

VOACAP Greyline

Locator: Date: Calendar: [Manual](#)

SOLAR INFORMATION FOR 2018-07-14
All times UTC

SUNRISE AT J061LS 02:21 03:06 03:37 | 18:51 19:21 20:06 | 23:14
Lat: 51.75, Lon: 12.91667

CITY	DAWN	RISE	POST	PRE	SET	DUSK	MNITE	HALFW	KM/SP	DEG	KM/LP	DEG
1A SMOM	03:14	03:47	04:11	18:20	18:44	19:17	23:15	23:15	1099	182	38910	2
3A Monaco	03:26	04:01	04:26	18:46	19:10	19:45	23:36	23:26	984	207	39025	27
3B6 Agalega Is	02:09	02:32	02:49				20:19	21:26	8077	135	31932	315
3B7 St. Brandon Is	02:08	02:31	02:49				20:07	21:19	8856	135	31153	315
3B8 Mauritius	02:21	02:45	03:03				20:15	21:26	9101	138	30908	318
3C Equatorial Guinea	04:58	05:20	05:36	17:16	17:33	17:55	23:26	23:22	5559	184	34450	4
3C0 Annobon Is	05:19	05:42	05:58	17:28	17:44	18:06	23:43	23:32	5953	189	34056	9
3DA Swaziland	04:16	04:41	05:00	14:59	15:18	15:43	22:00	22:30	8886	163	31123	343
3V Tunisia	03:41	04:11	04:33	18:17	18:39	19:09	23:25	23:20	1679	189	38330	9
3XA Guinea	06:18	06:41	06:58	19:02	19:19	19:42	01:00	00:19	5269	217	34740	37
3Y/B Bouvet	07:16	07:59	08:34	15:10	15:45	16:27	23:52	23:32	11844	186	28165	6
40 Montenegro	02:44	03:18	03:42				22:48	23:00	1134	153	38875	333
4U1ITU ITU Geneva	03:20	03:58	04:23	18:58	19:24	20:01	23:41	23:28	793	222	39216	42
4U1UN UN HQ NYC	09:04	09:37	10:00	00:03	00:26	00:58	05:01	02:29	6393	296	33616	116
4U1VIC Vienna Intl Center	02:29	03:08	03:36				23:00	23:06	467	146	39542	326
4U1WB The World Bank	09:23	09:54	10:17	00:11	00:33	01:04	05:14	02:40	6724	297	33285	117
4X Israel	02:17	02:44	03:04				21:46	22:23	2818	133	37191	313
5A Libya	03:41	04:09	04:29	17:56	18:16	18:44	23:13	23:13	2104	179	37905	359
5B Cyprus	02:13	02:43	03:03				21:52	22:27	2460	131	37549	311
5H Tanzania	03:13	03:36	03:52				21:29	22:09	6978	150	33031	330
5N Nigeria	05:15	05:38	05:55	17:49	18:06	18:28	23:52	23:37	5113	193	34896	13
5R Madagascar	02:59	03:23	03:40				20:55	21:50	8545	147	31464	327
5T Mauritania	06:12	06:36	06:53	19:25	19:43	20:07	01:09	00:24	4523	225	35486	45
5U Niger	05:08	05:31	05:48	18:05	18:22	18:46	23:57	23:40	4363	197	35646	17
5V Togo	05:25	05:47	06:04	17:57	18:14	18:36	00:00	23:43	5183	196	34826	16
5X Uganda	03:29	03:51	04:07	15:43	15:59	16:21	21:55	22:25	6009	156	34000	336
5Z Kenya	03:14	03:37	03:53				21:38	22:15	6310	151	33699	331
6W Senegal	06:24	06:47	07:04	19:25	19:42	20:06	01:15	00:28	4913	224	35096	44
6Y Jamaica	10:15	10:39	10:57	23:28	23:46	00:10	05:13	03:01	8429	281	31580	101
7O Yemen	02:17	02:41	02:58				21:08	21:56	5011	134	34998	314
7P Lesotho	04:37	05:03	05:22	15:09	15:28	15:54	22:15	22:40	9129	167	30880	347
7Q Malawi	03:44	04:07	04:25	15:06	15:23	15:47	21:45	22:20	7809	157	32200	337
7X Algeria	04:10	04:40	05:01	18:45	19:07	19:37	23:53	23:36	1842	209	38167	29
8P Barbados	09:16	09:39	09:56	22:12	22:29	22:52	04:04	02:16	7674	265	32335	85
8R Guyana	09:21	09:44	10:00	21:56	22:12	22:35	03:58	02:14	8119	259	31890	79
9A Croatia	02:43	03:20	03:45				23:01	23:07	700	160	39309	340
9G Ghana	05:30	05:52	06:09	18:01	18:17	18:40	00:05	23:45	5267	197	34742	17
9H Malta	03:27	03:56	04:18	17:58	18:19	18:48	23:08	23:10	1770	176	38239	356
9J Zambia	04:10	04:34	04:51	15:34	15:51	16:14	22:12	22:36	7615	164	32394	344
9L Sierra Leone	06:19	06:41	06:58	18:59	19:15	19:38	00:58	00:18	5372	216	34637	36
9Q Dem. Rep. Congo	04:10	04:32	04:48	16:15	16:31	16:53	22:31	22:48	6115	167	33894	347
9U Burundi	03:47	04:10	04:26	15:50	16:06	16:28	22:08	22:33	6328	160	33681	340
9X Rwanda	03:42	04:05	04:21	15:49	16:06	16:28	22:05	22:31	6186	159	33823	339
9Y Trinidad & Tobago	09:28	09:51	10:07	22:15	22:31	22:54	04:11	02:21	8017	264	31992	84
A2 Botswana	04:28	04:52	05:10	15:27	15:45	16:09	22:18	22:41	8356	167	31653	347
