

CTD QC Report: Oahu 2021

The file used in this QC routine is: ESD_NCRMP_CTD_2021_HI.csv

QC run at: 2022-03-29 12:03:26 HST

Number of rows in data file: 520

Number of casts in data file: 53

Check the ISLAND and time ranges

	Min	Max
LATITUDE	21.24257	21.59129
LONGITUDE	-158.2708	-157.7182
UTCDATETIME	2021-05-19 01:28:28	2021-07-16 19:13:39

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

ISLAND	OCC_CRUISE	NO.CASTS	UTCDATETIME.range
Oahu	MP2108	53	2021-05-19 01:28:28, 2021-07-16 19:13:39

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?
CTDCASTNAME	No
CTDCASTID	No
REGIONCODE	No
CASTYEAR	No
OCC_CRUISE	No
ISLAND	No
LATITUDE	No
LONGITUDE	No
UTCDATETIME	No
ASSOC_OCC_SITEID	Yes
ASSOC_REA_SITE	No
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	Yes
TEMP_DEGC	Yes
COND_S_PER_M	Yes
SALN_PSU	Yes
DENSITY_SIGMAT	Yes

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

Casts missing temperature values
MP2108_SN1280_2021-07-15_001
MP2108_SN1280_2021-05-18_001

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

Casts missing salinity values
MP2108_SN1280_2021-07-15_001
MP2108_SN1280_2021-05-18_001

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	1.00822168597712	27.22198554	No
DEPTH_M	1	27	No
TEMP_DEGC	25.163014526	27.77822073	No
COND_S_PER_M	4.8217987045	5.548851573	No
SALN_PSU	30.407580355	34.9669913	No
DENSITY_SIGMAT	19.4540577536302	23.0712929491918	Yes

