Time Series and Spectral Properties

Significant Wave Height ( Hm0)

This is the classic estimate sometimes referred to as Hs. It is calculated from the energy spectrum, Hmo = 4sqrt(sum(M0)).

Mean 1/3 Wave Height (H3)

This is the mean of the 1/3 largest waves in a record. It is a time series based estimate. Typically this value is 5% larger than Hmo, yet variations can be greater or smaller.

Mean 1/10 Wave Height (H10)

This is the mean of the 1/10 largest waves in a record. It is a time series based estimate when AST is available. When AST is not available, then this estimate may simply be presented as a linear extrapolation of Hmo, whereby H10 = 1.27Hm0.

Maximum Wave Height (Hmax)

This is the largest wave in a record. It is a time series based estimate when AST is available. When AST is not available, then this estimate may simply be presented as a linear extrapolation of Hmo, whereby Hmax = 1.67Hm0.

Mean Wave Height (Hmean)

This is the mean value of all waves in a record. It is a time series based estimate.

Mean Period (Tm02)

This is the average period for all the waves in the burst and it is calculated from the energy spectrum according to the first and second moment of the energy spectrum: Tm02 = sqrt(M0/M02) The value is reported in seconds.

Peak Period (Tpeak)

This is the period of the waves corresponding to the peak frequency for the wave spectrum. The value is reported in seconds.

Mean Zero-crossing Period (Tz)

This is the mean period calculated from the zero-crossing technique. It is calculated as the mean of all the periods in the wave burst. The value is reported in seconds.

Mean Zero-crossing Period (T3)

This is the mean period associated with the 1/3 largest waves (H3) in a record, where the period is calculated from the zero-crossing technique. The value is reported in seconds.

Mean Zero-crossing Period (T10)

This is the mean period associated with the 1/10 largest waves (H10) in a record, where the period is calculated from the zero-crossing technique. The value is reported in seconds.

Mean Zero-crossing Period (Tmax)

This is the mean period associated with the largest wave (Hmax) in a record, where the period is calculated from the zero-crossing technique. The value is reported in seconds