FIGURE 1A. COMPARISON OF FILTERED LONG WAVELENGTH GRAVITY OVER THARSIS WITH FILTERED MODEL GRAVITY. 
Fig. 1C. Inset shows nature of filter. Gravity is from Mars 50c (Konopliv & Sjogren 1995).

1B. Comparison of filtered observed and model topography. Topography from USGS digital terrain model.

1C. Cross section of axisymmetric model which produces theoretical gravity and topography shown in Figs 1A&B. Cross-hatched area is conductive lid, dotted lines are temperature contours (in °C), dark shaded area is zone of melt generation, light shaded area zone of melt freezing. Rayleigh number is $6.57 \times 10^5$, mantle viscosity is $9 \times 10^{-2}$ Pas, melt generation rate 0.06 km a$^{-1}$, heat flux is 14 mW m$^{-2}$, and average mantle potential temperature is 150 °C.