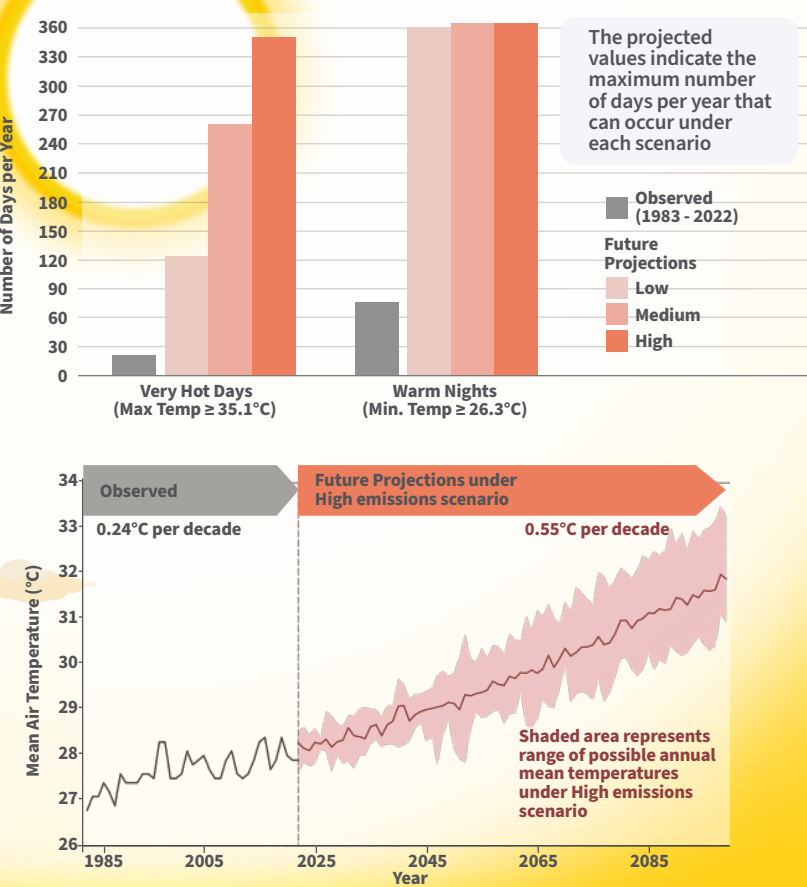


KEY CLIMATE CHANGE PROJECTIONS FOR SINGAPORE

The projections, from Singapore's Third National Climate Change Study (V3), are based on three global greenhouse gas (GHG) emissions scenarios (Low, Medium, High).

 **The choices we make today will determine which scenario will occur.**

Very hot days and warm nights will be the new normal by end-century



Range of possible outcomes under all three emissions scenarios

Annual average daily mean temperature

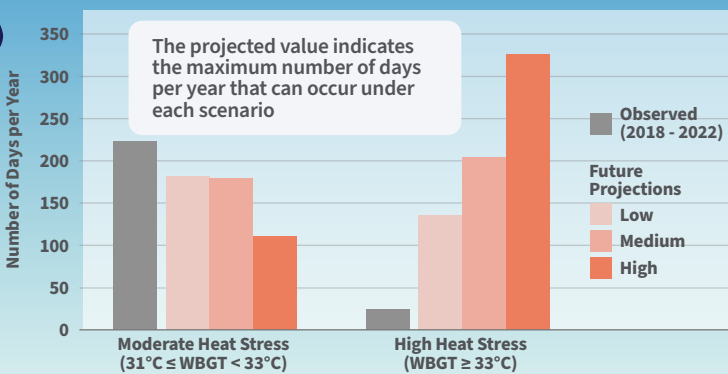
Present	Future
27.9 $^{\circ}\text{C}$	28.5 $^{\circ}\text{C}$ to 32.9 $^{\circ}\text{C}$
	↑ 0.6 $^{\circ}\text{C}$ to 5.0 $^{\circ}\text{C}$

Annual average daily maximum temperature

Present	Future
31.4 $^{\circ}\text{C}$	31.9 $^{\circ}\text{C}$ to 36.7 $^{\circ}\text{C}$
	↑ 0.5 $^{\circ}\text{C}$ to 5.3 $^{\circ}\text{C}$

Rising threat of heat stress

By end-century, under the High emissions scenario, occurrences of *high heat stress* are significantly more frequent than *moderate heat stress*, a reversal from today's normal.



