Record Nr. UNINA9910299433503321 Remote Sensing Time Series: Revealing Land Surface Dynamics // **Titolo** edited by Claudia Kuenzer, Stefan Dech, Wolfgang Wagner Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-15967-4 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (458 p.) Remote Sensing and Digital Image Processing, , 1567-3200;; 22 Collana Disciplina 363.7063 910 910.02 910.285 Soggetti Remote sensing **Environmental monitoring** Physical geography Remote Sensing/Photogrammetry Monitoring/Environmental Analysis Physical Geography Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Tentative with international authorship from DFD, IMF, ESA, NASA, Nota di contenuto USGS etc -- Snow dynamics in Europe over the past 30 years --Dynamic of net primary productivity in Europe -- Biomass development in Kasachsthan -- Land degradation in South Africa -- Land cover and land use change in central Asia -- Vegetation dynamics in western Africa -- Dynamics of soil moisture in the Mekong Basin --Temperature trends in the Mekong Basin -- Landcover dynamics during the past decade in the Mekong Basin -- Coastal zone dynamics of the yellow river delta -- Landcover change in the yellow river delta -- Flood dynamics in the Mekong delta. Sommario/riassunto This volume comprises an outstanding variety of chapters on Earth Observation based time series analyses, undertaken to reveal past and

current land surface dynamics for large areas. What exactly are time series of Earth Observation data? Which sensors are available to

generate real time series? How can they be processed to reveal their valuable hidden information? Which challenges are encountered on the way, and which pre-processing is needed? And last but not least: which processes can be observed? How are large regions of our planet changing over time, and which dynamics and trends are visible? These and many other questions are answered within this book "Remote Sensing Time Series: Revealing Land Surface Dynamics". Internationally renowned experts from Europe, the USA, and China present their exciting findings based on the exploitation of satellite data archives from well-known sensors such as AVHRR, MODIS, Landsat, ENVISAT, ERS, and METOP amongst others. Selected review and methods chapters provide a good overview over time series processing and the recent advances in the optical and radar domain. A fine selection of application chapters addresses multi-class land cover and land use change at national to continental scale, the derivation of patterns of vegetation phenology, biomass assessments, investigations on snow cover duration and recent dynamics, as well as urban sprawl observed over time.