

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	1-1			04:07		373	04:50		451	4:57		436	5:13		440	4:20		373	04:52		363	3:57		375
vr	1-1				11:02	92		11:06	92		11:03	-16		11:36	79		11:30	102		12:02	92		10:30	63
vr	1-1			16:52		352	17:25		428	17:09		364	17:52		420	17:05		352	17:37		342	16:31		358
vr	1-1				23:08	109		23:19	114		23:13	5		23:47	100								22:49	80
za	2-1	6:30	LK	04:36		371	05:33		448	5:17		381	05:55		437		23:36	119		0:08	109	4:39		376
za	2-1				11:42	96		11:48	96		11:37	-12		12:17	83	4:49		371	05:21		361		11:14	65
za	2-1			17:32		347	18:13		424	17:57		359	18:42		415		12:10	106		12:42	96	17:18		355
za	2-1				23:53	113										17:45		347	18:17		337		23:40	85
zo	3-1			05:30		362		0:05	120		0:03	12		0:33	107		0:21	123		00:53	113			
zo	3-1				12:32	100	06:25		438	6:09		370	06:49		426	5:43		362	06:15		352	5:35		365
zo	3-1			18:37		341		12:37	105		12:31	-2		13:07	93		13:00	110		13:32	100		12:09	74
zo	3-1						19:09		418	18:53		353	19:41		409	18:50		341	19:22		331	18:27		346
ma	4-1				00:50	117		01:01	130		1:01	22		01:30	117		1:18	127		01:50	117		0:46	95
ma	4-1			06:45		349	07:26		425	7:10		357	07:54		413	6:58		349	07:30		339	6:50		350
ma	4-1				13:34	105		13:37	117		13:32	10		14:08	105		14:02	115		14:34	105		13:18	87
ma	4-1			19:52		340	20:11		414	19:55		350	20:44		406	20:05		340	20:37		330	19:57		341
di	5-1				02:00	117		02:10	136		2:05	28		02:39	123		2:28	127		03:00	117		2:03	99
di	5-1			08:08		342	08:31		415	8:15		349	09:01		405	8:21		342	08:53		332	8:20		341
di	5-1				14:42	105		14:46	121		14:37	15		15:19	110		15:10	115		15:42	105		14:38	91
di	5-1			20:57		346	21:15		419	20:59		355	21:45		411	21:10		346	21:42		336	21:07		345
wo	6-1				03:15	110		03:24	129		3:09	21		03:55	116		3:43	120		04:15	110		3:18	93
wo	6-1			09:15		344	09:35		415	9:19		349	10:02		405	9:28		344	10:00		334	9:30		342
wo	6-1				15:47	99		15:53	113		15:39	7		16:26	102		16:15	109		16:47	99		15:47	86
wo	6-1			21:52		359	22:15		432	21:59		368	22:43		424	22:05		359	22:37		349	22:03		356
do	7-1				04:20	96		04:30	112		4:09	3		05:01	98		4:48	106		05:20	96		4:22	80
do	7-1			10:10		351	10:35		424	10:19		358	11:00		414	10:23		351	10:55		341	10:23		349
do	7-1				16:43	89		16:51	98		16:36	-8		17:25	87		17:11	99		17:43	89		16:42	75
do	7-1			22:42		373	23:09		451	22:53		386	23:35		442	22:55		373	23:27		363	22:50		371
vr	8-1				05:15	82		05:26	91		5:03	-16		05:57	79		5:43	92		06:15	82		5:16	65
vr	8-1			10:59		361	11:29		438	11:13		371	11:55		427	11:12		361	11:44		351	11:07		359
vr	8-1				17:33	78		17:43	81		17:27	-25		18:16	70		18:01	88		18:33	78		17:27	62
vr	8-1			23:27		386	23:57		469	23:41		-95						10				23:30		386
za	9-1				06:04	68		06:15	73		5:52	403	00:24		459	23:40		386	0:12		376		6:03	50
za	9-1			11:45		368	12:19		451	12:03		-34		06:47	61		6:32	78		07:04	68	11:48		370
za	9-1				18:20	68		18:31	67		18:15	382	12:45		438	11:58		368	12:30		358		18:07	49
za	9-1													19:04	57		18:48	78		19:20	68			

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	10-1	2:30	NM	00:09		395	00:43		482	0:27		414	01:10		470	0:22		395	00:54		385	0:09		398
zo	10-1				06:52	57		07:01	59		6:39	-46		07:34	49		7:20	67		07:52	57		6:49	39
zo	10-1			12:29		372	13:07		457	12:51		387	13:34		443	12:42		372	13:14		362	12:30		376
zo	10-1				19:05	59		19:16	58		19:01	-46		19:50	49		19:33	69		20:05	59		18:47	40
ma	11-1			00:49		398	01:27		486	1:11		415	01:54		471	1:02		398	01:34		388	0:51		402
ma	11-1				07:38	49		07:45	50		7:23	-54		08:20	41		8:06	59		08:38	49		7:40	31
ma	11-1			13:12		370	13:52		455	13:36		385	14:20		441	13:25		370	13:57		360	13:17		374
ma	11-1				19:49	55		20:00	55		19:44	-49		20:34	46		20:17	65		20:49	55		19:28	36
di	12-1			01:29		396	02:08		483	1:52		412	02:34		468	1:42		396	02:14		386	1:34		400
di	12-1				08:22	44		08:27	45		8:05	-60		09:03	35		8:50	54		09:22	44		8:33	26
di	12-1			13:56		365	14:35		448	14:19		378	15:03		434	14:09		365	14:41		355	14:07		367
di	12-1				20:31	52		20:41	54		20:24	-51		21:15	44		20:59	62		21:31	52		20:07	35
wo	13-1			02:11		394	02:46		481	2:30		409	03:12		465	2:24		394	02:56		384	2:19		394
wo	13-1				09:03	41		09:08	41		8:44	-64		09:44	31		9:31	51		10:03	41		9:16	24
wo	13-1			14:42		359	15:14		441	14:58		372	15:43		428	14:55		359	15:27		349	14:54		359
wo	13-1				21:11	49		21:20	52		21:02	-53		21:55	42		21:39	59		22:11	49		20:42	32
do	14-1			02:56		392	03:23		481	3:07		410	03:50		466	3:09		392	03:41		382	3:01		390
do	14-1				09:43	38		09:47	38		9:21	-67		10:23	28		10:11	48		10:43	38		9:13	20
do	14-1			15:27		354	15:51		437	15:35		369	16:24		425	15:40		354	16:12		344	15:36		353
do	14-1				21:50	45		21:58	49		21:41	-56		22:33	39		22:18	55		22:50	45		21:20	28
vr	15-1			03:41		391	04:04		484	3:48		413	04:32		469	3:54		391	04:26		381	3:42		389
vr	15-1				10:22	37		10:26	36		10:02	-68		11:01	27		10:50	47		11:22	37		9:50	14
vr	15-1			16:11		349	16:32		435	16:16		368	17:08		424	16:24		349	16:56		339	16:15		350
vr	15-1				22:31	43		22:38	47		22:24	-58		23:11	37		22:59	53		23:31	43		22:03	23
za	16-1			04:25		388	04:49		482	4:33		412	05:19		468	4:38		388	05:10		378	4:25		390
za	16-1				11:04	39		11:09	39		10:47	-64		11:42	31		11:32	49		12:04	39		10:37	12
za	16-1			16:55		343	17:18		429	17:02		362	17:57		418	17:08		343	17:40		333	16:56		347
za	16-1				23:15	45		23:22	52		23:13	-54		23:54	41								22:56	24
zo	17-1	0:26	EK	05:11		380	05:40		472	5:24		401	06:12		457		23:43	55		0:15	45		5:14	385
zo	17-1				11:50	47		11:56	51		11:40	-53		12:28	42		5:24	380	05:56		370		11:33	18
zo	17-1			17:40		334	18:12		417	17:56		351	18:53		407		12:18	57		12:50	47		17:46	340
zo	17-1																17:53	334	18:25		324			
ma	18-1				00:05	54		00:13	66		0:09	-41		00:44	54		0:33	64		01:05	54		0:00	32
ma	18-1			05:59		367	06:39		452	6:23		383	07:12		439	6:12		367	06:44		357	6:10		373
ma	18-1				12:46	60		12:53	68		12:43	-36		13:24	59		13:14	70		13:46	60		12:35	29
ma	18-1			18:31		325	19:19		403	19:03		338	19:56		394	18:44		325	19:16		315	18:42		330

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
di	19-1				01:07	66		01:16	83		1:19	-25		01:48	70		1:35	76		02:07	66		1:07	41
di	19-1			06:57		351	07:52		432	7:36		363	08:20		419	7:10		351	07:42		341	7:10		358
di	19-1				14:00	70		14:03	83		13:58	-22		14:34	73		14:28	80		15:00	70		13:40	41
di	19-1			19:39		318	20:36		395	20:20		330	21:06		386	19:52		318	20:24		308	19:43		321
wo	20-1				02:32	72		02:34	91		2:36	-19		03:06	76		3:00	82		03:32	72		2:13	46
wo	20-1			08:06		338	09:09		421	8:53		351	09:33		407	8:19		338	08:51		328	8:13		343
wo	20-1				15:19	71		15:17	84		15:13	-22		15:49	73		15:47	81		16:19	71		14:44	47
				20:59		318	21:50		400	21:34		333	22:18		389	21:12		318	21:44		308	20:51		318
do	21-1				03:53	64		03:52	81		3:50	-28		04:23	67		4:21	74		04:53	64		3:19	44
do	21-1			09:34		334	10:23		423	10:07		351	10:52		407	9:47		334	10:19		324	9:24		336
do	21-1				16:33	62		16:28	73		16:24	-33		17:01	62		17:01	72		17:33	62		15:49	46
do	21-1			22:29		330	22:57		415	22:41		347	23:25		403	22:42		330	23:14		320	22:08		325
vr	22-1				05:11	48		05:04	62		4:57	-47		05:38	48		5:39	58		06:11	48		4:26	35
vr	22-1			11:06		344	11:30		434	11:14		363	12:00		419	11:19		344	11:51		334	10:52		341
vr	22-1				17:43	50		17:36	59		17:27	-49		18:12	46		18:11	60		18:43	50		16:57	39
vr	22-1			23:33		348	23:56		434	23:40		-95										23:31		341
za	23-1				06:16	32		06:10	43		5:57	366	00:22		422	23:46		348	0:18		338		5:41	25
za	23-1			12:04		357	12:30		447	12:14		-67		06:46	28		6:44	42		07:16	32	12:06		355
za	23-1				18:38	40		18:37	47		18:23	378	12:56		434	12:17		357	12:49		347		18:44	29
za	23-1													19:13	34		19:06	50		19:38	40			
zo	24-1	2:46 VM		00:23		363	00:49		449	0:33		382	01:12		438	0:36		363	01:08		353	0:28		358
zo	24-1				07:06	26		07:06	34		6:50	-76		07:41	19		7:34	36		08:06	26		7:17	16
zo	24-1			12:51		367	13:23		454	13:07		386	13:45		442	13:04		367	13:36		357	12:57		367
zo	24-1				19:23	40		19:29	45		19:14	-61		20:03	34		19:51	50		20:23	40		19:38	23
ma	25-1			01:07		372	01:37		456	1:21		389	01:57		445	1:20		372	01:52		362	1:15		369
ma	25-1				07:49	31		07:54	38		7:36	-70		08:28	25		8:17	41		08:49	31		8:03	17
ma	25-1			13:33		370	14:08		453	13:52		386	14:29		442	13:46		370	14:18		360	13:43		373
ma	25-1				20:01	47		20:12	54		19:57	-50		20:45	45		20:29	57		21:01	47		20:20	27
di	26-1			01:46		375	02:18		456	2:02		388	02:38		444	1:59		375	02:31		365	1:59		373
di	26-1				08:26	43		08:34	52		8:16	-54		09:07	41		8:54	53		09:26	43		8:40	27
di	26-1			14:11		369	14:47		447	14:31		380	15:08		436	14:24		369	14:56		359	14:25		372
di	26-1				20:35	58		20:48	68		20:33	-35		21:21	60		21:03	68		21:35	58		20:54	39
wo	27-1			02:22		373	02:52		452	2:36		383	03:14		439	2:35		373	03:07		363	2:35		370
wo	27-1				08:59	55		09:08	65		8:49	-41		09:40	54		9:27	65		09:59	55		9:01	41
wo	27-1			14:46		366	15:19		441	15:03		374	15:41		430	14:59		366	15:31		356	14:59		367
wo	27-1				21:06	67		21:19	78		21:04	-25		21:51	70		21:34	77		22:06	67		21:09	51

[illegible]

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	1-2	4:28	LK	04:46		357	05:39		438	5:23		369	06:02		425		23:43	94		0:15	84	4:47		364
ma	1-2				11:38	86		11:49	88		11:38	-22		12:19	73	4:59		357	05:31		347		11:21	51
ma	1-2			17:14		342	18:10		422	17:54		354	18:42		410		12:06	96		12:38	86	17:12		348
ma	1-2				23:58	93										17:27		342	17:59		332		23:48	66
di	2-2			05:42		342		0:08	103		0:02	-8		00:40	87		0:26	103		00:58	93	5:41		345
di	2-2				12:25	99	06:27		421	6:11		353	06:53		409	5:55		342	06:27		332		12:12	73
di	2-2			18:17		333		12:34	108		12:28	-2		13:05	93		12:53	109		13:25	99	18:12		333
di	2-2					104	19:01		411	18:45		344	19:37		400	18:30		333	19:02		323			
wo	3-2				00:52	104		01:00	120		0:56	9		01:33	104		1:20	114		01:52	104		0:51	87
wo	3-2			06:52		331	07:24		408	7:08		342	07:55		398	7:05		331	07:37		321	7:00		328
wo	3-2				13:24	110		13:32	125		13:27	17		14:03	112		13:52	120		14:24	110		13:18	94
wo	3-2			19:36		332	20:03		408	19:47		345	20:41		401	19:49		332	20:21		322	19:53		327
do	4-2				01:58	109		02:08	131		2:00	21		02:41	116		2:26	119		02:58	109		2:13	96
do	4-2			08:07		330	08:30		405	8:14		341	09:03		397	8:20		330	08:52		320	8:24		326
do	4-2				14:32	111		14:46	129		14:35	21		15:17	116		15:00	121		15:32	111		14:39	99
do	4-2			20:53		343	21:13		418	20:57		356	21:49		412	21:06		343	21:38		333	21:07		339
vr	5-2				03:15	103		03:32	124		3:11	14		04:04	109		3:43	113		04:15	103		3:31	87
vr	5-2			09:19		339	09:42		413	9:26		350	10:12		406	9:32		339	10:04		329	9:31		336
vr	5-2				15:45	100		16:04	113		15:47	6		16:36	101		16:13	110		16:45	100		15:52	85
vr	5-2			21:58		360	22:25		437	22:09		375	22:56		431	22:11		360	22:43		350	22:06		359
za	6-2				04:30	85		04:47	99		4:23	-10		05:18	85		4:58	95		05:30	85		4:37	66
za	6-2			10:22		351	10:53		429	10:37		364	11:20		420	10:35		351	11:07		341	10:29		351
za	6-2				16:55	81		17:11	88		16:54	-19		17:43	76		17:23	91		17:55	81		16:53	64
za	6-2			22:56		375	23:28		459	23:12		393	23:56		449	23:09		375	23:41		365	22:58		377
zo	7-2				05:35	63		05:48	72		5:26	-35		06:19	60		6:03	73		06:35	63		5:37	44
zo	7-2			11:21		360	11:56		444	11:40		375	12:23		431	11:34		360	12:06		350	11:23		363
zo	7-2				17:56	61		18:08	66		5:53	-40		18:40	55		18:24	71		18:56	61		17:48	45
zo	7-2			23:48		383																		
ma	8-2				06:31	45	0:22		472	0:06		402	00:49		458	0:01		383	00:33		373	23:47		388
ma	8-2			12:13		362		06:41	51		18:20	-54		07:13	41		6:59	55		07:31	45		6:39	27
ma	8-2	15:39	NM		18:49	46	12:50		450	12:34		379	13:17		435	12:26		362	12:58		352	12:13		366
ma	8-2							18:59	51		18:44	-54		19:31	41		19:17	56		19:49	46		18:50	31
di	9-2			00:33		383	01:10		476	0:54		403	01:35		459	0:46		383	01:18		373	0:32		389
di	9-2				07:22	32		07:28	38		7:08	-67		08:02	28		7:50	42		08:22	32		7:42	15
di	9-2			12:59		359	13:38		448	13:22		376	14:04		432	13:12		359	13:44		349	13:01		363
di	9-2				19:36	36		19:44	42		19:29	-64		20:18	31		20:04	46		20:36	36		19:58	22

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
wo	10-2			01:15		382	01:53		475	1:37		401	02:17		457	1:28		382	02:00		372	1:18		385
wo	10-2				08:08	23		08:12	28		7:51	-77		08:48	18		8:36	33		09:08	23		8:34	7
wo	10-2			13:42		355	14:22		444	14:06		372	14:47		428	13:55		355	14:27		345	13:50		357
wo	10-2				20:20	27		20:27	33		20:11	-73		21:02	22		20:48	37		21:20	27		20:48	13
do	11-2			01:57		383	02:32		477	2:16		402	02:56		458	2:10		383	02:42		373	2:03		383
do	11-2				08:51	18		08:53	20		8:30	-86		09:30	9		9:19	28		09:51	18		9:19	1
do	11-2			14:25		354	15:01		442	14:45		371	15:28		427	14:38		354	15:10		344	14:36		353
do	11-2				21:01	20		21:07	23		20:50	-83		21:44	12		21:29	30		22:01	20		21:29	6
vr	12-2			02:41		387	03:12		483	2:56		409	03:37		465	2:54		387	03:26		377	2:48		385
vr	12-2				09:31	15		09:34	13		9:10	-93		10:11	2		9:59	25		10:31	15		9:56	-3
vr	12-2			15:09		354	15:40		443	15:24		374	16:09		430	15:22		354	15:54		344	15:19		353
vr	12-2				21:40	14		21:47	15		21:30	-91		22:23	4		22:08	24		22:40	14		21:11	-1
za	13-2			03:26		390	03:53		488	3:37		415	04:20		471	3:39		390	04:11		380	3:32		389
za	13-2				10:09	16		10:14	11		9:50	-92		10:50	3		10:37	26		11:09	16		9:40	-6
za	13-2			15:54		353	16:20		444	16:04		376	16:52		432	16:07		353	16:39		343	15:59		353
za	13-2				22:19	13		22:27	13		22:13	-91		23:02	4		22:47	23		23:19	13		21:54	-7
zo	14-2			04:12		386	04:38		484	4:22		412	05:07		468	4:25		386	04:57		376	4:15		389
zo	14-2				10:47	23		10:54	20		10:34	-83		11:28	12		11:15	33		11:47	23		10:24	-6
zo	14-2			16:37		346	17:03		438	16:47		370	17:39		426	16:50		346	17:22		336	16:38		349
zo	14-2				22:59	19		23:09	23		22:59	-82		23:42	13		23:27	29		23:59	19		22:42	-5
ma	15-2			04:56		373	05:27		468	5:11		397	05:58		453	5:09		373	05:41		363	4:59		380
ma	15-2	8:46 EK			11:28	36		11:38	38		11:23	-64		12:10	31		11:56	46		12:28	36		11:13	4
ma	15-2			17:17		333	17:52		423	17:36		355	18:30		411	17:30		333	18:02		323	17:20		339
ma	15-2				23:43	33		23:55	42		23:52	-95										23:37		6
di	16-2			05:42		352	06:24		443	6:08		-64		00:26	31		0:11	43		00:43	33		5:49	362
di	16-2				12:15	54		12:28	64		12:22	373	06:56		429	5:55		352	06:27		342		12:09	22
di	16-2			18:00		319	18:53		403	18:37		-40		12:58	55		12:43	64		13:15	54		18:10	324
di	16-2												19:29		393	18:13		319	18:45		309			23
wo	17-2				00:39	51		00:53	66		0:57	-41		01:23	54		1:07	61		01:39	51		0:40	23
wo	17-2			06:39		331	07:34		418	7:18		349	08:02		405	6:52		331	07:24		321	6:45		339
wo	17-2				13:25	72		13:33	87		13:35	-18		14:04	77		13:53	82		14:25	72		13:11	40
wo	17-2			19:09		308	20:08		390	19:52		324	20:39		380	19:22		308	19:54		298	19:11		310
do	18-2				02:09	62		02:09	82		2:13	-26		02:41	69		2:37	72		03:09	62		1:48	36
do	18-2			07:58		318	08:51		407	8:35		337	09:18		393	8:11		318	08:43		308	7:51		321
do	18-2				14:56	74		14:54	94		14:52	-13		15:25	82		15:24	84		15:56	74		14:21	51
do	18-2			20:46		308	21:26		394	21:10		327	21:56		383	20:59		308	21:31		298	20:29		306



