

## Impacts of the South Atlantic Convergence Zone on Southeast Brazil

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### Abstract:

Most part of Brazilian population and gross national product production is concentrated on Southeast Brazil. This region is directly affected by the South America Monsoon System (SAMS) and its main feature, the South Atlantic Convergence Zone (SACZ). Together, they are responsible for the concentration of the major part of annual rainfall during austral spring and summer, with heavy social and economic impacts. Some recent studies show that the intensity of SACZ-related events is experiencing a linear increase since the last 60 years. Given this scenario, my research focus is understanding how the SACZ affects the natural disaster's occurrence in Southeast Brazil. Furthermore, I wish to understand which is the role of urban growth in the population's exposure to these disasters and if this growth is occurring toward high-risk areas.

### Bio:

Ms. Marcia Zilli is a second year PhD student in the Geography Department at UCSB. Her focus is in physical geography, more specifically climatology and climate-related natural disasters. She holds a MSc. in Environmental Engineering and Water Resources and a B.S. in Environmental Engineering, both from Federal University of Parana, Brazil. Before enrolling at UCSB, she worked as a part-time college professor, teaching disciplines related to sanitation, meteorology, fluid mechanics and introduction to environmental engineering. She also has worked as research assistant in the Parana Meteorological Institute, developing a natural disaster atlas for the Parana state, with emphasis on the meteorological background of these events.