



Fig. 12. Akna Montes. (a) Venera and (b) Arcicibo images. (c) Topography of Akna Montes (Venera topography). (d) Geological map comparable to Maxwell Montes unit map (Figure 2d).

Maxwell Montes is not consistently right-lateral. Although there is a right-lateral sense of shear along the northern boundary of Maxwell, the southern boundary displays evidence of left-lateral shear (Figure 9), and the eastern and western boundaries of the range show no evidence for large-scale shear at all. These observations indicate that strike-slip faulting associated with simple rotation of Maxwell Montes as a whole cannot account for all of the features observed in and around the mountain belt. Indeed, we have already seen that the plains regions west of Maxwell show evidence of tectonic and volcanic activity different from that observed on the mountain range. In particular we note the interpreted formation of the

dark bands from plains materials and a lack of CSDs within this unit and within the plains units beyond. These observations suggest that tectonic deformation continued in this region after activity along the CSDs ceased. Additionally, the east-west convergence of materials from Fortuna Tessera to Maxwell [Vorder Bruegge and Head, 1989b] could produce overprinting of patterns in eastern Maxwell and may be responsible for the observed sense of shear along southern Maxwell. High-resolution images obtained by the Magellan spacecraft should clarify this sequence of events and help determine if this model and further deformation could account for all of the deformation observed here.