Subject: Re: interpolation of angular data (interpolation in a circle)
Posted by MarioIncandenza on Wed, 11 Apr 2012 05:09:50 GMT
View Forum Message <> Reply to Message

On Tuesday, April 10, 2012 6:41:38 PM UTC-7, Russell wrote:
Russell,

Yes, everything starts as Julian dates. To describe the problem better: I have data at irregular intervals from T to T+24 hours. I wish to generate from these data an interpolated 24-hour curve, that describes a diurnal cycle. I can do this at face value, but then my curve has a discontinuity. For instance, if the first observation is at T=2 hours and the last is at T=22, I want the interpolation to use both of these observations to generate the curve for T=0,1,23, and 24 hours.

This is directly analogous to trying to interpolate observations to make a continuous transect of longitude around the equator.

The answer just hit me, it's something like this:

OBS_TO_INTERPOLATE = [OBS, OBS, OBS]
T_TO_INTERPOLATE = [T_OBS-1,T_OBS,T_OBS+1]

Then I can take the middle of the curve interpolated from these values and it will be continuous.

Thanks for the answer re: INTERPOL/INTERPOLATE.

--Edward H.