



## Global Irminger MFM A 2014 Mooring Model Analysis

designed for 2700m Depth



By: P. Chua

05-Aug-2014

DCN: 3202-00011

REV: B

REF.DES. GI04FLMA

Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

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### Revision History

3202-00011\_Global\_Irminger\_MFM\_A\_2014\_Mooring\_Model\_Analysis\_2014-08-05\_RevB

Rev#	Date	Author	Description
A	31-Oct-2012	C.Begler	Initial Release, ECR# 1303-00860
B	05-Aug-2014	P. Chua	OSNAP Instruments Added & Depth, ECR# 1303-01362



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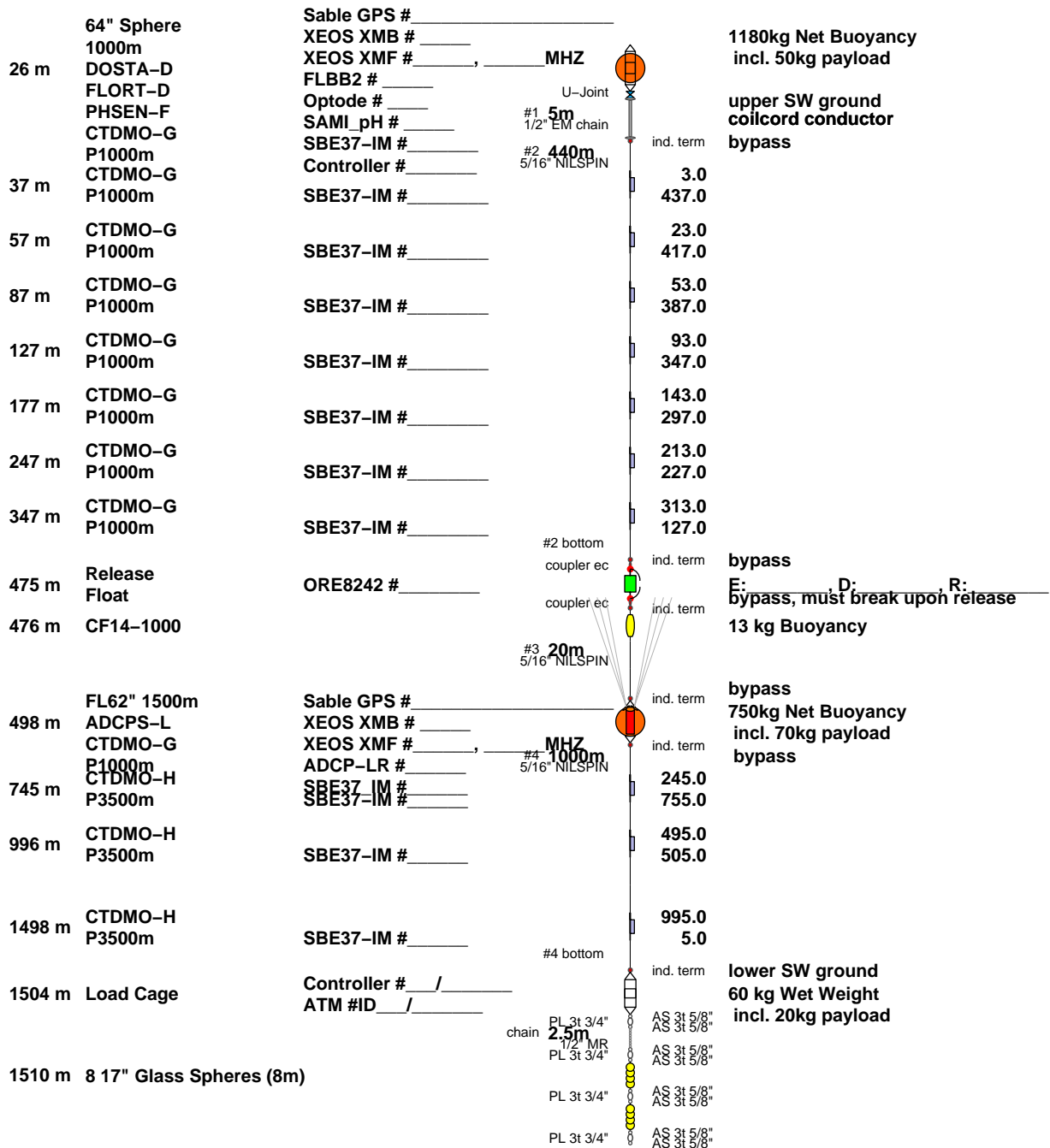


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depth	component (incl. stretch)	instruments	rope # & Length	Distance from Upper / Lower rope end
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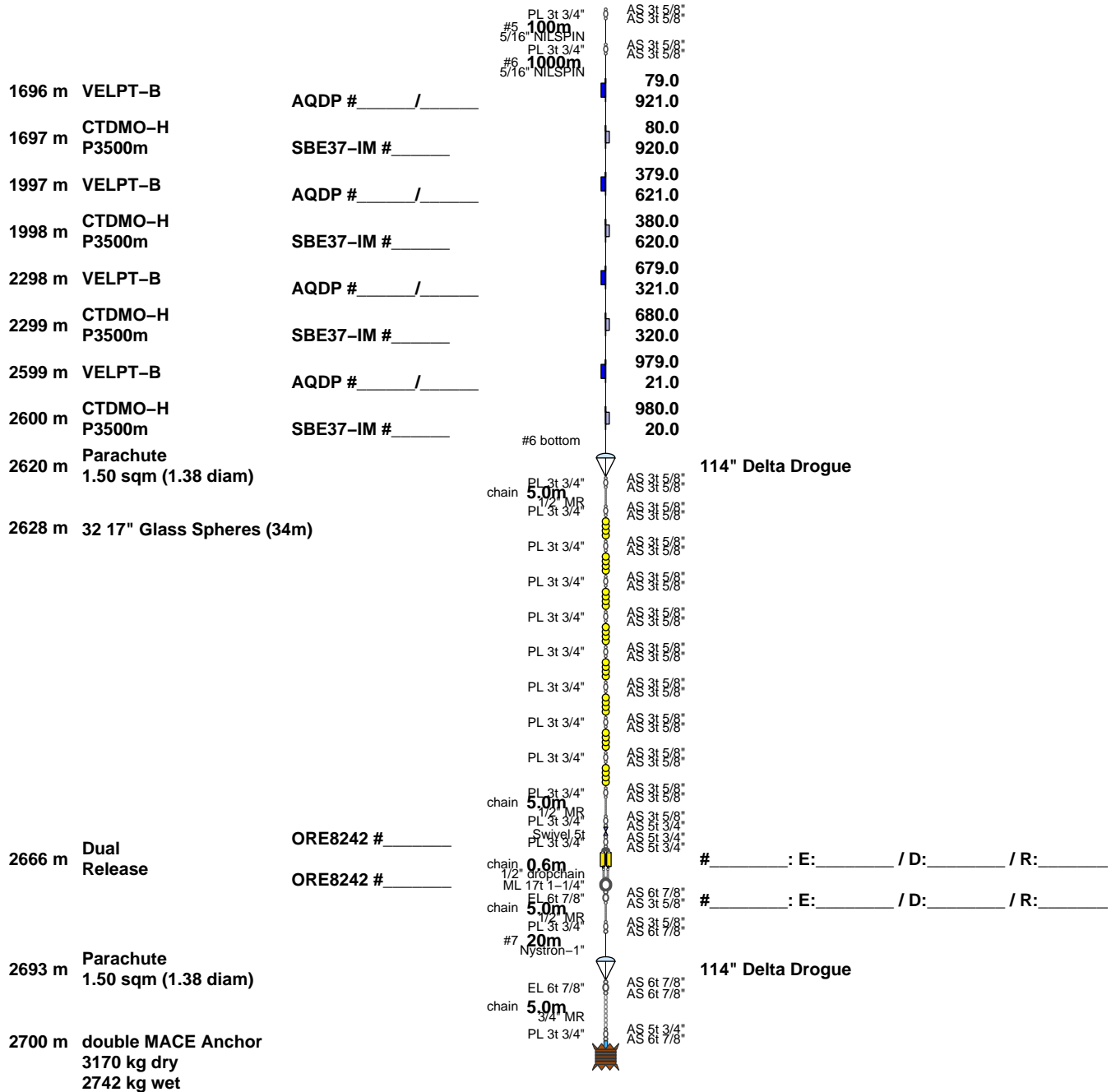


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### Element List

Code	Count	Label	Weight in air	/	water
-----					
Components					
-----					
13	6	Inductive Termination	18.0 kg		14.4 kg
15	2	Special Coupler Eye-Clevis	16.0 kg		12.0 kg
17	1	45deg Universal Joint	25.0 kg		16.3 kg
32	35	5/8" Bolt Type Anchor Shackle (AS) 3.2t	26.6 kg		23.1 kg
33	4	3/4" Bolt Type Anchor Shackle (AS) 4.7t	4.9 kg		4.3 kg
34	5	7/8" Bolt Type Anchor Shackle (AS) 6.5t	8.9 kg		7.8 kg
53	20	3/4" Pear Link (PL) 2.7t	17.2 kg		14.8 kg
64	2	7/8" End Link (EL) 6.3t	2.4 kg		2.1 kg
76	1	1-1/4" Master Link (ML) 17t	5.5 kg		4.8 kg
94	1	SS Swivel 5t	6.2 kg		5.3 kg
256	1	Cable Float CF14 1000m	25.0 kg		-13.0 kg
274	10	4 17" Glass Sphere 204HR on 4m chain	960.0 kg		-880.0 kg
300	1	Load Cage w/ Controller, ACOMM	50.0 kg		60.0 kg
306	1	64" Syntactic Sphere 1000m	1100.0 kg		-1180.0 kg
326	1	62" float 1500m, LR-ADCP	1150.0 kg		-750.0 kg
347	4	Aquadopp DW clamp	38.0 kg		24.0 kg
374	7	CTDMO-G P1000m IM, clamp on	26.6 kg		19.6 kg
375	7	CTDMO-H P3500m IM, clamp on	26.6 kg		19.6 kg
478	1	Dual Acoustic Release	77.0 kg		61.0 kg
479	1	Acoustic Release in Float	121.0 kg		-0.0 kg
480	1	DropChain 1/2"-4ft	7.8 kg		6.8 kg
491	2	Parachute	NaN kg		-0.0 kg
-----					
Components weight :			3712.8 kg		-2527.0 kg
-----					
Ropes					
-----					
103	2560m	5/16" 3x19 Jac. NILSPIN wire	798.7 kg		545.3 kg
113	20m	Samson Nystron 1"	10.1 kg		2.0 kg
141	5m	EM chain 1/2", 2.7t	90.0 kg		35.0 kg
181	18m	Mooring (MR) chain 1/2", 2.7t	61.3 kg		53.2 kg
183	5m	Mooring (MR) chain 3/4", 6.0t	38.0 kg		33.1 kg
-----					
Ropes weight :			998.1 kg		668.5 kg
-----					
Summary					
-----					
		Components	3712.8 kg		-2527.0 kg
		Ropes	998.1 kg		668.5 kg
522	1	double MACE Anchor	3170.0 kg		2742.1 kg
-----					
Mooring total weight :			7880.9 kg		883.5 kg



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### Rope List

#	Code	Length	Label	Weight in air	/	water
1	141	5m	EM chain 1/2", 2.7t	90.0 kg		35.0 kg
2x	103	440m	5/16" 3x19 Jac. NILSPIN wire	137.3 kg		93.7 kg
3x	103	20m	5/16" 3x19 Jac. NILSPIN wire	6.2 kg		4.3 kg
4x	103	1000m	5/16" 3x19 Jac. NILSPIN wire	312.0 kg		213.0 kg
	181	3m	Mooring (MR) chain 1/2", 2.7t	8.8 kg		7.6 kg
5	103	100m	5/16" 3x19 Jac. NILSPIN wire	31.2 kg		21.3 kg
6	103	1000m	5/16" 3x19 Jac. NILSPIN wire	312.0 kg		213.0 kg
	181	5m	Mooring (MR) chain 1/2", 2.7t	17.5 kg		15.2 kg
	181	5m	Mooring (MR) chain 1/2", 2.7t	17.5 kg		15.2 kg
	181	5m	Mooring (MR) chain 1/2", 2.7t	17.5 kg		15.2 kg
7	113	20m	Samson Nystroon 1"	10.1 kg		2.0 kg
	183	5m	Mooring (MR) chain 3/4", 6.0t	38.0 kg		33.1 kg

Symmetric Marker: 36

#	Length	Type	Position of Markers [m]
2x	440m	5/16" NILSPIN:	3, 23, 53, 93, 127, 143, 213, 227 297, 313, 347, 387, 417, 437
4x	1000m	5/16" NILSPIN:	5, 245, 495, 505, 755, 995
6	1000m	5/16" NILSPIN:	20, 21, 79, 80, 320, 321, 379, 380 620, 621, 679, 680, 920, 921, 979, 980



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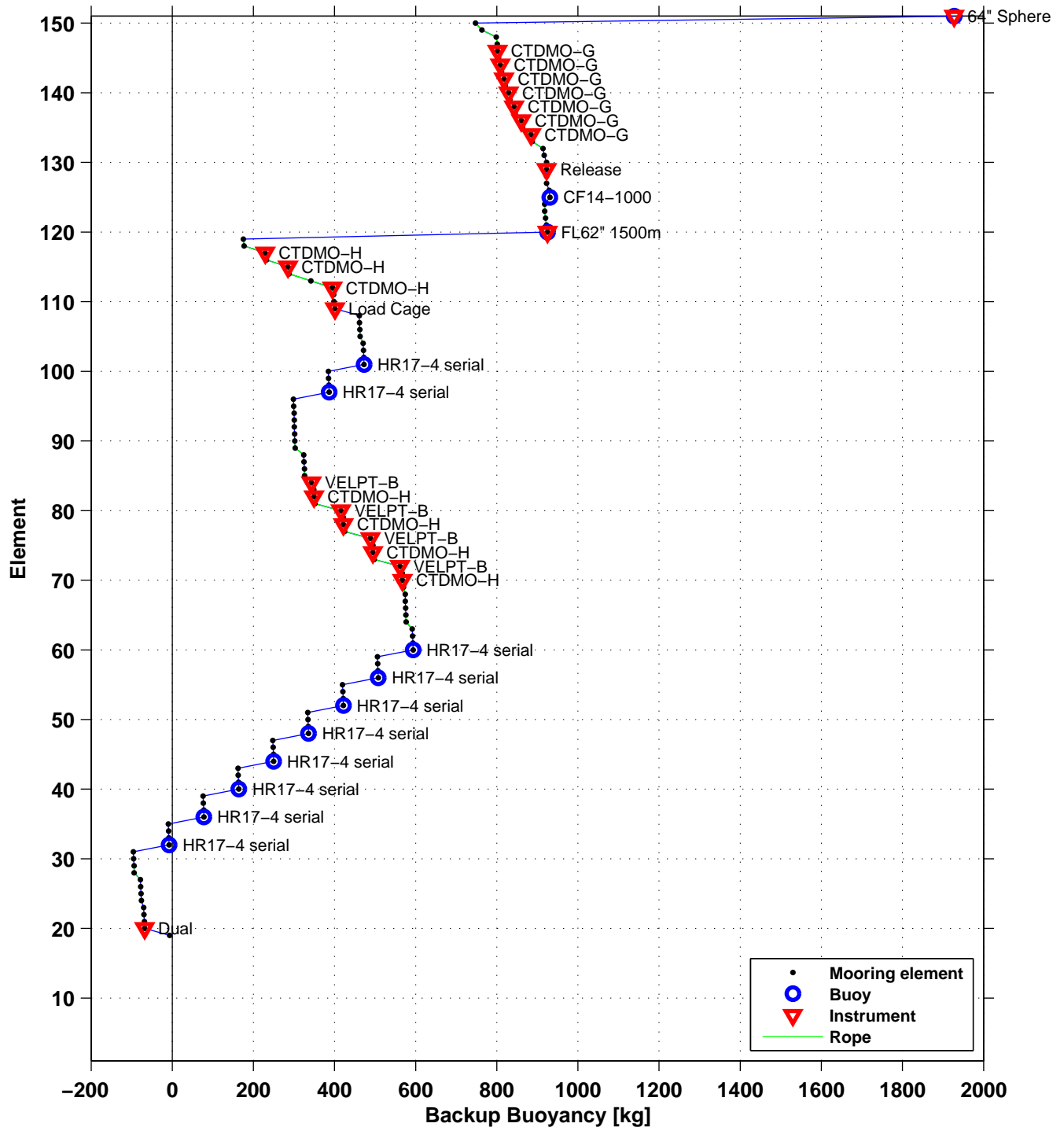


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## Backup Buoyancy



NO Current Vertical anchor load : 1859 kg  
 Wet safe anchor weight : 2323 kg (125%, max: 500 kg)  
 Wet / Dry MACE anchor weight : 2742 kg / 3170 kg

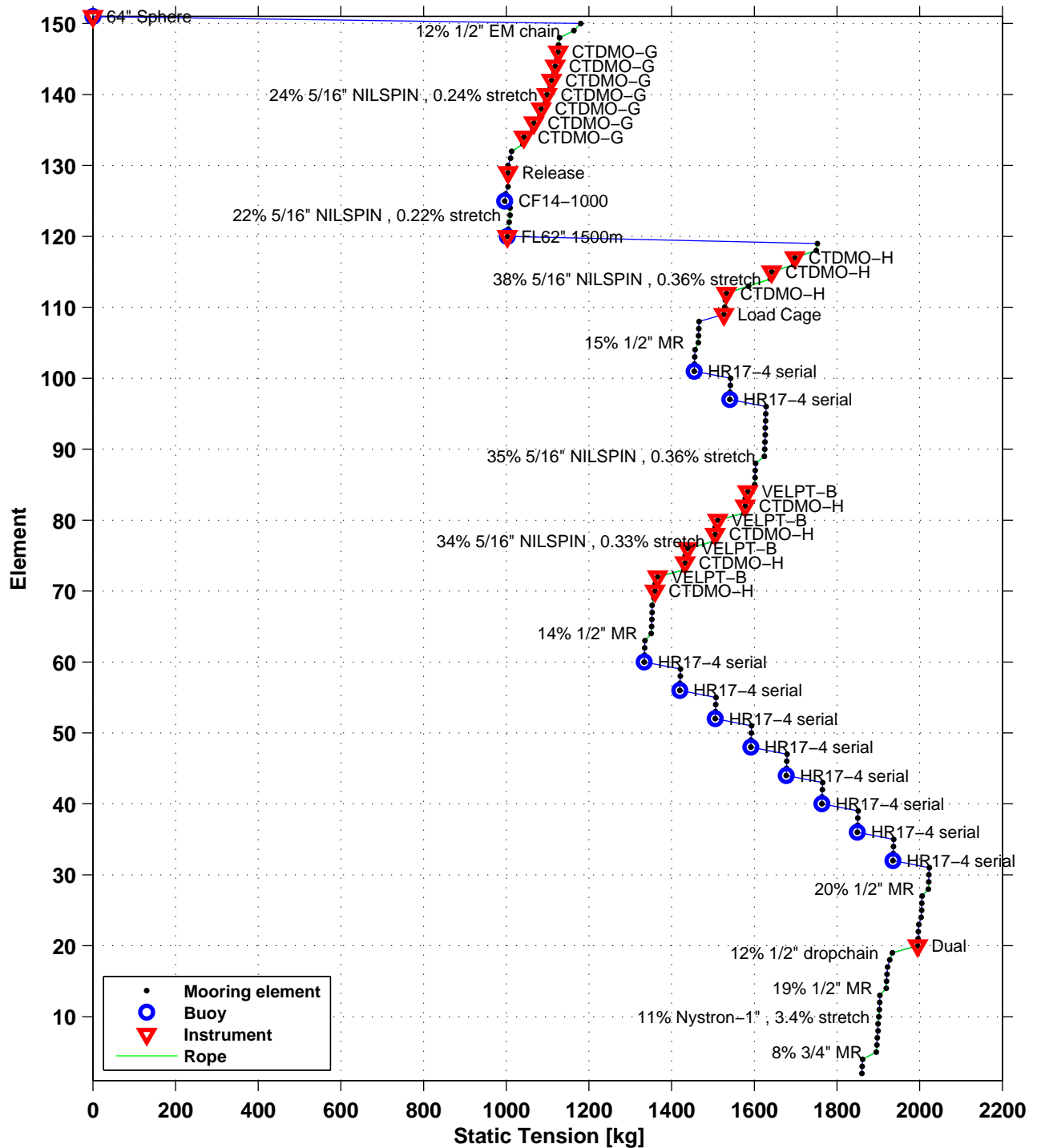


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Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)				
<b>No Current Static Tension</b>				



NO Current Vertical anchor load : 1859 kg  
 Wet safe anchor weight : 2323 kg (125%, max: 500 kg)  
 Wet / Dry MACE anchor weight : 2742 kg / 3170 kg





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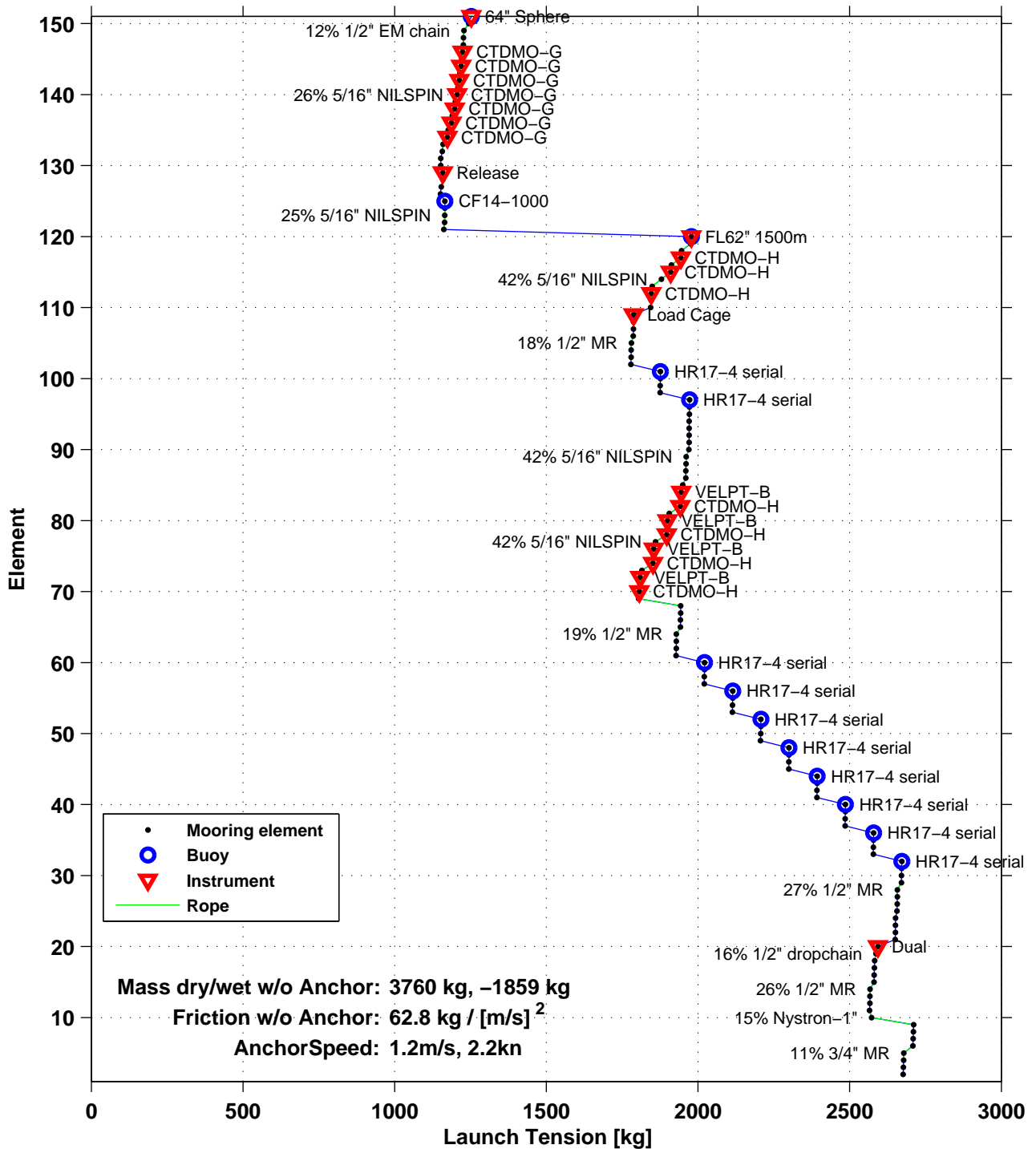


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## Steady State Launch Tension



**NO Current Vertical anchor load: 1859 kg**  
**Wet safe anchor weight: 2323 kg (125%, max: 500 kg)**  
**Wet / Dry MACE anchor weight: 2742 kg / 3170 kg**



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### No Current Static Solution – Parameter

