Scr		rative Oc stitution		ohy Divisk lography	on .		Co	onso	le Operations	Log	77.783.56	Date: O Febr Operator: Ferna		ruise: 020170 (alc ta: CTD-LA-2(SE)	Co F
(CM223727)	Bottle	在3000000000000000000000000000000000000	Wire	Time	(PST)	Ctrl	Ctrl	Con-	ID#	!D#	ID#			ast: 467	_
Pyln	Trip#	Depth(m)	Out(m)	Stopped	Tripped	F3		firm	Pressure	Temp.	Conduct	Salinity	Ck salt,Ck-CTD FI	lename: 0201467	÷
1	1	230	730	1122	1122	462	/	/	230.7	8.819	3.631	34.187		CTD Start Down	
2	2	O	0	1127	1128		1	1	٧.١	14. 359	4.084	34.613	,	Time: 1117	
3	3													Start Cast Depth: 2	65
4	4													Lat: 33 39,55	
5	5									 .				Lon: 118 17 14	\overline{c}
6	6										1			Rosette Start Up	207
7	7										<u> </u>	1		Time: {123	e constituti
8	8				7					1			1	Start Up Depth: 25	2
9	9				V				·	 		 		Lat: 33 33.	
10	10					 				- :				Lon: 118 17	
11	11	-			-	 				- 				Ädditional sensors	
12	12	12								<u> </u>	1 .		177	Trans -	Albania.
13	13													Fluor -	
14	14							<u> </u>						02 -	_
15	15													Ref.PAR -	
16	16									1		<u> </u>		Rem.PAR -	_
17	17		_											Pump -	
18	18					1			<u>.</u>	 	<u> </u>			SeaBrd-	
19	19			 -						1 .				Pre-Cast	X (1)
20	20					1						<u> </u>		Deck Calib	
21	21					T			- 	 	<u> </u>			Unlied	
22	22					 			<u> </u>	- 	<u> </u>	_	1	Pull Tube	
23	23					\vdash			<u> </u>			- 		Rinse Glass	
24	24					T		 		 	•	-			
_		ck - Begin:	-0.01	Y End	-0.22	<u> </u>					<u></u>	# Biles @ Surface	(o) (iii	PAR Cap Tosed Póst-Cast	100
		0 w						1	CalCOFI 0a	urvalent stat	hoin	# Markers	# Btis tripped	Tied down	100
		_							•	•			. :	Replace Tube	
		Gomma	ust 0	~50M	30 m/m	in			1	38.4 32.6				Flush w/ DI	
			5	0 - 530	1m co 1m co	Min								Rinse Pylon	
				_	(~ 44)									PAR Cap	20

				hy Divisio	n		C	onso	le Op	erations	Log	*			Date:	10 Feb		Cruise:	050120	
SCI Nisk	Bottle	stitution Desired	Wire Wire	ograpny Time	(PST)	Ctrl	CH	Con	ine	P. A. Bride	ID#		ID#		Opera	ator: Tern	and Kamvez (x.001)		TD-LA-2 (N	E)
Pyln	FE (49.75)	Depth(m)	Out(m)	Stopped	Tripped	F3		firm		ressure	di U	Temp.	_	Conduct	2 13 Sept.	Salinity	(x .001) Ck salt,Ck-CTD		<u> 468 </u>	
1	1	50	50	1152	1152	442	/	/	51	. 3	11	.513	_	.811		. 570			CTD Start Down	
2	2	0	D	1154	1154	7	/	7	1	.5		1.248		1.073		. 613	-	···	Time: 1152	-380760
3	3		•		1,1-1				Ė		Ť		<u> </u>	(,				•	Start Cast Depth:	
4	4					\vdash				•	_	•		_ .		<u>• </u>	1		Lat: 33 37 4	
5	5			ě.		T				•	+	•	1	•		•			Lon: 118 16	
6	6							<u> </u>	-	<u>. :</u>	1	•	1	•		•			Rosette Start Up	*
	7						-			•	 	•	+	•		•			1.00	87
8	'					-				•		·•	+	•		•				
9										•	+	•	-	•		<u>. </u>	 	· · · · · · · · · · · · · · · · · · ·	Start Up Depth: 80	
10	10					\vdash				•	+	·	+	•		•	 		Lat: 33 37	
