

Time Series Analysis (new assignment to replace what is in the course readers)

Objective: Prepare and interpret a time series analysis for the Klein Karoo region of southern Africa.

- 1) Read up on time series analysis
- 2) Download IDRISI 32 from (unzip the license details using the password dolphin) /nisl/computing/Idrisi download license and setup file.
- 3) Download the data file (modis_kk.rar un unzip it)
- 4) Analyse the data and prepare a report as per instructions below.

Time Series Analysis Tutorial

http://planet.uwc.ac.za/nisl/Remote_sensing/Word_docs/Time%20Series%20Exercise.doc (Been printed out for you in your notes)

Once completed this tutorial/instructions you must analyse the following data

Using this exercise you must analyse the following MODIS NDVI data from this folder

The dates for the scenes to be analysed are

http://planet.uwc.ac.za/nisl/Remote_sensing/Assignment_Time_Series/modis_kk/Modis_dates.xls

You will analyse all of the images associated with these dates (e.g. 2000049 to 2005353) use the zip file to download

The following report is considered potentially useful when interpreting your results.

[Final Little Karoo Transformation Report 05.pdf](http://planet.uwc.ac.za/nisl/Remote_sensing/Assignment_Time_Series/modis_kk/Final%20Little_Karoo_Transformation_Report_05.pdf) -
[http://planet.uwc.ac.za/nisl/Remote_sensing/Assignment_Time_Series/modis_kk/Final%20 Little Karoo Transformation Report 05.pdf](http://planet.uwc.ac.za/nisl/Remote_sensing/Assignment_Time_Series/modis_kk/Final%20Little_Karoo_Transformation_Report_05.pdf)

The following website could also be helpful with the interpretation of your analysis

<http://bgis.sanbi.org>

Once you get you PCA results you will need to produce graphs using Excel.

Your report needs to be written Abstract, Introduction, Methods, Results, Discussion, Acknowledgements, References - please use the following lecture to help you prepare your report.

http://planet.uwc.ac.za/nisl/Scientific_methods/Chapter5/index.html