				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	19-2				03:36	55		03:32	77		3:30	-32		04:03	63		4:04	65		04:36	55		3:02	39
vr	19-2			09:43		321	10:07		414	9:51		343	10:40		399	9:56		321	10:28		311	9:21		317
vr	19-2				16:17	61		16:12	81		16:06	-26		16:44	69		16:45	71		17:17	61		15:36	49
vr	19-2			22:19		326	22:38		414	22:22		346	23:08		402	22:32		326	23:04		316	22:18		319
za	20-2				04:58	37		04:50	58		4:42	-51		05:22	44		5:26	47		05:58	37		4:18	31
za	20-2			10:58		340	11:18		433	11:02		363	11:48		419	11:11		340	11:43		330	11:03		334
za	20-2				17:28	41		17:24	59		17:14	-49		17:58	46		17:56	51		18:28	41		17:04	38
za	20-2			23:21		351	23:42		439	23:26		-95										23:32		345
zo	21-2				06:01	21		05:58	38		5:44	370	00:08		426	23:34		351	0:06		341		6:16	18
zo	21-2			11:52		359	12:19		452	12:03		-72		06:31	23		6:29	31		07:01	21	12:00		356
zo	21-2				18:22	29		18:25	42		18:12	381	12:44		437	12:05		359	12:37		349		18:43	21
zo	21-2													18:58	29		18:50	39		19:22	29			
ma	22-2			00:10		368	00:37		456	0:21		386	00:59		442	0:23		368	00:55		358	0:21		366
ma	22-2				06:50	18		06:53	30		6:37	-79		07:25	16		7:18	28		07:50	18		7:10	10
ma	22-2	19:20 VM		12:37		369	13:10		459	12:54		387	13:31		443	12:50		369	13:22		359	12:45		370
ma	22-2				19:06	31		19:15	40		19:00	-66		19:47	29		19:34	41		20:06	31		19:28	16
di	23-2			00:51		375	01:23		460	1:07		389	01:42		445	1:04		375	01:36		365	1:03		375
di	23-2				07:31	28		07:38	38		7:21	-69		08:10	26		7:59	38		08:31	28		7:50	15
di	23-2			13:14		370	13:51		455	13:35		384	14:11		440	13:27		370	13:59		360	13:24		374
di	23-2				19:43	40		19:55	50		19:39	-55		20:27	40		20:11	50		20:43	40		20:05	21
wo	24-2			01:26		373	01:59		456	1:43		385	02:19		441	1:39		373	02:11		363	1:39		373
wo	24-2				08:05	42		08:15	52		7:55	-55		08:46	40		8:33	52		09:05	42		8:19	25
wo	24-2			13:46		368	14:24		447	14:08		378	14:43		434	13:59		368	14:31		358	13:58		372
wo	24-2				20:14	49		20:28	60		20:10	-44		20:59	51		20:42	59		21:14	49		20:32	30
do	25-2			01:56		371	02:28		452	2:12		382	02:49		438	2:09		371	02:41		361	2:08		369
do	25-2				08:34	49		08:45	59		8:22	-49		09:16	46		9:02	59		09:34	49		8:30	32
do	25-2			14:15		368	14:49		447	14:33		379	15:11		435	14:28		368	15:00		358	14:26		370
do	25-2				20:41	51		20:55	61		20:35	-45		21:27	50		21:09	61		21:41	51		20:41	32
vr	26-2			02:24		372	02:53		455	2:37		385	03:17		441	2:37		372	03:09		362	2:27		368
vr	26-2				09:01	49		09:11	55		8:48	-55		09:44	40		9:29	59		10:01	49		8:43	28
vr	26-2			14:44		371	15:15		454	14:59		386	15:40		442	14:57		371	15:29		361	14:47		372
vr	26-2				21:10	48		21:23	54		21:02	-54		21:54	41		21:38	58		22:10	48		20:57	26
za	27-2			02:51		375	03:22		461	3:06		390	03:46		446	3:04		375	03:36		365	2:43		373
za	27-2				09:29	47		09:39	48		9:17	-64		10:12	31		9:57	57		10:29	47		9:06	19
za	27-2			15:13		373	15:45		460	15:29		391	16:12		447	15:26		373	15:58		363	15:05		375
za	27-2				21:41	47		21:52	49		21:34	-60		22:24	35		22:09	57		22:41	47		21:23	18

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	28-2			03:18		374	03:55		463	3:39		392	04:18		448	3:31		374	04:03		364	3:08		377
zo	28-2				09:58	50		10:08	48		9:50	-63		10:41	32		10:26	60		10:58	50		9:36	15
zo	28-2			15:40		369	16:18		459	16:02		388	16:46		444	15:53		369	16:25		359	15:28		375
zo	28-2				22:12	52		22:23	54		22:07	-56		22:54	39		22:40	62		23:12	52		21:54	18
ma	29-2			03:48		368	04:28		456	4:12		385	04:53		441	4:01		368	04:33		358	3:40		375
ma	29-2				10:26	60		10:37	60		10:23	-51		11:10	44		10:54	70		11:26	60		10:08	22
ma	29-2			16:05		361	16:50		450	16:34		378	17:19		434	16:18		361	16:50		351	15:56		369
ma	29-2				22:43	63		22:53	67		22:40	-44		23:25	51		23:11	73		23:43	63		22:27	28



				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
di	1-3			04:20		357	05:03		443	4:47		372	05:29		428	4:33		357	05:05		347	4:14		365
di	1-3				10:57	75		11:09	78		10:57	-33		11:40	62		11:25	85		11:57	75		10:43	39
di	1-3			16:32		353	17:23		438	17:07		367	17:52		423	16:45		353	17:17		343	16:28		359
di	1-3				23:19	77		23:27	83		23:16	-95											23:03	48
wo	2-3	0:11	LK	04:59		345	05:42		429	5:26		-29		0:00	66		23:47	87		0:19	77	4:52		350
wo	2-3				11:36	91		11:46	97		11:36	360	06:09		416	5:12		345	05:44		335		11:23	62
wo	2-3			17:17		346	18:03		429	17:47		-15		12:18	80		12:04	101		12:36	91	17:07		348
wo	2-3												18:33		415	17:30		346	18:02		336		23:48	70
do	3-3				00:06	91		00:11	100		0:01	-13		00:44	82		0:34	101		01:06	91	5:44		335
do	3-3			06:02		335	06:32		417	6:16		350	07:03		406	6:15		335	06:47		325		12:16	86
do	3-3				12:31	105		12:35	115		12:30	3		13:09	98		12:59	115		13:31	105	18:11		337
do	3-3			18:32		342	19:00		423	18:44		355	19:34		411	18:45		342	19:17		332			89
vr	4-3				01:08	99		01:09	116		1:02	3		01:43	98		1:36	109		02:08	99		1:02	89
vr	4-3			07:16		333	07:37		412	7:21		347	08:12		403	7:29		333	08:01		323	7:28		327
vr	4-3				13:38	108		13:43	127		13:39	15		14:15	110		14:06	118		14:38	108		13:37	98
vr	4-3			19:50		347	20:13		425	19:57		360	20:52		416	20:03		347	20:35		337	20:11		342
za	5-3				02:22	96		02:29	120		2:17	7		03:02	102		2:50	106		03:22	96		2:41	85
za	5-3			08:31		340	08:53		416	8:37		353	09:28		409	8:44		340	09:16		330	8:46		337
za	5-3				14:53	98		15:11	120		14:58	9		15:40	104		15:21	108		15:53	98		15:05	85
za	5-3			21:07		360	21:35		437	21:19		374	22:11		430	21:20		360	21:52		350	21:21		361
zo	6-3				03:44	78		04:03	99		3:39	-13		04:33	82		4:12	88		04:44	78		3:57	59
zo	6-3			09:44		351	10:16		429	10:00		364	10:45		420	9:57		351	10:29		341	9:52		352
zo	6-3				16:14	78		16:35	93		16:18	-17		17:04	78		16:42	88		17:14	78		16:15	59
zo	6-3			22:18		373	22:53		456	22:37		389	23:22		445	22:31		373	23:03		363	22:22		377
ma	7-3				05:01	53		05:16	67		4:55	-43		05:46	52		5:29	63		06:01	53		5:02	33
ma	7-3			10:52		360	11:29		444	11:13		375	11:56		431	11:05		360	11:37		350	10:53		362
ma	7-3				17:27	54		17:40	65		17:26	-44		18:11	51		17:55	64		18:27	54		17:17	36
ma	7-3			23:19		380	23:55		469	23:39		398										23:17		385
di	8-3				06:06	32		06:15	42		5:55	398	00:21		454	23:32		380	0:04		370		6:16	14
di	8-3			11:51		361	12:27		450	12:11		-65		06:47	30		6:34	42		07:06	32	11:47		364
di	8-3				18:26	35		18:35	46		18:20	378	12:54		434	12:04		361	12:36		351		18:43	21
di	8-3													19:08	33		18:54	45		19:26	35			
wo	9-3	2:55	NM	00:10		380	00:45		474	0:29		399	01:11		455	0:23		380	00:55		370	0:06		385
wo	9-3				07:00	18		07:05	28		6:45	-79		07:39	16		7:28	28		08:00	18		7:26	3
wo	9-3			12:39		358	13:17		448	13:01		376	13:42		432	12:52		358	13:24		348	12:37		359
wo	9-3				19:16	22		19:23	33		19:07	-74		19:57	21		19:44	32		20:16	22		19:47	9

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
do	10-3			00:54		380	01:30		475	1:14		399	01:54		455	1:07		380	01:39		370	0:52		381
do	10-3				07:48	11		07:50	18		7:29	-89		08:26	6		8:16	21		08:48	11		8:19	-5
do	10-3			13:21		356	14:00		446	13:44		374	14:25		430	13:34		356	14:06		346	13:23		354
do	10-3				20:02	12		20:06	21		19:50	-87		20:43	8		20:30	22		21:02	12		20:35	-1
vr	11-3			01:37		383	02:12		480	1:56		404	02:36		460	1:50		383	02:22		373	1:38		382
vr	11-3				08:31	6		08:33	9		8:10	-95		09:10	0		8:59	16		09:31	6		9:03	-11
vr	11-3			14:03		358	14:41		448	14:25		377	15:06		433	14:16		358	14:48		348	14:09		355
vr	11-3				20:44	3		20:48	7		20:31	-101		21:26	-6		21:12	13		21:44	3		20:01	-5
za	12-3			02:22		389	02:54		487	2:38		412	03:19		468	2:35		389	03:07		379	2:26		386
za	12-3				09:12	4		09:13	1		8:51	-105		09:52	-10		9:40	14		10:12	4		9:42	-16
za	12-3			14:48		362	15:21		454	15:05		384	15:48		440	15:01		362	15:33		352	14:54		359
za	12-3				21:24	-3		21:29	-4		21:13	-111		22:07	-16		21:52	7		22:24	-3		20:51	-17
zo	13-3			03:09		392	03:38		490	3:22		417	04:04		473	3:22		392	03:54		382	3:13		391
zo	13-3				09:50	6		09:54	1		9:33	-95		10:31	0		10:18	16		10:50	6		10:09	-16
zo	13-3			15:33		363	16:01		457	15:45		387	16:32		443	15:46		363	16:18		353	15:37		362
zo	13-3				22:03	-3		22:09	-5		21:56	-110		22:46	-15		22:31	7		23:03	-3		21:39	-24
ma	14-3			03:56		385	04:24		482	4:08		410	04:51		466	4:09		385	04:41		375	3:58		388
ma	14-3				10:26	15		10:34	12		10:18	-91		11:09	4		10:54	25		11:26	15		10:05	-13
ma	14-3			16:17		356	16:44		450	16:28		381	17:17		437	16:30		356	17:02		346	16:16		358
ma	14-3				22:41	6		22:51	7		22:42	-97		23:25	-2		23:09	16		23:41	6		22:24	-21
di	15-3			04:42		367	05:12		462	4:56		390	05:41		446	4:55		367	05:27		357	4:41		374
di	15-3				11:01	32		11:15	36		11:05	-68		11:47	27		11:29	42		12:01	32		10:50	-1
di	15-3	18:03	EK	16:58		342	17:30		434	17:14		365	18:04		421	17:11		342	17:43		332	16:55		346
di	15-3				23:22	23		23:36	31		23:32	-95										23:14		-6
wo	16-3			05:28		344	06:07		434	5:51		-75		00:06	20		23:50	33		0:22	23	5:27		351
wo	16-3				11:40	53		12:01	66		12:00	364	06:36		420	5:41		344	06:13		334	11:40		20
wo	16-3			17:39		327	18:25		413	18:09		-40		12:30	55		12:08	63		12:40	53	17:42		330
wo	16-3												18:59		401	17:52		327	18:24		317			
do	17-3				00:13	45		00:29	59		0:33	-48		00:58	47		0:41	55		01:13	45		0:12	17
do	17-3			06:26		322	07:13		410	6:57		341	07:40		397	6:39		322	07:11		312	6:20		327
do	17-3				12:37	74		13:01	95		13:08	-12		13:30	83		13:05	84		13:37	74	12:42		44
do	17-3			18:45		315	19:36		398	19:20		332	20:08		388	18:58		315	19:30		305	18:42		315
vr	18-3				01:45	61		01:42	81		1:46	-27		02:13	68		2:13	71		02:45	61		1:23	37
vr	18-3			07:45		312	08:28		401	8:12		332	08:56		388	7:58		312	08:30		302	7:29		311
vr	18-3				14:26	81		14:25	107		14:26	-1		14:56	94		14:54	91		15:26	81	13:55		59
vr	18-3			20:21		317	20:57		402	20:41		336	21:29		392	20:34		317	21:06		307	20:09		311

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
za	19-3				03:11	56		03:09	81		3:05	-27		03:38	68		3:39	66		04:11	56		2:43	43
za	19-3			09:24		321	09:45		413	9:29		343	10:18		399	9:37		321	10:09		311	9:15		314
za	19-3				15:50	67		15:49	93		15:43	-15		16:20	80		16:18	77		16:50	67		15:17	57
za	19-3			21:56		337	22:14		424	21:58		357	22:45		413	22:09		337	22:41		327	22:00		331
zo	20-3				04:33	39		04:29	63		4:20	-46		04:59	49		5:01	49		05:33	39		4:05	34
zo	20-3			10:38		345	10:59		437	10:43		367	11:29		423	10:51		345	11:23		335	10:43		339
zo	20-3				17:03	46		17:04	68		16:54	-40		17:35	55		17:31	56		18:03	46		17:10	41
zo	20-3			23:00		363	23:22		451	23:06		381	23:48		437	23:13		363	23:45		353	23:11		361
ma	21-3				05:37	23		05:37	42		5:25	-66		06:08	29		6:05	33		06:37	23		5:54	19
ma	21-3			11:32		365	12:01		458	11:45		385	12:27		441	11:45		365	12:17		355	11:39		365
ma	21-3				17:58	31		18:04	48		5:53	-59		18:35	36		18:26	41		18:58	31		18:22	23
ma	21-3			23:49		379																		
di	22-3				06:25	20	0:18		467	0:02		393	00:40		449	0:02		379	00:34		369	0:00		380
di	22-3			12:15		373		06:31	33		18:18	-74		07:01	21		6:53	30		07:25	20		6:47	11
di	22-3				18:42	31	12:51		463	12:35		388	13:12		444	12:28		373	13:00		363	12:22		376
di	22-3							18:52	44		18:40	-61		19:23	34		19:10	41		19:42	31		19:07	17
wo	23-3			00:28		380	01:02		465	0:46		390	01:22		446	0:41		380	01:13		370	0:38		382
wo	23-3	13:01 VM			07:05	29		07:14	40		6:59	-66		07:44	29		7:33	39		08:05	29		7:23	15
wo	23-3			12:49		371	13:28		456	13:12		381	13:48		437	13:02		371	13:34		361	12:57		376
wo	23-3				19:18	40		19:31	51		19:15	-53		20:01	42		19:46	50		20:18	40		19:40	21
do	24-3			00:59		374	01:35		456	1:19		382	01:54		438	1:12		374	01:44		364	1:09		375
do	24-3				07:37	41		07:49	51		7:28	-56		08:18	39		8:05	51		08:37	41		7:45	22
do	24-3			13:16		370	13:54		450	13:38		378	14:14		434	13:29		370	14:01		360	13:26		374
do	24-3				19:48	45		20:01	56		19:40	-50		20:32	45		20:16	55		20:48	45		19:59	25
vr	25-3			01:26		372	01:59		453	1:43		381	02:21		437	1:39		372	02:11		362	1:34		370
vr	25-3				08:04	43		08:16	52		7:52	-57		08:48	38		8:32	53		09:04	43		7:55	21
vr	25-3			13:42		374	14:17		457	14:01		387	14:40		443	13:55		374	14:27		364	13:51		376
vr	25-3				20:14	40		20:28	48		20:05	-59		21:00	36		20:42	50		21:14	40		20:08	18
za	26-3			01:52		376	02:25		460	2:09		388	02:49		444	2:05		376	02:37		366	1:56		373
za	26-3				08:31	37		08:43	42		8:19	-69		09:15	26		8:59	47		09:31	37		8:15	11
za	26-3			14:12		383	14:46		471	14:30		400	15:11		456	14:25		383	14:57		373	14:16		383
za	26-3				20:44	33		20:57	36		21:05	-72		21:29	23		21:12	43		21:44	33		20:32	7
zo	27-3			03:22		381	03:57		470	3:41		396	04:21		452	3:35		381	04:07		371	3:21		380
zo	27-3				09:59	30		10:11	30		9:52	-85		10:45	10		10:27	40		10:59	30		9:43	2
zo	27-3			15:44		387	16:19		479	16:03		407	16:46		463	15:57		387	16:29		377	15:43		388
zo	27-3				22:16	33		22:28	33		22:09	-75		23:01	20		22:44	43		23:16	33		22:02	2

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	28-3			03:56		380	04:32		470	4:16		396	04:56		452	4:09		380	04:41		370	3:52		382
ma	28-3				10:29	40		10:42	40		10:26	-75		11:15	20		10:57	50		11:29	40		10:13	2
ma	28-3			16:17		383	16:53		476	16:37		402	17:21		458	16:30		383	17:02		373	16:12		385
ma	28-3				22:47	44		22:59	45		22:43	-63		23:31	32		23:15	54		23:47	44		22:32	11
di	29-3			04:31		371	05:06		460	4:50		386	05:31		442	4:44		371	05:16		361	4:25		375
di	29-3				10:58	50		11:10	50		10:59	-55		11:42	40		11:26	60		11:58	50		10:42	22
di	29-3			16:48		373	17:24		464	17:08		390	17:52		446	17:01		373	17:33		363	16:38		376
di	29-3				23:19	60		23:28	64		23:15	-95											23:00	29
wo	30-3			05:04		358	05:39		445	5:23		-45		0:00	50		23:47	70		0:19	60	4:54		363
wo	30-3				11:29	70		11:39	80		11:31	373	06:04		429	5:17		358	05:49		348		11:12	42
wo	30-3			17:15		365	17:55		454	17:39		-31		12:10	64		11:57	85		12:29	75	17:02		368
wo	30-3				23:53	75						381	18:22		437	17:28		365	18:00		355		23:30	46
do	31-3			05:36		348		0:00	70		23:49	-35		00:30	60		0:21	80		00:53	70	5:21		353
do	31-3				12:06	90	06:15		433	5:59		363	06:41		419	5:49		348	06:21		338		11:46	52
do	31-3	17:17	LK	17:46		360		12:13	94		12:07	-20		12:44	75		12:34	100		13:06	90	17:33		364
do	31-3					80	18:32		448	18:16		377	18:59		433	17:59		360	18:31		350			

