

Tidal Analysis of Current at LT-A

ADCP Observations, 4.5 m

Mooring Number: 4381

File Name: 4381adc-alh.nc

nobs = 62, ngood = 61, record length (days) = 2.58

start time: 04-Apr-1994 14:45:00

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.33, x trend= 0

var(x)= 80.3162 var(xp)= 71.7041 var(xres)= 11.8825

percent var predicted/var original= 89.3 %

y0= 7.51, x trend= 0

var(y)= 36.7471 var(yp)= 19.2245 var(yres)= 17.6796

percent var predicted/var original= 52.3 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
K1	0.0417807	3.408	2.676	2.187	2.92	145.39	84.51	252.42	74.87	1.6
*M2	0.0805114	12.863	1.873	0.525	1.85	153.46	8.11	40.23	8.88	47
M3	0.1207671	1.438	1.461	-0.326	1.55	106.49	99.93	160.01	86.47	0.97
*M4	0.1610228	1.714	1.003	-1.443	1.02	121.98	100.63	55.76	104.13	2.9
2MK5	0.2028035	0.590	0.944	-0.317	0.74	80.58	75.89	343.62	151.70	0.39
*M6	0.2415342	0.524	0.084	0.063	0.36	171.66	48.53	264.31	11.34	39
*3MK7	0.2833149	0.928	0.086	-0.339	0.38	166.22	30.89	139.27	11.38	1.2e+002
M8	0.3220456	0.204	0.344	-0.119	0.37	19.52	112.75	73.99	167.84	0.35

total var= 117.0633 pred var= 90.9286

percent total var predicted/var original= 77.7 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.7 m

Mooring Number: 4511

File Name: 4511adc-alh.nc

nobs = 1481, ngood = 1477, record length (days) = 61.71

start time: 14-Feb-1995 15:45:02

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.402, x trend= 0

var(x)= 115.8557 var(xp)= 77.1379 var(xres)= 39.4583
percent var predicted/var original= 66.6 %

y0= -3.37, x trend= 0

var(y)= 67.9474 var(yp)= 0.59628 var(yres)= 67.3328
percent var predicted/var original= 0.9 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	2.828	2.634	-0.968	2.31	87.68	58.03	238.06	78.63	1.2
MSF	0.0028219	2.237	2.414	-0.050	2.26	110.14	67.38	45.91	86.36	0.86
ALP1	0.0343966	0.889	1.331	0.104	1.30	71.05	86.17	240.78	120.72	0.45
2Q1	0.0357064	1.038	1.286	-0.608	1.22	176.08	134.37	60.44	102.52	0.65
Q1	0.0372185	0.890	1.263	0.280	1.25	47.34	99.07	48.12	113.47	0.5
O1	0.0387307	0.887	1.116	0.028	1.16	160.78	106.31	242.00	104.41	0.63
NO1	0.0402686	1.909	1.534	-0.600	1.60	45.95	63.10	294.38	69.68	1.5
K1	0.0417807	2.231	1.706	-0.608	1.20	93.84	37.80	34.00	54.10	1.7
J1	0.0432929	0.918	1.093	0.007	1.32	2.24	123.41	1.35	91.88	0.71
OO1	0.0448308	1.817	2.253	0.043	2.23	165.85	114.29	44.04	92.06	0.65
UPS1	0.0463430	0.969	2.039	0.219	1.83	63.80	82.46	35.04	148.66	0.23
EPS2	0.0761773	1.067	1.043	-0.369	1.03	108.51	63.09	124.27	90.19	1
MU2	0.0776895	1.336	1.273	-0.439	0.86	80.93	51.96	143.78	61.48	1.1
*N2	0.0789992	1.773	1.089	0.225	1.40	174.60	59.25	14.74	44.79	2.6
*M2	0.0805114	11.667	0.871	-0.385	1.46	1.40	6.75	196.06	5.90	1.8e+002
L2	0.0820236	0.915	0.781	-0.762	0.85	52.11	107.05	55.75	124.04	1.4
*S2	0.0833333	1.981	1.055	-0.059	1.24	152.62	42.73	55.22	32.15	3.5
ETA2	0.0850736	0.344	1.372	-0.009	1.16	110.05	101.82	96.54	211.28	0.063
MO3	0.1192421	0.537	0.456	-0.296	0.49	177.51	103.70	132.19	95.08	1.4
M3	0.1207671	0.483	0.469	0.172	0.43	71.48	78.72	93.28	84.44	1.1
MK3	0.1222921	0.473	0.468	-0.038	0.46	174.59	92.96	341.21	79.92	1
SK3	0.1251141	0.359	0.501	0.124	0.41	88.17	81.71	288.66	117.82	0.51
MN4	0.1595106	0.284	0.419	-0.102	0.45	172.86	116.60	4.65	192.35	0.46
M4	0.1610228	0.614	0.580	0.070	0.49	75.82	69.60	157.14	60.31	1.1
SN4	0.1623326	0.549	0.490	-0.147	0.50	30.35	69.15	318.77	69.26	1.3
MS4	0.1638447	0.255	0.474	-0.127	0.44	4.21	131.28	324.77	140.93	0.29
S4	0.1666667	0.650	0.548	-0.192	0.52	112.26	64.64	34.68	67.39	1.4
2MK5	0.2028035	0.299	0.299	-0.070	0.29	5.60	76.73	86.07	71.13	1
2SK5	0.2084474	0.290	0.352	-0.015	0.33	157.39	84.29	11.74	77.82	0.68
2MN6	0.2400221	0.149	0.230	-0.067	0.21	172.86	138.05	301.53	151.77	0.42
*M6	0.2415342	0.363	0.252	0.040	0.28	44.45	54.28	40.79	54.95	2.1
2MS6	0.2443561	0.184	0.242	-0.160	0.26	45.96	128.35	150.54	125.05	0.58
2SM6	0.2471781	0.217	0.267	-0.109	0.25	54.56	85.50	315.69	103.05	0.66
3MK7	0.2833149	0.103	0.181	0.011	0.16	34.50	100.11	313.92	140.56	0.32
M8	0.3220456	0.165	0.142	-0.018	0.12	164.76	53.37	235.32	73.42	1.3

total var= 183.8031 pred var= 77.7342
percent total var predicted/var original= 42.3 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.8 m

Mooring Number: 4791

File Name: 4791adc-alh.nc

nobs = 1308, ngood = 1305, record length (days) = 54.50

start time: 01-Oct-1996 13:45:37

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 1.65, x trend= 0

var(x)= 105.76 var(xp)= 74.1759 var(xres)= 30.7055
percent var predicted/var original= 70.1 %

y0= 0.766, x trend= 0

var(y)= 39.4144 var(yp)= 1.2629 var(yres)= 38.2383
percent var predicted/var original= 3.2 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.499	2.288	-0.589	1.85	117.52	67.35	181.15	128.71	0.43
MSF	0.0028219	1.426	2.071	0.356	2.26	2.35	143.01	270.29	101.61	0.47
ALP1	0.0343966	1.087	0.858	-0.330	0.85	129.75	67.80	7.54	63.24	1.6
2Q1	0.0357064	0.708	0.822	0.225	0.68	109.24	76.51	66.01	89.39	0.74
Q1	0.0372185	0.496	0.693	0.115	0.66	110.63	91.17	344.28	128.05	0.51
O1	0.0387307	0.801	0.836	-0.220	0.78	123.69	74.24	133.12	72.14	0.92
NO1	0.0402686	0.444	0.561	-0.359	0.59	164.54	133.24	327.89	121.59	0.63
*K1	0.0417807	1.512	0.754	-0.883	0.72	38.17	55.05	260.45	51.52	4
J1	0.0432929	0.546	0.706	-0.146	0.67	137.22	90.14	126.63	108.96	0.6
OO1	0.0448308	1.317	1.313	-0.662	1.07	115.12	84.15	253.02	97.74	1
UPS1	0.0463430	0.942	1.330	-0.839	1.38	13.17	138.80	161.84	129.54	0.5
EPS2	0.0761773	0.424	0.592	0.047	0.55	102.23	128.24	91.47	107.37	0.51
MU2	0.0776895	0.477	0.553	0.324	0.57	133.24	116.55	153.03	128.52	0.74
*N2	0.0789992	1.769	0.820	-0.403	0.63	1.35	26.57	151.63	30.73	4.6
*M2	0.0805114	11.566	0.819	-0.826	0.68	1.61	3.33	204.26	4.72	2e+002
L2	0.0820236	0.629	0.677	0.134	0.59	175.22	67.31	128.07	102.01	0.86
*S2	0.0833333	1.667	0.935	-0.588	0.71	9.45	31.08	231.19	38.45	3.2
ETA2	0.0850736	1.289	1.133	0.208	1.17	46.32	63.97	190.11	70.51	1.3
MO3	0.1192421	0.153	0.372	-0.054	0.36	102.58	123.88	297.31	170.60	0.17
M3	0.1207671	0.281	0.283	-0.104	0.33	3.12	100.32	23.10	97.07	0.98
MK3	0.1222921	0.453	0.387	-0.071	0.42	177.73	59.35	169.79	68.05	1.4
SK3	0.1251141	0.390	0.406	-0.050	0.40	145.23	76.64	98.77	89.36	0.92
MN4	0.1595106	0.238	0.223	0.018	0.24	162.47	81.74	286.43	66.97	1.1
*M4	0.1610228	0.524	0.304	0.052	0.27	34.75	35.42	145.31	36.43	3
SN4	0.1623326	0.148	0.204	0.058	0.21	152.18	118.99	24.75	117.32	0.52
MS4	0.1638447	0.273	0.233	0.065	0.26	38.13	82.38	174.45	77.38	1.4
S4	0.1666667	0.162	0.234	-0.110	0.23	98.93	116.99	53.98	146.70	0.48
2MK5	0.2028035	0.171	0.234	0.021	0.21	101.74	88.65	241.37	103.29	0.53
2SK5	0.2084474	0.162	0.226	-0.029	0.21	120.25	93.02	254.76	128.73	0.51
2MN6	0.2400221	0.277	0.277	0.011	0.21	16.92	47.55	284.60	75.56	1
M6	0.2415342	0.396	0.337	0.126	0.23	38.66	49.59	31.22	54.17	1.4
2MS6	0.2443561	0.309	0.239	-0.059	0.31	67.31	70.50	54.01	57.59	1.7
2SM6	0.2471781	0.191	0.268	-0.006	0.17	177.83	54.33	310.99	123.30	0.51
3MK7	0.2833149	0.151	0.250	0.018	0.18	142.92	89.17	151.17	113.58	0.36
*M8	0.3220456	0.254	0.173	0.061	0.19	22.82	46.27	302.02	50.85	2.2

total var= 145.1744 pred var= 75.4388
percent total var predicted/var original= 52.0 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.3 m

Mooring Number: 4952

File Name: 4952adc-alh.nc

nobs = 2818, ngood = 2817, record length (days) = 117.42

start time: 12-Feb-1997 13:57:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 2.26, x trend= 0

var(x)= 110.0103 var(xp)= 61.2847 var(xres)= 48.7315
percent var predicted/var original= 55.7 %

y0= -1.22, x trend= 0

var(y)= 87.3534 var(yp)= 25.8069 var(yres)= 61.5066
percent var predicted/var original= 29.5 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	0.719	1.724	-0.500	1.57	83.98	83.83	240.70	184.57	0.17
MSF	0.0028219	1.627	2.266	-0.006	1.49	101.46	54.10	232.77	118.15	0.52
ALP1	0.0343966	0.924	0.842	-0.556	0.82	145.50	92.22	122.50	97.24	1.2
2Q1	0.0357064	0.549	0.770	0.226	0.88	148.33	112.67	239.54	118.52	0.51
Q1	0.0372185	0.434	0.856	-0.190	0.73	47.10	127.22	89.79	147.42	0.26
O1	0.0387307	0.546	0.758	-0.123	0.80	6.92	100.46	77.13	120.52	0.52
NO1	0.0402686	0.764	0.664	-0.115	0.66	172.78	55.32	7.61	62.55	1.3
*K1	0.0417807	1.712	0.759	-1.195	0.84	134.57	61.31	31.82	69.96	5.1
J1	0.0432929	0.610	0.881	-0.250	0.78	45.38	101.54	217.41	107.42	0.48
OO1	0.0448308	0.770	1.180	-0.302	1.05	29.53	99.54	337.07	117.74	0.43
UPS1	0.0463430	1.192	1.292	-0.370	1.32	98.76	90.68	105.69	88.64	0.85
EPS2	0.0761773	0.112	0.435	-0.026	0.44	103.63	106.81	33.95	217.90	0.066
MU2	0.0776895	0.121	0.379	-0.049	0.43	120.80	113.34	192.11	217.51	0.1
*N2	0.0789992	2.813	0.655	-0.325	0.68	26.26	14.71	145.08	13.24	18
*M2	0.0805114	11.867	0.580	-0.871	0.59	32.39	2.78	192.97	3.03	4.2e+002
*L2	0.0820236	2.015	0.592	-0.876	0.71	35.37	28.00	286.78	27.16	12
*S2	0.0833333	1.830	0.692	-0.059	0.67	37.14	22.32	226.22	23.23	7
ETA2	0.0850736	0.758	0.821	-0.228	0.93	86.71	75.76	94.12	100.50	0.85
MO3	0.1192421	0.362	0.382	-0.068	0.35	18.19	84.54	33.70	80.84	0.9
M3	0.1207671	0.247	0.327	-0.145	0.27	165.67	106.14	28.12	104.96	0.57
MK3	0.1222921	0.250	0.310	-0.050	0.31	113.93	99.50	72.08	95.02	0.65
SK3	0.1251141	0.210	0.322	0.134	0.32	21.37	130.21	174.03	141.93	0.43
*MN4	0.1595106	0.391	0.251	0.027	0.26	34.56	51.47	30.87	40.64	2.4
*M4	0.1610228	0.735	0.318	-0.172	0.31	48.36	25.48	70.18	25.48	5.3
*SN4	0.1623326	0.342	0.230	-0.085	0.29	173.05	72.92	130.50	81.05	2.2
MS4	0.1638447	0.299	0.224	0.095	0.24	64.55	58.46	137.31	80.78	1.8
S4	0.1666667	0.150	0.249	0.108	0.22	95.74	102.39	132.43	139.86	0.36
2MK5	0.2028035	0.163	0.157	-0.032	0.17	29.11	75.88	54.76	84.50	1.1
2SK5	0.2084474	0.193	0.180	-0.036	0.19	19.48	74.39	317.28	73.21	1.1
*2MN6	0.2400221	0.541	0.173	0.126	0.18	34.87	22.62	284.08	22.31	9.8
*M6	0.2415342	0.758	0.188	0.101	0.16	45.73	14.93	356.34	15.61	16
*2MS6	0.2443561	0.392	0.178	-0.089	0.20	38.46	32.59	18.51	35.25	4.8
2SM6	0.2471781	0.086	0.145	0.006	0.15	44.10	109.29	24.10	136.64	0.35
3MK7	0.2833149	0.056	0.136	0.001	0.11	107.24	148.23	350.41	156.89	0.17
M8	0.3220456	0.146	0.117	-0.039	0.11	37.25	63.43	261.43	52.00	1.6

total var= 197.3637 pred var= 87.0916
percent total var predicted/var original= 44.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 5.9 m

Mooring Number: 5012

File Name: 5012adc-alh.nc

nobs = 2506, ngood = 2505, record length (days) = 104.42

start time: 10-Jun-1997 13:57:29

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -2.58, x trend= 0

var(x)= 88.4294 var(xp)= 30.9076 var(xres)= 57.5907
percent var predicted/var original= 35.0 %

y0= 1.72, x trend= 0

var(y)= 83.6103 var(yp)= 11.4553 var(yres)= 72.3125
percent var predicted/var original= 13.7 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	3.376	3.407	0.087	2.15	95.53	37.83	161.89	75.67	0.98
MSF	0.0028219	1.843	2.609	-0.280	2.11	138.29	71.07	305.39	134.51	0.5
ALP1	0.0343966	0.434	0.937	-0.248	0.87	2.04	125.51	308.59	161.00	0.21
2Q1	0.0357064	0.582	0.951	-0.377	0.84	7.29	103.45	44.51	149.84	0.37
Q1	0.0372185	1.182	1.123	-0.518	1.00	174.89	66.81	222.10	77.78	1.1
O1	0.0387307	0.971	1.022	-0.330	0.98	33.59	78.57	305.53	86.43	0.9
NO1	0.0402686	0.374	0.717	-0.119	0.56	176.33	114.10	337.68	191.66	0.27
K1	0.0417807	1.520	1.089	-0.823	0.83	166.90	64.34	96.48	63.80	1.9
J1	0.0432929	0.337	0.881	-0.110	0.93	75.06	138.13	286.25	171.93	0.15
OO1	0.0448308	0.553	1.192	-0.082	1.19	21.99	121.01	167.98	159.05	0.22
UPS1	0.0463430	0.340	1.375	-0.213	1.41	134.41	136.88	345.99	202.25	0.061
EPS2	0.0761773	0.859	1.221	-0.404	1.21	68.63	122.82	345.03	124.67	0.49
MU2	0.0776895	1.043	1.328	-0.606	1.32	71.36	107.32	106.29	105.58	0.62
*N2	0.0789992	2.686	1.467	-0.181	1.53	23.59	33.09	159.37	33.08	3.4
*M2	0.0805114	8.155	1.638	1.792	1.49	30.36	9.81	191.70	11.48	25
L2	0.0820236	1.000	1.175	-0.659	1.29	61.23	115.59	154.56	124.49	0.72
S2	0.0833333	1.094	1.250	0.171	1.26	31.66	82.68	262.05	81.87	0.77
ETA2	0.0850736	1.225	1.886	-0.371	1.69	16.19	112.36	215.50	128.60	0.42
MO3	0.1192421	0.179	0.365	0.008	0.39	61.20	138.12	28.94	169.32	0.24
M3	0.1207671	0.108	0.293	-0.023	0.27	107.92	140.00	13.53	188.90	0.14
MK3	0.1222921	0.295	0.398	-0.271	0.40	29.79	134.83	166.44	151.11	0.55
SK3	0.1251141	0.196	0.372	-0.079	0.39	133.97	105.73	184.20	146.92	0.28
MN4	0.1595106	0.330	0.350	0.090	0.31	7.82	76.29	349.79	85.27	0.89
*M4	0.1610228	0.750	0.373	-0.125	0.36	22.99	32.16	74.13	33.58	4
SN4	0.1623326	0.375	0.338	-0.282	0.31	62.86	105.83	6.69	104.46	1.2
MS4	0.1638447	0.425	0.382	-0.073	0.34	39.95	64.48	156.10	68.19	1.2
S4	0.1666667	0.144	0.278	-0.063	0.31	66.70	121.34	46.71	150.20	0.27
2MK5	0.2028035	0.125	0.179	0.036	0.17	7.27	96.99	126.40	129.50	0.49
2SK5	0.2084474	0.113	0.189	-0.021	0.17	35.85	101.15	325.48	129.04	0.36
*2MN6	0.2400221	0.418	0.227	-0.043	0.25	55.35	34.64	338.28	34.22	3.4
*M6	0.2415342	0.917	0.239	-0.132	0.21	61.03	15.96	11.79	16.09	15
2MS6	0.2443561	0.182	0.179	-0.100	0.20	75.79	111.89	59.76	95.84	1
2SM6	0.2471781	0.196	0.205	-0.067	0.18	90.36	96.44	12.64	82.14	0.92
3MK7	0.2833149	0.107	0.180	0.081	0.18	90.18	132.58	203.94	147.94	0.35
M8	0.3220456	0.161	0.121	-0.070	0.13	24.52	80.39	28.43	80.10	1.8

total var= 172.0397 pred var= 42.3629
percent total var predicted/var original= 24.6 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.5 m

