

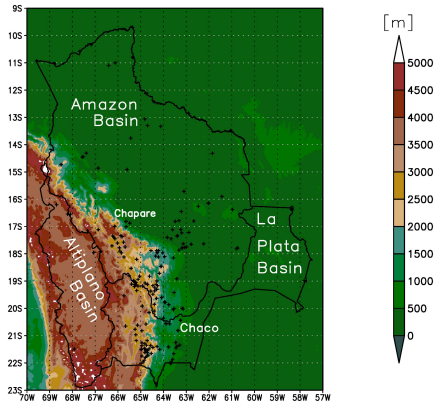


Precipitation Comparison of four datasets over complex topography region

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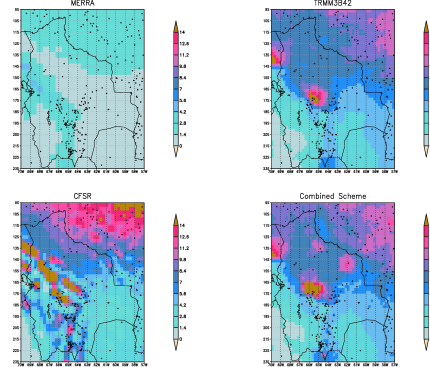
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The region



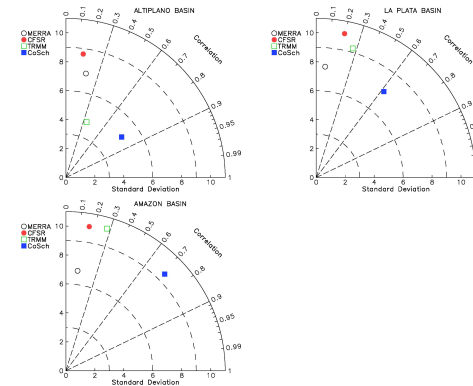
The Bolivian territory can be divided into three main basins: Amazon, Altiplano and La Plata. The topography plays a major role in distributing moisture. Two main seasons can be pointed out: rainy season, that is concentrated on the Southern Hemisphere summer (DJF), and dry season which lasts throughout winter (JJA)

The challenge

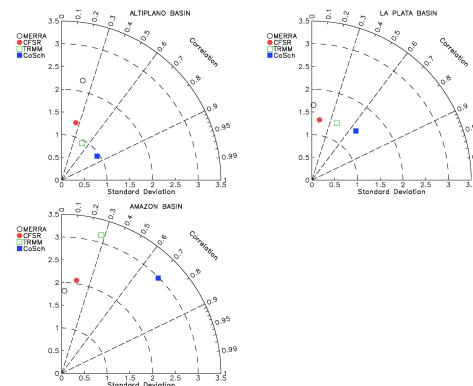


Due to the lack of surface rain gauges, and the complex topography interpolation is not the best approach to determine the amounts of precipitation. Reanalysis and satellite estimations can bring some insights about temporal and spatial characteristics. Surface stations and satellite estimations should be combined to obtain "the best of two worlds"

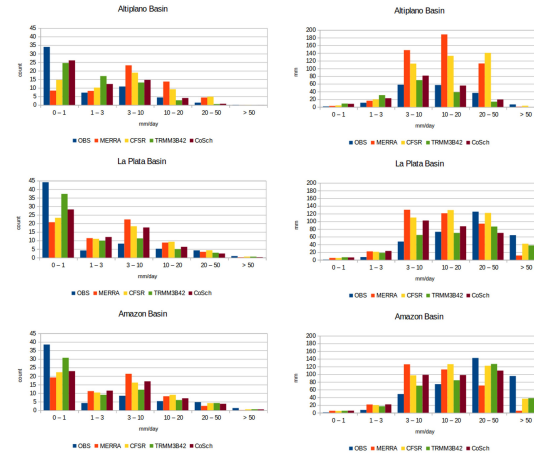
The results



The Combined Scheme (CoSch) outperforms the other three datasets when compared against surface observations on every basin and at both seasons.



The conclusions



Part of the key to understand the rain spatial and temporal is to know which systems bring most of the rain. In this case, for the Amazon and La Plata Basins most of the rain comes from relatively small systems

