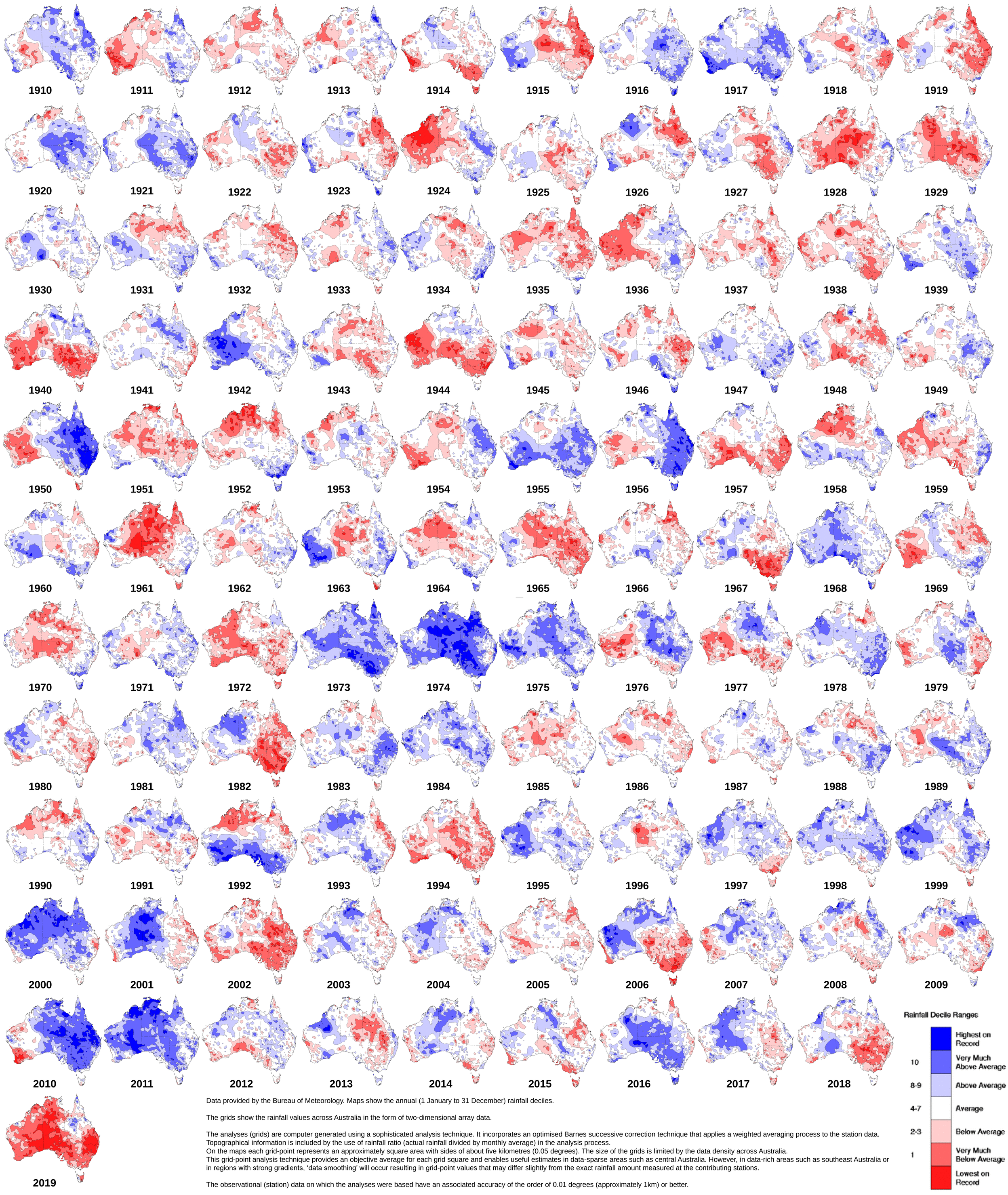
Annual rainfall deciles 1910 to 2019



Data provided by the Bureau of Meteorology. Maps show the annual (1 January to 31 December) rainfall deciles.

The grids show the rainfall values across Australia in the form of two-dimensional array data.

The analyses (grids) are computer generated using a sophisticated analysis technique. It incorporates an optimised Barnes successive correction technique that applies a weighted averaging process to the station data. Topographical information is included by the use of rainfall ratio (actual rainfall divided by monthly average) in the analysis process.
On the maps each grid-point represents an approximately square area with sides of about five kilometres (0.05 degrees). The size of the grids is limited by the data density across Australia.
This grid-point analysis technique provides an objective average for each grid square and enables useful estimates in data-sparse areas such as central Australia. However, in data-rich areas such as southeast Australia or in regions with strong gradients, 'data smoothing' will occur resulting in grid-point values that may differ slightly from the exact rainfall amount measured at the contributing stations.

The observational (station) data on which the analyses were based have an associated accuracy of the order of 0.01 degrees (approximately 1km) or better.