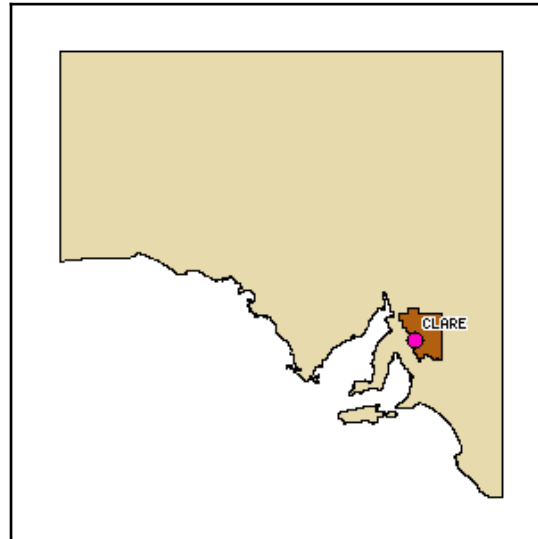




Regional Profile

Clare and Gilbert Valleys (DC), Goyder (DC), Northern Areas (DC) (LGA) Region

South Australia



Produced by the National Agricultural Monitoring System
(NAMS)

January 9, 2007

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Major production systems and regional statistics

Local Area: Clare and Gilbert Valleys (DC)

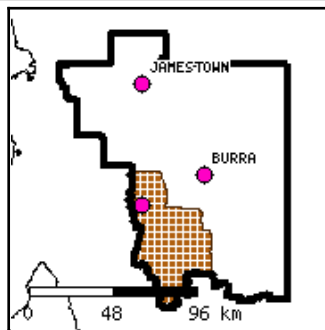
Major towns in the region: CLARE,RIVERTON,SADDLEWORTH

Size of the region:	184,699 ha
Total population (2003):	8,318
No. of Cropping enterprises (2001):	157.3
No. of Livestock enterprises (2001):	33.1
No. of Other enterprises (2001):	255.6

Top 5 agricultural commodities by value (2001):

1. Wheat:	\$37,856,815.00		147,358 t
2. Barley:	\$13,198,076.00		61,778 t
3. Pulses:	\$5,679,034.00		
4. Canola:	\$5,538,306.00		17,184 t
5. Wool:	\$5,280,397.00		1,644,403 kg

(Source: Australian Bureau of Statistics)



The cross-hatched area on the adjoining map shows the underlying source area for the statistical data in relation to the report region.

Local Area: Goyder (DC)

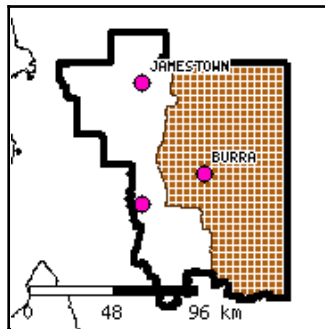
Major towns in the region: BURRA,EUDUNDA,ROBERTSTOWN

Size of the region:	652,780 ha
Total population (2003):	4,166
No. of Cropping enterprises (2001):	146.1
No. of Livestock enterprises (2001):	66.1
No. of Other enterprises (2001):	180.7

Top 5 agricultural commodities by value (2001):

1. Wheat:	\$39,542,510.00		153,920 t
2. Barley:	\$11,340,135.00		53,081 t
3. Wool:	\$10,420,608.00		3,115,812 kg
4. Sheep and lambs:	\$6,868,956.00		495,672 head
5. Pulses:	\$2,491,767.00		

(Source: Australian Bureau of Statistics)



The cross-hatched area on the adjoining map shows the underlying source area for the statistical data in relation to the report region.