Mooring Number: 5072

File Name: 5072adc-alh.nc

nobs = 3359, ngood = 3342, record length (days) = 139.96

start time: 23-Sep-1997 15:57:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 1.05, x trend= 0

var(x)= 88.8911 var(xp)= 66.3772 var(xres)= 22.3481
percent var predicted/var original= 74.7 %

y0= -1.2, x trend= 0

var(y)= 48.9789 var(yp)= 9.6713 var(yres)= 39.3212
percent var predicted/var original= 19.7 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.871	1.641	-0.356	0.66	84.95	22.03	228.52	52.76	1.3
MSF	0.0028219	0.446	1.074	-0.154	0.67	110.80	44.92	42.99	162.09	0.17
ALP1	0.0343966	0.328	0.370	-0.249	0.42	130.36	116.60	120.84	135.11	0.79
2Q1	0.0357064	0.299	0.382	-0.130	0.40	163.23	96.93	219.45	99.30	0.61
Q1	0.0372185	0.352	0.396	-0.033	0.34	62.39	78.89	180.65	83.13	0.79
O1	0.0387307	0.474	0.397	0.239	0.40	117.43	78.84	340.31	70.45	1.4
NO1	0.0402686	0.256	0.263	-0.029	0.28	166.41	74.47	3.78	81.15	0.95
*K1	0.0417807	0.599	0.409	-0.151	0.39	18.82	44.85	282.85	47.77	2.1
J1	0.0432929	0.466	0.370	-0.295	0.38	28.65	94.01	335.29	92.86	1.6
OO1	0.0448308	0.844	0.607	-0.349	0.58	100.65	48.13	73.54	58.57	1.9
UPS1	0.0463430	0.456	0.469	-0.220	0.48	30.80	104.54	72.17	107.88	0.94
*EPS2	0.0761773	0.420	0.260	-0.332	0.30	147.53	107.88	0.22	101.62	2.6
MU2	0.0776895	0.321	0.289	-0.181	0.27	157.39	72.30	112.81	80.69	1.2
*N2	0.0789992	2.362	0.323	-0.097	0.36	15.19	8.08	154.59	8.08	54
*M2	0.0805114	11.430	0.323	-0.387	0.32	20.98	1.55	197.17	1.55	1.3e+003
L2	0.0820236	0.412	0.366	-0.113	0.37	80.86	65.14	322.85	62.60	1.3
*S2	0.0833333	1.955	0.352	-0.234	0.39	10.66	12.68	219.63	10.37	31
ETA2	0.0850736	0.693	0.500	-0.364	0.44	57.15	77.09	143.21	80.96	1.9
MO3	0.1192421	0.123	0.130	-0.069	0.12	154.74	86.16	243.73	130.38	0.9
M3	0.1207671	0.046	0.099	-0.036	0.10	124.62	150.96	152.06	146.69	0.22
MK3	0.1222921	0.123	0.113	-0.036	0.15	84.25	113.99	248.04	94.76	1.2
SK3	0.1251141	0.100	0.121	0.061	0.12	127.37	116.82	299.05	116.85	0.69
*MN4	0.1595106	0.285	0.126	-0.103	0.15	14.77	42.29	96.95	36.62	5.1
*M4	0.1610228	0.586	0.183	-0.072	0.15	17.60	14.47	85.24	13.43	10
SN4	0.1623326	0.043	0.113	-0.006	0.11	54.61	109.05	301.41	176.92	0.14
*MS4	0.1638447	0.228	0.145	-0.042	0.16	17.26	45.85	138.83	39.82	2.5
*S4	0.1666667	0.239	0.165	-0.006	0.18	142.80	48.19	313.49	40.09	2.1
2MK5	0.2028035	0.183	0.160	-0.020	0.14	12.75	63.70	130.45	53.66	1.3
2SK5	0.2084474	0.128	0.134	-0.080	0.14	108.84	116.92	62.08	129.87	0.92
*2MN6	0.2400221	0.291	0.137	0.062	0.13	47.20	29.63	315.12	26.87	4.5
*M6	0.2415342	0.627	0.149	0.023	0.13	44.08	12.24	347.07	11.78	18
*2MS6	0.2443561	0.278	0.121	-0.102	0.11	45.45	36.35	50.57	35.76	5.2
2SM6	0.2471781	0.092	0.099	-0.005	0.11	151.39	78.54	199.21	121.42	0.85
3MK7	0.2833149	0.076	0.107	0.008	0.09	56.12	89.99	103.08	120.02	0.5
M8	0.3220456	0.074	0.078	-0.035	0.09	34.23	85.33	250.20	104.13	0.89

total var= 137.87 pred var= 76.0485
percent total var predicted/var original= 55.2 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.4 m

Mooring Number: 5162

File Name: 5162adc-alh.nc

nobs = 3046, ngood = 3045, record length (days) = 126.92

start time: 10-Feb-1998 15:57:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.00357, x trend= 0

var(x)= 140.408 var(xp)= 66.028 var(xres)= 74.6241
percent var predicted/var original= 47.0 %

y0= -2.17, x trend= 0

var(y)= 138.9175 var(yp)= 5.1683 var(yres)= 133.9262
percent var predicted/var original= 3.7 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.906	3.963	-0.186	2.53	78.34	62.48	38.33	147.17	0.23
MSF	0.0028219	4.803	4.687	0.561	3.22	97.14	43.44	141.22	56.20	1.1
ALP1	0.0343966	1.258	0.971	-0.792	1.03	79.92	91.59	335.92	78.26	1.7
2Q1	0.0357064	0.488	0.859	-0.371	0.96	94.58	146.32	115.73	147.16	0.32
Q1	0.0372185	0.724	0.899	-0.140	0.94	119.18	94.47	272.17	103.36	0.65
O1	0.0387307	0.708	1.022	-0.479	1.05	126.64	121.25	20.16	123.79	0.48
NO1	0.0402686	0.361	0.701	-0.030	0.64	170.29	93.12	114.21	160.77	0.26
*K1	0.0417807	1.961	1.076	-0.789	1.01	110.89	52.10	28.81	42.60	3.3
*J1	0.0432929	2.084	1.035	-1.142	1.14	102.73	56.50	59.17	50.28	4.1
OO1	0.0448308	1.663	1.266	-0.704	1.35	147.63	65.67	140.90	68.15	1.7
UPS1	0.0463430	0.459	1.385	-0.125	1.15	61.24	132.33	307.77	172.07	0.11
EPS2	0.0761773	0.842	0.994	-0.158	0.91	54.73	77.63	278.45	103.74	0.72
MU2	0.0776895	0.963	1.017	-0.433	0.92	115.74	82.92	79.19	96.12	0.9
*N2	0.0789992	2.331	1.113	-0.276	1.32	17.76	33.69	160.08	29.05	4.4
*M2	0.0805114	10.609	1.139	-0.870	1.26	8.05	7.43	193.85	5.47	87
*L2	0.0820236	1.720	1.148	-0.693	1.29	150.91	68.17	52.97	55.96	2.2
*S2	0.0833333	1.905	0.916	-0.420	1.20	7.71	46.42	264.98	31.74	4.3
ETA2	0.0850736	0.961	1.284	-0.494	1.18	57.56	94.36	95.10	134.65	0.56
MO3	0.1192421	0.359	0.428	0.168	0.42	33.63	100.36	344.31	95.47	0.7
M3	0.1207671	0.189	0.330	0.075	0.30	121.30	110.67	357.82	145.73	0.33
MK3	0.1222921	0.393	0.383	-0.228	0.40	75.26	80.10	37.56	103.24	1.1
SK3	0.1251141	0.352	0.460	-0.031	0.33	163.53	101.63	354.75	79.03	0.59
MN4	0.1595106	0.340	0.342	-0.075	0.29	26.78	69.61	103.03	65.93	0.99
*M4	0.1610228	0.712	0.311	-0.185	0.37	20.45	31.55	92.34	33.83	5.2
SN4	0.1623326	0.304	0.267	-0.162	0.31	2.43	95.94	244.88	74.79	1.3
MS4	0.1638447	0.092	0.262	-0.007	0.26	8.53	126.97	185.28	173.15	0.12
S4	0.1666667	0.230	0.251	0.009	0.30	33.18	87.44	346.92	97.79	0.84
2MK5	0.2028035	0.212	0.183	-0.081	0.20	56.16	83.75	354.83	69.72	1.3
2SK5	0.2084474	0.215	0.230	-0.043	0.17	15.99	59.25	166.21	89.52	0.88
*2MN6	0.2400221	0.496	0.174	-0.053	0.18	38.33	23.51	334.41	21.32	8.2
*M6	0.2415342	0.625	0.175	0.064	0.18	37.29	15.95	357.88	16.82	13
2MS6	0.2443561	0.261	0.210	0.042	0.16	15.62	40.85	51.77	45.16	1.5
2SM6	0.2471781	0.126	0.136	0.013	0.15	32.63	92.28	159.32	95.88	0.86
3MK7	0.2833149	0.110	0.134	0.051	0.15	161.21	116.23	342.08	127.99	0.68
*M8	0.3220456	0.189	0.123	0.009	0.12	175.26	42.49	148.60	50.66	2.4

total var= 279.3255 pred var= 71.1962
percent total var predicted/var original= 25.5 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.1 m

Mooring Number: 5302

File Name: 5302adc-alh.nc

nobs = 2516, ngood = 2513, record length (days) = 104.83

start time: 17-Jun-1998 15:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.743, x trend= 0

var(x)= 91.3604 var(xp)= 22.3442 var(xres)= 69.9729
percent var predicted/var original= 24.5 %

y0= -0.0424, x trend= 0

var(y)= 72.4122 var(yp)= 8.4206 var(yres)= 63.8109
percent var predicted/var original= 11.6 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
*MM	0.0015122	2.351	1.484	0.042	1.37	89.31	35.78	197.03	33.38	2.5
MSF	0.0028219	1.720	1.350	0.345	1.45	12.14	63.95	144.73	62.52	1.6
ALP1	0.0343966	0.832	0.654	0.002	0.61	143.22	60.55	230.30	59.00	1.6
2Q1	0.0357064	0.448	0.595	-0.048	0.58	4.02	90.79	319.23	89.92	0.57
Q1	0.0372185	0.856	0.666	-0.385	0.66	40.60	66.22	321.61	65.81	1.7
O1	0.0387307	0.671	0.611	0.186	0.64	115.75	82.70	118.26	79.86	1.2
NO1	0.0402686	0.299	0.445	-0.024	0.40	20.66	101.45	268.62	115.93	0.45
*K1	0.0417807	1.549	0.669	-0.661	0.66	163.00	37.18	128.22	34.90	5.4
J1	0.0432929	0.643	0.592	-0.261	0.58	5.49	75.85	280.74	84.75	1.2
OO1	0.0448308	0.814	0.869	-0.247	0.85	32.69	85.16	87.85	73.28	0.88
UPS1	0.0463430	0.673	0.882	-0.547	0.90	3.70	130.86	316.74	136.58	0.58
EPS2	0.0761773	0.743	1.569	-0.626	1.47	151.29	129.47	81.88	174.64	0.22
MU2	0.0776895	1.311	1.822	-0.596	1.60	33.55	99.89	12.83	124.95	0.52
N2	0.0789992	2.319	2.064	-0.711	1.87	52.72	75.66	230.00	67.38	1.3
*M2	0.0805114	6.423	2.824	-2.724	1.98	14.94	21.56	212.59	25.46	5.2
L2	0.0820236	2.300	2.065	-1.808	2.11	79.50	106.26	296.47	98.91	1.2
S2	0.0833333	1.296	1.850	-0.486	1.56	33.91	105.98	312.63	114.97	0.49
ETA2	0.0850736	1.526	2.479	-0.780	2.31	17.17	81.48	47.05	143.41	0.38
MO3	0.1192421	0.337	0.425	0.093	0.39	59.00	98.42	47.46	104.37	0.63
M3	0.1207671	0.317	0.349	-0.004	0.35	45.42	87.86	82.76	86.06	0.82
MK3	0.1222921	0.566	0.440	-0.311	0.42	76.34	79.63	95.36	75.22	1.7
SK3	0.1251141	0.242	0.425	-0.114	0.36	119.96	106.19	8.95	105.37	0.32
MN4	0.1595106	0.516	0.452	-0.018	0.38	163.40	52.75	231.77	63.80	1.3
*M4	0.1610228	0.810	0.542	-0.280	0.41	157.48	34.52	234.22	41.99	2.2
SN4	0.1623326	0.313	0.386	-0.190	0.39	128.36	99.54	191.54	128.14	0.66
MS4	0.1638447	0.461	0.413	-0.216	0.41	74.13	93.16	220.33	74.10	1.2
S4	0.1666667	0.141	0.387	-0.028	0.36	51.50	119.47	320.50	163.26	0.13
2MK5	0.2028035	0.328	0.242	-0.224	0.25	84.52	95.11	78.20	91.99	1.8
2SK5	0.2084474	0.141	0.241	-0.111	0.22	61.11	137.89	126.22	143.53	0.35
*2MN6	0.2400221	0.400	0.233	-0.067	0.22	26.59	35.55	352.65	39.91	2.9
*M6	0.2415342	0.615	0.266	0.013	0.28	24.10	24.77	5.05	23.77	5.4
2MS6	0.2443561	0.230	0.215	-0.200	0.23	78.03	112.09	89.80	116.49	1.1
2SM6	0.2471781	0.194	0.229	-0.074	0.24	38.71	85.29	248.78	105.43	0.72
3MK7	0.2833149	0.060	0.125	0.002	0.12	18.15	95.50	157.25	161.36	0.23
M8	0.3220456	0.087	0.099	-0.009	0.10	175.22	73.68	175.32	95.99	0.78

total var= 163.7726 pred var= 30.7648
percent total var predicted/var original= 18.8 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.7 m