C3 Andorra	03:55	04:29	04:53	19:06	19:30	20:03	23:59	23:39	1340	224	38669	44
C5 Gambia	06:23	06:47	07:04	19:20	19:37	20:01	01:12	00:26	5011	223	34998	43
C6 Bahamas	10:03	10:29	10:47	23:44	00:02	00:27	05:15	02:57	7877	286	32132	106
C9 Mozambique	04:05	04:30	04:48	14:53	15:12	15:37	21:51	22:25	8779	161	31230	341
CE Santiago	11:17	11:44	12:05	21:31	21:52	22:19	04:48	02:31	12464	243	27545	63
CE0X San Felix	11:42	12:07	12:26	22:26	22:45	23:10	05:26	03:04	12476	255	27533	75
CE0Y Easter	13:41	14:06	14:25	00:21	00:41	01:06	07:23	04:31	14548	277	25461	97
CE0Z Juan Fernandez	11:51	12:18	12:38	22:04	22:25	22:52	05:21	02:52	13000	249	27009	69
CN Morocco	04:53	05:21	05:42	19:13	19:34	20:02	00:28	23:56	2481	224	37528	44
CO Cuba	10:19	10:44	11:02	23:49	00:07	00:31	05:25	03:07	8264	286	31745	106
CP Bolivia	10:20	10:43	11:01	21:35	21:53	22:16	04:18	02:24	10644	248	29365	68
CT Portugal	04:47	05:18	05:40	19:35	19:57	20:28	00:37	00:00	2150	237	37859	57
CT3 Madeira	05:42	06:10	06:30	19:57	20:17	20:45	01:13	00:23	3205	240	36804	60
CU Azores	06:04	06:35	06:57	20:51	21:13	21:44	01:54	00:44	3409	261	36600	81
CX Uruguay	10:20	10:47	11:08	20:35	20:56	21:23	03:51	01:56	11624	234	28385	54
CY0 Sable Is	07:55	08:30	08:54	23:15	23:40	00:15	04:05	01:52	5276	291	34733	111
CY9 St Paul Is	07:41	08:19	08:46	23:26	23:53	00:31	04:06	01:48	5082	295	34927	115
D2 Angola	04:51	05:14	05:31	16:24	16:41	17:04	22:58	23:04	7146	176	32863	356
D4 Cape Verde	06:48	07:12	07:29	19:50	20:07	20:31	01:39	00:43	5218	232	34791	52
D6 Comoros	03:05	03:27	03:44				21:12	21:59	7635	148	32374	328
DL Berlin	02:13	03:00	03:31				23:12	23:13	104	19	39905	199
DL Frankfurt	02:49	03:31	04:00				23:31	23:23	356	240	39653	60
DL Munich	02:49	03:28	03:55				23:19	23:17	412	195	39597	15
E3 Eritrea	02:38	03:01	03:18				21:30	22:10	4660	141	35349	321
E4 Palestine	02:16	02:44	03:03				21:45	22:22	2871	132	37138	312
E7 Bosnia-Herzegovina	02:42	03:17	03:42				22:52	23:02	970	154	39039	334

EA Barcelona	03:57	04:30	04:53	19:00	19:24	19:56	23:57	23:37	1417	220	38592	40
EA Madrid	04:24	04:56	05:19	19:21	19:44	20:16	00:20	23:51	1793	232	38216	52
EA6 Balearic Is	04:00	04:32	04:54	18:52	19:15	19:47	23:53	23:36	1550	213	38459	33
EA8 Canary Is	05:48	06:15	06:34	19:41	20:00	20:26	01:07	00:21	3542	233	36467	53
EA9 Ceuta	04:46	05:16	05:37	19:17	19:38	20:07	00:27	23:55	2281	226	37728	46
EA9 Melilla	04:38	05:08	05:28	19:06	19:27	19:56	00:17	23:50	2225	221	37784	41
EI Ireland	03:26	04:15	04:47	20:14	20:46	21:34	00:30	23:51	1305	285	38704	105
EL Liberia	06:12	06:35	06:51	18:45	19:02	19:25	00:48	00:12	5510	212	34499	32
ER Moldova	01:45	02:24	02:50				22:10	22:40	1265	108	38744	288
ET Ethiopia	02:50	03:12	03:29				21:30	22:10	5303	144	34706	324
F Marseille	03:36	04:11	04:35	18:53	19:17	19:51	23:44	23:30	1095	214	38914	34
F Nantes	03:46	04:24	04:51	19:33	19:59	20:38	00:12	23:44	1156	250	38853	70
F Paris	03:20	04:01	04:29	19:22	19:50	20:31	23:55	23:35	807	251	39202	71
F Strasbourg	03:01	03:41	04:09	19:00	19:28	20:08	23:34	23:24	503	229	39506	49
FG Guadeloupe	09:18	09:41	09:59	22:24	22:42	23:05	04:12	02:20	7538	268	32471	88
FH Mayotte	02:58	03:21	03:38				21:04	21:54	7823	146	32186	326
FJ St Barthelemy	09:20	09:44	10:01	22:33	22:50	23:14	04:17	02:23	7488	270	32521	90
FM Martinique	09:19	09:42	09:59	22:20	22:37	23:00	04:10	02:19	7642	267	32367	87
F0/C Clipperton Is	12:39	13:02	13:19	01:26	01:42	02:05	07:22	04:48	11187	302	28822	122
F0/M Marquesas Is	15:12	15:35	15:52	02:55	03:12	03:35	09:23	07:11	14684	322	25325	142
FP St Pierre & Miquelon	07:27	08:05	08:31	23:10	23:36	00:14	03:51	01:40	4861	292	35148	112
FR Reunion	02:31	02:54	03:12				20:23	21:31	9075	140	30934	320
