

*DRAFT*

***CLIMATE VARIABILITY IN THE EXTRATROPICS OF  
SOUTH AMERICA***



*Edited by*

Mario N. Nuñez and Co.

# Climate Variability in the Extratropics of South America

## Table of Contents

Foreword

Preface

1. Introduction (principal objectives and rationale for the book; organization of chapters; physiography of the region)

Leading Coordinating Author(s): Editors

2. The time-mean climate

Key features of the Winter & Summer climate - M. Nuñez

Low-level jet – M. Nicolini

SACZ – T. Ambrizzi

MCCs - M. Assunção

Other

Leading Coordinating Author(s): All of the above

3. Key aspects of the mean seasonal and diurnal cycles

Leading Coordinating Author(s): Carolina Vera & B. Liebmann

4. Climate variability

Synoptic scale and intraseasonal variability (2-90 days) – Pedro Silva Dias

Interannual variability (~90 days to ~7 yrs) ENSO, etc. – I. Cavalcanti

Decadal and longer-term variability (>~7 yrs) —PDO, AMO, AAO, South Atlantic decadal mode, Trends, etc. - T. Ambrizzi

Extreme events - J. Marengo

Leading Coordinating Author(s): All of the above

5. The paleoclimate record

Leading Coordinating Author(s): H. Diaz

6. Hydrologic variability

Seasonal to interannual (floods, droughts)

Long-term trends

Leading Coordinating Author(s): V. Barros & H. Berbery

7. The roles of the Atlantic and Pacific Oceans

Leading Coordinating Author(s): A. Grimm

8. Interaction among time scales of climatic variability

Interactions between large-scale patterns and regional to local climatic variability.

Modulation of short frequency climatic variability by low-frequency changes in climate states (e.g., PDO→ENSO→MJO)

Large-scale forcing and teleconnections

Leading Coordinating Author(s): C. Vera & P. Silva Dias

9. Future climate changes

Anthropogenic influences (greenhouse warming, land use changes, aerosol effects etc.)

Modeling results, comparison of different transient coupled GCMs of future climates in South America (e.g., country assessments)

Leading Coordinating Author(s): M. Nuñez, J. Marengo, H. Diaz

10. Climate impacts assessments

Impact of climate variability on water resources, agriculture, natural hazards risks, etc.)

Leading Coordinating Author(s): W. Vargas & Invited

11. Summary (a synthesis of some key findings and ideas, and a look to the future of climate research in southern South America)

Leading Coordinating Author(s): C. Nobre, M. Nuñez, H. Diaz

Possible Timetable

Draft outline for review for informal review at October Brazil PIs mtg.  
Chapter Manuscripts due by July 2004.