

Bender Motor position/encoder readback vs radius			
R [km]	U[V]	M1abend [step]	
2.5	6.72	231,433	
2.6	6.83	224,002	
2.7	6.93	217,122	
2.8	7.02	210,733	
2.9	7.11	204,784	
3	7.19	199,233	
3.1	7.27	194,039	
3.2	7.34	189,170	
3.3	7.40	184,596	
3.4	7.47	180,291	
3.5	7.53	176,232	
3.6	7.58	172,399	
3.7	7.63	168,773	
3.8	7.68	165,337	
3.9	7.73	162,078	
4	7.78	158,982	
4.1	7.82	156,037	
4.2	7.86	153,232	
4.3	7.90	150,557	
4.4	7.94	148,005	
4.5	7.97	145,565	
4.6	8.01	143,232	
4.7	8.04	140,998	
4.8	8.07	138,857	
4.9	8.10	136,803	
5	8.13	134,832	
5.1	8.16	132,937	
5.2	8.18	131,116	
5.3	8.21	129,364	
5.4	8.23	127,676	
5.5	8.26	126,050	
5.6	8.28	124,481	
5.7	8.30	122,968	
5.8	8.32	121,507	
5.9	8.34	120,096	
6	8.36	118,731	
6.1	8.38	117,412	
6.2	8.40	116,134	
6.3	8.42	114,898	
6.4	8.44	113,700	
6.5	8.45	112,539	
6.6	8.47	111,413	
6.7	8.49	110,321	
6.8	8.50	109,261	
6.9	8.52	108,231	
7	8.53	107,231	
7.1	8.55	106,259	
7.2	8.56	105,314	
7.3	8.57	104,395	
7.4	8.59	103,501	
7.5	8.60	102,631	
7.6	8.61	101,784	
7.7	8.62	100,958	
7.8	8.63	100,154	
7.9	8.65	99,370	
8	8.66	98,606	
8.1	8.67	97,861	
8.2	8.68	97,133	
8.3	8.69	96,424	

R [km]	U[V]	M1abend [step]
7	8.53	107,231
7.1	8.55	106,259
7.2	8.56	105,314
7.3	8.57	104,395
7.4	8.59	103,501
7.5	8.60	102,631
7.6	8.61	101,784
7.7	8.62	100,958
7.8	8.63	100,154
7.9	8.65	99,370
8	8.66	98,606
8.1	8.67	97,861
8.2	8.68	97,133
8.3	8.69	96,424
8.4	8.70	95,731
8.5	8.71	95,054
8.6	8.72	94,394
8.7	8.73	93,748
8.8	8.74	93,117
8.9	8.75	92,501
9	8.76	91,898
9.1	8.76	91,308
9.2	8.77	90,731
9.3	8.78	90,166
9.4	8.79	89,614
9.5	8.80	89,073
9.6	8.80	88,543
9.7	8.81	88,025
9.8	8.82	87,517
9.9	8.83	87,019
10	8.83	86,531
20	9.19	62,380
30	9.30	54,330
40	9.36	50,305
50	9.40	47,890
60	9.42	46,280
70	9.44	45,130
80	9.45	44,268
90	9.46	43,597
100	9.47	43,060
200	9.50	40,645
500	9.52	39,196
1000	9.53	38,713
10000	9.54	38,278
100000	9.54	38,235
1.00E+06	9.54	38,230

Bending Radius vs Grazing angle			
Theta [rad]	R [km]	U[V]	M1abend [step]
1	15.00	9.068	70,431
1.1	13.64	9.021	73650.58016
1.2	12.50	8.974	76870.63207
1.3	11.54	8.927	80090.68398
1.4	10.71	8.880	83310.73588
1.5	10.00	8.833	86530.78779
1.6	9.38	8.786	89750.8397
1.7	8.82	8.739	92970.89161
1.8	8.33	8.693	96190.94351
1.9	7.89	8.646	99410.99542
2	7.50	8.599	102631.0473
2.1	7.14	8.552	105851.0992
2.2	6.82	8.505	109071.1511
2.3	6.52	8.458	112291.203
2.4	6.25	8.411	115511.255
2.5	6.00	8.364	118731.3069
2.6	5.77	8.317	121951.3588
2.7	5.56	8.270	125171.4107
2.8	5.36	8.223	128391.4626
2.9	5.17	8.176	131611.5145
3	5.00	8.129	134831.5664
3.1	4.84	8.082	138051.6183
3.2	4.69	8.035	141271.6702
3.3	4.55	7.988	144491.7221
3.4	4.41	7.941	147711.774
3.5	4.29	7.894	150931.8259
3.6	4.17	7.847	154151.8778
3.7	4.05	7.801	157371.9298
3.8	3.95	7.754	160591.9817
3.9	3.85	7.707	163812.0336
4	3.75	7.660	167032.0855
4.1	3.66	7.613	170252.1374
4.2	3.57	7.566	173472.1893
4.3	3.49	7.519	176692.2412
4.4	3.41	7.472	179912.2931
4.5	3.33	7.425	183132.345
4.6	3.26	7.378	186352.3969
4.7	3.19	7.331	189572.4488
4.8	3.13	7.284	192792.5007
4.9	3.06	7.237	196012.5526
5	3.00	7.190	199232.6045
5.1	2.94	7.143	202452.6565
5.2	2.88	7.096	205672.7084
5.3	2.83	7.049	208892.7603
5.4	2.78	7.002	212112.8122
5.5	2.73	6.955	215332.8641
5.6	2.68	6.908	218552.916
5.7	2.63	6.862	221772.9679
5.8	2.59	6.815	224993.0198
5.9	2.54	6.768	228213.0717
6	2.50	6.721	231433.1236

8.4	8.70	95,731
8.5	8.71	95,054
8.6	8.72	94,394
8.7	8.73	93,748
8.8	8.74	93,117
8.9	8.75	92,501
9	8.76	91,898
9.1	8.76	91,308
9.2	8.77	90,731
9.3	8.78	90,166
9.4	8.79	89,614
9.5	8.80	89,073
9.6	8.80	88,543
9.7	8.81	88,025
9.8	8.82	87,517
9.9	8.83	87,019
10	8.83	86,531
20	9.19	62,380
30	9.30	54,330
40	9.36	50,305
50	9.40	47890
60	9.42	46280
70	9.44	45130
80	9.45	44268
90	9.46	43597
100	9.47	43060
200	9.50	40645
500	9.52	39196
1000	9.53	38713
1.00E+04	9.54	38278
1.00E+05	9.54	38235
1.00E+06	9.54	38230