Local Area: Northern Areas (DC)

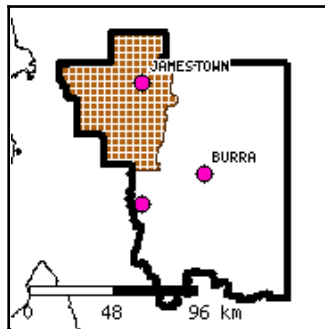
Major towns in the region: JAMESTOWN, GLADSTONE, LAURA

Size of the region:	289,027 ha
Total population (2003):	4,692
No. of Cropping enterprises (2001):	225.5
No. of Livestock enterprises (2001):	19.0
No. of Other enterprises (2001):	110.5

Top 5 agricultural commodities by value (2001):

1. Wheat:	\$61,926,186.00		241,049 t
2. Barley:	\$32,946,086.00		154,215 t
3. Pulses:	\$6,967,561.00		
4. Wool:	\$6,431,029.00		1,859,046 kg
5. Sheep and lambs:	\$6,342,301.00		333,132 head

(Source: Australian Bureau of Statistics)



The cross-hatched area on the adjoining map shows the underlying source area for the statistical data in relation to the report region.

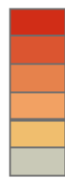
Geography

Topographic Map

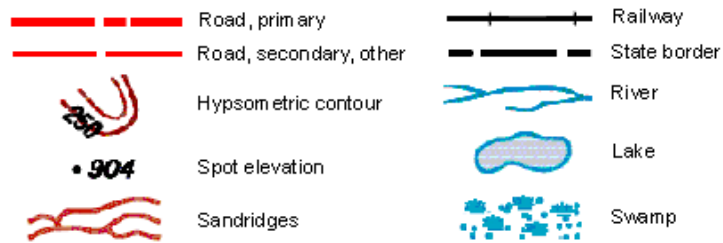
The following figure shows the region and the surrounding area within the context of the major towns, roads, rivers, and regional topography. The location of the region within the state is shown on the title page of this document.



Elevation (m)



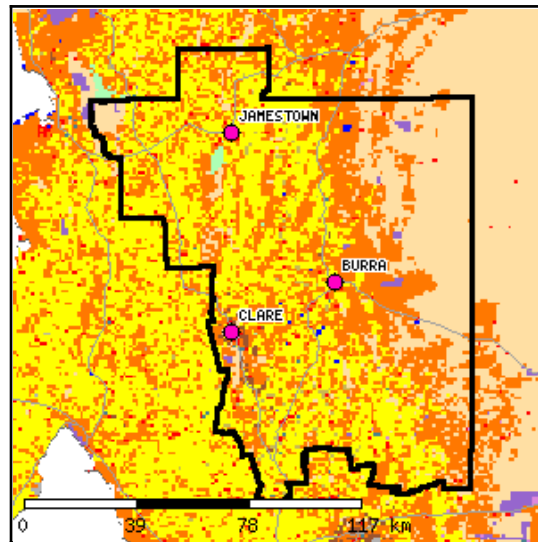
Topography






















Location of the region. The report region is outlined in white. (Source: Geoscience Australia)

Landuse

The following figure shows the major Landuses within the region. The region is outlined in black.



Land use

-  Water
-  Mining and waste
-  Urban intensive uses
-  Rural residential
-  Intensive animal and plant production
-  Irrigated horticulture
-  Irrigated pastures and cropping
-  Dryland horticulture
-  Dryland cropping
-  Grazing modified pastures
-  Plantation forestry
-  Production forestry
-  Grazing natural vegetation
-  Minimal use
-  Other protected areas inc Indigenous uses
-  Nature conservation
-  Main Roads
-  Selected Region
-  Localities

