Subject: Re: Newbie needs help...
Posted by James Kuyper on Wed, 10 Jan 2001 22:55:02 GMT
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"Liam E. Gumley" wrote:

..

- > You mentioned that you are using MODIS data at 1 km resolution (1354 x
- > 2030 pixels pre granule). One approach we use is to define a global
- > equal area grid; we happen to use 25 km x 25 km grid cells. We loop over
- > each 1 km pixel, and based on it's lat/lon, we accumulate the following
- > statistics in each grid cell:

>

- > Number of observations,
- > Sum of observations,
- > Minimum observation,
- > Maximum observation.

>

- > From these, we can compute mean and standard deviation. it is quite
- > straightforward to then resample the equal area grid to an equal angle
- > grid which can be visualized in IDL.

One thing to keep in mind about MODIS data is that you don't need to grid it yourself. For most data sets, if MODIS has a pixel-oriented product, it also has one or more corresponding products which are gridded by latitude and longitude. For instance, the MOD10_L2 product reports on snow coverage for each pixel, with 500m resolution at nadir; each file covering 5 minutes of data. MOD10L2G, on the other hand, summarizes an entire day's worth of data gridded according to one of several possible different map projections, with each file covering a tile that is nominally 10 deg by 10 degrees, with a nominal grid resolution of 500m.