



Lelu, Kosrae

Dates of very high tides

March 2014 to May 2014

NIWA
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Sea levels (and high tide levels) will be higher than normal for the next 3 months, by on average 3 inches (0.075 m)

Dates of higher than normal high tides (predicted tide + forecast mean sea-level fluctuation)

March 2014						
Su	Mo	Tu	We	Th	Fr	Sa
02	03	04	05	06	07	08
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Days with extreme high-tides

>= 99 % combined cumulative exceedance of high tide and mean level of the sea fluctuation.

April 2014						
Su	Mo	Tu	We	Th	Fr	Sa
		01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Days with much higher than normal high tides

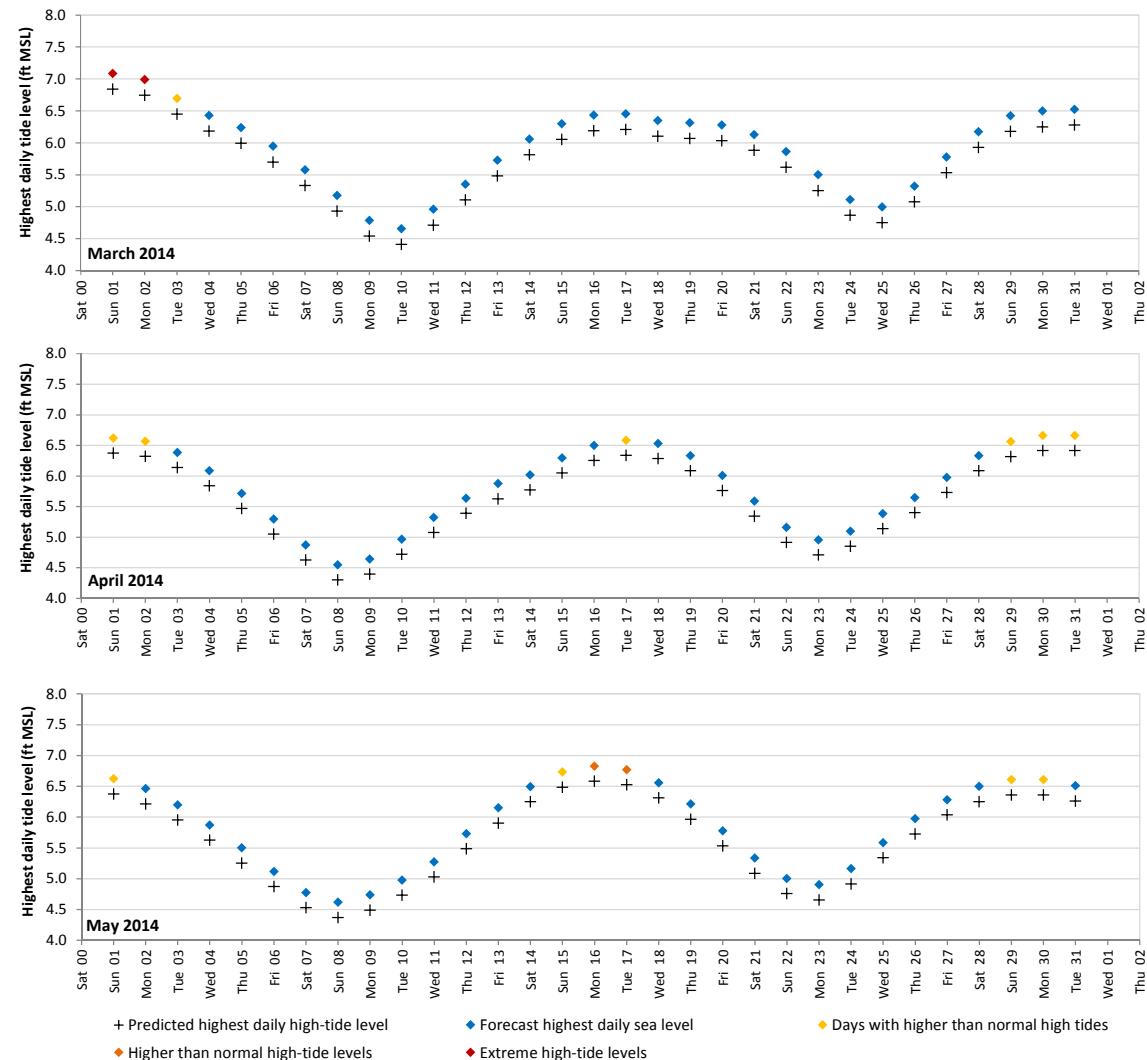
>= 97.5 % combined cumulative exceedance of high tide and mean level of the sea fluctuation.

May 2014						
Su	Mo	Tu	We	Th	Fr	Sa
04	05	06	07	01	02	03
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Days with higher than normal high tides

>= 95 % combined cumulative exceedance of high tide and mean level of the sea fluctuation.

Daily highest water levels (predicted tide + forecast mean sea-level fluctuation) compared to predicted daily highest tide levels



Did you know?

1. On Kosrae high tides are a major factor causing coastal flooding, particularly if they coincide with large waves or swell.
2. Highest tides generally occur a few days after Full or New Moon and when the Moon is also closest to the Earth (in its perigee).
3. Higher than normal tides tend to occur around December (Nov to Feb) and June (May to Aug) when the effect of the sun on tides is greatest.
4. Water levels (and hence tide heights) also tend to be raised between November and April due to the trade winds from the north-east.
5. Water levels (and hence tide heights) tend to be **lower** during periods of strong **El Niño** but tend to be **higher** during periods of **La Niña**. Hence if La Niña conditions are occurring around December to February (as in 2007/08 and 1999/00) more coastal flooding is likely.
6. Coastal flooding on Kosrae is not limited to the dates indicated above. Particular weather conditions, e.g. a typhoon or storm conditions that create large waves or swell, can cause flooding and coastal damage at any time. Such weather conditions are generally only predictable a few days in advance.