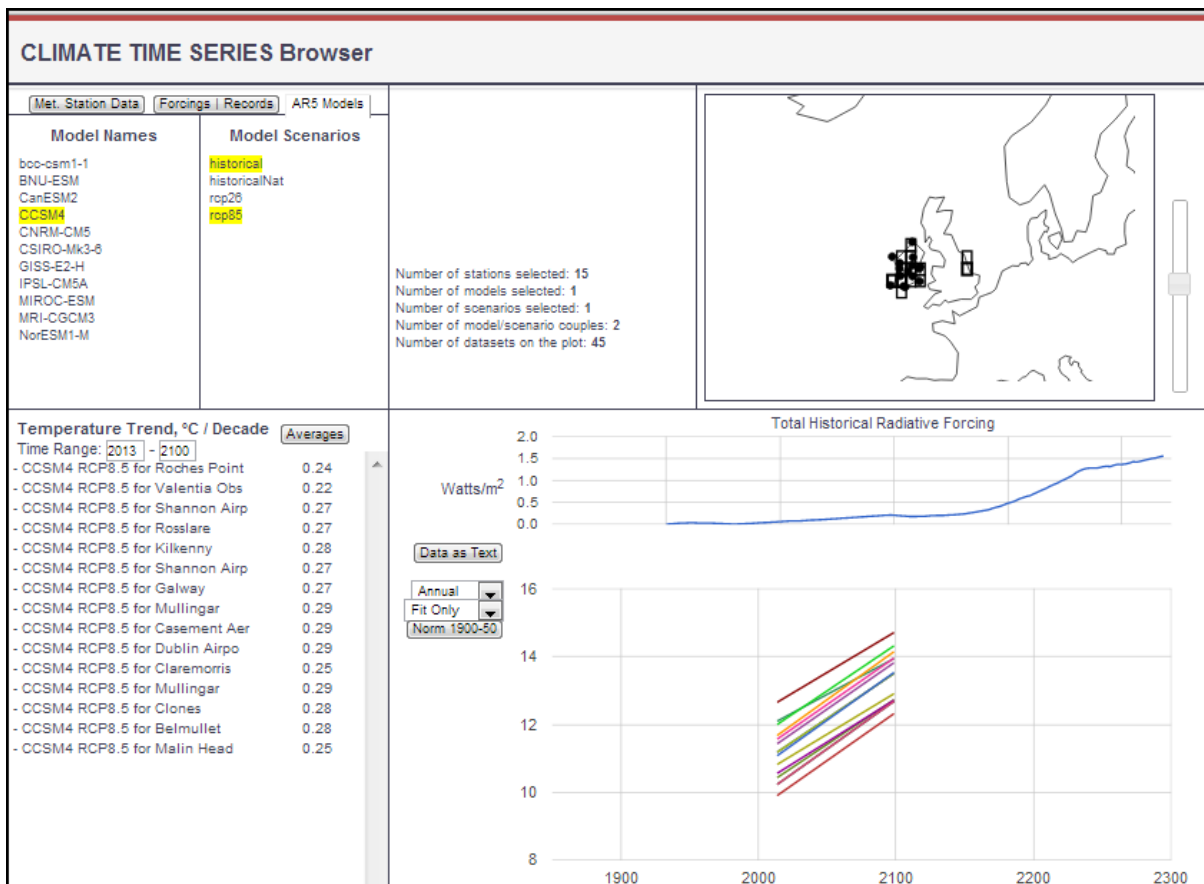


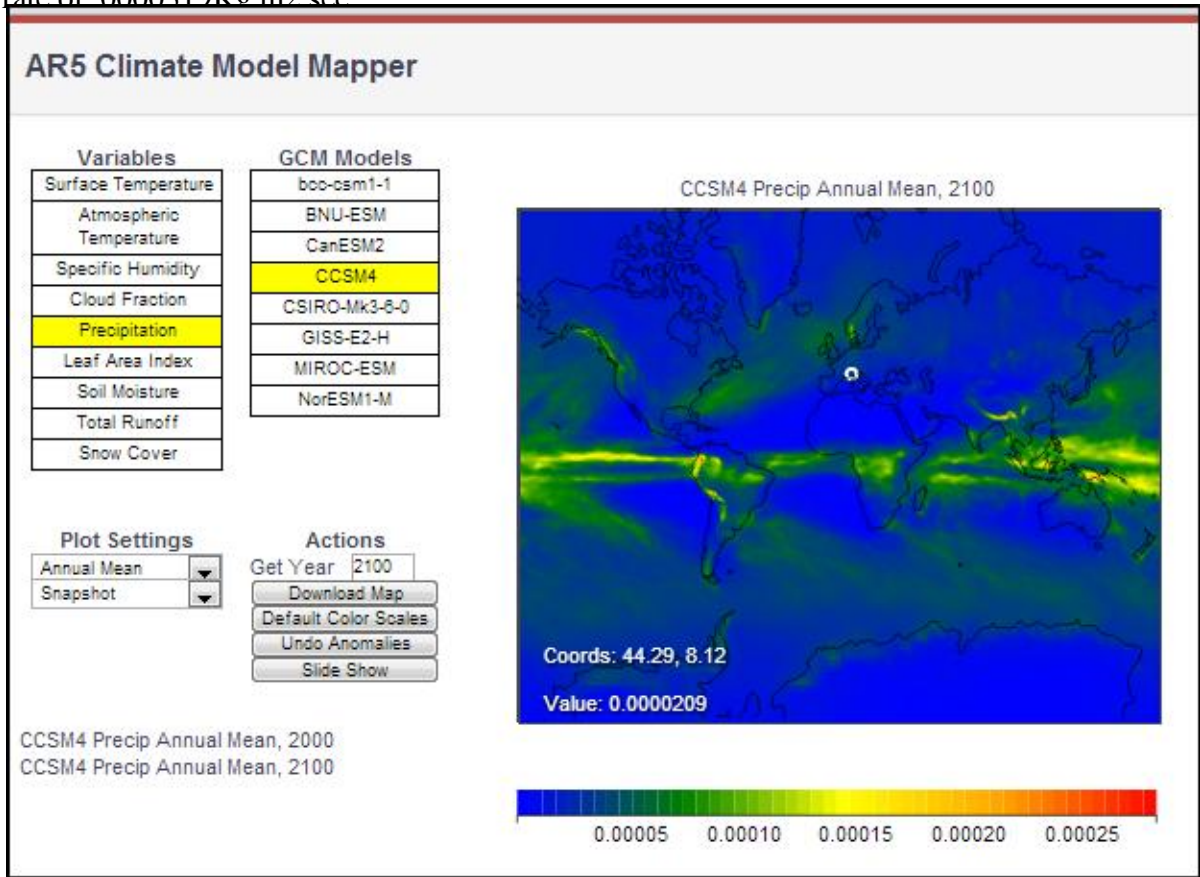
Climate change and global warming, will Ireland become Europe's new Riviera by 2100?

Living on the south west coast of Ireland, my childhood memories of the weather are of cool wet winters and cool wet summers. As a teenager I travelled to Nice on the French Riviera and wished we could have a similar climate. When we heard the early reports of global warming in the early 1980's we were delighted to be told of the imminent long warm summers and drier winters. We are still travelling to the Mediterranean for our sun holidays, so where have our dreams of warm summers gone and will we ever get those drier winters?

To investigate the prospect of more favourable weather I selected the 15 Irish meteorological stations in the climate time series browser, then using the CCSM4 model and selecting the RCP85 high forcing scenario I plotted the increase in temperatures to the year 2100. The temperature trend is upward, varying between 0.22°C and 0.29°C per decade and the average temperature will reach 13.52°C by the year 2100. This compares with an average current temperature of 14.89°C in Nice on the French Riviera, so not quite there in terms of temperature.



Now thanks to Professor Archer we have all seen the smoking gun, the Co2 increases are driving climate change with record temperatures being recorded around the globe. The most intense weather systems, typhoons and hurricanes have all taken place in the last twenty years. So what are the implications for the south west Ireland? Using the AR5 climate model and selecting the global climate model CCSM4, I plotted the change in precipitation rate from 2000 to 2100. The model shows an average reduction of 0.0000037Kg m2 sec but the average mean will still be at a rate of .0000478Kg m2 sec compared with the Nice average rate of .0000319Kg m2 sec



Also using the AR5 climate model I had a look at the cloud fraction data and while there will be a reduction from 16.73 to 11.17 over the period of the century this will still be higher than the current 10.47 in Nice.

So with no great change in sunshine amounts, any hope of those long dry sunny summers seems highly unlikely.