

CLIMATE VARIABILITY, PREDICTABILITY AND CLIMATE RISKS

A European Perspective

Edited by

Heinz Wanner

Martin Grosjean

Regine Röthlisberger

Elena Xoplaki

*NCCR Climate Management Center,
University of Bern, Switzerland*



The National Centres of Competence in Research (NCCR) are a research instrument of the Swiss National Science Foundation



Reprinted from Climatic Change
Volume 79, Nos. 1–2, 2006



Contents

HEINZ WANNER, MARTIN GROSJEAN, REGINE RÖTHLISBERGER and ELENA XOPLAKI / Climate variability, predictability and climate risks: a European perspective	1
CHRISTOPH C. RAIBLE, CARLO CASTY, JÜRG LUTERBACHER, ANDREAS PAULING, JAN ESPER, DAVID C. FRANK, ULF BÜNTGEN, ANDREAS C. ROESCH, PETER TSCHUCK, MARTIN WILD, PIER-LUIGI VIDALE, CHRISTOPH SCHÄR and HEINZ WANNER / Climate variability – observations, reconstructions, and model simulations for the Atlantic-European and Alpine region from 1500–2100 AD	9
CORNELIA SCHWIERZ, CHRISTOF APPENZELLER, HUW C. DAVIES, MARK A. LINIGER, WOLFGANG MÜLLER, THOMAS F. STOCKER and MASAKAZU YOSHIMORI / Challenges posed by and approaches to the study of seasonal-to-decadal climate variability	31
PIERLUIGI CALANCA, ANDREAS ROESCH, KARSTEN JASPER and MARTIN WILD / Global warming and the summertime evapotranspiration regime of the Alpine region	65
J. FUHRER, M. BENISTON, A. FISCHLIN, CH. FREI, S. GOYETTE, K. JASPER and CH. PFISTER / Climate risks and their impact on agriculture and forests in Switzerland	79
OLIVIER BAHN, LAURENT DROUET, NEIL R. EDWARDS, ALAIN HAURIE, RETO KNUTTI, SOCRATES KYPREOS, THOMAS F. STOCKER and JEAN- PHILIPPE VIAL / The coupling of optimal economic growth and climate dynamics	103
LAURENT VIGUIER, LEONARDO BARRETO, ALAIN HAURIE, SOCRATES KYPREOS and PETER RAFAJ / Modeling endogenous learning and imperfect competition effects in climate change economics	121
BEAT BÜRGENMEIER, ANDREA BARANZINI, CATHERINE FERRIER, CÉLINE GERMOND-DURET, KARIN INGOLD, SYLVAIN PERRET, PETER RAFAJ, SOCRATES KYPREOS and ALEXANDER WOKAUN / Economics of climate policy and collective decision making	143