FR/G Glorioso	02:49	03:11	03:28				20:56	21:49	7777	144	32232	324
FR/J Juan de Nova	03:15	03:39	03:56	14:33	14:50	15:14	21:14	22:01	8180	150	31829	330
FR/T Tromelin	02:26	02:49	03:07				20:27	21:32	8530	139	31479	319
FS St Martin	09:20	09:44	10:02	22:34	22:51	23:15	04:18	02:23	7486	271	32523	91
FT5/W Crozet	03:37	04:11	04:38	12:38	13:05	13:39	20:38	21:52	11535	154	28474	334
FT5/X Kerguelen	02:36	03:12	03:41				19:29	21:18	12426	144	27583	324
FY French Guiana	09:01	09:23	09:40	21:29	21:46	22:08	03:35	01:58	7896	253	32113	73
G Birmingham	03:15	04:02	04:33	19:54	20:25	21:12	00:13	23:43	1020	281	38989	101
G Leeds	03:04	03:53	04:26	19:57	20:30	21:19	00:11	23:42	995	289	39014	109
G London	03:14	03:59	04:29	19:42	20:12	20:57	00:05	23:40	891	274	39118	94
G Plymouth	03:38	04:21	04:50	19:54	20:23	21:06	00:22	23:48	1201	269	38808	89
GD Isle of Man	03:13	04:03	04:36	20:11	20:44	21:34	00:23	23:48	1194	290	38815	110
GI No. Ireland	03:15	04:06	04:40	20:18	20:52	21:44	00:29	23:50	1295	291	38714	111
GJ Jersey	03:38	04:18	04:46	19:41	20:09	20:50	00:14	23:45	1104	261	38905	81
GM Scotland	02:47	03:45	04:21	20:18	20:54	21:51	00:19	23:45	1185	302	38824	122
GU Guernsey	03:38	04:19	04:47	19:44	20:12	20:54	00:16	23:45	1121	263	38888	83
GW Wales	03:25	04:11	04:42	20:02	20:32	21:19	00:22	23:47	1162	280	38847	100
HA Hungary	02:23	03:01	03:27				22:47	23:00	730	135	39279	315
HB Switzerland	03:11	03:50	04:16	18:55	19:22	20:00	23:36	23:25	669	219	39340	39
HB0 Liechtenstein	03:02	03:41	04:07	18:48	19:14	19:52	23:27	23:21	571	207	39438	27
HC Ecuador	10:56	11:18	11:35	23:05	23:22	23:44	05:20	03:11	10226	270	29783	90
HC8 Galapagos Is	11:41	12:03	12:20	23:51	00:08	00:30	06:06	03:46	10972	280	29037	100
HH Haiti	09:57	10:20	10:38	23:12	23:29	23:53	04:55	02:48	8078	278	31931	98
HI Dominican Rep	09:47	10:11	10:29	23:02	23:19	23:43	04:45	02:42	7922	276	32087	96
HK Colombia	10:28	10:51	11:07	22:56	23:13	23:35	05:02	02:58	9398	271	30611	91
HK0/M Malpelo	11:00	11:22	11:38	23:25	23:42	00:04	05:32	03:20	9973	276	30036	96
HK0S San Andres	10:45	11:08	11:25	23:39	23:56	00:19	05:32	03:18	9233	281	30776	101
HP Panama	10:43	11:05	11:22	23:25	23:41	00:04	05:23	03:13	9394	278	30615	98
HR Honduras	11:05	11:28	11:45	00:04	00:21	00:44	05:54	03:33	9469	287	30540	107
HV Vatican City	03:14	03:47	04:11	18:21	18:44	19:17	23:16	23:15	1099	182	38910	2
I Milan	03:11	03:48	04:13	18:43	19:09	19:45	23:28	23:22	754	202	39255	22
I Rome	03:14	03:47	04:10	18:20	18:43	19:16	23:15	23:14	1108	181	38901	1
IS0 Sardinia	03:35	04:07	04:29	18:29	18:52	19:24	23:29	23:22	1341	195	38668	15
J2 Djibouti	02:28	02:50	03:07				21:13	21:59	5226	138	34783	318
J3 Grenada	09:26	09:49	10:06	22:19	22:35	22:58	04:12	02:22	7906	266	32103	86
J5 Guinea-Bissau	06:22	06:45	07:02	19:14	19:31	19:54	01:08	00:24	5129	221	34880	41
J6 St Lucia	09:20	09:43	10:01	22:19	22:36	22:59	04:10	02:20	7703	266	32306	86
J7 Dominica	09:19	09:42	09:59	22:22	22:40	23:03	04:11	02:20	7597	268	32412	88
J8 St Vincent	09:22	09:45	10:02	22:18	22:35	22:58	04:10	02:20	7768	266	32241	86
JY Jordan	02:12	02:40	03:00				21:42	22:20	2890	131	37119	311
KG4 Guantanamo Bay	10:05	10:29	10:47	23:25	23:43	00:07	05:06	02:55	8154	281	31855	101
KP1 Navassa	10:08	10:31	10:49	23:22	23:40	00:03	05:05	02:56	8279	280	31730	100
KP2 US Virgin Is	09:27	09:51	10:09	22:42	22:59	23:23	04:25	02:28	7593	272	32416	92
KP4 Puerto Rico	09:34	09:58	10:15	22:48	23:05	23:29	04:31	02:32	7710	273	32299	93
KP5 Desecheo	09:38	10:01	10:19	22:52	23:09	23:33	04:35	02:35	7761	274	32248	94
LA Norway	00:49	02:21	03:07	20:00	20:46	22:17	23:33	23:22	1072	346	38937	166
LU Buenos Aires	10:31	10:59	11:20	20:38	20:59	21:27	03:59	01:59	11866	234	28143	54