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	1-4				00:38	80		00:40	90		0:30	-25		01:11	70		1:06	90		01:38	80		0:10	52
vr	1-4			06:30		341	07:01		425	6:45		356	07:31		412	6:43		341	07:15		331	6:00		343
vr	1-4				12:58	99		13:00	106		12:57	-10		13:32	85		13:26	109		13:58	99		12:34	77
vr	1-4			18:57		359	19:25		444	19:09		375	19:55		431	19:10		359	19:42		349	18:25		358
za	2-4				01:38	80		01:36	90		1:28	-15		02:07	80		2:06	90		02:38	80		1:14	72
za	2-4			07:44		340	08:04		421	7:48		353	08:39		409	7:57		340	08:29		330	7:45		335
za	2-4				14:04	99		14:03	115		14:03	0		14:35	95		14:32	109		15:04	99		13:51	88
za	2-4			20:13		362	20:35		443	20:19		375	21:10		431	20:26		362	20:58		352	20:27		357
zo	3-4				02:49	80		02:50	100		2:42	-15		03:21	80		3:17	90		03:49	80		2:56	62
zo	3-4			08:58		346	09:21		423	9:05		357	09:56		413	9:11		346	09:43		336	9:13		343
zo	3-4				15:18	89		15:28	113		15:23	-1		15:56	94		15:46	99		16:18	89		15:27	77
zo	3-4			21:28		371	21:57		449	21:41		382	22:31		438	21:41		371	22:13		361	21:43		371
ma	4-4				04:09	60		04:23	80		4:04	-35		04:52	60		4:37	70		05:09	60		4:19	42
ma	4-4			10:12		356	10:44		434	10:28		366	11:14		422	10:25		356	10:57		346	10:20		357
ma	4-4				16:38	70		16:57	90		16:44	-20		17:25	75		17:06	80		17:38	70		16:41	51
ma	4-4			22:40		380	23:17		463	23:01		392	23:46		448	22:53		380	23:25		370	22:48		384
di	5-4				05:28	40		05:41	50		5:22	-55		06:11	40		5:56	50		06:28	40		5:24	12
di	5-4			11:22		363	12:00		448	11:44		375	12:28		431	11:35		363	12:07		353	11:23		365
di	5-4				17:55	48		18:08	63		5:55	-45		18:38	50		18:23	58		18:55	48		17:43	30
di	5-4			23:46		385																		
wo	6-4				06:36	20	0:23		474	0:07		399	00:50		455	23:59		385	0:31		375	23:46		389
wo	6-4			12:23		365		06:44	30		18:25	-75		07:16	20		7:04	30		07:36	20		6:36	2
wo	6-4				18:58	31	13:00		454	12:44		379	13:28		435	12:36		365	13:08		355	12:20		366
wo	6-4							19:06	44		18:52	-62		19:40	33		19:26	41		19:58	31		19:15	18
do	7-4			00:42		386	01:17		479	1:01		401	01:43		457	0:55		386	01:27		376	0:37		388
do	7-4	13:24	NM		07:33	10		07:37	20		7:17	-85		08:12	10		8:01	20		08:33	10		8:02	-8
do	7-4			13:13		363	13:50		453	13:34		378	14:16		434	13:26		363	13:58		353	13:09		362
do	7-4				19:52	20		19:57	30		19:41	-76		20:33	19		20:20	30		20:52	20		20:25	7
vr	8-4			01:29		386	02:05		481	1:49		402	02:29		458	1:42		386	02:14		376	1:24		386
vr	8-4				08:23	0		08:24	10		8:04	-95		09:02	0		8:51	10		09:23	0		8:56	-8
vr	8-4			13:57		363	14:35		454	14:19		380	15:00		436	14:10		363	14:42		353	13:55		360
vr	8-4				20:39	10		20:42	17		20:26	-90		21:21	5		21:07	20		21:39	10		19:50	4
za	9-4			02:14		389	02:50		485	2:34		407	03:15		463	2:27		389	02:59		379	2:12		387
za	9-4				09:08	0		09:08	0		8:47	-95		09:47	0		9:36	10		10:08	0		8:15	-8
za	9-4			14:40		368	15:17		459	15:01		387	15:43		443	14:53		368	15:25		358	8:16		-3
za	9-4				21:23	0		21:26	1		21:10	-105		22:05	-10		21:51	10		22:23	0		9:42	-14

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	10-4			03:01		394	03:35		490	3:19		412	04:01		468	3:14		394	03:46		384	3:03		390
zo	10-4				09:49	0		09:51	0		9:31	-95		10:30	0		10:17	10		10:49	0		10:21	-18
zo	10-4			15:26		375	15:59		467	15:43		395	16:27		451	15:39		375	16:11		365	15:31		370
zo	10-4				22:05	0		22:09	-10		21:54	-115		22:48	-20		22:33	10		23:05	0		22:35	-18
ma	11-4			03:50		393	04:22		488	4:06		412	04:48		468	4:03		393	04:35		383	3:55		391
ma	11-4				10:27	0		10:32	0		10:16	-95		11:11	0		10:55	10		11:27	0		10:52	-18
ma	11-4			16:13		377	16:42		470	16:26		397	17:11		453	16:26		377	16:58		367	16:17		373
ma	11-4				22:45	0		22:51	-10		22:39	-105		23:29	-10		23:13	10		23:45	0		22:57	-18
di	12-4			04:39		383	05:09		476	4:53		401	05:36		457	4:52		383	05:24		373	4:42		383
di	12-4				11:03	10		11:12	10		11:01	-95		11:49	0		11:31	20		12:03	10		10:50	-18
di	12-4			16:58		370	17:25		463	17:09		391	17:55		447	17:11		370	17:43		360	16:58		368
di	12-4				23:24	6		23:33	6		23:25	-95											23:11	-18
wo	13-4			05:27		364	05:57		454	5:41		381		00:08	0		23:52	10		0:24	0	5:25		366
wo	13-4				11:37	30		11:52	40		11:47	-61	06:25		437	5:40		364	06:12		354		11:28	2
wo	13-4			17:41		358	18:09		447	17:53		377		12:25	34		12:05	45		12:37	35	17:34		357
wo	13-4												18:41		433	17:54		358	18:26		348			
do	14-4	5:59	EK		00:04	20		00:17	30		0:12	-75		00:48	20		0:32	30		01:04	20		23:53	-8
do	14-4			06:14		342	06:48		429	6:32		358	07:17		414	6:27		342	06:59		332	6:07		345
do	14-4				12:12	57		12:36	71		12:38	-34		13:05	61		12:40	67		13:12	57		12:13	26
do	14-4			18:22		344	19:00		430	18:44		361	19:32		417	18:35		344	19:07		334	18:16		344
vr	15-4				00:54	50		01:07	60		1:08	-45		01:36	50		1:22	60		01:54	50		0:46	12
vr	15-4			07:09		325	07:48		410	7:32		342	08:16		398	7:22		325	07:54		315	6:56		326
vr	15-4				13:01	79		13:31	99		13:40	-7		13:59	88		13:29	89		14:01	79		13:10	50
vr	15-4			19:21		336	20:05		418	19:49		351	20:37		407	19:34		336	20:06		326	19:13		334
za	16-4				02:17	60		02:13	80		2:15	-25		02:44	70		2:45	70		03:17	60		1:53	42
za	16-4			08:21		320	08:57		406	8:41		338	09:28		394	8:34		320	09:06		310	8:04		316
za	16-4				14:45	91		14:48	114		14:53	7		15:20	102		15:13	101		15:45	91		14:22	67
za	16-4			20:47		338	21:22		421	21:06		355	21:57		411	21:00		338	21:32		328	20:36		332
zo	17-4				03:38	60		03:35	80		3:31	-25		04:07	70		4:06	70		04:38	60		3:14	42
zo	17-4			09:46		330	10:12		418	9:56		350	10:48		406	9:59		330	10:31		320	9:44		324
zo	17-4				16:10	80		16:13	105		16:10	-2		16:45	93		16:38	90		17:10	80		15:47	66
zo	17-4			22:17		355	22:40		439	22:24		373	23:14		429	22:30		355	23:02		345	22:23		349
ma	18-4				04:52	40		04:54	70		4:47	-45		05:24	50		5:20	50		05:52	40		4:35	32
ma	18-4			11:03		352	11:26		440	11:10		371	12:01		427	11:16		352	11:48		342	11:06		349
ma	18-4				17:24	60		17:28	82		17:21	-25		17:59	70		17:52	70		18:24	60		17:13	51
ma	18-4			23:26		375	23:49		461	23:33		352										23:35		374



				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
di	19-4				05:59	30		06:02	50		5:53	391		00:20	447		23:39	375		0:11	365		5:50	22
di	19-4				11:59	369		12:30	458		12:14	-65		06:32	30		6:27	40		06:59	30		12:05	371
di	19-4				18:24	44		18:31	62		18:22	387		13:00	443		12:12	369		12:44	359		18:40	33
di	19-4													19:02	51		18:52	54		19:24	44			386
wo	20-4				00:16	384		00:47	470		0:31	396		01:14	452		0:29	384		01:01	374		0:26	386
wo	20-4				06:51	20		06:57	40		6:47	-75		07:27	20		7:19	30		07:51	20		6:58	12
wo	20-4				12:42	375		13:19	462		13:03	387		13:46	443		12:55	375		13:27	365		12:49	380
wo	20-4				19:10	40		19:20	54		19:08	-51		19:51	44		19:38	50		20:10	40		19:31	25
do	21-4				00:55	381		01:30	463		1:14	388		01:55	444		1:08	381		01:40	371		1:05	383
do	21-4				07:32	30		07:41	40		7:26	-65		08:11	30		8:00	40		08:32	30		7:38	12
do	21-4				13:16	373		13:54	456		13:38	380		14:17	436		13:29	373		14:01	363		13:23	377
do	21-4				19:48	44		19:59	55		19:42	-50		20:30	45		20:16	54		20:48	44		20:03	26
vr	22-4	7:24 VM			01:27	373		02:02	453		1:46	378		02:25	434		1:40	373		02:12	363		1:35	373
vr	22-4				08:05	40		08:15	50		7:54	-65		08:46	30		8:33	50		09:05	40		8:00	12
vr	22-4				13:43	374		14:19	456		14:03	383		14:42	439		13:56	374		14:28	364		13:50	376
vr	22-4				20:18	45		20:30	53		20:07	-52		21:02	43		20:46	55		21:18	45		20:14	24
za	23-4				01:53	372		02:27	454		2:11	380		02:51	436		2:06	372		02:38	362		1:59	370
za	23-4				08:33	40		08:44	40		8:20	-65		09:16	30		9:01	50		09:33	40		8:18	12
za	23-4				14:11	383		14:45	469		14:29	397		15:10	453		14:24	383		14:56	373		14:17	383
za	23-4				20:47	39		21:00	41		20:35	-64		21:32	31		21:15	49		21:47	39		20:35	13
zo	24-4				02:21	379		02:57	466		2:41	391		03:23	447		2:34	379		03:06	369		2:25	377
zo	24-4				09:01	30		09:13	30		8:51	-75		09:47	20		9:29	40		10:01	30		8:45	2
zo	24-4				14:43	394		15:18	486		15:02	413		15:45	469		14:56	394		15:28	384		14:46	394
zo	24-4				21:19	32		21:31	30		21:10	-76		22:05	19		21:47	42		22:19	32		21:06	3
ma	25-4				02:56	386		03:34	477		3:18	400		04:00	456		3:09	386		03:41	376		2:57	385
ma	25-4				09:32	30		09:45	30		9:29	-85		10:20	10		10:00	40		10:32	30		9:18	2
ma	25-4				15:19	400		15:56	494		15:40	420		16:24	476		15:32	400		16:04	390		15:21	401
ma	25-4				21:53	34		22:06	31		21:48	-74		22:39	21		22:21	44		22:53	34		21:42	3
di	26-4				03:35	385		04:12	476		3:56	399		04:38	455		3:48	385		04:20	375		3:36	385
di	26-4				10:04	40		10:18	40		10:06	-65		10:52	30		10:32	50		11:04	40		9:51	12
di	26-4				15:57	397		16:32	489		16:16	414		16:59	470		16:10	397		16:42	387		15:57	397
di	26-4				22:27	47		22:39	46		22:24	-57		23:12	38		22:55	57		23:27	47		22:15	18
wo	27-4				04:15	375		04:48	463		4:32	387		05:13	443		4:28	375		05:00	365		4:13	375
wo	27-4				10:36	60		10:49	60		10:40	-45		11:21	50		11:04	70		11:36	60		10:21	32
wo	27-4				16:33	387		17:04	477		16:48	403		17:31	459		16:46	387		17:18	377		16:26	387
wo	27-4				23:01	63		23:10	66		22:57	-38		23:42	57								22:41	37



				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
do	28-4			04:53		361	05:22		446	5:06		373	05:48		429		23:29	70		0:01	60	4:43		361
do	28-4				11:09	70		11:19	80		11:13	-35		11:49	60		5:06	361		05:38	351		10:48	52
do	28-4			17:08		378	17:36		468	17:20		395	18:03		451		11:37	87		12:09	77	16:49		379
do	28-4				23:37	74		23:43	78		23:31	-35					17:21	378		17:53	368		23:08	49
vr	29-4			05:31		350	05:58		435	5:42		363		00:12	60		0:05	80		00:37	70	5:07		351
vr	29-4				11:48	80		11:53	90		11:50	-21	06:25		419		5:44	350		06:16	340		11:21	62
vr	29-4			17:45		375	18:14		465	17:58		393		12:22	74		12:16	97		12:48	87	17:16		377
vr	29-4												18:42		449	17:58		375		18:30	365		23:48	53
za	30-4	5:29	LK		00:22	70		00:23	80		0:12	-35		00:52	60		0:50	80		01:22	70	5:43		346
za	30-4			06:20		345	06:43		429	6:27		358	07:14		414	6:33		345		07:05	335		12:07	62
za	30-4				12:39	89		12:38	94		12:38	-21		13:09	74		13:07	99		13:39	89	18:07		374
za	30-4			18:40		375	19:05		464	18:49		393	19:35		449	18:53		375		19:25	365			

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	1-5				01:19	70		01:16	80		1:08	-35		01:46	60		1:47	80		02:19	70		0:50	52
zo	1-5			07:24		345	07:43		428	7:27		357	08:19		413	7:37		345	08:09		335	7:24		342
zo	1-5				13:41	86		13:39	98		13:40	-16		14:10	79		14:09	96		14:41	86		13:21	74
zo	1-5			19:47		378	20:10		463	19:54		391	20:43		447	20:00		378	20:32		368	19:55		373
ma	2-5				02:26	60		02:26	70		2:17	-35		02:55	60		2:54	70		03:26	60		2:22	42
ma	2-5			08:33		351	08:56		430	8:40		360	09:33		416	8:46		351	09:18		341	8:45		350
ma	2-5				14:51	77		14:57	97		14:55	-15		15:25	80		15:19	87		15:51	77		14:56	64
ma	2-5			20:57		383	21:27		465	21:11		393	21:58		449	21:10		383	21:42		373	21:10		382
di	3-5				03:41	50		03:50	60		3:35	-45		04:18	50		4:09	60		04:41	50		3:44	22
di	3-5			09:44		359	10:16		439	10:00		367	10:48		423	9:57		359	10:29		349	9:52		360
di	3-5				16:08	64		16:22	81		16:14	-26		16:50	69		16:36	74		17:08	64		16:09	43
di	3-5			22:06		389	22:44		473	22:28		398	23:12		454	22:19		389	22:51		379	22:15		391
wo	4-5				04:57	30		05:07	40		4:51	-65		05:36	30		5:25	40		05:57	30		4:47	2
wo	4-5			10:52		366	11:30		450	11:14		374	11:59		430	11:05		366	11:37		356	10:54		367
wo	4-5				17:24	48		17:34	60		17:24	-44		18:05	51		17:52	58		18:24	48		17:10	27
wo	4-5			23:12		392	23:51		481	23:35		362				23:25		392	23:57		382	23:15		393
do	5-5				06:05	20		06:10	20		5:54	401	00:17		457		6:33	30		07:05	20		5:43	2
do	5-5			11:53		368	12:30		457	12:14		-85		06:43	10	12:06		368	12:38		358	11:51		368
do	5-5				18:29	35		18:35	42		18:23	379	12:59		435		18:57	45		19:29	35		18:03	19
do	5-5													19:09	35									
vr	6-5			00:10		392	00:48		485	0:32		403	01:14		459	0:23		392	00:55		382	0:08		392
vr	6-5				07:04	10		07:06	10		6:49	-85		07:42	10		7:32	20		08:04	10		6:32	2
vr	6-5			12:46		370	13:22		459	13:06		382	13:50		438	12:59		370	13:31		360	6:34		2
vr	6-5	21:29 NM			19:26	24		19:29	28		19:14	-74		20:07	21		19:54	34		20:26	24		7:29	1
za	7-5			01:02		392	01:39		486	1:23		405	02:06		461	1:15		392	01:47		382	0:58		390
za	7-5				07:56	10		07:56	10		7:38	-95		08:36	0		8:24	20		08:56	10		7:11	2
za	7-5			13:32		373	14:09		464	13:53		388	14:36		444	13:45		373	14:17		363	7:13		2
za	7-5				20:17	14		20:18	13		20:03	-90		20:58	5		20:45	24		21:17	14		8:28	-4
zo	8-5			01:52		393	02:29		488	2:13		408	02:55		464	2:05		393	02:37		383	1:49		390
zo	8-5				08:43	10		08:44	0		8:25	-95		09:24	0		9:11	20		09:43	10		9:16	-18
zo	8-5			14:19		380	14:54		471	14:38		397	15:22		453	14:32		380	15:04		370	14:19		375
zo	8-5				21:03	4		21:05	0		20:50	-95		21:46	0		21:31	14		22:03	4		21:36	-16
ma	9-5			02:43		394	03:19		489	3:03		410	03:45		466	2:56		394	03:28		384	2:44		391
ma	9-5				09:26	10		09:29	0		9:13	-95		10:10	0		9:54	20		10:26	10		9:57	-18
ma	9-5			15:07		386	15:40		478	15:24		404	16:08		460	15:20		386	15:52		376	15:12		381
ma	9-5				21:47	0		21:51	0		21:38	-105		22:32	-10		22:15	10		22:47	0		22:16	-18

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West			
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E			
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	
di	10-5			03:35		391	04:09		484	3:53		405	04:35		461	3:48		391	04:20		381	3:41		388	
di	10-5				10:06	10		10:12	0		10:01	-95		10:52	0		10:34	20		11:06	10		10:33	-18	
di	10-5			15:55		388	16:26		479	16:10		405	16:54		461	16:08		388	16:40		378	16:03		383	
di	10-5				22:30	2		22:35	0		22:25	-95		23:14	0		22:58	12		23:30	2		22:50	-18	
wo	11-5			04:25		381	04:57		470	4:41		393	05:23		449	4:38		381	05:10		371	4:33		378	
wo	11-5				10:43	20		10:54	20		10:47	-75		11:31	20		11:11	30		11:43	20		10:52	-8	
wo	11-5			16:42		382	17:09		471	16:53		398	17:38		454	16:55		382	17:27		372	16:46		377	
wo	11-5				23:12	17		23:18	15		23:10	-85		23:54	10								23:06	-9	
do	12-5			05:13		365	05:44		450	5:28		376	06:10		432		23:40	20		0:12	10		5:16	362	
do	12-5				11:19	40		11:34	50		11:32	-55		12:08	40		5:26	365		05:58	355		11:12	12	
do	12-5			17:25		373	17:52		459	17:36		387	18:21		443		11:47	56		12:19	46		17:20	368	
do	12-5				23:53	39											17:38	373		18:10	363		23:36	10	
vr	13-5			05:59		349		0:00	40		23:55	-65		00:33	30			0:21	40		00:53	30		5:53	346
vr	13-5				11:55	60	06:30		432	6:14		360	06:58		416		6:12	349		06:44	339		11:50	32	
vr	13-5	19:02	EK	18:06		364		12:15	75		12:18	-26		12:45	69		12:23	76		12:55	66		17:54	362	
vr	13-5					50	18:38		449	18:22		378	19:08		434		18:19	364		18:51	354				
za	14-5				00:40	50		00:46	60		0:43	-45		01:17	50			1:08	60		01:40	50		0:20	22
za	14-5			06:49		338	07:21		420	7:05		351	07:51		407		7:02	338		07:34	328		6:34	336	
za	14-5				12:40	83		13:04	96		13:11	-7		13:33	88		13:08	93		13:40	83		12:39	55	
za	14-5			18:54		360	19:34		443	19:18		373	20:06		429		19:07	360		19:39	350		18:43	358	
zo	15-5				01:45	70		01:43	80		1:41	-25		02:15	70			2:13	80		02:45	70		1:18	42
zo	15-5			07:49		336	08:21		419	8:05		351	08:54		407		8:02	336		08:34	326		7:34	333	
zo	15-5				13:57	94		14:09	109		14:15	5		14:40	100		14:25	104		14:57	94		13:45	68	
zo	15-5			20:06		362	20:41		444	20:25		376	21:17		432		20:19	362		20:51	352		19:53	357	
ma	16-5				02:56	70		02:54	80		2:48	-25		03:28	70			3:24	80		03:56	70		2:34	52
ma	16-5			09:01		344	09:28		427	9:12		359	10:06		415		9:14	344		09:46	334		9:01	340	
ma	16-5				15:21	89		15:25	107		15:24	2		15:59	97			15:49	99		16:21	89		15:04	70
ma	16-5			21:25		369	21:53		452	21:37		384	22:31		440		21:38	369		22:10	359		21:32	364	
di	17-5				04:03	50		04:07	70		3:59	-35		04:39	60			4:31	60		05:03	50		3:54	42
di	17-5			10:12		358	10:38		440	10:22		372	11:17		428		10:25	358		10:57	348		10:19	358	
di	17-5				16:33	74		16:39	92		16:34	-13		17:12	82			17:01	84		17:33	74		16:25	58
di	17-5			22:36		378	23:02		460	22:46		391	23:39		447		22:49	378		23:21	368		22:48	377	
wo	18-5				05:07	40		05:14	60		5:06	-55		05:46	40			5:35	50		06:07	40		5:02	22
wo	18-5			11:12		370	11:42		452	11:26		381	12:18		437		11:25	370		11:57	360		11:21	374	
wo	18-5				17:38	60		17:45	75		5:36	-30		18:17	65			18:06	70		18:38	60		17:37	43
wo	18-5			23:31		380			461			350			445										

