



Long Term Rainfall Variability in Argentinean Buenos Aires Plain Region



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Conference Theme: 6. Climate monitoring, Prediction and Predictability.

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Buenos Aires Plain Region

Common period: 1973-2010

Whole period: 1950-2012

22 stations (SMN, INTA)

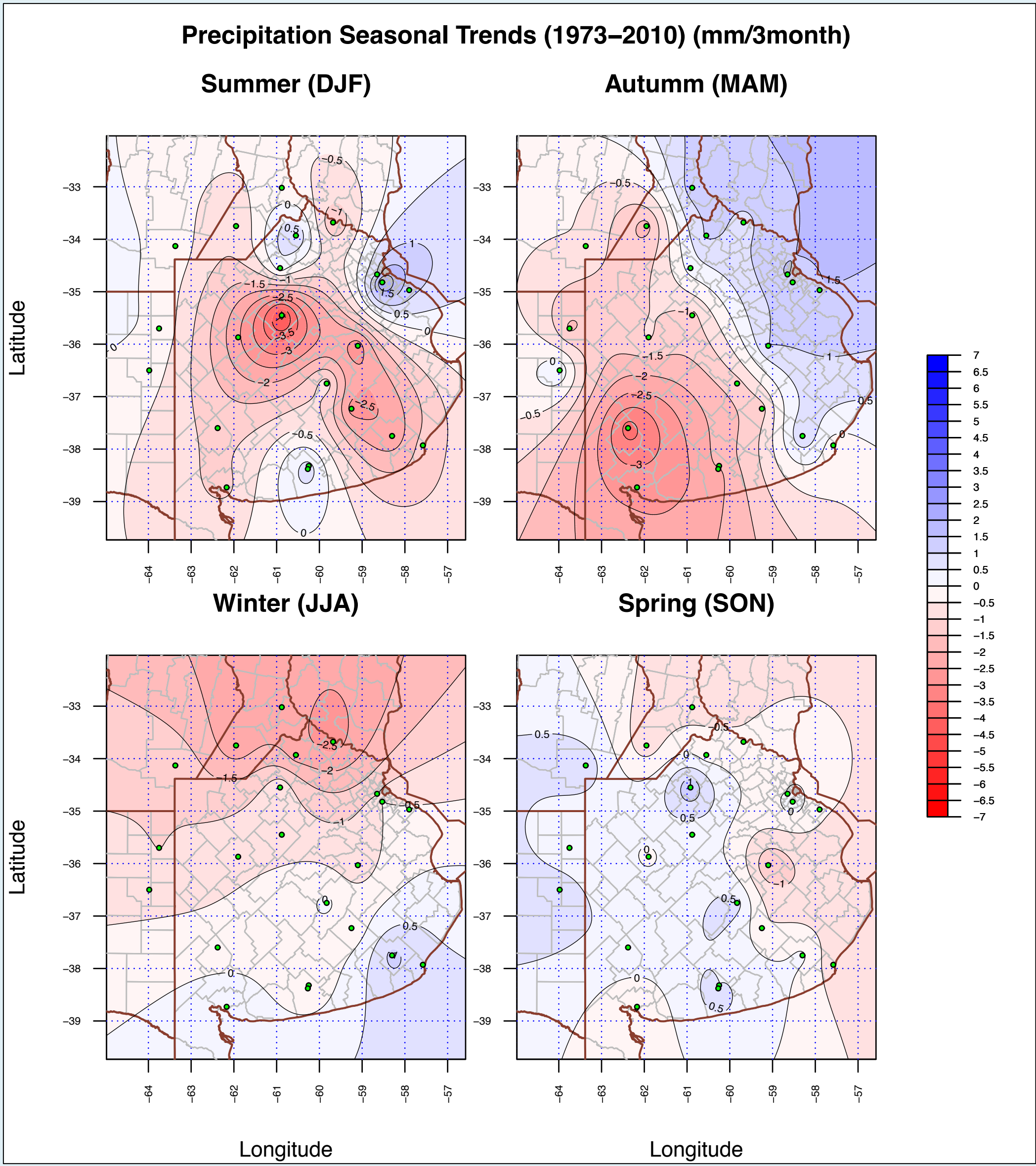
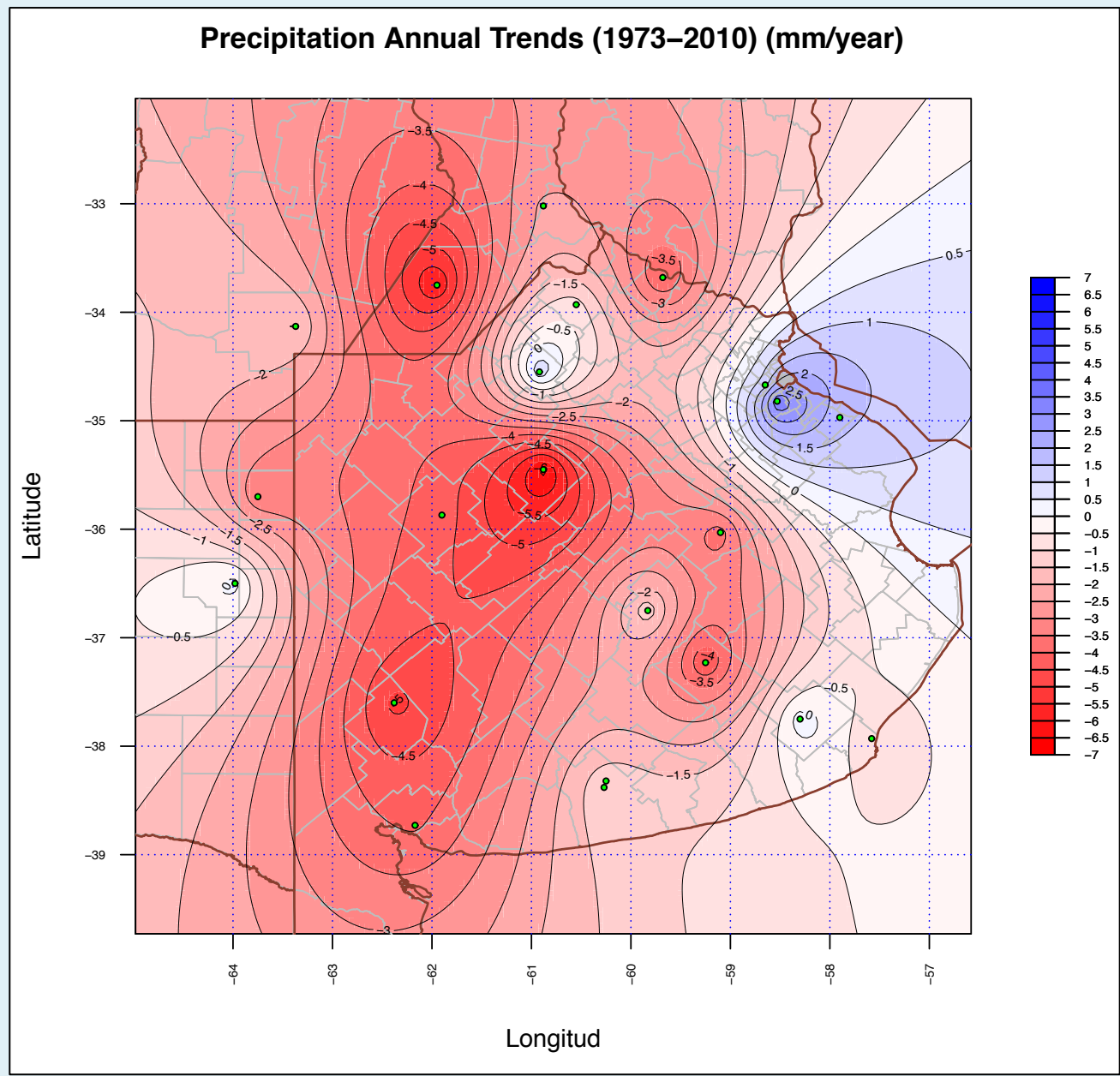
OBJECTIVE:

To analyze long term rainfall variabilities in Buenos Aires region.

