by the presence of significant convective systems that lead to the generation of storms with significant rainfall rates and associated severe weather. CHUVA-Santa Maria focused their objectives on describe mesoscale convective systems behavior, but many questions remain unanswered and it is necessarily to continue observing one of most active regions of the planet.
Some of those questions are:
What controls the diurnal cycle of convective system intensity (vertical structure) and mesoscale organization on the lee of the Andes?
What are the mesoscale flow features in the region, and how do they dictate the triggering of convective systems and the environment for storms to grow upscale into MCSs?
What is the role of microphysical and kinematic processes in leading to the upscale growth of convective clouds into MCSs?
Does the extreme intensity of the convection in the region impact the morphology of the convective systems?
Are there inferences of predictability for these processes from observations?
How well do cloud resolving models and regional NWP models represent this morphology from case study to seasonal time scales?
How is the influence of the these aerosols on the development of large systems?

This is a small list of questions where the scientific community will focus during next experiment RELAMPAGO (Remote sensing of Electrification, Lightning, And Meso-scale/micro-scale Processes with Adaptive Ground Observations). This experiment will be deployed in central Argentina during September - November 2016, covering one of the most convective areas on the lee side of the Andes. Local radar information, together with the S-Pol, a mobile X-band network, lightening and hail pads observations, a dense precipitation and raindrop size distribution observations together with a upper air network enhancement will allow to capture microphysics, dynamics and thermodynamics characteristics of convective systems over central Argentina.