



Fig. 3. Three distinct segments of the marginal scarp of a massive Pd (#7 in Table 1), each showing discontinuous layering at different scales. In each image, the lobes of material overlying the layered scarp are usually contiguous with the surrounding plains material, and in some cases are contiguous with the pedestal surface as well. Because of this, when a sequence of layers is only partially covered, the layers that are stratigraphically on top are usually the ones that remain exposed. This situation is apparent in part “C” of the figure. (A) A section of Thermal Emission Imaging System (THEMIS) VIS image V17859015. (B) A section of CTX image B12_014321_1131. (C) A section of HiRISE image ESP_014031_1125. (D–F) Sketch maps of the scenes shown in parts “A”, “B”, and “C”. These illustrate the striking discontinuity of the layers. Grey arrows point in the downslope direction along the marginal scarps.

(Fig. 2). The presence of layering is typically established on the basis of albedo differences between adjacent layers (Fig. 1c). However, in some cases, layers are primarily expressed topographically,

creating stepped pedestal margins, without providing any significant albedo variations (Fig. 1b). The ability to identify this type of layering is more heavily dependent on the lighting geometry