#	ID	Mooring Element	Length [m]	Buoy [kg]	Backup B. [kg]	Height [m]	Design Dpt [m]	Tension [kg]	[%]	Stretch [m]	[%]	
151	306	64" Sphere	100	2.3	1180.0	1927.3	2674.1	25.9	0.0	0.0	0.00	0.00
150	17	U-Joint	0.3	-16.3	747.3	2671.8	28.3	1180.0	7.4	0.00	0.00	0.00
149	141	1/2" EM chain	5.0	-35.0	763.6	2671.5	31.0	1163.7	11.6	0.00	0.00	0.00
148	13	ind. term	0.1	-2.4	798.6	2666.5	33.5	1128.7	7.1	0.00	0.00	0.00
147	103	5/16" NILSPIN	3.0	-0.6	801.0	2666.4	35.1	1126.3	24.2	0.01	0.25	0.00
146	374	CTDMO-G P1000m	0.0	-2.8	801.7	2663.4	36.6	1125.7	11.3	0.00	0.00	0.00
145	103	5/16" NILSPIN	20.0	-4.3	804.5	2663.4	46.6	1122.9	24.1	0.05	0.25	0.00
144	374	CTDMO-G P1000m	0.0	-2.8	808.7	2643.4	56.6	1118.6	11.2	0.00	0.00	0.00
143	103	5/16" NILSPIN	30.1	-6.4	811.5	2643.4	71.7	1115.8	24.0	0.07	0.25	0.00
142	374	CTDMO-G P1000m	0.0	-2.8	817.9	2613.3	86.7	1109.4	11.1	0.00	0.00	0.00
141	103	5/16" NILSPIN	40.1	-8.5	820.7	2613.3	106.8	1106.6	23.8	0.10	0.24	0.00
140	374	CTDMO-G P1000m	0.0	-2.8	829.2	2573.2	126.8	1098.1	11.0	0.00	0.00	0.00
139	103	5/16" NILSPIN	50.1	-10.6	832.0	2573.2	151.9	1095.3	23.5	0.12	0.24	0.00
138	374	CTDMO-G P1000m	0.0	-2.8	842.7	2523.1	176.9	1084.6	10.8	0.00	0.00	0.00
137	103	5/16" NILSPIN	70.2	-14.9	845.5	2523.1	212.0	1081.8	23.3	0.17	0.24	0.00
136	374	CTDMO-G P1000m	0.0	-2.8	860.4	2452.9	247.1	1066.9	10.7	0.00	0.00	0.00
135	103	5/16" NILSPIN	100.2	-21.3	863.2	2452.9	297.2	1064.1	22.9	0.23	0.23	0.00
134	374	CTDMO-G P1000m	0.0	-2.8	884.5	2352.7	347.3	1042.8	10.4	0.00	0.00	0.00
133	103	5/16" NILSPIN	127.3	-27.1	887.3	2352.7	411.0	1040.0	22.4	0.29	0.23	0.00
132	13	ind. term	0.1	-2.4	914.3	2225.4	474.7	1013.0	6.3	0.00	0.00	0.00
131	15	coupler ec	0.2	-6.0	916.7	2225.3	474.8	1010.6	6.3	0.00	0.00	0.00
129	479	Release Float	1.0	0.0	922.7	2225.1	475.4	1004.6	10.0	0.00	0.00	0.00
127	15	coupler ec	0.2	-6.0	922.7	2224.1	476.0	1004.6	6.3	0.00	0.00	0.00
126	13	ind. term	0.1	-2.4	928.7	2223.9	476.2	998.6	6.2	0.00	0.00	0.00
125	256	CF14-1000	0.0	13.0	931.1	2223.8	476.2	996.2	16.6	0.00	0.00	0.00
123	103	5/16" NILSPIN	10.0	-2.1	918.1	2223.8	481.2	1009.2	21.7	0.02	0.22	0.00
122	103	5/16" NILSPIN	10.0	-2.1	920.3	2213.7	491.3	1007.1	21.6	0.02	0.22	0.00



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**No Current Static Solution – Parameter, cont.**

#	ID	Mooring Element	Length [m]	Buoy [kg]	Backup B. [kg]	Height [m]	Design Dpt [m]	Tension [kg]	[%]	Stretch [m]	[%]
121	13	ind. term	0.1	-2.4	922.4	2203.7	496.3	1004.9	6.3	0.00	0.00
120	326	FL62" 1500m ADC	2.8	750.0	924.8	2203.6	497.8	1002.5	10.0	0.00	0.00
119	13	ind. term	0.1	-2.4	174.8	2200.8	499.2	1752.5	11.0	0.00	0.00
118	103	5/16" NILSPIN	245.9	-52.2	177.2	2200.7	622.3	1750.1	37.6	0.94	0.38
117	375	CTDMO-H P3500m	0.0	-2.8	229.4	1954.8	745.2	1697.9	17.0	0.00	0.00
116	103	5/16" NILSPIN	250.9	-53.3	232.2	1954.8	870.7	1695.1	36.4	0.92	0.37
115	375	CTDMO-H P3500m	0.0	-2.8	285.4	1703.8	996.2	1641.9	16.4	0.00	0.00
114	103	5/16" NILSPIN	250.9	-53.3	288.2	1703.8	1121.6	1639.1	35.2	0.89	0.36
113	103	5/16" NILSPIN	250.9	-53.3	341.5	1453.0	1372.5	1585.8	34.1	0.86	0.35
112	375	CTDMO-H P3500m	0.0	-2.8	394.7	1202.1	1497.9	1532.6	15.3	0.00	0.00
111	103	5/16" NILSPIN	5.0	-1.1	397.5	1202.1	1500.4	1529.8	32.9	0.02	0.34
110	13	ind. term	0.1	-2.4	398.6	1197.1	1503.0	1528.7	9.6	0.00	0.00
109	300	Load Cage	1.5	-60.0	401.0	1197.0	1503.8	1526.3	15.3	0.00	0.00
108	32	AS 3t 5/8"	0.1	-0.7	461.0	1195.5	1504.6	1466.3	12.2	0.00	0.00
107	53	PL 3t 3/4"	0.1	-0.7	461.7	1195.4	1504.7	1465.7	12.2	0.00	0.00
106	32	AS 3t 5/8"	0.1	-0.7	462.4	1195.3	1504.7	1464.9	12.2	0.00	0.00
105	181	1/2" MR	2.5	-7.6	463.1	1195.2	1506.0	1464.3	14.6	0.00	0.00
104	32	AS 3t 5/8"	0.1	-0.7	470.7	1192.7	1507.3	1456.7	12.1	0.00	0.00
103	53	PL 3t 3/4"	0.1	-0.7	471.3	1192.7	1507.4	1456.0	12.1	0.00	0.00
102	32	AS 3t 5/8"	0.1	-0.7	472.1	1192.5	1507.5	1455.3	12.1	0.00	0.00
101	274	HR17-4 serial	4.0	88.0	472.7	1192.5	1509.5	1454.6	14.5	0.00	0.00
100	32	AS 3t 5/8"	0.1	-0.7	384.7	1188.5	1511.5	1542.6	12.9	0.00	0.00
99	53	PL 3t 3/4"	0.1	-0.7	385.4	1188.4	1511.6	1541.9	12.8	0.00	0.00
98	32	AS 3t 5/8"	0.1	-0.7	386.1	1188.3	1511.7	1541.2	12.8	0.00	0.00
97	274	HR17-4 serial	4.0	88.0	386.8	1188.2	1513.8	1540.5	15.4	0.00	0.00
96	32	AS 3t 5/8"	0.1	-0.7	298.8	1184.2	1515.8	1628.5	13.6	0.00	0.00
95	53	PL 3t 3/4"	0.1	-0.7	299.5	1184.2	1515.9	1627.9	13.6	0.00	0.00



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### No Current Static Solution – Parameter, cont.

#	ID	Mooring Element	Length [m]	Buoy [kg]	Backup B. [kg]	Height [m]	Design Dpt [m]	Tension [kg]	[%]	Stretch [m]	[%]
94	32	AS 3t 5/8"	0.1	-0.7	300.2	1184.1	1516.0	1627.1	13.6	0.00	0.00
92	32	AS 3t 5/8"	0.1	-0.7	300.9	1184.0	1516.0	1626.5	13.6	0.00	0.00
91	53	PL 3t 3/4"	0.1	-0.7	301.5	1183.9	1516.1	1625.8	13.5	0.00	0.00
90	32	AS 3t 5/8"	0.1	-0.7	302.3	1183.8	1516.2	1625.1	13.5	0.00	0.00
89	103	5/16" NILSPIN	100.4	-21.3	302.9	1183.8	1566.4	1624.4	34.9	0.36	0.36
88	32	AS 3t 5/8"	0.1	-0.7	324.2	1083.4	1616.6	1603.1	13.4	0.00	0.00
87	53	PL 3t 3/4"	0.1	-0.7	324.9	1083.3	1616.7	1602.4	13.4	0.00	0.00
86	32	AS 3t 5/8"	0.1	-0.7	325.6	1083.2	1616.8	1601.7	13.3	0.00	0.00
85	103	5/16" NILSPIN	79.3	-16.8	326.3	1083.1	1656.5	1601.0	34.4	0.28	0.35
84	347	VELPT-B	0.0	-6.0	343.1	1003.9	1696.1	1584.2	15.8	0.00	0.00
83	103	5/16" NILSPIN	1.0	-0.2	349.1	1003.9	1696.6	1578.2	33.9	0.00	0.35
82	375	CTDMO-H P3500m	0.0	-2.8	349.3	1002.9	1697.1	1578.0	15.8	0.00	0.00
81	103	5/16" NILSPIN	300.0	-63.7	352.1	1002.9	1847.1	1575.2	33.9	1.02	0.34
80	347	VELPT-B	0.0	-6.0	415.8	702.8	1997.2	1511.5	15.1	0.00	0.00
79	103	5/16" NILSPIN	1.0	-0.2	421.8	702.8	1997.7	1505.5	32.4	0.00	0.33
78	375	CTDMO-H P3500m	0.0	-2.8	422.0	701.8	1998.2	1505.3	15.1	0.00	0.00
77	103	5/16" NILSPIN	300.0	-63.7	424.8	701.8	2148.1	1502.5	32.3	0.97	0.33
76	347	VELPT-B	0.0	-6.0	488.5	401.9	2298.1	1438.8	14.4	0.00	0.00
75	103	5/16" NILSPIN	1.0	-0.2	494.5	401.9	2298.6	1432.8	30.8	0.00	0.32
74	375	CTDMO-H P3500m	0.0	-2.8	494.7	400.9	2299.1	1432.6	14.3	0.00	0.00
73	103	5/16" NILSPIN	299.9	-63.7	497.5	400.9	2449.1	1429.8	30.7	0.93	0.31
72	347	VELPT-B	0.0	-6.0	561.2	100.9	2599.1	1366.1	13.7	0.00	0.00
71	103	5/16" NILSPIN	1.0	-0.2	567.2	100.9	2599.6	1360.1	29.2	0.00	0.30
70	375	CTDMO-H P3500m	0.0	-2.8	567.4	99.9	2600.1	1359.9	13.6	0.00	0.00
69	103	5/16" NILSPIN	20.1	-4.3	570.2	99.9	2610.1	1357.1	29.2	0.06	0.30
68	491	Parachute	0.0	0.0	574.5	79.9	2620.1	1352.8	13.5	0.00	0.00
67	32	AS 3t 5/8"	0.1	-0.7	574.5	79.9	2620.2	1352.8	11.3	0.00	0.00



**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

**No Current Static Solution – Parameter, cont.**

#	ID	Mooring Element	Length [m]	Buoy [kg]	Backup B. [kg]	Height [m]	Design Dpt [m]	Tension [kg]	[%]	Stretch [m]	[%]
66	53	PL 3t 3/4"	0.1	-0.7	575.1	79.8	2620.2	1352.2	11.3	0.00	0.00
65	32	AS 3t 5/8"	0.1	-0.7	575.9	79.7	2620.3	1351.4	11.3	0.00	0.00
64	181	1/2" MR	5.0	-15.2	576.5	79.6	2622.9	1350.8	13.5	0.00	0.00
63	32	AS 3t 5/8"	0.1	-0.7	591.7	74.6	2625.4	1335.6	11.1	0.00	0.00
62	53	PL 3t 3/4"	0.1	-0.7	592.4	74.6	2625.5	1334.9	11.1	0.00	0.00
61	32	AS 3t 5/8"	0.1	-0.7	593.1	74.5	2625.6	1334.2	11.1	0.00	0.00
60	274	HR17-4 serial	4.0	88.0	593.8	74.4	2627.6	1333.5	13.3	0.00	0.00
59	32	AS 3t 5/8"	0.1	-0.7	505.8	70.4	2629.6	1421.5	11.8	0.00	0.00
58	53	PL 3t 3/4"	0.1	-0.7	506.5	70.3	2629.7	1420.9	11.8	0.00	0.00
57	32	AS 3t 5/8"	0.1	-0.7	507.2	70.2	2629.8	1420.1	11.8	0.00	0.00
56	274	HR17-4 serial	4.0	88.0	507.9	70.1	2631.9	1419.5	14.2	0.00	0.00
55	32	AS 3t 5/8"	0.1	-0.7	419.9	66.1	2633.9	1507.5	12.6	0.00	0.00
54	53	PL 3t 3/4"	0.1	-0.7	420.5	66.1	2634.0	1506.8	12.6	0.00	0.00
53	32	AS 3t 5/8"	0.1	-0.7	421.3	66.0	2634.1	1506.1	12.6	0.00	0.00
52	274	HR17-4 serial	4.0	88.0	421.9	65.9	2636.1	1505.4	15.1	0.00	0.00
51	32	AS 3t 5/8"	0.1	-0.7	333.9	61.9	2638.1	1593.4	13.3	0.00	0.00
50	53	PL 3t 3/4"	0.1	-0.7	334.6	61.8	2638.2	1592.7	13.3	0.00	0.00
49	32	AS 3t 5/8"	0.1	-0.7	335.3	61.7	2638.3	1592.0	13.3	0.00	0.00
48	274	HR17-4 serial	4.0	88.0	336.0	61.7	2640.3	1591.3	15.9	0.00	0.00
47	32	AS 3t 5/8"	0.1	-0.7	248.0	57.7	2642.4	1679.3	14.0	0.00	0.00
46	53	PL 3t 3/4"	0.1	-0.7	248.7	57.6	2642.5	1678.7	14.0	0.00	0.00
45	32	AS 3t 5/8"	0.1	-0.7	249.4	57.5	2642.6	1677.9	14.0	0.00	0.00
44	274	HR17-4 serial	4.0	88.0	250.1	57.4	2644.6	1677.3	16.8	0.00	0.00
43	32	AS 3t 5/8"	0.1	-0.7	162.1	53.4	2646.6	1765.3	14.7	0.00	0.00
42	53	PL 3t 3/4"	0.1	-0.7	162.7	53.3	2646.7	1764.6	14.7	0.00	0.00
41	32	AS 3t 5/8"	0.1	-0.7	163.5	53.2	2646.8	1763.9	14.7	0.00	0.00
40	274	HR17-4 serial	4.0	88.0	164.1	53.2	2648.8	1763.2	17.6	0.00	0.00



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### No Current Static Solution – Parameter, cont.

#	ID	Mooring Element	Length [m]	Buoy [kg]	Backup B. [kg]	Height [m]	Design Dpt [m]	Tension [kg]	[%]	Stretch [m]	[%]
39	32	AS 3t 5/8"	0.1	-0.7	76.1	49.2	2650.9	1851.2	15.4	0.00	0.00
38	53	PL 3t 3/4"	0.1	-0.7	76.8	49.1	2651.0	1850.6	15.4	0.00	0.00
37	32	AS 3t 5/8"	0.1	-0.7	77.5	49.0	2651.0	1849.8	15.4	0.00	0.00
36	274	HR17-4 serial	4.0	88.0	78.2	48.9	2653.1	1849.2	18.5	0.00	0.00
35	32	AS 3t 5/8"	0.1	-0.7	-9.8	44.9	2655.1	1937.2	16.1	0.00	0.00
34	53	PL 3t 3/4"	0.1	-0.7	-9.2	44.9	2655.2	1936.5	16.1	0.00	0.00
33	32	AS 3t 5/8"	0.1	-0.7	-8.4	44.7	2655.3	1935.8	16.1	0.00	0.00
32	274	HR17-4 serial	4.0	88.0	-7.8	44.7	2657.3	1935.1	19.4	0.00	0.00
31	32	AS 3t 5/8"	0.1	-0.7	-95.8	40.7	2659.4	2023.1	16.9	0.00	0.00
30	53	PL 3t 3/4"	0.1	-0.7	-95.1	40.6	2659.4	2022.4	16.9	0.00	0.00
29	32	AS 3t 5/8"	0.1	-0.7	-94.4	40.5	2659.5	2021.7	16.8	0.00	0.00
28	181	1/2" MR	5.0	-15.2	-93.7	40.4	2662.1	2021.0	20.2	0.00	0.00
27	32	AS 3t 5/8"	0.1	-0.7	-78.5	35.4	2664.6	2005.8	16.7	0.00	0.00
26	53	PL 3t 3/4"	0.1	-0.7	-77.8	35.4	2664.7	2005.2	16.7	0.00	0.00
25	33	AS 5t 3/4"	0.1	-1.1	-77.1	35.3	2664.8	2004.4	11.1	0.00	0.00
24	94	Swivel 5t	0.2	-5.3	-76.0	35.2	2664.9	2003.4	20.0	0.00	0.00
23	33	AS 5t 3/4"	0.1	-1.1	-70.7	35.0	2665.1	1998.0	11.1	0.00	0.00
22	53	PL 3t 3/4"	0.1	-0.7	-69.6	34.9	2665.2	1996.9	16.6	0.00	0.00
21	33	AS 5t 3/4"	0.1	-1.1	-68.9	34.8	2665.3	1996.2	11.1	0.00	0.00
20	478	Dual Release	1.0	-61.0	-67.8	34.7	2665.8	1995.1	20.0	0.00	0.00
19	480	1/2" dropchain	0.6	-6.8	-6.8	33.6	2666.7	1934.1	12.1	0.00	0.00
18	76	ML 17t 1-1/4"	0.2	-4.8	NaN	33.0	2667.1	1927.3	4.4	0.00	0.00
17	34	AS 6t 7/8"	0.1	-1.6	NaN	32.8	2667.2	1922.5	8.0	0.00	0.00
16	64	EL 6t 7/8"	0.1	-1.0	NaN	32.7	2667.4	1920.9	8.0	0.00	0.00
15	32	AS 3t 5/8"	0.1	-0.7	NaN	32.6	2667.5	1919.9	16.0	0.00	0.00
14	181	1/2" MR	5.0	-15.2	NaN	32.5	2670.0	1919.2	19.2	0.00	0.00
13	32	AS 3t 5/8"	0.1	-0.7	NaN	27.5	2672.5	1904.0	15.9	0.00	0.00



**Global Irminger MFM A 2014 Mooring Model Analysis**  
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<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

**No Current Static Solution – Parameter, cont.**

#	ID	Mooring Element	Length [m]	Buoy [kg]	Backup B. [kg]	Height [m]	Design Dpt [m]	Tension [kg]	[%]	Stretch [m]	[%]
12	53	PL 3t 3/4"	0.1	-0.7	NaN	27.5	2672.6	1903.4	15.9	0.00	0.00
11	34	AS 6t 7/8"	0.1	-1.6	NaN	27.3	2672.7	1902.6	7.9	0.00	0.00
10	113	Nystron-1"	20.7	-2.0	NaN	27.3	2683.1	1901.1	11.3	0.68	3.39
9	491	Parachute	0.0	0.0	NaN	6.6	2693.4	1899.1	19.0	0.00	0.00
8	34	AS 6t 7/8"	0.1	-1.6	NaN	6.6	2693.5	1899.1	7.9	0.00	0.00
7	64	EL 6t 7/8"	0.1	-1.0	NaN	6.5	2693.6	1897.6	7.9	0.00	0.00
6	34	AS 6t 7/8"	0.1	-1.6	NaN	6.4	2693.7	1896.5	7.9	0.00	0.00
5	183	3/4" MR	5.0	-33.1	NaN	6.3	2696.2	1895.0	7.9	0.00	0.00
4	33	AS 5t 3/4"	0.1	-1.1	NaN	1.3	2698.8	1861.9	10.3	0.00	0.00
3	53	PL 3t 3/4"	0.1	-0.7	NaN	1.2	2698.9	1860.9	15.5	0.00	0.00
2	34	AS 6t 7/8"	0.1	-1.6	NaN	1.1	2699.0	1860.1	7.8	0.00	0.00
1	522	double MACE Anch	1.0	-2742.1	NaN	1.0	2700.0	1858.6	31.0	0.00	0.00

Max. 37.6% Static Tension at:

118	103	5/16" NILSPIN	245.9	-52.2	177.2	2200.7	622.3	1750.1	37.6	0.94	0.38
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Vertical anchor load : 1859 kg  
 Wet MACE Anchor weight : 2742 kg  
 Safe MACE Anchor weight : 2323 kg



## Global Irminger MFM A 2014 Mooring Model Analysis

designed for 2700m Depth



By: P. Chua

05-Aug-2014

DCN: 3202-00011

REV: B

REF.DES. GI04FLMA

Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Steady State Launch Tension – Parameter: descent at 1.15 m/s, 2.2 kn

#	ID	Mooring Element	Length [m]	Buoy [kg]	Diameter [m]	Area [m <sup>2</sup> ]	Ct	Drag [kg]	LaunchTension [kg]	[%]
151	306	64" Sphere	2.3	1180.0	1.630	2.087	0.50	72.58	1252.6	12.5
150	17	U-Joint	0.3	-16.3	0.300	0.071	1.50	7.38	1243.7	7.8
149	141	1/2" EM chain	5.0	-35.0	0.200	3.142	0.09	20.11	1228.8	12.3
148	13	ind. term	0.1	-2.4	0.050	0.002	1.50	0.20	1226.6	7.7
147	103	5/16" NILSPIN	3.0	-0.6	0.010	0.090	0.05	0.30	1226.2	26.4
146	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1223.7	12.2
145	103	5/16" NILSPIN	20.0	-4.3	0.010	0.600	0.05	2.00	1221.5	26.3
144	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1219.0	12.2
143	103	5/16" NILSPIN	30.1	-6.4	0.010	0.899	0.05	3.00	1215.6	26.1
142	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1213.1	12.1
141	103	5/16" NILSPIN	40.1	-8.5	0.010	1.199	0.05	4.00	1208.6	26.0
140	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1206.1	12.1
139	103	5/16" NILSPIN	50.1	-10.6	0.010	1.499	0.05	5.00	1200.4	25.8
138	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1197.9	12.0
137	103	5/16" NILSPIN	70.2	-14.9	0.010	2.098	0.05	7.00	1190.0	25.6
136	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1187.5	11.9
135	103	5/16" NILSPIN	100.2	-21.3	0.010	2.997	0.05	9.99	1176.2	25.3
134	374	CTDMO-G P1000m	0.0	-2.8	0.075	0.004	1.00	0.31	1173.7	11.7
133	103	5/16" NILSPIN	127.3	-27.1	0.010	3.807	0.05	12.69	1159.4	24.9
132	13	ind. term	0.1	-2.4	0.050	0.002	1.50	0.20	1157.2	7.2
131	15	coupler ec	0.2	-6.0	0.100	0.008	1.50	0.82	1152.0	7.2
129	479	Release Float	1.0	0.0	0.370	0.108	0.90	6.73	1158.7	11.6
127	15	coupler ec	0.2	-6.0	0.100	0.008	1.50	0.82	1153.5	7.2
126	13	ind. term	0.1	-2.4	0.050	0.002	1.50	0.20	1151.4	7.2
125	256	CF14-1000	0.0	13.0	0.300	0.071	0.30	1.48	1165.8	19.4
123	103	5/16" NILSPIN	10.0	-2.1	0.010	0.300	0.07	1.54	1165.2	25.0
122	103	5/16" NILSPIN	10.0	-2.1	0.010	0.300	0.07	1.54	1164.6	25.0
121	13	ind. term	0.1	-2.4	0.050	0.002	1.50	0.20	1162.4	7.3
120	326	FL62" 1500m ADC	2.8	750.0	1.550	1.887	0.50	65.63	1978.1	19.8
119	13	ind. term	0.1	-2.4	0.050	0.002	1.50	0.20	1975.9	12.3
118	103	5/16" NILSPIN	245.9	-52.2	0.010	7.349	0.04	22.09	1945.8	41.8
117	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1943.3	19.4
116	103	5/16" NILSPIN	250.9	-53.3	0.010	7.499	0.04	22.54	1912.6	41.1
115	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1910.1	19.1
114	103	5/16" NILSPIN	250.9	-53.3	0.010	7.498	0.04	22.54	1879.4	40.4
113	103	5/16" NILSPIN	250.9	-53.3	0.010	7.498	0.04	22.54	1848.7	39.7
112	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1846.2	18.5
111	103	5/16" NILSPIN	5.0	-1.1	0.010	0.150	0.04	0.45	1845.6	39.7
110	13	ind. term	0.1	-2.4	0.050	0.002	1.50	0.20	1843.4	11.5
109	300	Load Cage	1.5	-60.0	0.300	0.071	0.90	4.43	1787.8	17.9
108	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1787.5	14.9
107	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1787.0	14.9
106	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1786.7	14.9
105	181	1/2" MR	2.5	-7.6	0.020	0.157	0.10	1.13	1780.2	17.8
104	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1779.9	14.8
103	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1779.5	14.8





## Global Irminger MFM A 2014 Mooring Model Analysis

designed for 2700m Depth



By: P. Chua

05-Aug-2014

DCN: 3202-00011

REV: B

REF.DES. GI04FLMA

Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Steady State Launch Tension – Parameter: descent at 1.15 m/s, 2.2 kn, cont.

