

CTD QC Report: PRIAs 2018

The file used in this QC routine is: ESD_NCRMP_CTD_2018_PRIA.csv

QC run at: 2021-02-23 14:40:16 HST

Number of rows in data file: 669

Number of casts in data file: 64

Check the location and time ranges

	Min	Max
LATITUDE	-0.3819692	6.4388416
LONGITUDE	-176.6241	-159.9710
UTCDATETIME	2018-06-08 23:07:00	2018-08-12 01:23:00

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

LOCATION	CRUISE	NO.CASTS	UTCDATETIME.range
Baker Island	HA1801_PHOENIX	6	2018-06-13 02:46:00, 2018-06-16 01:30:00
Howland Island	HA1801_PHOENIX	7	2018-06-08 23:07:00, 2018-06-11 20:34:00
Jarvis Island	HA1801_LINE	13	2018-07-28 21:35:00, 2018-08-01 01:14:00
Kingman Reef	HA1801_LINE	18	2018-08-08 20:08:00, 2018-08-12 01:23:00
Palmyra Atoll	HA1801_LINE	20	2018-08-03 01:34:00, 2018-08-07 00:59:00

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

(continued)

	NULLs?
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	No
TEMP_DEGC	No
COND_S_PER_M	Yes
SALN_PSU	Yes
DENSITY_SIGMAT	Yes

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

Casts missing salinity values
HA1801_PHOENIX_HOW_SN3029_001
HA1801_PHOENIX_HOW_SN4818_001
HA1801_PHOENIX_HOW_SN4818_002
HA1801_PHOENIX_HOW_SN3029_002
HA1801_PHOENIX_BAK_SN3029_004
HA1801_PHOENIX_BAK_SN3029_003
HA1801_LINE_JAR_SN3029_001
HA1801_LINE_PAL_SN3029_001
HA1801_LINE_KIN_SN3029_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	1.005488037	21.12999893	No
DEPTH_M	1	21	No
TEMP_DEGC	26.60107778	30.37775	No
COND_S_PER_M	5.505917951	5.800038492	No
SALN_PSU	33.27610976	35.41496316	No
DENSITY_SIGMAT	20.67549791	22.69913121	No