LX Luxembourg	03:01	03:43	04:11	19:10	19:39	20:20	23:41	23:28	525	248	39484	68
LZ Bulgaria	02:24	02:57	03:21				22:26	22:48	1394	136	38615	316
OA Peru	10:51	11:13	11:30	22:37	22:54	23:16	05:04	02:58	10571	263	29438	83
OD Lebanon	02:09	02:37	02:58				21:43	22:22	2688	129	37321	309
OE Austria	02:29	03:09	03:36				23:00	23:07	464	147	39545	327
OK Czech Rep	02:26	03:08	03:37				23:08	23:11	214	150	39795	330
OM Slovakia	02:15	02:55	03:22				22:47	23:00	592	125	39417	305
ON Belgium	03:02	03:45	04:15	19:22	19:51	20:34	23:48	23:31	612	263	39397	83
OX Greenland	--:--	05:39	06:39	00:26	01:26	--:--	03:32	00:58	3858	316	36151	136
OY Faroe Is	01:15	03:09	03:58				00:33	23:48	1643	322	38366	142
OZ Denmark	02:02	02:56	03:31				23:24	23:19	438	338	39571	158
P4 Aruba	09:59	10:22	10:39	22:52	23:09	23:32	04:45	02:44	8434	272	31575	92
PA Netherlands	02:50	03:36	04:06				23:45	23:29	539	277	39470	97
PJ2 Curacao	09:55	10:18	10:35	22:48	23:04	23:27	04:41	02:42	8398	271	31611	91
PJ4 Bonaire	09:52	10:15	10:32	22:45	23:02	23:25	04:38	02:40	8343	271	31666	91

PJ5 St. Eustatius	09:21	09:45	10:02	22:32	22:50	23:13	04:17	02:23	7529	270	32480	90
PJ6 Saba	09:22	09:46	10:03	22:34	22:51	23:15	04:18	02:24	7533	271	32476	91
PJ7 Sint Maarten	09:21	09:44	10:02	22:34	22:51	23:15	04:18	02:23	7489	271	32520	91
PP6 Sergipe	08:26	08:49	09:05	20:05	20:22	20:44	02:35	01:19	8453	231	31556	51
PY0F Fernando de Noronha	07:55	08:18	08:34	19:56	20:13	20:35	02:15	01:07	7521	230	32488	50
PY0S St Peter & St Paul	07:35	07:58	08:14	19:51	20:08	20:30	02:03	00:59	6890	230	33119	50
PY0T Trindade & Martim Vaz Is	08:09	08:33	08:51	19:15	19:33	19:56	02:03	00:56	9022	220	30987	40
PY1 Rio de Janeiro	09:09	09:33	09:51	20:05	20:23	20:48	02:58	01:30	9953	230	30056	50
PY2 Sao Paulo	09:24	09:48	10:06	20:18	20:36	21:00	03:12	01:38	10187	232	29822	52
PY3 Rio Grande do Sul	10:03	10:28	10:48	20:33	20:53	21:18	03:41	01:52	11141	234	28868	54
PY4 Minas Gerais	09:16	09:40	09:58	20:25	20:43	21:07	03:11	01:40	9786	234	30223	54
PY5 Parana	09:46	10:11	10:29	20:35	20:54	21:19	03:32	01:50	10590	235	29419	55
PY6 Bahia	08:34	08:57	09:14	20:05	20:22	20:45	02:39	01:21	8737	231	31272	51
PY7 Pernambuco	08:12	08:34	08:51	19:59	20:16	20:38	02:25	01:13	8064	230	31945	50
PY8 Para	09:13	09:36	09:52	21:16	21:33	21:55	03:34	01:58	8623	248	31386	68
PY9 Mato Grosso	09:41	10:04	10:21	21:02	21:19	21:42	03:41	02:00	9901	242	30108	62
PZ Suriname	09:11	09:33	09:50	21:42	21:59	22:21	03:46	02:06	8006	256	32003	76
S0 Western Sahara	05:36	06:02	06:21	19:24	19:42	20:08	00:52	00:12	3464	226	36545	46
S5 Slovenia	02:48	03:25	03:51				23:07	23:10	650	169	39359	349
S7 Seychelles	02:05	02:27	02:44				20:24	21:28	7448	133	32561	313
S9 Sao Tome	05:12	05:34	05:51	17:26	17:43	18:05	23:38	23:29	5752	188	34257	8
SP Krakow	02:04	02:46	03:15				22:46	22:59	527	108	39482	288
SP Warsaw	01:45	02:32	03:02				22:41	22:58	556	82	39453	262
ST Sudan	03:03	03:26	03:43				21:55	22:26	4385	149	35624	329
SU Egypt	02:36	03:03	03:23				22:00	22:31	2846	141	37163	321
SV Greece	02:41	03:13	03:35				22:34	22:51	1582	147	38427	327
SV2/A Mt Athos	02:33	03:05	03:27				22:28	22:48	1558	141	38451	321
SV5 Dodecanese	02:30	03:00	03:21				22:12	22:39	2087	139	37922	319
SV9 Crete	02:46	03:15	03:36				22:25	22:46	2071	147	37938	327
T5 Somalia	02:35	02:57	03:14				21:04	21:53	6296	140	33713	320
T7 San Marino	03:06	03:41	04:05	18:26	18:51	19:26	23:16	23:15	872	183	39137	3
TA1 Istanbul	02:12	02:45	03:08				22:10	22:39	1701	129	38308	309
TA2 Ankara	02:00	02:31	02:54				21:54	22:30	2017	123	37992	303
TA3 Izmir	02:28	02:59	03:21				22:17	22:42	1851	138	38158	318
TA5 Adana	02:00	02:30	02:52				21:44	22:23	2403	124	37606	304
