EMIMGPOL.DOC

(last update Nov 12, 1985)

EMIMGPOL converts IMAGE data from a Cartesian to a polar coordinate system. The Cartesian IMAGE is subdivided into a number of annuli, where each annulus contains the same number of sample points. Enter the number of points/annulus (default = 128) and the number of annuli (default = the smaller of (NCOL/2)-1 and (NROW/2)-1, where NCOL and NROW are the number of columns and rows in the IMAGE data file). Now enter the radius limit (default = same as the number of annuli), and the x,y position (default XCEN = (NCOL-1)/2, YCEN = (NROW-1)/2)) defining the center for computing the polar IMAGE.

For example, if you start with an IMAGE that is 100 x 150 pixels (NCOL x NROW), then, if default values are used, then the polar IMAGE will contain 49 annuli, each sampled 128 times. This polar IMAGE will be computed from the center (49.5,74.5) of the Cartesian IMAGE out to a radius of 49. You may, of course, change any or all of these parameters within reasonable limits. It's up to the user to be sure not to compute something ridiculous.