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West										
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E										
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm								
do	19-5				06:05	40		0:02		461		23:46		389		00:36		445		23:44		380		0:16		370		23:44		382		
do	19-5				11:59		375		06:12		50		18:01		-55		06:43		40		6:33		50		07:05		40		6:02		22	
do	19-5					18:31		52		12:33		456		12:17		382		13:05		438		12:12		375		12:44		365		12:08		379
do	19-5						376		18:39		64		18:25		-41		19:11		54		18:59		62		19:31		52		18:36		34	
vr	20-5				00:15		376		00:49		455		0:33		380		01:18		436		0:28		376		01:00		366		0:27		376	
vr	20-5					06:51		40		06:58		50		6:44		-65		07:31		30		7:19		50		07:51		40		6:48		22
vr	20-5				12:37		377		13:11		457		12:55		382		13:38		438		12:50		377		13:22		367		12:45		378	
vr	20-5					19:13		51		19:21		59		19:01		-46		19:54		49		19:41		61		20:13		51		19:13		30
za	21-5				00:51		371		01:24		450		1:08		375		01:50		431		1:04		371		01:36		361		1:00		369	
za	21-5					07:29		40		07:36		50		7:16		-65		08:10		30		7:57		50		08:29		40		7:19		22
za	21-5				13:10		382		13:41		464		13:25		392		14:08		448		13:23		382		13:55		372		13:16		381	
za	21-5	23:14	VM			19:47		49		19:57		52		19:32		-53		20:31		42		20:15		59		20:47		49		19:37		26
zo	22-5				01:22		374		01:55		456		1:39		382		02:22		438		1:35		374		02:07		364		1:26		371	
zo	22-5					08:01		40		08:10		40		7:48		-65		08:45		30		8:29		50		09:01		40		7:44		12
zo	22-5				13:42		393		14:14		480		13:58		409		14:42		465		13:55		393		14:27		383		13:45		392	
zo	22-5					20:20		44		20:31		41		20:06		-63		21:06		32		20:48		54		21:20		44		20:06		16
ma	23-5				01:54		382		02:30		470		2:14		395		02:58		451		2:07		382		02:39		372		1:55		381	
ma	23-5					08:32		40		08:45		30		8:25		-75		09:20		20		9:00		50		09:32		40		8:15		2
ma	23-5				14:16		405		14:53		496		14:37		424		15:21		480		14:29		405		15:01		395		14:18		406	
ma	23-5					20:55		40		21:08		33		20:46		-70		21:43		25		21:23		50		21:55		40		20:42		8
di	24-5				02:31		390		03:11		479		2:55		403		03:39		459		2:44		390		03:16		380		2:32		389	
di	24-5					09:06		40		09:21		30		9:05		-75		09:56		20		9:34		50		10:06		40		8:52		2
di	24-5				14:55		412		15:32		502		15:16		429		16:02		485		15:08		412		15:40		402		14:57		413	
di	24-5					21:32		42		21:45		35		21:26		-67		22:20		28		22:00		52		22:32		42		21:22		11
wo	25-5				03:14		389		03:52		476		3:36		400		04:20		456		3:27		389		03:59		379		3:16		388	
wo	25-5					09:42		40		09:58		40		9:45		-65		10:32		30		10:10		50		10:42		40		9:30		12
wo	25-5				15:36		410		16:10		498		15:54		423		16:39		479		15:49		410		16:21		400		15:38		410	
wo	25-5					22:09		50		22:21		48		22:04		-54		22:56		41		22:37		60		23:09		50		22:00		23
do	26-5				03:58		379		04:30		463		4:14		388		04:58		444		4:11		379		04:43		369		4:00		377	
do	26-5					10:17		60		10:32		60		10:21		-45		11:05		50		10:45		70		11:17		60		10:02		32
do	26-5				16:16		401		16:44		487		16:28		414		17:12		470		16:29		401		17:01		391		16:14		399	
do	26-5					22:45		60		22:55		63		22:38		-40		23:29		55		23:13		70		23:45		60		22:27		37
vr	27-5				04:41		366		05:05		447		4:49		375		05:34		431		4:54		366		05:26		356		4:38		362	
vr	27-5					10:53		70		11:04		70		10:55		-35		11:35		60		11:21		80		11:53		70		10:31		52
vr	27-5				16:55		393		17:18		481		17:02		409		17:46		465		17:08		393		17:40		383		16:42		391	
vr	27-5					23:24		65		23:30		68		23:14		-45														22:56		41

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
za	28-5			05:23		355	05:42		438	5:26		366		0:01	50		23:52	70		0:24	60	5:10		352
za	28-5				11:34	70		11:39	80		11:34	-29	06:14		422	5:36		355	06:08		345		11:05	52
za	28-5			17:36		389	17:58		480	17:42		408		12:09	66		12:02	85		12:34	75	17:12		388
za	28-5												18:27		464	17:49		389	18:21		379		23:36	38
zo	29-5				00:08	60		0:10	60		23:56	-45		00:40	50		0:36	70		01:08	60	5:53		348
zo	29-5			06:09		351	06:27		435	6:11		363	07:02		419	6:22		351	06:54		341		11:52	52
zo	29-5	14:12	LK		12:23	73		12:23	77		12:21	-33		12:54	62		12:51	83		13:23	73	18:05		387
zo	29-5			18:24		389	18:47		480	18:31		407	19:18		463	18:37		389	19:09		379			
ma	30-5				01:01	50		01:01	60		0:48	-55		01:31	40		1:29	60		02:01	50		0:35	32
ma	30-5			07:04		351	07:22		434	7:06		361	08:01		417	7:17		351	07:49		341	7:07		349
ma	30-5				13:20	69		13:20	78		13:18	-33		13:50	62		13:48	79		14:20	69		13:01	55
ma	30-5			19:22		389	19:47		477	19:31		403	20:20		459	19:35		389	20:07		379	19:28		387
di	31-5				02:02	50		02:04	50		1:52	-55		02:33	40		2:30	60		03:02	50		1:54	22
di	31-5			08:05		354	08:30		433	8:14		362	09:09		418	8:18		354	08:50		344	8:16		354
di	31-5				14:24	65		14:29	80		14:28	-29		14:58	66		14:52	75		15:24	65		14:27	48
di	31-5			20:25		390	20:58		473	20:42		400	21:29		456	20:38		390	21:10		380	20:38		390

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
wo	1-6				03:12	40		03:19	50		3:06	-55		03:48	40		3:40	50		04:12	40		3:09	12
wo	1-6			09:11		358	09:46		436	9:30		364	10:19		420	9:24		358	09:56		348	9:20		360
wo	1-6				15:37	61		15:47	75		15:43	-31		16:16	64		16:05	71		16:37	61		15:37	36
wo	1-6			21:30		391	22:12		474	21:56		397	22:38		453	21:43		391	22:15		381	21:41		392
do	2-6				04:26	30		04:33	40		4:19	-65		05:03	30		4:54	40		05:26	30		4:11	2
do	2-6			10:16		362	10:58		443	10:42		368	11:27		424	10:29		362	11:01		352	10:20		363
do	2-6				16:53	53		17:00	61		16:53	-41		17:31	54		17:21	63		17:53	53		16:36	27
do	2-6			22:33		390	23:20		476	23:04		396	23:45		452	22:46		390	23:18		380	22:40		390
vr	3-6				05:34	30		05:38	30		5:24	-75		06:10	20		6:02	40		06:34	30		5:06	2
vr	3-6			11:18		365	12:00		450	11:44		373	12:29		429	11:31		365	12:03		355	11:17		364
vr	3-6				18:00	44		18:04	46		5:54	-55		18:38	40		18:28	54		19:00	44		17:31	21
vr	3-6			23:33		388															23:36		388	
za	4-6				06:35	30	0:21		478	0:05		396	00:48		452	23:46		388	0:18		378		5:57	2
za	4-6			12:16		369		06:36	20		18:22	-85		07:12	10		7:03	40		07:35	30	12:10		367
za	4-6				19:01	33	12:55		457	12:39		381	13:24		437	12:29		369	13:01		359		18:25	13
za	4-6							19:03	31		18:50	-71		19:41	24		19:29	43		20:01	33			
zo	5-6	5:00 NM		00:35		387	01:18		480	1:02		399	01:45		455	0:48		387	01:20		377	0:31		386
zo	5-6				07:31	20		07:31	10		7:16	-85		08:11	10		7:59	30		08:31	20		6:49	2
zo	5-6			13:09		376	13:46		465	13:30		391	14:14		447	13:22		376	13:54		366	7:17		7
zo	5-6				19:57	22		19:58	16		19:43	-86		20:38	9		20:25	32		20:57	22		7:47	7
ma	6-6			01:35		388	02:12		481	1:56		403	02:39		459	1:48		388	02:20		378	1:28		387
ma	6-6				08:21	20		08:24	10		8:08	-95		09:04	0		8:49	30		09:21	20		8:46	-8
ma	6-6			14:01		384	14:36		474	14:20		401	15:03		457	14:14		384	14:46		374	13:58		380
ma	6-6				20:47	13		20:49	5		20:35	-95		21:30	0		21:15	23		21:47	13		21:12	-12
di	7-6			02:30		389	03:06		481	2:50		404	03:32		460	2:43		389	03:15		379	2:31		387
di	7-6				09:07	20		09:13	10		8:59	-95		09:53	0		9:35	30		10:07	20		9:33	-8
di	7-6			14:52		391	15:25		479	15:09		406	15:51		462	15:05		391	15:37		381	14:57		386
di	7-6				21:34	9		21:38	3		21:25	-95		22:18	0		22:02	19		22:34	9		21:57	-17
wo	8-6			03:22		387	03:58		475	3:42		399	04:23		455	3:35		387	04:07		377	3:32		385
wo	8-6				09:50	20		09:59	20		9:49	-85		10:38	10		10:18	30		10:50	20		10:16	-8
wo	8-6			15:40		392	16:13		478	15:57		405	16:37		461	15:53		392	16:25		382	15:51		388
wo	8-6				22:19	17		22:23	14		22:13	-86		23:02	9		22:47	27		23:19	17		22:36	-9
do	9-6			04:11		379	04:46		463	4:30		388	05:10		444	4:24		379	04:56		369	4:23		377
do	9-6				10:30	40		10:41	40		10:35	-65		11:18	30		10:58	50		11:30	40		10:48	12
do	9-6			16:25		389	16:56		472	16:40		398	17:21		454	16:38		389	17:10		379	16:35		383
do	9-6				23:00	33		23:05	33		22:56	-65		23:41	30							22:58		10

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	10-6			04:56		369	05:29		448	5:13		374	05:54		430		23:28	40		0:00	30	5:06		364
vr	10-6				11:07	50		11:20	60		11:16	-35		11:53	60		5:09	369	05:41		359		10:59	32
vr	10-6			17:07		383	17:35		464	17:19		391	18:01		447		11:35	69		12:07	59	17:04		376
vr	10-6				23:40	53		23:44	54		23:36	-95					17:20	383	17:52		373		23:17	27
za	11-6			05:39		358	06:09		436	5:53		-45		00:17	50		0:08	60		00:40	50	5:37		353
za	11-6				11:42	70		11:57	80		11:56	365	06:35		421		5:52	358	06:24		348		11:27	42
za	11-6			17:43		378	18:15		460	17:59		-19		12:27	76		12:10	86		12:42	76	17:29		374
za	11-6												18:42		443		17:56	378	18:28		368		23:52	39
zo	12-6				00:21	60		00:25	60		0:17	-35		00:56	60		0:49	70		01:21	60	6:06		349
zo	12-6	10:10	EK	06:21		352	06:51		431	6:35		361	07:20		417		6:34	352	07:06		342		12:09	52
zo	12-6				12:22	87		12:39	91		12:40	-9		13:08	86		12:50	97		13:22	87	18:09		375
zo	12-6			18:21		376	19:02		459	18:46		386	19:30		442		18:34	376	19:06		366			
ma	13-6				01:09	70		01:12	70		1:06	-25		01:43	70		1:37	80		02:09	70		0:41	42
ma	13-6			07:12		350	07:42		431	7:26		361	08:13		417		7:25	350	07:57		340	6:55		350
ma	13-6				13:16	93		13:31	99		13:34	-2		14:00	93		13:44	103		14:16	93		13:04	64
ma	13-6			19:18		373	19:59		457	19:43		384	20:30		440		19:31	373	20:03		363	19:07		372
di	14-6				02:09	70		02:10	80		2:04	-25		02:42	70		2:37	80		03:09	70		1:44	42
di	14-6			08:15		352	08:41		434	8:25		363	09:15		419		8:28	352	09:00		342	8:09		353
di	14-6				14:26	94		14:35	103		14:36	2		15:07	97		14:54	104		15:26	94		14:15	69
di	14-6			20:33		371	21:03		453	20:47		381	21:38		437		20:46	371	21:18		361	20:32		367
wo	15-6				03:14	70		03:16	80		3:08	-25		03:49	70		3:42	80		04:14	70		3:01	42
wo	15-6			09:21		358	09:45		437	9:29		366	10:20		422		9:34	358	10:06		348	9:28		359
wo	15-6				15:40	87		15:47	99		15:41	-3		16:19	92		16:08	97		16:40	87		15:34	65
wo	15-6			21:43		370	22:10		449	21:54		377	22:45		433		21:56	370	22:28		360	21:56		368
do	16-6				04:17	60		04:23	70		4:13	-35		04:56	60		4:45	70		05:17	60		4:16	42
do	16-6			10:21		365	10:48		443	10:32		370	11:22		426		10:34	365	11:06		355	10:33		368
do	16-6				16:47	77		16:55	89		16:44	-13		17:27	82		17:15	87		17:47	77		16:47	55
do	16-6			22:43		369	23:13		446	22:57		372	23:46		428		22:56	369	23:28		359	22:59		369
vr	17-6				05:17	60		05:24	70		5:12	-35		05:56	60		5:45	70		06:17	60		5:18	32
vr	17-6			11:14		372	11:44		449	11:28		375	12:14		431		11:27	372	11:59		362	11:26		374
vr	17-6				17:46	68		17:55	78		5:39	-25		18:26	70		18:14	78		18:46	68		17:47	46
vr	17-6			23:33		368																		
za	18-6				06:09	60	0:06		445	23:50		369	00:35		425		23:46	368	0:18		358	23:48		367
za	18-6			11:59		379		06:16	60		18:02	-45		06:49	50		6:37	70		07:09	60		6:08	32
za	18-6				18:36	64	12:30		458	12:14		384	12:57		440		12:12	379	12:44		369	12:09		378
za	18-6					370		18:44	68		18:23	-36		19:17	59		19:04	74		19:36	64		18:33	40



				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	19-6			00:16		370	00:48		448	0:32		373	01:15		429	0:29		370	01:01		360	0:25		367
zo	19-6				06:53	60		07:00	60		6:43	-45		07:35	50		7:21	70		07:53	60		6:45	32
zo	19-6			12:40		390	13:10		471	12:54		399	13:36		455	12:53		390	13:25		380	12:45		387
zo	19-6				19:17	60		19:27	58		19:02	-44		20:01	51		19:45	70		20:17	60		19:09	34
ma	20-6			00:54		376	01:27		458	1:11		384	01:55		440	1:07		376	01:39		366	0:58		373
ma	20-6	13:02	VM		07:31	50		07:41	50		7:22	-55		08:16	40		7:59	60		08:31	50		7:16	22
ma	20-6			13:17		402	13:50		487	13:34		416	14:17		472	13:30		402	14:02		392	13:18		401
ma	20-6				19:57	55		20:07	49		19:43	-52		20:42	43		20:25	65		20:57	55		19:44	26
di	21-6			01:30		384	02:09		470	1:53		395	02:37		451	1:43		384	02:15		374	1:31		384
di	21-6				08:08	50		08:21	40		8:04	-65		08:57	30		8:36	60		09:08	50		7:50	22
di	21-6			13:54		412	14:31		499	14:15		427	15:00		483	14:07		412	14:39		402	13:54		413
di	21-6				20:36	50		20:48	42		20:25	-58		21:23	37		21:04	60		21:36	50		20:24	20
wo	22-6			02:10		389	02:52		475	2:36		400	03:21		456	2:23		389	02:55		379	2:12		390
wo	22-6				08:46	50		09:02	40		8:46	-65		09:37	30		9:14	60		09:46	50		8:29	22
wo	22-6			14:33		416	15:12		503	14:56		429	15:42		485	14:46		416	15:18		406	14:36		419
wo	22-6				21:16	49		21:28	43		21:07	-57		22:03	38		21:44	59		22:16	49		21:08	19
do	23-6			02:54		387	03:34		470	3:18		395	04:04		451	3:07		387	03:39		377	2:59		387
do	23-6				09:25	50		09:41	50		9:26	-55		10:15	40		9:53	60		10:25	50		9:11	22
do	23-6			15:14		413	15:51		498	15:35		423	16:19		479	15:27		413	15:59		403	15:20		414
do	23-6				21:56	51		22:06	48		21:46	-52		22:42	43		22:24	61		22:56	51		21:50	24
vr	24-6			03:40		379	04:13		458	3:57		384	04:43		440	3:53		379	04:25		369	3:48		376
vr	24-6				10:03	50		10:18	50		10:03	-45		10:52	50		10:31	60		11:03	50		9:48	32
vr	24-6			15:57		407	16:26		491	16:10		416	16:54		472	16:10		407	16:42		397	16:01		405
vr	24-6				22:34	53		22:43	53		22:22	-47		23:19	48		23:02	63		23:34	53		22:20	29
za	25-6			04:25		369	04:50		447	4:34		374	05:21		430	4:38		369	05:10		359	4:32		364
za	25-6				10:41	60		10:53	60		10:40	-45		11:26	50		11:09	70		11:41	60		10:20	42
za	25-6			16:39		402	17:02		489	16:46		415	17:30		471	16:52		402	17:24		392	16:37		398
za	25-6				23:12	52		23:20	53		22:58	-48		23:53	47								22:48	28
zo	26-6			05:08		361	05:27		442	5:11		369	06:02		425		23:40	60		0:12	50		5:12	357
zo	26-6				11:22	50		11:30	60		11:19	-45		12:01	50		5:21	361		05:53	351		10:55	32
zo	26-6			17:21		399	17:43		490	17:27		416	18:12		472		11:50	69		12:22	59		17:14	396
zo	26-6				23:54	47		23:59	49		23:41	-95					17:34	399		18:06	389		23:27	22
ma	27-6			05:53		357	06:11		440	5:55		367		00:31	40		0:22	50		00:54	40		5:54	354
ma	27-6				12:07	50		12:12	60		12:04	-45		06:48	423		6:06	357		06:38	347		11:41	32
ma	27-6			18:06		398	18:30		489	18:14		414		12:43	50		12:35	65		13:07	55		18:03	397
ma	27-6	20:19	LK										19:01		470	18:19		398	18:51		388			

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
di	28-6				00:42	40		00:46	40		0:30	-65		01:17	30		1:10	50		01:42	40		0:21	12
di	28-6			06:40		354	07:03		437	6:47		364	07:43		420	6:53		354	07:25		344	6:47		355
di	28-6				12:58	54		13:02	62		12:58	-44		13:33	51		13:26	64		13:58	54		12:44	36
di	28-6			18:57		395	19:26		482	19:10		407	19:58		463	19:10		395	19:42		385	19:04		395
wo	29-6				01:37	40		01:42	50		1:29	-55		02:12	40		2:05	50		02:37	40		1:28	12
wo	29-6			07:33		352	08:04		431	7:48		359	08:44		415	7:46		352	08:18		342	7:45		355
wo	29-6				13:56	59		14:03	70		14:01	-35		14:33	60		14:24	69		14:56	59		13:58	37
wo	29-6			19:52		389	20:31		471	20:15		397	21:02		453	20:05		389	20:37		379	20:06		391
do	30-6				02:41	50		02:50	50		2:38	-45		03:19	50		3:09	60		03:41	50		2:36	12
do	30-6			08:33		351	09:17		427	9:01		356	09:50		412	8:46		351	09:18		341	8:44		354
do	30-6				15:04	65		15:16	76		15:15	-28		15:46	67		15:32	75		16:04	65		15:05	35
do	30-6			20:53		383	21:45		463	21:29		387	22:10		443	21:06		383	21:38		373	21:07		385