						\vdash			-	•	 		+	•		•	 		The state of the s	37
11	11	FC.				\vdash		┝		•	+	•		•		•			Additional sensors	A 108 %
12	12					-		\vdash		•		•			+	•			Trans -	
13	13			· · · · · · · · · · · · · · · · · · ·		-		┝			╁	•		•	- -	<u>•</u>	 -		Fluor -	
14	14							 		•		<u>.</u>			-}	•			O2 ·	10
15	15					-		\vdash		•		•	_	<u></u>		•	 		Ref.PAR -	
16	16									··-	_	•	_	•		<u>.</u>	<u> </u>		Rem.PAR -	
. 17	17							<u> </u>			4	•	-	•		•	ļ		Pump -	
18	18							<u> </u>		•	_	•				•	ļ		SeaBrd-	8716 S-765
19	19					Ш				. •			_	•		•			Pre-Cast	
20	20							<u> </u>		•		•				•			Deck Calib	_
21	21					Щ		L_		•				•		•			Untied	433
22	22							_		•						•			Pull Tube	
23	23							<u> </u>		•		•				•			Rinse Glass	
24	24											•					dove		PAR Cap	
essu		_			-0 (5)	?										@ Surface	Open >1	Closed	Post-Cast	
hi Ma	x- 3	0	Mixed Layer		0										# Mark	ers <u>2</u>	# Bils tripped	_	Tied down	
			bon	incast	0-50	3	0 m	m											Replace Tube	-
			~γ	cast															Flush w/ DI Rinse Pylon	_
			,	١															CHIO FYUII	-230

			eanograp of Ocean	hy Divisio ography	on.		C	onso	le Operations	Log			vdo Ramivez		(C01050)
19813394-9	649744573831	Desired	Wire	Time	(PST)	Ctrl	Ctrl	Con-	ID#	ID#	ID#	EXPLICACION (169
Pyln	Trip#	Depth(m)	Out(m)	Stopped	Tripped	F3		firm	Pressure	Temp.	Conduct	Salinity	Ck salt,Ck-CTD	Filename:	0201469
_1	1	· · · ·	193	1220	1221	<16>	(/	194. 3	9.129	3.652	34.140			CTD Start Down
2	2	0	0	1224	1225	(_	_	1.6	14.269	4.067	34.607		-	Time: 1215.
3	3														Start Cast Depth: 23
4	4														Lat: 33 36 59
5	5								•	•		•	18	Ī	Lon: 118 17.52
6	6												Ì		Rosette Start Up
7	7												1		Time: 1221
8	8								•			1.			Start Up Depth: 223
9	9									• 10		1 .		- 1	Lat: 33 36 6
10	10	:													Lon: 118 1구 니
11	11								•		83			100	Additional sensors
12	12	,											54		Trans -
13	13												<u> </u>		Fluor -
14	14							Π							O2 -
15	15														Ref.PAR -
16	16														Rem.PAR -
17	17					1									Pump -
18	18					Т									SeaBrd-
19	19								•						Pre-Cast
20	20					П							1		Deck Calib
21	21									•	•				Untied
22	22														Pull Tube
23	23										•				Rinse Glass
24	24								•				(Josep		PAR Cap
ressur	e On De	ck - Begin:	-0 08	ጉ End:	0.159							# Btles @ Surface	1 Open > 1	i	Post-Cast
Chi Max	(·)	5	Mixed Laye	r-	30]	Calcofi	equivolent	station	# Markers 2	# Bils tripped		Tied down
			الم ل	neast a	_					88.3 3					Replace Tube Flush w/ DI
			Gow	ii (j	-210 210-0					00.7	·· I				
							, ^	v. 1							Rinse Pylon PAR Cap
				11.52	710-0		In O	11							n:vsz∧eth [[§

				hy Divisio	on.		C	onso	le Operations	Log		Date: 10 Febr		
