LATEST NEWS: Data updates will be affected by a planned power outage Wednesday 20 March 7am - 10am

CDIP Quality Control Measures

The tests applied are detemined by data/processing type, as summarized in the table below. Note that CDIP's time series products are for the most part unedited; other than checking for gaps in the data and incorrect times, the times series values are not quality-controlled. It is only when the time series are used for spectral and parameter processing that they are submitted to CDIP's full set of quality control routines.

- **AR = Directional Array of Pressure Sensors**
- **BS = Basin Energy Processing, Pressure Sensor**
- **DW = Datawell Directional Buoy**
- **NB = Non-directional Buoy**
- **PR = Single Point Pressure Sensor**
- **SG = Surge Processing, Pressure Sensor**

TIME SERIES VALUES

TEST: description (click name for more details)	AR	BS	DW	NB	PR	SG
GAP TEST: edit or discard time series with missing values.	✓	✓		✓	✓	✓
DW STATUS/TRANSMISSION BYTE: discard imperfectly received data.			✓			
MAX WAVE HEIGHT: check wave height against max in archive.	✓	✓		✓	✓	✓
FLAT EPISODES TEST: test if time series is changing too slowly.	✓			✓	✓	
SPIKE EDIT: replace spikes with average of point and previous.	✓	✓		✓	✓	✓
MAX/MIN VALUE TEST: for water column, check if values are sensible	✓				✓	
MEAN SHIFT TEST: check for a shift in the mean in the series.	✓	✓		✓	✓	✓
EQUAL PEAKS TEST: check for successive peaks with the same value.	✓				✓	✓
ACCELERATION TEST: check if acceleration is greater than 1/3 g	✓	✓			✓	✓
MEAN CROSSING TEST: check if there are too few mean crossings.	✓			✓	✓	
PERIOD DISTRIBUTION TEST: check for excessive long-period waves.	✓			✓	✓	
UNCORRECTED ENERGY COMPARISON: compare time series variance.	✓					
DEPTH COMPARISON: compare time series means.	✓					
SERIES COMPARISON: check correlation of time series.	✓					
CORRECTED ENERGY COMPARISON: compare depth-corrected variance.	✓					

SPECTRAL VALUES

TEST: description (click name for more details)	AR	BS	DW	NB	PR	SG
INCIDENT WAVE TEST: check that directions are incident to shore.	✓					
DW STATUS/TRANSMISSION BYTE: discard imperfectly transmitted data.			✓			
BAND DIRECTION MAX/MIN: check Dmean for each band.			✓			
DW CHECK FACTORS: issue warning for bad check factors.			✓			

	SUMMARY VALUE MAX/MIN: reject Hs, Tp values outside limits.			✓			
	PARAMETER VALUES						
	TEST: description (click name for more details)	**AR**	**BS**	**DW**	**NB**	**PR**	**SG**
	SPIKE TEST: check for abrupt changes in values between records.	✓	✓	✓	✓	✓	✓
	RANGE TEST: apply max/min tests to all parameters.	✓	✓	✓	✓	✓	✓
	CONSECUTIVE VALUE TEST: check for excessively constant values.	✓	✓	✓	✓	✓	✓
	Dp SPREAD TEST: check if Dp values are too spread out.	✓		✓			
	Dp RANDOM TEST: check if Dp values are too variable and random.	✓		✓			
	VISUAL INSPECTION: review monthly Hs, Tp, Dp plots.	✓	✓	✓	✓	✓	✓

CDIP's major funding contributors are the US Army Corps of Engineers and the California Department of Boating and Waterways.

0