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	1-7			03:55		50	04:03		50	3:51	-45		04:33		50	4:23	60		04:55		50	3:38		12
vr	1-7			09:37		351	10:30		430	10:14		356	10:58		412	9:50		351	10:22		341	9:43		353
vr	1-7			16:24		63	16:31		71	16:27	-33		17:02		62	16:52	73		17:24		63	16:07		32
vr	1-7			21:56		377	22:56		460	22:40		381	23:20		437	22:09		377	22:41		367	22:07		378
za	2-7			05:06		50	05:10		40	4:59	-55		05:43		40	5:34	60		06:06		50	4:37		12
za	2-7			10:44		355	11:35		438	11:19		362	12:04		418	10:57		355	11:29		345	10:43		354
za	2-7			17:37		54	17:40		56	5:33	-46		18:14		49	18:05	64		18:37		54	17:07		27
za	2-7			23:04		374			462			344			439	23:17		374	23:49		364	23:08		375
zo	3-7			06:12		40	0:03		462	23:47		383	00:31		439	6:40	50		07:12		40	5:35		12
zo	3-7			11:55		363	06:13		40	18:03	-65		06:49		30	12:08		363	12:40		353	11:44		361
zo	3-7			18:45		42	12:35		450	12:19		375	13:04		431	19:13	52		19:45		42	18:08		18
zo	3-7						18:45		39	18:34	-63		19:23		32									
ma	4-7			00:25		376	01:05		467	0:49		390	01:33		446	0:38		376	01:10		366	0:12		376
ma	4-7	13:01	NM	07:15		40	07:15		30	7:01	-75		07:54		20	7:43	50		08:15		40	6:35		12
ma	4-7			12:58		375	13:30		463	13:14		390	13:57		446	13:11		375	13:43		365	12:45		371
ma	4-7			19:46		31	19:46		25	19:30	-79		20:25		16	20:14	41		20:46		31	19:26		8
di	5-7			01:29		382	02:03		473	1:47		397	02:29		453	1:42		382	02:14		372	1:19		380
di	5-7			08:08		30	08:12		20	7:57	-75		08:51		20	8:36	40		09:08		30	8:15		2
di	5-7			13:51		386	14:23		473	14:07		401	14:48		457	14:04		386	14:36		376	13:48		382
di	5-7			20:38		24	20:41		18	20:24	-85		21:19		10	21:06	34		21:38		24	20:51		0
wo	6-7			02:21		386	02:57		474	2:41		399	03:21		455	2:34		386	03:06		376	2:23		384
wo	6-7			08:55		30	09:03		30	8:49	-75		09:41		20	9:23	40		09:55		30	9:13		2
wo	6-7			14:40		393	15:14		478	14:58		405	15:36		461	14:53		393	15:25		383	14:47		390
wo	6-7			21:24		26	21:30		23	21:14	-78		22:07		17	21:52	36		22:24		26	21:40		1
do	7-7			03:09		385	03:47		470	3:31		394	04:10		450	3:22		385	03:54		375	3:19		384
do	7-7			09:37		40	09:49		40	9:37	-65		10:25		30	10:05	50		10:37		40	9:59		12
do	7-7			15:25		394	15:59		477	15:43		401	16:22		457	15:38		394	16:10		384	15:38		391
do	7-7			22:06		37	22:13		37	21:59	-62		22:49		33	22:34	47		23:06		37	22:21		14
vr	8-7			03:53		380	04:31		459	4:15		384	04:54		440	4:06		380	04:38		370	4:08		378
vr	8-7			10:15		50	10:28		50	10:19	-45		11:03		50	10:43	60		11:15		50	10:35		32
vr	8-7			16:06		392	16:39		471	16:23		395	17:02		451	16:19		392	16:51		382	16:19		386
vr	8-7			22:43		52	22:50		54	22:37	-43		23:25		52	23:11	62		23:43		52	22:40		32
za	9-7			04:34		373	05:08		448	4:52		373	05:32		429	4:47		373	05:19		363	4:46		368
za	9-7			10:50		70	11:03		70	10:54	-25		11:35		70	11:18	80		11:50		70	10:42		42
za	9-7			16:43		387	17:13		467	16:57		390	17:37		446	16:56		387	17:28		377	16:42		380
za	9-7			23:18		67	23:24		66	23:11	-32		23:57		63							22:51		44

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	10-7			05:11		366	05:42		442	5:26		368	06:07		424		23:46	70		0:18	60	5:09		361
zo	10-7				11:23	80		11:36	80		11:28	-15		12:06	80	5:24		366	05:56		356		11:01	52
zo	10-7			17:14		384	17:47		466	17:31		390	18:12		446		11:51	91		12:23	81	16:58		381
zo	10-7				23:53	75										17:27		384	17:59		374		23:21	46
ma	11-7			05:46		362		0:00	70		23:46	-35		00:30	60		0:21	80		00:53	70	5:30		361
ma	11-7				11:57	80	06:18		441	6:02		368	06:45		424	5:59		362	06:31		352		11:37	52
ma	11-7			17:41		382		12:12	86		12:06	-13		12:40	82		12:25	97		12:57	87	17:31		384
ma	11-7						18:27		465	18:11		389	18:52		445	17:54		382	18:26		372			
di	12-7	2:52	EK		00:30	70		00:38	70		0:28	-35		01:08	60		0:58	80		01:30	70		0:02	42
di	12-7			06:25		358	07:02		441	6:46		368	07:31		424	6:38		358	07:10		348	6:09		362
di	12-7				12:38	91		12:55	91		12:52	-10		13:22	85		13:06	101		13:38	91		12:24	57
di	12-7			18:23		376	19:15		459	18:59		383	19:42		439	18:36		376	19:08		366	18:21		379
wo	13-7				01:16	80		01:25	80		1:18	-25		01:55	70		1:44	90		02:16	80		0:53	42
wo	13-7			07:20		354	07:53		437	7:37		364	08:25		420	7:33		354	08:05		344	7:10		358
wo	13-7				13:30	96		13:46	101		13:46	-1		14:14	94		13:58	106		14:30	96		13:23	66
wo	13-7			19:30		365	20:11		447	19:55		372	20:43		428	19:43		365	20:15		355	19:31		365
do	14-7				02:14	80		02:21	90		2:15	-15		02:52	80		2:42	90		03:14	80		1:58	62
do	14-7			08:28		352	08:52		433	8:36		360	09:25		416	8:41		352	09:13		342	8:32		353
do	14-7				14:36	101		14:50	111		14:47	10		15:18	105		15:04	111		15:36	101		14:36	77
do	14-7			20:47		357	21:14		435	20:58		362	21:46		418	21:00		357	21:32		347	20:58		355
vr	15-7				03:19	90		03:27	100		3:18	-5		03:59	90		3:47	100		04:19	90		3:17	62
vr	15-7			09:32		356	09:55		433	9:39		361	10:26		417	9:45		356	10:17		346	9:43		356
vr	15-7				15:48	101		16:02	114		15:51	12		16:32	107		16:16	111		16:48	101		15:55	78
vr	15-7			21:53		356	22:19		430	22:03		358	22:49		414	22:06		356	22:38		346	22:09		354
za	16-7				04:24	90		04:34	100		4:22	-5		05:07	90		4:52	100		05:24	90		4:30	62
za	16-7			10:30		366	10:57		441	10:41		370	11:25		426	10:43		366	11:15		356	10:42		365
za	16-7				16:57	95		17:11	104		16:52	3		17:42	98		17:25	105		17:57	95		17:03	71
za	16-7			22:50		361	23:20		435	23:04		362	23:48		418	23:03		361	23:35		351	23:05		359
zo	17-7				05:24	80		05:35	90		5:20	-15		06:09	80		5:52	90		06:24	80		5:27	62
zo	17-7			11:23		381	11:53		458	11:37		386	12:19		442	11:36		381	12:08		371	11:32		379
zo	17-7				17:56	86		18:10	89		5:48	-12		18:41	83		18:24	96		18:56	86		17:58	61
zo	17-7			23:41		370																		
ma	18-7				06:17	80	0:15		448	23:59		373	00:41		429	23:54		370	0:26		360	23:51		368
ma	18-7			12:10		396		06:28	70		18:13	-25		07:02	70		6:45	90		07:17	80		6:14	52
ma	18-7				18:48	76	12:43		478	12:27		405	13:09		461	12:23		396	12:55		386	12:16		394
ma	18-7					379		19:01	73		18:37	-27		19:33	68		19:16	86		19:48	76		18:46	49

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
di	19-7			00:28		379	01:04		461	0:48		386	01:31		442	0:41		379	01:13		369	0:32		378
di	19-7				07:04	70		07:16	60		7:00	-35		07:51	60		7:32	80		08:04	70		6:54	42
di	19-7			12:55		407	13:29		494	13:13		420	13:57		476	13:08		407	13:40		397	12:56		409
di	19-7				19:35	66		19:47	59		19:24	-39		20:21	56		20:03	76		20:35	66		19:31	39
wo	20-7	0:57	VM	01:12		385	01:51		471	1:35		394	02:19		450	1:25		385	01:57		375	1:12		387
wo	20-7				07:48	60		08:02	50		7:46	-45		08:36	50		8:16	70		08:48	60		7:33	32
wo	20-7			13:36		413	14:13		502	13:57		426	14:42		482	13:49		413	14:21		403	13:36		417
wo	20-7				20:20	57		20:31	50		20:08	-47		21:06	48		20:48	67		21:20	57		20:17	30
do	21-7			01:54		386	02:36		472	2:20		394	03:05		450	2:07		386	02:39		376	1:56		388
do	21-7				08:32	50		08:45	50		8:29	-55		09:20	40		9:00	60		09:32	50		8:15	32
do	21-7			14:15		414	14:55		502	14:39		424	15:24		480	14:28		414	15:00		404	14:19		418
do	21-7				21:04	51		21:13	45		20:51	-52		21:49	43		21:32	61		22:04	51		21:09	26
vr	22-7			02:37		382	03:20		466	3:04		387	03:49		443	2:50		382	03:22		372	2:45		383
vr	22-7				09:13	50		09:26	50		9:11	-55		10:01	40		9:41	60		10:13	50		9:01	32
vr	22-7			14:56		411	15:34		498	15:18		419	16:02		475	15:09		411	15:41		401	15:04		413
vr	22-7				21:45	47		21:53	43		21:30	-55		22:29	40		22:13	57		22:45	47		21:59	23
za	23-7			03:22		376	03:59		457	3:43		379	04:29		435	3:35		376	04:07		366	3:34		374
za	23-7				09:52	50		10:04	50		9:48	-55		10:40	40		10:20	60		10:52	50		9:44	32
za	23-7			15:38		409	16:10		496	15:54		417	16:37		473	15:51		409	16:23		399	15:48		407
za	23-7				22:23	44		22:31	40		22:07	-58		23:08	37		22:51	54		23:23	44		22:37	22
zo	24-7			04:06		371	04:36		451	4:20		375	05:08		431	4:19		371	04:51		361	4:20		366
zo	24-7				10:31	40		10:42	40		10:26	-55		11:17	40		10:59	50		11:31	40		10:12	22
zo	24-7			16:21		409	16:48		498	16:32		420	17:16		476	16:34		409	17:06		399	16:29		404
zo	24-7				23:01	41		23:09	37		22:45	-60		23:45	35								22:43	19
ma	25-7			04:50		367	05:14		450	4:58		375	05:49		431		23:29	50		0:01	40	5:01		363
ma	25-7				11:10	40		11:19	40		11:05	-55		11:53	40	5:03		367	05:35		357	10:46		22
ma	25-7			17:05		408	17:29		501	17:13		423	17:59		479		11:38	53		12:10	43	17:08		405
ma	25-7				23:40	39		23:48	37		23:27	-65			30	17:18		408	17:50		398	23:18		14
di	26-7			05:33		363	05:57		449	5:41		-65		00:22	30		0:08	40		00:40	30	5:41		361
di	26-7				11:51	40		12:00	40		11:50	374	06:34		430	5:46		363	06:18		353	11:31		22
di	26-7			17:49		404	18:15		497	17:59		-55		12:32	40		12:19	52		12:51	42	17:53		405
di	26-7												18:47		475	18:02		404	18:34		394			
wo	27-7	1:00	LK		00:23	40		00:31	40		0:14	-65		01:03	30		0:51	50		01:23	40		0:07	12
wo	27-7			06:17		358	06:45		443	6:29		368	07:25		424	6:30		358	07:02		348	6:26		359
wo	27-7				12:37	47		12:46	53		12:40	-48		13:17	47		13:05	57		13:37	47	12:28		26
wo	27-7			18:34		395	19:08		483	18:52		406	19:41		462	18:47		395	19:19		385	18:44		398

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
do	28-7				01:11	50		01:21	50		1:09	-45		01:52	50		1:39	60		02:11	50		1:06	12
do	28-7			07:03		350	07:43		431	7:27		358	08:23		414	7:16		350	07:48		340	7:17		354
do	28-7				13:29	59		13:41	69		13:41	-34		14:11	61		13:57	69		14:29	59		13:33	34
do	28-7			19:25		381	20:12		463	19:56		388	20:44		444	19:38		381	20:10		371	19:40		386
vr	29-7				02:10	60		02:23	70		2:17	-35		02:53	60		2:38	70		03:10	60		2:09	22
vr	29-7			07:59		343	08:54		421	8:38		350	09:28		406	8:12		343	08:44		333	8:13		347
vr	29-7				14:36	72		14:50	84		14:54	-19		15:21	76		15:04	82		15:36	72		14:39	42
vr	29-7			20:25		368	21:27		448	21:11		373	21:54		429	20:38		368	21:10		358	20:40		372
za	30-7				03:30	70		03:37	70		3:32	-25		04:09	70		3:58	80		04:30	70		3:13	32
za	30-7			09:10		341	10:09		422	9:53		349	10:39		405	9:23		341	09:55		331	9:15		343
za	30-7				16:05	73		16:10	83		16:09	-20		16:42	75		16:33	83		17:05	73		15:46	43
za	30-7			21:38		360	22:42		445	22:26		369	23:11		425	21:51		360	22:23		350	21:44		362
zo	31-7				04:48	60		04:51	70		4:44	-35		05:24	60		5:16	70		05:48	60		4:18	32
zo	31-7			10:35		348	11:19		434	11:03		360	11:49		416	10:48		348	11:20		338	10:25		346
zo	31-7				17:24	62		17:26	67		17:19	-36		17:58	59		17:52	72		18:24	62		16:53	38
zo	31-7			23:13		362	23:52		454	23:36		338				23:26		362	23:58		352	22:59		361

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	1-8				06:00	50		06:00	50		5:51	377	00:25		433		6:28	60		07:00	50		5:23	32
ma	1-8			11:56		365	12:22		453	12:06		-45		06:35	50	12:09		365	12:41		355	11:45		359
ma	1-8				18:39	46		18:36	47		18:23	379	12:52		435		19:07	56		19:39	46		18:01	27
ma	1-8													19:12	39									
di	2-8			00:29		374	00:57		466	0:41		391	01:27		447	0:42		374	01:14		364	0:22		371
di	2-8				07:06	40		07:05	40		6:52	-65		07:43	30		7:34	50		08:06	40		6:32	22
di	2-8			12:54		383	13:20		472	13:04		398	13:46		454	13:07		383	13:39		373	12:56		378
di	2-8	22:45 NM			19:40	35		19:39	33		19:21	-72		20:16	23		20:08	45		20:40	35		19:34	18
wo	3-8			01:23		386	01:54		476	1:38		401	02:20		457	1:36		386	02:08		376	1:24		383
wo	3-8				07:58	40		08:03	30		7:47	-75		08:40	20		8:26	50		08:58	40		8:06	12
wo	3-8			13:43		396	14:13		483	13:57		409	14:36		465	13:56		396	14:28		386	13:49		393
wo	3-8				20:29	34		20:33	30		20:13	-72		21:08	23		20:57	44		21:29	34		20:41	15
do	4-8			02:10		390	02:46		477	2:30		402	03:08		458	2:23		390	02:55		380	2:15		390
do	4-8				08:43	40		08:52	40		8:37	-65		09:28	30		9:11	50		09:43	40		9:00	12
do	4-8			14:26		401	15:00		486	14:44		410	15:22		466	14:39		401	15:11		391	14:37		400
do	4-8				21:11	43		21:18	41		20:59	-59		21:53	36		21:39	53		22:11	43		21:26	22
vr	5-8			02:51		389	03:31		470	3:15		395	03:53		451	3:04		389	03:36		379	3:02		390
vr	5-8				09:21	50		09:34	50		9:20	-45		10:09	50		9:49	60		10:21	50		9:43	22
vr	5-8			15:05		400	15:41		481	15:25		404	16:03		460	15:18		400	15:50		390	15:20		398
vr	5-8				21:46	56		21:56	57		21:38	-42		22:31	53		22:14	66		22:46	56		22:01	36
za	6-8			03:29		384	04:08		460	3:52		385	04:31		441	3:42		384	04:14		374	3:43		383
za	6-8				09:54	60		10:09	70		9:55	-35		10:43	60		10:22	70		10:54	60		10:13	42
za	6-8			15:41		397	16:14		475	15:58		398	16:38		454	15:54		397	16:26		387	15:54		391
za	6-8				22:19	67		22:29	68		22:10	-30		23:03	65		22:47	77		23:19	67		22:11	49
zo	7-8			04:03		379	04:38		454	4:22		379	05:03		435	4:16		379	04:48		369	4:15		376
zo	7-8				10:25	70		10:39	70		10:24	-25		11:12	70		10:53	80		11:25	70		10:14	52
zo	7-8			16:12		394	16:43		473	16:27		396	17:09		452	16:25		394	16:57		384	16:11		387
zo	7-8				22:49	73		22:58	72		22:39	-29		23:32	66		23:17	83		23:49	73		22:23	51
ma	8-8			04:36		377	05:07		454	4:51		379	05:34		435	4:49		377	05:21		367	4:32		373
ma	8-8				10:56	70		11:09	70		10:54	-25		11:40	70		11:24	80		11:56	70		10:34	52
ma	8-8			16:39		392	17:14		475	16:58		397	17:40		453	16:52		392	17:24		382	16:25		389
ma	8-8				23:20	76		23:29	71		23:11	-35											22:50	46
di	9-8			05:06		374	05:41		456	5:25		381		0:01	60		23:48	80		0:20	70	4:51		375
di	9-8				11:28	80		11:41	80		11:29	-22	06:09		437	5:19		374	05:51		364		11:06	42
di	9-8			17:04		389	17:50		473	17:34		396		12:11	73		11:56	92		12:28	82	16:54		392
di	9-8				23:51	80							18:15		452	17:17		389	17:49		379		23:25	44



				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
wo	10-8			05:34		370		0:02	70		23:48	-35		00:33	60		0:19	90		00:51	80	5:23		374
wo	10-8				12:02	80	06:19		454	6:03		378	06:49		434	5:47		370	06:19		360		11:46	42
wo	10-8			17:38		381		12:17	87		12:09	-17		12:47	78		12:30	98		13:02	88	17:37		386
wo	10-8	20:21	EK				18:31		463	18:15		387	18:57		443	17:51		381	18:23		371			
do	11-8				00:27	80		00:39	80		0:31	-25		01:10	70		0:55	90		01:27	80		0:08	52
do	11-8			06:13		362	07:03		445	6:47		370	07:36		426	6:26		362	06:58		352	6:09		366
do	11-8				12:44	98		12:58	102		12:54	-3		13:28	92		13:12	108		13:44	98		12:34	67
do	11-8			18:30		368	19:18		447	19:02		372	19:47		428	18:43		368	19:15		358	18:31		369
vr	12-8				01:11	100		01:23	100		1:19	-5		01:54	90		1:39	110		02:11	100		0:58	72
vr	12-8			07:12		354	07:53		434	7:37		362	08:30		418	7:25		354	07:57		344	7:19		353
vr	12-8				13:35	112		13:47	124		13:47	18		14:18	113		14:03	122		14:35	112		13:34	91
vr	12-8			19:38		356	20:13		431	19:57		360	20:46		416	19:51		356	20:23		346	19:52		352
za	13-8				02:07	110		02:18	130		2:16	25		02:49	120		2:35	120		03:07	110		2:04	92
za	13-8			08:27		354	08:52		429	8:36		361	09:31		417	8:40		354	09:12		344	8:48		351
za	13-8				14:38	123		14:52	141		14:48	36		15:23	131		15:06	133		15:38	123		14:56	108
za	13-8			20:52		353	21:16		424	21:00		357	21:50		413	21:05		353	21:37		343	21:13		349
zo	14-8				03:11	120		03:29	140		3:21	35		04:00	130		3:39	130		04:11	120		3:28	102
zo	14-8			09:38		365	09:59		437	9:43		371	10:35		427	9:51		365	10:23		355	9:54		363
zo	14-8				15:52	123		16:14	140		15:56	36		16:45	131		16:20	133		16:52	123		16:16	104
zo	14-8			22:00		361	22:26		431	22:10		364	22:56		420	22:13		361	22:45		351	22:17		358
ma	15-8				04:22	110		04:46	120		4:31	25		05:20	120		4:50	120		05:22	110		4:40	92
ma	15-8			10:40		384	11:09		458	10:53		391	11:40		447	10:53		384	11:25		374	10:52		383
ma	15-8				17:09	110		17:31	119		17:06	16		18:02	111		17:37	120		18:09	110		17:22	86
ma	15-8			23:02		373	23:36		447	23:20		338			433	23:15		373	23:47		363	23:13		373
di	16-8				05:32	100		05:53	100		5:38	377	0:03		433		6:00	110		06:32	100		5:38	72
di	16-8			11:38		402	12:12		483	11:56		-5		06:26	90	11:51		402	12:23		392	11:43		404
di	16-8				18:15	90		18:32	91		18:08	412	12:40		468		18:43	100		19:15	90		18:19	64
di	16-8			23:58		384																		
wo	17-8				06:34	80	00:37		465	0:21		391	01:05		447	0:11		384	00:43		374	0:03		386
wo	17-8			12:30		414		06:50	70		6:35	-25		07:23	70		7:02	90		07:34	80		6:29	52
wo	17-8				19:11	71	13:05		500	12:49		426	13:33		482	12:43		414	13:15		404	12:30		418
wo	17-8					388		19:24	68		19:01	-30		19:57	65		19:39	81		20:11	71		19:14	47
do	18-8			00:50		388	01:30		474	1:14		397	01:58		453	1:03		388	01:35		378	0:50		392
do	18-8	11:27	VM		07:27	60		07:39	60		7:25	-35		08:13	60		7:55	70		08:27	60		7:17	42
do	18-8			13:16		417	13:52		507	13:36		429	14:20		485	13:29		417	14:01		407	13:15		422
do	18-8				20:01	57		20:11	54		19:48	-44		20:45	51		20:29	67		21:01	57		20:12	35