	Bottle	Desired	of Ocean		(PST)	Ctrl	Ctrl	Con	ID#	ID#	ID#	Operator: TEYN	ando Ramilez Sta: CT	
97527	经外流基金	Depth(m)	100 mm 1	Stopped	Tripped	F3	0.00	firm	Pressure	Temp.	Conduct	Salinity	(x .001) Cast: Ck salt,Ck-CTD Filename	470
1	1	430	430	1255	1255	46	1	7	432.3	7.245	3.502	34. 246	ok oulder of a literature	CTD Start Down
		0	0	1303	1304	< ₹		/	1.6	14.496	4.090	33.610		
-				1/45	(30)		-	_	(, 0	17.519	4.040	33.019		Time: 1247
3	3				• •	+	-		•	•	- ·		-	Start Cast Depth: 469
-4	4		_			-			· · ·	 	•	<u> </u>	<u> </u>	Lat: 33 36:10
5	5					-	\vdash		<u></u>	•				Lon: 118 (8.64
- 6	6	54				├—	_			<u> </u>	<u> </u>	•		Rosette Start Up
7	7					-		_	•		<u> </u>		<u> </u>	Time: 1256
_8	8					<u> </u>		<u> </u>						Start Up Depth: 459
9	9					_					<u> </u>			Lat: 33 36.08
10	10		,											Lon: 118 18.49
11	11								,					Additional sensors
12	12	14											É	Trans -
13	13										,			Fluor -
14	14		•											O2 -
15	15										<u> </u>			Ref.PAR -
16	16									1 .				Rem.PAR -
17	17									1				Pump -
18	18											<u> </u>		SeaBrd-
19	19					\top					Ť			Pre-Cast
20	20					\vdash	一			· ·	- 	<u> </u>		Deck Calib
21	21					 			•			· ·		Untied
22	22					\vdash		 	•			- 		
苛						\vdash	-		ļ	•	•	<u> </u>		Pull Tube
23	23					\vdash	\vdash	\vdash	<u> </u>	 •	<u> </u>	•		Rinse Glass
24	24		-O +: 1		-0.12	 	<u> </u>	\vdash	<u> </u>	<u> </u>	•	·	Open > Closed	PAR Cap
			-0.04		-0.12	1		(alcoft ea	juvalent st	ntion	# Btles @ Surface	# Btls tripped 2	Post-Cast
hl Max	>	J	Mixed Laye						'	•		# Markers	# Dus tripped	Tied down
			down	cas f	0-60m 60-430 30-0	30	Mm	jw.	88	1.3 33				Replace Tube Flush w/ DI
				(60 - 430	6) m	1,	*					Rinse Pylon
								,	•					PAR Cap

_		nstitution				4	# 4.9% A.A.	acciping.	Full at Christians	Air Philippin	Washing and		Vintelligedustik	Oper	ator: LEAM	ando Ramirez		,
	Bottle		Wire	¥	e (PST)	См	5.8538	I Con-	8	ID#	4 7 (Comp. o.	ID#		35767	en Virginia	(x .001)		<u> </u>
lń		Depth(m)		Stopped	Tripped	F3		firm			Temp.		Conduct		Salinity	Ck salt,Ck-CTD	Filenam	ne: 0201471
1	<u></u>	316	313	1334	1335	4 γ 6 ✓	1	1-	316.6	8		_	.578		.219	<u> </u>	Ħ	CTD Start Down
2	2	20	0	1340	1341			1	1.9	14	1. 134	<u> </u>	1.055	33	. 596			Time: 1327
3	3	<u>'——</u>	<u></u>								•		•					Start Cast Depth: 346
4	4	<u>'</u>	<u> </u>			Ш'					•		•		•			Lat: 33 37.61
5	5	<u>'</u>	1 1 1								•		•		•			Lon: 118 18.26
6	6	, <u> </u>									•							Rosette Start Up
7	7	/				T							•					Time: 1335
8	e	3				T _		1_									6	Start Up Depth: 33 Y
9	<u> </u>	′ ا							÷5a							12		Lat: 33 37.64
10	 					\top		\top		\top	•		•					Lon: 118 18.19
11		 -				1		1										Additional sensors
12	1 1	185				1		1	1 .		•					348		Trans -
