

## How to create your own data sets like the ones provided

We have provided several data sets based on one model run. For project work, etc. it might be useful to be able to create similar data sets based on runs which you have completed on school/home computers.

To create these data sets, you will have to have, or have had, the *climateprediction.net* model running on your computer, and have the advanced visualisation package, SVI, installed.

### *Temperature and Precipitation Data for Correlation*

- Launch the SVI
- Choose an experiment using the file menu. This could be an experiment completed on your computer, or one of the three sample sets of data available from the *climateprediction.net* web site.
- Choose 'surface average field' from the 'view' menu
- Choose 'field 1' to be temperature and 'field 2' to be precipitation (or any other variables you want to investigate)
- Deselect global data if you want to enter a precise location on the globe – for example if each student is investigating a single city or country.
- Click 'plot'
- Copy and paste the data which appear in the box below the figure into Excel.

### *Seasonal temperature data*

Creating data sets such as this one takes a bit longer – at least an hour.

- Launch the SVI
- Choose an experiment using the file menu. This could be an experiment completed on your computer, or one of the three sample sets of data available from the *climateprediction.net* web site.
- Choose 'surface field' from the 'view' menu
- Choose 'field' to be surface temperature
- Choose 'timescale' to be 'season'
- Deselect global data to enter a precise location on the globe NB seasonality will not be apparent in globally averaged data!
- Select 2050 and DJF
- Click 'plot'
- Select 'output data' from the file menu. Create an appropriate file name such as '2050\_DJF' and click on 'output data'. The file will appear in c:/Program Files/ Climate Prediction/vis.
- Repeat for 2051 DJF, 2051 MAM, 2051 JJA etc. You will create 60 data files.
- Use excel to open each data file in turn. London (well, 52.5 °N, 0 °E) is the first column on line 241. Copy and paste this number into a new excel spreadsheet. For any other location, you will need to work out which is the corresponding number. The data is organised in blocks of latitude, so lines 1-16 correspond to the North Pole, lines 17-32 correspond to 87.5°N, lines 33-48 corresponds to 85°N etc. The first number in each block is 0 degrees, the 2<sup>nd</sup> number is 3.75° E, the 3<sup>rd</sup> number is 7.5° E etc to 356.25°E.