**Method of calculating global interhemispheric ratio:**

UCI 1984 – 1996 data don’t have longitudes, but they have site description, which is used along with latitudes to come up with the longitude; the original UCI data set doesn’t have the same problem. The UCI data are gridded following the GMAO 2x2.5 degrees. All data within a grid cell are combined and the coordinates are changed to the center latitude and center longitude of that cell. The current latitude bands are -50 to -30, -30 to 0, 0 to 30, 30 to 50, and 50 to 75. The latitude band must cover the 5 sites from the OGI data. Data are deseasonalized within each band by subtracting the seasonal average. A gaussian fit is used to obtain the standard deviation of the deseasoned data; data that are less than or greater than 3 standard deviation are removed. Annual average and its standard error is calculated for each data set as follow: monthly average is calculated for each year, then the annual average is the mean of the monthly averages of the corresponding year.