

Figure 1. Index map showing location of major physiographic features and 1:500,000-scale maps in Planum Australe region completed or in progress in Mars Geologic Mapping Program. Mars Transverse Mercator (MTM) numbers indicate latitude and longitude of center of maps. I-number indicates published map.

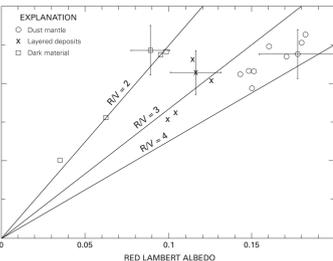


Figure 2. Violet Lambert albedo plotted against red Lambert albedo for three surface units in vicinity of south residual polar cap of Mars (exposures outside map area). Lambert albedos derived by dividing observed reflectance corrected for atmospheric scattering by cosine of incidence angle. Error bars represent combination of 13 percent uncertainty in absolute albedos and sampling errors in 5x5-pixel areas. Albedo variations along lines of constant red-to-violet ratio (R/V) mainly due to slope differences (Herkenhoff and Murray, 1990a). Colors of units are consistent with colors of similar units in north polar region (Thomas and Weitz, 1989).

Table 1. Lambert albedos and colors of surface units in the south polar region (Herkenhoff and Murray, 1990a). Ranges indicate variations in color and albedo among various areas sampled.

Unit	Violet	Red	R/V
Dust mantle (stipple)	0.04-0.05	0.14-0.18	3.2-3.8
Dark material (unit Ad)	0.02-0.05	0.04-0.10	1.8-2.1
Layered deposits (unit Ad)	0.03-0.05	0.10-0.13	2.5-3.2

Base from U.S. Geological Survey, 1986.
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GEOLOGIC MAP OF THE MTM -85280 QUADRANGLE, PLANUM AUSTRALE REGION OF MARS

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