

CTD QC Report: Hawaiian Archipelago 2015

The file used in this QC routine is: ESD_NCRMP_CTD_2015_HI.csv

QC run at: 2021-03-03 08:26:35 HST

Number of rows in data file: 192

Number of casts in data file: 12

Check the location and time ranges

	Min	Max
LATITUDE	23.88308	27.96281
LONGITUDE	-175.9578	-166.2511
UTCDATETIME	2015-07-31 20:40:00	2015-08-19 23:01:00

Check the cruises, dates, and number of casts associated with each island.

LOCATION	CRUISE	NO.CASTS	UTCDATETIME.range
French Frigate Shoals	HA1505	1	2015-07-31 20:40:00, 2015-07-31 20:40:00
Lisianski Island	HA1505	5	2015-08-16 23:00:00, 2015-08-19 23:01:00
Maro Reef	HA1505	3	2015-08-02 20:50:00, 2015-08-04 22:25:00
Pearl and Hermes Atoll	HA1505	3	2015-08-06 21:30:00, 2015-08-09 00:05:00

Check for NULLs in all metadata fields

“No” signifies that no NULL data exist. “Yes” signifies that NULL values are present. NULL values are only ok if present in the ASSOC_OCC_SITEID field (not every cast is associated with an OCC site).

	NULLs?
SHALLOWCTDID	No
CTDCASTID	No
REGIONCODE	No
CASTYEAR	No
CRUISE	No
LOCATION	No
LATITUDE	No
LONGITUDE	No
UTCDATETIME	No
WATERSAMPLE	No
ASSOC_OCC_SITEID	Yes
ASSOC_REA_SITE	No

(continued)

	NULLs?
OFFSHORE_YN	No
SURVEY_DESIGN	No

Check for NULLs in all data fields

“No” signifies that no NULL data exist. “Yes” signifies that NULL values are present. NULL values may be present in data fields if there were bad or missing data in a cast.

	NULLs?
PRESSURE_DB	No
DEPTH_M	No
TEMP_DEGC	Yes
COND_S_PER_M	No
SALN_PSU	Yes
DENSITY_SIGMAT	Yes

[1] “The following casts are missing at least one temperature value:”

Casts missing temperature values
HA1505_MAR_SN4282_002
HA1505_LIS_SN4282_008
HA1505_LIS_SN4282_011

[1] “The following casts are missing at least one salinity value:”

Casts missing salinity values
HA1505_MAR_SN4282_002
HA1505_LIS_SN4282_008
HA1505_LIS_SN4282_011

Check for data values out of expected ranges

Make sure that the CTD data values are within a reasonable range. Parameters with “Yes” flags are outside a general expected range (but may not necessarily be incorrect).

	Min	Max	Flag
PRESSURE_DB	1.006	25.145	No
DEPTH_M	1	25	No
TEMP_DEGC	26.2235	28.763	No
COND_S_PER_M	5.455703	5.837753	No
SALN_PSU	34.2459	35.9265	No
DENSITY_SIGMAT	22.0081	23.2854	No

Summary of casts

SHALLOWCTDID	LATITUDE	LONGITUDE	UTCDATETIME	ASSOC_OCC_SITEID	ASSOC_REA_SITE	SURVEY_DESIGN	MIN_DEPTH	MAX_DEPTH
HA1505_FFS_SN4282_001	23.88308	-166.2511	2015-07-31 20:40:00	NA	FFS-4142	Stratified_Random	1	24
HA1505_LIS_SN4282_008	26.04062	-173.9880	2015-08-16 23:00:00	NA	LIS-4175	Stratified_Random	1	11
HA1505_LIS_SN4282_009	26.09003	-173.9621	2015-08-17 01:33:00	NA	LIS-4164	Stratified_Random	1	13
HA1505_LIS_SN4282_010	25.97615	-173.9810	2015-08-17 22:32:00	NA	LIS-4165	Stratified_Random	1	17
HA1505_LIS_SN4282_011	25.97513	-173.8774	2015-08-19 00:12:00	NA	LIS-4180	Stratified_Random	1	16
HA1505_LIS_SN4282_012	26.04096	-173.9009	2015-08-19 23:01:00	NA	LIS-4122	Stratified_Random	1	11
HA1505_MAR_SN4282_002	25.44093	-170.5101	2015-08-02 20:50:00	NA	MAR-4027	Stratified_Random	1	25
HA1505_MAR_SN4282_003	25.35628	-170.5107	2015-08-03 22:47:00	NA	MAR-4020	Stratified_Random	1	15
HA1505_MAR_SN4282_004	25.41476	-170.5859	2015-08-04 22:25:00	NA	MAR-4073	Stratified_Random	1	15
HA1505_PHR_SN4282_005	27.96281	-175.8012	2015-08-06 21:30:00	NA	PHR-4060	Stratified_Random	1	14
HA1505_PHR_SN4282_006	27.78060	-175.7934	2015-08-08 00:55:00	NA	PHR-4059	Stratified_Random	1	14
HA1505_PHR_SN4282_007	27.75418	-175.9578	2015-08-09 00:05:00	NA	PHR-4078	Stratified_Random	1	18