Flexure Correction

Flexure is the error in telescope pointing due to the non-rigidity of the a telescope mount and tube. For PCTCS flexure correction also includes polar alignment and other issues not generally considered flexure. To correct flexure in TCS we must build a flexure map. This is done by measuring the error in pointing across the sky and analyzing those measurements with tpoint (http://www.tpsoft.demon.co.uk/).

Getting Started

In order to create a flexure map using the methods mentioned in this wiki you will need a linux (preferably ubuntu) computer and some software. First you will need astropy (http://astropy.org) for fits image manipulation.

Then you will need some python modules located on the mogit repository.

- astro (Classes to handle coordinate data)
- astrometry (Classes to submit data to astrometry.net for astrometric solutions)

Gathering flexure data

The best way to gather data for building a flexure map is to take images all over the sky in a dithered alt-az pattern and solve the astrometry of the image using http://astrometry.net or some other astrometry engine. If the telescope camera uses AzCam we can utilize AzCam scripts to take a