About the ACCESS-S climate outlooks

- The climate outlooks are generated from the Australian Community Climate Earth-System Simulator–Seasonal (ACCESS-S), the Bureau's dynamical (physics based) climate model. See About the ACCESS-S model.
- One- and three-month outlooks are issued each Thursday, while weekly and fortnightly outlooks are issued twice a week on Tuesday and Thursday.
- The mean sea level pressure (mslp), rainfall and temperature climate outlook maps present the outlooks in three forms:
 - 'Difference from average' (anomaly) maps show how far above or below the 1981 2018 average mslp, rainfall and temperature is likely to be. The values provided are the centre of the likely predicted scenarios—also known as the ensemble mean.
 - The percentage chance of exceeding median¹ rainfall and temperature.
 - The percent chance of cooler/near average/warmer (for temperature) and drier/near average and wetter (for rainfall) conditions, also known as terciles.

The outlooks in the three forms are available for weeks, fortnights, months, and threemonths ahead.

- For the monthly to seasonal timescales, the outlook issued closest to the end of a calendar month is likely to be the most accurate in terms of observed mslp, rainfall and temperature patterns for the three months ahead. For example, outlooks issued in the last week of June, for the three months July to September, will generally be more skilful than outlooks issued earlier in June. While weather forecasts provide you with a temperature and rainfall value or range for tomorrow, climate outlooks cannot be this specific. This is because the further we look ahead, the more small, random changes can amplify into different weather patterns. However, longerterm forecasts of seasonal statistics, such as whether rainfall or temperature will generally be above or below median, are possible to accurately predict. Recent advances in modelling and computing power have allowed us to look at shorter timescales, making possible accurate predictions for sub-monthly timescales. For more information see http://www.bom.gov.au/climate/ahead/about/#tabs=Past-accuracy
- Probability-based outlooks are designed to be used as one of several planning tools within risk management and decision-making. The greatest benefits of using Bureau climate outlooks will accrue from use over a number of seasons or years. Read our blog: <u>http://media.bom.gov.au/social/blog/1699/what-to-expect-from-theclimate-when-the-outlooksare-neutral/</u>

¹Median is a measure of what is considered average rainfall or temperature for a specific location, similar to the mean. The median is the value that lies in the middle of a set of past values when they are ranked from lowest to highest. Due to the high variability of rainfall, and that in some locations just one or two extremely wet years can substantially change the overall average, using the median is the best representation of typical rainfall that would be expected.