

1. Record Nr.	UNINA9910780035803321
Titolo	Doppler applications in LEO satellite communication systems [[electronic resource] /] / by Irfan Ali ... [et al.]
Pubbl/distr/stampa	Boston, : Kluwer Academic Publishers, c2002
ISBN	1-280-20033-2 9786610200337 0-306-47546-4
Edizione	[1st ed. 2002.]
Descrizione fisica	1 online resource (126 p.)
Collana	The Kluwer international series in engineering and computer science ; ; 656
Altri autori (Persone)	Alilrfan <1965->
Disciplina	621.382/38
Soggetti	Artificial satellites in telecommunication Doppler effect Signal processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"CD-ROM included."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Little LEO Satellites -- Doppler Characterization -- Doppler Estimation at Terminals -- Satellite Visibility Prediction -- Doppler Based Multiple Access -- Doppler for Power Control -- DBMA Simulation Software.
Sommario/riassunto	Doppler Applications in LEO Satellite Communication Systems develops and presents an important class of techniques useful in the construction of little Low Earth Orbit (LEO) satellite communication systems. It centers on the very significant Doppler shift that attends communications through a LEO satellite and shows how this phenomenon can be exploited for an unexpected benefit. The techniques taught in the book are expected to be particularly attractive to system engineers because ground-based transceivers must generally compensate for the large Doppler component and therefore the necessary receiver processing loops are often already in place and expensed. This volume starts with a recounting of the characteristics of a LEO satellite and its orbit. The 2nd chapter addresses the LEO orbital geometry and reviews the Doppler effect attending LEO communications. Chapter three is focused on the important task of estimating the Doppler at a ground terminal. Appropriate signal

processing algorithms are reviewed. Chapter four is concerned with predicting LEO satellite visibility. Chapters five and six are, respectively, devoted to the use of the significant LEO Doppler as an aid in a new traffic flow control protocol and as an aid for effecting communications power control. The last chapter describes MATLAB® based analysis. Doppler Applications in LEO Satellite Communication Systems provides a thorough review of the LEO Doppler phenomenon.

2. Record Nr.	UNINA9910557298703321
Autore	Martínez Justino
Titolo	Ten Years of Remote Sensing at Barcelona Expert Center
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 online resource (292 p.)
Soggetti	Geography Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book celebrates the ten-year anniversary of the Barcelona Expert Center by presenting recent contributions related to the topics on which the team has been working during these years. The Barcelona Expert Center expertise covers a wide variety of remote sensing fields, but the main focus of the research is on the Soil Moisture and Ocean Salinity (SMOS) data processing and its ocean, land, and ice applications. This book contains 14 scientific papers addressing topics that range from the description of the new data processing algorithms that are implemented in the last version of the operational SMOS Level 1 processor, to scientific applications derived from SMOS: results on the sea surface salinity assimilation in coastal models; synergies of the sea surface salinity with temperature and chlorophyll, and their impact on the better retrieval of ocean surface currents; quality assessment of

SMOS derived sea ice thickness; sea surface salinity; and soil moisture products, among others. Moreover, one of the papers verifies the potential of the future CIMR mission within the CMEMS SSS operational production after the SMOS era.