#	ID	Mooring Element	Length [m]	Buoy [kg]	Diameter [m]	Area [m <sup>2</sup> ]	Ct	Drag [kg]	LaunchTension [kg]	[%]
102	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1779.1	14.8
101	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.67	9.08	1876.2	18.8
100	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1875.9	15.6
99	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1875.4	15.6
98	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1875.1	15.6
97	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.67	9.08	1972.2	19.7
96	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1971.9	16.4
95	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1971.4	16.4
94	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1971.1	16.4
92	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1970.8	16.4
91	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1970.3	16.4
90	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1970.0	16.4
89	103	5/16" NILSPIN	100.4	-21.3	0.010	2.999	0.06	12.19	1960.9	42.1
88	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1960.6	16.3
87	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1960.1	16.3
86	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1959.8	16.3
85	103	5/16" NILSPIN	79.3	-16.8	0.010	2.369	0.04	7.12	1950.1	41.9
84	347	VELPT-B	0.0	-6.0	0.084	0.006	0.90	0.35	1944.5	19.4
83	103	5/16" NILSPIN	1.0	-0.2	0.010	0.030	0.04	0.09	1944.3	41.8
82	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1941.8	19.4
81	103	5/16" NILSPIN	300.0	-63.7	0.010	8.967	0.04	26.95	1905.1	40.9
80	347	VELPT-B	0.0	-6.0	0.084	0.006	0.90	0.35	1899.5	19.0
79	103	5/16" NILSPIN	1.0	-0.2	0.010	0.030	0.04	0.09	1899.3	40.8
78	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1896.8	19.0
77	103	5/16" NILSPIN	300.0	-63.7	0.010	8.966	0.04	26.95	1860.1	40.0
76	347	VELPT-B	0.0	-6.0	0.084	0.006	0.90	0.35	1854.4	18.5
75	103	5/16" NILSPIN	1.0	-0.2	0.010	0.030	0.04	0.09	1854.3	39.9
74	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1851.8	18.5
73	103	5/16" NILSPIN	299.9	-63.7	0.010	8.966	0.04	26.95	1815.1	39.0
72	347	VELPT-B	0.0	-6.0	0.084	0.006	0.90	0.35	1809.4	18.1
71	103	5/16" NILSPIN	1.0	-0.2	0.010	0.030	0.04	0.09	1809.3	38.9
70	375	CTDMO-H P3500m	0.0	-2.8	0.075	0.004	1.00	0.31	1806.8	18.1
69	103	5/16" NILSPIN	20.1	-4.3	0.010	0.600	0.04	1.80	1804.4	38.8
68	491	Parachute	0.0	0.0	1.382	1.500	1.33	138.78	1943.1	19.4
67	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1942.8	16.2
66	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1942.4	16.2
65	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1942.1	16.2
64	181	1/2" MR	5.0	-15.2	0.020	0.314	0.09	2.01	1928.9	19.3
63	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1928.5	16.1
62	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	1928.1	16.1
61	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	1927.8	16.1
60	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2021.7	20.2
59	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2021.4	16.8
58	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2021.0	16.8
57	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2020.6	16.8
56	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2114.6	21.1



## Global Irminger MFM A 2014 Mooring Model Analysis

designed for 2700m Depth



By: P. Chua

05-Aug-2014

DCN: 3202-00011

REV: B

REF.DES. GI04FLMA

Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Steady State Launch Tension – Parameter: descent at 1.15 m/s, 2.2 kn, cont.

#	ID	Mooring Element	Length [m]	Buoy [kg]	Diameter [m]	Area [m <sup>2</sup> ]	Ct	Drag [kg]	LaunchTension [kg]	[%]
55	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2114.3	17.6
54	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2113.8	17.6
53	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2113.5	17.6
52	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2207.5	22.1
51	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2207.1	18.4
50	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2206.7	18.4
49	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2206.4	18.4
48	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2300.3	23.0
47	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2300.0	19.2
46	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2299.5	19.2
45	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2299.2	19.2
44	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2393.2	23.9
43	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2392.9	19.9
42	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2392.4	19.9
41	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2392.1	19.9
40	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2486.0	24.9
39	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2485.7	20.7
38	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2485.3	20.7
37	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2484.9	20.7
36	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2578.9	25.8
35	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2578.6	21.5
34	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2578.1	21.5
33	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2577.8	21.5
32	274	HR17-4 serial	4.0	88.0	0.500	0.196	0.44	5.96	2671.8	26.7
31	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2671.4	22.3
30	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2671.0	22.3
29	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2670.7	22.3
28	181	1/2" MR	5.0	-15.2	0.020	0.314	0.09	2.01	2657.5	26.6
27	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2657.2	22.1
26	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2656.7	22.1
25	33	AS 5t 3/4"	0.1	-1.1	0.080	0.005	1.50	0.52	2656.2	14.8
24	94	Swivel 5t	0.2	-5.3	0.100	0.008	1.20	0.66	2651.5	26.5
23	33	AS 5t 3/4"	0.1	-1.1	0.080	0.005	1.50	0.52	2650.9	14.7
22	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2650.5	22.1
21	33	AS 5t 3/4"	0.1	-1.1	0.080	0.005	1.50	0.52	2649.9	14.7
20	478	Dual Release	1.0	-61.0	0.300	0.071	0.90	4.43	2593.4	25.9
19	480	1/2" dropchain	0.6	-6.8	0.040	0.001	1.00	0.09	2586.7	16.2
18	76	ML 17t 1-1/4"	0.2	-4.8	0.085	0.006	1.50	0.59	2582.4	5.9
17	34	AS 6t 7/8"	0.1	-1.6	0.088	0.006	1.50	0.63	2581.5	10.8
16	64	EL 6t 7/8"	0.1	-1.0	0.066	0.003	1.50	0.36	2580.8	10.8
15	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2580.5	21.5
14	181	1/2" MR	5.0	-15.2	0.020	0.314	0.09	2.01	2567.3	25.7
13	32	AS 3t 5/8"	0.1	-0.7	0.064	0.003	1.50	0.34	2567.0	21.4
12	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2566.5	21.4
11	34	AS 6t 7/8"	0.1	-1.6	0.088	0.006	1.50	0.63	2565.6	10.7
10	113	Nystron-1"	20.7	-2.0	0.026	1.661	0.07	8.53	2572.2	15.3



## Global Irminger MFM A 2014 Mooring Model Analysis

designed for 2700m Depth



By: P. Chua

05-Aug-2014

DCN: 3202-00011

REV: B

REF.DES. GI04FLMA

Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Steady State Launch Tension – Parameter: descent at 1.15 m/s, 2.2 kn, cont.

#	ID	Mooring Element	Length [m]	Buoy [kg]	Diameter [m]	Area [m <sup>2</sup> ]	Ct	Drag [kg]	LaunchTension [kg]	[%]
9	491	Parachute	0.0	0.0	1.382	1.500	1.33	138.78	2710.9	27.1
8	34	AS 6t 7/8"	0.1	-1.6	0.088	0.006	1.50	0.63	2710.0	11.3
7	64	EL 6t 7/8"	0.1	-1.0	0.066	0.003	1.50	0.36	2709.4	11.3
6	34	AS 6t 7/8"	0.1	-1.6	0.088	0.006	1.50	0.63	2708.4	11.3
5	183	3/4" MR	5.0	-33.1	0.030	0.471	0.09	3.02	2678.4	11.2
4	33	AS 5t 3/4"	0.1	-1.1	0.080	0.005	1.50	0.52	2677.9	14.9
3	53	PL 3t 3/4"	0.1	-0.7	0.060	0.003	1.50	0.30	2677.4	22.3
2	34	AS 6t 7/8"	0.1	-1.6	0.088	0.006	1.50	0.63	2676.5	11.2
1	522	double MACE Anch	1.0	-2742.1	1.000	0.785	1.20	65.56	0.0	0.0

Max. 42.1% Launch Tension at:

89	103	5/16" NILSPIN	100.4	-21.3	0.010	2.999	0.06	12.19	1960.9	42.1
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Mass dry / wet w/o Anchor: 3760 kg, -1859 kg  
 Drag / Friction w/o Anchor: 817.9 kg, 616.1 kg/[m/s]<sup>2</sup>  
 Dry/Wet MACE Anchor weight: 3170 kg, 2742 kg  
 Steady State AnchorSpeed : 1.15 m/s, 2.2 kn



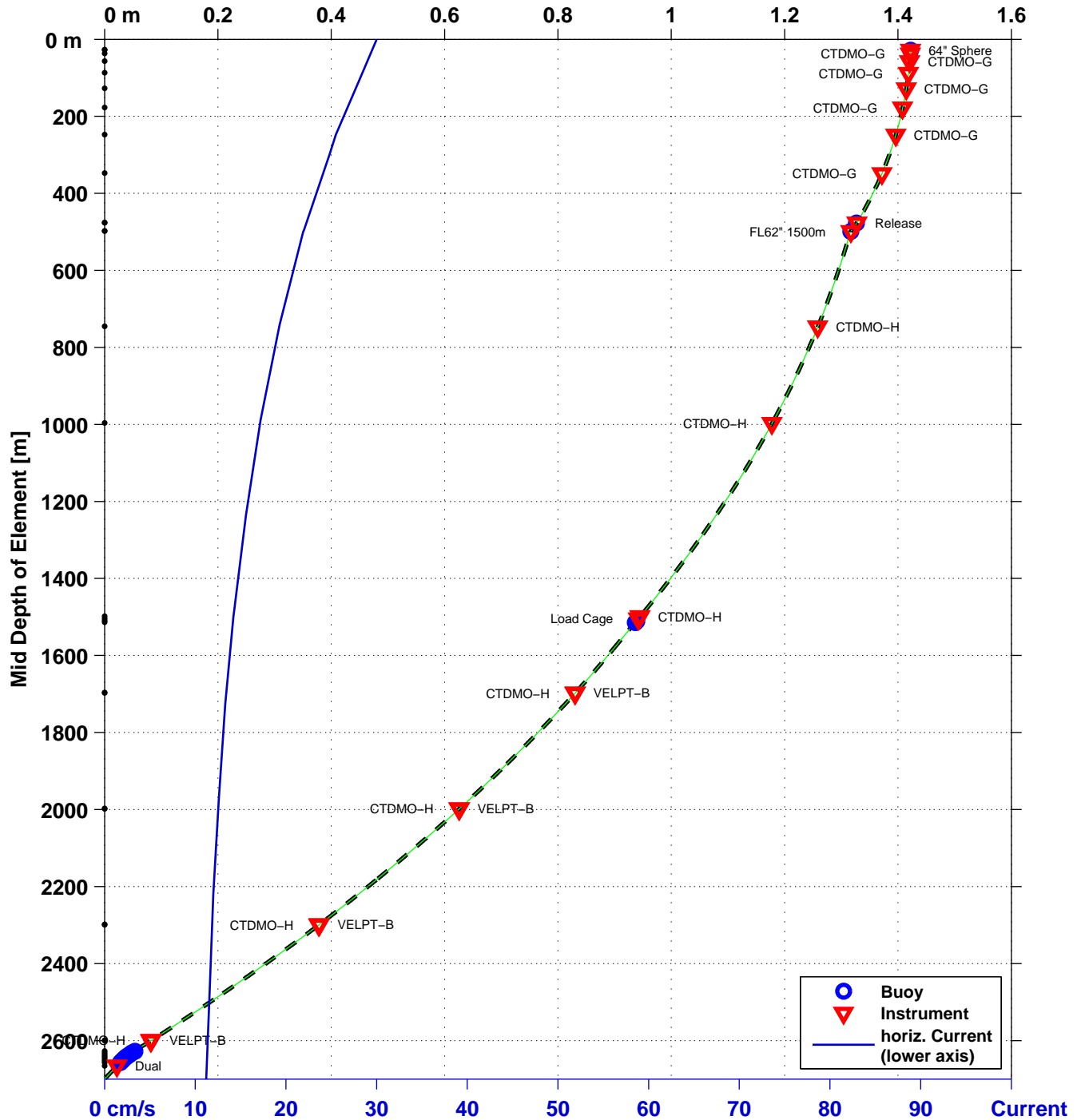
## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg  
 Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

**Event #001 – Subduction [m]: max. 1m, Top at 28m**  
 Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf



**Event #001: Vert / Horiz anchor load: 1857 kg / 69 kg**  
**Vert / Horiz anchor safety : 125 % / 120 %,**  
**Safe Wet MACE anchor weight: 2323 kg, (max. 500 kg or Horiz. safety)**  
**Wet / Dry MACE anchor weight : 2742 kg / 3170 kg**



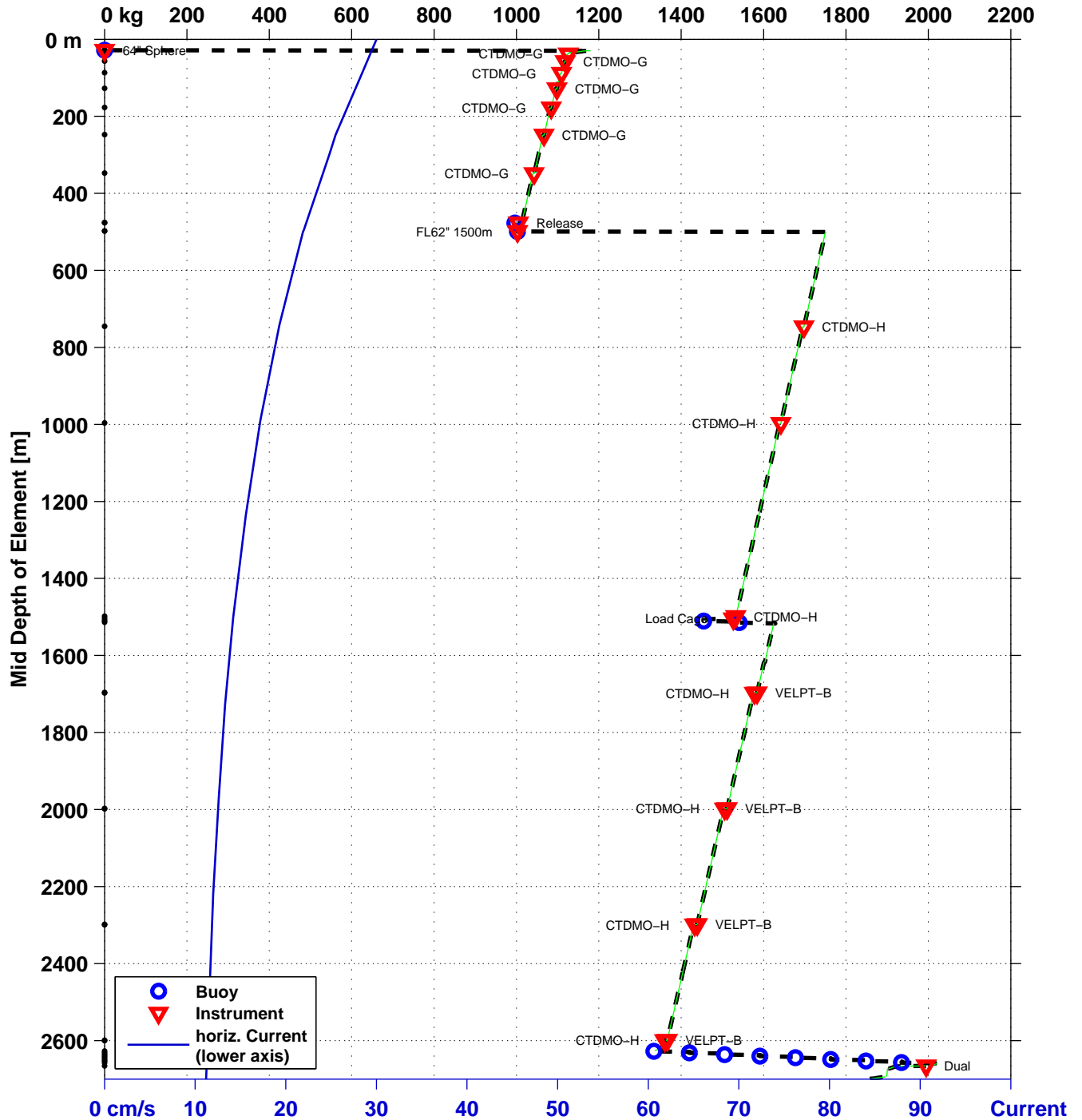
## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg  
 Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Event #001 – Tension [kg] Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf



Event #001: Vert / Horiz anchor load: 1857 kg / 69 kg  
 Vert / Horiz anchor safety : 125 % / 120 %,  
 Safe Wet MACE anchor weight: 2323 kg, (max. 500 kg or Horiz. safety)  
 Wet / Dry MACE anchor weight : 2742 kg / 3170 kg



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Result

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
151	306	64" Sphere	2.3	1180.0	2.087	0.50	0.30	4.7	0.0	0.0	0.00	0.00	27.4	1.4	83.9	0.2
150	17	U-Joint	0.3	-16.3	0.090	1.50	0.29	0.6	1180.0	7.4	0.00	0.00	29.8	1.4	83.9	0.2
149	141	1/2" EM chain	5.0	-35.0	1.000	1.30	0.29	5.9	1163.7	11.6	0.00	0.00	30.4	1.4	83.9	0.5
148	13	ind. term	0.1	-2.4	0.005	1.50	0.29	0.0	1128.7	7.1	0.00	0.00	35.0	1.4	83.9	0.6
147	103	5/16" NILSPIN	3.0	-0.6	0.029	1.10	0.29	0.1	1126.3	24.2	0.01	0.25	35.5	1.4	83.9	0.6
146	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.29	0.3	1125.7	11.3	0.00	0.00	38.0	1.4	83.9	0.6
145	103	5/16" NILSPIN	20.0	-4.3	0.191	1.10	0.29	0.9	1122.9	24.1	0.05	0.25	38.5	1.4	83.9	0.6
144	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.29	0.3	1118.6	11.2	0.00	0.00	58.1	1.4	83.6	0.6
143	103	5/16" NILSPIN	30.1	-6.4	0.286	1.10	0.29	1.4	1115.8	24.0	0.07	0.25	58.6	1.4	83.6	0.7
142	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.28	0.2	1109.4	11.1	0.00	0.00	88.1	1.4	83.3	0.7
141	103	5/16" NILSPIN	40.1	-8.5	0.381	1.10	0.28	1.7	1106.6	23.8	0.10	0.24	88.6	1.4	83.3	0.8
140	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.28	0.2	1098.1	11.0	0.00	0.00	128.2	1.4	82.7	0.8
139	103	5/16" NILSPIN	50.1	-10.6	0.476	1.10	0.27	2.0	1095.3	23.5	0.12	0.24	128.7	1.4	82.7	1.0
138	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.27	0.2	1084.7	10.8	0.00	0.00	178.3	1.4	81.9	1.0
137	103	5/16" NILSPIN	70.2	-14.9	0.667	1.10	0.26	2.6	1081.9	23.3	0.17	0.24	178.8	1.4	81.9	1.1
136	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.25	0.2	1067.0	10.7	0.00	0.00	248.5	1.4	80.6	1.1
135	103	5/16" NILSPIN	100.2	-21.3	0.953	1.10	0.25	3.4	1064.2	22.9	0.23	0.23	249.0	1.4	80.6	1.4
134	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.24	0.2	1042.9	10.4	0.00	0.00	348.7	1.4	78.4	1.4
133	103	5/16" NILSPIN	127.3	-27.1	1.210	1.10	0.23	3.7	1040.1	22.4	0.29	0.23	349.2	1.4	78.4	1.6
132	13	ind. term	0.1	-2.4	0.005	1.50	0.22	0.0	1013.0	6.3	0.00	0.00	476.0	1.3	75.1	1.6
131	15	coupler ec	0.2	-6.0	0.020	1.50	0.22	0.1	1010.6	6.3	0.00	0.00	476.2	1.3	75.1	1.6
129	479	Release Float	1.0	0.0	0.592	1.20	0.22	1.9	1004.6	10.0	0.00	0.00	476.8	1.3	75.0	1.6
127	15	coupler ec	0.2	-6.0	0.020	1.50	0.22	0.1	1004.6	6.3	0.00	0.00	477.4	1.3	75.0	1.8
126	13	ind. term	0.1	-2.4	0.005	1.50	0.22	0.0	998.6	6.2	0.00	0.00	477.5	1.3	75.0	1.8
125	256	CF14-1000	0.0	13.0	0.225	0.50	0.22	0.3	996.2	16.6	0.00	0.00	477.6	1.3	75.0	1.8
123	103	5/16" NILSPIN	10.0	-2.1	0.095	1.10	0.22	0.3	1009.2	21.7	0.02	0.22	478.1	1.3	75.0	1.8
122	103	5/16" NILSPIN	10.0	-2.1	0.095	1.10	0.22	0.3	1007.1	21.6	0.02	0.22	488.1	1.3	74.7	1.8
121	13	ind. term	0.1	-2.4	0.005	1.50	0.22	0.0	1005.0	6.3	0.00	0.00	497.6	1.3	74.4	1.8
120	326	FL62" 1500m ADC	2.8	750.0	1.887	0.50	0.22	2.4	1002.6	10.0	0.00	0.00	499.1	1.3	74.4	1.8



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
119	13	ind. term	0.1	-2.4	0.005	1.50	0.22	0.0	1752.4	11.0	0.00	0.00	500.6	1.3	74.3	1.1
118	103	5/16" NILSPIN	245.9	-52.2	2.335	1.10	0.21	5.7	1750.0	37.6	0.94	0.38	501.1	1.3	74.3	1.3
117	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.19	0.1	1697.8	17.0	0.00	0.00	746.5	1.3	69.0	1.3
116	103	5/16" NILSPIN	250.9	-53.3	2.382	1.10	0.18	4.6	1695.0	36.4	0.92	0.37	747.0	1.3	69.0	1.6
115	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.17	0.1	1641.8	16.4	0.00	0.00	997.3	1.2	62.6	1.6
114	103	5/16" NILSPIN	250.9	-53.3	2.383	1.10	0.16	3.7	1639.0	35.2	0.89	0.36	997.8	1.2	62.6	1.7
113	103	5/16" NILSPIN	250.9	-53.3	2.383	1.10	0.15	3.0	1585.8	34.1	0.86	0.35	1248.6	1.1	55.4	1.9
112	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.14	0.1	1532.5	15.3	0.00	0.00	1498.9	0.9	47.4	1.9
111	103	5/16" NILSPIN	5.0	-1.1	0.048	1.10	0.14	0.1	1529.7	32.9	0.02	0.34	1499.4	0.9	47.4	1.9
110	13	ind. term	0.1	-2.4	0.005	1.50	0.14	0.0	1528.7	9.6	0.00	0.00	1503.9	0.9	47.2	1.9
109	300	Load Cage	1.5	-60.0	0.300	1.30	0.14	0.4	1526.3	15.3	0.00	0.00	1504.7	0.9	47.2	1.9
108	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1466.3	12.2	0.00	0.00	1505.5	0.9	47.2	2.0
107	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.14	0.0	1465.7	12.2	0.00	0.00	1505.6	0.9	47.2	2.0
106	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1464.9	12.2	0.00	0.00	1505.7	0.9	47.2	2.0
105	181	1/2" MR	2.5	-7.6	0.050	1.60	0.14	0.1	1464.3	14.6	0.00	0.00	1506.1	0.9	47.2	2.0
104	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1456.7	12.1	0.00	0.00	1508.2	0.9	47.1	2.0
103	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.14	0.0	1456.0	12.1	0.00	0.00	1508.3	0.9	47.1	2.0
102	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1455.3	12.1	0.00	0.00	1508.4	0.9	47.1	2.0
101	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.14	0.6	1454.6	14.5	0.00	0.00	1510.5	0.9	47.1	2.0
100	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1542.5	12.9	0.00	0.00	1512.5	0.9	46.9	2.0
99	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.14	0.0	1541.9	12.8	0.00	0.00	1512.6	0.9	46.9	2.0
98	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1541.1	12.8	0.00	0.00	1512.7	0.9	46.9	2.0
97	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.14	0.6	1540.5	15.4	0.00	0.00	1514.7	0.9	46.9	2.0
96	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1628.4	13.6	0.00	0.00	1516.7	0.9	46.8	1.9
95	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.14	0.0	1627.8	13.6	0.00	0.00	1516.8	0.9	46.8	1.9
94	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1627.0	13.6	0.00	0.00	1516.9	0.9	46.8	1.9
92	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1626.4	13.6	0.00	0.00	1517.0	0.9	46.8	1.9
91	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.14	0.0	1625.7	13.5	0.00	0.00	1517.1	0.9	46.8	1.9
90	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1625.0	13.5	0.00	0.00	1517.2	0.9	46.8	1.9



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	Tension [%]	Stretch [m]	Stretch [%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
89	103	5/16" NILSPIN	100.4	-21.3	0.953	1.10	0.14	1.1	1624.3	34.9	0.36	0.36	1517.7	0.9	46.7	1.9
88	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1603.0	13.4	0.00	0.00	1617.5	0.9	43.4	1.9
87	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.14	0.0	1602.4	13.4	0.00	0.00	1617.6	0.9	43.4	1.9
86	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.14	0.0	1601.6	13.3	0.00	0.00	1617.7	0.9	43.4	1.9
85	103	5/16" NILSPIN	79.3	-16.8	0.753	1.10	0.14	0.8	1601.0	34.4	0.28	0.35	1618.2	0.9	43.4	2.0
84	347	VELPT-B	0.0	-6.0	0.063	1.20	0.13	0.1	1584.1	15.8	0.00	0.00	1697.0	0.8	40.7	2.0
83	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.13	0.0	1578.2	33.9	0.00	0.35	1697.5	0.8	40.7	2.0
82	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.13	0.1	1577.9	15.8	0.00	0.00	1698.0	0.8	40.6	2.0
81	103	5/16" NILSPIN	300.0	-63.7	2.849	1.10	0.13	2.8	1575.1	33.9	1.02	0.34	1698.5	0.8	40.6	2.2
80	347	VELPT-B	0.0	-6.0	0.063	1.20	0.13	0.1	1511.5	15.1	0.00	0.00	1997.8	0.6	29.6	2.2
79	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.13	0.0	1505.5	32.4	0.00	0.33	1998.3	0.6	29.6	2.2
78	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.13	0.0	1505.3	15.1	0.00	0.00	1998.8	0.6	29.5	2.2
77	103	5/16" NILSPIN	300.0	-63.7	2.849	1.10	0.12	2.5	1502.5	32.3	0.97	0.33	1999.3	0.6	29.5	2.4
76	347	VELPT-B	0.0	-6.0	0.063	1.20	0.12	0.1	1438.9	14.4	0.00	0.00	2298.5	0.4	17.4	2.4
75	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.12	0.0	1432.9	30.8	0.00	0.32	2299.0	0.4	17.4	2.4
74	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.12	0.0	1432.6	14.3	0.00	0.00	2299.5	0.4	17.3	2.4
73	103	5/16" NILSPIN	299.9	-63.7	2.849	1.10	0.12	2.2	1429.9	30.7	0.93	0.31	2300.0	0.4	17.3	2.6
72	347	VELPT-B	0.0	-6.0	0.063	1.20	0.11	0.1	1366.2	13.7	0.00	0.00	2599.1	0.1	4.0	2.6
71	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.11	0.0	1360.2	29.2	0.00	0.30	2599.6	0.1	4.0	2.7
70	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.11	0.0	1360.0	13.6	0.00	0.00	2600.1	0.1	4.0	2.7
69	103	5/16" NILSPIN	20.1	-4.3	0.191	1.10	0.11	0.1	1357.2	29.2	0.06	0.30	2600.6	0.1	4.0	2.7
68	491	Parachute	0.0	0.0	1.500	0.50	0.11	0.5	1353.0	13.5	0.00	0.00	2620.2	0.1	3.0	2.7
67	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1353.0	11.3	0.00	0.00	2620.2	0.1	3.0	2.7
66	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1352.3	11.3	0.00	0.00	2620.3	0.1	3.0	2.7
65	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1351.6	11.3	0.00	0.00	2620.4	0.1	3.0	2.7
64	181	1/2" MR	5.0	-15.2	0.100	1.60	0.11	0.1	1350.9	13.5	0.00	0.00	2620.9	0.1	3.0	2.7
63	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1335.7	11.1	0.00	0.00	2625.5	0.1	2.8	2.7
62	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1335.1	11.1	0.00	0.00	2625.5	0.1	2.8	2.7
61	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1334.4	11.1	0.00	0.00	2625.6	0.1	2.8	2.8





### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
60	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1333.7	13.3	0.00	0.00	2627.7	0.1	2.8	2.8
59	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1421.6	11.8	0.00	0.00	2629.7	0.0	2.6	2.6
58	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1420.9	11.8	0.00	0.00	2629.8	0.0	2.6	2.6
57	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1420.2	11.8	0.00	0.00	2629.9	0.0	2.6	2.6
56	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1419.5	14.2	0.00	0.00	2631.9	0.0	2.6	2.6
55	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1507.4	12.6	0.00	0.00	2633.9	0.0	2.4	2.5
54	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1506.8	12.6	0.00	0.00	2634.0	0.0	2.4	2.5
53	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1506.0	12.6	0.00	0.00	2634.1	0.0	2.4	2.5
52	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1505.4	15.1	0.00	0.00	2636.1	0.0	2.4	2.5
51	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1593.3	13.3	0.00	0.00	2638.2	0.0	2.2	2.3
50	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1592.7	13.3	0.00	0.00	2638.3	0.0	2.2	2.4
49	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1591.9	13.3	0.00	0.00	2638.4	0.0	2.2	2.4
48	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1591.3	15.9	0.00	0.00	2640.4	0.0	2.2	2.4
47	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1679.2	14.0	0.00	0.00	2642.4	0.0	2.0	2.2
46	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1678.5	14.0	0.00	0.00	2642.5	0.0	2.0	2.2
45	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1677.8	14.0	0.00	0.00	2642.6	0.0	2.0	2.2
44	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1677.1	16.8	0.00	0.00	2644.6	0.0	2.0	2.2
43	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1765.1	14.7	0.00	0.00	2646.7	0.0	1.9	2.1
42	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1764.4	14.7	0.00	0.00	2646.7	0.0	1.9	2.1
41	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1763.7	14.7	0.00	0.00	2646.8	0.0	1.9	2.2
40	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1763.0	17.6	0.00	0.00	2648.9	0.0	1.9	2.2
39	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1850.9	15.4	0.00	0.00	2650.9	0.0	1.7	2.1
38	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1850.3	15.4	0.00	0.00	2651.0	0.0	1.7	2.1
37	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1849.5	15.4	0.00	0.00	2651.1	0.0	1.7	2.1
36	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1848.9	18.5	0.00	0.00	2653.1	0.0	1.7	2.1
35	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1936.8	16.1	0.00	0.00	2655.1	0.0	1.6	2.0
34	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1936.2	16.1	0.00	0.00	2655.2	0.0	1.6	2.0
33	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1935.4	16.1	0.00	0.00	2655.3	0.0	1.6	2.0
32	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.11	0.4	1934.8	19.3	0.00	0.00	2657.4	0.0	1.6	2.0



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
31	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	2022.7	16.9	0.00	0.00	2659.4	0.0	1.4	1.9
30	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	2022.0	16.9	0.00	0.00	2659.5	0.0	1.4	1.9
29	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	2021.3	16.8	0.00	0.00	2659.6	0.0	1.4	1.9
28	181	1/2" MR	5.0	-15.2	0.100	1.60	0.11	0.1	2020.6	20.2	0.00	0.00	2660.1	0.0	1.4	1.9
27	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	2005.5	16.7	0.00	0.00	2664.6	0.0	1.2	1.9
26	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	2004.8	16.7	0.00	0.00	2664.7	0.0	1.2	1.9
25	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.11	0.0	2004.1	11.1	0.00	0.00	2664.8	0.0	1.2	1.9
24	94	Swivel 5t	0.2	-5.3	0.025	1.20	0.11	0.0	2003.0	20.0	0.00	0.00	2665.0	0.0	1.2	1.9
23	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.11	0.0	1997.6	11.1	0.00	0.00	2665.1	0.0	1.2	1.9
22	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1996.6	16.6	0.00	0.00	2665.2	0.0	1.2	1.9
21	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.11	0.0	1995.8	11.1	0.00	0.00	2665.3	0.0	1.2	1.9
20	478	Dual Release	1.0	-61.0	0.288	1.20	0.11	0.2	1994.8	19.9	0.00	0.00	2665.9	0.0	1.2	1.9
19	480	1/2" dropchain	0.6	-6.8	0.024	1.60	0.11	0.0	1933.8	12.1	0.00	0.00	2666.7	0.0	1.2	2.0
18	76	ML 17t 1-1/4"	0.2	-4.8	0.026	1.50	0.11	0.0	1927.0	4.4	0.00	0.00	2667.1	0.0	1.2	2.0
17	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.11	0.0	1922.2	8.0	0.00	0.00	2667.3	0.0	1.1	2.0
16	64	EL 6t 7/8"	0.1	-1.0	0.012	1.50	0.11	0.0	1920.6	8.0	0.00	0.00	2667.4	0.0	1.1	2.0
15	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1919.6	16.0	0.00	0.00	2667.5	0.0	1.1	2.0
14	181	1/2" MR	5.0	-15.2	0.100	1.60	0.11	0.1	1918.9	19.2	0.00	0.00	2668.0	0.0	1.1	2.0
13	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.11	0.0	1903.7	15.9	0.00	0.00	2672.5	0.0	1.0	2.0
12	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1903.1	15.9	0.00	0.00	2672.6	0.0	1.0	2.1
11	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.11	0.0	1902.3	7.9	0.00	0.00	2672.7	0.0	1.0	2.1
10	113	Nystron-1"	20.7	-2.0	0.520	1.30	0.11	0.5	1900.8	11.3	0.68	3.39	2673.3	0.0	0.9	2.1
9	491	Parachute	0.0	0.0	1.500	0.50	0.11	0.5	1898.8	19.0	0.00	0.00	2693.4	0.0	0.2	2.1
8	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.11	0.0	1898.8	7.9	0.00	0.00	2693.5	0.0	0.2	2.1
7	64	EL 6t 7/8"	0.1	-1.0	0.012	1.50	0.11	0.0	1897.3	7.9	0.00	0.00	2693.6	0.0	0.2	2.1
6	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.11	0.0	1896.2	7.9	0.00	0.00	2693.7	0.0	0.2	2.1
5	183	3/4" MR	5.0	-33.1	0.150	1.60	0.11	0.2	1894.7	7.9	0.00	0.00	2694.2	0.0	0.2	2.1
4	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.11	0.0	1861.7	10.3	0.00	0.00	2698.8	0.0	0.0	2.1
3	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.11	0.0	1860.6	15.5	0.00	0.00	2698.9	0.0	0.0	2.1



**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

**Event #001 – Simulation Result, cont.**

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
2	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.11	0.0	1859.9	7.7	0.00	0.00	2699.0	0.0	0.0	2.1
1	522	double MACE Anch	1.0	-2742.1	1.200	1.20	0.11	1.0	1858.3	31.0	0.00	0.00	2700.0	0.0	0.0	0.0

Max. 37.6% Static Tension at:

118	103	5/16" NILSPIN	245.9	-52.2	2.335	1.10	0.21	5.7	1750.0	37.6	0.94	0.38	501.1	1.3	74.3	1.3
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Vert/Horiz Anchor Load : 1857 kg / 69 kg  
 Wet MACE Anchor Weight : 2742 kg  
 Safe MACE Anchor Weight : 2323 kg



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Parameter

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
151	306	64" Sphere	2.087	2.087	2.087	0.50	0.50	0.50	0.30	4.7	0.0	0.0	0.0	1180.0	0.0	0.0	0.0	0.2
150	17	U-Joint	0.090	0.090	0.000	1.50	1.50	1.50	0.29	0.6	0.0	0.0	-0.0	-16.3	4.7	0.0	1180.0	0.2
149	141	1/2" EM chai	1.000	1.000	0.007	1.30	1.30	1.00	0.29	5.9	0.0	0.0	-0.0	-35.0	7.7	0.0	1149.7	0.5
148	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.29	0.0	0.0	0.0	-0.0	-2.4	11.2	0.0	1128.7	0.6
147	103	5/16" NILSPI	0.029	0.029	0.000	1.10	1.10	0.00	0.29	0.1	0.0	0.0	-0.0	-0.6	11.3	0.0	1126.0	0.6
146	374	CTDMO-G P100	0.042	0.042	0.000	1.40	1.40	1.00	0.29	0.3	0.0	0.0	-0.0	-2.8	11.4	0.0	1125.6	0.6
145	103	5/16" NILSPI	0.191	0.191	0.002	1.10	1.10	0.00	0.29	0.9	0.0	0.0	-0.0	-4.3	12.1	0.0	1120.8	0.6
144	374	CTDMO-G P100	0.042	0.042	0.000	1.40	1.40	1.00	0.29	0.3	0.0	0.0	-0.0	-2.8	12.6	0.0	1118.5	0.6
143	103	5/16" NILSPI	0.286	0.286	0.003	1.10	1.10	0.00	0.29	1.4	0.0	0.0	-0.0	-6.4	13.5	0.0	1112.6	0.7
142	374	CTDMO-G P100	0.042	0.042	0.001	1.40	1.40	1.00	0.28	0.2	0.0	0.0	-0.0	-2.8	14.2	0.0	1109.3	0.7
141	103	5/16" NILSPI	0.381	0.381	0.005	1.10	1.10	0.00	0.28	1.7	0.0	0.0	-0.0	-8.5	15.3	0.0	1102.4	0.8
140	374	CTDMO-G P100	0.042	0.042	0.001	1.40	1.40	1.00	0.28	0.2	0.0	0.0	-0.0	-2.8	16.2	0.0	1098.0	0.8
139	103	5/16" NILSPI	0.476	0.476	0.008	1.10	1.10	0.00	0.27	2.0	0.0	0.0	-0.0	-10.7	17.4	0.0	1090.0	1.0
138	374	CTDMO-G P100	0.042	0.042	0.001	1.40	1.40	1.00	0.27	0.2	0.0	0.0	-0.0	-2.8	18.5	0.0	1084.5	1.0
137	103	5/16" NILSPI	0.667	0.667	0.012	1.10	1.10	0.00	0.26	2.6	0.0	0.0	-0.0	-14.9	20.0	0.0	1074.3	1.1
136	374	CTDMO-G P100	0.042	0.042	0.001	1.40	1.40	1.00	0.25	0.2	0.0	0.0	-0.0	-2.8	21.3	0.0	1066.7	1.1
135	103	5/16" NILSPI	0.953	0.953	0.021	1.10	1.10	0.00	0.25	3.4	0.0	0.0	-0.1	-21.3	23.2	0.0	1053.4	1.4
134	374	CTDMO-G P100	0.042	0.042	0.001	1.40	1.40	1.00	0.24	0.2	0.0	0.0	-0.0	-2.8	24.9	0.0	1042.6	1.4
133	103	5/16" NILSPI	1.210	1.210	0.032	1.10	1.10	0.00	0.23	3.7	0.0	0.0	-0.1	-27.1	27.0	0.0	1026.3	1.6
132	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.22	0.0	0.0	0.0	-0.0	-2.4	28.8	0.0	1012.6	1.6
131	15	coupler ec	0.020	0.020	0.001	1.50	1.50	1.50	0.22	0.1	0.0	0.0	-0.0	-6.0	28.8	0.0	1010.2	1.6
129	479	Release Floa	0.592	0.592	0.017	1.20	1.20	0.90	0.22	1.9	0.0	0.0	-0.1	0.0	28.9	0.0	1004.2	1.6
127	15	coupler ec	0.020	0.020	0.001	1.50	1.50	1.50	0.22	0.1	0.0	0.0	-0.0	-6.0	30.8	0.0	1004.2	1.8
126	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.22	0.0	0.0	0.0	-0.0	-2.4	30.9	0.0	998.1	1.8
125	256	CF14-1000	0.225	0.225	0.007	0.50	0.50	0.40	0.22	0.3	0.0	0.0	-0.0	13.0	30.9	0.0	995.7	1.8
123	103	5/16" NILSPI	0.095	0.095	0.003	1.10	1.10	0.00	0.22	0.3	0.0	0.0	-0.0	-2.1	31.3	0.0	1007.8	1.8
122	103	5/16" NILSPI	0.095	0.095	0.003	1.10	1.10	0.00	0.22	0.3	0.0	0.0	-0.0	-2.1	31.6	0.0	1005.6	1.8
121	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.22	0.0	0.0	0.0	-0.0	-2.4	31.7	0.0	1004.5	1.8
120	326	FL62" 1500m	1.887	1.887	1.887	0.50	0.50	0.50	0.22	2.4	0.0	0.0	0.0	750.0	31.7	0.0	1002.1	1.8
119	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.22	0.0	0.0	0.0	-0.0	-2.4	34.1	0.0	1752.1	1.1



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m <sup>2</sup>	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
118	103	5/16" NILSPI	2.334	2.335	0.050	1.10	1.10	0.00	0.21	5.7	0.0	0.0	-0.1	-52.2	37.1	0.0	1723.6	1.3
117	375	CTDMO-H P350	0.042	0.042	0.001	1.40	1.40	1.00	0.19	0.1	0.0	0.0	-0.0	-2.8	39.8	0.0	1697.4	1.3
116	103	5/16" NILSPI	2.382	2.382	0.060	1.10	1.10	0.00	0.18	4.6	0.0	0.0	-0.1	-53.3	42.3	0.0	1668.0	1.6
115	375	CTDMO-H P350	0.042	0.042	0.001	1.40	1.40	1.00	0.17	0.1	0.0	0.0	-0.0	-2.8	44.5	0.0	1641.2	1.6
114	103	5/16" NILSPI	2.382	2.383	0.069	1.10	1.10	0.00	0.16	3.7	0.0	0.0	-0.1	-53.3	46.5	0.0	1611.8	1.7
113	103	5/16" NILSPI	2.381	2.383	0.076	1.10	1.10	0.00	0.15	3.0	0.0	0.0	-0.1	-53.3	49.8	0.0	1558.5	1.9
112	375	CTDMO-H P350	0.042	0.042	0.001	1.40	1.40	1.00	0.14	0.1	0.0	0.0	-0.0	-2.8	51.3	0.0	1531.7	1.9
111	103	5/16" NILSPI	0.048	0.048	0.002	1.10	1.10	0.00	0.14	0.1	0.0	0.0	-0.0	-1.1	51.4	0.0	1528.5	1.9
110	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-2.4	51.4	0.0	1527.8	1.9
109	300	Load Cage	0.300	0.300	0.010	1.30	1.30	0.90	0.14	0.4	0.0	0.0	-0.0	-60.0	51.4	0.0	1525.4	1.9
108	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	51.9	0.0	1465.4	2.0
107	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	51.9	0.0	1464.7	2.0
106	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	51.9	0.0	1464.0	2.0
105	181	1/2" MR	0.050	0.050	0.002	1.60	1.60	1.00	0.14	0.1	0.0	0.0	-0.0	-7.6	51.9	0.0	1460.8	2.0
104	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	52.0	0.0	1455.7	2.0
103	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	52.0	0.0	1455.1	2.0
102	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	52.0	0.0	1454.3	2.0
101	274	HR17-4 seria	0.999	1.000	0.036	0.60	0.60	1.06	0.14	0.6	0.0	0.0	-0.0	88.0	52.0	0.0	1453.7	2.0
100	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	52.6	0.0	1541.6	2.0
99	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	52.7	0.0	1541.0	2.0
98	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	52.7	0.0	1540.2	2.0
97	274	HR17-4 seria	0.999	1.000	0.034	0.60	0.60	1.06	0.14	0.6	0.0	0.0	-0.0	88.0	52.7	0.0	1539.6	2.0
96	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	53.3	0.0	1627.6	1.9
95	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	53.3	0.0	1626.9	1.9
94	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	53.3	0.0	1626.2	1.9
92	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	53.4	0.0	1625.5	1.9
91	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	53.4	0.0	1624.8	1.9
90	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	53.4	0.0	1624.1	1.9
89	103	5/16" NILSPI	0.952	0.953	0.032	1.10	1.10	0.00	0.14	1.1	0.0	0.0	-0.0	-21.3	53.9	0.0	1612.9	1.9
88	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	54.5	0.0	1602.1	1.9



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
87	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	54.5	0.0	1601.4	1.9
86	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.14	0.0	0.0	0.0	-0.0	-0.7	54.5	0.0	1600.7	1.9
85	103	5/16" NILSPI	0.752	0.753	0.026	1.10	1.10	0.00	0.14	0.8	0.0	0.0	-0.0	-16.8	54.9	0.0	1591.7	2.0
84	347	VELPT-B	0.063	0.063	0.002	1.20	1.20	0.90	0.13	0.1	0.0	0.0	-0.0	-6.0	55.3	0.0	1583.2	2.0
83	103	5/16" NILSPI	0.010	0.010	0.000	1.10	1.10	0.00	0.13	0.0	0.0	0.0	-0.0	-0.2	55.4	0.0	1577.2	2.0
82	375	CTDMO-H P350	0.042	0.042	0.001	1.40	1.40	1.00	0.13	0.1	0.0	0.0	-0.0	-2.8	55.4	0.0	1577.0	2.0
81	103	5/16" NILSPI	2.848	2.849	0.105	1.10	1.10	0.00	0.13	2.8	0.0	0.0	-0.1	-63.7	56.8	0.0	1542.4	2.2
80	347	VELPT-B	0.063	0.063	0.002	1.20	1.20	0.90	0.13	0.1	0.0	0.0	-0.0	-6.0	58.2	0.0	1510.4	2.2
79	103	5/16" NILSPI	0.010	0.010	0.000	1.10	1.10	0.00	0.13	0.0	0.0	0.0	-0.0	-0.2	58.3	0.0	1504.4	2.2
78	375	CTDMO-H P350	0.042	0.042	0.002	1.40	1.40	1.00	0.13	0.0	0.0	0.0	-0.0	-2.8	58.3	0.0	1504.2	2.2
77	103	5/16" NILSPI	2.847	2.849	0.115	1.10	1.10	0.00	0.12	2.5	0.0	0.0	-0.1	-63.7	59.6	0.0	1469.6	2.4
76	347	VELPT-B	0.063	0.063	0.003	1.20	1.20	0.90	0.12	0.1	0.0	0.0	-0.0	-6.0	60.8	0.0	1437.6	2.4
75	103	5/16" NILSPI	0.010	0.010	0.000	1.10	1.10	0.00	0.12	0.0	0.0	0.0	-0.0	-0.2	60.8	0.0	1431.6	2.4
74	375	CTDMO-H P350	0.042	0.042	0.002	1.40	1.40	1.00	0.12	0.0	0.0	0.0	-0.0	-2.8	60.8	0.0	1431.4	2.4
73	103	5/16" NILSPI	2.847	2.849	0.126	1.10	1.10	0.00	0.12	2.2	0.0	0.0	-0.1	-63.7	62.0	0.0	1396.8	2.6
72	347	VELPT-B	0.063	0.063	0.003	1.20	1.20	0.90	0.11	0.1	0.0	0.0	-0.0	-6.0	63.1	0.0	1364.8	2.6
71	103	5/16" NILSPI	0.010	0.010	0.000	1.10	1.10	0.00	0.11	0.0	0.0	0.0	-0.0	-0.2	63.2	0.0	1358.8	2.7
70	375	CTDMO-H P350	0.042	0.042	0.002	1.40	1.40	1.00	0.11	0.0	0.0	0.0	-0.0	-2.8	63.2	0.0	1358.6	2.7
69	103	5/16" NILSPI	0.190	0.191	0.009	1.10	1.10	0.00	0.11	0.1	0.0	0.0	-0.0	-4.3	63.3	0.0	1353.7	2.7
68	491	Parachute	1.500	1.500	1.500	0.50	0.50	1.33	0.11	0.5	0.0	0.0	0.0	0.0	63.4	0.0	1351.5	2.7
67	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	63.9	0.0	1351.5	2.7
66	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	63.9	0.0	1350.8	2.7
65	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	63.9	0.0	1350.1	2.7
64	181	1/2" MR	0.100	0.100	0.005	1.60	1.60	1.00	0.11	0.1	0.0	0.0	-0.0	-15.2	63.9	0.0	1343.3	2.7
63	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.0	0.0	1334.2	2.7
62	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.0	0.0	1333.6	2.7
61	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.0	0.0	1332.8	2.8
60	274	HR17-4 seria	0.999	1.000	0.048	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	64.0	0.0	1332.2	2.8
59	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.4	0.0	1420.1	2.6
58	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.4	0.0	1419.5	2.6



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
57	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.5	0.0	1418.7	2.6
56	274	HR17-4 seria	0.999	1.000	0.045	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	64.5	0.0	1418.1	2.6
55	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.9	0.0	1506.1	2.5
54	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.9	0.0	1505.4	2.5
53	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	64.9	0.0	1504.7	2.5
52	274	HR17-4 seria	0.999	1.000	0.043	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	64.9	0.0	1504.0	2.5
51	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	65.3	0.0	1592.0	2.3
50	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	65.3	0.0	1591.3	2.4
49	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	65.3	0.0	1590.6	2.4
48	274	HR17-4 seria	0.999	1.000	0.041	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	65.3	0.0	1589.9	2.4
47	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	65.7	0.0	1677.9	2.2
46	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	65.7	0.0	1677.2	2.2
45	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	65.8	0.0	1676.5	2.2
44	274	HR17-4 seria	0.999	1.000	0.039	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	65.8	0.0	1675.8	2.2
43	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	66.2	0.0	1763.8	2.1
42	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	66.2	0.0	1763.2	2.1
41	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	66.2	0.0	1762.4	2.2
40	274	HR17-4 seria	0.999	1.000	0.038	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	66.2	0.0	1761.8	2.2
39	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	66.6	0.0	1849.7	2.1
38	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	66.6	0.0	1849.1	2.1
37	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	66.6	0.0	1848.3	2.1
36	274	HR17-4 seria	0.999	1.000	0.036	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	66.6	0.0	1847.7	2.1
35	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.0	0.0	1935.7	2.0
34	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.0	0.0	1935.0	2.0
33	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.1	0.0	1934.3	2.0
32	274	HR17-4 seria	0.999	1.000	0.035	0.60	0.60	1.06	0.11	0.4	0.0	0.0	-0.0	88.0	67.1	0.0	1933.6	2.0
31	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.5	0.0	2021.6	1.9
30	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.5	0.0	2020.9	1.9
29	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.5	0.0	2020.2	1.9
28	181	1/2" MR	0.100	0.100	0.003	1.60	1.60	1.00	0.11	0.1	0.0	0.0	-0.0	-15.2	67.5	0.0	2013.4	1.9



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #001 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m <sup>2</sup>	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
27	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.6	0.0	2004.3	1.9
26	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.6	0.0	2003.7	1.9
25	33	AS 5t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.1	67.6	0.0	2002.9	1.9
24	94	Swivel 5t	0.025	0.025	0.001	1.20	1.20	1.20	0.11	0.0	0.0	0.0	-0.0	-5.3	67.6	0.0	2001.8	1.9
23	33	AS 5t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.1	67.6	0.0	1996.5	1.9
22	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	67.7	0.0	1995.4	1.9
21	33	AS 5t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.1	67.7	0.0	1994.7	1.9
20	478	Dual Release	0.288	0.288	0.010	1.20	1.20	0.90	0.11	0.2	0.0	0.0	-0.0	-61.0	67.7	0.0	1993.6	1.9
19	480	1/2" dropcha	0.024	0.024	0.001	1.60	1.60	1.00	0.11	0.0	0.0	0.0	-0.0	-6.8	67.9	0.0	1932.6	2.0
18	76	ML 17t 1-1/4	0.025	0.026	0.001	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-4.8	67.9	0.0	1925.8	2.0
17	34	AS 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.6	68.0	0.0	1921.0	2.0
16	64	EL 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.0	68.0	0.0	1919.4	2.0
15	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	68.0	0.0	1918.4	2.0
14	181	1/2" MR	0.100	0.100	0.004	1.60	1.60	1.00	0.11	0.1	0.0	0.0	-0.0	-15.2	68.0	0.0	1911.6	2.0
13	32	AS 3t 5/8"	0.006	0.006	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	68.1	0.0	1902.5	2.0
12	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	68.1	0.0	1901.8	2.1
11	34	AS 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.6	68.1	0.0	1901.1	2.1
10	113	Nystron-1"	0.520	0.520	0.019	1.30	1.30	0.02	0.11	0.5	0.0	0.0	-0.0	-2.0	68.3	0.0	1898.6	2.1
9	491	Parachute	1.500	1.500	1.500	0.50	0.50	1.33	0.11	0.5	0.0	0.0	0.0	0.0	68.6	0.0	1897.6	2.1
8	34	AS 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.6	69.1	0.0	1897.6	2.1
7	64	EL 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.0	69.1	0.0	1896.0	2.1
6	34	AS 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.6	69.1	0.0	1895.0	2.1
5	183	3/4" MR	0.150	0.150	0.006	1.60	1.60	1.00	0.11	0.2	0.0	0.0	-0.0	-33.0	69.2	0.0	1880.2	2.1
4	33	AS 5t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.1	69.3	0.0	1860.4	2.1
3	53	PL 3t 3/4"	0.010	0.010	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-0.7	69.3	0.0	1859.3	2.1
2	34	AS 6t 7/8"	0.012	0.012	0.000	1.50	1.50	1.50	0.11	0.0	0.0	0.0	-0.0	-1.6	69.3	0.0	1858.6	2.1
1	522	double MACE	1.200	1.200	0.000	1.20	1.20	1.20	0.11	1.0	0.0	0.0	0.0	-2742.1	69.3	0.0	1857.0	0.0