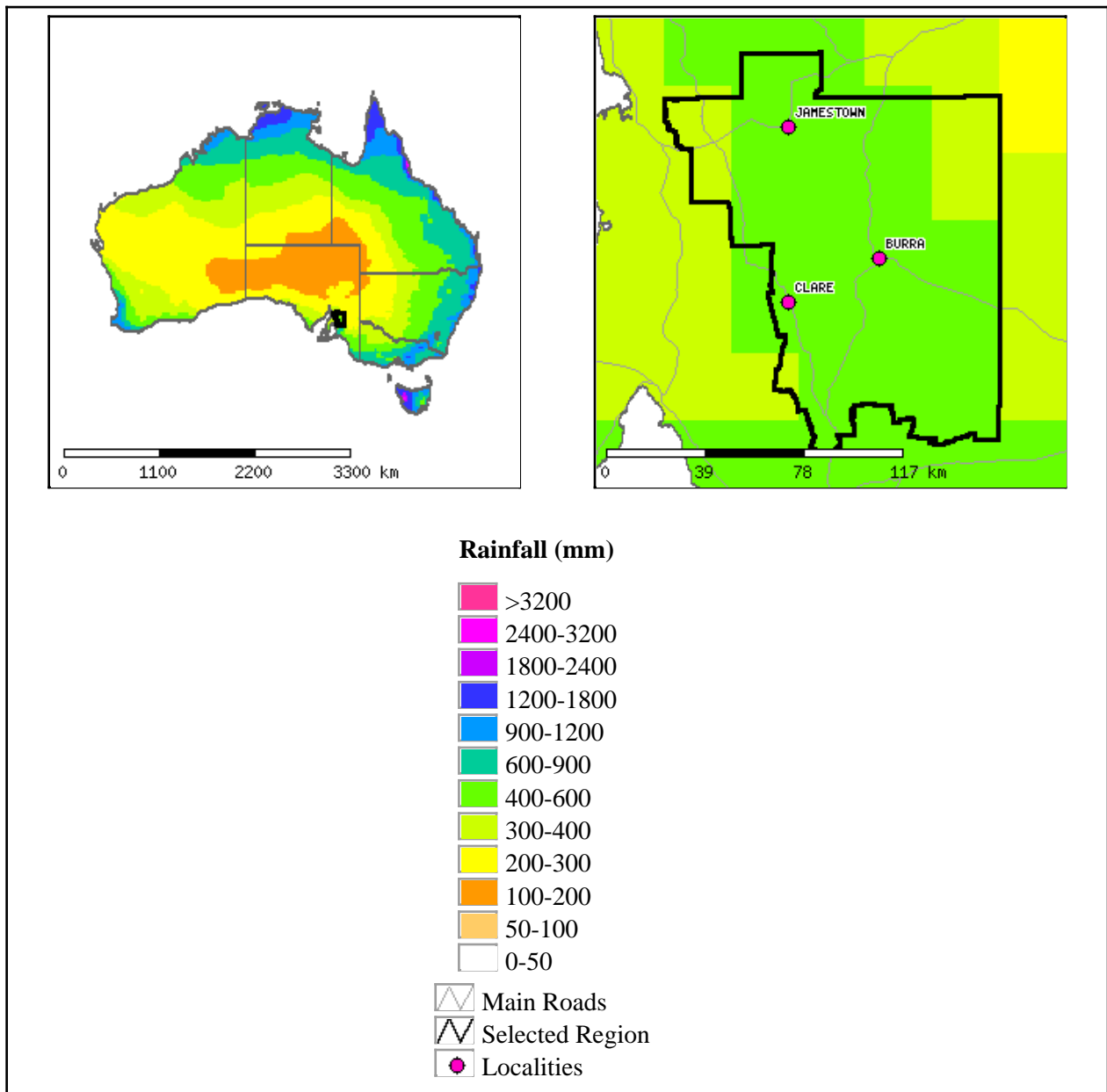
Landuse of the region. The report region is outlined in black. (Source: National Land and Water Resources Audit / Bureau of Rural Sciences).

