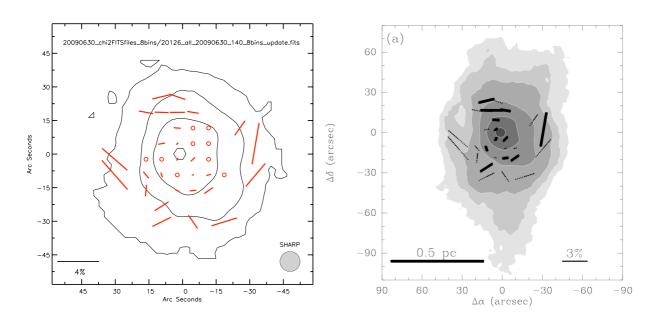
# SHARP data analysis on IRAS20126+4104 data set III Hiroko

#### -Result maps with lower contour levels

Following maps are made using polsharp5 using the 8 bins inflation factor. polsharp5,'20126\_all\_20090630\_140\_8bins\_update.fits',/vec,skipv=3,maxsig=2,color=2,onep=1,/ps,/debias,levels=[0.055,0.1,0.2,0.9] ("debias" flag ==> John's 2006 PASP paper equation (11) & (12))



Left: The map using the polsharp5 command written above. The lowest contour is 5.5% of the peak flux.

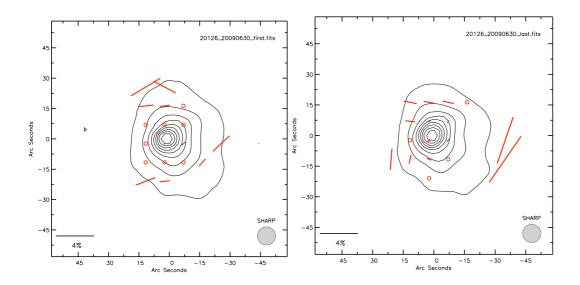
Right: A map with 350 micron continuum measured with SHARCII with the same vectors plotted

#### - Check the number of pixels for 4- and 8-bins chi2 fits files

Both chi2 fits files for 4 bins and 8 bins that the chi2 software generates have exactly the same number of pixels (2601 pixels). So, the reduced chi2 values derived (and reported in previous memos written on 2009/06/30 & 2009/07/01) are useful.

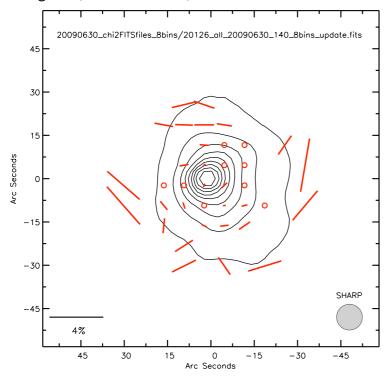
- Result maps using first half data and last half data

E vectors plotted above 2.3 sigma (error not inflated)



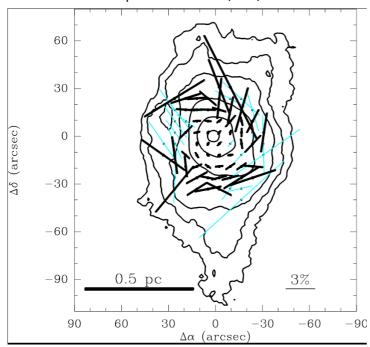
Results look similar, although some vectors show up only one of the plots.

### 2 sigma (error inflated)



Please note that the lowest degree of polarization measured was 0.3 %. The highest s/n was 6 sigma with 0.6% of degree of polarization near the center.

## Polarization map as of 2008/04/15



Result maps obtained look very similar to what we got from analysis done before April 2008.