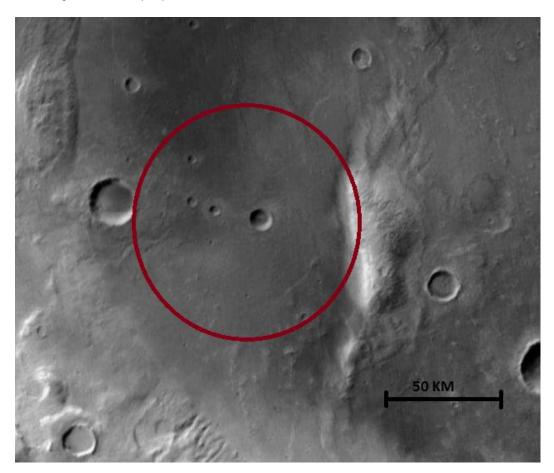
1015.pdf

Exploration Zone in Newton Crater

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Latitude and longitude of the proposed EZ: 40.6° S / 200° E



<u>Rationale for proposed EZ:</u> Newton is a large crater (300 km) located in Terra Sirenum in the Phaetholis quadrangle. This region is heavily cratered, preserves crustal magnetism, and has ground ice present. This region has been suggested target site for drilling to find the frozen remains of possible ancient Martian life (McKay 2010, Smith & McKay 2005). Within this EZ there are many potential science and resource ROIs, e.g. gully formations that are presumed to be indicative of past liquid water flows. There are also some observations about recent changes, probably formed from dry ice. This crater provides one of the few possible landing sites that are located in less than -2km altitude regions in the highlands of Terra Sirenum.

McKay, C.P. (2010). An Origin of Life on Mars. Cold Spring Harb Perspect Biol 2010;2:a003509. Smith H.D., McKay C.P. (2005). Drilling in ancient permafrost on Mars for evidence of a second genesis of life. Planet Space Sci 53: 1302 – 1308.