Mooring Number: 5402

File Name: 5402adc-alh.nc

nobs = 3192, ngood = 3190, record length (days) = 133.00

start time: 30-Sep-1998 13:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.23, x trend= 0

var(x)= 100.8348 var(xp)= 74.198 var(xres)= 26.5879

percent var predicted/var original= 73.6 %

y0= 0.862, x trend= 0

var(y)= 53.538 var(yp)= 5.9857 var(yres)= 47.5439

percent var predicted/var original= 11.2 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	2.238	1.824	0.142	0.95	88.09	29.38	279.94	56.01	1.5
MSF	0.0028219	0.674	1.168	-0.099	0.96	152.10	82.82	201.68	122.60	0.33
ALP1	0.0343966	0.470	0.550	-0.103	0.51	105.13	78.56	89.80	94.51	0.73
2Q1	0.0357064	0.225	0.425	0.121	0.46	145.01	120.78	153.65	158.76	0.28
Q1	0.0372185	0.368	0.470	0.187	0.44	162.92	114.26	173.69	108.26	0.61
O1	0.0387307	0.924	0.667	-0.160	0.59	69.54	43.06	299.54	48.67	1.9
NO1	0.0402686	0.373	0.430	-0.184	0.41	28.38	100.99	138.12	115.25	0.75
K1	0.0417807	0.454	0.482	0.160	0.45	25.76	87.89	298.31	91.07	0.89
J1	0.0432929	0.315	0.491	-0.245	0.45	131.20	113.94	122.80	143.04	0.41
OO1	0.0448308	0.815	0.743	-0.464	0.81	154.05	92.43	168.01	96.45	1.2
UPS1	0.0463430	0.518	0.661	-0.197	0.67	63.37	106.06	194.86	115.26	0.61
EPS2	0.0761773	0.324	0.317	-0.222	0.31	21.10	93.18	254.17	108.21	1
MU2	0.0776895	0.212	0.291	0.145	0.29	95.51	139.49	215.96	124.34	0.53
*N2	0.0789992	2.600	0.428	0.025	0.31	13.85	7.61	154.75	9.82	37
*M2	0.0805114	11.699	0.420	-0.931	0.35	15.29	1.71	200.84	1.81	7.8e+002
*L2	0.0820236	0.726	0.439	-0.018	0.35	17.01	29.46	260.01	38.54	2.7
*S2	0.0833333	1.932	0.396	0.036	0.33	10.66	10.65	232.40	12.65	24
ETA2	0.0850736	0.179	0.374	0.058	0.34	173.58	95.63	21.53	151.12	0.23
MO3	0.1192421	0.111	0.151	-0.061	0.14	69.47	90.95	264.98	128.82	0.54
M3	0.1207671	0.120	0.139	-0.009	0.11	76.22	76.62	333.78	85.82	0.75
MK3	0.1222921	0.104	0.150	-0.017	0.13	10.36	113.50	276.39	106.30	0.49
*SK3	0.1251141	0.252	0.156	-0.078	0.17	176.88	57.67	235.21	49.94	2.6
*MN4	0.1595106	0.157	0.104	-0.041	0.11	33.18	53.66	97.85	57.48	2.3
*M4	0.1610228	0.396	0.134	-0.008	0.15	49.57	17.77	117.72	20.61	8.7
SN4	0.1623326	0.053	0.096	0.008	0.09	108.20	130.83	182.84	146.44	0.3
*MS4	0.1638447	0.256	0.109	-0.107	0.12	34.40	41.73	174.41	32.59	5.5
S4	0.1666667	0.115	0.112	-0.027	0.11	110.07	76.38	222.31	78.14	1.1
2MK5	0.2028035	0.098	0.089	0.036	0.09	43.75	63.04	281.03	77.46	1.2
2SK5	0.2084474	0.107	0.107	-0.007	0.09	179.35	72.43	210.48	77.92	1
*2MN6	0.2400221	0.257	0.084	0.035	0.10	50.74	22.41	324.07	22.46	9.4
*M6	0.2415342	0.461	0.097	0.087	0.10	34.80	11.13	358.69	13.37	23
*2MS6	0.2443561	0.182	0.087	-0.016	0.10	54.35	32.99	52.45	30.02	4.3
2SM6	0.2471781	0.050	0.075	-0.022	0.06	134.34	118.01	255.71	128.20	0.44
3MK7	0.2833149	0.037	0.064	0.012	0.06	49.43	121.23	326.76	124.23	0.34
M8	0.3220456	0.056	0.053	-0.045	0.05	156.70	106.70	185.44	118.48	1.1

total var= 154.3728 pred var= 80.1837

percent total var predicted/var original= 51.9 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.4 m

Mooring Number: 5522

File Name: 5522adc-alh.nc

nobs = 2163, ngood = 2147, record length (days) = 90.13

start time: 10-Feb-1999 14:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.995, x trend= 0

var(x)= 131.0243 var(xp)= 82.3639 var(xres)= 48.6399
percent var predicted/var original= 62.9 %

y0= -0.499, x trend= 0

var(y)= 105.6545 var(yp)= 9.993 var(yres)= 95.6547
percent var predicted/var original= 9.5 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	2.669	2.938	-0.378	2.95	151.50	75.97	214.18	69.04	0.83
MSF	0.0028219	2.590	3.897	-1.357	2.00	104.59	48.18	358.78	123.30	0.44
ALP1	0.0343966	0.378	0.907	-0.348	0.93	12.76	161.40	302.25	175.67	0.17
2Q1	0.0357064	1.048	1.067	-0.135	1.10	90.29	60.73	188.72	77.55	0.96
*Q1	0.0372185	1.659	0.949	-0.919	1.19	129.40	71.06	321.61	73.48	3.1
O1	0.0387307	0.281	0.871	-0.090	0.87	52.87	122.94	270.58	212.47	0.1
NO1	0.0402686	0.470	0.828	-0.232	0.81	74.19	111.23	174.07	169.80	0.32
*K1	0.0417807	2.083	1.184	-1.166	1.02	95.05	46.67	49.29	58.07	3.1
J1	0.0432929	0.503	0.840	-0.072	0.78	131.83	97.68	295.16	133.09	0.36
OO1	0.0448308	1.328	1.387	-0.778	1.37	124.94	102.96	93.43	113.82	0.92
UPS1	0.0463430	1.162	1.370	-0.848	1.29	80.34	99.62	242.93	133.47	0.72
EPS2	0.0761773	0.623	0.739	-0.495	0.65	161.78	109.78	143.89	122.35	0.71
MU2	0.0776895	0.561	0.696	0.119	0.77	62.42	97.34	102.11	117.45	0.65
*N2	0.0789992	2.305	0.949	-0.531	0.85	18.18	27.11	182.63	26.53	5.9
*M2	0.0805114	12.367	0.994	-1.781	0.96	14.47	4.90	194.85	4.88	1.5e+002
L2	0.0820236	0.443	0.683	-0.215	0.67	51.16	114.36	293.26	152.72	0.42
*S2	0.0833333	2.698	1.004	-0.462	0.93	13.69	23.68	241.63	23.58	7.2
ETA2	0.0850736	0.540	0.835	-0.325	0.90	134.61	119.47	258.39	135.20	0.42
MO3	0.1192421	0.174	0.322	0.004	0.29	167.45	105.32	130.97	174.88	0.29
M3	0.1207671	0.120	0.249	-0.007	0.21	137.32	130.34	239.97	159.58	0.23
MK3	0.1222921	0.373	0.309	-0.111	0.33	161.59	81.97	4.40	67.81	1.5
SK3	0.1251141	0.337	0.325	-0.096	0.32	171.47	96.90	80.58	125.57	1.1
MN4	0.1595106	0.187	0.204	-0.128	0.22	56.48	94.40	165.26	119.55	0.84
*M4	0.1610228	0.614	0.288	-0.108	0.26	50.01	27.99	117.58	29.68	4.5
SN4	0.1623326	0.227	0.215	-0.077	0.27	14.24	92.92	306.76	86.78	1.1
MS4	0.1638447	0.262	0.242	-0.043	0.23	58.99	63.93	181.04	73.30	1.2
S4	0.1666667	0.180	0.229	0.027	0.20	155.88	109.98	101.83	98.03	0.62
2MK5	0.2028035	0.148	0.154	-0.033	0.16	111.32	88.15	32.31	91.68	0.92
2SK5	0.2084474	0.129	0.150	0.093	0.17	64.05	127.02	215.32	114.55	0.74
2MN6	0.2400221	0.230	0.165	0.082	0.16	45.83	54.08	354.76	57.43	1.9
*M6	0.2415342	0.448	0.181	0.118	0.17	45.80	27.92	14.84	28.09	6.1
*2MS6	0.2443561	0.280	0.165	-0.026	0.17	68.60	44.51	72.61	44.71	2.9
2SM6	0.2471781	0.159	0.162	-0.092	0.15	101.37	95.70	71.47	87.39	0.96
3MK7	0.2833149	0.065	0.100	0.010	0.09	92.92	95.39	179.98	132.81	0.43
*M8	0.3220456	0.117	0.078	-0.016	0.08	173.85	47.01	133.21	49.42	2.3

total var= 236.6788 pred var= 92.357
percent total var predicted/var original= 39.0 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.4 m

Mooring Number: 5691

File Name: 5691adc-alh.nc

nobs = 3180, ngood = 3179, record length (days) = 132.50

start time: 11-May-1999 15:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.936, x trend= 0

var(x)= 98.3815 var(xp)= 38.1624 var(xres)= 60.2839
percent var predicted/var original= 38.8 %

y0= 1.6, x trend= 0

var(y)= 84.1253 var(yp)= 4.0297 var(yres)= 80.0432
percent var predicted/var original= 4.8 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	0.800	1.948	0.207	1.65	101.36	115.93	8.47	179.42	0.17
MSF	0.0028219	0.872	1.754	0.629	1.84	95.13	122.04	18.65	183.63	0.25
ALP1	0.0343966	0.409	0.649	0.124	0.62	57.31	108.52	25.77	139.48	0.4
2Q1	0.0357064	0.671	0.719	0.025	0.76	14.46	86.91	87.72	76.80	0.87
Q1	0.0372185	1.016	0.751	-0.195	0.85	23.49	60.85	279.43	61.06	1.8
O1	0.0387307	0.686	0.701	0.197	0.74	139.34	77.35	170.46	81.54	0.96
NO1	0.0402686	0.945	0.973	-0.368	0.83	74.43	62.90	87.99	78.83	0.94
*K1	0.0417807	1.493	0.709	-0.729	0.67	128.83	50.32	82.61	43.98	4.4
J1	0.0432929	0.588	0.684	-0.366	0.70	114.26	97.17	86.12	104.91	0.74
OO1	0.0448308	0.901	1.026	-0.537	0.92	90.83	79.95	112.00	98.67	0.77
UPS1	0.0463430	0.351	0.842	0.213	0.68	46.16	129.30	274.37	183.51	0.17
EPS2	0.0761773	0.399	0.956	-0.247	0.82	83.71	143.03	340.43	161.20	0.17
MU2	0.0776895	0.670	0.969	-0.261	0.98	91.24	124.21	290.21	113.63	0.48
*N2	0.0789992	1.976	1.305	0.049	1.04	19.70	36.43	162.11	36.79	2.3
*M2	0.0805114	8.355	1.340	1.289	1.19	167.15	8.51	353.03	10.02	39
L2	0.0820236	0.955	0.988	-0.222	1.03	52.41	84.93	271.38	80.27	0.93
S2	0.0833333	1.569	1.295	0.214	1.03	167.60	49.39	21.90	53.43	1.5
ETA2	0.0850736	1.097	1.485	-0.855	1.12	15.37	113.35	248.77	127.49	0.55
MO3	0.1192421	0.468	0.502	-0.161	0.41	106.66	93.05	49.44	86.40	0.87
M3	0.1207671	0.369	0.450	-0.242	0.42	89.41	101.29	69.55	115.07	0.67
*MK3	0.1222921	0.835	0.439	-0.541	0.48	65.38	81.48	63.48	81.46	3.6
SK3	0.1251141	0.319	0.471	-0.227	0.44	172.19	107.75	322.97	129.50	0.46
MN4	0.1595106	0.507	0.382	-0.143	0.45	177.83	69.69	244.97	73.70	1.8
*M4	0.1610228	0.746	0.375	-0.111	0.39	165.96	37.82	265.43	34.54	4
SN4	0.1623326	0.207	0.348	-0.014	0.33	117.31	96.20	86.90	110.56	0.35
MS4	0.1638447	0.279	0.350	0.003	0.33	150.37	83.51	297.75	93.63	0.63
S4	0.1666667	0.198	0.385	-0.095	0.35	10.37	128.94	21.75	138.43	0.26
2MK5	0.2028035	0.156	0.160	-0.074	0.16	109.16	98.23	336.95	95.98	0.95
2SK5	0.2084474	0.076	0.164	0.003	0.14	63.83	114.90	327.88	151.84	0.22
*2MN6	0.2400221	0.432	0.190	0.024	0.19	34.21	25.43	301.39	26.30	5.2
*M6	0.2415342	0.591	0.177	-0.059	0.17	41.42	18.06	4.86	17.77	11
2MS6	0.2443561	0.153	0.170	0.053	0.16	9.44	78.97	77.73	92.37	0.81
2SM6	0.2471781	0.210	0.153	-0.064	0.16	35.59	64.68	159.64	51.96	1.9
3MK7	0.2833149	0.142	0.113	-0.019	0.11	177.72	49.60	284.83	61.34	1.6
*M8	0.3220456	0.170	0.098	-0.069	0.09	0.12	36.18	8.72	43.29	3

total var= 182.5067 pred var= 42.1921
percent total var predicted/var original= 23.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.6 m

Mooring Number: 5911

File Name: 5911adc-alh.nc

nobs = 3526, ngood = 3516, record length (days) = 146.92

start time: 21-Sep-1999 15:50:00

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.434, x trend= 0

var(x)= 92.4218 var(xp)= 74.1779 var(xres)= 18.2273
percent var predicted/var original= 80.3 %

y0= 1.17, x trend= 0

var(y)= 48.2238 var(yp)= 4.815 var(yres)= 43.3943
percent var predicted/var original= 10.0 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.487	1.605	-1.026	1.43	108.32	70.32	269.18	115.61	0.86
MSF	0.0028219	0.569	1.092	-0.278	1.09	50.99	90.81	102.32	165.18	0.27
ALP1	0.0343966	0.124	0.351	0.041	0.32	30.34	141.56	280.09	189.01	0.12
2Q1	0.0357064	0.234	0.361	-0.127	0.31	8.03	133.12	254.18	124.54	0.42
Q1	0.0372185	0.567	0.402	-0.364	0.37	137.15	93.44	164.03	96.19	2
*O1	0.0387307	0.676	0.391	0.156	0.47	0.16	50.42	283.30	45.26	3
NO1	0.0402686	0.400	0.598	-0.023	0.57	11.09	109.50	265.89	103.61	0.45
*K1	0.0417807	0.983	0.418	-0.005	0.49	8.07	30.99	299.32	26.26	5.5
J1	0.0432929	0.399	0.366	-0.115	0.40	38.07	80.30	156.43	82.54	1.2
OO1	0.0448308	0.451	0.539	-0.145	0.49	42.98	90.47	271.14	108.41	0.7
UPS1	0.0463430	0.158	0.460	-0.074	0.45	122.23	113.10	10.95	153.60	0.12
EPS2	0.0761773	0.253	0.265	-0.094	0.24	31.43	83.02	21.61	85.78	0.91
MU2	0.0776895	0.338	0.285	-0.157	0.23	7.40	72.83	146.62	82.83	1.4
*N2	0.0789992	2.972	0.355	-0.182	0.33	18.83	6.02	171.83	6.09	70
*M2	0.0805114	11.590	0.317	-0.752	0.31	13.29	1.46	201.17	1.59	1.3e+003
*L2	0.0820236	0.634	0.281	-0.255	0.22	18.56	30.53	235.50	34.32	5.1
*S2	0.0833333	1.971	0.315	-0.067	0.31	12.74	8.98	230.24	9.85	39
ETA2	0.0850736	0.233	0.302	-0.008	0.27	14.10	86.06	344.73	93.05	0.6
*MO3	0.1192421	0.197	0.139	-0.100	0.15	179.08	66.49	183.81	71.21	2
M3	0.1207671	0.056	0.100	0.032	0.10	149.37	124.60	240.50	144.09	0.31
MK3	0.1222921	0.113	0.108	0.009	0.13	57.96	84.05	265.84	82.29	1.1
SK3	0.1251141	0.141	0.139	-0.052	0.13	118.47	74.47	210.70	73.54	1
*MN4	0.1595106	0.305	0.140	-0.038	0.13	29.12	27.05	96.06	22.63	4.8
*M4	0.1610228	0.520	0.118	-0.066	0.15	26.31	15.35	118.77	13.23	19
SN4	0.1623326	0.092	0.112	-0.003	0.11	1.29	85.48	197.59	84.98	0.67
*MS4	0.1638447	0.233	0.111	-0.018	0.12	5.66	32.58	158.20	29.90	4.4
S4	0.1666667	0.082	0.108	-0.012	0.09	139.39	105.67	194.39	103.19	0.57
*2MK5	0.2028035	0.151	0.094	0.036	0.08	82.54	41.38	221.21	35.71	2.6
2SK5	0.2084474	0.086	0.079	0.017	0.08	88.08	82.75	135.07	71.97	1.2
*2MN6	0.2400221	0.255	0.119	0.047	0.09	35.64	24.46	324.03	26.24	4.6
*M6	0.2415342	0.495	0.111	0.086	0.10	35.62	12.16	357.67	13.05	20
*2MS6	0.2443561	0.252	0.106	0.018	0.11	33.42	24.52	50.38	26.79	5.6
2SM6	0.2471781	0.071	0.087	0.002	0.08	37.70	92.92	84.70	105.43	0.67
3MK7	0.2833149	0.076	0.067	0.006	0.06	39.06	72.70	27.39	81.71	1.3
*M8	0.3220456	0.099	0.060	0.010	0.05	169.29	30.78	90.61	38.52	2.7

total var= 140.6455 pred var= 78.9929
percent total var predicted/var original= 56.2 %

