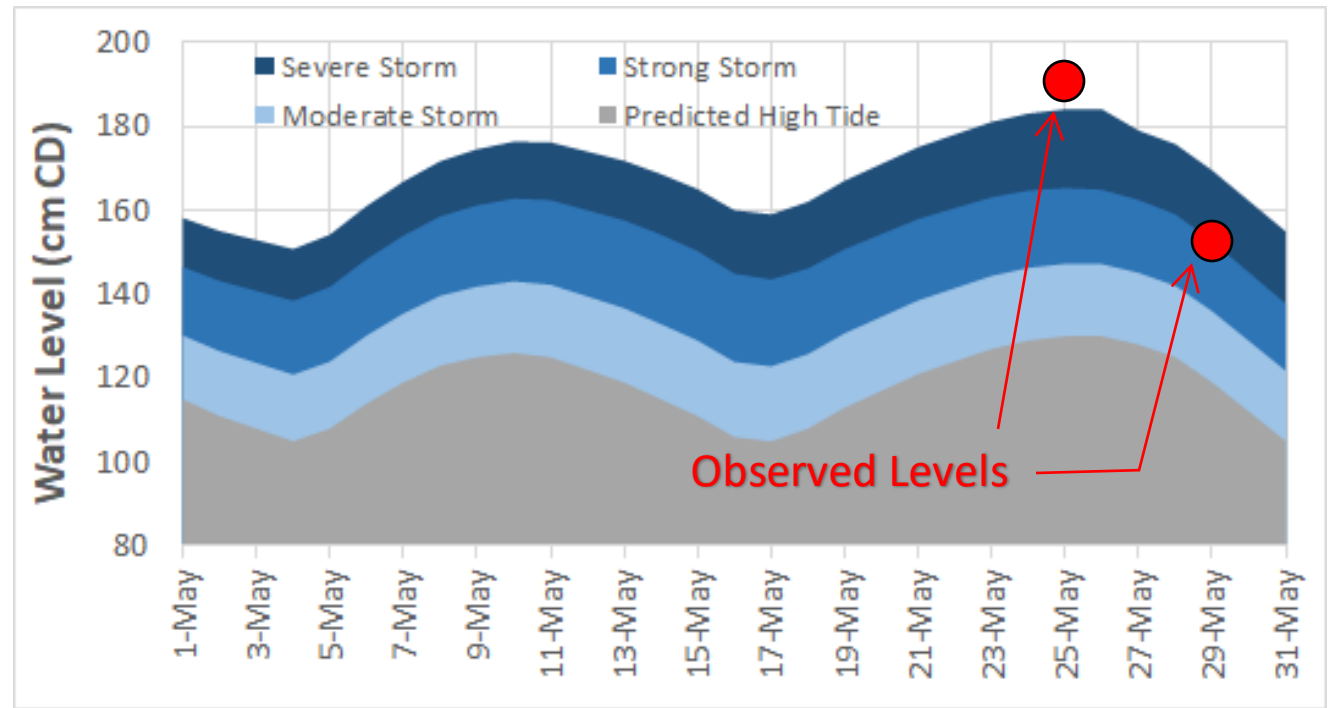
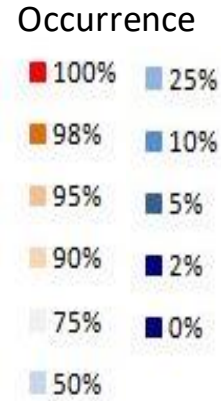
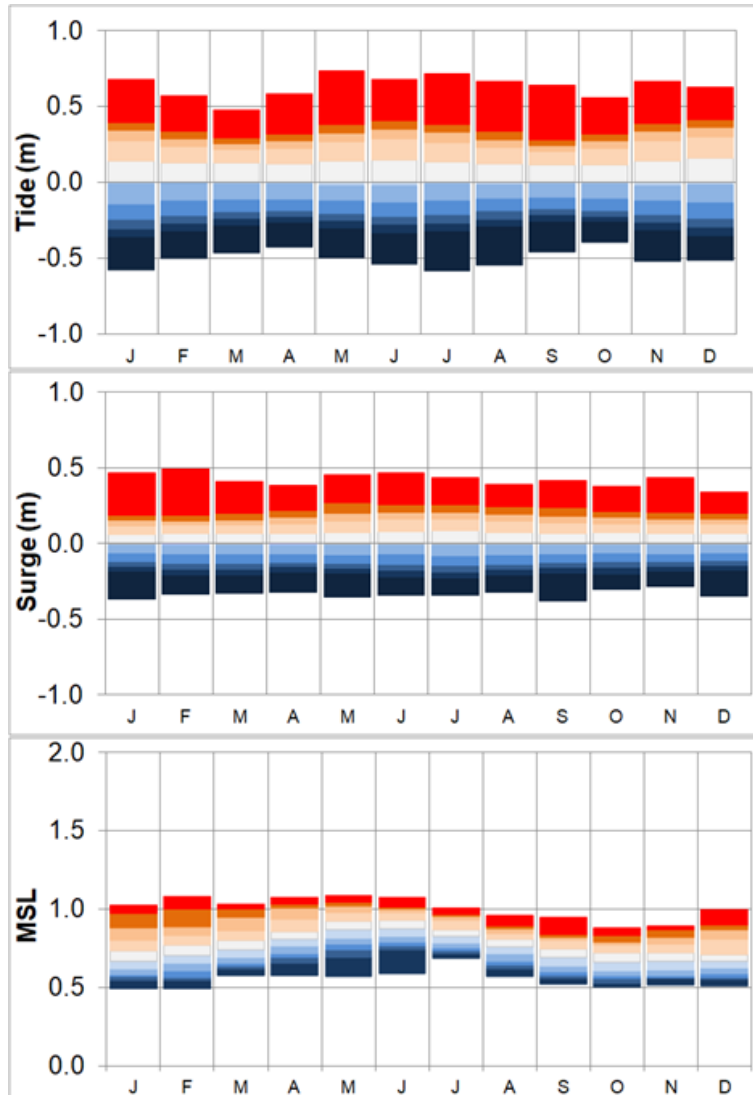


Southwest Coastal Flooding Risk

Coastal flooding is developed through the coincidence of tide, surge and mean sea level. In combination, these cause flood risk to vary substantially.



For southwestern Australia, there are seasonal cycles of surge and mean sea level, peaking in winter. The mainly diurnal tides have a twice-annual cycle, with peaks at the solstices in June and December. The combined factors provide the greatest likelihood of coastal flooding in May and June each year.

On a day-to-day basis, fortnightly tidal cycles cause significant variation in coastal flood risk.

Predicted tides can be combined with storm surge severity to estimate coastal flood risk. An extreme level occurred in late May 2020 when a severe surge combined with high tide.

Actual flood impacts can vary depending on the timing of tides and surges, as well as the coincident effect of wind waves or ocean swell.

