

Fig. 10. Reflectance spectra for rock type G (gabbroic) crustal material: (left) spectra scaled to unity at 1.02 μm and offset vertically; (right) residual absorption after a single straight-line continuum has been removed.

(Figure 8). They often occur near other craters of a different type (for example Descartes 22 is about 140 km from Apollo 16, but most other craters of the region are of type N-1). All type N-3 craters exhibit pyroxene absorption bands that are prominent and symmetric, while the continuum slope is only moderately steep. Assuming that no absorbing or other alteration products are present, the minimum pyroxene abundance would be 10–18%. The band centers for the short-wavelength pyroxene band range from near 0.92 μm for Aratus (Imbrium basin) to about 0.95 μm for Fra Mauro 6, indicating a range

of average pyroxene compositions. Most of these areas exhibit spectra with an inflection around 1.25 μm , indicating the presence of crystalline Fe-bearing plagioclase. The composition of these areas is thus generally noritic, but those areas with longer-wavelength band centers also contain a clinopyroxene component, such as augite. The well-defined feldspar and pyroxene features of type N-3 areas indicate that the mineral components have not been as heavily altered as those for types N-1 and N-2, suggesting a less brecciated rock type or one with fewer absorbing alteration products.

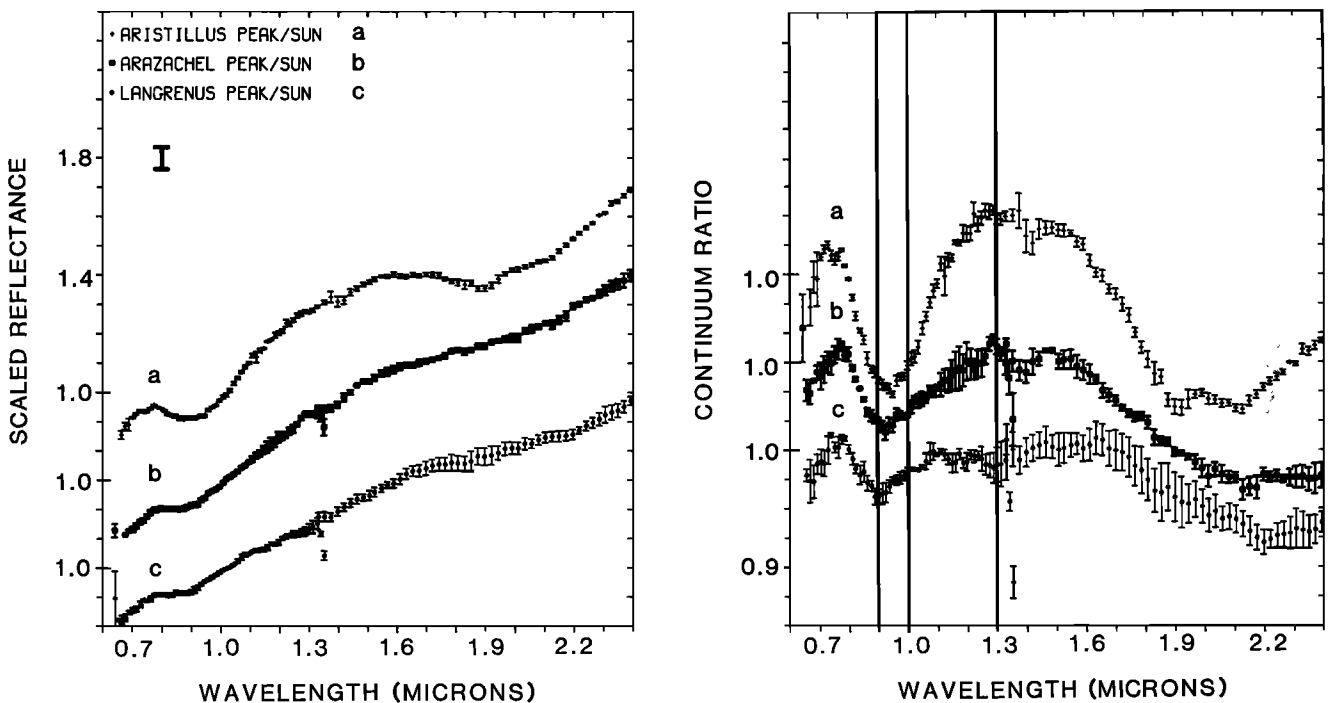


Fig. 11. Reflectance spectra for noritic central peaks I crustal material: (left) spectra scaled to unity at 1.02 μm and offset vertically; (right) residual absorption after a single straight-line continuum has been removed.