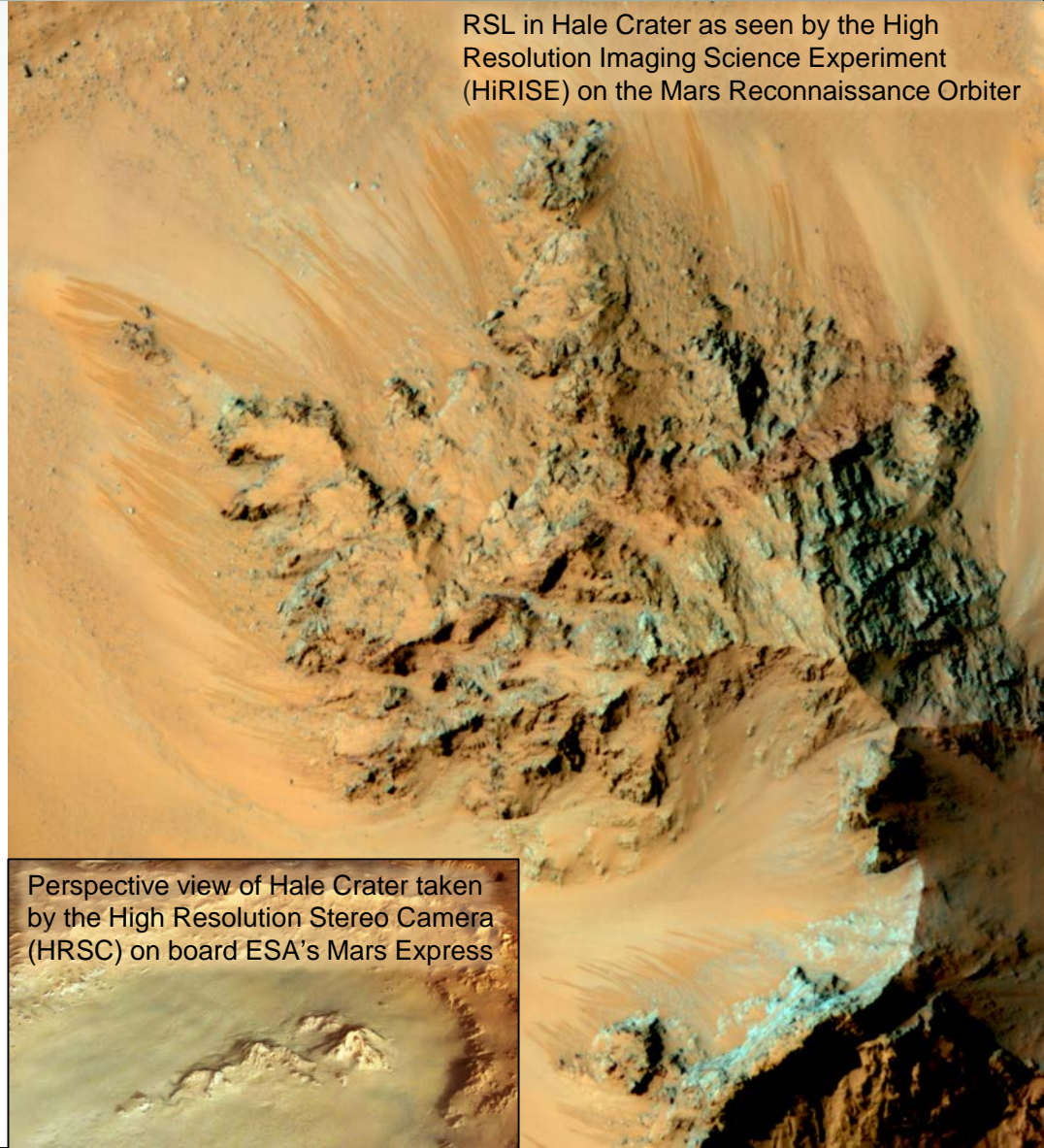


# Recurring Slope Lineae in Central Uplifts

**Recurring slope lineae (RSL) identified in the central peaks of Hale Crater in the Southern Hemisphere of Mars, have been shown to be one of the most active sites observed for these features.**

- The central peaks of Hale Crater, which are more complex than the single peak seen in some craters, are uplifted mountains of deep bedrock. During the middle summer, the RSL in Hale are active mostly towards the northwest (upper left in the image).
- A HiRISE–CRISM coordinated observation acquired during the late RSL season showed narrow 1.48 and 1.9  $\mu\text{m}$  absorption bands which are consistent with a mixture of magnesium perchlorate and Martian soil.
- The Hale Crater RSLs are unique for two reasons: they have more “reddish” color, and begin activity earlier in the year than most RSLs. Both of these are thought to be tied to particular mineralogy in these features.
- The complexity of the central peaks in Hale, and the identification of very active RSLs in its central peaks may indicate that there are more complex processes at work in this crater than in others with central uplifts.

RSL in Hale Crater as seen by the High Resolution Imaging Science Experiment (HiRISE) on the Mars Reconnaissance Orbiter



Perspective view of Hale Crater taken by the High Resolution Stereo Camera (HRSC) on board ESA's Mars Express

