Record Nr. UNINA9910785323303321 Autore Lorenz Ralph <1969-> Titolo Titan unveiled [[electronic resource]]: Saturn's mysterious moon explored / / Ralph Lorenz and Jacqueline Mitton, with a new afterword by the authors Princeton, N.J.,: Princeton University Press, 2010 Pubbl/distr/stampa **ISBN** 1-282-93619-0 9786612936197 1-4008-3475-9 Edizione [With a New afterword by the authors] Descrizione fisica 1 online resource (287 p.) Altri autori (Persone) MittonJacqueline Disciplina 523.986 Soggetti Saturn probes Titan (Satellite) Titan (Satellite) Exploration Saturn (Planet) Satellites Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front matter -- Contents -- List of Illustrations and Tables -- Preface -- 1. The Lure of Titan -- 2. Waiting for Cassini -- 3. Cassini Arrives --4. Cassini's First Taste of Titan -- 5. Landing on Titan -- 6. The Mission Goes On -- 7. Where We Are and Where We Are Going --Afterword to the Paperback Edition -- Appendix: Summary of Dynamical and Physical Data -- Further Reading -- Index Sommario/riassunto For twenty-five years following the Voyager mission, scientists speculated about Saturn's largest moon, a mysterious orb clouded in orange haze. Finally, in 2005, the Cassini-Huygens probe successfully parachuted down through Titan's atmosphere, all the while transmitting images and data. In the early 1980's, when the two Voyager spacecraft skimmed past Titan, Saturn's largest moon, they transmitted back enticing images of a mysterious world concealed in a seemingly impenetrable orange haze. Titan Unveiled is one of the first general interest books to reveal the startling new discoveries that have been made since the arrival of the Cassini-Huygens mission to Saturn and

Titan. Ralph Lorenz and Jacqueline Mitton take readers behind the

scenes of this mission. Launched in 1997, Cassini entered orbit around Saturn in summer 2004. Its formidable payload included the Huygens probe, which successfully parachuted down through Titan's atmosphere in early 2005, all the while transmitting images and data--and scientists were startled by what they saw. One of those researchers was Lorenz, who gives an insider's account of the scientific community's first close encounter with an alien landscape of liquid methane seas and turbulent orange skies. Amid the challenges and frayed nerves, new discoveries are made, including methane monsoons, equatorial sand seas, and Titan's polar hood. Lorenz and Mitton describe Titan as a world strikingly like Earth and tell how Titan may hold clues to the origins of life on our own planet and possibly to its presence on others. Generously illustrated with many stunning images, Titan Unveiled is essential reading for anyone interested in space exploration, planetary science, or astronomy. A new afterword brings readers up to date on Cassini's ongoing exploration of Titan, describing the many new discoveries made since 2006.