Tidal Analysis of Current at LT-A

ADCP Observations, 5.9 m

Mooring Number: 6111

File Name: 6111adc-alh.nc

nobs = 2012, ngood = 2010, record length (days) = 83.83

start time: 15-Feb-2000 16:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 1.26, x trend= 0

var(x)= 122.428 var(xp)= 88.947 var(xres)= 33.7654
percent var predicted/var original= 72.7 %

y0= -1.42, x trend= 0

var(y)= 63.3636 var(yp)= 15.8044 var(yres)= 48.2701
percent var predicted/var original= 24.9 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
*MM	0.0015122	4.762	2.363	-0.876	2.23	90.31	31.28	344.60	34.01	4.1
MSF	0.0028219	1.617	1.711	0.458	2.02	79.25	95.99	133.60	100.44	0.89
ALP1	0.0343966	0.222	0.845	-0.128	0.74	3.00	166.05	266.82	200.53	0.069
2Q1	0.0357064	0.719	0.936	-0.182	0.77	64.16	87.78	278.40	115.35	0.59
Q1	0.0372185	0.204	0.739	-0.125	0.75	62.51	115.36	175.32	225.38	0.076
O1	0.0387307	0.698	0.931	-0.334	0.88	150.45	116.69	123.60	116.77	0.56
NO1	0.0402686	1.614	1.756	-1.161	1.71	102.57	101.15	40.35	125.28	0.84
K1	0.0417807	0.665	1.094	-0.315	0.85	66.92	98.50	19.44	119.66	0.37
J1	0.0432929	0.745	0.827	-0.277	0.90	3.21	97.79	163.83	98.59	0.81
OO1	0.0448308	1.145	1.589	-0.379	1.17	105.46	86.73	96.85	112.83	0.52
UPS1	0.0463430	1.008	1.313	-0.576	1.18	107.08	92.57	93.31	123.12	0.59
EPS2	0.0761773	0.522	0.462	0.317	0.42	30.72	90.04	65.48	89.89	1.3
MU2	0.0776895	0.549	0.506	-0.224	0.42	62.38	58.87	330.13	97.89	1.2
*N2	0.0789992	2.845	0.519	-0.024	0.67	22.63	14.07	172.88	9.14	30
*M2	0.0805114	12.499	0.430	-1.790	0.68	8.77	3.34	200.31	1.74	8.5e+002
*L2	0.0820236	0.958	0.348	-0.331	0.49	176.21	46.34	97.01	29.95	7.6
*S2	0.0833333	2.313	0.461	-0.130	0.69	174.73	20.64	49.03	11.56	25
ETA2	0.0850736	0.443	0.564	-0.011	0.50	129.04	64.63	23.87	83.50	0.62
MO3	0.1192421	0.336	0.285	0.055	0.28	137.60	65.22	160.79	65.59	1.4
M3	0.1207671	0.342	0.286	-0.167	0.25	133.96	74.98	61.13	82.72	1.4
MK3	0.1222921	0.290	0.316	-0.079	0.28	89.26	72.41	67.58	74.74	0.84
SK3	0.1251141	0.170	0.253	-0.129	0.25	3.48	139.75	196.11	141.57	0.45
MN4	0.1595106	0.235	0.187	-0.113	0.17	74.72	64.30	101.68	81.46	1.6
*M4	0.1610228	0.719	0.211	0.066	0.18	16.60	17.19	111.54	15.72	12
SN4	0.1623326	0.236	0.198	0.018	0.19	83.13	49.03	133.80	69.15	1.4
*MS4	0.1638447	0.289	0.162	-0.163	0.22	166.14	84.19	334.95	64.65	3.2
S4	0.1666667	0.124	0.182	-0.069	0.16	120.43	91.20	300.79	119.44	0.47
*2MK5	0.2028035	0.284	0.141	0.023	0.14	6.82	31.54	194.90	32.58	4.1
2SK5	0.2084474	0.163	0.143	-0.033	0.13	17.29	58.81	136.45	63.13	1.3
2MN6	0.2400221	0.231	0.181	0.074	0.14	32.36	43.47	355.91	52.65	1.6
*M6	0.2415342	0.669	0.178	0.021	0.17	32.31	13.97	359.84	16.69	14
*2MS6	0.2443561	0.223	0.156	0.090	0.17	52.50	59.92	85.73	60.97	2
2SM6	0.2471781	0.094	0.125	0.067	0.13	116.44	116.67	85.75	128.00	0.57
3MK7	0.2833149	0.096	0.096	-0.028	0.11	32.37	81.07	286.82	90.31	0.99
M8	0.3220456	0.079	0.079	-0.017	0.07	38.10	83.64	319.58	85.14	1

total var= 185.7916 pred var= 104.7514
percent total var predicted/var original= 56.4 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.5 m

Mooring Number: 6251

File Name: 6251adc-alh.nc

nobs = 3359, ngood = 3358, record length (days) = 139.96

start time: 09-May-2000 14:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.966, x trend= 0

var(x)= 123.0654 var(xp)= 42.7347 var(xres)= 80.9264
percent var predicted/var original= 34.7 %

y0= 2.47, x trend= 0

var(y)= 141.2565 var(yp)= 3.3494 var(yres)= 137.9436
percent var predicted/var original= 2.4 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.204	3.947	-0.694	2.06	100.95	38.75	292.75	190.35	0.093
MSF	0.0028219	1.779	4.155	-0.197	2.52	135.47	46.78	253.79	159.47	0.18
ALP1	0.0343966	0.467	0.579	-0.156	0.61	12.17	121.56	79.12	142.57	0.65
2Q1	0.0357064	0.382	0.609	-0.107	0.58	44.24	112.03	275.08	151.42	0.39
Q1	0.0372185	0.426	0.568	-0.263	0.67	132.29	113.93	296.34	126.60	0.56
O1	0.0387307	0.599	0.630	-0.226	0.67	153.62	104.61	141.99	100.73	0.9
NO1	0.0402686	1.880	1.512	-0.514	1.62	172.06	74.95	158.63	72.94	1.5
*K1	0.0417807	1.900	0.832	-0.933	0.73	143.71	41.56	82.95	40.75	5.2
J1	0.0432929	0.507	0.673	0.032	0.56	134.08	84.04	117.96	99.99	0.57
OO1	0.0448308	0.283	0.825	0.147	0.87	133.27	128.57	227.63	198.57	0.12
UPS1	0.0463430	0.866	1.046	-0.219	0.90	81.47	79.30	281.11	84.35	0.69
EPS2	0.0761773	0.818	0.873	-0.425	0.92	160.18	88.83	13.84	112.82	0.88
*MU2	0.0776895	1.769	1.099	-0.998	1.01	9.95	58.63	177.77	70.65	2.6
*N2	0.0789992	2.783	1.384	-0.503	0.99	10.53	23.15	163.60	33.45	4
*M2	0.0805114	8.396	1.359	1.088	1.21	8.49	8.26	190.55	10.46	38
L2	0.0820236	0.722	0.851	-0.002	0.86	124.36	97.24	357.75	90.92	0.72
S2	0.0833333	1.729	1.227	-0.228	1.12	7.61	41.07	219.09	51.78	2
ETA2	0.0850736	0.736	1.085	-0.569	0.98	64.69	132.70	67.62	128.21	0.46
MO3	0.1192421	0.436	0.372	-0.231	0.37	106.77	88.77	55.28	91.09	1.4
M3	0.1207671	0.403	0.374	-0.124	0.33	28.04	67.30	157.55	64.50	1.2
*MK3	0.1222921	0.490	0.346	-0.193	0.42	75.81	65.72	107.29	70.34	2
SK3	0.1251141	0.346	0.335	-0.053	0.35	90.35	79.76	110.44	78.43	1.1
MN4	0.1595106	0.404	0.314	-0.165	0.28	169.26	56.84	242.10	83.54	1.7
*M4	0.1610228	1.002	0.323	-0.274	0.33	4.32	19.14	97.80	23.73	9.6
SN4	0.1623326	0.112	0.237	-0.038	0.25	106.53	137.55	309.15	162.94	0.22
MS4	0.1638447	0.236	0.289	-0.019	0.26	164.97	70.89	335.95	100.06	0.67
S4	0.1666667	0.075	0.234	0.013	0.24	2.75	108.42	264.26	199.57	0.1
2MK5	0.2028035	0.115	0.164	-0.054	0.15	169.20	102.01	308.55	125.88	0.49
2SK5	0.2084474	0.106	0.157	-0.067	0.17	60.45	110.70	220.49	123.18	0.46
*2MN6	0.2400221	0.554	0.208	-0.102	0.18	41.52	19.80	329.71	20.35	7.1
*M6	0.2415342	0.531	0.194	0.013	0.20	59.23	20.38	22.20	21.64	7.5
2MS6	0.2443561	0.225	0.174	-0.052	0.18	53.95	57.09	18.70	63.93	1.7
2SM6	0.2471781	0.086	0.167	0.030	0.15	29.86	113.62	354.69	133.68	0.27
3MK7	0.2833149	0.051	0.100	0.002	0.09	50.25	117.02	100.89	132.98	0.26
M8	0.3220456	0.107	0.077	-0.005	0.09	135.71	47.06	118.18	52.44	2

total var= 264.3219 pred var= 46.0841
percent total var predicted/var original= 17.4 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.8 m

Mooring Number: 6301

File Name: 6301adc-alh.nc

nobs = 3362, ngood = 3360, record length (days) = 140.08

start time: 26-Sep-2000 13:50:00

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.8, x trend= 0

var(x)= 75.1383 var(xp)= 51.6395 var(xres)= 23.5414
percent var predicted/var original= 68.7 %

y0= -3.38, x trend= 0

var(y)= 53.8514 var(yp)= 18.4413 var(yres)= 35.4743
percent var predicted/var original= 34.2 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	0.894	1.250	-0.378	1.08	84.94	99.88	24.64	117.29	0.51
MSF	0.0028219	0.641	1.206	-0.402	1.34	55.60	127.92	181.98	144.31	0.28
ALP1	0.0343966	0.328	0.357	-0.020	0.38	166.66	109.20	24.25	90.54	0.85
2Q1	0.0357064	0.185	0.312	0.014	0.32	31.01	111.69	306.74	123.44	0.35
Q1	0.0372185	0.154	0.356	-0.040	0.31	170.99	149.49	245.75	158.87	0.19
O1	0.0387307	0.524	0.376	0.080	0.51	12.08	68.74	255.03	51.47	1.9
NO1	0.0402686	0.526	0.649	-0.426	0.55	122.61	129.24	177.02	155.24	0.66
K1	0.0417807	0.711	0.507	-0.073	0.39	84.56	28.79	293.91	45.85	2
J1	0.0432929	0.270	0.327	0.059	0.40	172.38	118.63	247.24	91.34	0.68
OO1	0.0448308	0.567	0.610	-0.189	0.52	97.16	60.94	297.81	100.97	0.86
UPS1	0.0463430	0.212	0.385	-0.102	0.39	90.15	88.26	44.01	165.49	0.3
EPS2	0.0761773	0.363	0.359	0.034	0.43	160.65	98.03	329.66	75.57	1
MU2	0.0776895	0.521	0.500	-0.249	0.47	137.03	68.20	268.68	75.54	1.1
*N2	0.0789992	2.168	0.429	-0.215	0.66	24.56	17.05	169.58	11.80	26
*M2	0.0805114	11.182	0.490	-0.871	0.57	30.44	3.06	190.40	2.33	5.2e+002
L2	0.0820236	0.411	0.400	-0.264	0.32	48.52	86.64	191.94	108.83	1.1
*S2	0.0833333	1.733	0.558	0.018	0.57	29.04	21.65	221.52	15.78	9.6
ETA2	0.0850736	0.311	0.373	-0.115	0.42	20.91	117.33	314.36	112.17	0.7
MO3	0.1192421	0.205	0.200	-0.064	0.17	97.65	64.47	123.94	78.34	1.1
M3	0.1207671	0.103	0.176	0.055	0.20	156.79	118.37	356.32	128.83	0.35
MK3	0.1222921	0.219	0.202	-0.088	0.20	165.80	96.19	163.84	79.74	1.2
SK3	0.1251141	0.150	0.164	0.014	0.19	169.56	106.54	300.01	99.30	0.83
*MN4	0.1595106	0.348	0.187	-0.063	0.19	64.22	30.13	92.81	41.08	3.5
*M4	0.1610228	0.693	0.237	-0.168	0.20	72.14	15.80	116.97	21.66	8.5
SN4	0.1623326	0.098	0.164	0.045	0.16	53.67	95.37	108.37	154.85	0.36
*MS4	0.1638447	0.356	0.230	-0.049	0.20	98.29	33.46	145.64	40.92	2.4
S4	0.1666667	0.134	0.192	-0.098	0.17	135.20	122.63	328.73	122.23	0.49
2MK5	0.2028035	0.069	0.125	0.007	0.09	77.32	92.54	105.63	136.02	0.31
2SK5	0.2084474	0.082	0.115	-0.056	0.13	34.09	117.85	277.76	129.42	0.5
*2MN6	0.2400221	0.307	0.177	-0.065	0.16	65.65	32.12	313.49	40.72	3
*M6	0.2415342	0.706	0.191	0.106	0.16	64.63	13.66	349.79	16.76	14
*2MS6	0.2443561	0.346	0.191	-0.001	0.14	60.68	29.80	15.01	30.85	3.3
2SM6	0.2471781	0.117	0.154	0.001	0.13	87.33	65.99	33.11	108.58	0.58
3MK7	0.2833149	0.073	0.112	-0.005	0.09	106.43	92.91	27.41	136.00	0.43
*M8	0.3220456	0.213	0.114	-0.036	0.10	83.95	28.29	337.48	37.98	3.5

total var= 128.9897 pred var= 70.0809
percent total var predicted/var original= 54.3 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.6 m

Mooring Number: 6321

File Name: 6321adc-alh.nc

nobs = 3357, ngood = 3350, record length (days) = 139.88

start time: 26-Sep-2000 16:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.0144, x trend= 0

var(x)= 90.0716 var(xp)= 69.5491 var(xres)= 20.5759
percent var predicted/var original= 77.2 %

y0= -3.72, x trend= 0

var(y)= 43.1181 var(yp)= 4.533 var(yres)= 38.6108
percent var predicted/var original= 10.5 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.183	1.436	-0.238	1.28	59.31	88.22	23.98	92.02	0.68
MSF	0.0028219	0.726	1.098	-0.373	1.40	63.12	129.47	153.65	155.57	0.44
ALP1	0.0343966	0.313	0.386	-0.057	0.38	154.06	96.80	23.76	105.59	0.65
2Q1	0.0357064	0.300	0.342	0.022	0.45	6.37	131.58	293.33	104.94	0.77
Q1	0.0372185	0.232	0.414	-0.142	0.36	11.70	147.79	30.78	125.51	0.31
O1	0.0387307	0.539	0.403	0.145	0.56	4.21	79.26	256.34	61.81	1.8
NO1	0.0402686	0.585	0.633	-0.305	0.64	60.54	74.99	244.54	113.87	0.86
K1	0.0417807	0.729	0.523	-0.161	0.43	59.50	36.65	293.33	54.61	1.9
J1	0.0432929	0.263	0.371	-0.043	0.36	160.13	129.59	254.42	93.73	0.5
OO1	0.0448308	0.624	0.576	-0.169	0.48	63.85	50.52	309.96	78.06	1.2
UPS1	0.0463430	0.242	0.453	-0.154	0.46	36.07	104.35	60.03	143.04	0.29
EPS2	0.0761773	0.464	0.387	0.108	0.32	128.56	67.72	328.60	62.37	1.4
MU2	0.0776895	0.438	0.407	-0.175	0.37	122.13	64.80	265.10	83.84	1.2
*N2	0.0789992	2.183	0.541	-0.133	0.41	15.21	12.96	176.09	12.21	16
*M2	0.0805114	11.498	0.469	-0.777	0.47	12.79	2.39	197.52	2.60	6e+002
L2	0.0820236	0.376	0.317	-0.011	0.32	3.10	57.05	206.09	68.05	1.4
*S2	0.0833333	1.730	0.446	0.053	0.54	7.25	14.94	224.69	17.27	15
ETA2	0.0850736	0.219	0.365	-0.162	0.34	23.13	127.49	284.55	139.14	0.36
MO3	0.1192421	0.130	0.185	-0.112	0.19	103.32	98.93	88.70	157.56	0.49
M3	0.1207671	0.132	0.205	0.041	0.16	129.71	85.51	326.52	111.91	0.42
MK3	0.1222921	0.192	0.215	-0.101	0.18	111.57	75.16	208.94	101.24	0.8
SK3	0.1251141	0.167	0.210	-0.020	0.23	149.14	96.79	309.19	103.97	0.63
*MN4	0.1595106	0.459	0.217	0.016	0.21	54.04	29.57	82.96	27.76	4.5
*M4	0.1610228	1.002	0.214	-0.191	0.22	58.21	12.16	116.50	14.19	22
SN4	0.1623326	0.055	0.161	0.005	0.17	43.50	120.91	106.78	191.75	0.12
*MS4	0.1638447	0.364	0.237	-0.039	0.21	71.20	32.52	127.12	34.95	2.4
S4	0.1666667	0.154	0.194	-0.090	0.18	46.71	118.38	42.96	118.43	0.63
2MK5	0.2028035	0.107	0.134	0.064	0.11	78.55	70.63	143.77	127.52	0.64
2SK5	0.2084474	0.098	0.134	-0.058	0.12	119.44	59.69	169.85	120.39	0.54
*2MN6	0.2400221	0.357	0.147	-0.015	0.18	26.95	28.06	335.63	26.28	5.9
*M6	0.2415342	0.658	0.143	0.132	0.16	39.19	14.72	10.54	14.00	21
*2MS6	0.2443561	0.213	0.129	0.011	0.15	31.02	47.05	48.69	42.61	2.7
2SM6	0.2471781	0.121	0.131	-0.011	0.13	74.89	69.79	75.44	83.33	0.85
3MK7	0.2833149	0.072	0.097	0.021	0.08	88.82	95.80	99.32	127.62	0.54
*M8	0.3220456	0.224	0.086	0.046	0.07	67.16	20.71	358.88	27.47	6.8

total var= 133.1896 pred var= 74.0822
percent total var predicted/var original= 55.6 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.6 m

