

1. Record Nr.	UNINA9910502636103321
Autore	Barentine John C.
Titolo	Mystery of the ashen light of Venus : investigating a 400-year-old phenomenon // John C. Barentine
Pubbl/distr/stampa	Cham, Switzerland : , : Springer International Publishing, , [2021] ©2021
ISBN	3-030-72715-7
Descrizione fisica	1 online resource (265 pages)
Collana	Astronomers' Universe
Disciplina	523.42
Soggetti	Venus (Planet) Observations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Acknowledgments -- Contents -- Introduction -- 1 Prologue: The Martians That Never Were -- 2 "I Could See the Dark Part of Venus..." -- Venus in Myth and Tradition -- Galileo Discovers the Phases of Venus -- 3 First Light: Early Accounts of the Ashen Light 1643-1800 -- The Observations of Giovanni Riccioli (1643) -- Early Accounts: 1700-1800 -- William Derham (c. 1700) -- Christfried Kirch (1721) -- Andreas Mayer (1759) -- William Herschel (1793) -- Friedrich von Hahn (1793) -- 4 Going Mainstream: A Scientific Approach c. 1800-1900 -- Johann Hieronymus Schröter and Karl Ludwig Harding (1806) -- Johann Wilhelm Pastorf (1822) -- Franz von Paula Gruithuisen (1825) -- The Later Nineteenth Century -- 5 What Is the Light? Historical Explanations of the Ashen Light -- Reflected Light -- Aurorae -- 'Extended Twilight' -- Surface or Atmospheric Phosphorescence -- Thermal Emission -- Surface Ice -- Scattered Light and Diffraction Effects -- 6 Venus as a Knowable World: Chasing the Ashen Light into the Space Age 1900-1980 -- Daylight Observations -- The Barbier Campaign (1935) -- Nikolai Kozyrev and the Venus Airglow -- The International Geophysical Year (1957-1958) -- The Early Spacecraft Era -- 7 New Ideas for an Old Problem: Observations and Science 1980-2020 -- The Phillips and Russell Campaign (1988) -- Lightning in the Venusian Dark -- Active Volcanism -- Airglow Revived: New Observations of the "Green Line" -- To the Limits of Human Visual Perception -- 8 Seeing What We Want to See: The

Psychology of the Ashen Light -- The Discovery of Neptune -- The  
Cautionary Tale of `Vulcan' -- 9 Perception Revisited: The  
Psychophysics of the Ashen Light -- The Effects of Observer Bias --  
Down the (Duck-)Rabbit Hole of Vision Science -- Accurate and  
illusory? -- 10 Epilogue: Evanescence and Evasion -- Bibliography --  
Index.

---