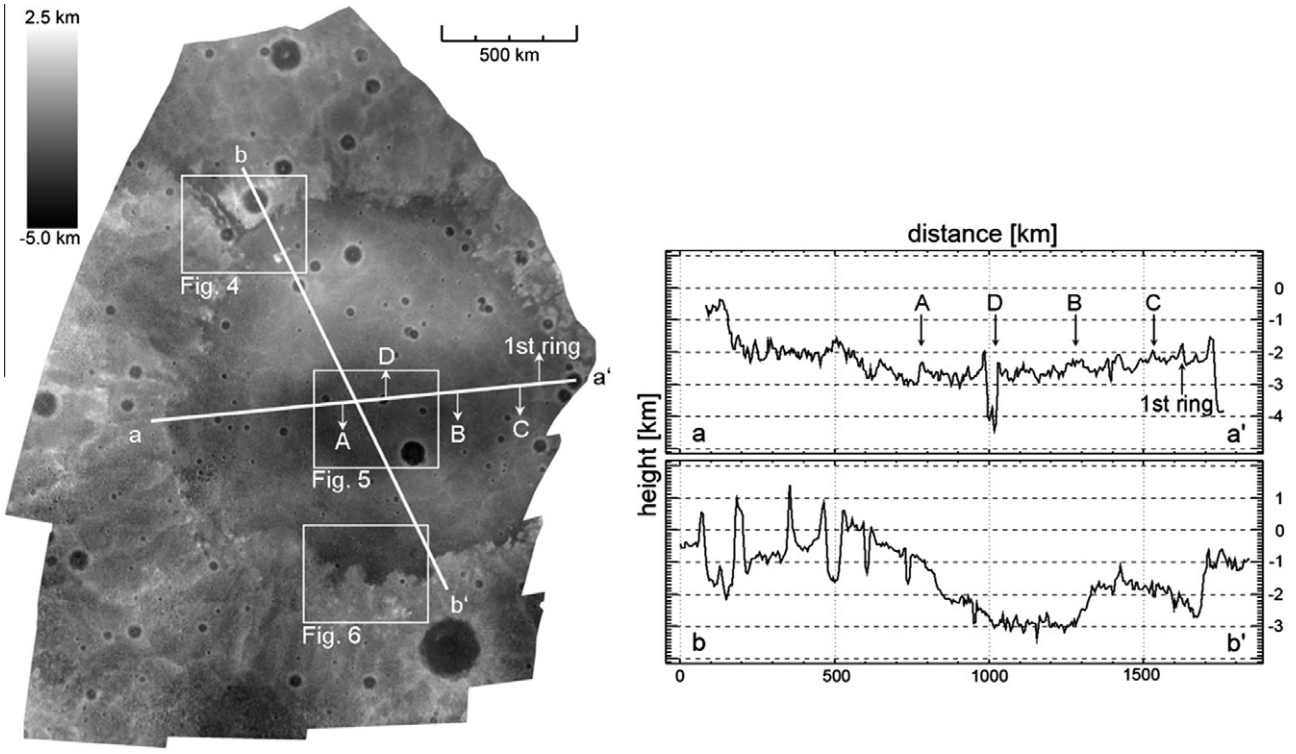

Fig. 3. Selected topographic profiles and locations of areas shown in greater detail in later figures (identified by figure number).

et al., 1997). Caloris is shallower than the lunar Orientale basin, which is similar in diameter but has a depth from rim crest to basin floor of 6 km (Fig. 8). The Caloris profile is more similar to those of Serenitatis and Imbrium, both of which are comparably shallow (approximately 1–2 km from rim crest to floor) and have flat basin floors (Fig. 8). Unlike Orientale, Serenitatis and Imbrium are filled with mare basalt to depths of several kilometers. The comparison suggests that Caloris was likewise infilled by large volumes of lava. While the resolution of Clementine data profiles are certainly limited, we suggest that further comparisons should be carried out using the vast volume of new altimeter data from lunar orbital missions now becoming available (Araki et al., 2009; Smith et al., 2010).

4.5. Long-wavelength topography

Within the Caloris basin interior, the DTM displays prominent long-wavelength variations in topographic height, particularly in the north–south direction (Fig. 3). A broad high dominates large parts of the northern basin floor and at its highest points exceeds

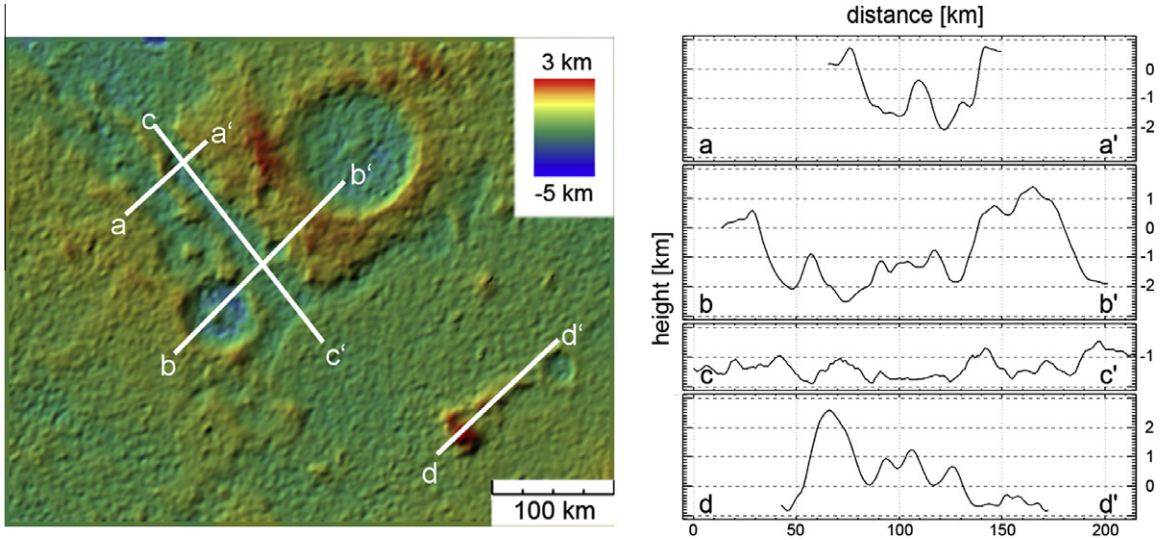

Fig. 4. Selected topographic profiles along and across a prominent trough located on the northwestern rim of, and radial to, the Caloris basin. The topographic high along profile dd′, interpreted as part of the inner Caloris basin ring, marks the highest point of the DTM.