Climate of the Cuvelai~Etosha Basin

Evaporation
Evaporation varies between about 2,400 and 3,000 millimetres of water per year, which is several times more than the annual rainfall.

The loss of water is greatest in the early summer months of October, November and December when the sun is intense and there is little cloud to reflect the heat.

The Tsumeb area has the lowest rates of evaporation because there is more cloud cover as a result of the hilly terrain.

Sunshine
Average hours of sunshine per day

During the winter months, the Basin has between 8 and 10 hours of sunshine per day. Even though the days are longer in summer, there is much more cloud cover and therefore fewer hours of sunshine than in winter.

Wind speed and direction
For much of the year, most winds blow across the Basin from the north-east, east and south-east, but easterly winds predominate in the winter.

Strong east winds in winter blow fine dust off Etosha Pan and elsewhere towards and over the sea. Over many years, these winds have eroded Etosha Pan so that it remains a low-lying pan rather than being filled-in by sediments.

Average wind speeds (kilometres per hour) at Ondangwa each month at different times of the day

Temperatures
As a result of abundant sun and skies that are often clear, temperatures in the Basin are amongst the highest in the country.

On average, temperatures vary little across the Basin, although the south-eastern and south-western areas are slightly cooler.

October is the hottest month in the south of the Basin, while further north high temperatures persist from September to December.

Frost
Frost occurs on only about one day per year in the Basin and thus has little impact on plants.

Humidity
Relative humidity (%) at different times of the day