TF Iceland	--:--	03:40	04:40	22:26	23:26	--:--	01:33	00:11	2425	318	37584	138
TG Guatemala	11:17	11:40	11:57	00:18	00:35	00:58	06:08	03:43	9639	290	30370	110
TI Costa Rica	10:59	11:22	11:39	23:45	00:01	00:24	05:42	03:26	9616	282	30393	102
TI9 Cocos Is	11:19	11:41	11:58	23:49	00:06	00:28	05:54	03:36	10210	281	29799	101
TJ Cameroon	04:47	05:10	05:26	17:13	17:29	17:51	23:19	23:17	5330	182	34679	2
TK Corsica	03:29	04:02	04:26	18:35	18:59	19:32	23:30	23:23	1140	198	38869	18
TL Central African Rep	04:18	04:40	04:57	16:45	17:01	17:24	22:51	23:00	5294	172	34715	352
TN Congo	04:45	05:07	05:23	16:49	17:06	17:28	23:06	23:09	6045	178	33964	358
TR Gabon	04:52	05:14	05:31	17:05	17:21	17:43	23:18	23:16	5770	181	34239	1
TT Chad	04:19	04:42	04:59	17:12	17:28	17:51	23:05	23:09	4415	177	35594	357
TU Cote d'Ivoire	05:47	06:09	06:26	18:17	18:34	18:56	00:21	23:55	5370	203	34639	23
TY Benin	05:20	05:42	05:59	17:53	18:09	18:32	23:56	23:40	5142	195	34867	15
TZ Mali	05:50	06:13	06:30	18:44	19:01	19:24	00:37	00:05	4743	211	35266	31
V2 Antigua	09:17	09:41	09:58	22:27	22:45	23:08	04:13	02:20	7477	269	32532	89
V3 Belize	11:02	11:26	11:43	00:13	00:31	00:55	05:58	03:34	9230	289	30779	109
V4 St Kitts	09:21	09:44	10:02	22:31	22:49	23:12	04:16	02:23	7526	270	32483	90
V5 Namibia	05:07	05:31	05:49	16:05	16:23	16:47	22:57	23:04	8276	176	31733	356
VE1 Halifax NS	08:07	08:42	09:07	23:32	23:57	00:33	04:20	01:59	5462	294	34547	114
VE2 Montreal QC	08:43	09:19	09:45	00:15	00:40	01:17	05:00	02:20	6019	300	33990	120
VE3 Thunder Bay ON	09:31	10:11	10:38	01:27	01:54	02:34	06:02	02:48	6670	311	33339	131
VE3 Toronto ON	09:14	09:49	10:13	00:33	00:57	01:32	05:23	02:37	6494	302	33515	122
VE4 Winnipeg MB	09:54	10:36	11:04	02:04	02:32	03:14	06:34	03:00	6938	317	33071	137
VE5 Regina SK	10:20	11:03	11:32	02:36	03:05	03:48	07:04	03:14	7221	322	32788	142
VE9 Saint John NB	08:14	08:50	09:15	23:44	00:10	00:46	04:30	02:04	5578	296	34431	116
VK0H Heard	02:31	03:12	03:45				19:11	21:14	12944	144	27065	324
V01 St.John's NL	07:09	07:48	08:14	22:58	23:25	00:04	03:36	01:31	4587	291	35422	111
V02 Goose Bay NL	07:03	07:52	08:24	23:50	00:22	01:11	04:07	01:37	4741	302	35268	122
VP2E Anguilla	09:20	09:44	10:01	22:34	22:51	23:15	04:18	02:23	7472	271	32537	91
VP2M Montserrat	09:20	09:43	10:01	22:28	22:45	23:09	04:14	02:22	7538	269	32471	89
VP2V Br Virgin Is	09:26	09:50	10:07	22:41	22:58	23:22	04:24	02:27	7563	272	32446	92
VP5 Turks & Caicos	09:48	10:13	10:31	23:16	23:34	23:59	04:53	02:45	7771	280	32238	100
VP6 Pitcairn	15:00	15:24	15:43	01:49	02:07	02:32	08:46	05:57	15720	299	24289	119
VP6/D Ducie	14:38	15:02	15:21	01:28	01:47	02:11	08:25	05:34	15359	294	24650	114
VP8 Falkland	11:11	11:51	12:22	19:32	20:03	20:42	03:57	01:35	13274	222	26735	42
VP8G South Georgia	09:56	10:38	11:13	17:51	18:26	19:08	02:32	00:50	12652	209	27357	29
VP8H South Shetland	11:59	12:59	13:57	17:58	18:56	19:56	03:57	01:13	14095	214	25914	34
VP80 South Orkney	11:01	11:56	12:47	17:28	18:19	19:15	03:08	00:56	13534	209	26475	29
VP8S South Sandwich	09:30	10:18	11:00	16:42	17:24	18:13	01:51	00:26	12696	202	27313	22
VP9 Bermuda	08:55	09:22	09:42	23:07	23:27	23:55	04:25	02:18	6445	283	33564	103
VY2 Prince Edward Is	07:58	08:35	09:01	23:35	00:01	00:38	04:18	01:56	5331	295	34678	115
W0 Bismarck ND	10:25	11:03	11:29	02:08	02:34	03:12	06:49	03:19	7375	317	32634	137
W0 Denver CO	11:12	11:44	12:06	02:04	02:27	02:59	07:05	03:50	8208	315	31801	135
W0 Des Moines IA	10:20	10:53	11:16	01:24	01:47	02:20	06:20	03:16	7473	309	32536	129
W0 Jefferson City MO	10:25	10:56	11:18	01:10	01:32	02:03	06:14	03:19	7644	306	32365	126
W0 Lincoln NE	10:35	11:07	11:30	01:34	01:57	02:29	06:32	03:25	7694	310	32315	130