Climate

Average rainfall

Average annual rainfall

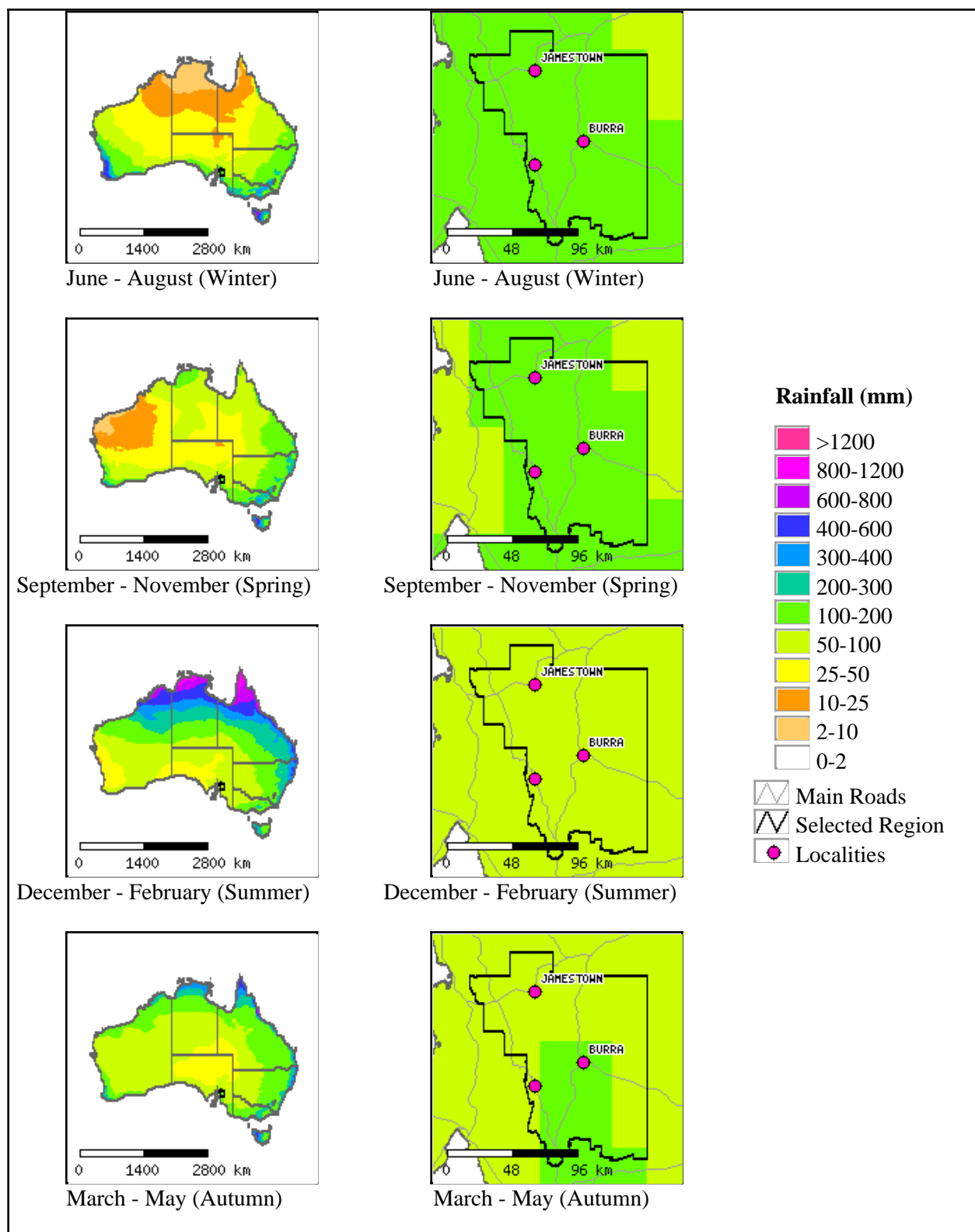
The following figure shows a summary of average annual rainfall for Australia and for the EC report region.



Average annual rainfall for Australia and for the region. The report region is outlined in black. (Source: Bureau of Meteorology).

