

South Eastern Latin America

- LA26: Impact of GC on coastal areas of the Rio de la Plata: Sea level rise and meteorological effects
- LA27: Building capacity to assess impact of CC/V and develop adaptive responses for the mixed crop/livestock production systems in the Argentinean and Uruguayan pampas
- LA29: Integrated assessment of social variability and adaptation to CV and change among farmers in Mexico and Argentina
- LA32: Assessing global change I, V & A strategies for estuarine waters of the Rio de la Plata

Objectives

To strengthen technical capacity of the participating countries in vulnerability and adaptation studies to climate variability and change

AGRICULTURE

LA27

To develop capacity, establish, use and maintain an agricultural systems network in the Pampas to assess the I of CC/V

To develop adaptive responses for the mixed grain/livestock production systems

LA29

To examine the adaptation strategies used by farmers under climatic and socio-economic changes

To investigate the ways to enhance their adaptation capacity by improving technical and analytical capacity, within the context of current policy trends.

COASTAL AREAS

LA26

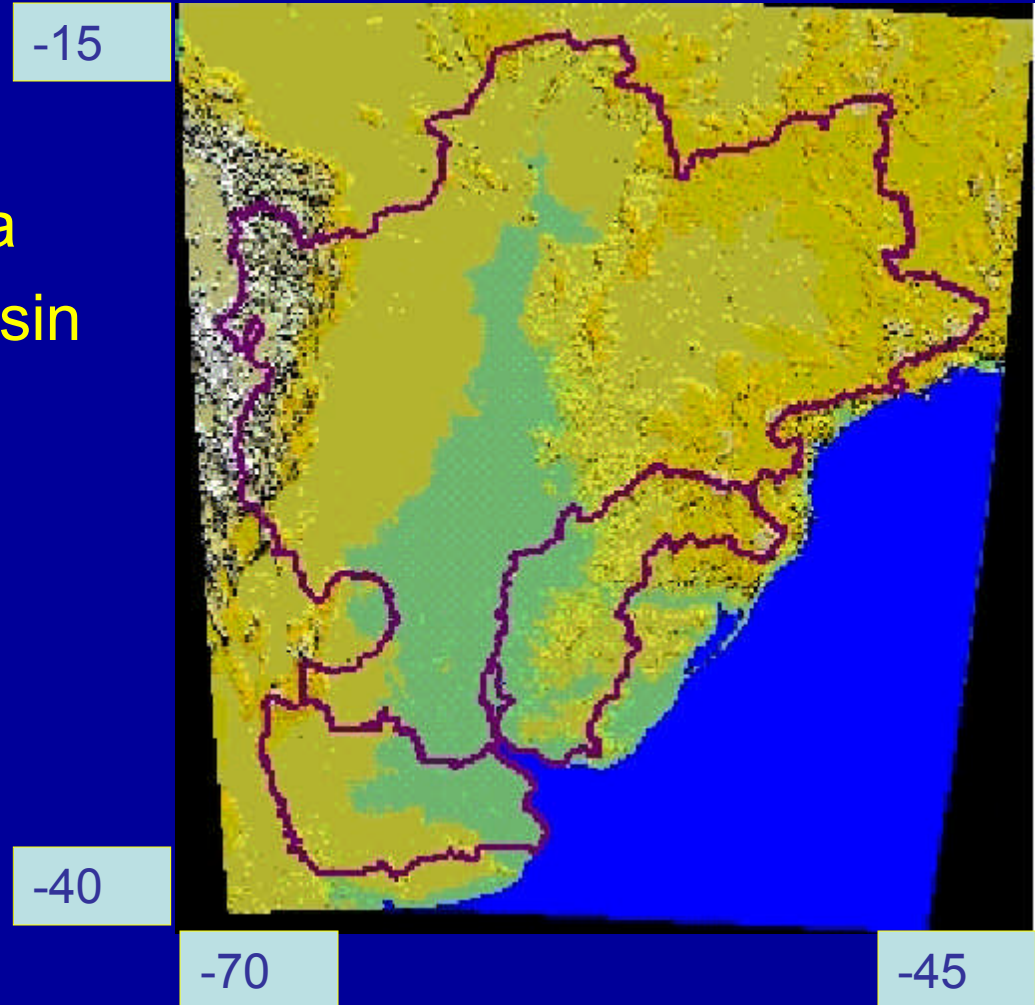
To assess the vulnerability of human activities and natural areas on the coast of the Río de la Plata to sea level rise.

LA32

To assess vulnerability, impact and responses of the Río de la Plata estuarine ecosystem to plan adaptation strategies.

