## Dr Matthew Balme Senior Lecturer, Faculty of Science, Dept. of Physical Sciences, Open University



I am a planetary scientist specialising in planetary geomorphological studies. I work on a variety of Marsrelated research topics but focuss mainly on aeolian and cold-climate processes. I am a senior lecturer at Open University, and work in the Planetary Environments research group - part of the Department of Physical Sciences

June 2013 - Senior Lecturer, Open University, UK June 2009 - June 2013: <u>UK Space Agency Aurora</u> <u>Fellow</u>, Open University, UK. January 2006 - January 2015: Research Scientist (Senior Research Scientist from 2011), Planetary Science Institute, Tucson, USA. October 2005 to June 2009: Postdoctoral Research Scientist, Dept. of Earth Sciences, Open University, UK.

April 2005 to Sept. 2005: Postdoctoral Researcher, Departement des Sciences de la Terre, Univ. Paris-Sud, Paris, France.

**Dec 2004 to March 2005: Postdoctoral Researcher**, Planetary Science Institute, Tucson. **May 2003 to Nov. 2003 and June 2004 to Nov 2004: Post Doctoral Research Assistant**, (part time), University of Oxford, UK.

Nov. 2003 to Feb. 2004: Post Doctoral Research Associate, Mullard Space Science Laboratory, UK.

April 2001 to April 2003: Post Doctoral Research Associate, Arizona State University, Phoenix, USA.

## **Research interests**

My research interests are generally in planetary science and, more specifically, planetary geomorphology and geology. My main research interest at present is to understand the recent geological history of Mars, and how climate (and possibly climate change) has shaped the surface. I also have a strong research interest in terrestrial dust devils (small, dust loaded "mini-tornadoes" driven by insolation) and in application of GIS to planetary surfaces. Much of my research is based on remote sensing, expecially using the totally awesome NASA <u>HiRISE</u> instrument onboard the Mars Reconaissance Orbiter spacecraft.

Recent funding success includes a UK Space Agency grant to help define the landing sites for the ExoMars 2018 Rover and an STFC consolidated grant project "Liquid water and climate change on Mars: combining high resolution imaging studies with high resolution climate models".