

1. Record Nr.	UNINA9910583363603321
Titolo	Dynamic Mars : recent and current landscape evolution of the red planet // edited by Richard J. Soare, Susan J. Conway, Stephen M. Clifford
Pubbl/distr/stampa	Amsterdam, Netherlands : , : Elsevier, , [2018] ©2018
ISBN	0-12-813019-9 0-12-813018-0
Descrizione fisica	1 online resource (xix, 446 pages)
Disciplina	523.43
Soggetti	Mars (Planet) Geomorphology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Orbital (climatic) forcing and its imprint on the global landscape / Michael A. Mischna -- Unraveling the mysteries of recurring slope lineae (RSL) / David E. Stillman -- Gullies and their connection with the climate / Susan J. Conway, Tanya N. Harrison and Stephen R. Lewis -- Recent fluvial-channels, -landforms and fresh shallow-valleys in the Olympus Mons lava plains / Henrik I. Hargitai and Virginia C. Gulick -- Active geomorphological processes involving exotic agents / Frederoc Schmidt and Ganna Portyankina -- CO2-driven geomorphological processes / Ganna Portyankina and K.-Michael Aye -- Paleo-periglacial and "ice-rich" complexes in Utopia Planitia / Richard J. Soare, Susan J. Conway, Colman J. Gallagher, Jean-Pierre Williams and Gordon R. Osinski- Slow periglacial) mass wasting (solifluction) on Mars / Andreas Johnsson, Susan J. Conway, Dennis Reiss, Ernst Hauber and Harald Hiesinger -- Volcanic disruption of recent ice-deposits in the Argyre Basin / Jean-Pierre Williams, Richard J. Soare and James M. Dohm -- Dust devils : stirring up the surface / Dennis Reiss -- Dark Dunes of Mars: An orbit-to-ground multidisciplinary perspective of aeolian science / Mark A. Bishop -- Modification of the surface by impact cratering / Jean-Pierre Williams -- Stone pavements, lag deposits, and contemporary landscape-evolution / John C. Dixon -- Karst landforms as markers of recent climate change: an example from the late

Amazonian Epoch evaporite karst within a trough in western Noctis Labyrinthus / Davide Baioni. .

Sommario/riassunto

Presents the latest observations, interpretations, and explanations of geological change at the surface or near-surface of this terrestrial body. These changes raise questions about a decades-old paradigm, formed largely in the aftermath of very coarse Mariner-mission imagery in the 1960s, suggesting that much of the interesting geological activity on Mars occurred deep in its past, eons ago. The book includes discussions of (1) Mars' ever-changing atmosphere and the impact of this on the planet's surface and near-surface; (2) the possible involvement of water in relatively new, if not contemporary, gully-like flows and slope streaks (id est recurring slope lineae); and (3) the identification of a broad suite of agents and processes (i.e. glacial, periglacial, aeolian, meteorological, volcanic, and meteoric) that are actively revising surface and near-surface landscapes, landforms, and features on a local, regional, and hemispheric scale.--
