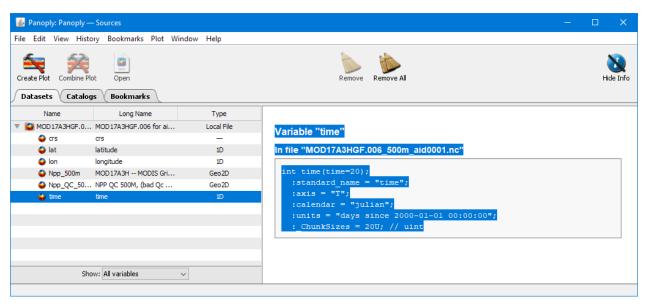
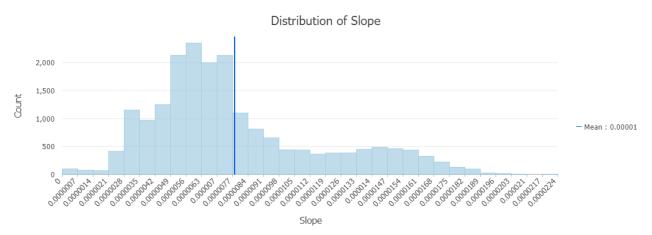
Using ArcGIS Pro 2.9.1 on windows 10 I imported a netcdf file to a Multidimensional Raster Layer. The data is a time series with one data set per year for 20 years (2001-2020). The original time dimesnsion in the netcdf file is days. When I calculate the trend using AcrGIS Pro (Multidimensional Trend) i get very small values.

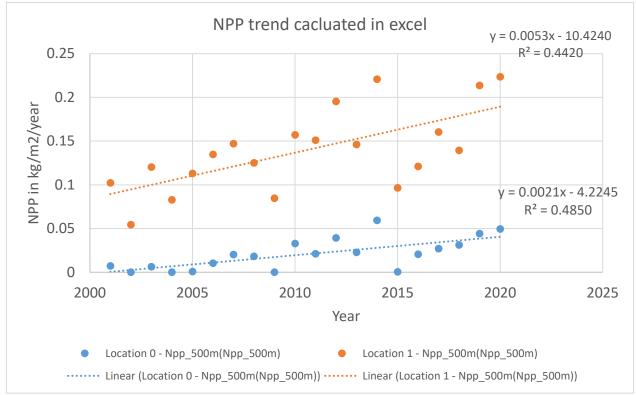


The data set in Panoply showing the time unit in days:

The slope after calculating Multidimensional Trend:



The slope calculated in excel for two subset of the area. Slopes are here 0.0053 (5 g) and 0.0021 (2 g) kg/m2/year which I assume reasonable. Dividing these slopes with 365 (days per year) gives a value fitting in the distribution above (0.0021/365) = 0.0000058.



Question: What time interval do Multidimensional Trend use for calculation of the trend? The predefined interval in the netcdf file (days in this case)? How do I calculate a trend for a raster time series without time (each band is equal to one time step?

Regards

/Jonas Ardö (Jonas.ardo@nateko.lu.se), Lund University, January 17, 2021