Mooring Number: 6381

File Name: 6381adc-alh.nc

nobs = 2400, ngood = 2396, record length (days) = 100.00

start time: 13-Feb-2001 16:22:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.831, x trend= 0

var(x)= 110.7276 var(xp)= 57.7954 var(xres)= 52.7903
percent var predicted/var original= 52.2 %

y0= -2.16, x trend= 0

var(y)= 95.7888 var(yp)= 11.3279 var(yres)= 84.647
percent var predicted/var original= 11.8 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	2.475	3.137	0.054	3.88	151.16	99.10	249.75	109.27	0.62
MSF	0.0028219	1.941	3.920	-0.229	2.89	60.42	69.33	35.35	130.34	0.25
ALP1	0.0343966	0.599	0.782	-0.110	0.81	13.60	111.36	156.24	111.34	0.59
2Q1	0.0357064	0.305	0.812	-0.030	0.66	89.54	109.57	48.36	186.21	0.14
Q1	0.0372185	0.874	0.877	-0.612	0.88	134.56	98.89	76.02	95.53	0.99
O1	0.0387307	0.510	0.798	-0.113	0.69	127.75	106.69	356.77	139.02	0.41
NO1	0.0402686	0.635	0.966	-0.193	0.92	36.01	102.66	350.17	105.10	0.43
*K1	0.0417807	1.873	0.989	-0.979	0.92	98.76	42.85	36.88	54.26	3.6
J1	0.0432929	0.495	0.763	-0.198	0.69	112.72	113.23	25.33	152.70	0.42
OO1	0.0448308	0.742	0.824	-0.291	0.92	31.25	98.46	6.52	108.46	0.81
UPS1	0.0463430	0.313	0.749	0.137	0.72	32.25	134.58	264.42	174.78	0.17
EPS2	0.0761773	0.570	0.642	-0.417	0.59	159.27	103.28	31.52	116.58	0.79
MU2	0.0776895	0.617	0.615	-0.071	0.61	99.07	87.71	284.09	95.34	1
*N2	0.0789992	2.561	0.774	-0.469	0.86	34.50	17.56	163.41	17.90	11
*M2	0.0805114	10.911	0.789	-0.346	0.74	19.65	4.31	195.53	4.41	1.9e+002
*L2	0.0820236	1.378	0.646	-0.907	0.62	35.04	62.78	283.89	60.51	4.6
*S2	0.0833333	2.025	0.794	0.573	0.75	14.36	23.34	225.63	26.53	6.5
ETA2	0.0850736	0.425	0.533	-0.080	0.57	28.24	98.94	167.01	117.47	0.64
MO3	0.1192421	0.197	0.268	-0.010	0.27	37.69	112.96	240.36	126.86	0.54
M3	0.1207671	0.259	0.263	-0.091	0.31	19.24	98.39	132.81	89.21	0.97
MK3	0.1222921	0.424	0.311	-0.152	0.35	159.54	66.92	5.67	65.99	1.9
SK3	0.1251141	0.322	0.311	0.083	0.34	46.81	84.71	113.13	84.21	1.1
*MN4	0.1595106	0.418	0.247	-0.011	0.25	79.54	45.54	76.05	52.68	2.9
*M4	0.1610228	0.975	0.322	-0.198	0.33	53.47	20.60	97.70	22.74	9.2
*SN4	0.1623326	0.442	0.299	-0.099	0.27	103.79	42.23	222.15	51.48	2.2
MS4	0.1638447	0.329	0.277	-0.061	0.27	65.78	61.31	139.45	67.66	1.4
S4	0.1666667	0.127	0.229	0.054	0.24	55.80	110.79	85.00	134.61	0.31
2MK5	0.2028035	0.148	0.177	-0.012	0.15	20.09	85.92	71.85	104.94	0.7
2SK5	0.2084474	0.054	0.162	-0.015	0.13	164.35	140.67	312.32	151.32	0.11
*2MN6	0.2400221	0.413	0.190	0.040	0.20	47.01	32.85	321.43	29.56	4.7
*M6	0.2415342	0.658	0.217	0.086	0.21	56.47	19.59	357.75	20.53	9.2
*2MS6	0.2443561	0.422	0.212	-0.013	0.21	56.44	32.42	46.07	31.82	4
2SM6	0.2471781	0.116	0.147	0.027	0.15	72.16	114.10	87.02	119.18	0.63
3MK7	0.2833149	0.093	0.118	-0.024	0.12	19.12	108.82	16.70	116.19	0.62
M8	0.3220456	0.088	0.103	0.059	0.09	84.58	106.54	332.85	96.90	0.73

total var= 206.5164 pred var= 69.1232
percent total var predicted/var original= 33.5 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.3 m

Mooring Number: 6451

File Name: 6451adc-alh.nc

nobs = 3672, ngood = 3628, record length (days) = 153.00

start time: 23-May-2001 14:35:00

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -1.54, x trend= 0

var(x)= 93.0685 var(xp)= 41.9871 var(xres)= 51.065

percent var predicted/var original= 45.1 %

y0= -0.353, x trend= 0

var(y)= 130.2599 var(yp)= 4.7214 var(yres)= 125.618

percent var predicted/var original= 3.6 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	0.401	1.536	-0.262	1.20	152.85	87.68	200.54	237.45	0.068
MSF	0.0028219	1.667	1.829	0.559	1.35	72.89	55.31	231.72	95.67	0.83
ALP1	0.0343966	0.236	0.595	0.092	0.57	39.92	138.75	175.96	197.53	0.16
2Q1	0.0357064	0.499	0.635	0.115	0.63	126.21	91.68	305.04	111.49	0.62
Q1	0.0372185	0.407	0.660	-0.152	0.64	128.24	95.87	56.94	131.23	0.38
O1	0.0387307	0.935	0.847	-0.336	0.67	90.40	50.02	226.42	61.87	1.2
NO1	0.0402686	0.600	0.619	-0.327	0.62	68.41	88.37	125.63	99.14	0.94
*K1	0.0417807	1.657	0.907	0.342	0.86	106.74	31.36	60.10	39.06	3.3
J1	0.0432929	0.498	0.671	0.105	0.57	65.32	76.13	316.48	117.18	0.55
OO1	0.0448308	0.259	0.613	0.015	0.55	160.12	142.96	32.30	164.43	0.18
UPS1	0.0463430	0.346	0.589	-0.136	0.60	154.20	122.50	20.16	142.60	0.34
EPS2	0.0761773	0.303	0.818	-0.092	0.74	102.74	124.96	112.62	203.16	0.14
MU2	0.0776895	0.729	0.994	0.107	0.96	45.14	98.96	306.47	121.72	0.54
*N2	0.0789992	2.018	1.261	0.121	1.41	2.31	43.43	186.27	38.55	2.6
*M2	0.0805114	8.547	1.340	-1.721	1.28	174.42	10.51	2.84	9.00	41
L2	0.0820236	0.592	1.088	-0.158	0.97	63.74	98.94	57.78	136.63	0.3
*S2	0.0833333	1.970	1.158	-1.275	1.23	29.02	82.86	200.50	78.18	2.9
ETA2	0.0850736	0.583	0.925	-0.009	0.84	106.85	87.83	339.92	130.40	0.4
MO3	0.1192421	0.361	0.473	-0.217	0.39	120.58	76.72	176.35	125.49	0.58
M3	0.1207671	0.362	0.412	0.132	0.36	128.65	78.19	16.51	98.80	0.77
*MK3	0.1222921	0.789	0.490	-0.009	0.50	139.06	43.86	321.48	38.45	2.6
SK3	0.1251141	0.363	0.473	0.141	0.40	108.58	78.23	40.68	102.51	0.59
MN4	0.1595106	0.442	0.402	-0.160	0.38	56.63	83.78	304.97	83.08	1.2
M4	0.1610228	0.584	0.450	-0.164	0.46	70.44	54.22	24.31	62.63	1.7
SN4	0.1623326	0.235	0.389	0.151	0.36	121.29	114.71	205.58	139.36	0.37
MS4	0.1638447	0.652	0.494	0.057	0.45	106.44	39.38	88.16	46.91	1.7
S4	0.1666667	0.305	0.417	0.158	0.40	130.13	104.23	214.27	116.63	0.53
*2MK5	0.2028035	0.688	0.344	-0.041	0.23	93.75	18.47	187.08	28.54	4
2SK5	0.2084474	0.118	0.234	-0.089	0.22	135.52	87.16	165.97	167.91	0.25
*2MN6	0.2400221	0.367	0.228	0.065	0.25	169.95	57.30	142.20	41.58	2.6
*M6	0.2415342	0.599	0.239	0.292	0.27	21.74	42.83	13.91	38.75	6.3
2MS6	0.2443561	0.111	0.205	0.044	0.19	35.50	122.01	54.11	120.13	0.29
2SM6	0.2471781	0.111	0.203	0.089	0.22	158.99	128.30	1.53	171.41	0.3
3MK7	0.2833149	0.227	0.169	-0.047	0.19	49.16	51.36	76.89	56.11	1.8
*M8	0.3220456	0.249	0.171	0.045	0.12	72.46	29.81	358.50	41.51	2.1

total var= 223.3284 pred var= 46.7085

percent total var predicted/var original= 20.9 %

Tidal Analysis of Current at LT-A

ADCP Observations, 5.0 m

Mooring Number: 6631

File Name: 6631adc-alh.nc

nobs = 343, ngood = 343, record length (days) = 14.29

start time: 17-Sep-2001 19:10:00

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -3.22, x trend= 0

var(x)= 90.8398 var(xp)= 32.4317 var(xres)= 58.4409

percent var predicted/var original= 35.7 %

y0= -1.18, x trend= 0

var(y)= 90.9609 var(yp)= 5.8144 var(yres)= 85.208

percent var predicted/var original= 6.4 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
O1	0.0387307	1.800	2.330	-1.038	1.92	42.63	104.36	286.08	113.45	0.6
K1	0.0417807	1.413	1.984	-0.132	1.64	31.85	103.99	311.76	108.28	0.51
*M2	0.0805114	7.822	2.996	3.296	2.80	176.58	33.91	11.30	30.36	6.8
M3	0.1207671	0.715	0.975	-0.653	0.93	50.46	116.97	226.52	125.94	0.54
*M4	0.1610228	1.520	0.960	-0.577	0.97	1.55	44.35	82.62	46.39	2.5
2MK5	0.2028035	0.317	0.693	0.161	0.64	95.08	84.31	257.70	182.60	0.21
2SK5	0.2084474	0.233	0.686	0.005	0.58	42.30	85.51	22.93	180.72	0.11
*M6	0.2415342	0.939	0.558	-0.310	0.59	22.73	58.75	13.56	38.87	2.8
3MK7	0.2833149	0.275	0.362	-0.056	0.39	7.38	106.28	334.64	112.19	0.58
M8	0.3220456	0.307	0.375	-0.186	0.38	36.50	105.48	216.10	123.06	0.67

total var= 181.8008 pred var= 38.2462

percent total var predicted/var original= 21.0 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.7 m

Mooring Number: 6651

File Name: 6651adc-alh.nc

nobs = 2541, ngood = 2523, record length (days) = 105.88

start time: 23-Oct-2001 16:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.199, x trend= 0

var(x)= 87.8678 var(xp)= 69.512 var(xres)= 18.4658
percent var predicted/var original= 79.1 %

y0= -1.89, x trend= 0

var(y)= 39.0482 var(yp)= 5.7939 var(yres)= 33.226
percent var predicted/var original= 14.8 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	2.135	2.599	0.048	1.60	65.18	45.40	228.31	81.96	0.68
MSF	0.0028219	0.881	1.910	-0.021	1.36	113.14	67.87	331.81	153.60	0.21
ALP1	0.0343966	0.383	0.402	0.108	0.38	69.20	67.57	253.81	97.11	0.91
2Q1	0.0357064	0.278	0.348	-0.105	0.38	14.14	129.16	116.27	117.24	0.64
Q1	0.0372185	0.337	0.433	-0.095	0.40	87.31	58.47	241.68	89.54	0.6
*O1	0.0387307	0.697	0.436	0.145	0.52	27.57	52.30	299.58	46.61	2.6
NO1	0.0402686	0.346	0.319	-0.026	0.36	58.38	68.07	55.33	84.05	1.2
*K1	0.0417807	0.782	0.437	-0.106	0.47	26.03	47.50	291.27	34.05	3.2
J1	0.0432929	0.331	0.376	-0.103	0.33	153.70	102.63	96.10	100.50	0.78
OO1	0.0448308	0.378	0.359	-0.263	0.33	102.43	94.67	38.09	115.56	1.1
UPS1	0.0463430	0.433	0.392	-0.002	0.33	96.37	48.37	88.22	71.66	1.2
EPS2	0.0761773	0.193	0.377	-0.191	0.32	66.54	83.82	33.57	178.38	0.26
MU2	0.0776895	0.465	0.466	-0.155	0.37	48.30	63.50	260.38	72.28	1
*N2	0.0789992	2.024	0.315	0.072	0.54	14.25	17.90	169.23	10.28	41
*M2	0.0805114	11.943	0.384	-0.881	0.65	14.82	2.80	201.82	1.75	9.7e+002
L2	0.0820236	0.530	0.419	0.216	0.52	164.27	98.57	47.71	62.81	1.6
*S2	0.0833333	1.304	0.372	0.091	0.53	3.17	31.29	231.05	18.20	12
ETA2	0.0850736	0.322	0.394	-0.016	0.29	63.34	54.67	343.11	102.36	0.67
MO3	0.1192421	0.153	0.179	-0.124	0.17	53.75	103.95	281.52	129.54	0.73
M3	0.1207671	0.094	0.156	0.025	0.15	165.70	125.55	180.27	157.91	0.36
MK3	0.1222921	0.130	0.148	-0.003	0.16	40.17	96.16	221.83	116.39	0.78
SK3	0.1251141	0.076	0.172	0.029	0.13	82.83	85.11	279.09	141.26	0.2
*MN4	0.1595106	0.397	0.208	0.052	0.21	59.10	34.40	107.33	31.48	3.6
*M4	0.1610228	0.944	0.256	-0.026	0.20	65.10	15.02	137.56	13.67	14
SN4	0.1623326	0.140	0.175	-0.005	0.17	133.13	90.84	231.16	99.01	0.65
MS4	0.1638447	0.122	0.177	-0.013	0.16	63.75	84.47	208.88	118.29	0.47
S4	0.1666667	0.153	0.193	-0.003	0.16	50.07	80.03	102.40	89.36	0.63
2MK5	0.2028035	0.100	0.136	0.006	0.12	163.55	88.01	313.00	101.74	0.54
2SK5	0.2084474	0.103	0.115	-0.031	0.11	9.69	100.97	53.82	87.43	0.81
*2MN6	0.2400221	0.270	0.156	0.024	0.20	34.84	39.47	317.41	45.43	3
*M6	0.2415342	0.540	0.188	0.095	0.18	37.87	22.27	21.00	22.66	8.2
2MS6	0.2443561	0.166	0.152	0.019	0.15	50.33	72.18	34.11	73.77	1.2
2SM6	0.2471781	0.116	0.153	0.070	0.15	55.66	98.81	71.15	111.00	0.58
*3MK7	0.2833149	0.138	0.094	-0.078	0.10	49.75	68.55	143.69	70.73	2.1
M8	0.3220456	0.087	0.090	-0.028	0.07	95.98	69.35	46.16	75.18	0.93

total var= 126.916 pred var= 75.3059
percent total var predicted/var original= 59.3 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.4 m

Mooring Number: 6831

File Name: 6831adc-alh.nc

nobs = 2492, ngood = 2471, record length (days) = 103.83

start time: 06-Feb-2002 15:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.493, x trend= 0

var(x)= 108.7145 var(xp)= 72.4616 var(xres)= 36.3727
percent var predicted/var original= 66.7 %

y0= -2.35, x trend= 0

var(y)= 63.8156 var(yp)= 8.7576 var(yres)= 55.0023
percent var predicted/var original= 13.7 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
*MM	0.0015122	2.845	1.943	-0.270	1.73	116.26	43.94	209.48	44.93	2.1
MSF	0.0028219	0.640	1.354	0.256	1.27	119.36	123.01	98.30	186.78	0.22
ALP1	0.0343966	0.574	0.701	-0.411	0.78	175.79	143.83	245.26	119.08	0.67
2Q1	0.0357064	0.422	0.664	-0.271	0.55	20.28	133.65	94.51	134.92	0.4
Q1	0.0372185	0.601	0.775	-0.171	0.58	108.87	86.50	293.46	114.41	0.6
*O1	0.0387307	1.124	0.708	-0.267	0.86	13.51	58.33	298.58	54.22	2.5
NO1	0.0402686	0.160	0.503	-0.028	0.47	32.36	112.14	291.50	185.98	0.1
*K1	0.0417807	1.659	0.908	-0.527	0.75	135.63	45.56	49.02	38.46	3.3
J1	0.0432929	0.728	0.798	-0.415	0.69	131.26	92.15	9.67	91.98	0.83
OO1	0.0448308	0.578	0.685	-0.534	0.60	59.60	121.90	24.94	140.54	0.71
UPS1	0.0463430	0.454	0.644	-0.258	0.65	27.97	124.78	209.18	116.96	0.5
EPS2	0.0761773	0.309	0.515	0.045	0.46	145.95	105.31	255.11	156.25	0.36
MU2	0.0776895	0.313	0.485	-0.083	0.51	8.73	118.57	141.68	133.16	0.42
*N2	0.0789992	2.767	0.725	-0.425	0.67	7.27	16.92	167.38	14.82	15
*M2	0.0805114	11.661	0.646	-0.709	0.77	13.75	3.39	200.86	3.77	3.3e+002
*L2	0.0820236	1.444	0.795	-0.401	0.85	14.37	42.94	228.11	40.88	3.3
*S2	0.0833333	2.374	0.698	0.309	0.65	6.44	17.92	242.69	17.73	12
ETA2	0.0850736	0.264	0.388	-0.022	0.42	46.91	105.28	337.37	148.17	0.47
MO3	0.1192421	0.336	0.247	-0.043	0.30	64.85	59.05	148.16	57.03	1.8
M3	0.1207671	0.152	0.233	0.016	0.24	6.23	108.59	21.93	127.88	0.43
MK3	0.1222921	0.254	0.262	-0.058	0.25	70.05	78.99	201.04	75.99	0.94
SK3	0.1251141	0.180	0.255	0.062	0.21	134.29	94.42	192.64	113.08	0.5
*MN4	0.1595106	0.581	0.268	-0.207	0.25	62.97	26.05	87.61	33.39	4.7
*M4	0.1610228	0.648	0.287	-0.174	0.22	63.44	23.40	133.39	25.83	5.1
SN4	0.1623326	0.165	0.214	0.084	0.23	53.55	93.07	259.95	108.20	0.6
*MS4	0.1638447	0.366	0.230	0.004	0.22	41.00	43.58	159.63	39.24	2.5
S4	0.1666667	0.109	0.194	0.064	0.19	41.92	107.10	210.84	125.85	0.32
2MK5	0.2028035	0.136	0.131	-0.016	0.14	116.53	90.38	264.14	88.26	1.1
2SK5	0.2084474	0.098	0.129	0.012	0.13	109.55	99.91	275.39	98.55	0.59
*2MN6	0.2400221	0.470	0.181	0.078	0.17	29.90	23.99	316.12	23.24	6.8
*M6	0.2415342	0.490	0.181	0.174	0.17	44.01	24.58	21.07	22.27	7.3
*2MS6	0.2443561	0.247	0.168	0.108	0.15	30.59	55.95	62.69	55.45	2.1
2SM6	0.2471781	0.133	0.131	-0.022	0.15	30.88	90.10	89.62	86.32	1
3MK7	0.2833149	0.072	0.111	-0.017	0.10	45.65	105.79	252.03	129.44	0.42
M8	0.3220456	0.081	0.091	0.041	0.10	31.50	87.26	329.65	105.84	0.8

total var= 172.5301 pred var= 81.2191
percent total var predicted/var original= 47.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.4 m

