Science of Sea Level Changes

Local Sea Level (LSL) = high-frequency part + low-frequency part

Separation at periods of about 2 months

High-frequency part of LSL equation:

$$h_{\mathrm{hf}}t = w(t) + h_{\mathrm{tidal}}(t) + h_{\mathrm{atmos}}(t) + h_{\mathrm{seiches}}(t) + h_{\mathrm{tsunami}}(t).$$

Important for projection of maximum flood levels