

Recorder initials: P.C.J.

VESSEL			CRUISE ID			PROJECT & LEG				CTD File Name:					STATION NO.		
NOAAS Oscar Dyson			DY23-06			Spring Mooring Cruise									58n1		
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
0085428.51	N	16602.20	W	24	A	9223	17	20	2.0	90	1006	145	18			\$34	
SBE 9+			FLUOR S/N			WEATHER OBS:								SFC/Bottom Temp.		MAX. DEPTH = 500 m	
PRESS SN			SBE43-Oxy (prime)			REMARKS:											
PRI TEMP SN			SBE43-Oxy (sec)			STALLED ON CTD HOOD DUE TO EK80 range											
SEC TEMP SN			Transmissometer			TARGET 500M depth											
PRI COND SN			PAR S/N			1 st OXY reading @ 50m & on way up											
SEC COND SN			O2 Tmp Sensor No			2 nd oxy still working in upper 50m use 2 nd @ depth for											
						wind speed on upcast due to wraps @ 366											
																Recorder Initials:	
NIS	DEPTH	Rosette Notes		Hydro Team-PMEL				Chloro				POC	Comments		NIS		
No.	DESIRED	SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml			No.				
1	BTM		45	284 290							triplicate oxy		1				
2	300		116	x									2				
3	200		47	x									3				
4	100		48	x									4				
5	75		49	x									5				
6	50		50	x	283								6				
7	40		51	x	285								7				
8	30		52	x	285								8				
9	20		53	x	283								9				
10	10		54	x	279								10				
11	0		55	x	283								11				
12	~												12				
		Inline															

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise			CTD File Name:					STATION NO. <i>UBWY</i>		
CONSC CAST #	LATITUDE		LONGITUDE			TIME (GMT)			DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH	STA. NAME/ID <i>UBWY</i>	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
010 54 41.21	N	166 13.81	W	24	APR	23	22	34	4.4	84	0999	183	17	291		
SBE 9+				FLUOR S/N				WEATHER OBS:			SFC/Bottom Temp.			MAX. DEPTH = 287 m		
PRESS SN				SBE43-Oxy (prime)												
PRI TEMP SN				SBE43-Oxy (sec)												
SEC TEMP SN				Transmissometer												
PRI COND SN				PAR S/N												
SEC COND SN				O2 Tmp Senson No												
															REMARKS: <i>New O₂ sensor on secondary channel, still pretty good separation. Worse in first 60m or so</i>	
																Recorder Initials:
Nis No.	DEPTH	Rosette Notes		Hydro Team-PMEL			Chloro				POC		Comments		Nis No.	
DESIRED		SALT	Nut.Btl	O2-Btl.No	DIC/AIk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml	<i>EDNA</i>	<i>xE1723</i>				
1	Bot		67	352										1		
2	200		68											2		
3	100		69											3		
4	75		70											4		
5	50		71			283								5		
6	40		72			28.5						<i>E1724</i>		6		
7	30		73			285								7		
8	20		74			283								8		
9	10		75			279						<i>xE1725</i>		9		
10	0		76			265								10		
11														11		
12														12		
1		Inline												1		

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise			CTD FileName:					STATION NO. S16H1			
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		UBN6 STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
	165	50	2.85	N	165	05	.82	W	15	APR	23	0841	3.8	84	99725717	113	
SBE 9+			FLUOR S/N			WEATHER OBS:			SFC/Bottom Temp.				MAX. DEPTH = 110 m				
PRESS SN			SBE43-Oxy (prime)														
PRI TEMP SN			SBE43-Oxy (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAR S/N														
SEC COND SN			02 Tmp Sensor No														
REMARKS: <i>Double-Tripped at 30m due to operator error.</i>																	
<i>prim. oxy looks questionable in upper 20-30m on downcast. upcast looks better until ~10m</i>																	

Recorder Initials:

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD File Name:					STATION NO.		
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
0 21 58	10.	62 N	169 43.	14 W		26	APR	23	19	35	+3.1	80	1000	83	15		70
SBE 9+			<input type="checkbox"/> FLUOR S/N			WEATHER OBS:				SFC/Bottom Temp.				MAX. DEPTH = 65 m			
PRESS SN			<input type="checkbox"/> SBE43-Oxy (prime)														
PRI TEMP SN			<input type="checkbox"/> SBE43-Oxy (sec)														
SEC TEMP SN			<input type="checkbox"/> Transmissometer														
PRI COND SN			<input type="checkbox"/> PAR S/N														
SEC COND SN			<input type="checkbox"/> O2 Tmp Sensor No														
REMARKS: BEGIN W/3RD ICE TRANSIT A NEW O ₂ sensor - had been stored w/o tube only looks better 13@ SFC chl par : float casts on - repeat cast SCS w/l @ 35m on upcast																	