W0 Pierre SD	10:35	11:11	11:35	01:58	02:23	02:59	06:47	03:25	7570	315	32439	135
W0 St. Paul MN	10:04	10:40	11:05	01:31	01:56	02:32	06:18	03:06	7155	311	32854	131
W0 Topeka KS	10:37	11:09	11:31	01:26	01:48	02:19	06:28	03:27	7793	308	32216	128
W1 Augusta ME	08:33	09:08	09:33	23:56	00:21	00:56	04:45	02:14	5874	297	34135	117

W1 Boston MA	08:46	09:20	09:44	23:56	00:19	00:53	04:50	02:20	6092	296	33917	116
W1 Concord NH	08:45	09:19	09:43	00:00	00:24	00:58	04:52	02:20	6062	297	33947	117
W1 Hartford CT	08:55	09:28	09:52	00:01	00:24	00:57	04:56	02:25	6238	296	33771	116
W1 Montpelier VT	08:44	09:20	09:44	00:07	00:32	01:07	04:56	02:20	6044	299	33965	119
W1 Providence RI	08:50	09:23	09:46	23:56	00:19	00:52	04:51	02:22	6152	296	33857	116
W2 Albany NY	08:56	09:30	09:54	00:07	00:31	01:05	05:00	02:26	6234	298	33775	118
W2 New York City NY	09:04	09:37	10:00	00:03	00:26	00:59	05:01	02:29	6387	296	33622	116
W2 Trenton NJ	09:09	09:41	10:04	00:05	00:28	01:00	05:04	02:32	6483	296	33526	116
W3 Annapolis MD	09:21	09:52	10:14	00:09	00:31	01:02	05:11	02:38	6682	296	33327	116
W3 Dover DE	09:16	09:48	10:10	00:05	00:28	00:59	05:08	02:36	6609	296	33400	116
W3 Harrisburg PA	09:18	09:50	10:12	00:13	00:36	01:08	05:13	02:37	6607	298	33402	118
W3 Pittsburgh PA	09:30	10:02	10:25	00:26	00:49	01:21	05:25	02:44	6784	300	33225	120
W3 Washington DC	09:23	09:54	10:16	00:10	00:33	01:04	05:13	02:39	6716	297	33293	117
W4 Atlanta GA	10:09	10:37	10:58	00:28	00:49	01:17	05:43	03:06	7589	297	32420	117
W4 Charlotte NC	09:50	10:19	10:40	00:17	00:38	01:07	05:29	02:55	7254	296	32755	116
W4 Columbia SC	09:55	10:23	10:44	00:15	00:36	01:04	05:30	02:57	7363	295	32646	115
W4 Frankfort KY	09:57	10:28	10:50	00:40	01:02	01:33	05:45	03:00	7254	301	32755	121
W4 Knoxville TN	10:01	10:30	10:51	00:31	00:53	01:22	05:41	03:02	7388	299	32621	119
W4 Memphis TN	10:28	10:57	11:18	00:54	01:15	01:44	06:06	03:19	7820	302	32189	122
W4 Montgomery AL	10:21	10:48	11:08	00:33	00:53	01:21	05:51	03:13	7822	298	32187	118
W4 Nashville TN	10:11	10:41	11:02	00:43	01:04	01:34	05:53	03:09	7533	301	32476	121
W4 Raleigh NC	09:40	10:09	10:30	00:10	00:31	01:00	05:20	02:48	7070	295	32939	115
W4 Richmond VA	09:29	10:00	10:21	00:09	00:31	01:01	05:15	02:43	6855	296	33154	116
W4 Tallahassee FL	10:18	10:45	11:04	00:21	00:41	01:08	05:43	03:10	7864	295	32145	115
W5 Austin TX	11:12	11:39	11:58	01:15	01:34	02:01	06:36	03:49	8680	304	31329	124
W5 Baton Rouge LA	10:45	11:12	11:32	00:49	01:08	01:35	06:10	03:30	8287	300	31722	120
W5 Dallas TX	11:01	11:29	11:49	01:16	01:36	02:04	06:33	03:42	8402	305	31607	125
W5 Jackson MS	10:36	11:04	11:24	00:48	01:08	01:36	06:06	03:24	8065	300	31944	120
W5 Little Rock AR	10:38	11:06	11:27	01:02	01:23	01:52	06:15	03:26	7974	303	32035	123
W5 Oklahoma City OK	10:56	11:25	11:46	01:25	01:45	02:15	06:35	03:39	8199	307	31810	127
W5 Santa Fe NM	11:29	11:59	12:20	01:59	02:20	02:49	07:09	04:03	8630	313	31379	133
W6 Los Angeles CA	12:23	12:52	13:12	02:44	03:05	03:33	07:58	04:47	9353	321	30656	141
W7 Boise ID	11:42	12:17	12:41	03:00	03:24	03:59	07:50	04:10	8344	324	31665	144
W7 Carson City NV	12:13	12:45	13:07	03:02	03:24	03:56	08:04	04:37	8919	325	31090	145
W7 Cheyenne WY	11:06	11:39	12:02	02:07	02:30	03:03	07:05	03:46	8071	316	31938	136
W7 Helena MT	11:12	11:49	12:15	02:52	03:18	03:56	07:34	03:47	7890	323	32119	143
W7 Las Vegas NV	12:05	12:34	12:56	02:37	02:58	03:28	07:46	04:31	9019	320	30990	140
W7 Phoenix AZ	12:01	12:29	12:49	02:18	02:39	03:07	07:34	04:27	9138	316	30871	136
W7 Salt Lake City UT	11:36	12:08	12:31	02:35	02:58	03:30	07:33	04:07	8433	320	31576	140
W8 Charleston WV	09:43	10:14	10:36	00:28	00:50	01:20	05:32	02:52	7047	299	32962	119