13						\top	\top	1	<u> </u>		.	\top			· · · · ·	†		Fluor -
14	1			+		_	\vdash	\top	<u> </u>	\top	<u>. </u>		-					02 -
5				-		+	\vdash	+	 	-	<u> </u>	\top	•		•		=-	Ref.PAR -
16					-	+		1	-	+	<u>•</u>	十	•		•			Rem.PAR -
17		1		 		+-	†	†	† :	\top	•	\dashv	•		•			Pump -
18	1			 		+	+	+	 	+	<u>·</u>					+		SeaBrd-
19				 	 	+	+	+	<u> </u>	_	•		•	-				Pre-Cast
20	 			 	 	+	十	+		+		-	• • • • • • • • • • • • • • • • • • • •		<u>_:</u>			Deck Calib
21				+		+	+	+	<u> </u>	+	•	+		+		+		Untied
<u> </u>			$\overline{}$	+	_	+	+	+	•	+	<u>·</u>	+	•	+	•	+		Pull Tube
┪	1		 		 	+	+	+	•	+	•	+	•	+	•	+		Rinse Glass
23	1		 	+	+	+-	+-	+-	<u> </u>	+-	•	+	•	+	•	العزولي		- B
24		4 eck - Begin:	702		1: -0·07 ⁴	_	Т.	+	<u> </u>		<u>. </u>		<u> </u>	- Dilor	A Surface	Open >	Closed	PAR Cap Post-Cast
	ax -	CK - Degin.	Mixed Laye		-0.01	9		1 /	CalCOFI eg	fui val	ient s	tatio	~	# Dires	terrs 2	# Btils tripped _2	Liusea	Tied down
16.6-	<u>,,, , , , , , , , , , , , , , , , , , </u>								1	ገቢ ነ	32.	4		Tr 47		"		Replace Tube
		goma	reast "	0- 5K	0 13 60 M				7	80.0) L-	٦						Flush w/ DI
		_	ŗ	50 - 31	13													Rinse Pylon
				212 - 5	(a) M	A /	-											PAR Cap

1 1 6

Integrative Oceanography Division Console Operations Log Date: D. C. O. Cruise: 0244 30 Scripps institution of Oceanography Operator: Stac CTD L1:-3 Bottle Desired Time (PST) Ctrl Con-IDs (x .001) | Cast: Tripe Depth(m) Out(m) Tripped F3 FS flanc Pressure Temp. Conduct Salimity Ck sait, Ck-CTD Filename: \\ \(\forall \) \(\forall \) 34.232 CTD Start Down 4.081 33611 Start Cast Depth: 45 Rosetto Start Up 2 Start Up Depth: Additional compars Trans -Ref. PAR -Rem.PAR -Pump -SeaBrd-Pre-Cast Deck Calib **Pull Tube** Plinee Glass PAR Cap Pressure On Deck - Begin: -0. 014 End: # Biles @ Serface ___Open>___ Closed Post Cast Chi Max -Mixed Layer -# Markets # Bills tetpped _ 2 Tied down 4 30 m 20 5 Replace Tube Flush w/ DI Rinse Pylon PAR Cep Processing # 473 Backup/Pricing 1944 ConsideOpeTyp0 ats

700	Integ	rative Oc	anograp	hy Divisi	ЭП		Cc	onso	le Operations	Log	Real Property	Date: (OAc	را ري	Cruise:	0201 13
		stitution				5,524,705	1144	THE R.				Operator:)(-	Sta: 💍	TD-LA-5
Nisk	Bottle	\$1964(900)x825	Wire	****	(PST)		Ctrl	Con-	tD#	ID#	ID#	State - State	(x .001)	Cast:	4-14
Pyln	Trip#	Depth(m)	Out(m)	Stopped	Tripped	F3	F5	firm	Pressure	Temp.	Conduct	Salinity	Ck salt,Ck-CTD	Filename:	02014
1	1		480	2214	2215	51/5	/		4824	6604	3.446	34.255		9	CTD Start Down
2	2		0	22.24	22:24		_	_	1.3	14.508	4.097	33.607			Time: 200
3	3								•	<u>(a)</u>					Start Cast Depth:
4	4					<u> </u>				. 3					Lat:
5	5											•			Lon:
6	6	%							•	•					Rosette Start Up
7	7								·						Time: 22.