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	19-8			01:36		386	02:17		472	2:01		394	02:45		450	1:49		386	02:21		376	1:36		389
vr	19-8				08:14	50		08:25	50		8:10	-45		09:00	50		8:42	60		09:14	50		8:17	32
vr	19-8			13:56		415	14:35		505	14:19		425	15:02		481	14:09		415	14:41		405	13:58		418
vr	19-8				20:47	48		20:54	46		20:32	-52		21:29	43		21:15	58		21:47	48		21:07	27
za	20-8			02:17		381	03:01		466	2:45		387	03:29		443	2:30		381	03:02		371	2:23		381
za	20-8				08:58	50		09:07	50		8:51	-55		09:43	40		9:26	60		09:58	50		9:20	32
za	20-8			14:35		413	15:14		503	14:58		422	15:40		478	14:48		413	15:20		403	14:42		412
za	20-8				21:29	42		21:34	39		21:11	-60		22:11	35		21:57	52		22:29	42		21:55	22
zo	21-8			02:59		377	03:40		460	3:24		382	04:09		438	3:12		377	03:44		367	3:10		374
zo	21-8				09:38	40		09:46	40		9:29	-65		10:23	30		10:06	50		10:38	40		10:05	22
zo	21-8			15:17		415	15:51		505	15:35		425	16:18		481	15:30		415	16:02		405	15:26		410
zo	21-8				22:08	38		22:13	33		21:48	-67		22:51	28		22:36	48		23:08	38		22:35	19
ma	22-8			03:43		376	04:18		460	4:02		384	04:48		440	3:56		376	04:28		366	3:56		371
ma	22-8				10:17	30		10:25	30		10:08	-65		11:02	30		10:45	40		11:17	30		9:49	22
ma	22-8			16:01		417	16:31		510	16:15		431	16:59		487	16:14		417	16:46		407	9:54		24
ma	22-8				22:46	36		22:52	29		22:28	-70		23:29	25		23:14	46		23:46	36		10:40	23
di	23-8			04:28		376	04:57		462	4:41		387	05:30		443	4:41		376	05:13		366	4:39		371
di	23-8				10:55	30		11:04	30		10:49	-75		11:40	20		11:23	40		11:55	30		10:29	12
di	23-8			16:46		416	17:13		510	16:57		433	17:43		489	16:59		416	17:31		406	16:53		414
di	23-8				23:23	39		23:31	32		23:10	-95											23:04	15
wo	24-8			05:12		372	05:39		461	5:23		-65		00:07	30		23:51	40		0:23	30		5:21	371
wo	24-8				11:35	30		11:45	30		11:33	386	06:15		442	5:25		372	05:57		362		11:16	12
wo	24-8			17:30		407	18:00		500	17:44		-62		12:19	33		12:03	47		12:35	37		17:37	409
wo	24-8												18:31		479	17:43		407	18:15		397		23:50	21
do	25-8	5:41	LK		00:02	40		00:12	40		23:57	-55		00:46	40		0:30	50		01:02	40		6:03	366
do	25-8			05:55		364	06:26		451	6:10		377	07:04		433	6:08		364	06:40		354		12:10	22
do	25-8				12:17	48		12:29	53		12:23	-48		13:00	47		12:45	58		13:17	48		18:24	396
do	25-8			18:15		390	18:52		478	18:36		403	19:25		459	18:28		390	19:00		380			
vr	26-8				00:45	60		00:59	60		0:51	-35		01:30	60		1:13	70		01:45	60		0:44	32
vr	26-8			06:39		352	07:22		436	7:06		363	08:01		419	6:52		352	07:24		342		6:51	356
vr	26-8				13:06	65		13:20	76		13:23	-27		13:50	68		13:34	75		14:06	65		13:10	40
vr	26-8			19:06		369	19:57		452	19:41		379	20:29		435	19:19		369	19:51		359		19:18	376
za	27-8				01:40	80		01:57	90		1:59	-15		02:28	80		2:08	90		02:40	80		1:45	42
za	27-8			07:37		341	08:33		422	8:17		352	09:08		408	7:50		341	08:22		331		7:48	345
za	27-8				14:15	82		14:29	96		14:37	-7		14:59	88		14:43	92		15:15	82		14:18	54
za	27-8			20:14		353	21:13		436	20:57		364	21:43		420	20:27		353	20:59		343		20:20	357

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
zo	28-8				03:09	90		03:15	100		3:15	-5		03:47	90		3:37	100		04:09	90		2:52	62
zo	28-8			09:04		340	09:50		423	9:34		353	10:22		409	9:17		340	09:49		330	8:58		340
zo	28-8				15:54	82		15:54	99		15:54	-6		16:26	89		16:22	92		16:54	82		15:30	60
zo	28-8			21:47		349	22:30		438	22:14		365	23:02		421	22:00		349	22:32		339	21:37		348
ma	29-8				04:34	80		04:35	90		4:30	-15		05:08	80		5:02	90		05:34	80		4:04	62
ma	29-8			10:38		354	11:03		441	10:47		370	11:35		426	10:51		354	11:23		344	10:34		350
ma	29-8				17:16	67		17:14	81		17:06	-24		17:46	71		17:44	77		18:16	67		16:46	53
ma	29-8			23:20		363	23:42		454	23:26		-95										23:20		358
di	30-8				05:50	60		05:49	70		5:40	381	00:16		437	23:33		363	0:05		353		5:20	52
di	30-8			11:50		379	12:10		468	11:54		-35		06:23	60		6:18	70		06:50	60	11:59		375
di	30-8				18:30	49		18:27	57		18:12	395	12:39		451	12:03		379	12:35		369		18:11	40
di	30-8													19:01	48		18:58	59		19:30	49			
wo	31-8			00:21		383	00:47		474	0:31		400	01:16		456	0:34		383	01:06		373	0:28		380
wo	31-8				06:53	40		06:55	50		6:42	-55		07:29	40		7:21	50		07:53	40		7:02	32
wo	31-8			12:43		401	13:09		490	12:53		415	13:34		471	12:56		401	13:28		391	12:54		399
wo	31-8				19:26	39		19:28	42		19:10	-62		20:02	33		19:54	49		20:26	39		19:45	28

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
do	1-9			01:11		396	01:43		485	1:27		410	02:08		466	1:24		396	01:56		386	1:17		396
do	1-9	11:03	NM		07:43	40		07:50	40		7:35	-65		08:24	30		8:11	50		08:43	40		8:02	22
do	1-9			13:29		412	14:00		498	13:44		422	14:22		478	13:42		412	14:14		402	13:39		412
do	1-9				20:12	44		20:18	43		19:59	-59		20:51	36		20:40	54		21:12	44		20:32	28
vr	2-9			01:52		398	02:31		482	2:15		406	02:52		462	2:05		398	02:37		388	2:00		401
vr	2-9				08:25	50		08:36	50		8:21	-55		09:10	40		8:53	60		09:25	50		8:46	32
vr	2-9			14:07		411	14:43		494	14:27		417	15:03		473	14:20		411	14:52		401	14:19		412
vr	2-9				20:50	58		21:00	57		20:40	-43		21:32	52		21:18	68		21:50	58		21:08	38
za	3-9			02:27		393	03:09		471	2:53		396	03:30		452	2:40		393	03:12		383	2:37		397
za	3-9				08:59	60		09:13	70		8:57	-35		09:47	60		9:27	70		09:59	60		9:21	42
za	3-9			14:40		406	15:17		484	15:01		409	15:39		465	14:53		406	15:25		396	14:54		405
za	3-9				21:21	70		21:33	72		21:11	-28		22:06	67		21:49	80		22:21	70		21:30	49
zo	4-9			02:57		390	03:38		463	3:22		389	04:01		445	3:10		390	03:42		380	3:11		391
zo	4-9				09:28	70		09:43	80		9:25	-25		10:17	70		9:56	80		10:28	70		9:38	52
zo	4-9			15:09		403	15:44		479	15:28		404	16:09		460	15:22		403	15:54		393	15:21		398
zo	4-9				21:49	74		22:01	76		21:37	-26		22:35	69		22:17	84		22:49	74		21:36	53
ma	5-9			03:27		390	04:03		464	3:47		391	04:29		447	3:40		390	04:12		380	3:37		388
ma	5-9				09:56	70		10:10	70		9:50	-25		10:44	70		10:24	80		10:56	70		9:42	52
ma	5-9			15:37		402	16:10		482	15:54		406	16:37		462	15:50		402	16:22		392	15:38		397
ma	5-9				22:17	72		22:28	71		22:05	-33		23:02	62		22:45	82		23:17	72		21:54	49
di	6-9			03:58		392	04:32		472	4:16		397	05:00		453	4:11		392	04:43		382	3:57		389
di	6-9				10:27	70		10:39	70		10:20	-35		11:12	60		10:55	80		11:27	70		10:07	42
di	6-9			16:05		402	16:41		485	16:25		408	17:09		464	16:18		402	16:50		392	15:57		400
di	6-9				22:46	74		22:56	69		22:37	-35		23:31	60		23:14	84		23:46	74		22:21	44
wo	7-9			04:28		390	05:05		475	4:49		398	05:35		454	4:41		390	05:13		380	4:19		391
wo	7-9				10:59	70		11:11	70		10:54	-35		11:43	60		11:27	80		11:59	70		10:38	42
wo	7-9			16:33		397	17:16		480	17:00		404	17:43		460	16:46		397	17:18		387	16:26		400
wo	7-9				23:16	83		23:27	78		23:12	-35											22:54	49
do	8-9			04:55		384	05:40		469	5:24		392		0:00	60		23:44	90		0:16	80	4:47		387
do	8-9				11:31	90		11:42	90		11:30	-15	06:12		448	5:08		384	05:40		374		11:13	52
do	8-9			17:05		387	17:52		468	17:36		392		12:15	80		11:59	100		12:31	90	17:01		391
do	8-9				23:47	99		23:58	98		23:48	-15	18:19		448	17:18		387	17:50		377		23:29	65
vr	9-9			05:24		376	06:16		458	6:00		381		00:30	80		0:15	100		00:47	90	5:20		378
vr	9-9				12:06	100		12:16	110		12:07	4	06:49		437	5:37		376	06:09		366		11:51	72
vr	9-9	13:49	EK	17:45		374	18:30		451	18:14		378		12:49	99		12:34	117		13:06	107	17:40		376
vr	9-9												18:59		434	17:58		374	18:30		364			

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
za	10-9				00:23	110		00:33	120		0:27	15		01:06	110		0:51	120		01:23	110		0:09	82
za	10-9			06:11		369	06:56		447	6:40		372	07:31		428	6:24		369	06:56		359	6:03		367
za	10-9				12:50	124		12:57	132		12:51	24		13:30	119		13:18	134		13:50	124		12:36	104
za	10-9			18:45		363	19:18		436	19:02		366	19:50		422	18:58		363	19:30		353	18:36		359
zo	11-9				01:13	130		01:18	140		1:17	35		01:51	130		1:41	140		02:13	130		1:01	112
zo	11-9			07:21		365	07:49		441	7:33		371	08:28		427	7:34		365	08:06		355	7:34		358
zo	11-9				13:48	136		13:51	152		13:48	43		14:24	138		14:16	146		14:48	136		13:46	128
zo	11-9			19:58		359	20:19		428	20:03		362	20:55		418	20:11		359	20:43		349	20:19		351
ma	12-9				02:15	130		02:21	150		2:22	45		02:53	140		2:43	140		03:15	130		2:19	132
ma	12-9			08:37		373	08:57		445	8:41		379	09:39		435	8:50		373	09:22		363	9:03		370
ma	12-9				14:58	136		15:06	159		14:58	51		15:38	146		15:26	146		15:58	136		15:26	128
ma	12-9			21:11		366	21:32		432	21:16		369	22:07		425	21:24		366	21:56		356	21:32		362
di	13-9				03:26	130		03:45	150		3:38	35		04:14	130		3:54	140		04:26	130		3:49	122
di	13-9			09:50		391	10:17		461	10:01		397	10:54		453	10:03		391	10:35		381	10:07		392
di	13-9				16:17	120		16:42	139		16:19	33		17:11	128		16:45	130		17:17	120		16:41	102
di	13-9			22:21		379	22:53		448	22:37		382	23:22		438	22:34		379	23:06		369	22:34		379
wo	14-9				04:42	110		05:10	120		4:57	15		05:41	110		5:10	120		05:42	110		4:57	92
wo	14-9			10:58		409	11:33		485	11:17		417	12:03		473	11:11		409	11:43		399	11:05		413
wo	14-9				17:35	94		17:56	103		5:33	-1		18:26	94		18:03	104		18:35	94		17:44	71
wo	14-9			23:26		390																23:31		393
do	15-9				05:58	80	0:05		466	23:49		395	00:34		451	23:39		390	0:11		380		5:55	62
do	15-9			11:58		419	06:16		90		18:03	-15		06:48	80		6:26	90		06:58	80	11:58		425
do	15-9				18:40	70	12:33		503	12:17		430	13:02		486	12:11		419	12:43		409		18:46	49
do	15-9						18:53		74		18:32	-28		19:26	67		19:08	80		19:40	70			
vr	16-9			00:24		394	01:03		476	0:47		401	01:32		457	0:37		394	01:09		384	0:23		398
vr	16-9				06:59	60	07:11		70		6:57	-35		07:44	60		7:27	70		07:59	60		6:49	52
vr	16-9			12:48		421	13:24		509	13:08		431	13:52		487	13:01		421	13:33		411	12:46		425
vr	16-9	21:05 VM			19:35	55	19:43		57		19:22	-44		20:17	51		20:03	65		20:35	55		19:54	36
za	17-9			01:12		390	01:52		474	1:36		397	02:19		453	1:25		390	01:57		380	1:09		393
za	17-9				07:50	50	07:59		60		7:44	-45		08:34	50		8:18	60		08:50	50		8:11	42
za	17-9			13:31		418	14:08		508	13:52		428	14:34		484	13:44		418	14:16		408	13:29		420
za	17-9				20:23	46	20:28		49		20:05	-53		21:04	42		20:51	56		21:23	46		20:50	30
zo	18-9			01:52		385	02:35		468	2:19		391	03:02		447	2:05		385	02:37		375	1:53		385
zo	18-9				08:36	40	08:41		50		8:25	-55		09:19	40		9:04	50		09:36	40		7:53	32
zo	18-9			14:10		417	14:48		507	14:32		427	15:15		483	14:23		417	14:55		407	8:03		41
zo	18-9				21:06	42	21:09		41		20:45	-60		21:47	35		21:34	52		22:06	42		9:06	37

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	19-9			02:33		384	03:15		466	2:59		390	03:42		446	2:46		384	03:18		374	2:38		380
ma	19-9				09:19	40		09:23	40		9:05	-65		10:01	30		9:47	50		10:19	40		8:28	32
ma	19-9			14:52		420	15:28		511	15:12		432	15:56		488	15:05		420	15:37		410	8:50		34
ma	19-9				21:47	39		21:49	34		21:25	-68		22:28	27		22:15	49		22:47	39		9:51	31
di	20-9			03:17		386	03:54		470	3:38		395	04:24		451	3:30		386	04:02		376	3:25		381
di	20-9				09:59	30		10:03	30		9:46	-75		10:42	20		10:27	40		10:59	30		9:12	22
di	20-9			15:38		423	16:10		514	15:54		437	16:39		493	15:51		423	16:23		413	9:38		25
di	20-9				22:25	39		22:29	30		22:06	-70		23:08	25		22:53	49		23:25	39		10:28	23
wo	21-9			04:04		388	04:35		474	4:19		400	05:07		456	4:17		388	04:49		378	4:12		384
wo	21-9				10:38	30		10:45	30		10:29	-75		11:23	20		11:06	40		11:38	30		10:03	12
wo	21-9			16:26		418	16:55		509	16:39		434	17:25		490	16:39		418	17:11		408	16:32		417
wo	21-9				23:02	44		23:09	37		22:50	-62		23:47	33								22:40	22
do	22-9			04:51		385	05:18		472	5:02		398	05:52		454		23:30	50		0:02	40	4:56		383
do	22-9				11:17	40		11:26	30		11:14	-65		12:02	30	5:04		385	05:36		375		10:57	12
do	22-9			17:14		404	17:43		492	17:27		418	18:14		474		11:45	50		12:17	40	17:17		406
do	22-9				23:39	57		23:50	56		23:38	-95				17:27		404	17:59		394		23:27	31
vr	23-9			05:36		374	06:05		461	5:49		-45		00:25	50		0:07	60		00:39	50	5:39		375
vr	23-9	11:56	LK		11:58	50		12:10	50		12:04	388	06:40		444	5:49		374	06:21		364		11:49	22
vr	23-9			18:01		382	18:36		466	18:20		-43		12:43	52		12:26	64		12:58	54	18:04		386
vr	23-9												19:08		450	18:14		382	18:46		372			
za	24-9				00:18	70		00:35	80		0:31	-25		01:06	70		0:46	80		01:18	70		0:17	42
za	24-9			06:21		360	06:59		443	6:43		372	07:35		428	6:34		360	07:06		350	6:25		363
za	24-9				12:46	74		13:01	85		13:03	-18		13:31	77		13:14	84		13:46	74		12:47	50
za	24-9			18:54		358	19:40		439	19:24		370	20:12		426	19:07		358	19:39		348	18:56		362
zo	25-9				01:08	90		01:30	110		1:38	5		02:00	100		1:36	100		02:08	90		1:17	62
zo	25-9			07:21		348	08:08		428	7:52		360	08:43		416	7:34		348	08:06		338	7:22		350
zo	25-9				14:02	93		14:07	110		14:15	6		14:38	101		14:30	103		15:02	93		13:55	70
zo	25-9			20:11		344	20:55		425	20:39		357	21:26		413	20:24		344	20:56		334	20:01		343
ma	26-9				02:48	100		02:49	120		2:55	15		03:22	110		3:16	110		03:48	100		2:27	82
ma	26-9			08:51		348	09:27		430	9:11		363	10:00		419	9:04		348	09:36		338	8:45		346
ma	26-9				15:40	91		15:35	115		15:33	9		16:07	104		16:08	101		16:40	91		15:14	77
ma	26-9			21:45		348	22:12		433	21:56		364	22:46		420	21:58		348	22:30		338	21:44		342
di	27-9				04:15	90		04:16	110		4:11	5		04:48	100		4:43	100		05:15	90		3:49	82
di	27-9			10:24		367	10:43		451	10:27		384	11:15		440	10:37		367	11:09		357	10:30		363
di	27-9				16:58	74		16:58	96		16:49	-9		17:28	86		17:26	84		17:58	74		16:40	68
di	27-9			23:06		369	23:27		455	23:11		-95				23:19		369	23:51		359	23:13		365

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
wo	28-9				05:29	70		05:31	90		5:24	386	0:00		442		5:57	80		06:29	70		5:21	62
wo	28-9			11:32		395	11:53		480	11:37		-15		06:03	80	11:45		395	12:17		385	11:43		394
wo	28-9				18:09	55		18:09	70		17:57	410	12:22		466		18:37	65		19:09	55		18:30	50
wo	28-9													18:41	61									
do	29-9			00:05		391	00:33		479	0:17		407	01:01		463	0:18		391	00:50		381	0:13		392
do	29-9				06:31	50		06:36	70		6:27	-35		07:09	60		6:59	60		07:31	50		6:53	42
do	29-9			12:25		415	12:53		501	12:37		427	13:18		483	12:38		415	13:10		405	12:37		417
do	29-9				19:04	46		19:08	55		18:54	-49		19:40	46		19:32	56		20:04	46		19:28	37
vr	30-9			00:52		402	01:28		490	1:12		414	01:52		470	1:05		402	01:37		392	0:59		407
vr	30-9				07:21	50		07:30	60		7:19	-45		08:02	50		7:49	60		08:21	50		7:45	42
vr	30-9			13:08		419	13:42		504	13:26		427	14:04		483	13:21		419	13:53		409	13:19		423
vr	30-9				19:48	53		19:55	56		19:40	-45		20:27	50		20:16	63		20:48	53		20:09	38