Mooring Number: 6901

File Name: 6901adc-alh.nc

nobs = 3693, ngood = 3691, record length (days) = 153.88

start time: 21-May-2002 15:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.633, x trend= 0

var(x)= 117.8707 var(xp)= 49.819 var(xres)= 67.9626
percent var predicted/var original= 42.3 %

y0= 1.77, x trend= 0

var(y)= 109.7827 var(yp)= 2.6742 var(yres)= 107.0896
percent var predicted/var original= 2.4 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	3.018	3.439	0.367	1.77	89.63	40.81	91.46	87.46	0.77
MSF	0.0028219	2.992	3.256	0.399	2.64	122.39	44.16	6.58	73.55	0.84
ALP1	0.0343966	0.373	0.634	-0.107	0.49	63.62	101.57	356.06	140.37	0.35
2Q1	0.0357064	0.516	0.650	-0.399	0.59	126.14	118.98	88.57	112.77	0.63
Q1	0.0372185	0.342	0.616	0.085	0.54	167.24	118.23	205.37	126.88	0.31
O1	0.0387307	0.966	0.785	-0.180	0.72	166.91	48.54	139.06	52.12	1.5
NO1	0.0402686	0.575	0.469	-0.174	0.47	63.66	69.15	6.16	66.35	1.5
*K1	0.0417807	1.777	0.679	-0.735	0.80	147.16	31.86	97.90	31.53	6.8
J1	0.0432929	0.834	0.642	-0.388	0.59	92.61	69.12	111.33	67.70	1.7
OO1	0.0448308	0.522	0.507	-0.150	0.45	110.51	70.13	124.66	70.79	1.1
UPS1	0.0463430	0.223	0.457	0.012	0.38	0.08	118.85	290.01	162.45	0.24
EPS2	0.0761773	0.933	1.210	-0.169	1.06	16.10	79.19	173.86	101.04	0.59
MU2	0.0776895	1.001	1.131	-0.703	0.99	1.45	104.19	260.04	119.97	0.78
*N2	0.0789992	2.568	1.422	-0.456	1.19	12.70	32.43	157.21	37.70	3.3
*M2	0.0805114	9.222	1.527	0.615	1.22	6.03	8.32	189.99	9.25	36
*L2	0.0820236	2.027	1.392	-1.013	1.73	159.55	82.56	300.79	80.58	2.1
*S2	0.0833333	1.700	1.165	-0.697	1.24	173.28	51.53	39.54	63.23	2.1
ETA2	0.0850736	0.415	0.840	-0.239	0.76	27.22	115.03	101.49	169.81	0.24
MO3	0.1192421	0.177	0.303	-0.001	0.26	76.55	116.59	24.42	153.15	0.34
M3	0.1207671	0.146	0.305	0.075	0.29	89.05	154.26	336.54	161.84	0.23
*MK3	0.1222921	0.588	0.368	-0.509	0.37	53.10	120.66	125.66	113.08	2.6
SK3	0.1251141	0.231	0.313	-0.070	0.32	111.95	115.35	304.26	109.08	0.55
MN4	0.1595106	0.420	0.376	0.007	0.32	2.29	53.23	92.18	66.87	1.2
*M4	0.1610228	0.617	0.380	-0.108	0.34	16.30	32.29	97.38	49.90	2.6
SN4	0.1623326	0.256	0.350	-0.144	0.34	141.61	95.20	281.88	132.00	0.54
MS4	0.1638447	0.379	0.383	-0.158	0.32	1.98	69.62	139.19	79.36	0.98
S4	0.1666667	0.240	0.310	-0.146	0.34	80.02	126.40	180.05	116.09	0.6
2MK5	0.2028035	0.179	0.206	-0.021	0.18	25.61	65.57	46.33	93.69	0.76
2SK5	0.2084474	0.085	0.178	0.023	0.14	130.27	107.91	63.85	136.02	0.23
*2MN6	0.2400221	0.485	0.182	-0.075	0.22	51.49	27.68	339.11	24.15	7.1
*M6	0.2415342	0.814	0.208	-0.203	0.23	43.62	13.57	15.40	13.98	15
*2MS6	0.2443561	0.278	0.171	0.033	0.20	48.02	40.41	79.19	43.74	2.6
2SM6	0.2471781	0.067	0.148	-0.039	0.14	96.71	128.86	222.42	170.98	0.2
3MK7	0.2833149	0.120	0.126	-0.046	0.12	28.39	66.14	173.71	85.07	0.9
M8	0.3220456	0.072	0.088	0.016	0.08	11.57	69.19	300.63	111.19	0.67

total var= 227.6533 pred var= 52.4932
percent total var predicted/var original= 23.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.1 m

Mooring Number: 6931

File Name: 6931adc-alh.nc

nobs = 2183, ngood = 2157, record length (days) = 90.96

start time: 20-Jun-2002 17:10:00

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.591, x trend= 0

var(x)= 103.7487 var(xp)= 39.2222 var(xres)= 64.2306
percent var predicted/var original= 37.8 %

y0= 3.52, x trend= 0

var(y)= 102.5481 var(yp)= 4.4095 var(yres)= 98.0241
percent var predicted/var original= 4.3 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	3.503	3.523	1.880	2.59	70.38	60.41	68.48	92.07	0.99
MSF	0.0028219	2.304	2.721	-0.563	2.78	148.49	92.87	6.55	97.65	0.72
ALP1	0.0343966	0.496	0.663	0.098	0.64	134.48	97.70	31.69	110.49	0.56
2Q1	0.0357064	0.902	0.702	-0.266	0.73	95.38	62.45	82.53	70.84	1.6
Q1	0.0372185	0.590	0.710	0.188	0.63	118.79	92.62	128.21	97.15	0.69
O1	0.0387307	0.784	0.828	0.542	0.64	113.48	97.43	81.15	102.10	0.9
NO1	0.0402686	0.669	0.479	-0.202	0.54	57.72	59.23	7.09	64.95	2
*K1	0.0417807	1.887	0.879	-0.608	0.78	140.65	29.82	91.06	30.22	4.6
J1	0.0432929	0.638	0.713	0.024	0.67	74.53	82.60	135.75	87.17	0.8
OO1	0.0448308	0.572	0.526	-0.026	0.48	110.79	64.25	119.86	62.38	1.2
UPS1	0.0463430	0.429	0.515	-0.199	0.53	5.02	94.08	296.73	100.32	0.69
EPS2	0.0761773	0.866	1.062	-0.011	1.13	0.03	88.33	194.13	112.38	0.67
*MU2	0.0776895	2.071	1.296	-0.909	1.19	172.94	58.02	84.66	62.75	2.6
*N2	0.0789992	2.449	1.406	-0.536	1.36	4.97	42.62	174.78	43.99	3
*M2	0.0805114	7.648	1.750	1.621	1.33	178.61	12.04	8.67	14.04	19
*L2	0.0820236	3.015	1.891	-2.310	1.62	152.40	93.05	253.38	101.83	2.5
S2	0.0833333	1.413	1.394	-0.591	1.40	138.32	94.24	58.61	93.85	1
ETA2	0.0850736	0.320	0.989	-0.220	0.93	11.37	117.52	144.94	193.57	0.1
MO3	0.1192421	0.553	0.441	-0.047	0.55	101.22	74.32	343.18	62.09	1.6
M3	0.1207671	0.301	0.450	0.211	0.43	69.26	146.86	2.82	128.41	0.45
MK3	0.1222921	0.631	0.489	-0.269	0.49	106.35	74.92	71.79	60.32	1.7
SK3	0.1251141	0.278	0.430	0.058	0.39	65.40	112.08	346.00	121.47	0.42
MN4	0.1595106	0.241	0.413	-0.026	0.38	2.82	76.52	168.35	137.49	0.34
M4	0.1610228	0.192	0.425	0.072	0.36	177.74	92.83	257.79	156.96	0.2
SN4	0.1623326	0.362	0.354	-0.010	0.38	55.08	91.53	308.31	86.53	1
MS4	0.1638447	0.260	0.356	0.007	0.38	115.93	104.89	329.49	127.57	0.53
S4	0.1666667	0.487	0.422	-0.184	0.41	126.96	68.20	93.71	77.38	1.3
2MK5	0.2028035	0.141	0.291	0.051	0.27	107.11	123.96	329.60	154.31	0.23
2SK5	0.2084474	0.171	0.285	-0.027	0.30	143.00	111.56	25.80	140.93	0.36
*2MN6	0.2400221	0.437	0.294	0.041	0.26	73.94	50.11	323.63	37.95	2.2
*M6	0.2415342	0.638	0.295	-0.130	0.32	42.96	27.63	14.38	36.58	4.7
2MS6	0.2443561	0.171	0.238	-0.041	0.21	75.50	107.57	100.60	117.71	0.52
2SM6	0.2471781	0.113	0.198	0.038	0.21	33.37	107.17	160.00	153.13	0.33
*3MK7	0.2833149	0.326	0.204	-0.014	0.21	12.99	43.28	183.46	49.11	2.6
M8	0.3220456	0.143	0.142	0.014	0.16	125.62	91.58	153.04	86.69	1

total var= 206.2968 pred var= 43.6317
percent total var predicted/var original= 21.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.7 m

Mooring Number: 6971

File Name: 6971adc-alh.nc

nobs = 5015, ngood = 4991, record length (days) = 208.96

start time: 24-Oct-2002 14:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 1.38, x trend= 0

var(x)= 110.8774 var(xp)= 72.9208 var(xres)= 37.8869
percent var predicted/var original= 65.8 %

y0= -3.85, x trend= 0

var(y)= 72.8715 var(yp)= 11.4722 var(yres)= 61.5677
percent var predicted/var original= 15.7 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
*SSA	0.0002282	3.557	1.804	-0.504	1.31	104.43	19.34	91.86	31.31	3.9
M5M	0.0013098	1.960	1.884	-0.467	1.13	102.21	30.80	55.57	58.82	1.1
MM	0.0015122	1.578	1.657	-0.362	1.04	106.55	37.58	79.52	78.59	0.91
MSF	0.0028219	0.190	1.156	0.012	0.83	178.64	114.80	323.82	159.71	0.027
MF	0.0030501	1.216	1.302	-0.042	1.25	127.91	66.06	226.16	95.14	0.87
ALP1	0.0343966	0.209	0.282	-0.011	0.31	145.58	106.16	203.59	127.68	0.55
2Q1	0.0357064	0.277	0.305	0.037	0.32	48.14	88.56	350.99	86.00	0.83
SIG1	0.0359087	0.399	0.343	-0.037	0.33	73.07	68.22	60.03	68.98	1.4
Q1	0.0372185	0.252	0.320	0.180	0.32	26.52	126.43	235.02	127.96	0.62
RHO1	0.0374209	0.427	0.354	-0.188	0.34	72.13	71.09	257.23	68.94	1.4
O1	0.0387307	0.536	0.388	-0.129	0.36	30.24	49.98	269.43	42.17	1.9
TAU1	0.0389588	0.273	0.348	-0.074	0.36	74.51	96.89	65.47	111.63	0.62
BET1	0.0400404	0.293	0.317	0.006	0.30	59.93	77.90	103.56	83.07	0.85
NO1	0.0402686	0.229	0.279	-0.024	0.26	3.32	92.51	153.95	81.08	0.67
CHI1	0.0404710	0.379	0.347	0.061	0.39	178.06	82.02	73.03	73.31	1.2
*P1	0.0415526	0.677	0.410	-0.469	0.38	101.45	75.00	187.75	82.43	2.7
K1	0.0417807	0.433	0.373	-0.037	0.38	138.12	51.36	38.68	66.15	1.3
*PHI1	0.0420089	0.686	0.430	-0.285	0.38	72.30	44.08	117.50	47.07	2.5
THE1	0.0430905	0.303	0.307	-0.206	0.30	77.78	107.22	125.84	117.81	0.97
J1	0.0432929	0.352	0.335	-0.199	0.36	127.11	88.96	67.04	81.81	1.1
SO1	0.0446027	0.115	0.265	0.066	0.25	130.77	120.41	338.58	165.66	0.19
OO1	0.0448308	0.276	0.207	-0.227	0.22	172.94	146.48	76.56	156.06	1.8
UPS1	0.0463430	0.220	0.264	-0.138	0.24	45.59	100.63	345.30	123.62	0.69
QQ2	0.0759749	0.178	0.300	-0.154	0.27	33.13	125.42	344.48	152.50	0.35
EPS2	0.0761773	0.320	0.306	0.028	0.29	135.68	75.72	215.13	71.96	1.1
*2N2	0.0774871	0.441	0.297	0.214	0.31	146.98	76.03	258.52	65.14	2.2
*MU2	0.0776895	0.556	0.308	-0.028	0.37	173.49	42.02	247.26	41.01	3.3
*N2	0.0789992	2.862	0.331	0.042	0.40	4.68	8.71	167.46	5.87	75
*NU2	0.0792016	0.784	0.343	-0.243	0.38	162.09	35.28	337.79	28.62	5.2
*M2	0.0805114	11.790	0.333	-0.526	0.45	12.68	1.84	198.29	1.52	1.3e+003
*MKS2	0.0807396	0.518	0.308	0.017	0.32	60.55	33.91	193.26	39.09	2.8
*LDA2	0.0818212	0.485	0.277	-0.267	0.36	2.16	74.49	270.23	66.56	3.1
*L2	0.0820236	0.840	0.403	-0.473	0.47	6.30	60.21	211.15	47.61	4.3
*S2	0.0833333	1.947	0.309	-0.206	0.39	5.46	11.68	235.99	9.54	40
*K2	0.0835615	0.533	0.293	-0.040	0.33	43.67	32.42	234.99	32.33	3.3
MSN2	0.0848455	0.180	0.265	-0.002	0.23	162.00	137.28	321.26	124.72	0.46
ETA2	0.0850736	0.137	0.250	0.026	0.20	132.66	100.88	286.91	125.99	0.3
MO3	0.1192421	0.232	0.206	0.051	0.17	125.71	53.82	36.50	58.21	1.3
*M3	0.1207671	0.330	0.193	-0.135	0.19	135.42	55.39	247.17	50.00	2.9
SO3	0.1220640	0.136	0.148	-0.004	0.12	127.31	84.17	160.79	98.51	0.84
MK3	0.1222921	0.259	0.196	-0.074	0.18	62.43	51.65	53.09	57.15	1.7
SK3	0.1251141	0.105	0.142	-0.043	0.16	32.60	120.98	125.26	119.97	0.54
*MN4	0.1595106	0.383	0.171	-0.097	0.19	45.69	31.39	95.77	31.56	5
*M4	0.1610228	1.117	0.227	-0.379	0.15	68.35	11.15	106.51	13.34	24
SN4	0.1623326	0.118	0.139	-0.001	0.14	2.06	117.04	36.33	82.57	0.72
*MS4	0.1638447	0.345	0.183	-0.160	0.18	50.29	43.27	165.65	46.61	3.6
MK4	0.1640729	0.064	0.107	-0.017	0.12	3.92	161.42	151.71	136.08	0.36
S4	0.1666667	0.055	0.144	-0.016	0.12	21.32	126.37	257.89	196.45	0.15
SK4	0.1668948	0.075	0.132	-0.041	0.12	92.67	92.16	347.78	139.79	0.32