8	8									•	<u> </u>			•	Start Up Depth:
9	9					$ldsymbol{f eta}$				_ 	<u> </u>				Lat: ? 3 30
10	10								•		<u> </u>				Lon: 1/7 54
11	11								•	·		<u> </u>			Additional sensors
12	12						<u> </u>		·			·	<u> </u>		Trans -
13	13					ļ	<u> </u>		·		•	•	X		Fluor -
14	14		-									·			02 -
15	15					<u> </u>	<u> </u>								Ref.PAR -
16	16					ļ					·	•			Rem.PAR -
17	17									<u>.</u>	•	·			Pump -
18	18					<u> </u>				<u> </u>	<u>.</u>	•			SeaBrd-
19	19									<u>.</u>					Pre-Cast
20	20														Deck Calib
21	21					_			•						Untied
22	22			,					•		•				Pull Tube
23	23			-					•		•	•			Rinse Glass
24	24								•		•				PAR Cap
		k - Begin:	0.10	End:	- 0, 00	14						# Biles @ Surface	Орен >		Post-Cast
Chi Ma	K -	P	/lixed Layer	•	· · · · · · · · · · · · · · · · · · ·							# Markers2	# Btls tripped	2_	Tied down
															Replace Tube
				*											Flush w/ DI
															Rinse Pylon

	thha iii	stitution	of Ocear	phy Division ography	on		- G	onso	le Operations	Log		Date: / () Operator:	1602	Cruise:	10-61-3-A
Sulm	Bottle		Wire		(PST)	Ctrl	Ctrl	Con-	ID#	ID#	ID#		(x .001)		195
Aut .	Trip#	Depth(m)	Out(m)	Stopped	Tripped	F3	F5	firm	Pressure	Temp.	Conduct	Salinity	Ck salt,Ck-CTD		
1	1		415	20:54	20 55	910		_	418.0	7202	3.496	34.234		7//	CTD Start Down
2	2		0	405					1.5	14.491	4.093	35625			Time: 20145
_3	3								•		•			1	Start Cast Depth:
4	4														Lat:
5	5														Lon:
-6	6								•	•					Rosette Start Up
7	7								•						Time: 20155
-8	8														Start Up Depth:
- 9	9				•				•			<u></u>			Lat: 33 31.65
10	10									<u> </u>	•	<u> </u>			Lon: 117 54,02
11	11						<u> </u>			<u> </u>	•			i.	Additional sensors
12	12						<u> </u>	<u> </u>	<u> </u>	<u>.</u>				3	Trans -
13	13							ldash	<u>.</u>	<u>.</u>	<u> </u>				Fluor -
14	14								<u>.</u>	<u> </u>					02 -
15	15								•	ļ					Ref.PAR -
16	16					<u> </u>		<u> </u>		<u> </u>					Rem.PAR -
17	17					ļ		7,00		<u>.</u>				777	Pump -
18	18			<u> </u>											SeaBrd-
19	19							_	•	·	<u> </u>				Pre-Cast
20	20			<u> </u>		 			•	<u> </u>					Deck Calib
21	21					_			•	-					Untied
22	22							<u> </u>	•	<u> </u>		·			Pull Tube
23	23									· ·					Rinse Glass
24	24		19 /5	100		14.2-2			•		•				PAR Cap
essun nl Max		:k - Begin:	000 Mixed Laye		~ (<u>),</u>	16						# Biles @ Surface # Markers	Open > # Bils tripped	Closed 	Post-Cast Tied down Replace Tube
															Flush w/ DI Rinse Pylon PAR Cap

	Integr	rative Oc	eanograp	ohy Divisio	on .	MR	Co	onsolo	B Operations	Log		Date: 10 fcl.		Cruise:	0201 11