				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
za	1-10	2:11	NM	01:30		401	02:11		483	1:55		406	02:33		462	1:43		401	02:15		391	1:37		408
za	1-10				08:02	60		08:13	60		8:00	-35		08:45	60		8:30	70		09:02	60		8:25	42
za	1-10			13:43		413	14:21		492	14:05		415	14:42		471	13:56		413	14:28		403	13:54		416
za	1-10				20:24	67		20:34	69		20:15	-31		21:06	64		20:52	77		21:24	67		20:38	48
zo	2-10			01:59		396	02:42		471	2:26		395	03:03		451	2:12		396	02:44		386	2:09		402
zo	2-10				08:34	70		08:47	80		8:29	-25		09:20	70		9:02	80		09:34	70		8:51	52
zo	2-10			14:11		405	14:49		480	14:33		405	15:12		461	14:24		405	14:56		395	14:22		405
zo	2-10				20:52	76		21:04	79		20:40	-22		21:37	73		21:20	86		21:52	76		20:45	54
ma	3-10			02:25		395	03:04		469	2:48		394	03:28		450	2:38		395	03:10		385	2:35		398
ma	3-10				09:00	70		09:15	80		8:52	-25		09:48	70		9:28	80		10:00	70		8:53	52
ma	3-10			14:36		403	15:12		479	14:56		405	15:38		461	14:49		403	15:21		393	14:45		400
ma	3-10				21:17	75		21:30	77		21:04	-26		22:04	69		21:45	85		22:17	75		21:01	52
di	4-10			02:52		401	03:28		478	3:12		404	03:56		460	3:05		401	03:37		391	3:01		400
di	4-10				09:28	70		09:42	70		9:18	-35		10:16	60		9:56	80		10:28	70		9:13	42
di	4-10			15:04		406	15:40		487	15:24		411	16:08		467	15:17		406	15:49		396	15:07		402
di	4-10				21:45	72		21:57	70		21:34	-35		22:32	60		22:13	82		22:45	72		21:26	47
wo	5-10			03:24		406	04:01		489	3:45		414	04:30		470	3:37		406	04:09		396	3:27		404
wo	5-10				10:00	70		10:12	70		9:51	-35		10:46	60		10:28	80		11:00	70		9:42	42
wo	5-10			15:36		406	16:14		490	15:58		413	16:42		469	15:49		406	16:21		396	15:34		405
wo	5-10				22:16	76		22:27	72		22:09	-32		23:02	63		22:44	86		23:16	76		21:55	49
do	6-10			03:58		405	04:36		491	4:20		414	05:06		470	4:11		405	04:43		395	3:55		404
do	6-10				10:33	80		10:44	70		10:27	-25		11:18	70		11:01	90		11:33	80		10:14	52
do	6-10			16:11		399	16:50		482	16:34		406	17:17		462	16:24		399	16:56		389	16:05		400
do	6-10				22:46	92		22:57	89		22:44	-14		23:31	81		23:14	102		23:46	92		22:26	63
vr	7-10			04:30		397	05:11		482	4:55		404	05:41		460	4:43		397	05:15		387	4:23		398
vr	7-10				11:06	90		11:15	90		11:01	-5		11:48	90		11:34	100		12:06	90		10:46	62
vr	7-10			16:44		387	17:24		467	17:08		392	17:51		448	16:57		387	17:29		377	16:36		389
vr	7-10				23:16	113		23:26	113		23:17	8		23:58	103								22:57	85
za	8-10			04:59		388	05:43		469	5:27		393	06:13		449		23:44	120		0:16	110	4:49		389
za	8-10				11:40	110		11:46	120		11:34	15		12:18	110	5:12		388	05:44		378		11:17	92
za	8-10			17:16		374	17:58		450	17:42		379	18:26		435		12:08	129		12:40	119	17:05		376
za	8-10				23:50	131		23:57	134		23:52	25					17:29	374	18:01		364		23:30	108
zo	9-10	6:33	EK	05:31		382	06:18		461	6:02		387		00:29	120		0:18	140		00:50	130	5:19		383
zo	9-10				12:21	130		12:23	130		12:13	28	06:48		443	5:44		382	06:16		372		11:54	112
zo	9-10			18:07		364	18:40		439	18:24		370		12:55	123		12:49	142		13:21	132	17:42		364
zo	9-10												19:11		426	18:20		364	18:52		354			122

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	10-10				00:37	140		00:38	140		0:37	35		01:12	130		1:05	150		01:37	140		0:13	122
ma	10-10			06:38		380	07:06		458	6:50		387	07:38		443	6:51		380	07:23		370	6:08		377
ma	10-10				13:16	138		13:13	147		13:06	36		13:45	131		13:44	148		14:16	138		12:50	128
ma	10-10			19:21		361	19:39		433	19:23		367	20:14		423	19:34		361	20:06		351	19:24		354
di	11-10				01:39	140		01:37	150		1:39	35		02:10	130		2:07	150		02:39	140		1:21	132
di	11-10			07:52		385	08:11		459	7:55		391	08:48		447	8:05		385	08:37		375	8:12		380
di	11-10				14:24	131		14:22	150		14:16	39		14:53	134		14:52	141		15:24	131		14:31	128
di	11-10			20:34		368	20:53		435	20:37		372	21:30		428	20:47		368	21:19		358	20:54		364
wo	12-10				02:49	130		02:55	150		2:55	35		03:25	130		3:17	140		03:49	130		3:01	122
wo	12-10			09:05		397	09:30		468	9:14		403	10:07		459	9:18		397	09:50		387	9:24		398
wo	12-10				15:39	112		15:52	134		15:36	26		16:20	121		16:07	122		16:39	112		15:59	100
wo	12-10			21:47		381	22:15		449	21:59		383	22:47		439	22:00		381	22:32		371	21:59		382
do	13-10				04:04	110		04:25	130		4:16	15		04:53	110		4:32	120		05:04	110		4:18	92
do	13-10			10:16		411	10:50		486	10:34		417	11:22		473	10:29		411	11:01		401	10:26		415
do	13-10				16:57	87		17:14	100		16:55	-5		17:44	90		17:25	97		17:57	87		17:04	68
do	13-10			22:55		392	23:32		467	23:16		357			452	23:08		392	23:40		382	23:00		395
vr	14-10				05:22	80		05:39	100		5:28	396	0:01		452		5:50	90		06:22	80		5:19	62
vr	14-10			11:21		419	11:57		501	11:41		-15		06:09	80	11:34		419	12:06		409	11:23		424
vr	14-10				18:06	64		18:17	71		17:59	427	12:26		483		18:34	74		19:06	64		18:07	46
vr	14-10			23:56		396								18:49	64									
za	15-10				06:29	60	00:33		477	0:17		402	01:02		458	0:09		396	00:41		386	23:55		399
za	15-10			12:17		421		06:38	70		6:26	-35		07:11	60		6:57	70		07:29	60		6:13	52
za	15-10				19:05	51	12:52		507	12:36		429	13:20		485	12:30		421	13:02		411	12:14		424
za	15-10							19:11	55		18:51	-46		19:45	49		19:33	61		20:05	51		19:27	37
zo	16-10	6:23	VM	00:46		394	01:23		477	1:07		401	01:51		457	0:59		394	01:31		384	0:43		395
zo	16-10				07:24	50		07:29	60		7:15	-45		08:05	50		7:52	60		08:24	50		6:50	42
zo	16-10			13:03		419	13:39		507	13:23		428	14:06		484	13:16		419	13:48		409	6:59		50
zo	16-10				19:55	46		19:58	47		19:37	-53		20:35	42		20:23	56		20:55	46		7:51	49
ma	17-10			01:28		391	02:07		474	1:51		398	02:35		454	1:41		391	02:13		381	1:26		390
ma	17-10				08:13	50		08:15	50		7:58	-55		08:53	40		8:41	60		09:13	50		7:20	42
ma	17-10			13:45		418	14:22		508	14:06		428	14:50		484	13:58		418	14:30		408	7:44		46
ma	17-10				20:41	44		20:42	41		20:19	-60		21:21	35		21:09	54		21:41	44		8:47	42
di	18-10			02:09		393	02:48		476	2:32		401	03:17		457	2:22		393	02:54		383	2:09		389
di	18-10				08:57	40		08:58	40		8:41	-65		09:39	30		9:25	50		09:57	40		8:00	32
di	18-10			14:30		420	15:07		510	14:51		432	15:35		488	14:43		420	15:15		410	8:29		38
di	18-10				21:23	42		21:24	34		21:02	-66		22:05	29		21:51	52		22:23	42		9:32	33

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
wo	19-10			02:54		397	03:30		482	3:14		407	04:00		463	3:07		397	03:39		387	2:58		392
wo	19-10				09:40	30		09:42	30		9:25	-75		10:23	20		10:08	40		10:40	30		8:49	22
wo	19-10			15:19		419	15:53		509	15:37		432	16:22		488	15:32		419	16:04		409	9:13		27
wo	19-10				22:03	43		22:06	33		21:47	-67		22:47	28		22:31	53		23:03	43		10:12	24
do	20-10			03:43		400	04:13		486	3:57		411	04:45		467	3:56		400	04:28		390	3:49		395
do	20-10				10:22	30		10:26	20		10:11	-75		11:06	20		10:50	40		11:22	30		9:50	12
do	20-10			16:10		411	16:41		499	16:25		424	17:10		480	16:23		411	16:55		401	9:57		19
do	20-10				22:41	51		22:48	43		22:34	-56		23:27	39		23:09	61		23:41	51		10:43	19
vr	21-10			04:32		396	04:59		482	4:43		408	05:31		464	4:45		396	05:17		386	4:36		393
vr	21-10				11:02	40		11:09	30		10:58	-65		11:47	30		11:30	50		12:02	40		10:48	22
vr	21-10			17:00		394	17:30		478	17:14		406	18:00		462	17:13		394	17:45		384	17:03		394
vr	21-10				23:17	66		23:30	65		23:21	-95										23:05		42
za	22-10			05:18		385	05:45		469	5:29		-35		00:06	60		23:45	70		0:17	60		5:18	383
za	22-10				11:44	60		11:54	60		11:47	397	06:18		453	5:31		385	06:03		375		11:33	32
za	22-10			17:50		372	18:22		452	18:06		-39		12:28	56		12:12	70		12:44	60		17:47	373
za	22-10	21:14	LK		23:55	86							18:53		439	18:03		372	18:35		362		23:51	62
zo	23-10			06:04		371		00:13	90		0:13	-15		00:46	80		0:23	90		00:55	80		6:00	371
zo	23-10				12:33	80	06:37		452	6:21		382	07:11		438	6:17		371	06:49		361		12:24	52
zo	23-10			18:45		352		12:43	90		12:43	-13		13:15	82		13:01	92		13:33	82		18:35	351
zo	23-10						19:21		429	19:05		363	19:53		419	18:58		352	19:30		342			
ma	24-10				00:41	100		01:04	120		1:14	15		01:36	110		1:09	110		01:41	100		0:46	82
ma	24-10			07:01		360	07:40		439	7:24		372	08:15		428	7:14		360	07:46		350	6:53		360
ma	24-10				13:52	99		13:45	114		13:49	10		14:18	105		14:20	109		14:52	99		13:27	78
ma	24-10			19:57		342	20:30		420	20:14		356	21:03		412	20:10		342	20:42		332	19:42		338
di	25-10				02:19	120		02:17	140		2:26	35		02:52	130		2:47	130		03:19	120		1:55	92
di	25-10			08:24		361	08:55		439	8:39		376	09:31		432	8:37		361	09:09		351	8:15		357
di	25-10				15:14	96		15:05	121		15:03	14		15:39	109		15:42	106		16:14	96		14:45	87
di	25-10			21:20		350	21:44		429	21:28		366	22:21		422	21:33		350	22:05		340	21:25		343
wo	26-10				03:44	100		03:43	130		3:42	25		04:16	120		4:12	110		04:44	100		3:20	102
wo	26-10			09:52		377	10:12		456	9:56		393	10:47		449	10:05		377	10:37		367	10:00		373
wo	26-10				16:24	81		16:25	106		16:19	-2		16:56	93		16:52	91		17:24	81		16:13	78
wo	26-10			22:38		371	22:59		451	22:43		387	23:34		443	22:51		371	23:23		361	22:45		369
do	27-10				04:54	80		04:59	110		4:55	-5		05:30	90		5:22	90		05:54	80		4:51	82
do	27-10			11:02		399	11:23		479	11:07		414	11:55		470	11:15		399	11:47		389	11:13		399
do	27-10				17:33	64		17:36	83		5:28	-23		18:06	72		18:01	74		18:33	64		17:35	60
do	27-10			23:37		391																		

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
vr	28-10				05:59	70	0:06		474	23:50		406	00:37		462	23:50		391	0:22		381	23:45		395
vr	28-10			11:56		412		06:05	80		17:59	-25		06:37	70		6:27	80		06:59	70		6:17	62
vr	28-10				18:30	55	12:25		494	12:09		424	12:53		480	12:09		412	12:41		402	12:07		416
vr	28-10					400		18:35	68		18:26	-38		19:06	57		18:58	65		19:30	55		18:45	47
za	29-10			00:24		400	01:00		483	0:44		411	01:28		467	0:37		400	01:09		390	0:32		408
za	29-10				06:52	60		06:59	70		6:51	-35		07:31	60		7:20	70		07:52	60		7:15	52
za	29-10			12:40		410	13:15		491	12:59		417	13:41		473	12:53		410	13:25		400	12:50		415
za	29-10				19:16	58		19:23	67		19:12	-37		19:54	58		19:44	68		20:16	58		19:28	45
zo	30-10			01:01		398	01:41		477	1:25		402	02:06		458	1:14		398	01:46		388	1:08		406
zo	30-10				06:33	68		06:43	78		7:00	-26		07:15	69		7:01	78		07:33	68		6:54	55
zo	30-10	18:38	NM	12:14		400	12:52		476	12:36		402	13:16		458	12:27		400	12:59		390	12:24		403
zo	30-10				18:52	69		19:01	76		18:44	-28		19:32	67		19:20	79		19:52	69		18:51	52
ma	31-10			00:29		395	01:08		470	0:52		396	01:32		452	0:42		395	01:14		385	0:37		400
ma	31-10				07:06	75		07:17	83		6:56	-21		07:50	74		7:34	85		08:06	75		7:10	60
ma	31-10			12:40		393	13:17		468	13:01		395	13:43		451	12:53		393	13:25		383	12:50		393
ma	31-10				19:20	76		19:31	81		19:07	-24		20:04	71		19:48	86		20:20	76		19:06	54

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
di	1-11			00:54		398	01:30		474	1:14		402	01:55		458	1:07		398	01:39		388	1:02		400
di	1-11				07:34	76		07:46	79		7:20	-25		08:19	70		8:02	86		08:34	76		7:18	57
di	1-11			13:06		395	13:42		473	13:26		400	14:10		456	13:19		395	13:51		385	13:12		393
di	1-11				19:47	75		19:58	75		19:34	-30		20:33	65		20:15	85		20:47	75		19:29	50
wo	2-11			01:22		408	01:58		490	1:42		418	02:27		474	1:35		408	02:07		398	1:28		407
wo	2-11				08:04	72		08:15	70		7:50	-34		08:50	61		8:32	82		09:04	72		7:46	49
wo	2-11			13:35		401	14:14		484	13:58		411	14:43		467	13:48		401	14:20		391	13:38		400
wo	2-11				20:17	73		20:28	69		20:08	-36		21:05	59		20:45	83		21:17	73		19:58	47
do	3-11			01:56		415	02:34		502	2:18		428	03:04		484	2:09		415	02:41		405	1:59		415
do	3-11				08:37	73		08:48	67		8:27	-36		09:24	59		9:05	83		09:37	73		8:20	48
do	3-11			14:12		403	14:52		488	14:36		413	15:21		469	14:25		403	14:57		393	14:13		403
do	3-11				20:49	81		21:01	75		20:46	-28		21:37	67		21:17	91		21:49	81		20:31	55
vr	4-11			02:34		415	03:12		502	2:56		427	03:42		483	2:47		415	03:19		405	2:33		415
vr	4-11				09:12	84		09:23	80		9:04	-23		09:58	72		9:40	94		10:12	84		8:55	59
vr	4-11			14:53		396	15:29		478	15:13		405	15:58		461	15:06		396	15:38		386	14:49		396
vr	4-11				21:22	98		21:33	96		21:21	-7		22:08	88		21:50	108		22:22	98		21:02	75
za	5-11			03:11		407	03:46		491	3:30		416	04:16		472	3:24		407	03:56		397	3:05		407
za	5-11				09:47	102		09:55	101		9:38	-2		10:29	93		10:15	112		10:47	102		9:26	79
za	5-11			15:31		382	16:03		460	15:47		389	16:32		445	15:44		382	16:16		372	15:22		382
za	5-11				21:53	118		22:02	119		21:54	15		22:36	110		22:21	128		22:53	118		21:31	97
zo	6-11			03:45		397	04:17		478	4:01		406	04:47		462	3:58		397	04:30		387	3:30		397
zo	6-11				10:22	117		10:26	120		10:10	14		10:59	109		10:50	127		11:22	117		9:54	96
zo	6-11			16:08		368	16:36		445	16:20		376	17:06		432	16:21		368	16:53		358	15:46		369
zo	6-11				22:28	131		22:33	134		22:27	25		23:05	120		22:56	141		23:28	131		22:01	112
ma	7-11			04:18		390	04:51		472	4:35		401	05:22		457	4:31		390	05:03		380	3:54		392
ma	7-11				11:02	124		11:01	126		10:47	17		11:33	112		11:30	134		12:02	124		10:28	104
ma	7-11			16:53		360	17:16		436	17:00		369	17:49		425	17:06		360	17:38		350	16:14		361
ma	7-11	20:51 EK			23:14	136		23:12	138		23:10	25		23:46	120								22:41	119
di	8-11			05:09		388	05:36		471	5:20		401	06:08		457		23:42	146		0:14	136	4:34		390
di	8-11				11:54	120		11:49	125		11:37	14		12:21	109	5:22		388	05:54		378		11:19	106
di	8-11			17:55		358	18:10		433	17:54		367	18:47		423		12:22	130		12:54	120	17:17		355
di	8-11															18:08		358	18:40		348		23:42	123
wo	9-11				00:13	131		0:07	139		0:07	25		00:41	120		0:41	141		01:13	131	6:15		387
wo	9-11			06:18		390	06:37		470	6:21		401	07:11		457	6:31		390	07:03		380		12:40	103
wo	9-11				12:57	110		12:52	122		12:42	11		13:23	106		13:25	120		13:57	110	19:18		361
wo	9-11			19:03		364	19:20		435	19:04		370	19:59		426	19:16		364	19:48		354			117

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
do	10-11				01:20	120		01:19	138		1:19	24		01:50	119		1:48	130		02:20	120		1:17	117
do	10-11			07:26		397	07:50		472	7:34		404	08:25		460	7:39		397	08:11		387	7:42		396
do	10-11				14:07	94		14:11	111		13:59	2		14:39	97		14:35	104		15:07	94		14:13	82
do	10-11			20:13		374	20:40		444	20:24		379	21:14		435	20:26		374	20:58		364	20:25		375
vr	11-11				02:32	104		02:43	124		2:38	14		03:10	109		3:00	114		03:32	104		2:40	92
vr	11-11			08:35		404	09:09		480	8:53		410	09:39		466	8:48		404	09:20		394	8:47		407
vr	11-11				15:22	75		15:32	88		15:17	-17		16:01	78		15:50	85		16:22	75		15:21	58
vr	11-11			21:22		384	21:57		458	21:41		388	22:26		444	21:35		384	22:07		374	21:27		386
za	12-11				03:49	86		04:00	100		3:52	-7		04:30	88		4:17	96		04:49	86		3:42	70
za	12-11			09:42		409	10:19		490	10:03		415	10:47		471	9:55		409	10:27		399	9:47		413
za	12-11				16:32	59		16:39	65		16:23	-37		17:10	58		17:00	69		17:32	59		16:18	43
za	12-11			22:24		389	23:00		469	22:44		395	23:29		451	22:37		389	23:09		379	22:24		391
zo	13-11				04:58	69		05:04	79		4:53	-26		05:37	69		5:26	79		05:58	69		4:36	57
zo	13-11			10:42		410	11:19		496	11:03		417	11:46		473	10:55		410	11:27		400	10:41		412
zo	13-11				17:33	50		17:36	51		17:20	-50		18:11	45		18:01	60		18:33	50		17:10	38
zo	13-11			23:18		390	23:53		474	23:37		-95										23:14		390
ma	14-11				05:57	57		05:59	63		5:46	399	00:21		455	23:31		390	0:03		380		5:20	50
ma	14-11			11:34		409	12:11		497	11:55		-41		06:35	54		6:25	67		06:57	57	5:52		51
ma	14-11	14:52 VM			18:27	47		18:27	44		18:09	419	12:39		475	11:47		409	12:19		399		6:17	51
ma	14-11					392								19:05	38		18:55	57		19:27	47			
di	15-11			00:04		392	00:39		476	0:23		402	01:08		458	0:17		392	00:49		382	23:59		389
di	15-11				06:49	48		06:49	49		6:33	-55		07:28	40		7:17	58		07:49	48		6:00	42
di	15-11			12:22		408	13:00		498	12:44		421	13:28		477	12:35		408	13:07		398	6:22		44
di	15-11				19:16	45		19:16	38		18:56	-63		19:56	32		19:44	55		20:16	45		7:23	41
wo	16-11			00:49		396	01:24		481	1:08		409	01:53		465	1:02		396	01:34		386	0:46		392
wo	16-11				07:38	38		07:37	34		7:20	-69		08:18	26		8:06	48		08:38	38		6:47	32
wo	16-11			13:13		408	13:49		498	13:33		422	14:18		478	13:26		408	13:58		398	7:03		33
wo	16-11				20:01	43		20:02	34		19:43	-67		20:43	28		20:29	53		21:01	43		8:12	28
do	17-11			01:36		401	02:10		487	1:54		415	02:40		471	1:49		401	02:21		391	1:39		396
do	17-11				08:24	31		08:24	24		8:09	-80		09:06	15		8:52	41		09:24	31		8:56	17
do	17-11			14:06		405	14:40		493	14:24		419	15:08		475	14:19		405	14:51		395	14:11		402
do	17-11				20:44	45		20:47	36		20:32	-65		21:29	30		21:12	55		21:44	45		21:14	26
vr	18-11			02:27		403	02:57		489	2:41		417	03:27		473	2:40		403	03:12		393	2:34		398
vr	18-11				09:09	31		09:11	24		8:58	-78		09:52	17		9:37	41		10:09	31		9:35	14
vr	18-11			14:58		396	15:31		481	15:15		409	15:59		465	15:11		396	15:43		386	15:08		395
vr	18-11				21:25	54		21:31	49		21:21	-51		22:11	44		21:53	64		22:25	54		21:46	34