Average calendar season rainfall

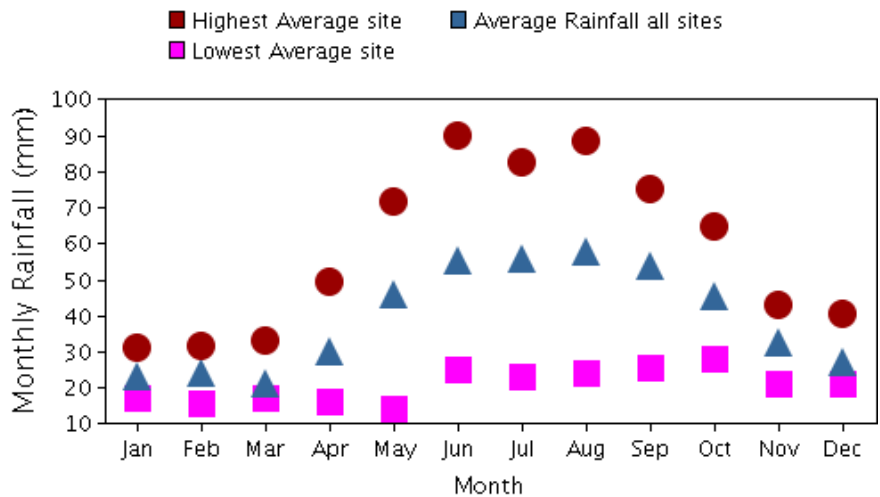
The following figure shows a summary of average rainfall for each calendar season for Australia and for the region.



Average rainfall for the calendar seasons for Australia and report region. The report region is outlined in black. (Source: Bureau of Meteorology).

Average and range of monthly rainfall

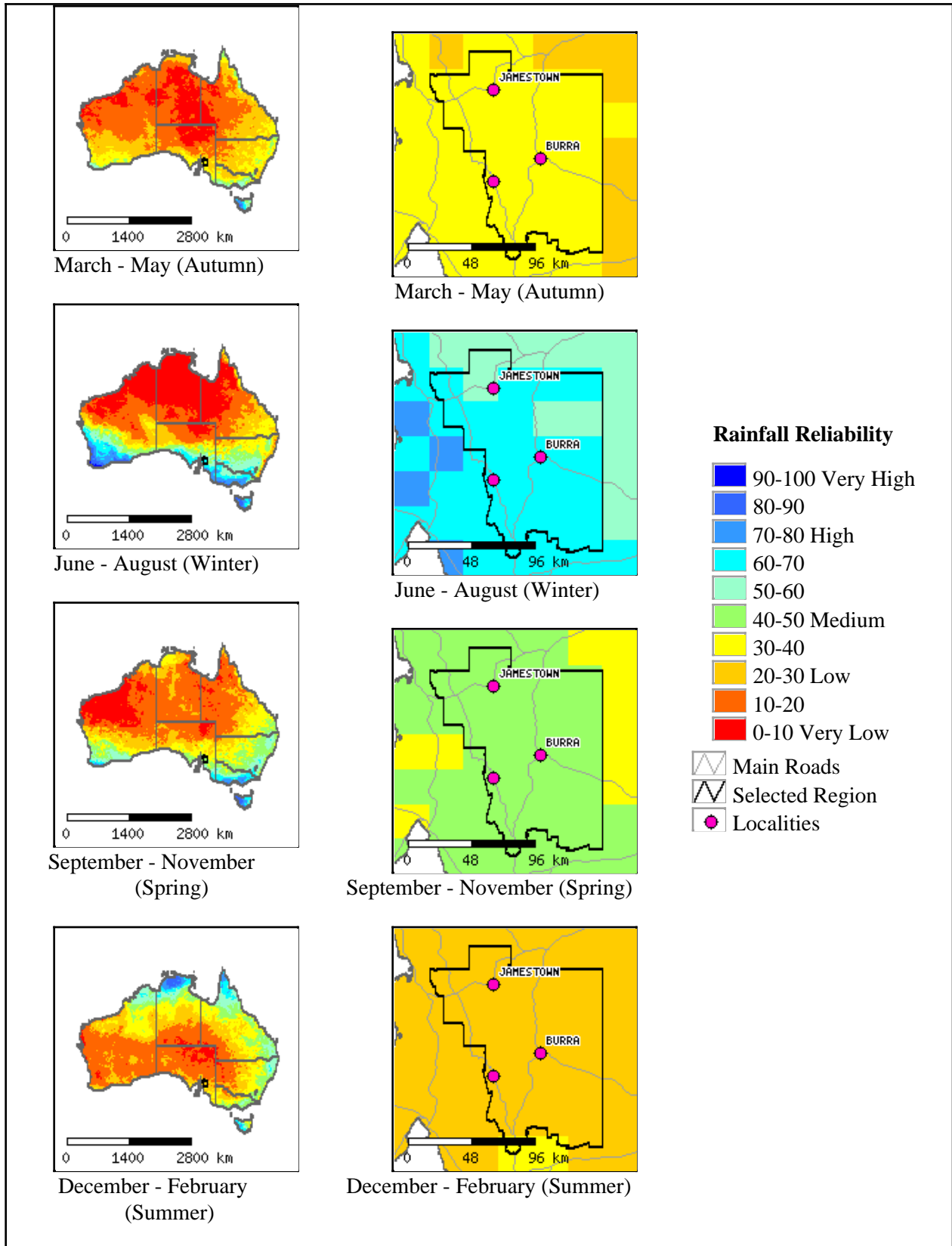
The following figure shows the average (mean) and range of monthly rainfall (highest average and lowest average) using all sites within the EC report region over the historic record.