W8 Cleveland OH	09:32	10:05	10:29	00:36	00:59	01:32	05:32	02:47	6799	302	33210	122
W8 Columbus OH	09:43	10:15	10:38	00:37	01:00	01:32	05:37	02:52	6995	301	33014	121
W8 Lansing MI	09:39	10:13	10:37	00:51	01:14	01:48	05:44	02:51	6867	304	33142	124
W9 Indianapolis IN	09:57	10:28	10:51	00:49	01:12	01:43	05:50	03:01	7197	303	32812	123
W9 Madison WI	09:57	10:31	10:55	01:11	01:35	02:09	06:03	03:02	7110	307	32899	127
W9 Springfield IL	10:11	10:42	11:05	01:03	01:26	01:58	06:04	03:09	7393	305	32616	125
XE Guadalajara	11:56	12:21	12:38	01:19	01:37	02:01	06:59	04:19	9874	303	30135	123
XE Merida	11:01	11:25	11:43	00:25	00:43	01:07	06:04	03:36	9017	293	30992	113
XE Mexico City	11:42	12:06	12:24	01:00	01:18	01:42	06:42	04:07	9752	299	30257	119
XE Monterrey	11:33	11:59	12:17	01:16	01:34	02:00	06:47	04:03	9242	303	30767	123
XF4 Revilla Gigedo	12:31	12:55	13:12	01:47	02:04	02:28	07:29	04:47	10484	308	29525	128
XT Burkina Faso	05:25	05:48	06:05	18:18	18:35	18:58	00:11	23:49	4573	202	35436	22
YK Syria	02:07	02:35	02:56				21:40	22:20	2763	128	37246	308
YN Nicaragua	11:04	11:27	11:44	23:57	00:14	00:36	05:50	03:31	9571	285	30438	105
YO Romania	02:05	02:42	03:07				22:23	22:47	1146	122	38863	302
YS El Salvador	11:13	11:36	11:53	00:11	00:28	00:51	06:02	03:39	9630	288	30379	108
YT Serbia	02:30	03:06	03:30				22:44	22:58	952	141	39057	321
YV Caracas	09:50	10:13	10:29	22:37	22:54	23:16	04:33	02:37	8400	269	31609	89
YV Maracaibo	10:08	10:31	10:48	22:56	23:13	23:35	04:52	02:50	8711	272	31298	92
YV0 Aves	09:27	09:51	10:08	22:32	22:49	23:13	04:20	02:26	7727	269	32282	89
Z2 Zimbabwe	04:11	04:34	04:52	15:20	15:38	16:01	22:06	22:33	8086	163	31923	343
Z3 Macedonia	02:37	03:11	03:34				22:38	22:54	1306	146	38703	326
Z8 South Sudan	03:25	03:48	04:04	15:54	16:10	16:33	21:59	22:28	5495	155	34514	335
ZA Albania	02:46	03:19	03:42				22:45	22:58	1282	152	38727	332
ZB2 Gibraltar	04:45	05:15	05:36	19:17	19:39	20:08	00:27	23:55	2262	227	37747	47
ZC4 UK Bases on Cyprus	02:17	02:46	03:06				21:53	22:28	2492	132	37517	312
ZD7 St Helena	06:27	06:50	07:08	17:49	18:06	18:29	00:28	23:59	7743	199	32266	19
ZD8 Ascension	06:50	07:12	07:29	18:37	18:54	19:16	01:03	00:21	7134	210	32875	30
ZD9 Tristan da Cunha	07:31	08:00	08:21	17:28	17:50	18:18	00:55	00:11	10183	200	29826	20
ZF Cayman	10:31	10:55	11:12	23:49	00:06	00:30	05:30	03:12	8614	285	31395	105
ZP Paraguay	10:10	10:35	10:54	20:58	21:17	21:42	03:56	02:05	10965	240	29044	60
ZS Cape Town	05:22	05:49	06:10	15:33	15:54	16:21	22:51	23:01	9546	175	30463	355
ZS Johannesburg	04:29	04:54	05:13	15:14	15:32	15:57	22:13	22:38	8793	166	31216	346
ZS8 Pr Edward & Marion	04:34	05:09	05:36	13:33	14:00	14:34	21:34	22:22	11220	163	28789	343

SUNSET AT J061LS 02:21 03:06 03:37 | 18:51 19:21 20:06 | 23:14
 Lat: 51.75, Lon: 12.91667

CITY	DAWN	RISE	POST	PRE	SET	DUSK	MNITE	HALFW	KM/SP	DEG	KM/LP	DEG
1A SMOM	03:14	03:47	04:11	18:20	18:44	19:17	23:15	23:15	1099	182	38910	2
1S Spratly Is	21:44	22:07	22:24	10:33	10:50	11:13	16:28	18:49	9811	74	30198	254
3A Monaco				18:46	19:10	19:45	23:36	23:26	984	207	39025	27

3B6 Agalega Is	02:09	02:32	02:49	13:49	14:06	14:28	20:19	21:26	8077	135	31932	315
3B7 St. Brandon Is	02:08	02:31	02:49	13:26	13:44	14:07	20:07	21:19	8856	135	31153	315
3B8 Mauritius	02:21	02:45	03:03	13:28	13:46	14:09	20:15	21:26	9101	138	30908	318
3B9 Rodriguez Is	01:57	02:20	02:38	13:05	13:23	13:47	19:52	21:10	9332	133	30677	313
3C Equatorial Guinea	04:58	05:20	05:36	17:16	17:33	17:55	23:26	23:22	5559	184	34450	4
3C0 Annobon Is	05:19	05:42	05:58	17:28	17:44	18:06	23:43	23:32	5953	189	34056	9
3DA Swaziland	04:16	04:41	05:00	14:59	15:18	15:43	22:00	22:30	8886	163	31123	343