	Bottle	Desired	of Ocear Wire	ography		THE STATE OF	22.53					Operator:)(,-		10-61-3-
in	2000	Depth(m)	THE REPORT OF	Stopped	(PST)	Ctrl F3	· 55 50 00	Con-		ID#	iD#	36.5000000000000000000000000000000000000		Cast:	176
1017	in spar	Depuiling	351	2/33	7 / 2//	_	F5	firm	Pressure	Temp.	Conduct	Salinity	Ck salt,Ck-CTD	Filename	: 0201474
-1			331	·	21.34	< Mar/			3534	7.849	3.551	34224			CTD Start Down
-2	2			11. 10	21:41		_		1.3	14.331	4 075	33611			Time: 2/: 23
઼³	3			ļ		_		$\vdash \vdash$		<u> </u>					Start Cast Depth: 38
4	4				- 	<u> </u>			<u> </u>			. 10	22.		Lat:
5	. 5					<u> </u>		Щ	•		•	20			Lon:
в	6								•						Rosette Start Up
7	7				-··				• 1		•	•			Time: 21:39
8	8								•					왕	Start Up Depth:
9	. g														Lat: 3332,76
o	10								•	<u> </u>					Lon: 147 52 31
1	11										 				Additional sensors
2	12	-7,											· ·		
3	13								•						Trans -
4	14					\vdash	\vdash		<u>-</u>		· · · · · · · · · · · · · · · · · · ·	·			Fluor -
5	15				·			\vdash				<u> </u>			02 -
7	1								<u> </u>	•		<u> </u>		- -	Ref.PAR -
6	16								•	· · · · · · · · · · · · · · · · · · ·		<u> </u>	<u>.</u>		Rem.PAR -
7	17							-+	•						Pump -
8	18					ļ		\vdash	•	-	·	_ · · · · · · · · · · · · · · · · · · ·			SeaBrd-
익	19					ļ			• •	•	<u> </u>	· ·			Pre-Cast
익	20						_		<u> </u>	· · · · · · · · · · · · · · · · · · ·					Deck Calib
1	21														Untied
2	22										•				Pull Tube
3	23								•		•				Rinse Glass
4	24			,					•	,					PAR Cap
ur	on Dec	k - Begin:	0.16	End:	-0.0	16						# Biles @ Surface	Open >	Closed	Post-Cast
a)	•		Mixed Layer	32								^	# Btls tripped		Tied down
															Replace Tube
															Flush w/DI
															PAR Cap

integrative Oceanography Division Console Operations Log Date: 10 fcb 02 0201 Cruise: Scripps institution of Oceanography Operator: Sta: Nisk Bottle Desired Wire Time (PST) Ctrl Ctrl Con-ID# ID# (x .001) Cast: Trip# Depth(m) Pyln Out(m) Stopped F3 Tripped F5 firm Pressure Temp. Ck salt, Ck-CTD | Filename: 0201474 Conduct Salinity 406 22:01 **CTD Start Down** Time: 22:00 Start Cast Depth: 438 Lat: Rosette Start Up Time: 221 09 Start Up Depth: 10 11 11 Additional sensors 12 Trans -13 13 14 02 -15 15 Ref.PAR -16 16 Rem.PAR -17 17 Pump -18 18 SeaBrd-19 19 Pre-Cast 20 20 Deck Calib 21 21 Untied 22 22 Pull Tube 23 23 Rinse Glass PAR Cap End: - 0.016 Pressure On Deck - Begin: # Btles @ Surface ___Open > _ Closed Post-Cast # Markers _______ Chl Max -Mixed Layer -# Btls tripped _ Tied down Replace Tube Flush w/ DI Rinse Pylon PAR Cap Backup/Printout Processing # 10/01 ConsoleOpeTyp0.xis