

Fig. 7.65. (a) The gravity anomaly, (b) and (c) Gravity Topography Ratio (GTR) for a seamount that forms on-ridge and off-ridge. The GTR over the on-ridge feature is 11 mGal km⁻¹ compared with 44 mGal km⁻¹ for the off-ridge feature. (c) This compares the observed and calculated GTR for seamounts in the Pacific Ocean. The observed data (filled circles) are based on the compilation of Wessel and Lyons (1997). The calculated profiles are based on simple two-dimensional elastic plate models. The intersection of the calculated curves with the observed data can be used to determine the distribution of those features that have formed on-ridge and off-ridge.