the impact basins Isidis and Utopia. After our preliminary search and evaluation, the northern part of the Amenthes region had 78 members in the data set, nine of which were CTAs. The southern section had 105 members of its data set, only three of which were CTAs.

1. CTA uncertainties
In this region more than any other, the set of CTAs recovered from the crustal thickness model played a major role in the cumulative frequency curves. These curves represent the cumulative number of craters of a certain diameter within a given area. The 12 CTAs ranged in diameter from 200 km to 330 km, but the relatively low resolution of the crustal thickness model involves a measure of uncertainty in these estimates. We attempted to determine the possible maximum and minimum diameters for the CTAs in this region as well as a best estimate for the true diameter. The central diameters shown by thick circles in Figure 3 on the right are the values used in analysis, but the range of diameters is presented as a horizontal bracket (or a diameter “error bar”) on the cumulative frequency curve for the region (Figure 5).

Figure 5: CUMULATIVE FREQUENCY CURVES FOR AMENTHES AND ISMENIUS LACUS
a) The Amenthes curves include both counting error (square root of diameter, represented by the y-axis error bars) and the uncertainty brackets on the CTA diameters mentioned previously. b) The Ismenius Lacus curves have an almost identical shape to each other, and they are within error bars at virtually all diameters.