Activities in Brazil related to Regional Modeling and Climate Change Scenarios

NWP - Bonn, 7th June 2008

Downscaling and Regional Model ETA/CPTEC

- Need for “downscaling” methods applicable to climate change scenarios from global climate models.

- Objective: obtain more detailed climate projections for states, watersheds or regions, at a higher spatial resolution than that provided by a global climate model, which is crucial for studies of the impacts of climate change in key areas.

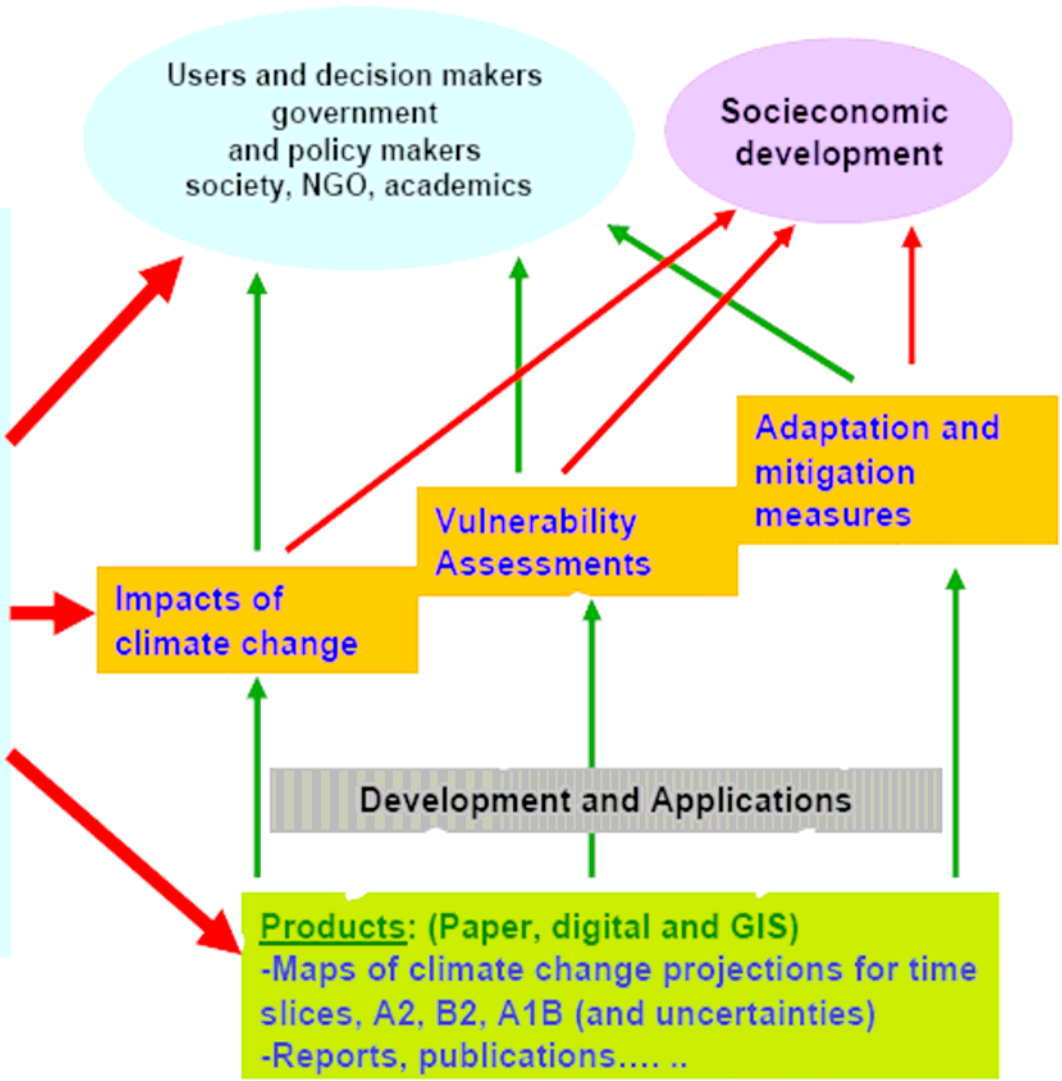
-CPTEC has developed a **regional climate model (Eta/CPTEC)** that can be applied to South America (to be expanded to Latin America and the Caribbean) to generate detailed climate predictions, including for climate change.

- Eta/CPTEC model: run based on the coupled global climate model of the Hadley Centre (HadCM3H) and of the Max Planck Institute.

Downscaling and applications

Products:

-Regional climate change scenarios: A2, B2, A1B, 2071-2100 and other time slices, Eta/CPTEC (40x40 km)
-Developement of capacity on regional modeling at CPTEC
-Training and capacity building (Brazil and S. America) in climate change
-Applications for vulnerability assessments



Regional Training

-Training courses in regional climate modeling (Eta/CPTEC model).

- July 2008: experts from 18 countries in Latin America will participate in a training activity in Brazil (supported by RIOCC and ECLAC, financed by the Governments of Brazil and Spain).

- Exchange of experience with other countries in the region.

- Next phase (2009): Training activities on the use of the downscaled climate change scenarios for agriculture, health and other key areas - vulnerability assessment.