*Integrating GPR and CCRI Techniques: Implications for Identifying and Mapping Near-Surface Ground Ice on Mars [#1410]*
Preliminary results using GPR and CCRI techniques in a proglacial environment show that both techniques complement each other by resolving different characteristics of the ground, thus proving beneficial to the continuing exploration of Mars.

*Identification of Hydrated Sulfates Collected in the Northern Rio Tinto Valley by Reflectance and Raman Spectroscopy [#1941]*
This abstract reports results of VNIR and Raman spectroscopic analyses of sulfate efflorescents from the northern Rio Tinto Valley, a martian analog terrain. Phases identified include copiapite-group minerals, gypsum, jarosite and schwertmannite.

Carlisle O. Lucey P. G. Sherman S. B.
*Thermal Infrared Weathering Trajectories in Hawaiian Basalts: Results from Airborne, Field and Laboratory Observations [#2063]*
TIR spectra of weathered basaltic rocks are used to better understand the relationship between weathering and TIR data. Results suggest complex relation between heavy and light wetting events and spectral shape.

Velbel M. A.
*Early Stages of Olivine Weathering in Hawai’i [#1807]*
Olivine corrosion is similar in slightly weathered rocks from several Hawai’ian volcanic centers and regolith/oucrop settings. Etch pits are devoid of products; weathering takes place by dissolution-reprecipitation as well as by replacement.

Rossi A. P. Huvenne V. A. I. Henriet J. P. Wagner R. Hauber E. Chicarro A. Di Lorenzo S. Neukum G. HRSC Co-Investigator Team
*A Buried Earth Analogue to Martian Chaotic Terrains [#1573]*
We are comparing martian chaotic terrains with a recently discovered ancient submarine slope failure, which shows great resemblance to the polygonal pattern of chaos on Mars.

Komatsu G. Ori G. G. Arzhannikov S. G. Arzhannikova A. V.
*The Azas Plateau in Southern Siberia: A Proposed Terrestrial Analogue Site for Ice-Magma-Flood Processes on Mars [#1065]*
The Azas Plateau in southern Siberia is rich in examples of landforms that resulted from glaciation and ice-magma interactions. Understanding these processes will deepen our knowledge that would be applicable to studies of similar processes on Mars.