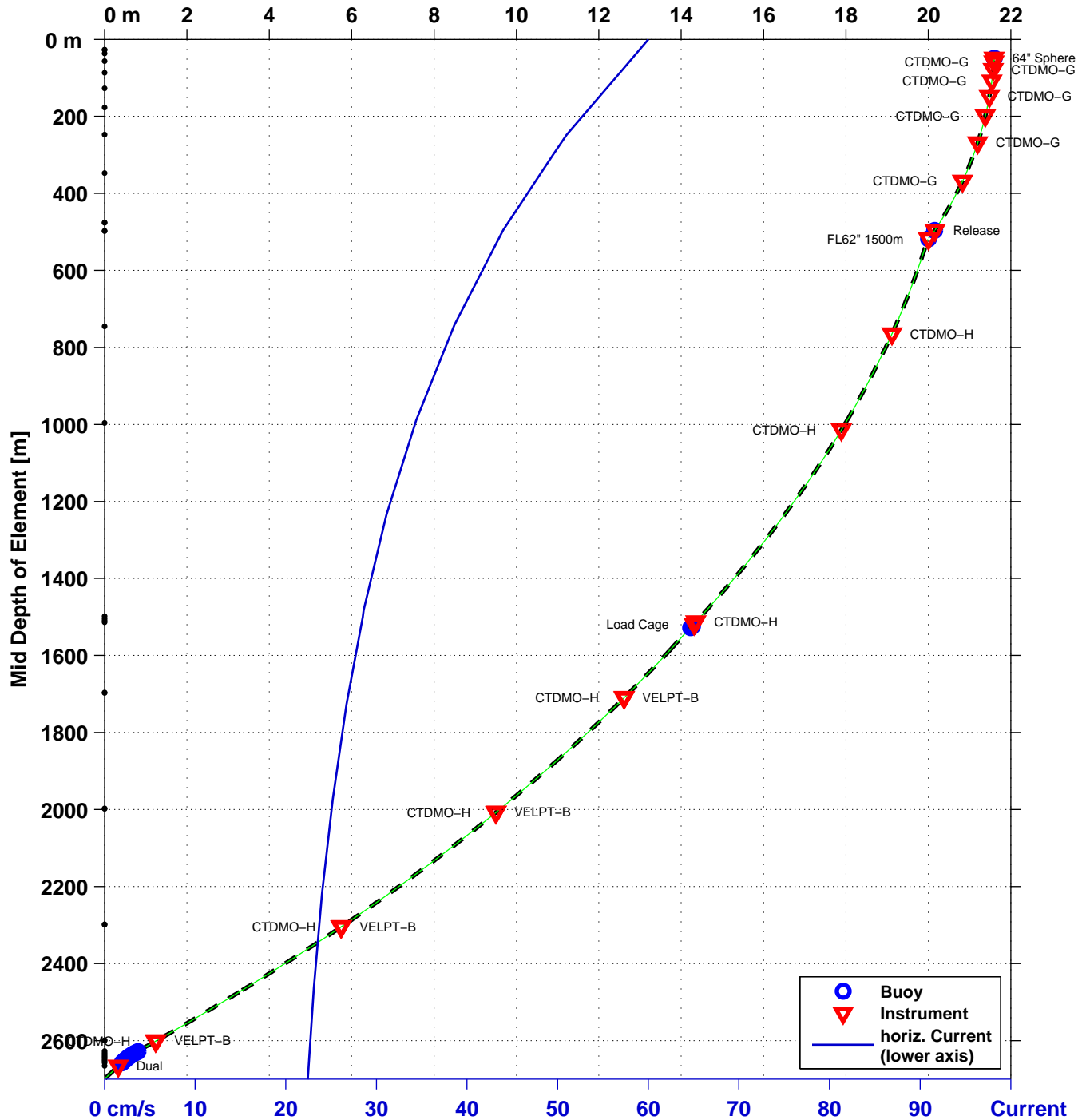
## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg  
 Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

**Event #002 – Subduction [m]: max. 22m, Top at 49m**  
 Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf



**Event #002: Vert / Horiz anchor load: 1835 kg / 270 kg**  
**Vert / Horiz anchor safety : 125 % / 120 %,**  
**Safe Wet MACE anchor weight: 2323 kg, (max. 500 kg or Horiz. safety)**  
**Wet / Dry MACE anchor weight : 2742 kg / 3170 kg**



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



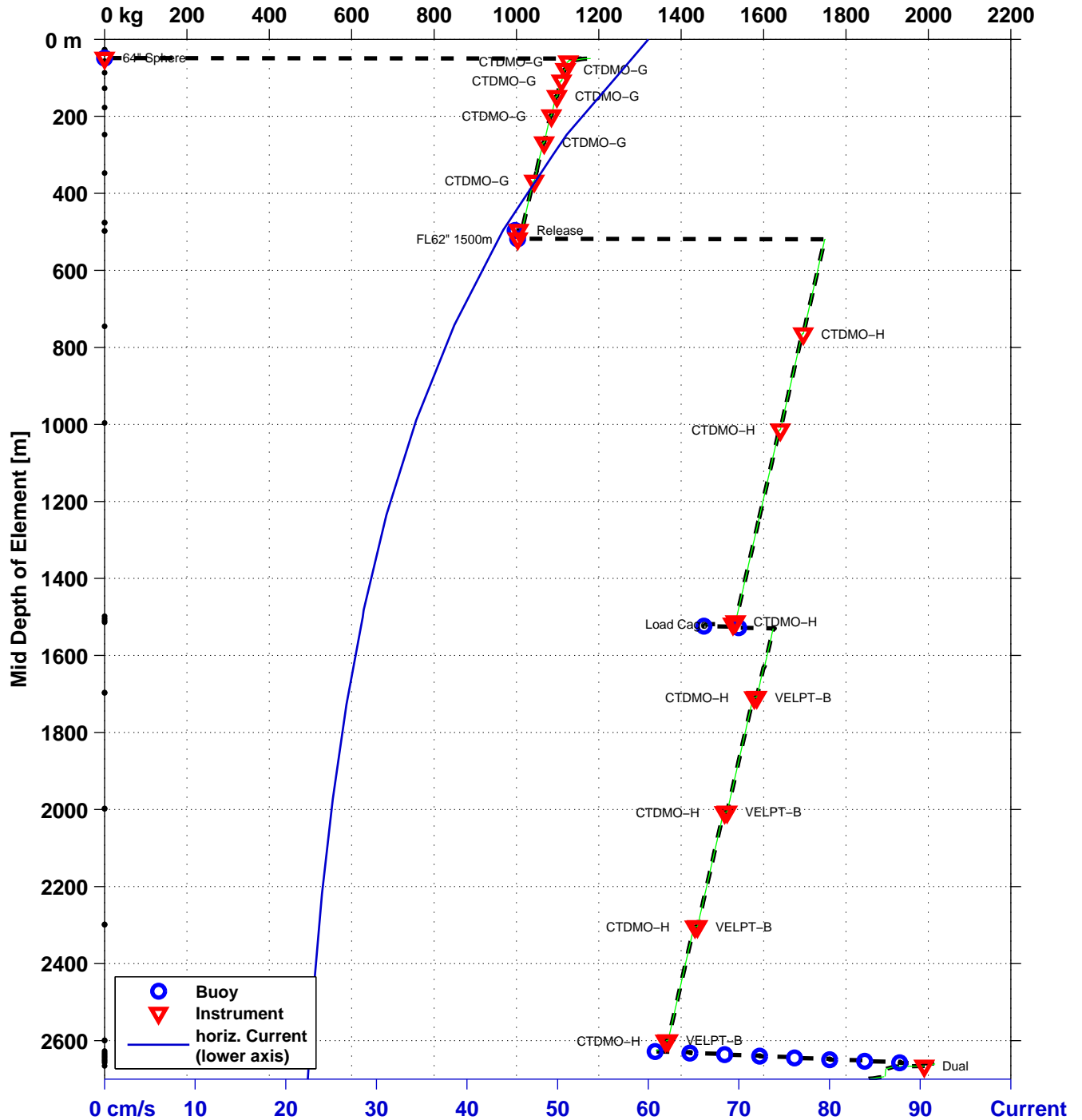
By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Event #002 – Tension [kg]

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf



Event #002: Vert / Horiz anchor load : 1835 kg / 270 kg  
 Vert / Horiz anchor safety : 125 % / 120 %,  
 Safe Wet MACE anchor weight : 2323 kg, (max. 500 kg or Horiz. safety)  
 Wet / Dry MACE anchor weight : 2742 kg / 3170 kg



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Result

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
151	306	64" Sphere 100	2.3	1180.0	2.087	0.50	0.58	18.5	0.0	0.0	0.00	0.00	47.5	21.6	326.4	0.9
150	17	U-Joint	0.3	-16.3	0.090	1.50	0.58	2.4	1180.1	7.4	0.00	0.00	49.9	21.6	326.3	0.9
149	141	1/2" EM chain	5.0	-35.0	1.000	1.30	0.58	22.9	1163.9	11.6	0.00	0.00	50.6	21.6	326.3	2.0
148	13	ind. term	0.1	-2.4	0.005	1.50	0.58	0.1	1128.9	7.1	0.00	0.00	55.1	21.6	326.2	2.2
147	103	5/16" NILSPIN	3.0	-0.6	0.029	1.10	0.58	0.6	1126.5	24.2	0.01	0.25	55.7	21.6	326.2	2.3
146	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.58	1.0	1125.9	11.3	0.00	0.00	58.2	21.6	326.1	2.3
145	103	5/16" NILSPIN	20.0	-4.3	0.191	1.10	0.58	3.6	1123.1	24.1	0.05	0.25	58.7	21.6	326.1	2.5
144	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.57	1.0	1118.8	11.2	0.00	0.00	78.2	21.6	325.2	2.5
143	103	5/16" NILSPIN	30.1	-6.4	0.286	1.10	0.57	5.3	1116.0	24.0	0.07	0.25	78.7	21.6	325.2	2.9
142	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.56	1.0	1109.6	11.1	0.00	0.00	108.3	21.5	323.8	2.9
141	103	5/16" NILSPIN	40.1	-8.5	0.381	1.10	0.55	6.7	1106.9	23.8	0.10	0.24	108.8	21.5	323.8	3.3
140	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.55	0.9	1098.3	11.0	0.00	0.00	148.3	21.5	321.6	3.3
139	103	5/16" NILSPIN	50.1	-10.6	0.476	1.10	0.54	7.9	1095.6	23.5	0.12	0.24	148.8	21.5	321.6	3.8
138	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.53	0.9	1084.9	10.8	0.00	0.00	198.3	21.4	318.5	3.8
137	103	5/16" NILSPIN	70.2	-14.9	0.667	1.10	0.52	10.1	1082.1	23.3	0.17	0.24	198.8	21.4	318.5	4.4
136	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.50	0.8	1067.3	10.7	0.00	0.00	268.3	21.2	313.4	4.5
135	103	5/16" NILSPIN	100.2	-21.3	0.953	1.10	0.49	13.0	1064.5	22.9	0.23	0.23	268.8	21.2	313.4	5.3
134	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.48	0.7	1043.3	10.4	0.00	0.00	368.2	20.8	304.8	5.3
133	103	5/16" NILSPIN	127.3	-27.1	1.210	1.10	0.46	14.4	1040.5	22.4	0.29	0.23	368.7	20.8	304.8	6.3
132	13	ind. term	0.1	-2.4	0.005	1.50	0.44	0.1	1013.6	6.3	0.00	0.00	494.8	20.2	291.8	6.3
131	15	coupler ec	0.2	-6.0	0.020	1.50	0.44	0.3	1011.2	6.3	0.00	0.00	495.0	20.2	291.8	6.4
129	479	Release Float	1.0	0.0	0.592	1.20	0.44	7.3	1005.2	10.1	0.00	0.00	495.6	20.2	291.8	6.4
127	15	coupler ec	0.2	-6.0	0.020	1.50	0.44	0.3	1005.3	6.3	0.00	0.00	496.2	20.2	291.7	6.8
126	13	ind. term	0.1	-2.4	0.005	1.50	0.44	0.1	999.3	6.2	0.00	0.00	496.3	20.2	291.7	6.9
125	256	CF14-1000	0.0	13.0	0.225	0.50	0.44	1.2	997.0	16.6	0.00	0.00	496.4	20.2	291.6	6.9
123	103	5/16" NILSPIN	10.0	-2.1	0.095	1.10	0.44	1.0	1009.9	21.7	0.02	0.22	496.9	20.2	291.6	7.0
122	103	5/16" NILSPIN	10.0	-2.1	0.095	1.10	0.44	1.0	1007.8	21.7	0.02	0.22	506.8	20.1	290.4	7.0
121	13	ind. term	0.1	-2.4	0.005	1.50	0.44	0.1	1005.6	6.3	0.00	0.00	516.3	20.0	289.2	7.0
120	326	FL62" 1500m ADC	2.8	750.0	1.887	0.50	0.44	9.4	1003.3	10.0	0.00	0.00	517.8	20.0	289.2	7.1



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
119	13	ind. term	0.1	-2.4	0.005	1.50	0.43	0.1	1750.7	10.9	0.00	0.00	519.2	20.0	288.9	4.3
118	103	5/16" NILSPIN	245.9	-52.2	2.335	1.10	0.41	22.2	1748.3	37.6	0.94	0.38	519.8	20.0	288.9	5.2
117	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.38	0.5	1696.3	17.0	0.00	0.00	764.3	19.1	268.3	5.2
116	103	5/16" NILSPIN	250.9	-53.3	2.382	1.10	0.36	17.7	1693.5	36.4	0.92	0.37	764.8	19.1	268.3	6.0
115	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.34	0.4	1640.5	16.4	0.00	0.00	1014.0	17.9	243.5	6.1
114	103	5/16" NILSPIN	250.9	-53.3	2.383	1.10	0.32	14.2	1637.8	35.2	0.89	0.36	1014.5	17.9	243.5	6.8
113	103	5/16" NILSPIN	250.9	-53.3	2.383	1.10	0.30	11.8	1584.9	34.1	0.86	0.35	1263.9	16.3	215.4	7.5
112	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.28	0.3	1532.0	15.3	0.00	0.00	1512.3	14.4	184.2	7.5
111	103	5/16" NILSPIN	5.0	-1.1	0.048	1.10	0.28	0.2	1529.3	32.9	0.02	0.34	1512.8	14.4	184.2	7.5
110	13	ind. term	0.1	-2.4	0.005	1.50	0.28	0.0	1528.2	9.6	0.00	0.00	1517.3	14.3	183.5	7.5
109	300	Load Cage	1.5	-60.0	0.300	1.30	0.28	1.7	1525.8	15.3	0.00	0.00	1518.1	14.3	183.5	7.5
108	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1466.4	12.2	0.00	0.00	1518.9	14.3	183.3	7.9
107	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.28	0.1	1465.7	12.2	0.00	0.00	1519.0	14.3	183.3	7.9
106	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1465.0	12.2	0.00	0.00	1519.0	14.3	183.3	7.9
105	181	1/2" MR	2.5	-7.6	0.050	1.60	0.28	0.3	1464.3	14.6	0.00	0.00	1519.5	14.3	183.3	7.9
104	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1456.8	12.1	0.00	0.00	1521.6	14.3	183.0	8.0
103	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.28	0.1	1456.2	12.1	0.00	0.00	1521.7	14.3	182.9	8.0
102	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1455.4	12.1	0.00	0.00	1521.8	14.3	182.9	8.0
101	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.28	2.6	1454.8	14.5	0.00	0.00	1523.8	14.3	182.9	8.0
100	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1542.0	12.8	0.00	0.00	1525.8	14.2	182.4	7.6
99	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.28	0.1	1541.3	12.8	0.00	0.00	1525.9	14.2	182.4	7.6
98	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1540.6	12.8	0.00	0.00	1526.0	14.2	182.3	7.6
97	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.28	2.6	1539.9	15.4	0.00	0.00	1528.0	14.2	182.3	7.6
96	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1627.2	13.6	0.00	0.00	1530.0	14.2	181.8	7.3
95	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.28	0.1	1626.6	13.6	0.00	0.00	1530.1	14.2	181.8	7.3
94	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1625.8	13.5	0.00	0.00	1530.2	14.2	181.8	7.3
92	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1625.2	13.5	0.00	0.00	1530.2	14.2	181.8	7.3
91	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.28	0.1	1624.5	13.5	0.00	0.00	1530.3	14.2	181.8	7.3
90	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.28	0.0	1623.8	13.5	0.00	0.00	1530.4	14.2	181.7	7.3



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
89	103	5/16" NILSPIN	100.4	-21.3	0.953	1.10	0.28	4.2	1623.1	34.9	0.36	0.36	1530.9	14.2	181.7	7.6
88	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.27	0.0	1602.0	13.4	0.00	0.00	1630.0	13.3	168.7	7.6
87	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.27	0.1	1601.4	13.3	0.00	0.00	1630.1	13.3	168.7	7.6
86	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.27	0.0	1600.6	13.3	0.00	0.00	1630.2	13.3	168.7	7.6
85	103	5/16" NILSPIN	79.3	-16.8	0.753	1.10	0.27	3.1	1600.0	34.4	0.28	0.35	1630.7	13.3	168.7	7.8
84	347	VELPT-B	0.0	-6.0	0.063	1.20	0.27	0.3	1583.3	15.8	0.00	0.00	1708.7	12.6	158.0	7.8
83	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.27	0.0	1577.4	33.9	0.00	0.35	1709.3	12.6	158.0	7.8
82	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.27	0.2	1577.1	15.8	0.00	0.00	1709.7	12.6	157.9	7.8
81	103	5/16" NILSPIN	300.0	-63.7	2.849	1.10	0.26	10.7	1574.4	33.8	1.02	0.34	1710.2	12.6	157.9	8.6
80	347	VELPT-B	0.0	-6.0	0.063	1.20	0.25	0.2	1511.4	15.1	0.00	0.00	2006.7	9.5	114.9	8.6
79	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.25	0.0	1505.4	32.4	0.00	0.33	2007.2	9.5	114.9	8.7
78	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.25	0.2	1505.2	15.1	0.00	0.00	2007.7	9.5	114.7	8.7
77	103	5/16" NILSPIN	300.0	-63.7	2.849	1.10	0.24	9.4	1502.4	32.3	0.97	0.33	2008.2	9.5	114.7	9.4
76	347	VELPT-B	0.0	-6.0	0.063	1.20	0.24	0.2	1439.6	14.4	0.00	0.00	2303.9	5.8	67.5	9.4
75	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.24	0.0	1433.7	30.8	0.00	0.32	2304.4	5.8	67.5	9.5
74	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.24	0.2	1433.4	14.3	0.00	0.00	2304.9	5.7	67.3	9.5
73	103	5/16" NILSPIN	299.9	-63.7	2.849	1.10	0.23	8.5	1430.7	30.7	0.93	0.31	2305.4	5.7	67.3	10.3
72	347	VELPT-B	0.0	-6.0	0.063	1.20	0.23	0.2	1368.0	13.7	0.00	0.00	2600.3	1.3	15.7	10.3
71	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.23	0.0	1362.1	29.3	0.00	0.30	2600.8	1.3	15.7	10.4
70	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.23	0.2	1361.9	13.6	0.00	0.00	2601.3	1.2	15.5	10.4
69	103	5/16" NILSPIN	20.1	-4.3	0.191	1.10	0.23	0.5	1359.1	29.2	0.06	0.30	2601.8	1.2	15.5	10.5
68	491	Parachute	0.0	0.0	1.500	0.50	0.23	2.0	1354.9	13.5	0.00	0.00	2621.0	0.9	11.8	10.5
67	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1355.3	11.3	0.00	0.00	2621.1	0.9	11.8	10.5
66	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1354.6	11.3	0.00	0.00	2621.2	0.9	11.8	10.6
65	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1353.9	11.3	0.00	0.00	2621.2	0.9	11.8	10.6
64	181	1/2" MR	5.0	-15.2	0.100	1.60	0.23	0.4	1353.3	13.5	0.00	0.00	2621.8	0.9	11.8	10.7
63	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1338.3	11.2	0.00	0.00	2626.2	0.8	10.9	10.7
62	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1337.7	11.1	0.00	0.00	2626.3	0.8	10.9	10.7
61	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1337.0	11.1	0.00	0.00	2626.4	0.8	10.8	10.7



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
60	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1336.3	13.4	0.00	0.00	2628.4	0.8	10.8	10.7
59	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1422.9	11.9	0.00	0.00	2630.4	0.7	10.1	10.1
58	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1422.2	11.9	0.00	0.00	2630.5	0.7	10.1	10.1
57	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1421.5	11.8	0.00	0.00	2630.6	0.7	10.0	10.1
56	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1420.9	14.2	0.00	0.00	2632.6	0.7	10.0	10.2
55	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1507.6	12.6	0.00	0.00	2634.6	0.7	9.3	9.6
54	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1506.9	12.6	0.00	0.00	2634.7	0.7	9.3	9.6
53	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1506.2	12.6	0.00	0.00	2634.7	0.7	9.3	9.6
52	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1505.5	15.1	0.00	0.00	2636.8	0.7	9.3	9.6
51	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1592.4	13.3	0.00	0.00	2638.8	0.6	8.6	9.2
50	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1591.7	13.3	0.00	0.00	2638.8	0.6	8.6	9.2
49	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1591.0	13.3	0.00	0.00	2638.9	0.6	8.6	9.2
48	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1590.3	15.9	0.00	0.00	2641.0	0.6	8.6	9.2
47	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1677.3	14.0	0.00	0.00	2642.9	0.6	7.9	8.8
46	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1676.6	14.0	0.00	0.00	2643.0	0.6	7.9	8.8
45	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1675.9	14.0	0.00	0.00	2643.1	0.6	7.9	8.8
44	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1675.3	16.8	0.00	0.00	2645.1	0.6	7.9	8.8
43	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1762.3	14.7	0.00	0.00	2647.1	0.5	7.3	8.4
42	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1761.6	14.7	0.00	0.00	2647.2	0.5	7.3	8.4
41	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1760.9	14.7	0.00	0.00	2647.3	0.5	7.3	8.4
40	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1760.2	17.6	0.00	0.00	2649.3	0.5	7.3	8.4
39	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1847.4	15.4	0.00	0.00	2651.3	0.5	6.7	8.1
38	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1846.7	15.4	0.00	0.00	2651.4	0.5	6.7	8.1
37	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1846.0	15.4	0.00	0.00	2651.5	0.5	6.7	8.1
36	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1845.3	18.5	0.00	0.00	2653.5	0.5	6.6	8.1
35	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1932.5	16.1	0.00	0.00	2655.5	0.4	6.1	7.8
34	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1931.8	16.1	0.00	0.00	2655.6	0.4	6.1	7.8
33	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1931.1	16.1	0.00	0.00	2655.7	0.4	6.1	7.8
32	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.23	1.6	1930.5	19.3	0.00	0.00	2657.7	0.4	6.0	7.8



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
31	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	2017.7	16.8	0.00	0.00	2659.7	0.4	5.5	7.5
30	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	2017.0	16.8	0.00	0.00	2659.8	0.4	5.5	7.5
29	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	2016.3	16.8	0.00	0.00	2659.9	0.4	5.5	7.5
28	181	1/2" MR	5.0	-15.2	0.100	1.60	0.23	0.4	2015.6	20.2	0.00	0.00	2660.5	0.4	5.5	7.5
27	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	2000.6	16.7	0.00	0.00	2664.9	0.3	4.8	7.6
26	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1999.9	16.7	0.00	0.00	2665.0	0.3	4.8	7.6
25	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.23	0.0	1999.2	11.1	0.00	0.00	2665.1	0.3	4.8	7.6
24	94	Swivel 5t	0.2	-5.3	0.025	1.20	0.23	0.1	1998.1	20.0	0.00	0.00	2665.3	0.3	4.8	7.6
23	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.23	0.0	1992.8	11.1	0.00	0.00	2665.4	0.3	4.8	7.6
22	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1991.8	16.6	0.00	0.00	2665.5	0.3	4.7	7.6
21	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.23	0.0	1991.0	11.1	0.00	0.00	2665.6	0.3	4.7	7.6
20	478	Dual Release	1.0	-61.0	0.288	1.20	0.23	0.9	1990.0	19.9	0.00	0.00	2666.2	0.3	4.7	7.6
19	480	1/2" dropchain	0.6	-6.8	0.024	1.60	0.23	0.1	1929.5	12.1	0.00	0.00	2667.0	0.3	4.6	7.9
18	76	ML 17t 1-1/4"	0.2	-4.8	0.026	1.50	0.23	0.1	1922.8	4.4	0.00	0.00	2667.4	0.3	4.5	7.9
17	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.23	0.1	1918.0	8.0	0.00	0.00	2667.6	0.3	4.5	7.9
16	64	EL 6t 7/8"	0.1	-1.0	0.012	1.50	0.23	0.0	1916.5	8.0	0.00	0.00	2667.7	0.3	4.5	7.9
15	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1915.4	16.0	0.00	0.00	2667.8	0.3	4.4	7.9
14	181	1/2" MR	5.0	-15.2	0.100	1.60	0.23	0.4	1914.8	19.1	0.00	0.00	2668.3	0.3	4.4	8.0
13	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.23	0.0	1899.7	15.8	0.00	0.00	2672.8	0.3	3.7	8.0
12	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.23	0.0	1899.1	15.8	0.00	0.00	2672.9	0.3	3.7	8.0
11	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.23	0.1	1898.4	7.9	0.00	0.00	2673.0	0.3	3.7	8.0
10	113	Nystron-1"	20.7	-2.0	0.520	1.30	0.22	1.8	1896.8	11.3	0.68	3.39	2673.5	0.3	3.7	8.1
9	491	Parachute	0.0	0.0	1.500	0.50	0.22	2.0	1894.9	18.9	0.00	0.00	2693.5	0.1	0.8	8.1
8	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.22	0.1	1895.2	7.9	0.00	0.00	2693.5	0.1	0.8	8.2
7	64	EL 6t 7/8"	0.1	-1.0	0.012	1.50	0.22	0.0	1893.6	7.9	0.00	0.00	2693.6	0.1	0.8	8.2
6	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.22	0.1	1892.6	7.9	0.00	0.00	2693.7	0.1	0.8	8.2
5	183	3/4" MR	5.0	-33.1	0.150	1.60	0.22	0.6	1891.1	7.9	0.00	0.00	2694.3	0.1	0.8	8.3
4	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.22	0.0	1858.4	10.3	0.00	0.00	2698.8	0.0	0.0	8.3
3	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.22	0.0	1857.3	15.5	0.00	0.00	2698.9	0.0	0.0	8.3