Summary of casts

CTDCASTID	CTDCASTNAME	LATITUDE	LONGITUDE	UTCDATETIME	ASSOC_OCC_SITEID	ASSOC_REA_SITE	SURVEY_DESIGN	MIN_DEPTH	MAX_DEPTH
10000	MP2108_SNI280_2021-06-07_001	21.28618	-157.9783	2021-06-07 21:41:40	NA	OAH-4166	Stratified_Random	1	13
10001	MP2108_SNI280_2021-06-07_002	21.30207	-157.9838	2021-06-07 23:11:49	NA	OAH-4125	Stratified_Random	1	4
10003	MP2108_SNI281_2021-06-07_002	21.29904	-157.9718	2021-06-07 22:29:58	NA	OAH-4167	Stratified_Random	1	8
10004	MP2108_SNI281_2021-06-07_001	21.29796	-157.9796	2021-06-07 21:36:12	NA	OAH-4150	Stratified_Random	1	7
10005	MP2108_SNI280_2021-06-08_001	21.30098	-158.1233	2021-06-08 20:16:14	NA	OAH-4123	Stratified_Random	1	9
10006	MP2108_SNI280_2021-06-08_002	21.29718	-158.0009	2021-06-08 22:39:34	NA	OAH-4254	Stratified_Random	1	3
10007	MP2108_SNI281_2021-06-08_001	21.28047	-158.0525	2021-06-08 21:27:15	NA	OAH-4121	Stratified_Random	1	15
10008	MP2108_SNI281_2021-06-08_002	21.29930	-157.9844	2021-06-08 23:46:00	NA	OAH-4180	Stratified_Random	1	3
10020	MP2108_SNI281_2021-06-14_001	21.28831	-157.8654	2021-06-15 01:13:42	OCC-OAH-010	OAH-23	Permanent	1	12
10021	MP2108_SNI281_2021-06-15_001	21.28852	-157.8653	2021-06-16 00:11:48	OCC-OAH-010	OAH-23	Permanent	1	7
10022	MP2108_SNI281_2021-06-17_001	21.29763	-157.9333	2021-06-17 23:36:40	OCC-OAH-038	OAH-B3304	Permanent	1	14
10023	MP2108_SNI280_2021-06-14_001	21.46438	-157.7452	2021-06-14 20:52:59	NA	OAH-4198	Stratified_Random	1	17
10024	MP2108_SNI280_2021-06-14_002	21.46979	-157.7654	2021-06-14 21:46:17	NA	OAH-4160	Stratified_Random	1	14
10025	MP2108_SNI280_2021-06-14_003	21.48475	-157.7872	2021-06-14 22:51:07	NA	OAH-4159	Stratified_Random	1	7
10026	MP2108_SNI280_2021-06-15_001	21.49388	-157.7872	2021-06-15 20:11:45	NA	OAH-4157	Stratified_Random	1	9
10027	MP2108_SNI280_2021-06-15_002	21.50473	-157.8029	2021-06-15 21:24:13	NA	OAH-4130	Stratified_Random	1	9
10028	MP2108_SNI280_2021-06-15_003	21.50104	-157.8173	2021-06-15 22:17:29	NA	OAH-4132	Stratified_Random	1	3
10029	MP2108_SNI281_2021-06-22_001	21.56700	-157.8493	2021-06-22 20:41:20	NA	OAH-4158	Stratified_Random	1	7
10031	MP2108_SNI281_2021-06-22_002	21.55814	-157.8327	2021-06-22 21:42:53	NA	OAH-4129	Stratified_Random	1	10
10040	MP2108_SNI281_2021-06-09_001	21.25524	-157.8298	2021-06-09 21:21:00	NA	OAH-4153	Stratified_Random	1	11
10041	MP2108_SNI281_2021-06-09_002	21.27772	-157.8424	2021-06-09 22:59:02	NA	OAH-4162	Stratified_Random	1	3
10042	MP2108_SNI281_2021-06-09_003	21.29631	-157.8790	2021-06-10 00:28:37	NA	OAH-4181	Stratified_Random	1	6
10043	MP2108_SNI281_2021-06-10_001	21.30081	-157.9855	2021-06-10 20:28:57	NA	OAH-4179	Stratified_Random	1	5
10044	MP2108_SNI281_2021-06-10_002	21.29502	-158.0019	2021-06-10 22:16:50	NA	OAH-4126	Stratified_Random	1	4
10045	MP2108_SNI280_2021-06-10_001	21.29901	-157.8256	2021-06-10 21:09:10	NA	OAH-4185	Stratified_Random	1	3
10046	MP2108_SNI280_2021-06-10_002	21.29711	-157.9388	2021-06-10 23:04:48	NA	OAH-4250	Stratified_Random	1	13
10047	MP2108_SNI280_2021-06-09_001	21.24257	-157.8054	2021-06-09 21:23:58	NA	OAH-4152	Stratified_Random	1	5
10048	MP2108_SNI280_2021-05-20_001	21.28828	-157.8653	2021-05-21 13:38:00	OCC-OAH-010	OAH-23	Permanent	1	9
10049	MP2108_SNI280_2021-06-09_002	21.25962	-157.7592	2021-06-09 23:07:27	NA	OAH-4170	Stratified_Random	1	4
10050	MP2108_SNI280_2021-05-18_001	21.28821	-157.8650	2021-05-19 01:28:28	OCC-OAH-010	OAH-23	Permanent	2	6
10051	MP2108_SNI280_2021-06-22_001	21.47974	-157.7831	2021-06-22 22:43:57	OCC-OAH-005	OAH-22	Permanent	1	8
10052	MP2108_SNI280_2021-06-23_001	21.47945	-157.7832	2021-06-23 23:09:42	OCC-OAH-005	OAH-22	Permanent	1	9
10061	MP2108_SNI281_2021-06-22_003	21.53945	-157.8340	2021-06-22 22:52:42	NA	OAH-4131	Stratified_Random	1	4
10062	MP2108_SNI281_2021-06-23_001	21.55938	-158.2708	2021-06-23 21:01:21	NA	OAH-4133	Stratified_Random	1	27
10063	MP2108_SNI281_2021-06-23_002	21.55984	-158.2610	2021-06-23 22:02:10	NA	OAH-4138	Stratified_Random	1	13
10064	MP2108_SNI281_2021-06-23_003	21.54710	-158.2451	2021-06-23 23:08:27	NA	OAH-4143	Stratified_Random	1	6
10065	MP2108_SNI281_2021-06-24_001	21.49998	-158.2346	2021-06-24 21:41:37	NA	OAH-4136	Stratified_Random	1	6
10066	MP2108_SNI281_2021-06-24_002	21.46966	-158.2256	2021-06-24 23:28:38	NA	OAH-4134	Stratified_Random	1	17
10067	MP2108_SNI281_2021-06-25_001	21.51689	-158.2361	2021-06-25 20:25:18	NA	OAH-4144	Stratified_Random	1	8
10068	MP2108_SNI281_2021-06-25_002	21.49256	-158.2317	2021-06-25 22:13:51	NA	OAH-4200	Stratified_Random	1	5
10080	MP2108_SNI281_2021-07-01_001	21.53395	-158.2351	2021-07-01 23:32:56	OCC-OAH-012	OAH-25	Permanent	1	18
10081	MP2108_SNI281_2021-07-02_001	21.53408	-158.2344	2021-07-02 23:56:47	OCC-OAH-012	OAH-25	Permanent	1	15
10082	MP2108_SNI281_2021-07-06_001	21.59129	-158.1743	2021-07-07 00:52:17	OCC-OAH-002	OAH-20	Permanent	1	13
10083	MP2108_SNI281_2021-06-30_001	21.53674	-158.2321	2021-06-30 22:17:20	NA	OAH-4140	Stratified_Random	1	3
10084	MP2108_SNI281_2021-06-30_002	21.43090	-158.2025	2021-06-30 23:53:31	NA	OAH-4223	Stratified_Random	1	18
10085	MP2108_SNI281_2021-07-09_001	21.26751	-157.7182	2021-07-09 20:12:23	NA	OAH-4155	Stratified_Random	1	8
10086	MP2108_SNI281_2021-07-09_002	21.25893	-157.7357	2021-07-09 21:12:34	NA	OAH-4151	Stratified_Random	1	17
10087	MP2108_SNI281_2021-07-09_003	21.25999	-157.7409	2021-07-09 22:00:56	NA	OAH-4156	Stratified_Random	1	12
10088	MP2108_SNI281_2021-07-09_004	21.26056	-157.7444	2021-07-09 23:01:08	NA	OAH-4154	Stratified_Random	1	18
10120	MP2108_SNI280_2021-07-15_001	21.44198	-157.7957	2021-07-15 21:17:40	NA	OAH-3554	Stratified_Random	2	6
10121	MP2108_SNI280_2021-07-15_002	21.44703	-157.8025	2021-07-15 21:40:19	NA	OAH-3555	Stratified_Random	1	13
10122	MP2108_SNI280_2021-07-15_003	21.46792	-157.8231	2021-07-15 21:57:47	NA	OAH-3556	Stratified_Random	1	14
10123	MP2108_SNI280_2021-07-16_001	21.29668	-157.9297	2021-07-16 19:13:39	NA	OAH-3557	Stratified_Random	1	10