1. Record Nr. UNINA9910337899803321

Autore	Suárez Moreno Roberto
Titolo	Interdecadal Changes in Ocean Teleconnections with the Sahel : Implications in Rainfall Predictability / / by Roberto Suárez Moreno
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-99450-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (201 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	551.577
Soggetti	Atmospheric science Geophysics Planetary science Climatic changes Atmospheric Sciences Geophysics and Environmental Physics Planetary Sciences Geophysics/Geodesy Climate Change/Climate Change Impacts
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Chapter 1: Motivation -- Chapter 2: State-of-the-Art -- Chapter 3: Objectives -- Chapter 4: Physical Background -- Chapter 5: Data -- Chapter 6: Methodology -- Chapter 7: A Statistical Model based on Non-stationary Predictors -- Chapter 8: Interdecadal changes in the SST-driven teleconnections with the Sahel -- Chapter 9: Modulation of the non-stationary Mediterranean-Sahel teleconnection -- Chapter 10: Concluding Remarks -- Glossary -- References.
Sommario/riassunto	In tropical latitudes, monsoons trigger regimes of strong seasonal rainfall over the continents. Over the West African region, the rainfall has shown a strong variability from interannual to decadal time scales. The atmospheric response to global sea surface temperatures is the leading cause of rainfall variability in the West African Sahel. This thesis explores changes in the leading ocean forcing of Sahelian rainfall

interannual variability. It analyzes the dynamical mechanisms at work to explain the non-stationary sea surface temperature-forced response of anomalous rainfall. The underlying multidecadal sea surface temperature background is raised as a key factor that favors some interannual teleconnections and inhibits others. Results of this thesis are relevant for improving the seasonal predictability of summer rainfall in the Sahel.