Recorder Initials: SG

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD File Name:				STATION NO.		
CONSC CAST #	LATITUDE		LONGITUDE			TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
0255820.05	N	169 57.60	W	27	APR	23	00	05	-2.8	074	1001066	16			72	S24 H1
SBE 9+			FLUOR S/N				WEATHER OBS:				SFC/Bottom Temp.		MAX. DEPTH = 65 m			
PRESS SN			SBE43-Oxy (prime)				REMARKS: Inbound to 70 m line, extra stations near ice edge									
PRI TEMP SN			SBE43-Oxy (sec)													
SEC TEMP SN			Transmissometer													
PRI COND SN			PAR S/N													
SEC COND SN			O2 Tmp Sensor No													
Recorder Initials: EDNA																
Nis No.	DEPTH	Rosette Notes Hydro Team-PMEL				Chloro				POC	Comments			Nis No.		
	DESIRED	SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml	EDNA					
1	130T				/						E1788			1		
2	30				/						E1789			2		
3	10				/						E1740			3		
4														4		
5														5		
6														6		
7														7		
8														8		
9														9		
10														10		
11														11		
12														12		
I		Inline												I		

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD File Name:					STATION NO. S35H1						
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID				
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)					
	36	57	31	.52	N	16	8	18	39	W	27	APR	23	23	17	-1	2083	1002	33306	72	
SBE 9+				FLUOR S/N						WEATHER OBS:					SFC/Bottom Temp.			MAX. DEPTH = 66 m			
PRESS SN				SBE43-Oxy (prime)																	
PRI TEMP SN				SBE43-Oxy (sec)																	
SEC TEMP SN				Transmissometer																	
PRI COND SN				PAR S/N																	
SEC COND SN				O2 Tmp Sensor No																	
Recorder Initials:																					
Nis No.	DEPTH	Rosette Notes				Hydro Team-PMEL				Chloro				POC	500 ml	Comments			Nis No.		
	DESIRED					SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol								
1	BOT					216	364	X										1			
2	50					217			283									2			
3	40					218			285									3			
4	30					219			285									4			
5	20					220			283									5			
6	10					221			279									6			
7	0					222			283									7			
8																		8			
9																		9			
10																		10			
11																		11			
12																		12			
1																		1			
Inline																					

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise			CTD FileName:					STATION NO. <i>S48 H1</i>			
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		<i>70M8</i>
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	STA. NAME/ID
	48	57	15.70	N	16544.93	W	28	APR	23	1937	11.1	87	10120113			70	
SBE 9+			FLUOR S/N					WEATHER OBS:		SFC/Bottom Temp.					MAX. DEPTH = <i>625</i> m		
PRESS SN			SBE43-Oxy (prime)					REMARKS:									
PRI TEMP SN			SBE43-Oxy (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAR S/N														
SEC COND SN			O2 Tmp Senson No														
<i>NUTS out of order</i>																	
Recorder Initials:																	
Nis No.	DEPTH	Rosette Notes		Hydro Team-PMEL			Chloro				POC			Comments			Nis No.
	DESIRED			SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml	EDNA				
1	BOT			286	247	X							E1778				1
2	50			288			283										2
3	40			287			285										3
4	30			282			285						E1779				4
5	20			283			283										5
6	10			284			279						E1780				6
7	0			285			283										7
8																	8
9																	9
10																	10
11																	11
12																	12
1				Inline													1

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD File Name:				STATION NO. S49H1				
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID 70m7	
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
050 57 06.54 N	165 36.46 W		28A	PZ	Z3	21	06	1.5081	100	1230	16		71					
SBE 9+			FLUOR S/N													MAX. DEPTH = 65 m		
PRESS SN			SBE43-Oxy (prime)															
PRI TEMP SN			SBE43-Oxy (sec)															
SEC TEMP SN			Transmissometer															
PRI COND SN			PAR S/N															
SEC COND SN			O2 Tmp Senson No															
										WEATHER OBS:		SFC/Bottom Temp.						
										REMARKS:								
Recorder Initials:																		
Nis	DEPTH	Rosette Notes			Hydro Team-PMEL			Chloro				POC			Comments		Nis	
No.	DESIRED				SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml					No.
1	130				289												1	
2	50				290				283								2	
3	40				291				285								3	
4	30				292				285								4	
5	20				293				283								5	
6	10				294				279								6	
7	0				295	252			283								7	
8																	8	
9																	9	
10																	10	
11																	11	
12																	12	
1					Inline												1	

