

1. Record Nr.	UNINA9910299441303321
Autore	Li Zongxing
Titolo	Study on Climate Change in Southwestern China / / by Zongxing Li
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-44742-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (265 p.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	363.73874
Soggetti	Climatic changes Climatology Meteorology Climate Change
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Doctoral Thesis accepted by Cold and Arid Region Environment and Engineering Research Institute, Chinese Academy of Sciences, Lanzhou, China"--T.p.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Data and Methods -- Spatial and Temporal Variation of Temperature and Precipitation in Southwestern China -- Spatial and Temporal Variation of Climate Extremes in Southwestern China -- Spatial and Temporal Variation of Sunshine Hours in Southwestern China -- Spatial and Temporal Variation of Wind Speed in Southwestern China -- Glaciers Response to Climate Change in Southwestern China -- The Main Conclusion and Prospect.
Sommario/riassunto	This thesis confirms many changes, including sharp temperature rise, interannual variability of precipitation, extreme climate events and significant decreases of sunshine duration and wind speed in southwestern China, and systemically explores the action mechanism between large-scale atmospheric circulation systems, the complicated topography, human activities and regional climate changes. This study also analyzes the response of glaciers to climate change so that on the one hand it clearly reflects the relationship between glacier morphologic changes and climate change; on the other, it reveals the mechanism of action of climate warming as a balance between energy and matter. The achievements of this study reflect a significant

contribution to the body of research on the response of climate in cold regions, glaciers and human activities to a global change against the background of the typical monsoon climate, and have provided scientific basis for predictions, countermeasures against disasters from extreme weather, utilization of water and the establishment of counterplans to slow and adapt to climate change. Zongxing Li works at the Cold and Arid Region Environmental and Engineering Research Institute, Chinese Academy of Sciences, China.
