

1. 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
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, 2010
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
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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.