**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

**Event #002 – Simulation Result, cont.**

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
2	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.22	0.1	1856.6	7.7	0.00	0.00	2699.0	0.0	0.0	8.4
1	522	double MACE Anch	1.0	-2742.1	1.200	1.20	0.22	3.8	1855.0	30.9	0.00	0.00	2700.0	0.0	0.0	0.0

Max. 37.6% Static Tension at:

118	103	5/16" NILSPIN	245.9	-52.2	2.335	1.10	0.41	22.2	1748.3	37.6	0.94	0.38	519.8	20.0	288.9	5.2
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Vert/Horiz Anchor Load : 1835 kg / 270 kg  
 Wet MACE Anchor Weight : 2742 kg  
 Safe MACE Anchor Weight : 2323 kg





## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg  
**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Parameter

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
151	306	64" Sphere	2.087	2.087	2.087	0.50	0.50	0.50	0.58	18.5	0.0	0.0	0.0	1180.0	0.0	0.0	0.0	0.9
150	17	U-Joint	0.090	0.090	0.001	1.50	1.50	1.50	0.58	2.4	0.0	0.0	-0.0	-16.3	18.5	0.0	1180.0	0.9
149	141	1/2" EM chai	1.000	1.000	0.026	1.30	1.30	1.00	0.58	22.9	0.0	0.0	-0.6	-35.0	30.1	0.0	1149.5	2.0
148	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.58	0.1	0.0	0.0	0.0	-2.4	43.9	0.0	1128.1	2.2
147	103	5/16" NILSPI	0.029	0.029	0.001	1.10	1.10	0.00	0.58	0.6	0.0	0.0	-0.0	-0.6	44.2	0.0	1125.4	2.3
146	374	CTDMO-G P100	0.042	0.042	0.002	1.40	1.40	1.00	0.58	1.0	0.0	0.0	-0.0	-2.8	44.6	0.0	1125.0	2.3
145	103	5/16" NILSPI	0.190	0.191	0.008	1.10	1.10	0.00	0.58	3.6	0.0	0.0	-0.2	-4.3	47.3	0.0	1120.1	2.5
144	374	CTDMO-G P100	0.042	0.042	0.002	1.40	1.40	1.00	0.57	1.0	0.0	0.0	-0.0	-2.8	49.2	0.0	1117.7	2.5
143	103	5/16" NILSPI	0.286	0.286	0.014	1.10	1.10	0.00	0.57	5.3	0.0	0.0	-0.2	-6.4	52.8	0.0	1111.7	2.9
142	374	CTDMO-G P100	0.042	0.042	0.002	1.40	1.40	1.00	0.56	1.0	0.0	0.0	-0.0	-2.8	55.5	0.0	1108.3	2.9
141	103	5/16" NILSPI	0.381	0.381	0.021	1.10	1.10	0.00	0.55	6.7	0.0	0.0	-0.4	-8.5	59.8	0.0	1101.1	3.3
140	374	CTDMO-G P100	0.042	0.042	0.002	1.40	1.40	1.00	0.55	0.9	0.0	0.0	-0.1	-2.8	63.2	0.0	1096.5	3.3
139	103	5/16" NILSPI	0.476	0.476	0.030	1.10	1.10	0.00	0.54	7.9	0.0	0.0	-0.5	-10.7	68.0	0.0	1088.2	3.8
138	374	CTDMO-G P100	0.042	0.042	0.003	1.40	1.40	1.00	0.53	0.9	0.0	0.0	-0.1	-2.8	72.0	0.0	1082.5	3.8
137	103	5/16" NILSPI	0.665	0.667	0.048	1.09	1.10	0.00	0.52	10.1	0.0	0.0	-0.7	-14.9	77.9	0.0	1072.0	4.4
136	374	CTDMO-G P100	0.042	0.042	0.003	1.40	1.40	1.00	0.50	0.8	0.0	0.0	-0.1	-2.8	82.9	0.0	1064.0	4.5
135	103	5/16" NILSPI	0.949	0.953	0.082	1.09	1.10	0.00	0.49	13.0	0.0	0.0	-1.1	-21.3	90.3	0.0	1050.1	5.3
134	374	CTDMO-G P100	0.042	0.042	0.004	1.39	1.40	1.00	0.48	0.7	0.0	0.0	-0.1	-2.8	96.8	0.0	1038.8	5.3
133	103	5/16" NILSPI	1.204	1.210	0.124	1.09	1.10	0.00	0.46	14.4	0.0	0.0	-1.5	-27.1	104.8	0.0	1021.8	6.3
132	13	ind. term	0.005	0.005	0.001	1.49	1.50	1.49	0.44	0.1	0.0	0.0	-0.0	-2.4	111.9	0.0	1007.4	6.3
131	15	coupler ec	0.020	0.020	0.002	1.49	1.50	1.49	0.44	0.3	0.0	0.0	-0.0	-6.0	111.9	0.0	1005.0	6.4
129	479	Release Floa	0.588	0.592	0.066	1.19	1.20	0.89	0.44	7.3	0.0	0.0	-0.8	0.0	112.2	0.0	998.9	6.4
127	15	coupler ec	0.020	0.020	0.002	1.49	1.50	1.49	0.44	0.3	0.0	0.0	-0.0	-6.0	119.5	0.0	998.2	6.8
126	13	ind. term	0.005	0.005	0.001	1.49	1.50	1.49	0.44	0.1	0.0	0.0	-0.0	-2.4	119.8	0.0	992.1	6.9
125	256	CF14-1000	0.223	0.225	0.027	0.50	0.50	0.40	0.44	1.2	0.0	0.0	-0.1	13.0	119.9	0.0	989.7	6.9
123	103	5/16" NILSPI	0.095	0.095	0.011	1.08	1.10	0.00	0.44	1.0	0.0	0.0	-0.1	-2.1	121.5	0.0	1001.6	7.0
122	103	5/16" NILSPI	0.095	0.095	0.012	1.08	1.10	0.00	0.44	1.0	0.0	0.0	-0.1	-2.1	122.6	0.0	999.3	7.0
121	13	ind. term	0.005	0.005	0.001	1.49	1.50	1.49	0.44	0.1	0.0	0.0	-0.0	-2.4	123.1	0.0	998.1	7.0
120	326	FL62" 1500m	1.887	1.887	1.887	0.50	0.50	0.50	0.44	9.4	0.0	0.0	0.0	750.0	123.2	0.0	995.7	7.1
119	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.43	0.1	0.0	0.0	-0.0	-2.4	132.6	0.0	1745.7	4.3



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
118	103	5/16" NILSPI	2.327	2.335	0.196	1.09	1.10	0.00	0.41	22.2	0.0	0.0	-1.9	-52.2	144.2	0.0	1716.3	5.2
117	375	CTDMO-H P350	0.042	0.042	0.004	1.39	1.40	1.00	0.38	0.5	0.0	0.0	-0.0	-2.8	154.8	0.0	1689.2	5.2
116	103	5/16" NILSPI	2.371	2.382	0.235	1.09	1.10	0.00	0.36	17.7	0.0	0.0	-1.7	-53.3	164.5	0.0	1659.0	6.0
115	375	CTDMO-H P350	0.042	0.042	0.004	1.39	1.40	0.99	0.34	0.4	0.0	0.0	-0.0	-2.8	173.0	0.0	1631.4	6.1
114	103	5/16" NILSPI	2.367	2.383	0.267	1.08	1.10	0.00	0.32	14.2	0.0	0.0	-1.6	-53.3	180.6	0.0	1601.2	6.8
113	103	5/16" NILSPI	2.364	2.383	0.296	1.08	1.10	0.00	0.30	11.8	0.0	0.0	-1.5	-53.3	193.6	0.0	1546.5	7.5
112	375	CTDMO-H P350	0.042	0.042	0.005	1.39	1.40	0.99	0.28	0.3	0.0	0.0	-0.0	-2.8	199.3	0.0	1519.0	7.5
111	103	5/16" NILSPI	0.047	0.048	0.006	1.08	1.10	0.00	0.28	0.2	0.0	0.0	-0.0	-1.1	199.6	0.0	1515.7	7.5
110	13	ind. term	0.005	0.005	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-2.4	199.8	0.0	1515.1	7.5
109	300	Load Cage	0.297	0.300	0.039	1.29	1.30	0.89	0.28	1.7	0.0	0.0	-0.2	-60.0	199.8	0.0	1512.7	7.5
108	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	201.5	0.0	1452.5	7.9
107	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.28	0.1	0.0	0.0	-0.0	-0.7	201.5	0.0	1451.8	7.9
106	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	201.6	0.0	1451.1	7.9
105	181	1/2" MR	0.050	0.050	0.007	1.58	1.60	0.99	0.28	0.3	0.0	0.0	-0.0	-7.6	201.7	0.0	1447.8	7.9
104	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	201.9	0.0	1442.7	8.0
103	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.28	0.1	0.0	0.0	-0.0	-0.7	202.0	0.0	1442.1	8.0
102	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	202.0	0.0	1441.3	8.0
101	274	HR17-4 seria	0.990	1.000	0.139	0.59	0.60	1.05	0.28	2.6	0.0	0.0	-0.3	88.0	202.1	0.0	1440.7	8.0
100	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	204.6	0.0	1528.3	7.6
99	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.28	0.1	0.0	0.0	-0.0	-0.7	204.7	0.0	1527.7	7.6
98	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	204.8	0.0	1526.9	7.6
97	274	HR17-4 seria	0.991	1.000	0.133	0.59	0.60	1.05	0.28	2.6	0.0	0.0	-0.3	88.0	204.8	0.0	1526.3	7.6
96	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	207.3	0.0	1613.9	7.3
95	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.28	0.1	0.0	0.0	-0.0	-0.7	207.4	0.0	1613.3	7.3
94	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	207.4	0.0	1612.5	7.3
92	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	207.5	0.0	1611.9	7.3
91	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.28	0.1	0.0	0.0	-0.0	-0.7	207.5	0.0	1611.2	7.3
90	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.28	0.0	0.0	0.0	-0.0	-0.7	207.6	0.0	1610.5	7.3
89	103	5/16" NILSPI	0.945	0.953	0.124	1.08	1.10	0.00	0.28	4.2	0.0	0.0	-0.5	-21.3	209.7	0.0	1599.0	7.6
88	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.27	0.0	0.0	0.0	-0.0	-0.7	211.8	0.0	1587.9	7.6



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m <sup>2</sup>	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
87	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.27	0.1	0.0	0.0	-0.0	-0.7	211.9	0.0	1587.3	7.6
86	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.27	0.0	0.0	0.0	-0.0	-0.7	211.9	0.0	1586.5	7.6
85	103	5/16" NILSPI	0.746	0.753	0.101	1.08	1.10	0.00	0.27	3.1	0.0	0.0	-0.4	-16.8	213.5	0.0	1577.3	7.8
84	347	VELPT-B	0.062	0.063	0.009	1.19	1.20	0.89	0.27	0.3	0.0	0.0	-0.0	-6.0	215.1	0.0	1568.6	7.8
83	103	5/16" NILSPI	0.009	0.010	0.001	1.08	1.10	0.00	0.27	0.0	0.0	0.0	-0.0	-0.2	215.4	0.0	1562.6	7.8
82	375	CTDMO-H P350	0.042	0.042	0.006	1.39	1.40	0.99	0.27	0.2	0.0	0.0	-0.0	-2.8	215.4	0.0	1562.4	7.8
81	103	5/16" NILSPI	2.820	2.849	0.408	1.08	1.10	0.00	0.26	10.7	0.0	0.0	-1.5	-63.7	221.1	0.0	1527.0	8.6
80	347	VELPT-B	0.062	0.063	0.009	1.19	1.20	0.89	0.25	0.2	0.0	0.0	-0.0	-6.0	226.4	0.0	1494.3	8.6
79	103	5/16" NILSPI	0.009	0.010	0.001	1.07	1.10	0.00	0.25	0.0	0.0	0.0	-0.0	-0.2	226.6	0.0	1488.3	8.7
78	375	CTDMO-H P350	0.042	0.042	0.006	1.38	1.40	0.99	0.25	0.2	0.0	0.0	-0.0	-2.8	226.6	0.0	1488.1	8.7
77	103	5/16" NILSPI	2.814	2.849	0.449	1.07	1.10	0.00	0.24	9.4	0.0	0.0	-1.5	-63.7	231.6	0.0	1452.7	9.4
76	347	VELPT-B	0.062	0.063	0.010	1.18	1.20	0.89	0.24	0.2	0.0	0.0	-0.0	-6.0	236.3	0.0	1420.1	9.4
75	103	5/16" NILSPI	0.009	0.010	0.002	1.07	1.10	0.00	0.24	0.0	0.0	0.0	-0.0	-0.2	236.5	0.0	1414.0	9.5
74	375	CTDMO-H P350	0.042	0.042	0.007	1.38	1.40	0.99	0.24	0.2	0.0	0.0	-0.0	-2.8	236.5	0.0	1413.8	9.5
73	103	5/16" NILSPI	2.807	2.849	0.491	1.06	1.10	0.00	0.23	8.5	0.0	0.0	-1.5	-63.7	241.0	0.0	1378.5	10.3
72	347	VELPT-B	0.062	0.063	0.011	1.18	1.20	0.89	0.23	0.2	0.0	0.0	-0.0	-6.0	245.2	0.0	1345.8	10.3
71	103	5/16" NILSPI	0.009	0.010	0.002	1.06	1.10	0.00	0.23	0.0	0.0	0.0	-0.0	-0.2	245.4	0.0	1339.8	10.4
70	375	CTDMO-H P350	0.042	0.042	0.008	1.38	1.40	0.98	0.23	0.2	0.0	0.0	-0.0	-2.8	245.4	0.0	1339.6	10.4
69	103	5/16" NILSPI	0.187	0.191	0.035	1.06	1.10	0.00	0.23	0.5	0.0	0.0	-0.1	-4.3	245.8	0.0	1334.7	10.5
68	491	Parachute	1.500	1.500	1.500	0.50	0.50	1.33	0.23	2.0	0.0	0.0	0.0	0.0	246.1	0.0	1332.4	10.5
67	32	AS 3t 5/8"	0.006	0.006	0.001	1.47	1.50	1.47	0.23	0.0	0.0	0.0	-0.0	-0.7	248.1	0.0	1332.4	10.5
66	53	PL 3t 3/4"	0.009	0.010	0.002	1.47	1.50	1.47	0.23	0.0	0.0	0.0	-0.0	-0.7	248.2	0.0	1331.7	10.6
65	32	AS 3t 5/8"	0.006	0.006	0.001	1.47	1.50	1.47	0.23	0.0	0.0	0.0	-0.0	-0.7	248.2	0.0	1331.0	10.6
64	181	1/2" MR	0.098	0.100	0.018	1.57	1.60	0.98	0.23	0.4	0.0	0.0	-0.1	-15.2	248.4	0.0	1324.2	10.7
63	32	AS 3t 5/8"	0.006	0.006	0.001	1.47	1.50	1.47	0.23	0.0	0.0	0.0	-0.0	-0.7	248.7	0.0	1315.0	10.7
62	53	PL 3t 3/4"	0.009	0.010	0.002	1.47	1.50	1.47	0.23	0.0	0.0	0.0	-0.0	-0.7	248.7	0.0	1314.4	10.7
61	32	AS 3t 5/8"	0.006	0.006	0.001	1.47	1.50	1.47	0.23	0.0	0.0	0.0	-0.0	-0.7	248.7	0.0	1313.6	10.7
60	274	HR17-4 seria	0.983	1.000	0.186	0.59	0.60	1.04	0.23	1.6	0.0	0.0	-0.3	88.0	248.7	0.0	1313.0	10.7
59	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	250.4	0.0	1400.7	10.1
58	53	PL 3t 3/4"	0.009	0.010	0.002	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	250.4	0.0	1400.0	10.1



**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

**Event #002 – Simulation Parameter, cont.**

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
57	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	250.4	0.0	1399.3	10.1
56	274	HR17-4 seria	0.984	1.000	0.176	0.59	0.60	1.04	0.23	1.6	0.0	0.0	-0.3	88.0	250.5	0.0	1398.6	10.2
55	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	252.1	0.0	1486.3	9.6
54	53	PL 3t 3/4"	0.009	0.010	0.002	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	252.1	0.0	1485.7	9.6
53	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	252.2	0.0	1484.9	9.6
52	274	HR17-4 seria	0.986	1.000	0.168	0.59	0.60	1.05	0.23	1.6	0.0	0.0	-0.2	88.0	252.2	0.0	1484.3	9.6
51	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	253.8	0.0	1572.0	9.2
50	53	PL 3t 3/4"	0.009	0.010	0.002	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	253.9	0.0	1571.4	9.2
49	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	253.9	0.0	1570.6	9.2
48	274	HR17-4 seria	0.987	1.000	0.160	0.59	0.60	1.05	0.23	1.6	0.0	0.0	-0.2	88.0	253.9	0.0	1569.9	9.2
47	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	255.6	0.0	1657.7	8.8
46	53	PL 3t 3/4"	0.009	0.010	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	255.6	0.0	1657.0	8.8
45	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	255.6	0.0	1656.3	8.8
44	274	HR17-4 seria	0.988	1.000	0.153	0.59	0.60	1.05	0.23	1.6	0.0	0.0	-0.2	88.0	255.6	0.0	1655.6	8.8
43	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	257.3	0.0	1743.4	8.4
42	53	PL 3t 3/4"	0.009	0.010	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	257.3	0.0	1742.7	8.4
41	32	AS 3t 5/8"	0.006	0.006	0.001	1.48	1.50	1.48	0.23	0.0	0.0	0.0	-0.0	-0.7	257.3	0.0	1742.0	8.4
40	274	HR17-4 seria	0.989	1.000	0.146	0.59	0.60	1.05	0.23	1.6	0.0	0.0	-0.2	88.0	257.4	0.0	1741.3	8.4
39	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	259.0	0.0	1829.1	8.1
38	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	259.0	0.0	1828.4	8.1
37	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	259.1	0.0	1827.7	8.1
36	274	HR17-4 seria	0.990	1.000	0.140	0.59	0.60	1.05	0.23	1.6	0.0	0.0	-0.2	88.0	259.1	0.0	1827.0	8.1
35	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	260.7	0.0	1914.8	7.8
34	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	260.8	0.0	1914.2	7.8
33	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	260.8	0.0	1913.4	7.8
32	274	HR17-4 seria	0.991	1.000	0.135	0.59	0.60	1.05	0.23	1.6	0.0	0.0	-0.2	88.0	260.8	0.0	1912.8	7.8
31	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	262.5	0.0	2000.5	7.5
30	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	262.5	0.0	1999.9	7.5
29	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	262.5	0.0	1999.1	7.5
28	181	1/2" MR	0.099	0.100	0.013	1.59	1.60	0.99	0.23	0.4	0.0	0.0	-0.1	-15.2	262.7	0.0	1992.4	7.5



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #002 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m <sup>2</sup>	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
27	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	263.0	0.0	1983.2	7.6
26	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	263.0	0.0	1982.6	7.6
25	33	AS 5t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-1.1	263.0	0.0	1981.8	7.6
24	94	Swivel 5t	0.025	0.025	0.003	1.19	1.20	1.19	0.23	0.1	0.0	0.0	-0.0	-5.3	263.1	0.0	1980.7	7.6
23	33	AS 5t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-1.1	263.2	0.0	1975.4	7.6
22	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	263.2	0.0	1974.3	7.6
21	33	AS 5t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-1.1	263.2	0.0	1973.6	7.6
20	478	Dual Release	0.285	0.288	0.038	1.19	1.20	0.89	0.23	0.9	0.0	0.0	-0.1	-61.0	263.3	0.0	1972.5	7.6
19	480	1/2" dropcha	0.024	0.024	0.003	1.58	1.60	0.99	0.23	0.1	0.0	0.0	-0.0	-6.8	264.2	0.0	1911.4	7.9
18	76	ML 17t 1-1/4	0.025	0.026	0.004	1.49	1.50	1.49	0.23	0.1	0.0	0.0	-0.0	-4.8	264.3	0.0	1904.6	7.9
17	34	AS 6t 7/8"	0.012	0.012	0.002	1.49	1.50	1.49	0.23	0.1	0.0	0.0	-0.0	-1.6	264.4	0.0	1899.7	7.9
16	64	EL 6t 7/8"	0.012	0.012	0.002	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-1.0	264.5	0.0	1898.1	7.9
15	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	264.5	0.0	1897.1	7.9
14	181	1/2" MR	0.099	0.100	0.014	1.58	1.60	0.99	0.23	0.4	0.0	0.0	-0.1	-15.2	264.7	0.0	1890.3	8.0
13	32	AS 3t 5/8"	0.006	0.006	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	265.0	0.0	1881.2	8.0
12	53	PL 3t 3/4"	0.010	0.010	0.001	1.49	1.50	1.49	0.23	0.0	0.0	0.0	-0.0	-0.7	265.0	0.0	1880.5	8.0
11	34	AS 6t 7/8"	0.012	0.012	0.002	1.49	1.50	1.49	0.23	0.1	0.0	0.0	-0.0	-1.6	265.0	0.0	1879.8	8.0
10	113	Nystron-1"	0.515	0.520	0.073	1.29	1.30	0.02	0.22	1.8	0.0	0.0	-0.2	-2.0	265.9	0.0	1877.1	8.1
9	491	Parachute	1.500	1.500	1.500	0.50	0.50	1.33	0.22	2.0	0.0	0.0	0.0	0.0	266.9	0.0	1876.0	8.1
8	34	AS 6t 7/8"	0.012	0.012	0.002	1.48	1.50	1.48	0.22	0.1	0.0	0.0	-0.0	-1.6	268.9	0.0	1876.0	8.2
7	64	EL 6t 7/8"	0.012	0.012	0.002	1.48	1.50	1.48	0.22	0.0	0.0	0.0	-0.0	-1.0	268.9	0.0	1874.4	8.2
6	34	AS 6t 7/8"	0.012	0.012	0.002	1.48	1.50	1.48	0.22	0.1	0.0	0.0	-0.0	-1.6	269.0	0.0	1873.4	8.2
5	183	3/4" MR	0.148	0.150	0.022	1.58	1.60	0.99	0.22	0.6	0.0	0.0	-0.1	-33.0	269.3	0.0	1858.6	8.3
4	33	AS 5t 3/4"	0.009	0.010	0.001	1.48	1.50	1.48	0.22	0.0	0.0	0.0	-0.0	-1.1	269.6	0.0	1838.7	8.3
3	53	PL 3t 3/4"	0.009	0.010	0.001	1.48	1.50	1.48	0.22	0.0	0.0	0.0	-0.0	-0.7	269.7	0.0	1837.6	8.3
2	34	AS 6t 7/8"	0.012	0.012	0.002	1.48	1.50	1.48	0.22	0.1	0.0	0.0	-0.0	-1.6	269.7	0.0	1836.9	8.4
1	522	double MACE	1.200	1.200	0.000	1.20	1.20	1.20	0.22	3.8	0.0	0.0	0.0	-2742.1	269.8	0.0	1835.3	0.0