2MK5	0.2028035	0.050	0.089	0.036	0.09	66.98	123.03	182.30	145.37	0.32
2SK5	0.2084474	0.076	0.092	-0.017	0.09	173.02	101.19	24.21	113.03	0.69
*2MN6	0.2400221	0.400	0.153	-0.027	0.16	52.47	22.56	332.03	19.94	6.8
*M6	0.2415342	0.645	0.161	0.092	0.13	44.38	15.22	0.30	14.73	16
*2MS6	0.2443561	0.283	0.151	0.018	0.14	55.05	28.43	49.71	29.00	3.5
2MK6	0.2445843	0.095	0.108	0.053	0.10	85.41	112.18	119.37	95.89	0.76
2SM6	0.2471781	0.045	0.106	-0.010	0.10	106.72	136.35	109.14	158.42	0.18
MSK6	0.2474062	0.045	0.093	-0.013	0.10	125.90	126.21	299.62	153.84	0.23
3MK7	0.2833149	0.069	0.073	0.041	0.07	14.92	95.21	38.16	111.94	0.9
*M8	0.3220456	0.161	0.072	0.045	0.07	77.20	29.00	12.19	31.29	5.1

total var= 183.7489 pred var= 84.393
percent total var predicted/var original= 45.9 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.5 m

Mooring Number: 7081

File Name: 7081adc-alh.nc

nobs = 4270, ngood = 4254, record length (days) = 177.92

start time: 30-Mar-2003 13:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -1.15, x trend= 0

var(x)= 122.2762 var(xp)= 58.5866 var(xres)= 64.2672
percent var predicted/var original= 47.9 %

y0= 2.63, x trend= 0

var(y)= 98.1777 var(yp)= 1.3321 var(yres)= 96.8521
percent var predicted/var original= 1.4 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.176	2.237	0.266	1.65	132.97	98.46	63.86	155.35	0.28
MSF	0.0028219	1.842	2.219	0.217	1.85	106.14	67.09	186.53	97.47	0.69
ALP1	0.0343966	0.310	0.389	0.006	0.33	107.85	101.32	169.37	91.77	0.63
2Q1	0.0357064	0.377	0.438	-0.125	0.36	11.04	81.00	8.92	101.42	0.74
Q1	0.0372185	0.387	0.449	-0.296	0.48	41.18	108.07	334.12	118.40	0.74
O1	0.0387307	0.243	0.385	0.077	0.37	79.43	117.26	300.41	129.17	0.4
NO1	0.0402686	0.246	0.351	0.102	0.40	139.39	94.16	347.74	101.62	0.49
*K1	0.0417807	1.110	0.502	-0.042	0.47	134.61	28.75	54.83	28.05	4.9
J1	0.0432929	0.501	0.430	-0.351	0.39	140.90	92.23	37.30	100.16	1.4
OO1	0.0448308	0.468	0.356	-0.279	0.32	127.35	78.21	79.18	76.50	1.7
UPS1	0.0463430	0.365	0.325	-0.139	0.33	118.78	95.65	24.78	83.41	1.3
EPS2	0.0761773	0.590	0.740	-0.404	0.89	82.88	129.65	134.76	121.54	0.64
MU2	0.0776895	0.792	0.894	-0.714	0.77	100.21	143.34	264.23	134.03	0.78
*N2	0.0789992	2.750	1.019	0.200	0.80	6.93	18.38	160.49	22.80	7.3
*M2	0.0805114	10.473	0.924	0.752	0.96	2.05	4.88	176.59	5.26	1.3e+002
L2	0.0820236	1.273	0.904	-0.627	0.87	11.76	58.10	281.49	73.35	2
*S2	0.0833333	2.426	0.990	-0.397	0.83	6.60	19.42	248.05	23.93	6
ETA2	0.0850736	0.382	0.641	-0.347	0.59	149.03	139.80	330.72	154.84	0.36
MO3	0.1192421	0.179	0.244	0.020	0.24	40.37	89.06	334.11	126.43	0.54
M3	0.1207671	0.267	0.288	-0.105	0.29	110.38	99.15	236.78	98.65	0.86
*MK3	0.1222921	0.730	0.277	-0.487	0.31	91.99	54.89	53.59	56.93	6.9
SK3	0.1251141	0.181	0.258	0.008	0.23	86.15	112.86	87.87	108.33	0.49
MN4	0.1595106	0.492	0.366	-0.258	0.30	179.12	58.08	275.99	72.52	1.8
*M4	0.1610228	0.630	0.365	-0.188	0.29	10.60	35.73	92.20	40.85	3
SN4	0.1623326	0.243	0.275	-0.144	0.27	93.05	124.26	174.01	114.43	0.78
MS4	0.1638447	0.266	0.283	-0.088	0.28	176.73	68.13	351.04	91.40	0.88
S4	0.1666667	0.135	0.258	0.050	0.25	166.93	111.67	350.17	214.91	0.27
2MK5	0.2028035	0.212	0.182	-0.050	0.17	122.87	57.92	308.15	57.50	1.4
2SK5	0.2084474	0.177	0.148	-0.049	0.15	144.50	74.08	77.39	77.31	1.4
*2MN6	0.2400221	0.252	0.157	0.019	0.14	31.70	37.46	330.15	44.18	2.6
*M6	0.2415342	0.768	0.196	-0.101	0.16	42.33	14.82	1.60	13.40	15
*2MS6	0.2443561	0.303	0.147	0.031	0.15	38.30	32.17	58.85	35.78	4.2
2SM6	0.2471781	0.082	0.134	-0.029	0.14	31.11	90.50	87.33	128.65	0.37
3MK7	0.2833149	0.082	0.084	-0.045	0.10	104.58	111.13	283.77	100.65	0.95
M8	0.3220456	0.076	0.086	0.005	0.08	144.70	74.39	204.06	86.94	0.78

total var= 220.4539 pred var= 59.9187
percent total var predicted/var original= 27.2 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.5 m

Mooring Number: 7171

File Name: 7171Eadc-alh.nc

nobs = 223, ngood = 220, record length (days) = 9.29

start time: 14-Oct-2003 23:03:57

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.261, x trend= 0

var(x)= 81.6242 var(xp)= 30.9721 var(xres)= 50.9699
percent var predicted/var original= 37.9 %

y0= 5.87, x trend= 0

var(y)= 82.1748 var(yp)= 2.2701 var(yres)= 79.8111
percent var predicted/var original= 2.8 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
K1	0.0417807	3.561	4.354	-2.421	3.94	124.58	96.65	78.67	122.63	0.67
*M2	0.0805114	8.096	2.846	1.393	2.45	9.16	18.53	189.51	22.68	8.1
*M3	0.1207671	0.767	0.513	-0.435	0.51	178.54	58.98	230.52	64.64	2.2
M4	0.1610228	0.857	0.918	-0.124	0.92	174.83	81.71	219.01	80.80	0.87
2MK5	0.2028035	0.408	0.295	0.180	0.23	36.66	49.61	82.51	63.73	1.9
*2SK5	0.2084474	0.526	0.369	0.186	0.17	166.12	23.93	124.81	44.62	2
*M6	0.2415342	1.097	0.727	0.047	0.61	64.07	31.53	318.05	41.23	2.3
3MK7	0.2833149	0.394	0.280	-0.012	0.26	141.97	42.31	359.62	49.80	2
*M8	0.3220456	0.336	0.229	0.205	0.21	142.23	66.56	65.44	71.57	2.2

total var= 163.799 pred var= 33.2423
percent total var predicted/var original= 20.3 %

Tidal Analysis of Current at LT-A

ADCP Observations, 5.9 m

Mooring Number: 7561

File Name: 7561adc-alh.nc

nobs = 2493, ngood = 2492, record length (days) = 103.88

start time: 05-Feb-2004 15:44:42

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.048, x trend= 0

var(x)= 110.853 var(xp)= 78.5777 var(xres)= 32.165
percent var predicted/var original= 70.9 %

y0= -2.14, x trend= 0

var(y)= 61.2187 var(yp)= 0.73504 var(yres)= 60.4775
percent var predicted/var original= 1.2 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.177	3.167	0.244	1.93	123.22	52.54	39.51	160.70	0.14
MSF	0.0028219	3.040	3.552	0.137	1.85	92.71	33.88	155.29	94.32	0.73
ALP1	0.0343966	0.759	0.584	-0.160	0.63	42.24	58.29	351.12	62.42	1.7
2Q1	0.0357064	0.449	0.547	-0.153	0.50	51.31	94.00	338.62	104.02	0.67
Q1	0.0372185	0.500	0.500	-0.076	0.54	13.36	97.78	351.98	86.35	1
O1	0.0387307	0.276	0.492	0.044	0.52	46.22	115.86	269.02	145.29	0.32
NO1	0.0402686	0.259	0.577	-0.149	0.55	119.81	105.93	143.74	149.83	0.2
K1	0.0417807	1.078	0.793	-0.352	0.62	59.61	46.93	42.08	45.98	1.8
J1	0.0432929	0.647	0.506	-0.351	0.60	149.54	95.19	45.86	92.14	1.6
OO1	0.0448308	0.240	0.344	-0.080	0.39	106.58	93.07	64.62	154.51	0.49
UPS1	0.0463430	0.539	0.476	-0.205	0.46	136.19	56.13	109.11	75.54	1.3
EPS2	0.0761773	0.373	0.603	-0.108	0.60	16.24	124.39	40.90	139.65	0.38
MU2	0.0776895	0.492	0.642	-0.259	0.63	161.53	120.84	231.30	113.56	0.59
*N2	0.0789992	2.342	0.602	0.222	0.83	178.36	23.74	0.58	17.98	15
*M2	0.0805114	12.271	0.737	-0.540	0.92	2.20	4.17	199.05	3.79	2.8e+002
L2	0.0820236	0.323	0.502	0.025	0.49	117.99	88.29	258.83	140.52	0.42
*S2	0.0833333	2.434	0.741	0.041	0.87	8.80	20.31	245.09	14.59	11
ETA2	0.0850736	0.266	0.467	-0.116	0.46	12.72	135.65	14.24	152.82	0.32
MO3	0.1192421	0.214	0.250	-0.067	0.25	147.09	83.61	124.58	86.54	0.73
M3	0.1207671	0.250	0.288	0.025	0.28	109.77	76.99	279.91	88.66	0.75
*MK3	0.1222921	0.469	0.300	-0.228	0.29	70.50	59.70	98.22	54.68	2.4
SK3	0.1251141	0.276	0.258	-0.058	0.27	13.42	73.17	98.28	70.29	1.1
*MN4	0.1595106	0.369	0.256	-0.152	0.25	49.88	59.30	81.18	57.29	2.1
*M4	0.1610228	0.589	0.265	-0.337	0.25	64.31	47.90	86.52	45.71	4.9
SN4	0.1623326	0.236	0.245	0.113	0.23	110.11	97.78	140.83	87.96	0.93
MS4	0.1638447	0.310	0.237	-0.202	0.22	78.23	74.03	141.72	79.97	1.7
S4	0.1666667	0.201	0.228	0.019	0.21	176.67	83.68	355.16	79.16	0.78
2MK5	0.2028035	0.108	0.159	-0.033	0.14	94.79	109.32	117.14	114.65	0.46
2SK5	0.2084474	0.121	0.156	0.002	0.15	84.83	108.03	230.95	98.84	0.61
*2MN6	0.2400221	0.374	0.204	-0.037	0.22	31.49	39.28	339.68	39.45	3.4
*M6	0.2415342	0.671	0.221	-0.080	0.22	30.52	18.49	10.55	19.82	9.2
*2MS6	0.2443561	0.415	0.205	0.052	0.20	42.78	31.06	61.80	34.80	4.1
2SM6	0.2471781	0.100	0.137	-0.017	0.16	89.78	107.45	51.64	110.11	0.53
3MK7	0.2833149	0.129	0.125	0.051	0.11	52.78	74.72	67.09	94.70	1.1
M8	0.3220456	0.083	0.097	-0.039	0.08	17.74	95.51	302.68	95.14	0.74

total var= 172.0717 pred var= 79.3127
percent total var predicted/var original= 46.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.1 m

Mooring Number: 7671

File Name: 7671adc-alh.nc

nobs = 3019, ngood = 3019, record length (days) = 125.79

start time: 19-May-2004 16:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -0.867, x trend= 0

var(x)= 101.6115 var(xp)= 44.0588 var(xres)= 57.2462
percent var predicted/var original= 43.4 %

y0= 2.72, x trend= 0

var(y)= 106.2031 var(yp)= 6.3808 var(yres)= 99.864
percent var predicted/var original= 6.0 %

ellipse parameters with 95%% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.650	4.356	-0.268	2.01	53.49	36.07	7.81	169.75	0.14
MSF	0.0028219	3.941	5.148	-0.093	1.51	95.25	20.03	13.34	90.85	0.59
ALP1	0.0343966	0.428	0.534	-0.032	0.56	146.66	96.66	146.90	97.45	0.64
2Q1	0.0357064	0.258	0.451	-0.117	0.51	119.42	122.16	23.79	156.03	0.33
Q1	0.0372185	0.525	0.493	-0.341	0.59	93.05	105.73	96.80	111.07	1.1
O1	0.0387307	0.480	0.490	-0.152	0.52	164.66	83.22	116.44	98.11	0.96
NO1	0.0402686	0.592	0.759	-0.094	0.56	16.67	82.07	348.35	103.92	0.61
*K1	0.0417807	2.072	0.663	-0.801	0.63	131.17	22.86	106.66	24.11	9.8
J1	0.0432929	0.657	0.577	-0.262	0.59	144.21	77.38	63.08	73.54	1.3
OO1	0.0448308	0.406	0.421	-0.191	0.43	69.01	83.91	270.32	86.31	0.93
UPS1	0.0463430	0.397	0.422	0.034	0.38	98.31	88.75	70.31	84.91	0.89
*EPS2	0.0761773	1.577	0.992	-0.725	1.16	56.87	54.55	62.66	57.33	2.5
MU2	0.0776895	0.746	0.962	-0.614	0.90	110.28	133.96	15.66	144.00	0.6
*N2	0.0789992	2.627	1.141	-0.152	1.15	179.85	21.34	331.17	24.10	5.3
*M2	0.0805114	9.086	1.176	1.277	1.08	165.49	6.53	359.63	7.09	60
L2	0.0820236	0.796	0.663	-0.379	0.75	81.15	89.72	308.08	87.82	1.4
*S2	0.0833333	2.140	1.166	-0.347	1.00	175.72	29.79	44.21	37.18	3.4
ETA2	0.0850736	1.040	0.871	-0.462	0.80	179.73	66.37	43.98	75.27	1.4
MO3	0.1192421	0.155	0.279	-0.045	0.26	107.24	110.52	213.25	147.18	0.31
M3	0.1207671	0.394	0.376	-0.105	0.42	79.74	77.30	254.41	89.69	1.1
*MK3	0.1222921	0.844	0.381	-0.766	0.36	82.96	96.07	64.24	100.08	4.9
SK3	0.1251141	0.357	0.312	-0.202	0.38	14.78	99.20	228.86	90.80	1.3
MN4	0.1595106	0.351	0.324	-0.079	0.29	157.24	63.95	217.97	78.80	1.2
*M4	0.1610228	0.964	0.404	-0.499	0.32	173.51	35.68	258.72	43.70	5.7
SN4	0.1623326	0.268	0.295	-0.178	0.30	28.56	95.13	187.91	122.59	0.83
MS4	0.1638447	0.297	0.308	-0.008	0.28	48.75	73.85	176.23	69.90	0.93
*S4	0.1666667	0.432	0.305	-0.274	0.29	64.85	90.96	301.79	80.24	2
2MK5	0.2028035	0.196	0.178	-0.064	0.18	90.46	78.79	13.51	69.95	1.2
2SK5	0.2084474	0.053	0.135	-0.015	0.13	132.94	135.39	63.72	172.92	0.16
*2MN6	0.2400221	0.406	0.226	-0.038	0.20	46.60	32.10	336.55	29.97	3.2
*M6	0.2415342	0.711	0.218	-0.078	0.22	35.90	16.48	11.50	18.08	11
*2MS6	0.2443561	0.259	0.176	-0.101	0.17	39.01	59.40	79.99	60.06	2.2
2SM6	0.2471781	0.106	0.156	-0.023	0.15	116.07	100.99	180.22	138.97	0.46
3MK7	0.2833149	0.116	0.128	-0.076	0.13	78.82	117.89	46.98	123.34	0.81
M8	0.3220456	0.076	0.098	-0.022	0.08	2.62	79.12	29.33	110.50	0.59

total var= 207.8147 pred var= 50.4396
percent total var predicted/var original= 24.3 %