Summary of casts

SHALLOWCTDID	LATITUDE	LONGITUDE	UTCDATETIME	MAX_DEPTH	ASSOC_OCC_SITEID	ASSOC_REA_SITE	SURVEY_DESIGN
HA1801_LINE_JAR_SN3029_001	-0.3675441	-160.2335	2018-07-29 05:47:00	3	NA	JAR-2073	End_member
HA1801_LINE_JAR_SN4282_001	-0.3624373	-159.9926	2018-07-28 21:35:00	18	NA	JAR-1980	Stratified_Random
HA1801_LINE_JAR_SN4282_002	-0.3621151	-160.0039	2018-07-28 22:45:00	18	NA	JAR-1916	Stratified_Random
HA1801_LINE_JAR_SN4282_003	-0.3614417	-159.9990	2018-07-28 23:46:00	15	NA	JAR-1948	Stratified_Random
HA1801_LINE_JAR_SN4282_004	-0.3625110	-160.0024	2018-07-29 00:42:00	8	NA	JAR-1995	Stratified_Random
HA1801_LINE_JAR_SN4282_005	-0.3653582	-160.0063	2018-07-29 01:37:00	12	NA	JAR-2021	Stratified_Random
HA1801_LINE_JAR_SN4282_006	-0.3653676	-160.0066	2018-07-29 21:54:00	18	NA	JAR-09	Stratified_Random
HA1801_LINE_JAR_SN4282_007	-0.3686971	-159.9774	2018-07-29 23:17:00	15	NA	JAR-1935	Stratified_Random
HA1801_LINE_JAR_SN4282_008	-0.3707657	-159.9758	2018-07-30 00:32:00	12	NA	JAR-1950	Stratified_Random
HA1801_LINE_JAR_SN4282_009	-0.3686224	-159.9810	2018-07-30 03:00:00	6	NA	JAR-1997	Stratified_Random
HA1801_LINE_JAR_SN4818_006	-0.3817668	-159.9995	2018-07-31 00:20:00	2	NA	JAR-1923	Stratified_Random
HA1801_LINE_JAR_SN4818_008	-0.3794747	-159.9710	2018-07-31 03:05:00	2	NA	JAR-201	Stratified_Random
HA1801_LINE_JAR_SN4818_010	-0.3819692	-159.9895	2018-08-01 01:14:00	2	NA	JAR-1967	Stratified_Random
HA1801_LINE_KIN_SN3029_001	6.4214800	-162.6154	2018-08-11 06:40:00	4	NA	KIN-5146	End_member
HA1801_LINE_KIN_SN4282_001	6.4332824	-162.3780	2018-08-08 21:13:00	20	NA	KIN-832	Stratified_Random
HA1801_LINE_KIN_SN4282_002	6.4356161	-162.3818	2018-08-08 22:57:00	12	NA	KIN-841	Stratified_Random
HA1801_LINE_KIN_SN4282_003	6.4281937	-162.3711	2018-08-09 00:57:00	12	NA	KIN-835	Stratified_Random
HA1801_LINE_KIN_SN4282_004	6.4247390	-162.3685	2018-08-09 02:34:00	4	NA	KIN-868	Stratified_Random
HA1801_LINE_KIN_SN4282_005	6.4360627	-162.3936	2018-08-09 22:54:00	21	NA	KIN-5145	Random
HA1801_LINE_KIN_SN4282_006	6.3994491	-162.4339	2018-08-10 20:53:00	15	NA	KIN-872	Stratified_Random
HA1801_LINE_KIN_SN4282_007	6.3868452	-162.4252	2018-08-10 22:11:00	10	NA	KIN-855	Stratified_Random
HA1801_LINE_KIN_SN4282_008	6.3808384	-162.4388	2018-08-10 23:42:00	12	NA	KIN-905	Stratified_Random
HA1801_LINE_KIN_SN4282_009	6.3853258	-162.3358	2018-08-11 01:40:00	8	NA	KIN-862	Stratified_Random
HA1801_LINE_KIN_SN4818_001	6.4025100	-162.3854	2018-08-08 20:08:00	12	OCC-KIN-014	KIN-62	Permanent
HA1801_LINE_KIN_SN4818_002	6.3930100	-162.3420	2018-08-09 00:09:00	5	OCC-KIN-005	KIN-16	Permanent
HA1801_LINE_KIN_SN4818_003	6.4388416	-162.3879	2018-08-09 21:28:00	15	OCC-KIN-002	KIN-04	Permanent
HA1801_LINE_KIN_SN4818_004	6.3822500	-162.3838	2018-08-10 21:22:00	10	OCC-KIN-009	KIN-13	Permanent
HA1801_LINE_KIN_SN4818_005	6.3817100	-162.3463	2018-08-11 00:13:00	14	OCC-KIN-006	KIN-11	Permanent
HA1801_LINE_KIN_SN4818_006	6.3977282	-162.3360	2018-08-11 20:46:00	15	NA	KIN-5001	Stratified_Random
HA1801_LINE_KIN_SN4818_007	6.4011694	-162.4670	2018-08-11 23:34:00	14	NA	KIN-901	Stratified_Random
HA1801_LINE_KIN_SN4818_008	6.4051971	-162.4604	2018-08-12 01:23:00	12	NA	KIN-918	Stratified_Random
HA1801_LINE_PAL_SN3029_001	5.7317330	-162.0777	2018-08-05 05:50:00	3	NA	PAL-5131	End_member
