

Dr. Adrian Brown
SETI Institute & NASA Ames Research Center
Mountain View, California

***Mars Dust and Ice: A Voyage to the Poles with the Mars
Reconnaissance Orbiter***

The Martian polar regions are the most dynamic regions of the Red Planet. **Dr. Adrian Brown** from the SETI Institute is a researcher on the Mars Reconnaissance Orbiter (MRO) mission that has been in orbit since 2007. Onboard MRO are a high resolution camera (HiRISE), context camera (CTX), and daily mapping camera (MARCI) in addition to a near infrared mapping spectrometer, the Compact Reconnaissance Imaging Spectrometer for Mars (CRISM). Dr. Brown has used data from these cameras and spectrometer to examine the properties and behavior of surface ices, clouds and atmospheric dust over the past 3 Earth years. These new datasets are addressing some of our old questions about how dust storms form on Mars, and how much water is available for future explorers of the Red Planet. Dr. Brown is the coordinator for the SETI Seminar Series, which can be found at <http://youtube.com/setiinstitute>. **Dr. Brown** will describe how we know what we know about the polar regions of Mars and how MRO has uncovered new complexities and fascinating details at a spatial resolution previously only available to spy satellites.

Biography

Dr. Adrian Brown is currently working as a planetary science researcher at the [NASA Ames Research Center](#) and [SETI Institute](#) in Mountain View, Calif., United States of America. Adrian has a background in computer science and electrical engineering - his first degree was in Electrical Engineering from the Australian Defense Force Academy in Canberra, Australia. After receiving his Electrical Engineering degree, Adrian served with the Royal Australian Navy as a Weapons Engineer and Fire Control Officer on Her Majesty's Australian Ships CANBERRA and ARUNTA, in addition to numerous shore postings around Australia. Adrian is a certified Java programmer, and has worked as a Software Engineer for a variety of commercial projects for IBM, Zurich and other businesses. He has a Masters in Computer Science from the University of New England in Armidale, New South Wales. Adrian completed his PhD in Earth and Planetary Science at Macquarie University, in Sydney, Australia. The topic of his defense was "Hyperspectral Mapping of Ancient Hydrothermal Systems". His advisors were Prof. Malcolm Walter of the Australian Centre for Astrobiology and Dr. Thomas Cudahy of CSIRO Exploration and Mining in Perth, Western Australia. Adrian is a fully qualified Private pilot, and has used this skill to enhance his knowledge of remote sensing by flying over study regions in Western Australia. He holds current endorsements on C172 and Piper Warrior single engine aircraft. Adrian is qualified in remote first aid and as an outback four wheel drive exponent. Adrian is an Australian citizen, and grew up in Melbourne, Victoria. He is keen on personal fitness. He is a fan of the Australian Rules football club Essendon, and an avid listener to JJJ and TAL.