Average and range of monthly rainfall for all sites within the EC report region. Symbols show the highest average (mean), and the lowest average (mean) rainfall of all sites. (Source: Bureau of Meteorology)

Seasonal Rainfall Reliability (Intra-seasonal)

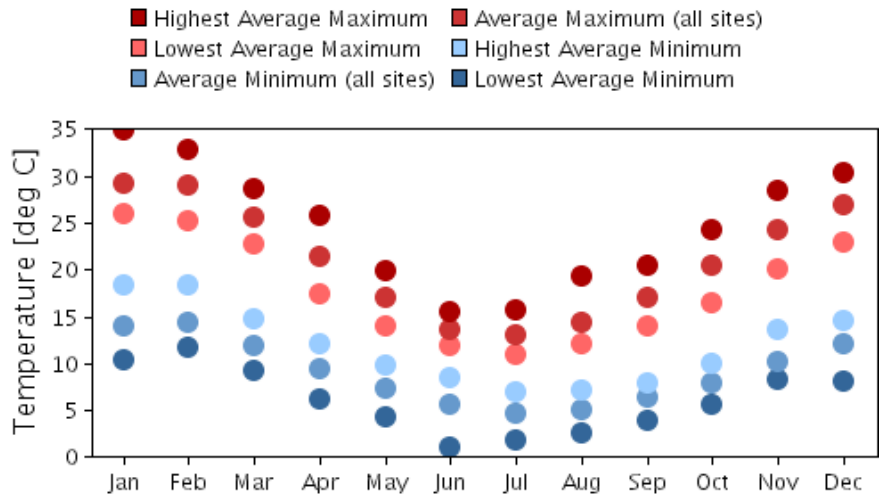
The following figure shows the proportion of years that the region has received at least half of the long-term average monthly rainfall in each and every month of the four calendar seasons (intra-seasonal reliability). Average rainfall is not necessarily a reasonable guide to its reliability, where-as intra-season rainfall reliability is a direct measure that has agronomic significance. Generally, the higher the number the more reliable the growth conditions tend to be.



Intra-season rainfall reliability for the calendar seasons for Australia and the report region derived from the Rainfall Reliability Wizard. The report region is outlined in black. (Source: Bureau of Rural Sciences).

