CTD #:6	Data Dum	np # <mark>0263</mark>	 Starting D	Date:J	January	13, 2018_	_	Defective / Absent Sensors					
Cast#	Quality Code		Data Qual	lity Com	nment			Cond	I Temp	Fluo	OBS	PAR	O2
All Casts in Dump	0												
				-	OR -								
01													
02													
03													
04													
05													
06													
07													
00													
10													
11													
12													
13													
14													
15													
16											H		
17													
10													

Analyst's Comments

(these are not applied to the database)

cast(s).

This Dump contains the first cast data collected in oceanographic year 2018; it represents the "mid-winter all-stations" survey. Nineteen of the 22 stations (00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 16, 17, and 24) were successfully occupied; three stations (18, 19, and 20) proved inaccessible because of non-navigable thick pan ice.

 Data quality codes are:
 0 - good
 1 - unknown
 4 - questionable
 8 - bad

 as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

 Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #:6	Data Du	mp #0264 Starting Date:March 14, 2018	Defective / Absent Sensors				ensors	
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	02
All Casts in Dump	4	All dissolved oxygen measurements in all casts for entire data dump (entire survey) disqualified due to suspect O2 sensor (see Comments below).						Ø
		- OR -						
20 21 22 23 24 25 26 								

Analyst's Comments

(these are not applied to the database)

This Dump contains cast data from seven of the eight core stations (01, 04, 07, 12, 13, 16, and 24) during the March 2018 survey. Station 20 was inaccessible because of non-navigable thick pan ice.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4.5-6.5 ml/l across stations, depths, and seasons; these values ranged from 1.8-3.0 ml/l. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly.

Data quality codes are: 0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #:6	Data Du	mp #0265 Starting Date:April 4, 2018	Defective / Absent Sensors					
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	O2
All Casts in Dump	4	All dissolved oxygen measurements in all casts for entire data dump (entire survey) disqualified due to suspect O2 sensor (see Comments below).						V
		- OR -						
27 28 29 30 31 32 33 								

Analyst's Comments

(these are not applied to the database)

This Dump contains cast data from seven of the eight core stations (01, 04, 07, 12, 13, 16, and 24) during the April 2018 survey. Station 20 was inaccessible because of non-navigable thick pan ice.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4-6.5 ml/l across stations, depths, and seasons; these values ranged from 1.8-2.9 ml/l. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly.

Data quality codes are: 0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #: <u>6</u>	Data Du	mp # <mark>0266</mark>	Starting D	Date:	_May 7, 2018		Defective / Absent Sensors							
Cast#	Quality Code		Data Quality	y Comme	nt	Cond	Temp	Fluo	OBS	PAR	O2			
All Casts in Dump	4	All dissolved dump (entire s	oxygen measurem urvey) disqualifiec Comment	ients in all due to su s below).	casts for entire data ispect O2 sensor (see						7			
				- OR	-									
34 35 36 37 38 39 40 41														
(these are not ap	plied to the databa	ase)												
This Dump cont Dissolved oxyge observed in Gla across stations, credible and ca	ains cast data col en (DO) data were cier Bay previous depths, and seas nnot be explained	lected from all 8 core e disqualified for all c ly, thoughout the wa ons; these values ran l, the 02 sensor is dec	stations (01, 04, 07, 12 asts performed during ter column, at all static ged from 1.4-5.0 ml/l, emed unreliable and th	2, 13, 16, 20, this survey (ons, and they and all meas us is disqual	and 24) during the May 201 entire data dump) because r could not be reasonably ev ured less than 3.0 ml/l belo ified for the entire survey.	.8 survey. measureme plained. D(w 30 m. Be	nts were s D values n cause thes	substantia ormally ra se abnorn	ally lower ange from nally low y	than any 14-6.5 ml/ values are	ever /I not			

All other sensors appear to have operated properly.

Data quality codes are: 0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #:6	Data Du	mp # <mark>0267</mark> Starting Date: <mark>May 31, 2018</mark>	Defective / Absent Sensors					
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	O2
All Casts in Dump	4	All dissolved oxygen measurements in all casts for entire data dump (entire survey) disqualified due to suspect O2 sensor (see Comments below).						Ø
		- OR -						
42 43 44 45 46 47 48 49								

Analyst's Comments

(these are not applied to the database)

This Dump contains cast data collected from all 8 core stations (01, 04, 07, 12, 13, 16, 20, and 24) during the "June" 2018 survey (actually conducted on May 31).

Fluorescence data (Fluo sensor) were disqualified for one cast performed during this survey. See detailed cast-by-cast comments above.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4-6.5 ml/l across stations, depths, and seasons; these values ranged from 1.4-3.6 ml/l. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly.

