Astronomy & Astrophysics

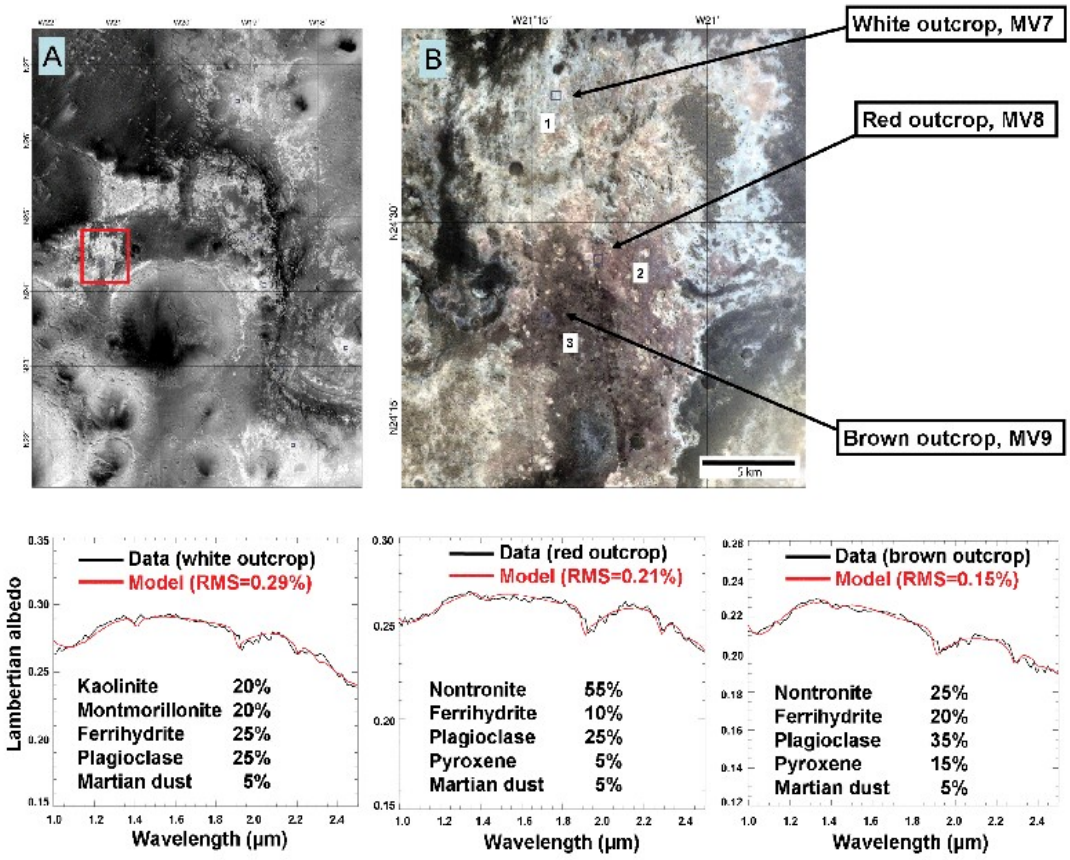
HIGHLIGHTS: this week in A&A

Volume 487-2 (August IV 2008)

In section 1. Letters

"Abundance of minerals in the phyllosilicate-rich units of Mars", by F. Poulet, N. Mangold, D. Loizeau, J.-P. Bibring, Y. Langevin, J. Michalski, and B. Gondet, A&A 487, p. L41

Poulet et al. use OMEGA/MEx spectroscopic observations of Mars to characterize and locate regions in which liquid water may have surfaced for some time in the distant past of the planet.
They show that the Mawrth Vallis region exhibits the largest content of hydrated phyllosilicates, indicating the highest degree of aqueous weathering detected on Mars. This region therefore appears as one of the major targets for future in situ and sample return missions.



In section 1. Letters

"Observational consequences of the recently proposed Super-Earth orbiting GJ 436", by J. Bean and A. Seifahrt, A&A 487, p. L25

By analyzing radial-velocity and photometric data again for the star GJ 436, Bean et al. are able to rule out the hypothesis put forward by Ribas et al. (2007) for the existence of a second planet with mass 5.5 Earth masses and an orbital period of 5.2 days. This result is in line with what was independently found by Alonso et al. (highlighted in issue 487-1), and it shows the now extremely fine constraints that can be derived for this very interesting system with the first known transiting Neptune planet.