				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
za	19-11			03:16		399	03:44		482	3:28		411	04:13		467	3:29		399	04:01		389	3:24		394
za	19-11				09:54	42		09:56	38		9:46	-63		10:35	32		10:22	52		10:54	42		10:00	23
za	19-11			15:49		381	16:21		462	16:05		392	16:48		448	16:02		381	16:34		371	15:57		380
za	19-11				22:04	71		22:14	72		22:09	-28		22:51	67		22:32	81		23:04	71		21:54	50
zo	20-11			04:03		389	04:30		470	4:14		400	04:59		456	4:16		389	04:48		379	4:05		385
zo	20-11				10:39	61		10:40	62		10:33	-39		11:17	56		11:07	71		11:39	61		10:21	39
zo	20-11			16:39		364	17:08		441	16:52		375	17:37		431	16:52		364	17:24		354	16:38		362
zo	20-11				22:42	91		22:56	98		22:56	-4		23:30	91		23:10	101		23:42	91		22:30	68
ma	21-11			04:48		378	05:17		457	5:01		389	05:47		445	5:01		378	05:33		368	4:39		376
ma	21-11				11:27	82		11:26	87		11:22	-16		12:00	79		11:55	92		12:27	82		11:01	58
ma	21-11	9:33	LK	17:30		350	17:59		425	17:43		362	18:30		418	17:43		350	18:15		340	17:17		347
ma	21-11				23:26	109		23:43	121		23:49	16											23:17	86
di	22-11			05:36		370	06:11		448	5:55		382		00:14	111		23:54	119		0:26	109	5:21		369
di	22-11				12:29	95		12:20	106		12:18	1	06:44		438	5:49		370	06:21		360		11:54	75
di	22-11			18:30		344	18:57		419	18:41				12:53	96		12:57	105		13:29	95	18:11		340
di	22-11												19:31		414	18:43		344	19:15		334			
wo	23-11				00:40	119		00:42	135		0:50	29		01:15	124		1:08	129		01:40	119		0:17	99
wo	23-11			06:45		368	07:16		445	7:00		382	07:52		438	6:58		368	07:30		358	6:25		366
wo	23-11				13:36	95		13:26	114		13:23	6		14:01	101		14:04	105		14:36	95		13:02	84
wo	23-11			19:40		349	20:03		424	19:47		363	20:41		419	19:53		349	20:25		339	19:41		344
do	24-11				02:00	114		01:56	137		1:59	28		02:32	123		2:28	124		03:00	114		1:34	103
do	24-11			08:04		374	08:27		451	8:11		389	09:05		445	8:17		374	08:49		364	8:10		370
do	24-11				14:41	84		14:39	107		14:34	-2		15:11	93		15:09	94		15:41	84		14:24	79
do	24-11			20:52		363	21:14		438	20:58		376	21:53		432	21:05		363	21:37		353	21:01		363
vr	25-11				03:09	99		03:12	123		3:10	13		03:44	108		3:37	109		04:09	99		3:00	91
vr	25-11			09:16		383	09:39		460	9:23		396	10:15		452	9:29		383	10:01		373	9:29		384
vr	25-11				15:44	71		15:49	92		15:44	-17		16:19	78		16:12	81		16:44	71		15:39	64
vr	25-11			21:55		377	22:22		453	22:06		389	22:58		445	22:08		377	22:40		367	22:04		382
za	26-11				04:16	82		04:21	104		4:17	-5		04:52	90		4:44	92		05:16	82		4:17	73
za	26-11			10:16		388	10:45		464	10:29		398	11:18		454	10:29		388	11:01		378	10:29		393
za	26-11				16:45	63		16:51	80		16:46	-28		17:21	67		17:13	73		17:45	63		16:43	53
za	26-11			22:45		385	23:19		462	23:03		393	23:51		449	22:58		385	23:30		375	22:54		392
zo	27-11				05:14	71		05:20	89		5:13	-19		05:51	76		5:42	81		06:14	71		5:25	61
zo	27-11			11:03		385	11:39		460	11:23		390	12:08		446	11:16		385	11:48		375	11:16		390
zo	27-11				17:36	63		17:42	77		5:34	-31		18:13	64		18:04	73		18:36	63		17:35	50
zo	27-11			23:25		387																23:34		392



				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	28-11				06:01	69	0:02		462	23:46		391	00:29		447	23:38		387	0:10		377		6:11	57
ma	28-11			11:41		378		06:07	83		17:54	-25		06:39	70		6:29	79		07:01	69	11:52		380
ma	28-11				18:17	70	12:18		452	12:02		381	12:45		437	11:54		378	12:26		368		18:11	53
ma	28-11			23:58		389		18:23	80		18:09	-28		18:56	67		18:45	80		19:17	70			
di	29-11				06:38	72	00:32		464	0:16		394	00:57		450	0:11		389	00:43		379	0:05		390
di	29-11	13:18	NM	12:13		376		06:45	80		6:23	-27		07:18	68		7:06	82		07:38	72		6:31	58
di	29-11				18:50	75	12:47		451	12:31		381	13:13		437	12:26		376	12:58		366	12:19		375
di	29-11					396		18:58	80		18:37	-28		19:32	67		19:18	85		19:50	75		18:35	55
wo	30-11			00:28		396	01:00		475	0:44		408	01:26		464	0:41		396	01:13		386	0:32		396
wo	30-11				07:10	72		07:18	74		6:52	-33		07:52	62		7:38	82		08:10	72		6:52	54
wo	30-11			12:41		382	13:16		461	13:00		393	13:45		449	12:54		382	13:26		372	12:44		381
wo	30-11				19:21	75		19:30	74		19:08	-33		20:06	62		19:49	85		20:21	75		19:01	51

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
do	1-12			00:59		408	01:33		491	1:17		425	02:02		481	1:12		408	01:44		398	1:00		408
do	1-12				07:43	70		07:52	67		7:26	-40		08:27	55		8:11	80		08:43	70		7:23	47
do	1-12			13:13		391	13:52		474	13:36		405	14:22		461	13:26		391	13:58		381	13:14		392
do	1-12				19:53	74		20:05	69		19:45	-36		20:41	59		20:21	84		20:53	74		19:33	49
vr	2-12			01:33		417	02:11		503	1:55		434	02:41		490	1:46		417	02:18		407	1:33		418
vr	2-12				08:18	71		08:29	65		8:05	-41		09:04	54		8:46	81		09:18	71		8:01	46
vr	2-12			13:52		394	14:32		477	14:16		408	15:02		464	14:05		394	14:37		384	13:52		396
vr	2-12				20:27	80		20:40	76		20:24	-29		21:16	66		20:55	90		21:27	80		20:09	56
za	3-12			02:12		417	02:49		501	2:33		432	03:20		488	2:25		417	02:57		407	2:12		419
za	3-12				08:55	78		09:05	75		8:43	-31		09:41	64		9:23	88		09:55	78		8:40	55
za	3-12			14:35		388	15:10		467	14:54		399	15:41		455	14:48		388	15:20		378	14:35		389
za	3-12				21:01	93		21:14	92		21:00	-12		21:50	83		21:29	103		22:01	93		20:43	72
zo	4-12			02:51		410	03:23		491	3:07		422	03:53		478	3:04		410	03:36		400	2:48		410
zo	4-12				09:31	90		09:39	90		9:17	-15		10:14	80		9:59	100		10:31	90		9:12	69
zo	4-12			15:18		375	15:44		451	15:28		384	16:15		440	15:31		375	16:03		365	15:13		374
zo	4-12				21:36	106		21:45	109		21:33	3		22:20	98		22:04	116		22:36	106		21:12	88
ma	5-12			03:29		399	03:55		481	3:39		412	04:25		468	3:42		399	04:14		389	3:17		399
ma	5-12				10:07	97		10:11	101		9:50	-6		10:45	89		10:35	107		11:07	97		9:38	78
ma	5-12			15:58		362	16:17		438	16:01		373	16:50		429	16:11		362	16:43		352	15:41		361
ma	5-12				22:13	112		22:17	116		22:07	7		22:50	102		22:41	122		23:13	112		21:42	94
di	6-12			04:07		392	04:30		477	4:14		409	05:01		465	4:20		392	04:52		382	3:41		393
di	6-12				10:46	97		10:46	100		10:26	-9		11:19	86		11:14	107		11:46	97		10:11	76
di	6-12			16:41		354	16:55		433	16:39		367	17:31		423	16:54		354	17:26		344	16:06		355
di	6-12				22:57	110		22:55	113		22:48	1		23:28	96		23:25	120		23:57	110		22:20	92
wo	7-12			04:50		389	05:13		476	4:57		408	05:46		464	5:03		389	05:35		379	4:16		392
wo	7-12	10:03 EK			11:34	91		11:30	93		11:12	-18		12:02	77		12:02	101		12:34	91		10:58	71
wo	7-12			17:31		352	17:44		431	17:28		365	18:23		421	17:44		352	18:16		342	16:58		353
wo	7-12				23:50	104		23:45	110		23:39	-4											23:16	90
do	8-12			05:46		388	06:07		473	5:51		404		00:18	91		0:18	114		00:50	104		5:28	389
do	8-12				12:30	83		12:26	89		12:10	-22	06:41		460	5:59		388	06:31		378		12:04	66
do	8-12			18:29		354	18:46		430	18:30		364		12:57	73		12:58	93		13:30	83		18:37	354
do	8-12												19:27		420	18:42		354	19:14		344			
vr	9-12				00:51	97		00:47	110		0:43	-4		01:19	91		1:19	107		01:51	97		0:37	87
vr	9-12			06:48		388	07:13		468	6:57		399	07:46		455	7:01		388	07:33		378	6:59		389
vr	9-12				13:34	76		13:34	88		13:20	-22		14:03	73		14:02	86		14:34	76		13:26	59
vr	9-12			19:33		358	20:00		431	19:44		366	20:37		422	19:46		358	20:18		348	19:44		361

				Großer Vogelsand,			Wilhelmshaven			Vareler Schleuse			Bremerhaven,			Neuwerk			Cuxhaven,			Trischen, West		
				Leuchtturm			Alter Vorhafen			11:03			Alter Leuchtturm						Steubenhöft					
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
za	10-12				01:58	91		02:02	109		1:58	-3		02:32	92		2:26	101		02:58	91		1:59	76
za	10-12			07:52		388	08:28		465	8:12		396	08:57		452	8:05		388	08:37		378	8:05		391
za	10-12				14:46	70		14:52	80		14:37	-27		15:20	68		15:14	80		15:46	70		14:35	48
za	10-12			20:39		363	21:18		437	21:02		369	21:47		425	20:52		363	21:24		353	20:46		366
zo	11-12				03:14	82		03:21	98		3:14	-11		03:50	84		3:42	92		04:14	82		3:04	62
zo	11-12			08:56		388	09:42		466	9:26		394	10:06		450	9:09		388	09:41		378	9:06		391
zo	11-12				15:59	62		16:02	67		15:48	-37		16:33	58		16:27	72		16:59	62		15:35	42
zo	11-12			21:45		368	22:26		446	22:10		375	22:53		431	21:58		368	22:30		358	21:45		369
ma	12-12				04:27	70		04:30	81		4:21	-27		05:02	68		4:55	80		05:27	70		4:01	52
ma	12-12			10:00		386	10:48		469	10:32		394	11:13		450	10:13		386	10:45		376	10:04		389
ma	12-12				17:03	55		17:04	55		16:50	-48		17:37	47		17:31	65		18:03	55		16:29	39
ma	12-12			22:45		372	23:24		454	23:08		383	23:52		439	22:58		372	23:30		362	22:40		371
di	13-12				05:31	56		05:32	62		5:19	-45		06:07	50		5:59	66		06:31	56		4:54	44
di	13-12			11:04		386	11:47		472	11:31		398	12:15		454	11:17		386	11:49		376	11:01		387
di	13-12				18:02	50		18:01	47		5:45	-57		18:38	38		18:30	60		19:02	50		17:22	36
di	13-12			23:41		378															23:32			375
wo	14-12	1:06	VM		06:30	43	0:16		463	0:00		393	00:44		449	23:54		378	0:26		368		5:49	34
wo	14-12			12:07		386		06:29	44		18:14	-63		07:07	32		6:58	53		07:30	43	6:07		35
wo	14-12				18:56	45	12:44		475	12:28		402	13:12		458	12:20		386	12:52		376		6:54	34
wo	14-12					385		18:55	40		18:39	-64		19:35	31		19:24	55		19:56	45			387
do	15-12			00:33		385	01:07		472	0:51		403	01:34		459	0:46		385	01:18		375	0:27		382
do	15-12				07:24	32		07:23	30		7:07	-77		08:03	18		7:52	42		08:24	32		7:51	18
do	15-12			13:04		387	13:40		476	13:24		405	14:06		461	13:17		387	13:49		377	13:02		387
do	15-12				19:45	42		19:48	37		19:33	-67		20:27	28		20:13	52		20:45	42		20:13	23
vr	16-12			01:25		391	01:58		478	1:42		409	02:23		465	1:38		391	02:10		381	1:26		387
vr	16-12				08:14	25		08:15	23		8:00	-84		08:55	11		8:42	35		09:14	25		8:40	8
vr	16-12			13:58		386	14:34		473	14:18		403	14:58		459	14:11		386	14:43		376	14:06		387
vr	16-12				20:32	44		20:37	41		20:25	-62		21:16	33		21:00	54		21:32	44		20:59	22
za	17-12			02:15		393	02:48		478	2:32		409	03:12		465	2:28		393	03:00		383	2:25		390
za	17-12				09:02	27		09:03	27		8:50	-78		09:42	17		9:30	37		10:02	27		9:24	9
za	17-12			14:49		380	15:25		463	15:09		393	15:48		449	15:02		380	15:34		370	15:02		381
za	17-12				21:15	53		21:22	54		21:13	-47		22:00	48		21:43	63		22:15	53		21:40	32
zo	18-12			03:03		390	03:34		472	3:18		402	03:58		458	3:16		390	03:48		380	3:16		387
zo	18-12				09:47	40		09:47	42		9:36	-61		10:25	34		10:15	50		10:47	40		9:59	23
zo	18-12			15:37		370	16:10		448	15:54		379	16:34		435	15:50		370	16:22		360	15:49		369
zo	18-12				21:56	69		22:03	74		21:57	-27		22:39	68		22:24	79		22:56	69		21:57	50

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
ma	19-12			03:48		383	04:16		463	4:00		393	04:40		449	4:01		383	04:33		373	3:54		378
ma	19-12				10:29	59		10:29	63		10:18	-40		11:03	55		10:57	69		11:29	59		10:04	42
ma	19-12			16:22		358	16:52		433	16:36		367	17:16		423	16:35		358	17:07		348	16:25		355
ma	19-12				22:34	86		22:41	93		22:38	-8		23:14	87		23:02	96		23:34	86		22:10	65
di	20-12			04:28		375	04:56		454	4:40		386	05:22		442	4:41		375	05:13		365	4:16		371
di	20-12				11:10	77		11:08	81		10:58	-23		11:41	72		11:38	87		12:10	77		10:34	55
di	20-12			17:05		347	17:32		423	17:16		359	18:00		415	17:18		347	17:50		337	16:49		345
di	20-12				23:11	100		23:21	107		23:20	3		23:51	98								22:46	74
wo	21-12	2:56 LK		05:04		369	05:40		448	5:24		381	06:08		437		23:39	110		0:11	100	4:46		369
wo	21-12				11:55	88		11:52	92		11:43	-13		12:23	82	5:17		369	05:49		359		11:16	63
wo	21-12			17:51		342	18:19		419	18:03		356	18:49		412		12:23	98		12:55	88	17:25		343
wo	21-12				23:59	107										18:04		342	18:36		332		23:36	80
do	22-12			05:52		363		0:08	115		0:10	10		00:38	105		0:27	117		00:59	107	5:36		365
do	22-12				12:50	90	06:33		443	6:17		376	07:05		432	6:05		363	06:37		353		12:11	69
do	22-12			18:51		341		12:44	98		12:38	-8		13:16	87		13:18	100		13:50	90	18:31		342
do	22-12					108	19:15		419	18:59		355	19:48		411	19:04		341	19:36		331			
vr	23-12				01:06	108		01:08	121		1:09	15		01:39	110		1:34	118		02:06	108		0:41	86
vr	23-12			07:07		357	07:36		437	7:20		370	08:12		426	7:20		357	07:52		347	6:54		357
vr	23-12				13:51	87		13:47	102		13:42	-5		14:20	90		14:19	97		14:51	87		13:24	74
vr	23-12			19:58		345	20:20		421	20:04		357	20:54		413	20:11		345	20:43		335	20:02		346
za	24-12				02:18	101		02:19	121		2:17	13		02:51	108		2:46	111		03:18	101		2:02	86
za	24-12			08:21		355	08:46		431	8:30		365	09:22		421	8:34		355	09:06		345	8:32		355
za	24-12				14:54	80		14:56	101		14:51	-8		15:28	87		15:22	90		15:54	80		14:47	70
za	24-12			21:02		353	21:28		426	21:12		360	22:01		416	21:15		353	21:47		343	21:13		356
zo	25-12				03:27	89		03:32	112		3:26	4		04:02	99		3:55	99		04:27	89		3:24	76
zo	25-12			09:26		355	09:56		428	9:40		361	10:29		417	9:39		355	10:11		345	9:42		357
zo	25-12				15:57	75		16:03	96		15:57	-12		16:33	83		16:25	85		16:57	75		15:58	64
zo	25-12			21:59		361	22:31		434	22:15		366	23:01		422	22:12		361	22:44		351	22:10		365
ma	26-12				04:32	78		04:38	99		4:28	-9		05:07	86		5:00	88		05:32	78		4:33	65
ma	26-12			10:22		354	10:58		428	10:42		358	11:28		414	10:35		354	11:07		344	10:38		357
ma	26-12				16:56	73		17:01	91		16:54	-18		17:32	77		17:24	83		17:56	73		16:57	60
ma	26-12			22:48		368	23:22		443	23:06		374	23:47		430	23:01		368	23:33		358	22:57		370
di	27-12				05:27	72		05:32	88		5:17	-20		06:03	75		5:55	82		06:27	72		5:27	59
di	27-12			11:09		355	11:45		430	11:29		360	12:12		416	11:22		355	11:54		345	11:20		357
di	27-12				17:44	74		17:49	86		5:37	-22		18:21	73		18:12	84		18:44	74		17:42	59
di	27-12			23:29		377																23:35		376

				Großer Vogelsand, Leuchtturm			Wilhelmshaven Alter Vorhafen			Vareler Schleuse 11:03			Bremerhaven, Alter Leuchtturm			Neuwerk			Cuxhaven, Steubenhöft			Trischen, West		
maan				54,0000° N, 8,4833° E			53°30'60"N 8°09'00"E			53°24'35"N 8°11'18"E			53°32'42.0"N, 8°34'5.2"E			53°55'04"N 8°29'11"E			53°52'04"N 8°43'03"E			54°04'07"N 8°38'16"E		
dag	datum	tijd	fase	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm	HW	lw	cm
wo	28-12				06:11	71	0:02		455	23:46		387	00:25		443	23:42		377	0:14		367		6:04	56
wo	28-12			11:48		360		06:17	79		17:56	-29		06:49	66		6:39	81		07:11	71	11:53		360
wo	28-12				18:24	75	12:22		437	12:06		369	12:48		425	12:01		360	12:33		350		18:14	58
wo	28-12							18:31	80		18:14	-27		19:04	68		18:52	85		19:24	75			
do	29-12	7:53	NM	00:07		388	00:38		470	0:22		404	01:02		460	0:20		388	00:52		378	0:07		387
do	29-12				06:49	69		06:56	71		6:32	-36		07:30	59		7:17	79		07:49	69		6:35	52
do	29-12			12:24		369	12:58		450	12:42		382	13:25		438	12:37		369	13:09		359	12:23		370
do	29-12				19:00	74		19:09	73		18:50	-33		19:44	62		19:28	84		20:00	74		18:42	54
vr	30-12			00:42		400	01:15		485	0:59		419	01:42		475	0:55		400	01:27		390	0:40		401
vr	30-12				07:26	66		07:35	64		7:10	-42		08:09	53		7:54	76		08:26	66		7:09	45
vr	30-12			12:59		377	13:37		461	13:21		393	14:06		449	13:12		377	13:44		367	12:57		380
vr	30-12				19:36	72		19:47	68		19:30	-37		20:22	58		20:04	82		20:36	72		19:15	49
za	31-12			01:17		406	01:55		493	1:39		426	02:23		482	1:30		406	02:02		396	1:16		410
za	31-12				08:04	64		08:13	61		7:50	-45		08:48	50		8:32	74		09:04	64		7:49	41
za	31-12			13:38		379	14:17		462	14:01		394	14:47		450	13:51		379	14:23		369	13:39		384
za	31-12				20:13	72		20:25	70		20:00	-35		21:00	60		20:41	82		21:13	72		19:53	50