

MODULE 10: HOW WILL ARGENTINA'S PRECIPITATION CHANGE?

TEACHING ACTIVITY PLAN: ARGENTINA

Argentina is a vast country with a large north south extent over a variety of latitudes and relief. It is important to note that local trends may differ from the information presented in the graphic. For further information see Christensen *et al.* (2007) IPCC Working Group I Report: 'The Physical Science Basis', Chapter 11 (*Regional Climate projections*): Section 11.6 (*South and Central America*).

ACTIVITY ONE

- Mean annual rainfall over Argentina has increased by 1.9mm per decade (3.5%) since 1960.

Students could be told about the significant trends evident in particular seasons.

- The increases in MAM and SON are statistically significant at a rate of 5% and 4.7% per decade respectively
- The proportion of rainfall that occurs in heavy events has increased by 1.7% per decade, on average, since 1960. A 'heavy' event is defined as a daily rainfall total which exceeds the threshold that is exceeded on 5% of rainy days in the current climate of that region and season.

ACTIVITY TWO

- Projections of mean annual rainfall from the different emissions scenarios show very small or no changes in precipitation for Argentina as a whole.
- Central Argentina shows large increases in precipitation in DJF and MAM (by over 20% by the 2090s.
- There is a projected decrease in the south western part of the country.
- Change is mostly negative throughout the country in JJA.