1. Record Nr. UNINA9910988390203321 Autore Jiang Yi Titolo BeiDou Navigation Satellite System : Maritime Applications / / by Yi Jiang, Shufang Zhang, Huakai Zhao Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 981-9621-92-5 Edizione [1st ed. 2025.] 1 online resource (XX, 260 p. 90 illus., 40 illus. in color.) Descrizione fisica 621 Disciplina **Physics** Soggetti Signal processing Marine engineering Aerospace engineering **Astronautics** Security systems **Optics** Applied and Technical Physics Digital and Analog Signal Processing Marine Engineering Aerospace Technology and Astronautics Security Science and Technology **Applied Optics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Introduction -- 2. Positioning Error Analysis in maritime navigation -- 3. Maritime Standards of Satellite Navigation -- 4. Radio Determination Service System -- 5. Global Maritime Distress and Safety System. Sommario/riassunto This book highlights the maritime applications of Global Navigation Satellite Systems (GNSSs) with emphasis on BeiDou Navigation Satellite System (BDS). The book systematically summarizes the technical standards for maritime applications of GNSS issued by the International Maritime Organization (IMO), the International Telecommunication

Union (ITU), and other relevant international organizations. It covers the

development history and future prospects of the international standardization of BDS' maritime applications. Various applications of BDS in maritime navigation, including the radio determination service system, the global maritime distress and safety system, the automatic identification system, the vessel monitoring system, the long-range identification and tracking system, and the maritime ground-based augmentation system, are introduced. Promising new directions are put forward. This book is intended for technical engineers in maritime communication and navigation. It is also a valuable reference for researchers, graduate students, and upper-level undergraduate students in maritime-related majors.