Temperature Profile

The following figure shows the average (mean) and the range of average monthly maximum and average minimum temperatures (highest to lowest) of all the sites in the EC report region over the historical record.



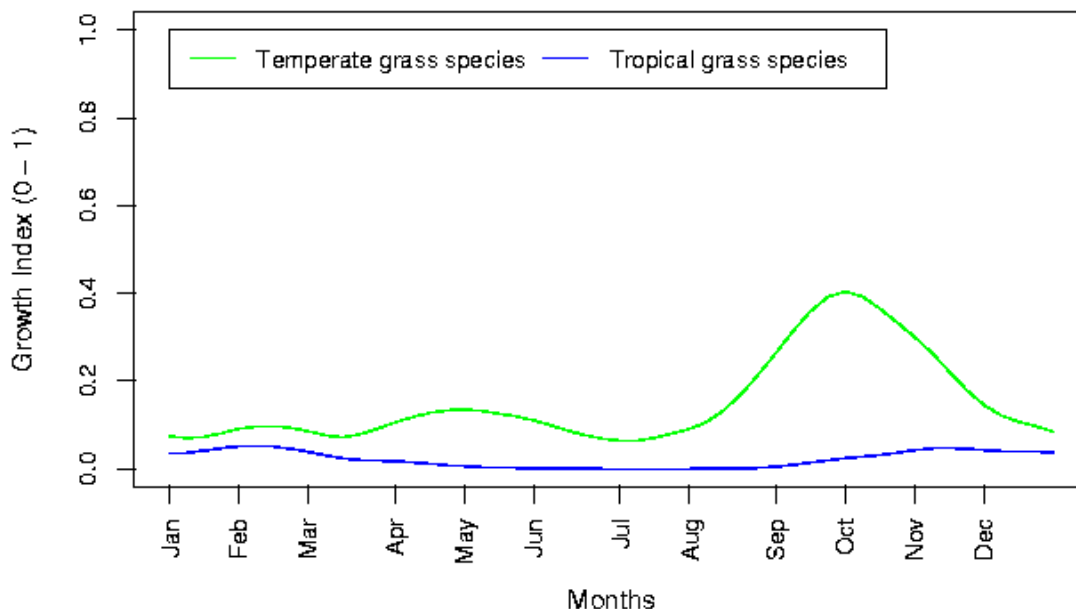
Average values and range of average maximum and average minimum air temperatures for all sites within the report region. (Source: Bureau of Meteorology).

Growing Seasons for Pasture Types

The following figure shows the potential growing seasons for pastures within the region. It uses a simple growth model, GROWEST, to characterise the growing season for a site in the region.

The GROWEST model can be used to predict potential plant growth, expressed in terms of a Growth Index for both cool-season (C3) and warm-season (C4) plant species, at selected sites within the region. Examples of cool-season species include: annual and perennial ryegrass, wallaby grass, and subterranean clover; examples of warm-season plant species include: Kikuyu, Rhodes grass, and Kangaroo grass. This simple model uses light, temperature and moisture input data. It should be noted, however, that the GROWEST model's predictions are not absolute estimates of plant production. Other factors, such as pasture species, soil types and management practices should also be taken into account when interpreting this analysis. In the figure, the horizontal axis is time (one year) and the vertical axis is an index of potential growth; zero suggests no growth potential and 1 suggests optimal conditions for growth. Although this model does include some soil characteristics, it is largely weather driven and as such it might be better to think of a growth index of 1 meaning optimal weather conditions for growth. The cool season pasture species are represented by the blue line and the warm-season species are represented by the red line. The following figure shows the potential growing seasons for pastures for a site within the region. It uses a simple growth model, GROWEST, to characterise the growing season for a site in the region.

MOUNT BRYAN (21034)
MOUNT BRYAN
Average Growing Season



Potential growing seasons of warm-season (C4 megatherm) and cool-season (C3 mesotherm) pasture species. (Source: Bureau of Rural Sciences).