



Fig. 6. (A) West sub-basin and Middle sub-basin for context of flat, bright-tipped, shallower (average slope angle is 2.6°), and laterally extensive fan features on the south side and lower-albedo, steeper (average slope angle is 6.4°), multi-lobed, and laterally contained possible slumps on the north side of Erythraea Fossa. Based on these morphologies, we interpret the southern features as having formed under wetter conditions than the northern features. (B) The westernmost fan-like feature is the most lobate. (C) Light-tipped, laterally extensive fan-like features at the terminus of short valleys sloping into West sub-basin. The light-tipped ends of the southern fans may be either the exposed ends of fans that are entirely light-toned or an exposure of a light-toned layer beneath the fans. (D) A low-albedo feature with several lobes evident coming from the northern side of Erythraea Fossa. This feature appears to have collapsed locally. (E) Another dark-toned lobate feature on the north side of the graben that appears to have moved as one mass. Figure is a composite of CTX images P20_008852_1550, B01_010197_1545, and B01_09986_1534.

the south side of the fossa, where the catchment areas are larger than to the north (Fig. 7). For example, in West sub-basin, on the north side the drainage divide is less than a kilometer away from the hypothesized lake surface, whereas on the south side the

drainage divide ranges up to 20 km away from it, providing more drainage area for runoff. Also visible on the south side of the fossa are laterally extensive, light-tipped, lobate features (Fig. 6B and C), whereas on the north side of the sub-basin there are darker