Subject: spherical harmonics
Posted by Klaus Gottschaldt on Fri, 13 Oct 2000 07:00:00 GMT
View Forum Message <> Reply to Message

Hallo!

I want to analyze data on a sphere, representing them by spherical harmonic coefficients.
This is somehow like a Fourier transform, but based on Legendre polynoms, which are
defined on the surface of a sphere.
Unlike wavelets, this transform is global.
My data are given in the form [longitude, latitude, data_value], where longitude, latitude
and data_value are vectors of the same length.
Data points are randomly scattered over the sphere with a resolution of approx. 100km
on the Earth's surface.

Does somebody know, how to do this transform with idl?

Klaus