Annual precipitation low frequency variability was analyzed using a linear trend method of minimum squares, and statistics significance was tested using a T-Student test.

Results depend on the region and seasons.

Annual trends were positive in northern and eastern part of Buenos Aires meanwhile they were negative in western-southern and central area of the province.



Mean Annual Cycle

maximum in summer and a double relative peak in transition seasons (Autumn and Spring) is present all over the region.

more pronounced towards the west.

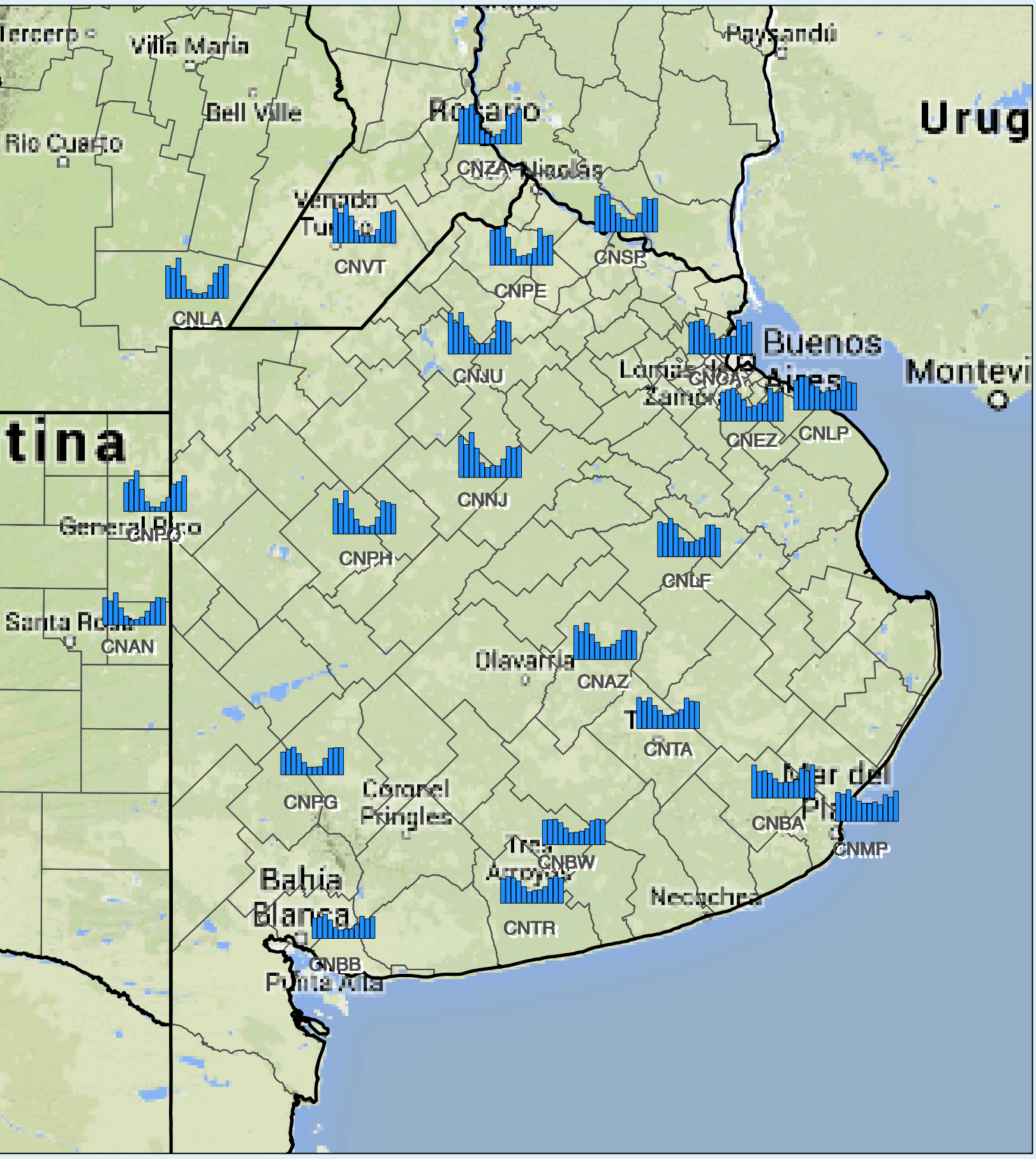
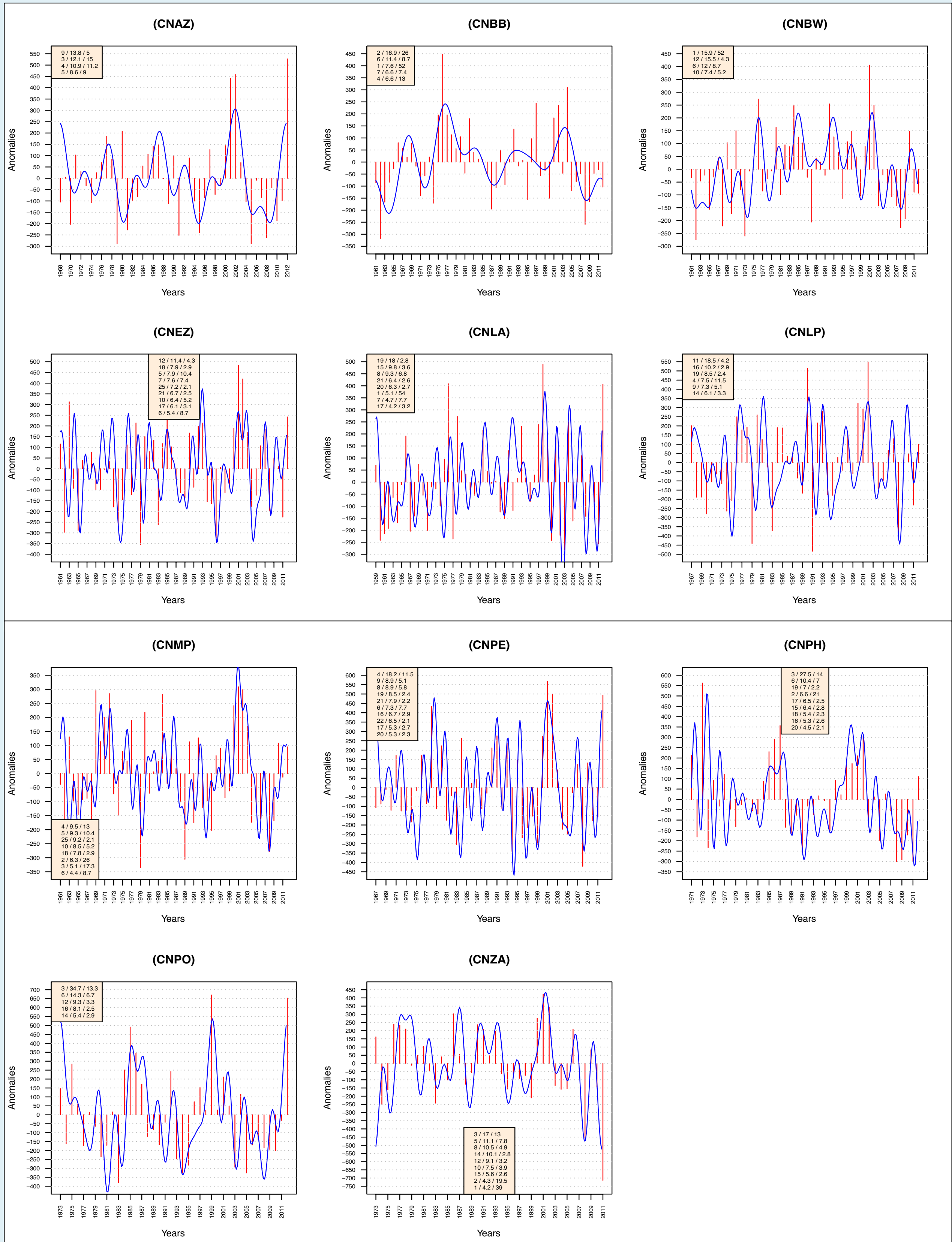
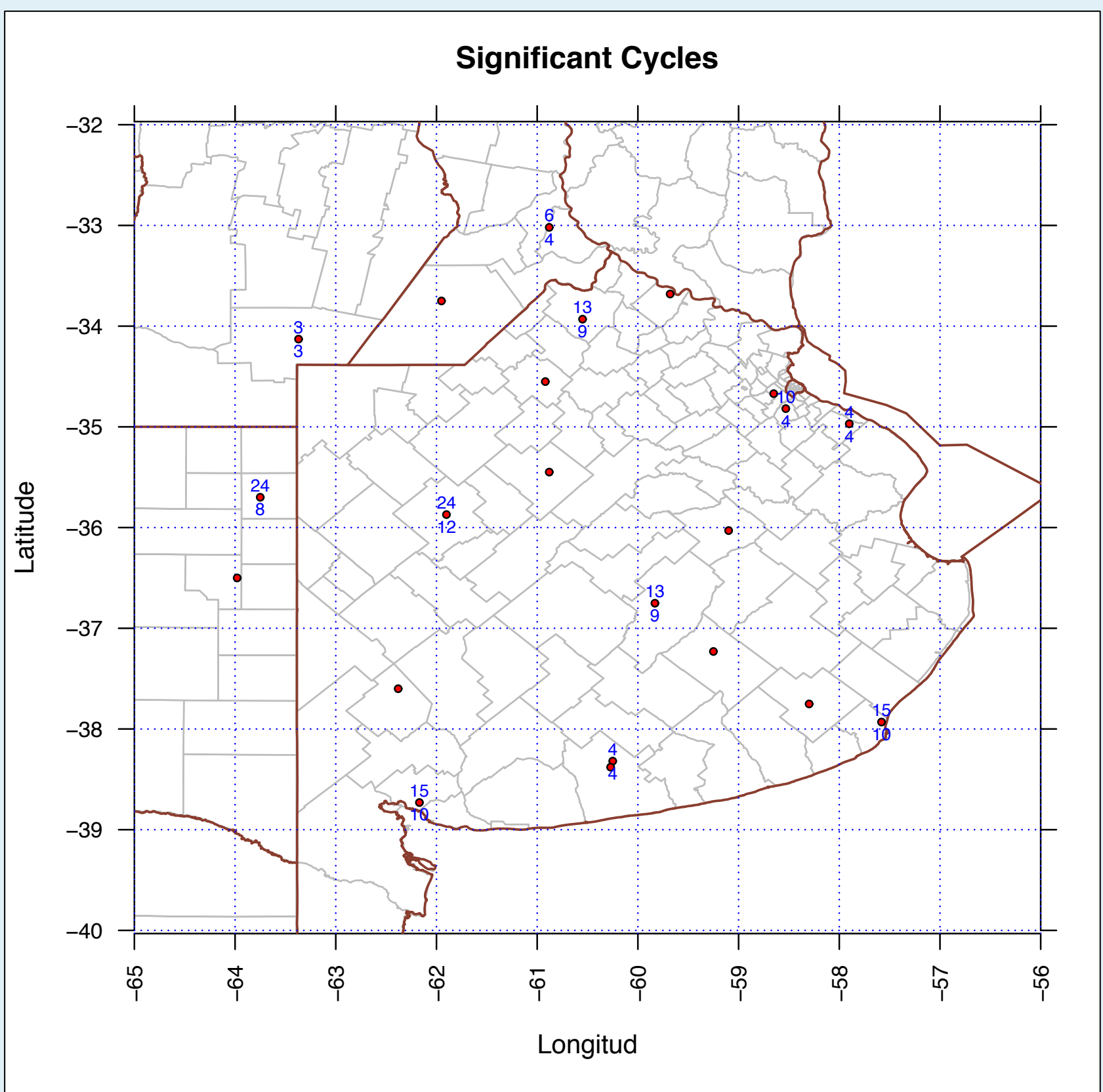
Spectral analysis (Blackman-Tukey method).
Confidence level 95%

smoothing spectral values using a Hann window

cycle of around 12 years was found in stations widely distributed all over Buenos Aires province

other of around 4 years was also present especially in northeastern region

The most important harmonics were used to reconstruct rainfall series .



Aknowledgement:

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