**Common Data Processing Tasks in Hydrologic Sciences**

**Objective:**

The objective of this tutorial is to become familiar with hydrologic data processing in R or Python. The tutorial data is from the First Creek at Waterfall Gully catchment in South Australia. This catchment is part of the Bureau of Meteorology Hydrologic Reference Station network (<http://www.bom.gov.au/water/hrs/>).

**Data:**

Input\_Climate.csv

This file contains 7 columns including climate zone identification key, date, maximum temperature, minimum temperature, rain, potential evapotranspiration and radiation. You can view the content of this file in EXCEL.

**Data Processing:**

Upload the data in R or Python, and prepare the following graphs or tables

1) Visualize daily mean temperature, and precipitation in the catchment

2) Compute monthly temperature and precipitation and plot the results

3) Compute mean annual precipitation and temperature and plot the results

4) Compute trends in annual precipitation and temperature and plot the results