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD File Name:				STATION NO. 550 H1		
CONSC CAST #	LATITUDE		LONGITUDE			TIME (GMT)			DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH	STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
051	56	59.58	N	165	22.49	W	28	APR	23	2222	2.2081	1001	25413	72	70 N 6	
SBE 9+				FLUOR S/N											MAX. DEPTH = 66 m	
PRESS SN				SBE43-Oxy (prime)												
PRI TEMP SN				SBE43-Oxy (sec)												
SEC TEMP SN				Transmissometer												
PRI COND SN				PAR S/N												
SEC COND SN				O2 Tmp Senson No												
										WEATHER OBS:		SFC/Bottom Temp.				
										REMARKS:						
Recorder Initials:																
Nis No.	DEPTH	Rosette Notes		Hydro Team-PMEL			Chloro				POC	EDNA	Comments		Nis No.	
	DESIRED	SALT	Nut.Btl	O2-Btl.No	DIC/AIk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml						
1	BSK		296	255	Y						E1781				1	
2	50		297			283									2	
3	40		298			285									3	
4	30		299			285					E1782				4	
5	20		300			283									5	
6	10		301			279					E1783				6	
7	0		302			283									7	
8															8	
9															9	
10															10	
11															11	
12															12	
1															1	
Inline																

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD File Name: CTD 68				STATION NO. S67 H2			
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)		DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID KUM2A
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)	
82	58	15.67	N	163	29.66	W	02	05	23	02	23	0.60916	99.131017	40			
SBE 9+	FLUOR S/N			WEATHER OBS:			SFC/Bottom Temp.			MAX. DEPTH = 36 m							
PRESS SN	SBE43-Oxy (prime)																
PRI TEMP SN	SBE43-Oxy (sec)																
SEC TEMP SN	Transmissometer																
PRI COND SN	PAR S/N																
SEC COND SN	O2 Tmp Sensor No																
															Recorder Initials:		
Nis No.	DEPTH	Rosette Notes		Hydro Team-PMEL			Chloro				POC			Comments		Nis No.	
	DESIR ED			SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml	E1799				
1	BOT			388 069				285					E1799			1	
2	70			389				285								2	
3	10			390				279					E1800			3	
4	0			391				283								4	
5																5	
6																6	
7																7	
8																8	
9																9	
10																10	
11																11	
12																12	
1		Inline														1	

VESSEL NOAAS Oscar Dyson			CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise			CTD File Name:			STATION NO. S65 H3						
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID		
	DEG	MIN	DEG	MIN		DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
	66	56	51.98	N		16	40	3.21	W	01	May	23	0256	3.2	86	98314116	72	
SBE 9+			FLUOR S/N _____					WEATHER OBS:		SFC/Bottom Temp.			MAX. DEPTH = 67 m					
PRESS SN			SBE43-Oxy (prime) _____					REMARKS:		_____			_____					
PRI TEMP SN			SBE43-Oxy (sec) _____					Bumpy water! :)		_____			_____					
SEC TEMP SN			Transmissometer _____					_____		_____			_____					
PRI COND SN			PAR S/N _____					_____		_____			_____					
SEC COND SN			O2 Tmp Senson No _____					_____		_____			_____					
Recorder Initials: _____																		
Nis No.	DEPTH	Rosette Notes		Hydro Team-PMEL			Chloro				POC			Comments		Nis No.		
	DESIRED			SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml						
1	Bot			378	286											1		
2	50			379				283								2		
3	40			380				285								3		
4	30			381				285								4		
5	20			382				283								5		
6	10			383				279								6		
7	0			384				283								7		
8																8		
9																9		
10																10		
11																11		
12																12		
I																1		
Inline																		

VESSEL NOAAS Oscar Dyson		CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise				CTD FileName: CTD062				STATION NO. S61 H1			
CONSC CAST #	LATITUDE		LONGITUDE					TIME (GMT)	DRY BULB	RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		STA. NAME/ID Ice + 2
	DEG	MIN	DEG	MIN		DAY	MO	HR MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
	62	57	17.9	7	N	10	35	3.17	W	30	APR 23	30	742			
SBE 9+			FLUOR S/N				WEATHER OBS:				SFC/Bottom Temp.			MAX. DEPTH = m		
PRESS SN			SBE43-Oxy (prime)				REMARKS:									
PRI TEMP SN			SBE43-Oxy (sec)													
SEC TEMP SN			Transmissometer													
PRI COND SN			PAR S/N													
SEC COND SN			O2 Tmp Senson No													
<i>No Samples</i>															Recorder Initials:	
Nis No.	DEPTH	Rosette Notes		Hydro Team-PMEL			Chloro				POC			Comments		Nis No.
	DESIRED			SALT	Nut.Btl	O2-Btl.No	DIC/Alk	GFF Vol	>10 Large Vol	GFF Dup Vol	>10 dup vol	500 ml				
1															1	
2															2	
3															3	
4															4	
5															5	
6															6	
7															7	
8															8	
9															9	
10															10	
11															11	
12															12	
I															I	
Inline																