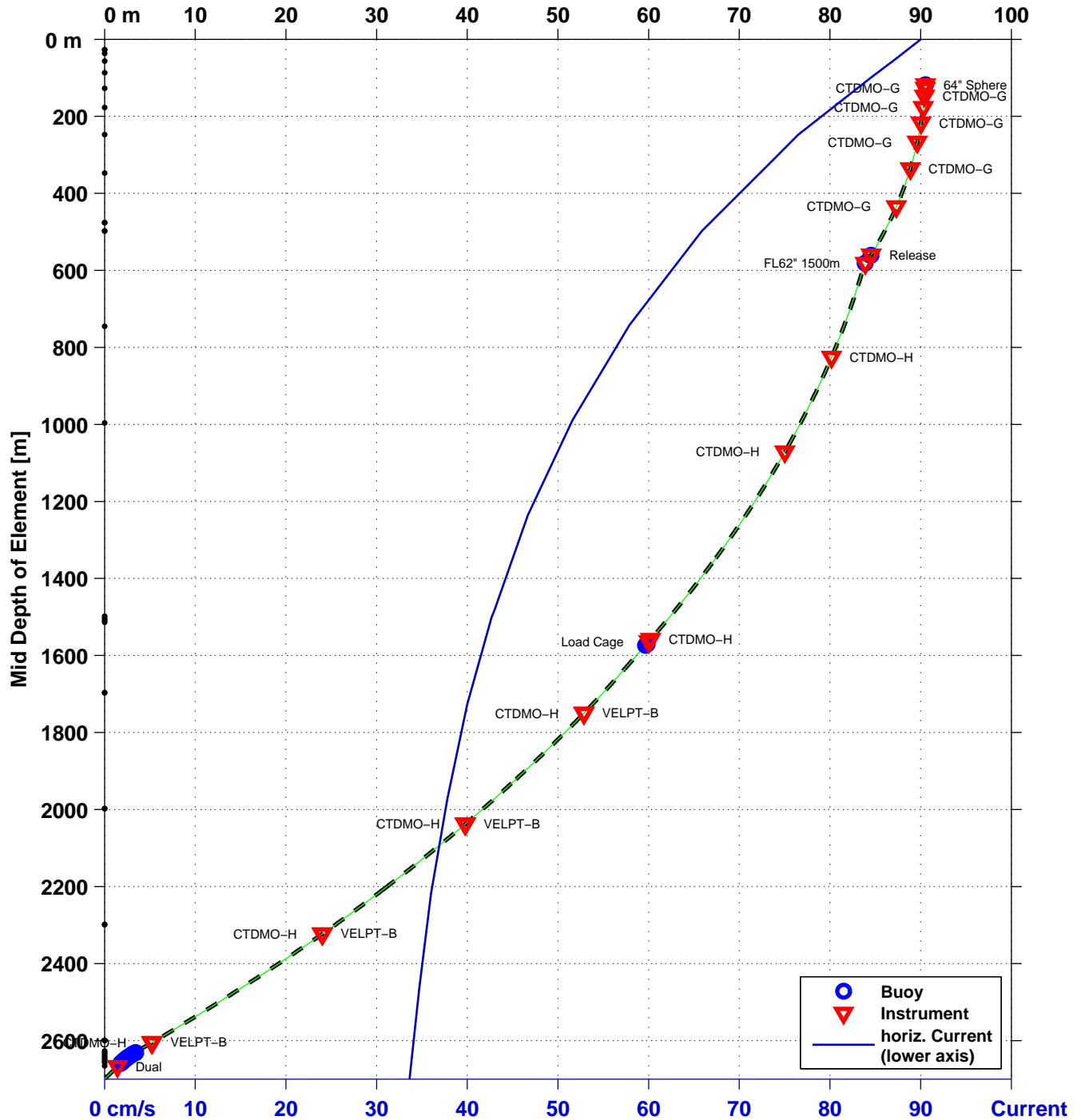
## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg  
 Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

**Event #003 – Subduction [m]: max. 91m, Top at 118m**  
 Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf



**Event #003: Vert / Horiz anchor load: 1764 kg / 550 kg**  
**Vert / Horiz anchor safety: 125 % / 120 %,**  
**Safe Wet MACE anchor weight: 2424 kg, (max. 500 kg or Horiz. safety)**  
**Wet / Dry MACE anchor weight: 2742 kg / 3170 kg**



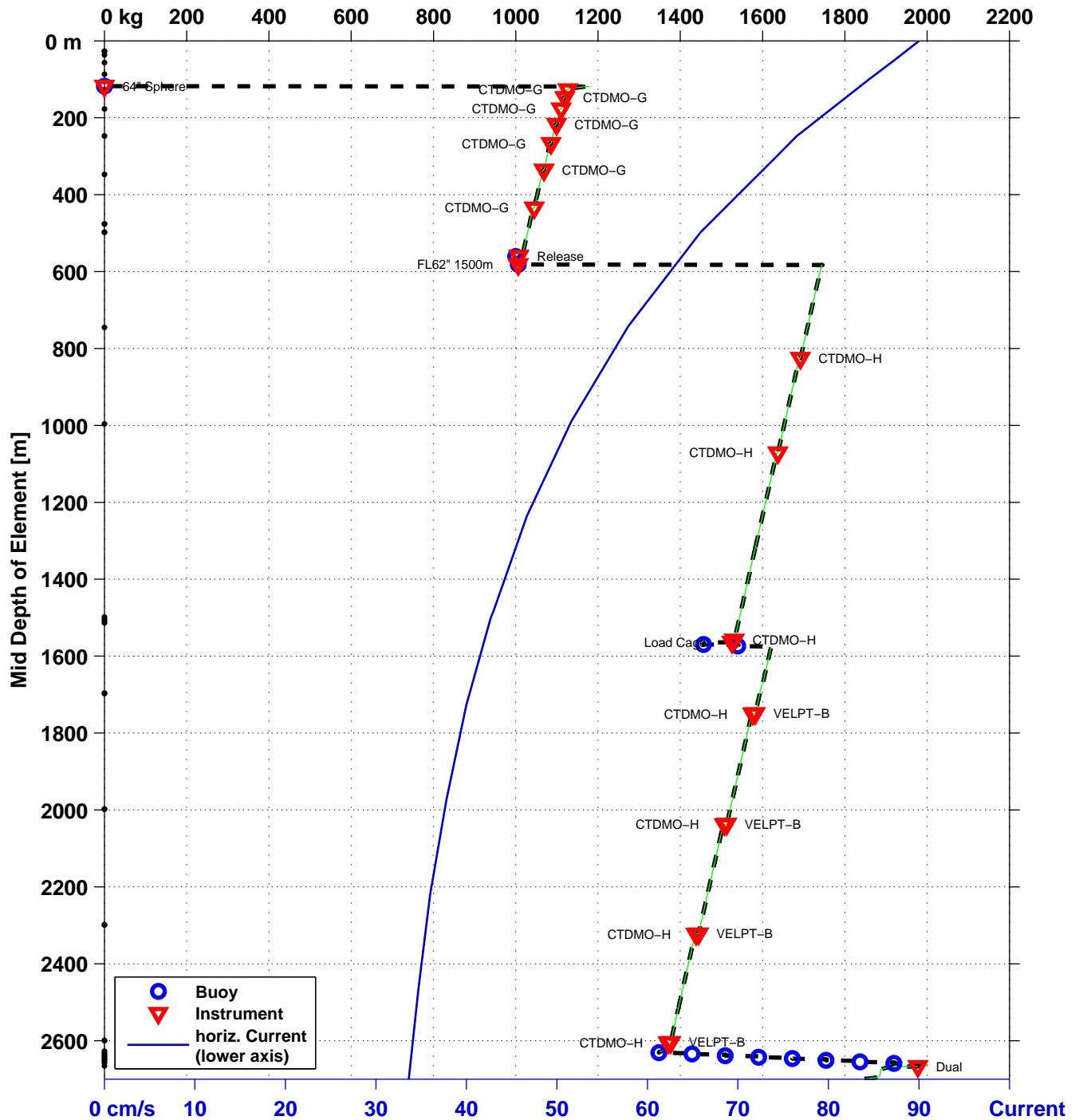
## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



By: P. Chua	05-Aug-2014	DCN: 3202-00011	REV: B	REF.DES. GI04FLMA
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Source: 05-Aug-2014 14:22:15, ...Paul's m-files\OON\IrmingerSea\gi04flmadeploy.cfg  
 Author: 05-Aug-2014 14:22:38, pchua@(PCWIN64)

### Event #003 – Tension [kg] Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf



**Event #003: Vert / Horiz anchor load : 1764 kg / 550 kg**  
**Vert / Horiz anchor safety : 125 % / 120 %,**  
**Safe Wet MACE anchor weight : 2424 kg, (max. 500 kg or Horiz. safety)**  
**Wet / Dry MACE anchor weight : 2742 kg / 3170 kg**



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Result

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
151	306	64" Sphere 100	2.3	1180.0	2.087	0.50	0.84	38.1	0.0	0.0	0.00	0.00	116.5	90.5	663.3	1.9
150	17	U-Joint	0.3	-16.3	0.090	1.50	0.83	5.0	1180.6	7.4	0.00	0.00	118.9	90.5	663.2	1.9
149	141	1/2" EM chain	5.0	-35.0	1.000	1.30	0.83	47.1	1164.3	11.6	0.00	0.00	119.5	90.5	663.2	4.1
148	13	ind. term	0.1	-2.4	0.005	1.50	0.83	0.3	1129.6	7.1	0.00	0.00	124.1	90.5	663.0	4.6
147	103	5/16" NILSPIN	3.0	-0.6	0.029	1.10	0.83	1.1	1127.2	24.2	0.01	0.25	124.6	90.5	662.9	4.6
146	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.83	2.1	1126.6	11.3	0.00	0.00	127.1	90.5	662.7	4.7
145	103	5/16" NILSPIN	20.0	-4.3	0.191	1.10	0.83	7.4	1123.8	24.2	0.05	0.25	127.6	90.5	662.7	5.2
144	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.82	2.1	1119.6	11.2	0.00	0.00	147.1	90.4	661.0	5.2
143	103	5/16" NILSPIN	30.1	-6.4	0.286	1.10	0.81	10.7	1116.8	24.0	0.07	0.25	147.6	90.4	661.0	5.9
142	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.80	2.0	1110.4	11.1	0.00	0.00	177.0	90.3	658.0	5.9
141	103	5/16" NILSPIN	40.1	-8.5	0.381	1.10	0.79	13.5	1107.6	23.8	0.10	0.24	177.5	90.3	658.0	6.7
140	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.78	1.9	1099.2	11.0	0.00	0.00	216.9	90.0	653.6	6.8
139	103	5/16" NILSPIN	50.1	-10.6	0.476	1.10	0.77	15.8	1096.4	23.6	0.12	0.24	217.4	90.0	653.6	7.8
138	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.76	1.8	1085.9	10.9	0.00	0.00	266.6	89.6	647.2	7.8
137	103	5/16" NILSPIN	70.2	-14.9	0.667	1.10	0.74	20.4	1083.1	23.3	0.17	0.24	267.1	89.6	647.2	9.1
136	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.73	1.6	1068.4	10.7	0.00	0.00	336.0	88.9	636.8	9.1
135	103	5/16" NILSPIN	100.2	-21.3	0.953	1.10	0.71	26.1	1065.7	22.9	0.23	0.23	336.5	88.9	636.8	10.9
134	374	CTDMO-G P1000m	0.0	-2.8	0.042	1.40	0.69	1.4	1044.8	10.4	0.00	0.00	434.7	87.3	619.3	10.9
133	103	5/16" NILSPIN	127.3	-27.1	1.210	1.10	0.66	28.4	1042.0	22.4	0.29	0.23	435.2	87.3	619.3	12.9
132	13	ind. term	0.1	-2.4	0.005	1.50	0.64	0.2	1015.7	6.3	0.00	0.00	559.2	84.6	593.0	12.9
131	15	coupler ec	0.2	-6.0	0.020	1.50	0.64	0.7	1013.4	6.3	0.00	0.00	559.4	84.6	592.9	12.9
129	479	Release Float	1.0	0.0	0.592	1.20	0.64	15.0	1007.5	10.1	0.00	0.00	560.0	84.5	592.9	13.1
127	15	coupler ec	0.2	-6.0	0.020	1.50	0.64	0.7	1008.0	6.3	0.00	0.00	560.6	84.5	592.7	13.9
126	13	ind. term	0.1	-2.4	0.005	1.50	0.64	0.2	1002.2	6.3	0.00	0.00	560.7	84.5	592.6	14.1
125	256	CF14-1000	0.0	13.0	0.225	0.50	0.64	2.4	999.9	16.7	0.00	0.00	560.7	84.5	592.6	14.1
123	103	5/16" NILSPIN	10.0	-2.1	0.095	1.10	0.64	2.0	1012.6	21.8	0.02	0.22	561.2	84.5	592.6	14.2
122	103	5/16" NILSPIN	10.0	-2.1	0.095	1.10	0.63	2.0	1010.5	21.7	0.02	0.22	571.0	84.2	590.1	14.3
121	13	ind. term	0.1	-2.4	0.005	1.50	0.63	0.2	1008.5	6.3	0.00	0.00	580.2	83.9	587.7	14.4
120	326	FL62" 1500m ADC	2.8	750.0	1.887	0.50	0.63	19.7	1006.2	10.1	0.00	0.00	581.7	83.9	587.7	14.4





## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	Tension [%]	Stretch [m]	Stretch [%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
119	13	ind. term	0.1	-2.4	0.005	1.50	0.63	0.2	1745.6	10.9	0.00	0.00	583.1	83.8	586.9	8.9
118	103	5/16" NILSPIN	245.9	-52.2	2.335	1.10	0.59	45.2	1743.2	37.5	0.93	0.38	583.6	83.8	586.9	10.7
117	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.56	0.9	1691.9	16.9	0.00	0.00	825.4	80.2	544.9	10.7
116	103	5/16" NILSPIN	250.9	-53.3	2.382	1.10	0.53	35.8	1689.1	36.3	0.92	0.37	825.9	80.2	544.9	12.4
115	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.50	0.8	1637.1	16.4	0.00	0.00	1071.2	75.0	494.4	12.4
114	103	5/16" NILSPIN	250.9	-53.3	2.383	1.10	0.48	28.7	1634.4	35.1	0.89	0.36	1071.7	75.0	494.4	13.9
113	103	5/16" NILSPIN	250.9	-53.3	2.383	1.10	0.44	23.7	1582.7	34.0	0.86	0.35	1315.9	68.4	437.0	15.3
112	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.42	0.5	1531.4	15.3	0.00	0.00	1558.1	60.2	373.6	15.3
111	103	5/16" NILSPIN	5.0	-1.1	0.048	1.10	0.42	0.4	1528.7	32.9	0.02	0.34	1558.6	60.2	373.6	15.4
110	13	ind. term	0.1	-2.4	0.005	1.50	0.42	0.1	1527.7	9.5	0.00	0.00	1563.0	60.0	372.3	15.4
109	300	Load Cage	1.5	-60.0	0.300	1.30	0.42	3.6	1525.4	15.3	0.00	0.00	1563.8	60.0	372.2	15.4
108	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1467.8	12.2	0.00	0.00	1564.5	60.0	371.8	16.2
107	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.42	0.1	1467.2	12.2	0.00	0.00	1564.6	60.0	371.8	16.2
106	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1466.5	12.2	0.00	0.00	1564.7	60.0	371.8	16.2
105	181	1/2" MR	2.5	-7.6	0.050	1.60	0.42	0.7	1465.9	14.7	0.00	0.00	1565.2	60.0	371.8	16.3
104	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1458.6	12.2	0.00	0.00	1567.2	59.9	371.1	16.4
103	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.42	0.1	1458.0	12.1	0.00	0.00	1567.3	59.9	371.0	16.4
102	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1457.3	12.1	0.00	0.00	1567.3	59.9	371.0	16.4
101	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.42	5.4	1456.6	14.6	0.00	0.00	1569.4	59.9	371.0	16.4
100	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1541.5	12.8	0.00	0.00	1571.2	59.7	369.9	15.7
99	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.42	0.1	1540.8	12.8	0.00	0.00	1571.3	59.7	369.8	15.7
98	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1540.1	12.8	0.00	0.00	1571.4	59.7	369.8	15.7
97	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.42	5.4	1539.5	15.4	0.00	0.00	1573.4	59.7	369.8	15.7
96	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1624.6	13.5	0.00	0.00	1575.3	59.5	368.7	15.1
95	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.42	0.1	1623.9	13.5	0.00	0.00	1575.4	59.5	368.7	15.1
94	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1623.2	13.5	0.00	0.00	1575.5	59.5	368.7	15.1
92	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1622.6	13.5	0.00	0.00	1575.6	59.5	368.6	15.1
91	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.42	0.1	1622.0	13.5	0.00	0.00	1575.6	59.5	368.6	15.1
90	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.42	0.1	1621.3	13.5	0.00	0.00	1575.7	59.5	368.6	15.1



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
89	103	5/16" NILSPIN	100.4	-21.3	0.953	1.10	0.41	8.4	1620.6	34.8	0.36	0.36	1576.3	59.5	368.6	15.6
88	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.41	0.1	1600.2	13.3	0.00	0.00	1672.6	55.9	342.0	15.6
87	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.41	0.1	1599.5	13.3	0.00	0.00	1672.6	55.9	342.0	15.6
86	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.41	0.1	1598.8	13.3	0.00	0.00	1672.7	55.9	341.9	15.7
85	103	5/16" NILSPIN	79.3	-16.8	0.753	1.10	0.40	6.2	1598.2	34.3	0.28	0.35	1673.3	55.9	341.9	16.1
84	347	VELPT-B	0.0	-6.0	0.063	1.20	0.40	0.6	1582.1	15.8	0.00	0.00	1749.0	52.9	320.2	16.1
83	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.40	0.1	1576.3	33.9	0.00	0.35	1749.5	52.9	320.2	16.1
82	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.40	0.5	1576.1	15.8	0.00	0.00	1750.0	52.9	320.0	16.2
81	103	5/16" NILSPIN	300.0	-63.7	2.849	1.10	0.39	21.3	1573.5	33.8	1.02	0.34	1750.5	52.9	320.0	17.7
80	347	VELPT-B	0.0	-6.0	0.063	1.20	0.37	0.5	1512.8	15.1	0.00	0.00	2037.0	39.8	232.5	17.7
79	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.37	0.1	1507.1	32.4	0.00	0.33	2037.5	39.8	232.5	17.8
78	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.37	0.4	1506.9	15.1	0.00	0.00	2037.9	39.8	232.2	17.8
77	103	5/16" NILSPIN	300.0	-63.7	2.849	1.10	0.36	18.4	1504.3	32.3	0.98	0.33	2038.4	39.8	232.2	19.4
76	347	VELPT-B	0.0	-6.0	0.063	1.20	0.35	0.5	1444.2	14.4	0.00	0.00	2322.2	24.1	136.4	19.4
75	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.35	0.1	1438.6	30.9	0.00	0.32	2322.7	24.1	136.4	19.5
74	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.35	0.4	1438.4	14.4	0.00	0.00	2323.1	24.0	136.1	19.5
73	103	5/16" NILSPIN	299.9	-63.7	2.849	1.10	0.35	16.3	1435.7	30.9	0.93	0.31	2323.6	24.0	136.1	21.2
72	347	VELPT-B	0.0	-6.0	0.063	1.20	0.34	0.4	1376.4	13.8	0.00	0.00	2604.3	5.3	31.8	21.2
71	103	5/16" NILSPIN	1.0	-0.2	0.010	1.10	0.34	0.1	1370.8	29.5	0.00	0.30	2604.8	5.3	31.8	21.3
70	375	CTDMO-H P3500m	0.0	-2.8	0.042	1.40	0.34	0.3	1370.6	13.7	0.00	0.00	2605.3	5.2	31.4	21.3
69	103	5/16" NILSPIN	20.1	-4.3	0.191	1.10	0.34	1.0	1368.0	29.4	0.06	0.30	2605.8	5.2	31.4	21.4
68	491	Parachute	0.0	0.0	1.500	0.50	0.34	4.6	1364.1	13.6	0.00	0.00	2624.0	3.8	24.1	21.4
67	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1365.8	11.4	0.00	0.00	2624.0	3.8	24.1	21.6
66	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1365.2	11.4	0.00	0.00	2624.1	3.8	24.1	21.6
65	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1364.5	11.4	0.00	0.00	2624.2	3.8	24.0	21.6
64	181	1/2" MR	5.0	-15.2	0.100	1.60	0.34	0.8	1363.9	13.6	0.00	0.00	2624.7	3.8	24.0	21.9
63	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1349.8	11.2	0.00	0.00	2628.9	3.5	22.2	21.9
62	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1349.2	11.2	0.00	0.00	2628.9	3.4	22.1	21.9
61	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1348.5	11.2	0.00	0.00	2629.0	3.4	22.1	22.0



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
60	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.4	1347.9	13.5	0.00	0.00	2631.0	3.4	22.1	22.0
59	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1430.1	11.9	0.00	0.00	2632.8	3.1	20.6	20.8
58	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1429.5	11.9	0.00	0.00	2632.9	3.1	20.5	20.8
57	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1428.8	11.9	0.00	0.00	2633.0	3.1	20.5	20.8
56	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.4	1428.2	14.3	0.00	0.00	2635.0	3.1	20.5	20.8
55	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1511.0	12.6	0.00	0.00	2636.8	2.9	19.1	19.8
54	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1510.4	12.6	0.00	0.00	2636.8	2.9	19.0	19.8
53	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1509.7	12.6	0.00	0.00	2636.9	2.9	19.0	19.8
52	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.5	1509.1	15.1	0.00	0.00	2639.0	2.9	19.0	19.8
51	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1592.4	13.3	0.00	0.00	2640.7	2.6	17.6	18.9
50	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1591.8	13.3	0.00	0.00	2640.8	2.6	17.6	18.9
49	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1591.1	13.3	0.00	0.00	2640.9	2.6	17.6	18.9
48	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.5	1590.5	15.9	0.00	0.00	2642.9	2.6	17.5	18.9
47	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1674.1	14.0	0.00	0.00	2644.8	2.4	16.2	18.1
46	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1673.5	13.9	0.00	0.00	2644.9	2.4	16.2	18.1
45	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1672.8	13.9	0.00	0.00	2644.9	2.4	16.2	18.1
44	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.5	1672.2	16.7	0.00	0.00	2647.0	2.4	16.2	18.1
43	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1756.2	14.6	0.00	0.00	2648.8	2.2	14.9	17.3
42	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1755.6	14.6	0.00	0.00	2648.9	2.2	14.9	17.3
41	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1754.9	14.6	0.00	0.00	2649.0	2.2	14.9	17.3
40	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.5	1754.3	17.5	0.00	0.00	2651.0	2.2	14.8	17.3
39	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1838.6	15.3	0.00	0.00	2652.9	2.0	13.7	16.6
38	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1838.0	15.3	0.00	0.00	2652.9	2.0	13.6	16.6
37	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1837.3	15.3	0.00	0.00	2653.0	2.0	13.6	16.7
36	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.5	1836.7	18.4	0.00	0.00	2655.1	2.0	13.6	16.7
35	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1921.3	16.0	0.00	0.00	2656.9	1.8	12.4	16.0
34	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1920.7	16.0	0.00	0.00	2657.0	1.8	12.4	16.0
33	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1920.0	16.0	0.00	0.00	2657.1	1.8	12.4	16.0
32	274	HR17-4 serial	4.0	88.0	1.000	0.60	0.34	3.5	1919.3	19.2	0.00	0.00	2659.1	1.8	12.4	16.0



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Result, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
31	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	2004.2	16.7	0.00	0.00	2661.0	1.6	11.3	15.4
30	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	2003.5	16.7	0.00	0.00	2661.1	1.6	11.3	15.5
29	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	2002.8	16.7	0.00	0.00	2661.2	1.6	11.2	15.5
28	181	1/2" MR	5.0	-15.2	0.100	1.60	0.34	0.9	2002.2	20.0	0.00	0.00	2661.7	1.6	11.2	15.6
27	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1987.6	16.6	0.00	0.00	2666.0	1.4	9.9	15.6
26	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1986.9	16.6	0.00	0.00	2666.1	1.4	9.8	15.6
25	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.34	0.1	1986.2	11.0	0.00	0.00	2666.2	1.4	9.8	15.6
24	94	Swivel 5t	0.2	-5.3	0.025	1.20	0.34	0.2	1985.2	19.9	0.00	0.00	2666.4	1.4	9.8	15.6
23	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.34	0.1	1980.1	11.0	0.00	0.00	2666.5	1.4	9.7	15.7
22	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1979.0	16.5	0.00	0.00	2666.6	1.4	9.7	15.7
21	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.34	0.1	1978.3	11.0	0.00	0.00	2666.7	1.4	9.7	15.7
20	478	Dual Release	1.0	-61.0	0.288	1.20	0.34	2.1	1977.3	19.8	0.00	0.00	2667.3	1.4	9.7	15.7
19	480	1/2" dropchain	0.6	-6.8	0.024	1.60	0.34	0.2	1918.8	12.0	0.00	0.00	2668.0	1.4	9.4	16.3
18	76	ML 17t 1-1/4"	0.2	-4.8	0.026	1.50	0.34	0.2	1912.2	4.3	0.00	0.00	2668.4	1.4	9.2	16.3
17	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.34	0.1	1907.6	7.9	0.00	0.00	2668.6	1.3	9.1	16.4
16	64	EL 6t 7/8"	0.1	-1.0	0.012	1.50	0.34	0.1	1906.1	7.9	0.00	0.00	2668.7	1.3	9.1	16.4
15	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1905.1	15.9	0.00	0.00	2668.8	1.3	9.1	16.4
14	181	1/2" MR	5.0	-15.2	0.100	1.60	0.34	0.9	1904.5	19.0	0.00	0.00	2669.3	1.3	9.1	16.5
13	32	AS 3t 5/8"	0.1	-0.7	0.006	1.50	0.34	0.1	1889.9	15.7	0.00	0.00	2673.6	1.1	7.6	16.6
12	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1889.3	15.7	0.00	0.00	2673.7	1.1	7.6	16.6
11	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.34	0.1	1888.6	7.9	0.00	0.00	2673.8	1.1	7.6	16.6
10	113	Nystron-1"	20.7	-2.0	0.520	1.30	0.34	3.7	1887.1	11.2	0.67	3.37	2674.4	1.1	7.6	16.7
9	491	Parachute	0.0	0.0	1.500	0.50	0.34	4.5	1885.3	18.9	0.00	0.00	2693.7	0.2	1.6	16.7
8	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.34	0.1	1886.6	7.9	0.00	0.00	2693.7	0.2	1.6	16.9
7	64	EL 6t 7/8"	0.1	-1.0	0.012	1.50	0.34	0.1	1885.1	7.9	0.00	0.00	2693.8	0.2	1.6	16.9
6	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.34	0.1	1884.1	7.9	0.00	0.00	2693.9	0.2	1.6	16.9
5	183	3/4" MR	5.0	-33.1	0.150	1.60	0.34	1.3	1882.7	7.8	0.00	0.00	2694.5	0.2	1.5	17.2
4	33	AS 5t 3/4"	0.1	-1.1	0.010	1.50	0.34	0.1	1851.1	10.3	0.00	0.00	2698.8	0.0	0.1	17.3
3	53	PL 3t 3/4"	0.1	-0.7	0.010	1.50	0.34	0.1	1850.1	15.4	0.00	0.00	2698.9	0.0	0.1	17.3



