VLBA Antenna Horizons - MK

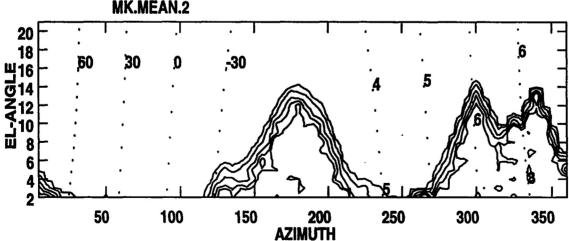
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Presented below are the results of two 6 cm total-power raster scans of the horizon at Mauna Kea (mean values plotted). The raster measurements were done in 72×5° azimuth steps for a 2-20° elevation range. One-second integrations of total and switched power were made at each raster point, and conversion to system temperature was done assuming a Tcal value of 1.38 K. These data have not been corrected for the effects of air mass. Further details (and data for the other nine stations) are given in VLBA Test Memo #37 'VLBA Antenna Horizons'.

Tabulations of the 75 K and 150 K T_{sys} elevation limits at Mauna Kea have been added to the file HORIZONS.VLBA available via anonymous-guest FTP in the directory 'pub' on host 'zia.aoc.nrao.edu' [146.88.1.4].

Figure 1: Mauna Kea horizon data; contours at $T_{sys} = 75$ (upper),100,150,200,250 K. Sidereal tracks for various delinations are indicated; the numbers on the left indicate the track declination, the numbers on the right hour angles. Azimuth indicates degrees east of north, El-angle in degrees.



Peak flux = 1.1964E+03 KELVINS Levs = 1.0000E+00 * (75.00, 100.0, 150.0, 200.0, 250.0)