Range of possible outcomes under all three emissions scenarios

Annual average daily mean WBGT

Present	Future
26.6 $^{\circ}\text{C}$	27.1 $^{\circ}\text{C}$ to 30.9 $^{\circ}\text{C}$
	↑ 0.5 $^{\circ}\text{C}$ to 4.3 $^{\circ}\text{C}$

Annual average daily maximum WBGT

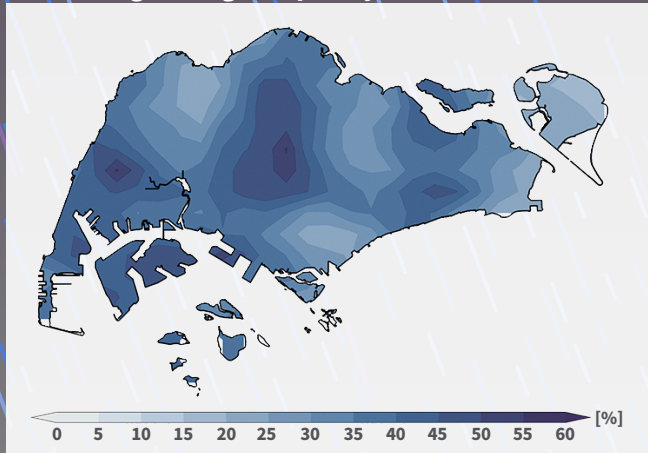
Present	Future
30.4 $^{\circ}\text{C}$	30.9 $^{\circ}\text{C}$ to 34.4 $^{\circ}\text{C}$
	↑ 0.5 $^{\circ}\text{C}$ to 4.0 $^{\circ}\text{C}$

WBGT refers to the Wet-Bulb Globe Temperature, a measure of heat stress, which is a composite measure that takes into account air temperature, humidity, wind, and solar radiation.

Extreme rainfall to intensify

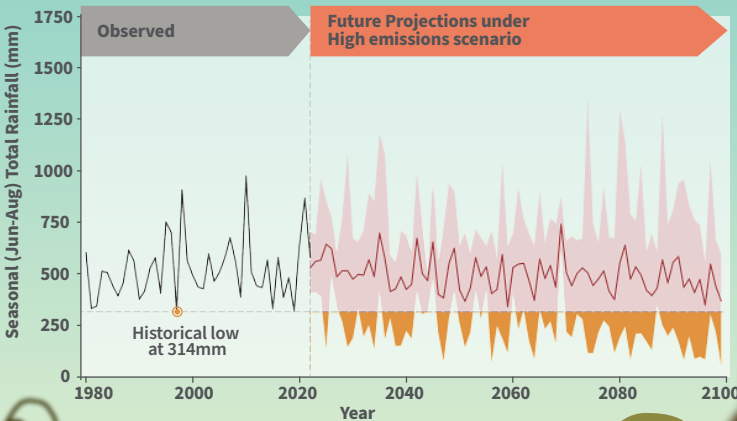
Extreme daily rainfall is projected to increase by about 6% to 92% in April and May by end-century.

Percentage Change in Apr-May



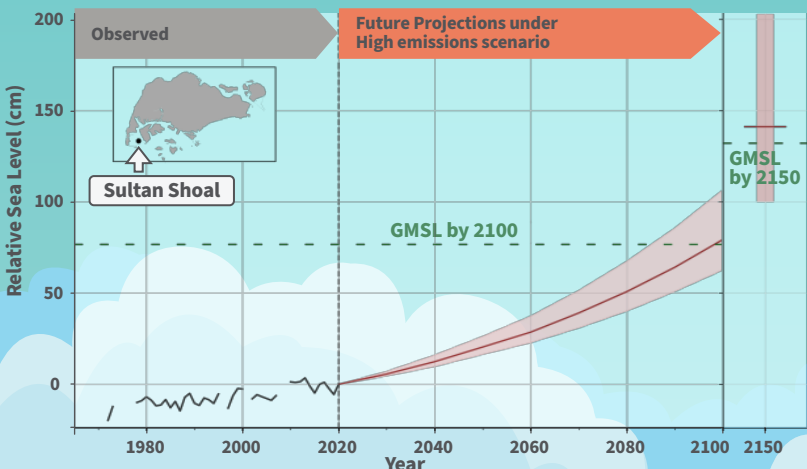
Dry periods to get drier

Seasonal rainfall in the dry months of June-through-August could fall significantly below the historical low of 314mm, around once every three years, by end-century.



Sea level rise will continue to accelerate

Sea level is expected to rise higher than previously projected due to a better understanding of key processes affecting sea level at global, regional and local scales. Projected sea level rise around Singapore is comparable to the Global Mean Sea Level (GMSL) rise.



Sultan Shoal is one of six tide gauge stations around Singapore with long-term records. The gaps seen in the observational time series are due to no data being available.

Range of possible outcomes under all three emissions scenarios

Mean sea level rise

↑ 0.23m to 1.15m by 2100

↑ Up to around 2m by 2150