Common Framework

- Region:
 - SE South America
 - Rio de la Plata basin
- Information:
 - Climatic
 - Non Climatic



Information

CLIMATIC

- Daily data from several surface weather stations
- Gridded global datasets (daily and monthly)
- Rivers stream flow
- Sea level

NON CLIMATIC

- Demographic projections
- Economic: GNP, input & prod. prices, etc
- Land use
- Water consumption
- Population spatial distribution
- Other (crop yield, livestock prod., etc)

Regional scenarios strategies

- Link SRES with regional climate scenarios (at least 3 from SRES)
- Estimate relevant variables changes (CO₂, Temp, Sea Level) using MAGICC

Climatic information needed

- Daily and monthly:
 - Precipitation
 - Temperature (minimum and maximum)
 - Solar radiation
 - Wind speed
 - Geopotential 925, 850, 500, 250 hPa
 - Sea level
- Extreme events (daily and hourly):
 - Precipitation
 - Wind speed
 - Sea level

Uncertainties

- GHG and aerosol emissions scenarios
- Model sensitivity
- How models represent the present regional climate
- Data quality and representativeness (climatic and non climatic)

Spatial and temporal scales

- Latitude 15° S - 40° S. Longitude 70° W - 45° W

- Monthly: T, P, and SLP from weather

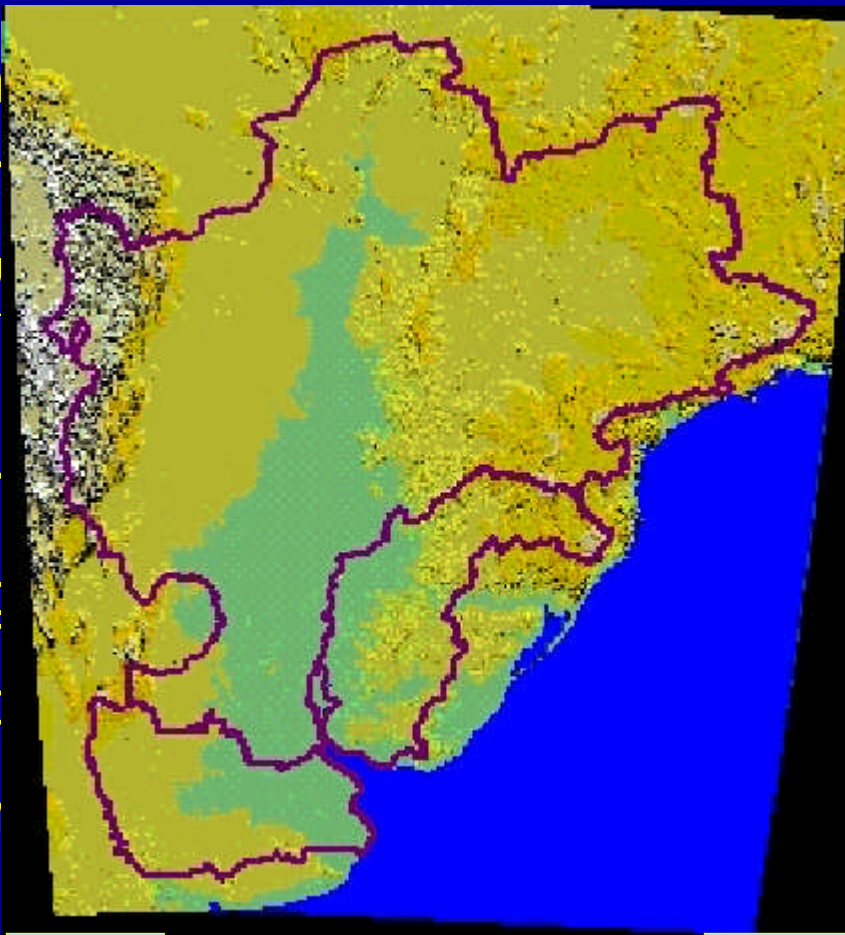
- Reanalysis

- Daily: T_{max}, T_{min}, P, and SLP from weather
SL from gauging

- Hourly: Wind

- Outputs from dynamic
downscaling

- Hydrological data: stream flow (Paraná, Paraguay, Uruguay, Iguazú).



and, SLP

and SLP
analysis.

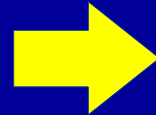
dynamic

Baseline climate data

- Surface Climate: 6 variables
- Monthly series for 1961-2000
(reference period 1961-1990)
- Observational gridded dataset
(proposed 10x10 km)

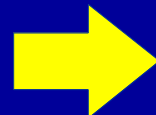
Obstacles & actions to overcome

Data access and sharing information



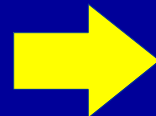
Individually by project

Regional model climatology



Explore regional climate centers support

Skills on dynamical downscaling



Additional training

Approach to regional mentors, Xianfu Lu and AIACC core programme

- ***Coordinate*** a proposal for regional training activities in the use of RCM, GCM and downscaling.
- ***Provide*** assistance in designing climate scenarios & databases.
- ***Promote*** regional workshops.
- ***Facilitate*** contacts with specific institutions and information on new funding opportunities.