Tidal Analysis of Current at LT-A

ADCP Observations, 5.2 m

Mooring Number: 7751

File Name: 7751adc-alh.nc

nobs = 1289, ngood = 1282, record length (days) = 53.71

start time: 22-Sep-2004 20:52:29

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.378, x trend= 0

var(x)= 94.8734 var(xp)= 70.9592 var(xres)= 24.7448
percent var predicted/var original= 74.8 %

y0= -3.33, x trend= 0

var(y)= 46.5848 var(yp)= 2.6885 var(yres)= 43.8411
percent var predicted/var original= 5.8 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	4.286	3.391	0.437	1.47	98.34	23.84	271.26	48.57	1.6
MSF	0.0028219	1.826	2.325	0.443	1.50	112.37	56.02	334.19	95.11	0.62
ALP1	0.0343966	0.302	0.547	-0.033	0.55	132.74	123.62	189.00	154.11	0.3
2Q1	0.0357064	0.444	0.672	-0.019	0.64	39.91	100.96	10.76	125.82	0.44
Q1	0.0372185	0.491	0.568	0.018	0.62	134.92	93.77	170.72	120.62	0.75
O1	0.0387307	0.743	0.752	-0.066	0.64	108.07	72.44	37.21	78.07	0.98
*NO1	0.0402686	1.506	0.951	-0.657	1.09	17.44	61.48	135.01	56.98	2.5
*K1	0.0417807	1.994	1.008	-0.407	0.81	41.36	29.92	288.83	30.94	3.9
J1	0.0432929	0.586	0.656	-0.104	0.72	31.64	93.85	134.66	102.53	0.8
OO1	0.0448308	0.413	0.422	-0.147	0.48	166.23	99.98	80.23	104.38	0.96
UPS1	0.0463430	0.174	0.445	-0.018	0.43	139.15	132.16	189.44	160.15	0.15
EPS2	0.0761773	0.678	0.590	-0.401	0.71	162.97	111.51	175.69	83.81	1.3
MU2	0.0776895	0.750	0.615	0.102	0.91	176.48	80.06	261.17	57.05	1.5
*N2	0.0789992	2.138	0.609	-0.937	0.83	19.10	39.68	180.40	26.06	12
*M2	0.0805114	11.543	0.492	-0.524	0.89	0.75	5.23	202.19	3.05	5.5e+002
L2	0.0820236	0.527	0.584	-0.018	0.42	64.37	50.10	231.50	72.86	0.81
*S2	0.0833333	2.397	0.543	-0.560	0.92	1.92	22.64	212.06	13.46	19
ETA2	0.0850736	0.627	0.526	-0.171	0.44	94.08	45.21	187.05	75.07	1.4
MO3	0.1192421	0.241	0.203	-0.092	0.21	157.89	67.26	38.90	90.78	1.4
M3	0.1207671	0.313	0.262	0.039	0.25	125.00	66.90	335.30	52.75	1.4
MK3	0.1222921	0.240	0.193	0.013	0.23	93.53	81.56	253.64	70.31	1.5
*SK3	0.1251141	0.345	0.220	-0.050	0.22	126.72	48.51	299.06	47.55	2.5
*MN4	0.1595106	0.448	0.233	-0.138	0.35	76.22	60.57	135.49	51.83	3.7
*M4	0.1610228	0.835	0.351	-0.112	0.31	27.15	20.19	129.62	23.43	5.7
*SN4	0.1623326	0.500	0.346	-0.003	0.27	170.73	31.67	102.95	44.93	2.1
MS4	0.1638447	0.213	0.246	-0.065	0.24	41.95	87.15	73.67	101.45	0.75
S4	0.1666667	0.292	0.249	0.054	0.23	144.33	57.06	149.88	73.47	1.4
2MK5	0.2028035	0.144	0.149	0.019	0.12	1.15	54.34	321.34	81.30	0.92
2SK5	0.2084474	0.125	0.148	-0.008	0.12	173.87	65.13	235.28	87.88	0.71
2MN6	0.2400221	0.351	0.278	-0.007	0.31	35.07	57.87	347.35	57.98	1.6
*M6	0.2415342	0.884	0.307	-0.215	0.31	48.05	24.51	11.83	22.65	8.3
2MS6	0.2443561	0.389	0.285	-0.066	0.28	31.90	52.16	19.79	48.14	1.9
2SM6	0.2471781	0.238	0.241	-0.030	0.26	2.71	77.35	21.59	81.02	0.98
3MK7	0.2833149	0.156	0.159	0.001	0.15	156.84	79.86	52.99	74.86	0.95
M8	0.3220456	0.153	0.144	0.084	0.13	112.01	78.80	34.29	86.79	1.1

total var= 141.4581 pred var= 73.6477
percent total var predicted/var original= 52.1 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.8 m

Mooring Number: 7771

File Name: 7771adc-alh.nc

nobs = 2346, ngood = 2342, record length (days) = 97.75

start time: 09-Feb-2005 17:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.179, x trend= 0

var(x)= 135.8614 var(xp)= 59.3842 var(xres)= 76.7419
percent var predicted/var original= 43.7 %

y0= -2.27, x trend= 0

var(y)= 106.4033 var(yp)= 2.9111 var(yres)= 103.3798
percent var predicted/var original= 2.7 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	2.311	3.245	-0.124	3.09	29.66	109.02	328.15	117.06	0.51
MSF	0.0028219	3.419	3.259	0.261	3.11	107.17	77.06	296.20	90.71	1.1
ALP1	0.0343966	0.229	0.870	0.176	0.80	166.50	113.21	154.34	169.60	0.069
2Q1	0.0357064	0.702	1.002	-0.119	1.17	103.59	112.70	147.30	104.33	0.49
Q1	0.0372185	0.364	0.966	-0.156	0.92	138.51	122.67	175.02	157.25	0.14
O1	0.0387307	0.559	0.796	0.022	0.89	112.64	139.87	8.25	156.44	0.49
NO1	0.0402686	0.837	1.237	-0.253	1.14	153.80	85.98	196.32	113.10	0.46
K1	0.0417807	1.471	1.139	-1.238	1.15	121.02	116.62	9.90	97.46	1.7
J1	0.0432929	0.405	0.958	-0.115	0.84	92.62	157.33	251.30	170.56	0.18
OO1	0.0448308	0.592	0.640	-0.446	0.73	96.01	117.37	318.66	105.04	0.85
UPS1	0.0463430	0.605	0.783	-0.326	0.69	88.82	115.12	325.38	112.57	0.6
EPS2	0.0761773	0.756	1.054	-0.447	0.99	76.41	102.49	185.29	124.94	0.51
MU2	0.0776895	0.574	0.958	0.139	0.86	65.60	115.62	73.93	137.43	0.36
*N2	0.0789992	2.205	1.341	-0.086	1.15	7.85	36.23	158.43	32.86	2.7
*M2	0.0805114	11.046	1.295	0.148	1.25	11.95	6.45	201.91	6.09	73
L2	0.0820236	0.647	0.713	-0.149	0.66	156.36	89.09	97.05	114.43	0.82
*S2	0.0833333	2.159	1.075	-0.116	1.11	9.49	31.63	243.75	30.59	4
ETA2	0.0850736	0.507	0.678	-0.098	0.66	159.66	103.05	351.22	136.56	0.56
MO3	0.1192421	0.212	0.284	-0.001	0.26	172.54	102.12	243.04	141.45	0.56
M3	0.1207671	0.165	0.305	-0.065	0.32	14.75	120.44	322.31	146.27	0.29
MK3	0.1222921	0.424	0.331	0.140	0.34	64.40	64.52	97.13	66.04	1.6
SK3	0.1251141	0.252	0.253	-0.136	0.27	102.31	104.29	253.77	117.44	0.99
MN4	0.1595106	0.111	0.216	-0.048	0.25	127.20	112.23	352.74	167.01	0.26
*M4	0.1610228	0.854	0.346	-0.301	0.34	46.49	31.27	101.49	29.98	6.1
SN4	0.1623326	0.250	0.276	0.036	0.24	36.55	77.47	147.04	79.96	0.82
MS4	0.1638447	0.249	0.263	0.043	0.28	62.53	74.71	113.85	89.10	0.89
S4	0.1666667	0.263	0.246	-0.225	0.22	125.21	133.56	201.18	144.74	1.1
2MK5	0.2028035	0.138	0.130	0.004	0.16	63.78	91.81	321.21	78.02	1.1
2SK5	0.2084474	0.143	0.140	-0.065	0.14	10.85	82.99	179.41	100.76	1
2MN6	0.2400221	0.283	0.223	-0.036	0.20	53.45	57.17	318.20	62.08	1.6
*M6	0.2415342	0.768	0.252	-0.065	0.23	40.18	18.52	12.16	17.82	9.3
*2MS6	0.2443561	0.411	0.252	-0.006	0.20	55.80	34.48	34.74	30.13	2.7
2SM6	0.2471781	0.126	0.166	-0.056	0.19	96.10	95.26	90.46	114.60	0.57
3MK7	0.2833149	0.098	0.113	0.001	0.12	57.72	90.17	27.48	95.31	0.75
*M8	0.3220456	0.169	0.108	-0.108	0.09	154.24	65.41	209.38	67.69	2.5

total var= 242.2647 pred var= 62.2954
percent total var predicted/var original= 25.7 %

Tidal Analysis of Current at LT-A

ADCP Observations, 5.3 m

Mooring Number: 7861

File Name: 7861adc-alh.nc

nobs = 3125, ngood = 3125, record length (days) = 130.21

start time: 18-May-2005 18:22:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= -1.98, x trend= 0

var(x)= 131.2049 var(xp)= 37.6716 var(xres)= 93.1072
percent var predicted/var original= 28.7 %

y0= 2.83, x trend= 0

var(y)= 155.0066 var(yp)= 7.5019 var(yres)= 147.6058
percent var predicted/var original= 4.8 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	5.185	5.154	-2.460	2.83	74.82	45.92	7.01	94.71	1
MSF	0.0028219	2.235	3.697	0.851	2.45	86.78	47.51	173.38	146.12	0.37
ALP1	0.0343966	0.697	0.589	-0.203	0.71	130.94	74.60	290.18	74.97	1.4
2Q1	0.0357064	0.514	0.619	0.011	0.59	154.32	93.35	307.14	92.97	0.69
Q1	0.0372185	0.414	0.670	0.050	0.65	78.94	88.10	106.84	114.96	0.38
O1	0.0387307	0.695	0.683	-0.250	0.65	137.84	82.27	171.81	85.81	1
NO1	0.0402686	0.867	0.683	-0.559	0.69	83.90	87.60	179.53	93.37	1.6
*K1	0.0417807	1.404	0.841	-0.249	0.77	131.87	37.10	79.07	36.06	2.8
J1	0.0432929	0.879	0.676	-0.427	0.65	128.95	73.07	87.82	75.19	1.7
OO1	0.0448308	0.194	0.337	0.074	0.35	29.12	129.33	15.51	145.07	0.33
UPS1	0.0463430	0.451	0.437	-0.138	0.46	34.86	83.08	334.45	84.70	1.1
EPS2	0.0761773	0.834	1.324	-0.349	1.10	4.57	96.21	229.39	126.62	0.4
MU2	0.0776895	0.638	1.158	-0.082	1.19	137.38	105.36	340.48	128.33	0.3
*N2	0.0789992	2.747	1.512	0.113	1.40	8.61	32.32	194.65	37.50	3.3
*M2	0.0805114	8.739	1.774	2.689	1.35	17.99	10.08	201.11	11.83	24
L2	0.0820236	0.864	1.061	-0.286	1.01	56.89	100.44	310.09	106.05	0.66
S2	0.0833333	1.241	1.376	0.211	1.02	179.67	68.26	47.45	85.28	0.81
ETA2	0.0850736	0.227	0.829	-0.171	0.79	18.58	115.82	106.68	231.87	0.075
MO3	0.1192421	0.151	0.268	0.107	0.31	48.36	124.76	343.60	158.45	0.32
M3	0.1207671	0.350	0.416	-0.130	0.40	129.70	102.13	221.30	110.64	0.71
MK3	0.1222921	0.540	0.426	-0.070	0.42	67.25	60.42	109.44	50.87	1.6
SK3	0.1251141	0.236	0.335	-0.052	0.31	176.93	106.37	222.81	122.01	0.5
MN4	0.1595106	0.431	0.428	-0.036	0.41	5.84	58.62	52.05	78.01	1
M4	0.1610228	0.687	0.498	0.117	0.41	174.33	40.46	287.52	53.00	1.9
*SN4	0.1623326	0.604	0.415	0.015	0.42	109.35	56.61	112.34	44.54	2.1
MS4	0.1638447	0.353	0.404	0.122	0.39	136.19	89.93	281.04	91.42	0.76
S4	0.1666667	0.161	0.310	0.030	0.33	8.34	101.98	336.39	165.31	0.27
2MK5	0.2028035	0.102	0.170	-0.002	0.17	115.86	113.22	210.43	121.55	0.36
2SK5	0.2084474	0.215	0.202	-0.034	0.19	146.56	55.11	12.29	77.73	1.1
2MN6	0.2400221	0.297	0.220	-0.035	0.19	30.46	43.64	347.42	57.34	1.8
*M6	0.2415342	0.684	0.242	0.212	0.24	37.52	28.64	6.34	27.64	8
2MS6	0.2443561	0.181	0.201	-0.027	0.19	26.26	73.62	45.15	91.62	0.82
2SM6	0.2471781	0.150	0.185	-0.051	0.19	7.51	86.00	111.51	114.00	0.66
3MK7	0.2833149	0.142	0.169	-0.062	0.12	147.80	71.96	231.02	93.85	0.7
M8	0.3220456	0.108	0.115	-0.095	0.11	3.31	119.74	3.00	122.80	0.88

total var= 286.2115 pred var= 45.1735
percent total var predicted/var original= 15.8 %

Tidal Analysis of Current at LT-A

ADCP Observations, 4.3 m

Mooring Number: 8051

File Name: 8051adc-alh.nc

nobs = 3188, ngood = 3180, record length (days) = 132.83

start time: 28-Sep-2005 17:52:30

rayleigh criterion = 1.0

Greenwich phase computed with nodal corrections applied to amplitude and phase relative to center time

x0= 0.974, x trend= 0

var(x)= 110.562 var(xp)= 70.5477 var(xres)= 39.9704
percent var predicted/var original= 63.8 %

y0= -2.07, x trend= 0

var(y)= 81.7508 var(yp)= 7.032 var(yres)= 74.6569
percent var predicted/var original= 8.6 %

ellipse parameters with 95% CI estimates

tide	freq	major	emaj	minor	emin	inc	einc	pha	epha	snr
MM	0.0015122	1.027	2.116	0.061	1.33	128.69	52.85	296.55	145.41	0.24
MSF	0.0028219	1.272	1.920	-0.418	1.77	177.80	151.14	335.43	113.80	0.44
ALP1	0.0343966	0.415	0.472	-0.157	0.47	77.71	108.03	318.03	94.78	0.77
2Q1	0.0357064	0.381	0.476	-0.028	0.43	127.24	89.56	74.12	94.18	0.64
Q1	0.0372185	0.357	0.482	-0.134	0.52	64.49	100.05	199.71	111.87	0.55
O1	0.0387307	0.779	0.561	0.139	0.49	36.48	48.66	294.66	47.99	1.9
NO1	0.0402686	0.160	0.387	-0.091	0.37	121.30	146.41	129.19	152.51	0.17
*K1	0.0417807	1.235	0.622	-0.557	0.58	46.65	39.57	275.33	34.50	3.9
J1	0.0432929	0.512	0.534	0.015	0.52	27.18	69.41	23.46	82.15	0.92
OO1	0.0448308	0.377	0.343	-0.231	0.30	0.56	80.38	8.98	87.36	1.2
UPS1	0.0463430	0.265	0.298	-0.086	0.30	177.62	105.97	207.11	160.33	0.79
EPS2	0.0761773	0.630	0.584	-0.190	0.54	128.49	69.01	153.13	65.82	1.2
MU2	0.0776895	0.322	0.483	-0.183	0.46	175.69	137.41	321.01	232.96	0.44
*N2	0.0789992	2.397	0.580	-0.337	0.69	16.17	16.22	177.89	16.15	17
*M2	0.0805114	12.259	0.644	-0.999	0.57	16.13	3.12	200.78	3.02	3.6e+002
L2	0.0820236	0.580	0.551	0.316	0.51	69.76	81.13	338.88	90.98	1.1
*S2	0.0833333	2.235	0.600	0.159	0.63	9.27	15.32	224.17	14.90	14
ETA2	0.0850736	0.188	0.315	0.042	0.32	44.58	122.84	349.14	149.82	0.36
MO3	0.1192421	0.197	0.213	-0.002	0.18	77.10	74.53	79.65	75.32	0.85
M3	0.1207671	0.172	0.245	-0.021	0.20	133.47	102.20	151.42	100.02	0.49
MK3	0.1222921	0.088	0.191	-0.039	0.16	120.20	129.62	236.64	145.50	0.21
SK3	0.1251141	0.131	0.177	0.084	0.18	102.17	109.72	79.88	138.09	0.55
*MN4	0.1595106	0.424	0.257	-0.031	0.18	82.24	24.58	63.55	40.26	2.7
M4	0.1610228	0.303	0.292	0.103	0.19	80.27	51.36	100.47	67.81	1.1
SN4	0.1623326	0.168	0.203	0.006	0.20	76.18	60.84	96.57	104.03	0.68
MS4	0.1638447	0.246	0.244	0.006	0.18	88.86	52.32	188.78	72.39	1
S4	0.1666667	0.120	0.155	-0.037	0.17	26.98	102.47	234.61	127.10	0.6
2MK5	0.2028035	0.044	0.128	0.018	0.11	98.23	138.56	191.97	182.54	0.12
2SK5	0.2084474	0.096	0.139	-0.069	0.13	5.54	131.99	349.99	117.68	0.48
*2MN6	0.2400221	0.474	0.162	0.122	0.18	62.49	22.34	333.37	24.84	8.5
*M6	0.2415342	0.813	0.146	0.042	0.19	41.45	11.64	348.51	11.90	31
2MS6	0.2443561	0.210	0.159	-0.007	0.16	31.72	52.66	38.22	50.86	1.8
2SM6	0.2471781	0.162	0.129	-0.067	0.17	173.42	77.95	200.84	106.55	1.6
3MK7	0.2833149	0.047	0.088	-0.012	0.09	43.35	120.44	300.57	147.57	0.28
M8	0.3220456	0.113	0.111	-0.045	0.11	75.94	78.99	258.94	73.92	1

total var= 192.3128 pred var= 77.5797
percent total var predicted/var original= 40.3 %