

### 3 Results

Maps and tables are shown in Section 3.1. The maps use model output from the 20C3M and A1B scenarios. We used the A1B scenario to ensure consistency with the IPCC maps and related theoretical research (Held and Soden 2006).

Precipitation time series for the 20th century (20C3M) and for the 21st century (A1B) for each model run are shown in Section 3.2. In that section we show time series for the globe and for the Australian continent. The Bureau of Meteorology (2008) observations for the Australian continent are also plotted enabling a visual comparison between model simulations and observations.

#### 3.1 Maps and Tables

Each run for a particular model-scenario combination is represented by six pages comprising two pages of maps and four pages of tables. For example, the NCAR-CCSM3.0 model had seven runs for the A1B scenario – hence there are seven sets of maps and tables.

In total, maps and tables are presented for 39 model runs from 20 different models (Table 1).

For each of the 39 model runs, we prepared maps showing precipitation, evaporation and their difference for the Globe and used the same data to prepare enlarged maps for Australia.

The maps show annual average precipitation (P) and evaporation (E) for the 1970-1999 (20C3M)

and 2070-2099 (A1B) periods in the first two rows. The third row shows the difference, P-E, and is equal to the runoff from terrestrial surfaces (under steady state conditions). Differences in P, E, and P-E are shown in the third column. The Australian map is based on the same data and is an enlargement of the world map. The layout of each map is described in Figure 2.

The tables include summaries of precipitation, evaporation and their difference for:

- Continental regions (20C3M and A1B),
- Latitude zones by Land/Ocean (20C3M),
- Latitude zones by Land/Ocean (A1B),
- Latitude zones by Land/Ocean (A2, when available).

Figure 2: Legend showing map panels and the associated scale bars. Top left scale bar applies to the P and E maps. The bottom left scale bar applies to the P-E maps. The top right scale bar applies to the third column. Each map is annotated with details describing the underlying source data.