Data quality codes are:

0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #: <u>6</u>	Data Du	mp #0268 Starting Date:July 15, 2018	Defective / Absent Sensors					
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	O 2
All Casts in Dump								
		- OR -						
50	4	All dissolved oxygen measurements for this cast disqualified due						V
51	4	All dissolved oxygen measurements for this cast disqualified due						V
		to suspect 02 sensor All dissolved oxygen measurements for this cast disgualified due						2
52	4	to suspect O2 sensor		_	_	_	_	_
53	4	All dissolved oxygen measurements for this cast disqualified due to suspect O2 sensor	Ц	Ц	Ц	Ц	Ц	
54	4	All dissolved oxygen measurements for this cast disqualified due						2
55	4	All dissolved oxygen measurements for this cast disqualified due						V
		to suspect 02 sensor All dissolved oxygen measurements for this cast disgualified due						2
56	4	to suspect O2 sensor	_	_	_	_	_	_
57	4	All dissolved oxygen measurements for this cast disqualified due to suspect O2 sensor	Ц	Ц	Ц	Ц	Ц	2
58	4	Cast was shallow, and so was re-cast later in the survey (Cast 65).						
50	-	to suspect O2 sensor.	_					
59	4	All dissolved oxygen measurements for this cast disqualified due to suspect O2 sensor						V
60	4	All dissolved oxygen measurements for this cast disqualified due						V
61	4	All dissolved oxygen measurements for this cast disqualified due						V
01	4	to suspect O2 sensor	п	П	П	п	п	I
62	4	to suspect O2 sensor	_	_	_	_	_	_
63	4	All dissolved oxygen measurements for this cast disqualified due to suspect O2 sensor						
64	4	All dissolved oxygen measurements for this cast disqualified due						2
		To suspect O2 sensor						V
65	4	measurements for this cast disqualified due to suspect O2 sensor.						
66	4	All dissolved oxygen measurements for this cast disqualified due						V
67		to suspect O2 sensor All dissolved oxygen measurements for this cast disqualified due						V
67	4	to suspect O2 sensor		П	п	п	п	Lت.
68	4	to suspect O2 sensor	_	_	_	_	_	_
69	4	All dissolved oxygen measurements for this cast disqualified due to suspect O2 sensor						7
70	4	All dissolved oxygen measurements for this cast disqualified due						
71	4	All dissolved oxygen measurements for this cast disqualified due						
	*	to suspect O2 sensor	п	П	П	п	п	N
72	4	to suspect O2 sensor		_	_	_	_	_
		·						

Analyst's Comments these are not applied to the database)

This Dump contains cast data collected from all 22 stations (00, 01, 02, 03, 04, 05, 06, 07, 08, 09. 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, and 24) during the mid-summer "all-stations" July 2018 survey. There are two replicate casts (different days) for Station 07 (Casts 58 and 65) - Cast 65 is the best (deeper) one.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4-6.5 ml/l across stations, depths, and seasons; these values ranged from 1.2-4.0 ml/l, and all measured less than 3.0 ml/l below 30 m. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly

Data quality codes are:

Data quality codes are: 0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #: <u>6</u>	Data Dur	Data Dump #0269 Starting Date:August 7, 2018				Defective / Absent Sensors						
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	O2				
All Casts in Dump	4	All dissolved oxygen measurements in all casts for entire data dump (entire survey) disqualified due to suspect O2 sensor (see Comments below).						V				
		- OR -										
73 74 75 76 77 78 79 80												

Analyst's Comments

(these are not applied to the database)

This Dump contains cast data collected from all 8 core stations (01, 04, 07, 12, 13, 16, 20, and 24) during the August 2018 survey.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4-6.5 ml/l across stations, depths, and seasons; these values ranged from 1-3.8 ml/l. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly.

Data quality codes are: 0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated cast(s).

CTD #:6	Data Du	mp #0270 Starting Date:September 4, 2018	Defective / Absent Sensors					
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	O2
All Casts in Dump	4	All dissolved oxygen measurements in all casts for entire data dump (entire survey) disqualified due to suspect O2 sensor (see Comments below).						V
		- OR -						
81								
82								
83								
84								
86								
87								
88								

Analyst's Comments

(these are not applied to the database)

This Dump contains cast data collected from all 8 core stations (01, 04, 07, 12, 13, 16, 20, and 24) during the September 2018 survey.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4-6.5 ml/l across stations, depths, and seasons; these values ranged from 1.0-4.0 ml/l, and all measured less than 3.0 ml/l below 30 m. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly.

Data quality codes are: 0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated

CTD #:6	Data Du	mp #0271 Starting Date:October 6, 2018	Defective / Absent Sensors					
Cast#	Quality Code	Data Quality Comment	Cond	Temp	Fluo	OBS	PAR	O2
All Casts in Dump	4	All dissolved oxygen measurements in all casts for entire data dump (entire survey) disqualified due to suspect O2 sensor (see Comments below).						Ø
	-	- OR -						
89 90 91 92 93								
94 95 96								

Analyst's Comments

(these are not applied to the database)

This Dump contains cast data collected from all 8 core stations (01, 04, 07, 12, 13, 16, 20, and 24) during the October 2018 survey.

Dissolved oxygen (DO) data were disqualified for all casts performed during this survey (entire data dump) because measurements were substantially lower than any ever observed in Glacier Bay previously, thoughout the water column, at all stations, and they could not be reasonably explained. DO values normally range from 4-6.5 ml/l across stations, depths, and seasons; these values ranged from 1.1-4.1 ml/l, and all measured less than 3.0 ml/l below 30 m. Because these abnormally low values are not credible and cannot be explained, the 02 sensor is deemed unreliable and thus is disqualified for the entire survey.

All other sensors appear to have operated properly.

Data quality codes are:

0 - good 1 - unknown 4 - questionable 8 - bad as defined for Ocean Data View at http://odv.awi.de/fileadmin/user_upload/odv/misc/ODV4_QualityFlagSets.pdf.

Disqualified sensors are either those disconnected from the instrument or those, after cast data are reviewed, determined to be giving invalid readings. Checking the sensor's disqualify box will cause the OC_D database to have its values made NULL for the indicated