**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

**Event #003 – Simulation Result, cont.**

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Mooring Element	Length [m]	Buoy [kg]	Area [m^2]	Cd	Current [m/s]	Drag [kg]	Tension [kg]	[%]	Stretch [m]	[%]	Depth [m]	dZ [m]	dXY [m]	Tilt [deg]
2	34	AS 6t 7/8"	0.1	-1.6	0.012	1.50	0.34	0.1	1849.4	7.7	0.00	0.00	2699.0	0.0	0.0	17.3
1	522	double MACE Anch	1.0	-2742.1	1.200	1.20	0.34	8.6	1847.9	30.8	0.00	0.00	2700.0	0.0	0.0	0.0

Max. 37.5% Static Tension at:

118	103	5/16" NILSPIN	245.9	-52.2	2.335	1.10	0.59	45.2	1743.2	37.5	0.93	0.38	583.6	83.8	586.9	10.7
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Vert/Horiz Anchor Load : 1764 kg / 550 kg  
 Wet MACE Anchor Weight : 2742 kg  
 Safe MACE Anchor Weight : 2424 kg



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Parameter

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
151	306	64" Sphere	2.087	2.087	2.087	0.50	0.50	0.50	0.84	38.1	0.0	0.0	0.0	1180.0	0.0	0.0	0.0	1.9
150	17	U-Joint	0.090	0.090	0.003	1.50	1.50	1.50	0.83	5.0	0.0	0.0	-0.2	-16.3	38.1	0.0	1180.0	1.9
149	141	1/2" EM chai	0.998	1.000	0.054	1.30	1.30	1.00	0.83	47.1	0.0	0.0	-2.5	-35.0	62.0	0.0	1148.7	4.1
148	13	ind. term	0.005	0.005	0.000	1.50	1.50	1.50	0.83	0.3	0.0	0.0	-0.0	-2.4	90.3	0.0	1126.0	4.6
147	103	5/16" NILSPI	0.028	0.029	0.002	1.09	1.10	0.00	0.83	1.1	0.0	0.0	-0.1	-0.6	90.9	0.0	1123.3	4.6
146	374	CTDMO-G P100	0.042	0.042	0.003	1.40	1.40	1.00	0.83	2.1	0.0	0.0	-0.2	-2.8	91.7	0.0	1122.9	4.7
145	103	5/16" NILSPI	0.190	0.191	0.017	1.09	1.10	0.00	0.83	7.4	0.0	0.0	-0.6	-4.3	97.3	0.0	1117.6	5.2
144	374	CTDMO-G P100	0.042	0.042	0.004	1.39	1.40	1.00	0.82	2.1	0.0	0.0	-0.2	-2.8	101.2	0.0	1115.0	5.2
143	103	5/16" NILSPI	0.285	0.286	0.028	1.09	1.10	0.00	0.81	10.7	0.0	0.0	-1.0	-6.4	108.4	0.0	1108.4	5.9
142	374	CTDMO-G P100	0.042	0.042	0.004	1.39	1.40	0.99	0.80	2.0	0.0	0.0	-0.2	-2.8	113.9	0.0	1104.6	5.9
141	103	5/16" NILSPI	0.379	0.381	0.042	1.09	1.10	0.00	0.79	13.5	0.0	0.0	-1.5	-8.5	122.6	0.0	1096.7	6.7
140	374	CTDMO-G P100	0.042	0.042	0.005	1.39	1.40	0.99	0.78	1.9	0.0	0.0	-0.2	-2.8	129.4	0.0	1091.5	6.8
139	103	5/16" NILSPI	0.473	0.476	0.061	1.08	1.10	0.00	0.77	15.8	0.0	0.0	-2.0	-10.7	139.1	0.0	1082.3	7.8
138	374	CTDMO-G P100	0.042	0.042	0.006	1.39	1.40	0.99	0.76	1.8	0.0	0.0	-0.2	-2.8	147.1	0.0	1075.9	7.8
137	103	5/16" NILSPI	0.660	0.667	0.099	1.07	1.10	0.00	0.74	20.4	0.0	0.0	-3.0	-14.9	159.1	0.0	1064.0	9.1
136	374	CTDMO-G P100	0.042	0.042	0.007	1.38	1.40	0.99	0.73	1.6	0.0	0.0	-0.3	-2.8	169.3	0.0	1054.9	9.1
135	103	5/16" NILSPI	0.938	0.953	0.166	1.06	1.10	0.00	0.71	26.1	0.0	0.0	-4.5	-21.3	184.2	0.0	1039.1	10.9
134	374	CTDMO-G P100	0.041	0.042	0.008	1.37	1.40	0.98	0.69	1.4	0.0	0.0	-0.3	-2.8	197.1	0.0	1026.0	10.9
133	103	5/16" NILSPI	1.184	1.210	0.251	1.05	1.10	0.00	0.66	28.4	0.0	0.0	-5.9	-27.1	213.0	0.0	1006.6	12.9
132	13	ind. term	0.005	0.005	0.001	1.46	1.50	1.46	0.64	0.2	0.0	0.0	-0.0	-2.4	226.9	0.0	990.0	12.9
131	15	coupler ec	0.019	0.020	0.004	1.46	1.50	1.46	0.64	0.7	0.0	0.0	-0.1	-6.0	227.1	0.0	987.6	12.9
129	479	Release Floa	0.577	0.592	0.134	1.17	1.20	0.88	0.64	15.0	0.0	0.0	-3.2	0.0	227.7	0.0	981.5	13.1
127	15	coupler ec	0.019	0.020	0.005	1.46	1.50	1.46	0.64	0.7	0.0	0.0	-0.1	-6.0	242.7	0.0	978.3	13.9
126	13	ind. term	0.005	0.005	0.001	1.46	1.50	1.46	0.64	0.2	0.0	0.0	-0.0	-2.4	243.4	0.0	972.2	14.1
125	256	CF14-1000	0.218	0.225	0.055	0.48	0.50	0.39	0.64	2.4	0.0	0.0	-0.5	13.0	243.6	0.0	969.8	14.1
123	103	5/16" NILSPI	0.092	0.095	0.023	1.03	1.10	0.00	0.64	2.0	0.0	0.0	-0.5	-2.1	246.9	0.0	981.1	14.2
122	103	5/16" NILSPI	0.092	0.095	0.023	1.03	1.10	0.00	0.63	2.0	0.0	0.0	-0.5	-2.1	248.9	0.0	978.4	14.3
121	13	ind. term	0.005	0.005	0.001	1.45	1.50	1.45	0.63	0.2	0.0	0.0	-0.0	-2.4	250.0	0.0	977.0	14.4
120	326	FL62" 1500m	1.887	1.887	1.887	0.50	0.50	0.50	0.63	19.7	0.0	0.0	0.0	750.0	250.2	0.0	974.6	14.4
119	13	ind. term	0.005	0.005	0.001	1.48	1.50	1.48	0.63	0.2	0.0	0.0	-0.0	-2.4	269.9	0.0	1724.6	8.9



### Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSealgi04flmadeploy.cfg  
**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
118	103	5/16" NILSPI	2.300	2.335	0.399	1.06	1.10	0.00	0.59	45.2	0.0	0.0	-7.7	-52.2	293.6	0.0	1692.3	10.7
117	375	CTDMO-H P350	0.041	0.042	0.008	1.38	1.40	0.98	0.56	0.9	0.0	0.0	-0.2	-2.8	315.2	0.0	1662.3	10.7
116	103	5/16" NILSPI	2.334	2.382	0.480	1.05	1.10	0.00	0.53	35.8	0.0	0.0	-7.2	-53.3	334.7	0.0	1629.1	12.4
115	375	CTDMO-H P350	0.041	0.042	0.009	1.37	1.40	0.98	0.50	0.8	0.0	0.0	-0.2	-2.8	352.0	0.0	1598.8	12.4
114	103	5/16" NILSPI	2.319	2.383	0.545	1.04	1.10	0.00	0.48	28.7	0.0	0.0	-6.5	-53.3	367.6	0.0	1566.1	13.9
113	103	5/16" NILSPI	2.305	2.383	0.602	1.02	1.10	0.00	0.44	23.7	0.0	0.0	-6.0	-53.3	393.6	0.0	1506.5	15.3
112	375	CTDMO-H P350	0.041	0.042	0.011	1.35	1.40	0.96	0.42	0.5	0.0	0.0	-0.1	-2.8	405.2	0.0	1476.9	15.3
111	103	5/16" NILSPI	0.046	0.048	0.013	1.01	1.10	0.00	0.42	0.4	0.0	0.0	-0.1	-1.1	405.9	0.0	1473.5	15.4
110	13	ind. term	0.005	0.005	0.001	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-2.4	406.1	0.0	1472.7	15.4
109	300	Load Cage	0.289	0.300	0.080	1.25	1.30	0.87	0.42	3.6	0.0	0.0	-0.9	-60.0	406.2	0.0	1470.3	15.4
108	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	409.8	0.0	1409.5	16.2
107	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	409.9	0.0	1408.8	16.2
106	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	410.0	0.0	1408.0	16.2
105	181	1/2" MR	0.048	0.050	0.014	1.54	1.60	0.96	0.42	0.7	0.0	0.0	-0.2	-7.6	410.3	0.0	1404.7	16.3
104	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	410.8	0.0	1399.5	16.4
103	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	410.9	0.0	1398.9	16.4
102	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	411.0	0.0	1398.1	16.4
101	274	HR17-4 seria	0.959	1.000	0.282	0.58	0.60	1.02	0.42	5.4	0.0	0.0	-1.3	88.0	411.1	0.0	1397.4	16.4
100	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	416.5	0.0	1484.1	15.7
99	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	416.6	0.0	1483.4	15.7
98	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.42	0.1	0.0	0.0	-0.0	-0.7	416.7	0.0	1482.7	15.7
97	274	HR17-4 seria	0.963	1.000	0.271	0.58	0.60	1.02	0.42	5.4	0.0	0.0	-1.3	88.0	416.8	0.0	1482.0	15.7
96	32	AS 3t 5/8"	0.006	0.006	0.002	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-0.7	422.2	0.0	1568.7	15.1
95	53	PL 3t 3/4"	0.009	0.010	0.002	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-0.7	422.3	0.0	1568.1	15.1
94	32	AS 3t 5/8"	0.006	0.006	0.002	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-0.7	422.5	0.0	1567.3	15.1
92	32	AS 3t 5/8"	0.006	0.006	0.002	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-0.7	422.6	0.0	1566.6	15.1
91	53	PL 3t 3/4"	0.009	0.010	0.003	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-0.7	422.7	0.0	1565.9	15.1
90	32	AS 3t 5/8"	0.006	0.006	0.002	1.45	1.50	1.45	0.42	0.1	0.0	0.0	-0.0	-0.7	422.8	0.0	1565.2	15.1
89	103	5/16" NILSPI	0.919	0.953	0.253	1.02	1.10	0.00	0.41	8.4	0.0	0.0	-2.2	-21.3	427.1	0.0	1552.8	15.6
88	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.41	0.1	0.0	0.0	-0.0	-0.7	431.2	0.0	1541.0	15.6



## Global Irminger MFM A 2014 Mooring Model Analysis designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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**Source:** 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

**Author:** 05-Aug-2014 14:22:39, pchua@(PCWIN64)

### Event #003 – Simulation Parameter, cont.

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
87	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.41	0.1	0.0	0.0	-0.0	-0.7	431.3	0.0	1540.3	15.6
86	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.41	0.1	0.0	0.0	-0.0	-0.7	431.5	0.0	1539.5	15.7
85	103	5/16" NILSPI	0.724	0.753	0.206	1.01	1.10	0.00	0.40	6.2	0.0	0.0	-1.7	-16.8	434.6	0.0	1529.7	16.1
84	347	VELPT-B	0.061	0.063	0.017	1.15	1.20	0.86	0.40	0.6	0.0	0.0	-0.2	-6.0	437.8	0.0	1520.3	16.1
83	103	5/16" NILSPI	0.009	0.010	0.003	1.01	1.10	0.00	0.40	0.1	0.0	0.0	-0.0	-0.2	438.4	0.0	1514.1	16.1
82	375	CTDMO-H P350	0.041	0.042	0.012	1.34	1.40	0.96	0.40	0.5	0.0	0.0	-0.1	-2.8	438.5	0.0	1513.9	16.2
81	103	5/16" NILSPI	2.726	2.849	0.831	1.00	1.10	0.00	0.39	21.3	0.0	0.0	-6.2	-63.7	449.8	0.0	1476.1	17.7
80	347	VELPT-B	0.060	0.063	0.019	1.14	1.20	0.86	0.37	0.5	0.0	0.0	-0.2	-6.0	460.2	0.0	1441.1	17.7
79	103	5/16" NILSPI	0.009	0.010	0.003	0.99	1.10	0.00	0.37	0.1	0.0	0.0	-0.0	-0.2	460.7	0.0	1434.9	17.8
78	375	CTDMO-H P350	0.040	0.042	0.013	1.33	1.40	0.95	0.37	0.4	0.0	0.0	-0.1	-2.8	460.8	0.0	1434.7	17.8
77	103	5/16" NILSPI	2.700	2.849	0.910	0.98	1.10	0.00	0.36	18.4	0.0	0.0	-5.9	-63.7	470.6	0.0	1397.1	19.4
76	347	VELPT-B	0.059	0.063	0.021	1.13	1.20	0.85	0.35	0.5	0.0	0.0	-0.1	-6.0	479.6	0.0	1362.2	19.4
75	103	5/16" NILSPI	0.009	0.010	0.003	0.97	1.10	0.00	0.35	0.1	0.0	0.0	-0.0	-0.2	480.1	0.0	1356.1	19.5
74	375	CTDMO-H P350	0.040	0.042	0.014	1.32	1.40	0.94	0.35	0.4	0.0	0.0	-0.1	-2.8	480.1	0.0	1355.9	19.5
73	103	5/16" NILSPI	2.672	2.849	0.991	0.95	1.10	0.00	0.35	16.3	0.0	0.0	-5.7	-63.7	488.8	0.0	1318.4	21.2
72	347	VELPT-B	0.059	0.063	0.023	1.12	1.20	0.84	0.34	0.4	0.0	0.0	-0.1	-6.0	496.8	0.0	1283.6	21.2
71	103	5/16" NILSPI	0.009	0.010	0.003	0.94	1.10	0.00	0.34	0.1	0.0	0.0	-0.0	-0.2	497.2	0.0	1277.5	21.3
70	375	CTDMO-H P350	0.039	0.042	0.015	1.30	1.40	0.93	0.34	0.3	0.0	0.0	-0.1	-2.8	497.3	0.0	1277.2	21.3
69	103	5/16" NILSPI	0.177	0.191	0.069	0.94	1.10	0.00	0.34	1.0	0.0	0.0	-0.4	-4.3	498.1	0.0	1272.1	21.4
68	491	Parachute	1.500	1.500	1.500	0.50	0.50	1.33	0.34	4.6	0.0	0.0	0.0	0.0	498.6	0.0	1269.7	21.4
67	32	AS 3t 5/8"	0.006	0.006	0.002	1.39	1.50	1.39	0.34	0.1	0.0	0.0	-0.0	-0.7	503.2	0.0	1269.7	21.6
66	53	PL 3t 3/4"	0.009	0.010	0.004	1.39	1.50	1.39	0.34	0.1	0.0	0.0	-0.0	-0.7	503.3	0.0	1269.0	21.6
65	32	AS 3t 5/8"	0.006	0.006	0.002	1.39	1.50	1.39	0.34	0.1	0.0	0.0	-0.0	-0.7	503.3	0.0	1268.2	21.6
64	181	1/2" MR	0.093	0.100	0.037	1.49	1.60	0.93	0.34	0.8	0.0	0.0	-0.3	-15.2	503.7	0.0	1261.4	21.9
63	32	AS 3t 5/8"	0.006	0.006	0.002	1.39	1.50	1.39	0.34	0.1	0.0	0.0	-0.0	-0.7	504.3	0.0	1252.1	21.9
62	53	PL 3t 3/4"	0.009	0.010	0.004	1.39	1.50	1.39	0.34	0.1	0.0	0.0	-0.0	-0.7	504.3	0.0	1251.4	21.9
61	32	AS 3t 5/8"	0.006	0.006	0.002	1.39	1.50	1.39	0.34	0.1	0.0	0.0	-0.0	-0.7	504.4	0.0	1250.6	22.0
60	274	HR17-4 seria	0.927	1.000	0.374	0.56	0.60	0.98	0.34	3.4	0.0	0.0	-1.0	88.0	504.5	0.0	1249.9	22.0
59	32	AS 3t 5/8"	0.006	0.006	0.002	1.40	1.50	1.40	0.34	0.1	0.0	0.0	-0.0	-0.7	507.9	0.0	1336.9	20.8
58	53	PL 3t 3/4"	0.009	0.010	0.003	1.40	1.50	1.40	0.34	0.1	0.0	0.0	-0.0	-0.7	507.9	0.0	1336.2	20.8





**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

**Event #003 – Simulation Parameter, cont.**

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m^2	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
57	32	AS 3t 5/8"	0.006	0.006	0.002	1.40	1.50	1.40	0.34	0.1	0.0	0.0	-0.0	-0.7	508.0	0.0	1335.5	20.8
56	274	HR17-4 seria	0.935	1.000	0.356	0.56	0.60	0.99	0.34	3.4	0.0	0.0	-1.0	88.0	508.1	0.0	1334.8	20.8
55	32	AS 3t 5/8"	0.006	0.006	0.002	1.41	1.50	1.41	0.34	0.1	0.0	0.0	-0.0	-0.7	511.5	0.0	1421.8	19.8
54	53	PL 3t 3/4"	0.009	0.010	0.003	1.41	1.50	1.41	0.34	0.1	0.0	0.0	-0.0	-0.7	511.6	0.0	1421.1	19.8
53	32	AS 3t 5/8"	0.006	0.006	0.002	1.41	1.50	1.41	0.34	0.1	0.0	0.0	-0.0	-0.7	511.6	0.0	1420.4	19.8
52	274	HR17-4 seria	0.941	1.000	0.339	0.56	0.60	1.00	0.34	3.5	0.0	0.0	-1.0	88.0	511.7	0.0	1419.7	19.8
51	32	AS 3t 5/8"	0.006	0.006	0.002	1.42	1.50	1.42	0.34	0.1	0.0	0.0	-0.0	-0.7	515.2	0.0	1506.7	18.9
50	53	PL 3t 3/4"	0.009	0.010	0.003	1.42	1.50	1.42	0.34	0.1	0.0	0.0	-0.0	-0.7	515.2	0.0	1506.1	18.9
49	32	AS 3t 5/8"	0.006	0.006	0.002	1.42	1.50	1.42	0.34	0.1	0.0	0.0	-0.0	-0.7	515.3	0.0	1505.3	18.9
48	274	HR17-4 seria	0.946	1.000	0.324	0.57	0.60	1.00	0.34	3.5	0.0	0.0	-0.9	88.0	515.4	0.0	1504.6	18.9
47	32	AS 3t 5/8"	0.006	0.006	0.002	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	518.9	0.0	1591.7	18.1
46	53	PL 3t 3/4"	0.009	0.010	0.003	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	518.9	0.0	1591.0	18.1
45	32	AS 3t 5/8"	0.006	0.006	0.002	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	519.0	0.0	1590.3	18.1
44	274	HR17-4 seria	0.951	1.000	0.310	0.57	0.60	1.01	0.34	3.5	0.0	0.0	-0.9	88.0	519.1	0.0	1589.6	18.1
43	32	AS 3t 5/8"	0.006	0.006	0.002	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	522.6	0.0	1676.7	17.3
42	53	PL 3t 3/4"	0.009	0.010	0.003	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	522.7	0.0	1676.0	17.3
41	32	AS 3t 5/8"	0.006	0.006	0.002	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	522.7	0.0	1675.2	17.3
40	274	HR17-4 seria	0.955	1.000	0.298	0.57	0.60	1.01	0.34	3.5	0.0	0.0	-0.9	88.0	522.8	0.0	1674.6	17.3
39	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	526.3	0.0	1761.7	16.6
38	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	526.4	0.0	1761.0	16.6
37	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	526.5	0.0	1760.3	16.7
36	274	HR17-4 seria	0.958	1.000	0.287	0.57	0.60	1.02	0.34	3.5	0.0	0.0	-0.9	88.0	526.5	0.0	1759.6	16.7
35	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	530.1	0.0	1846.7	16.0
34	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	530.1	0.0	1846.0	16.0
33	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	530.2	0.0	1845.3	16.0
32	274	HR17-4 seria	0.961	1.000	0.276	0.58	0.60	1.02	0.34	3.5	0.0	0.0	-0.8	88.0	530.3	0.0	1844.6	16.0
31	32	AS 3t 5/8"	0.006	0.006	0.002	1.45	1.50	1.45	0.34	0.1	0.0	0.0	-0.0	-0.7	533.8	0.0	1931.8	15.4
30	53	PL 3t 3/4"	0.009	0.010	0.003	1.45	1.50	1.45	0.34	0.1	0.0	0.0	-0.0	-0.7	533.9	0.0	1931.1	15.5
29	32	AS 3t 5/8"	0.006	0.006	0.002	1.45	1.50	1.45	0.34	0.1	0.0	0.0	-0.0	-0.7	534.0	0.0	1930.3	15.5
28	181	1/2" MR	0.096	0.100	0.027	1.54	1.60	0.96	0.34	0.9	0.0	0.0	-0.2	-15.2	534.4	0.0	1923.5	15.6



**Global Irminger MFM A 2014 Mooring Model Analysis**  
designed for 2700m Depth



<b>By: P. Chua</b>	<b>05-Aug-2014</b>	<b>DCN: 3202-00011</b>	<b>REV: B</b>	<b>REF.DES. GI04FLMA</b>
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Source: 05-Aug-2014 14:22:15, ...\\Paul's m-files\OOI\IrmingerSea\gi04flmadeploy.cfg

Author: 05-Aug-2014 14:22:39, pchua@(PCWIN64)

**Event #003 – Simulation Parameter, cont.**

Current Profile Reference: 3202-00007\_CGSN\_Site\_Characterization\_Irminger\_Sea.pdf

#	ID	Element	Ax [	Ay m <sup>2</sup>	Az ]	Cx	Cy	Cz	Current [m/s]	Fx [	Fy	Fz kg	Fc	Fb ]	Tx [	Ty kg	Tz ]	Tilt [deg]
27	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	534.9	0.0	1914.2	15.6
26	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	535.0	0.0	1913.6	15.6
25	33	AS 5t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.1	535.1	0.0	1912.8	15.6
24	94	Swivel 5t	0.024	0.025	0.007	1.16	1.20	1.16	0.34	0.2	0.0	0.0	-0.0	-5.3	535.2	0.0	1911.7	15.6
23	33	AS 5t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.1	535.4	0.0	1906.3	15.7
22	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	535.5	0.0	1905.2	15.7
21	33	AS 5t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.1	535.6	0.0	1904.5	15.7
20	478	Dual Release	0.277	0.288	0.078	1.16	1.20	0.87	0.34	2.1	0.0	0.0	-0.5	-61.0	535.6	0.0	1903.4	15.7
19	480	1/2" dropcha	0.023	0.024	0.007	1.54	1.60	0.96	0.34	0.2	0.0	0.0	-0.1	-6.8	537.7	0.0	1841.9	16.3
18	76	ML 17t 1-1/4	0.024	0.026	0.007	1.44	1.50	1.44	0.34	0.2	0.0	0.0	-0.1	-4.8	537.9	0.0	1835.0	16.3
17	34	AS 6t 7/8"	0.012	0.012	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.6	538.2	0.0	1830.1	16.4
16	64	EL 6t 7/8"	0.011	0.012	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.0	538.3	0.0	1828.5	16.4
15	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	538.4	0.0	1827.5	16.4
14	181	1/2" MR	0.096	0.100	0.028	1.53	1.60	0.96	0.34	0.9	0.0	0.0	-0.3	-15.2	538.8	0.0	1820.6	16.5
13	32	AS 3t 5/8"	0.006	0.006	0.002	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	539.3	0.0	1811.4	16.6
12	53	PL 3t 3/4"	0.009	0.010	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-0.7	539.4	0.0	1810.7	16.6
11	34	AS 6t 7/8"	0.012	0.012	0.004	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.6	539.5	0.0	1809.9	16.6
10	113	Nystron-1"	0.498	0.520	0.149	1.25	1.30	0.02	0.34	3.7	0.0	0.0	-1.1	-2.0	541.4	0.0	1806.9	16.7
9	491	Parachute	1.500	1.500	1.500	0.50	0.50	1.33	0.34	4.5	0.0	0.0	0.0	0.0	543.3	0.0	1805.3	16.7
8	34	AS 6t 7/8"	0.012	0.012	0.004	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.6	547.8	0.0	1805.3	16.9
7	64	EL 6t 7/8"	0.011	0.012	0.003	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.0	548.0	0.0	1803.7	16.9
6	34	AS 6t 7/8"	0.012	0.012	0.004	1.44	1.50	1.44	0.34	0.1	0.0	0.0	-0.0	-1.6	548.1	0.0	1802.7	16.9
5	183	3/4" MR	0.143	0.150	0.044	1.53	1.60	0.96	0.34	1.3	0.0	0.0	-0.4	-33.0	548.7	0.0	1787.7	17.2
4	33	AS 5t 3/4"	0.009	0.010	0.003	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-1.1	549.5	0.0	1767.7	17.3
3	53	PL 3t 3/4"	0.009	0.010	0.003	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-0.7	549.6	0.0	1766.6	17.3
2	34	AS 6t 7/8"	0.012	0.012	0.004	1.43	1.50	1.43	0.34	0.1	0.0	0.0	-0.0	-1.6	549.7	0.0	1765.8	17.3
1	522	double MACE	1.200	1.200	0.000	1.20	1.20	1.20	0.34	8.6	0.0	0.0	0.0	-2742.1	549.8	0.0	1764.2	0.0