VESSEL NOAAS Oscar Dyson		CRUISE ID DY23-06			PROJECT & LEG Spring Mooring Cruise			CTD FileName:					STATION NO. <i>57841</i>				
CONSC CAST #	LATITUDE		LONGITUDE			TIME (GMT)		DRY BULB		RH	Pressure	WIND DIRN.	WIND SPD.	BOTTOM DEPTH		<i>AWI</i> STA. NAME/ID	
	DEG	MIN	DEG	MIN	DAY	MO	YR	HR	MIN	(°C)	(%)	(mb)	(deg)	(kts)	(m)		
	<i>78 53</i>	<i>58.89</i>	<i>N</i>	<i>166 58.55</i>	<i>W</i>	<i>05</i>	<i>MA</i>	<i>23</i>	<i>2201</i>	<i>2.1</i>	<i>80</i>	<i>1018</i>	<i>23</i>	<i>8</i>	<i>200</i>		
SBE 9+			FLUOR S/N											WEATHER OBS: SFC/Bottom Temp.			MAX. DEPTH = <i>200</i> m
PRESS SN			SBE43-Oxy (prime)														
PRI TEMP SN			SBE43-Oxy (sec)														
SEC TEMP SN			Transmissometer														
PRI COND SN			PAR S/N														
SEC COND SN			O2 Tmp Senson No														
<i>+ Robin TAR (2x)</i>																	

Recorder Initials:

VESSEL	CRUISE ID		PROJECT & LEG		CTD File Name:			
	NOAAS Oscar Dyson		DY23-06		Spring Mooring Cruise			
CONSC CAST #	LATITUDE		LONGITUDE					
	DEG	MIN	DEG	MIN	DAY	MO	YR	
SBE 9+	85	51	17	.90	N	166	22	04
PRESS SN	FLUOR S/N		SBE43-Oxy (prime)		TIME (GMT)		DRY BULB	
PRI TEMP SN	SBE43-Oxy (sec)		Transmissometer		HR	MIN	(°C)	
SEC TEMP SN	PAR S/N		O2 Tmp Sensor No		RH	(%)	Pressure (mb)	
PRI COND SN							WIND DIRN. (deg)	
SEC COND SN							WIND SPD. (kts)	
							BOTTOM DEPTH (m)	
							STA. NAME/ID	
							UT3	
							STATION NO. 58541	

REMARKS:

~~SKIPPED UT4 DUE TO SHIP TRAFFIC IN AREA~~

~~Primary oxy still dropping off in 000s~~

~~@ 2750 primary channels are all 200~~

~~@ 3000 max is to bottom~~

~~pri oxy is very bad on upcast~~

~~pri scd has issues on ↑ @ 2500~~

NIS No.	DEPTH	Rosette Notes	Hydro Team-PMEL			Chloro	POC	Comments	NIS No.
			SALT	Nut.Btl	O2-Btl.No				
1	BTM		472	X		GFF Vol	>10 Large Vol	GFF Dup Vol	500 ml
2	500		473	X					X 1813
3	100		474	X					X 1814
4	75		475	X					
5	50		476	X					
6	40		477	X					
7	30		478	X					
8	20		479	X					
9	10		480	X					
10	0		481	X					
11									
12									
-		inline							-

VESSEL

NOAAS Oscar Dyson

CRUISE ID
DY23-06

PROJECT & LEG

STATION NO.

NOAAS Oscar Dyson		CRUISE ID		PROJECT & LEG		CTD File Name:							
		DY23-06		Spring Mooring Cruise									
CONSC CAST #	LATITUDE	LONGITUDE				TIME (GMT)	DRY BULB	RH	PRESSURE	WIND DIRN	WIND SPD.	BOTTOM DEPTH	STA. NAME/ID
		DEG	MIN	DEG	MIN								
87 54 10	.09 N	166	14	.05	w	MAY 06	232001	3.6077	1024	22007	124	UTI	
SBE 9+													
PRESS SN													
PRI TEMP SN													
SEC TEMP SN													
PRI COND SN													
SEC COND SN													
O2 Tmp Sensor No													
FLUOR S/N													
SBE 43-Oxy (prime)													
SBE 43-Oxy (sec)													
Transmissometer													
PAR S/N													
O2 Tmp Sensor No													
REMARKS: WEATHER OBS: SFC/Bottom Temp.													
MAX DEPTH = 118 m													

Hydro Team-PMEL

Chloro

Recorder Initials:

E1816

E1817

E1818

Inline

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