HA1801_LINE_PAL_SN4282_001	5.8847189	-162.1410	2018-08-03 21:31:00	21	NA	PAL-1052	Stratified_Random
HA1801_LINE_PAL_SN4282_002	5.8666911	-162.1230	2018-08-03 22:53:00	9	NA	PAL-1093	Stratified_Random
HA1801_LINE_PAL_SN4282_003	5.8735191	-162.1265	2018-08-04 00:49:00	8	NA	PAL-1106	Stratified_Random
HA1801_LINE_PAL_SN4282_004	5.8739067	-162.1124	2018-08-04 02:20:00	2	NA	PAL-1176	Stratified_Random
HA1801_LINE_PAL_SN4282_005	5.8971285	-162.0890	2018-08-05 21:18:00	18	NA	PAL-1057	Stratified_Random
HA1801_LINE_PAL_SN4282_006	5.8987693	-162.0660	2018-08-05 22:59:00	8	NA	PAL-1100	Stratified_Random
HA1801_LINE_PAL_SN4282_007	5.8959856	-162.0792	2018-08-06 01:32:00	3	NA	PAL-1162	Stratified_Random
HA1801_LINE_PAL_SN4282_008	5.8950485	-162.0844	2018-08-06 02:53:00	6	NA	PAL-1143	Stratified_Random
HA1801_LINE_PAL_SN4282_009	5.8952637	-162.0844	2018-08-06 21:13:00	16	NA	PAL-1077	Stratified_Random
HA1801_LINE_PAL_SN4282_010	5.8689860	-162.1151	2018-08-06 23:47:00	5	NA	PAL-956	Stratified_Random
HA1801_LINE_PAL_SN4282_011	5.8756906	-162.1660	2018-08-07 00:59:00	11	NA	PAL-903	Stratified_Random
HA1801_LINE_PAL_SN4818_001	5.8834370	-162.1328	2018-08-03 01:34:00	13	OCC-PAL-017	PAL-11	Permanent
HA1801_LINE_PAL_SN4818_002	5.8662039	-162.1099	2018-08-03 20:57:00	17	OCC-PAL-014	PAL-19	Permanent
HA1801_LINE_PAL_SN4818_003	5.8960040	-162.1378	2018-08-04 00:02:00	12	OCC-PAL-019	PAL-05	Permanent
HA1801_LINE_PAL_SN4818_004	5.8756472	-162.0035	2018-08-04 23:12:00	15	OCC-PAL-006	PAL-5001	Permanent
HA1801_LINE_PAL_SN4818_005	5.8642398	-162.0303	2018-08-05 00:30:00	9	OCC-PAL-008	PAL-25	Permanent
HA1801_LINE_PAL_SN4818_006	5.8976972	-162.0783	2018-08-05 22:13:00	15	OCC-PAL-001	PAL-64	Permanent
HA1801_LINE_PAL_SN4818_007	5.8970473	-162.1075	2018-08-06 00:46:00	13	OCC-PAL-020	PAL-12	Permanent
HA1801_LINE_PAL_SN4818_008	5.8699531	-162.0752	2018-08-06 21:09:00	6	OCC-PAL-013	PAL-5004	Permanent
HA1801_PHOENIX_BAK_SN3029_003	0.1926964	-176.6082	2018-06-13 05:43:00	3	NA	BAK-2025	End_member
HA1801_PHOENIX_BAK_SN3029_004	0.1937400	-176.3438	2018-06-15 05:59:00	3	NA	BAK-2024	End_member
HA1801_PHOENIX_BAK_SN4818_001	0.1985514	-176.4849	2018-06-13 02:46:00	5	OCC-BAK-011	BAK-11	Permanent
HA1801_PHOENIX_BAK_SN4818_002	0.1870276	-176.4705	2018-06-14 03:20:00	14	OCC-BAK-007	BAK-50	Permanent
HA1801_PHOENIX_BAK_SN4818_003	0.2052045	-176.4746	2018-06-15 02:16:00	7	OCC-BAK-003	BAK-14	Permanent
HA1801_PHOENIX_BAK_SN4818_004	0.1883900	-176.4800	2018-06-16 01:30:00	16	OCC-BAK-008	BAK-02	Permanent
HA1801_PHOENIX_HOW_SN3029_001	0.6746838	-176.6195	2018-06-09 05:43:00	4	NA	HOW-1050	End_member
HA1801_PHOENIX_HOW_SN3029_002	0.9367418	-176.6188	2018-06-11 05:53:00	5	NA	HOW-1051	End_member
HA1801_PHOENIX_HOW_SN4818_001	0.7987700	-176.6202	2018-06-08 23:07:00	12	OCC-HOW-005	HOW-11	Permanent
HA1801_PHOENIX_HOW_SN4818_002	0.8070214	-176.6220	2018-06-09 02:49:00	16	OCC-HOW-006	HOW-642	Permanent
HA1801_PHOENIX_HOW_SN4818_003	0.8148624	-176.6241	2018-06-10 02:12:00	14	OCC-HOW-009	HOW-14	Permanent
HA1801_PHOENIX_HOW_SN4818_004	0.8197093	-176.6161	2018-06-10 22:23:00	8	OCC-HOW-001	HOW-13	Permanent
HA1801_PHOENIX_HOW_SN4818_005	0.8094629	-176.6108	2018-06-11 20:34:00	6	OCC-HOW-003	HOW-12	Permanent