3V Tunisia	03:41	04:11	04:33	18:17	18:39	19:09	23:25	23:20	1679	189	38330	9
3W Da Nang	21:59	22:23	22:40	11:05	11:22	11:46	16:53	19:10	8971	76	31038	256
3W Hanoi	21:58	22:23	22:41	11:23	11:41	12:05	17:02	19:20	8385	74	31624	254
3W Ho Chi Minh	22:15	22:38	22:55	11:03	11:20	11:43	16:59	19:12	9318	80	30691	260
3XA Guinea				19:02	19:19	19:42	01:00	00:19	5269	217	34740	37
3Y/B Bouvet	07:16	07:59	08:34	15:10	15:45	16:27	23:52	23:32	11844	186	28165	6
3Y/P Peter I				--:--	18:59	21:08	06:08	01:27	15760	215	24249	35
4J Azerbaijan	00:57	01:29	01:52	15:55	16:18	16:50	20:53	21:56	2943	101	37066	281
4L Georgia	01:05	01:38	02:02	16:11	16:34	17:07	21:06	22:04	2644	102	37365	282
40 Montenegro	02:44	03:18	03:42	17:55	18:19	18:52	22:48	23:00	1134	153	38875	333
4S Sri Lanka	00:04	00:27	00:44	12:42	12:58	13:21	18:43	20:23	7832	103	32177	283
4U1ITU ITU Geneva				18:58	19:24	20:01	23:41	23:28	793	222	39216	42
4U1VIC Vienna Intl Center				18:24	18:51	19:31	23:00	23:06	467	146	39542	326
4W Timor Leste	21:31	21:53	22:10	09:16	09:33	09:55	15:43	18:12	12302	77	27707	257
4X Israel	02:17	02:44	03:04	16:28	16:48	17:16	21:46	22:23	2818	133	37191	313
5A Libya	03:41	04:09	04:29	17:56	18:16	18:44	23:13	23:13	2104	179	37905	359
5B Cyprus	02:13	02:43	03:03	16:40	17:01	17:30	21:52	22:27	2460	131	37549	311
5H Tanzania	03:13	03:36	03:52	15:05	15:21	15:44	21:29	22:09	6978	150	33031	330
5N Nigeria	05:15	05:38	05:55	17:49	18:06	18:28	23:52	23:37	5113	193	34896	13
5R Madagascar	02:59	03:23	03:40	14:10	14:28	14:51	20:55	21:50	8545	147	31464	327
5T Mauritania				19:25	19:43	20:07	01:09	00:24	4523	225	35486	45
5U Niger	05:08	05:31	05:48	18:05	18:22	18:46	23:57	23:40	4363	197	35646	17
5V Togo	05:25	05:47	06:04	17:57	18:14	18:36	00:00	23:43	5183	196	34826	16
5X Uganda	03:29	03:51	04:07	15:43	15:59	16:21	21:55	22:25	6009	156	34000	336
5Z Kenya	03:14	03:37	03:53	15:23	15:40	16:02	21:38	22:15	6310	151	33699	331
6W Senegal				19:25	19:42	20:06	01:15	00:28	4913	224	35096	44
70 Yemen	02:17	02:41	02:58	15:18	15:35	15:58	21:08	21:56	5011	134	34998	314
7P Lesotho	04:37	05:03	05:22	15:09	15:28	15:54	22:15	22:40	9129	167	30880	347
7Q Malawi	03:44	04:07	04:25	15:06	15:23	15:47	21:45	22:20	7809	157	32200	337
7X Algeria				18:45	19:07	19:37	23:53	23:36	1842	209	38167	29
8Q Maldives	00:39	01:01	01:18	13:05	13:22	13:44	19:11	20:41	7660	111	32349	291
9A Croatia	02:43	03:20	03:45	18:18	18:43	19:20	23:01	23:07	700	160	39309	340
9G Ghana	05:30	05:52	06:09	18:01	18:17	18:40	00:05	23:45	5267	197	34742	17
9H Malta	03:27	03:56	04:18	17:58	18:19	18:48	23:08	23:10	1770	176	38239	356
9J Zambia	04:10	04:34	04:51	15:34	15:51	16:14	22:12	22:36	7615	164	32394	344
9K Kuwait	01:31	01:58	02:17	15:30	15:49	16:16	20:53	21:51	3819	117	36190	297
9L Sierra Leone				18:59	19:15	19:38	00:58	00:18	5372	216	34637	36
9M2 West Malaysia	22:48	23:10	23:27	11:11	11:27	11:49	17:19	19:24	9649	89	30360	269
9M6 East Malaysia	21:45	22:08	22:24	10:17	10:34	10:57	16:21	18:42	10386	76	29623	256
9N Nepal	23:06	23:32	23:51	12:57	13:16	13:43	18:24	20:20	6441	85	33568	265
9Q Dem. Rep. Congo	04:10	04:32	04:48	16:15	16:31	16:53	22:31	22:48	6115	167	33894	347
9U Burundi	03:47	04:10	04:26	15:50	16:06	16:28	22:08	22:33	6328	160	33681	340
9V Singapore	22:42	23:04	23:21	10:59	11:16	11:38	17:10	19:18	9945	88	30064	268
9X Rwanda	03:42	04:05	04:21	15:49	16:06	16:28	22:05	22:31	6186	159	33823	339
A2 Botswana	04:28	04:52	05:10	15:27	15:45	16:09	22:18	22:41	8356	167	31653	347
A4 Oman	01:02	01:27	01:45	14:37	14:55	15:20	20:11	21:24	4966	111	35043	291
A5 Bhutan	22:49	23:15	23:34	12:40	12:59	13:25	18:07	20:08	6754	82	33255	262
A6 United Arab Emirates	01:12	01:37	01:55	14:53	15:11	15:37	20:24	21:32	4612	113	35397	293
A7 Qatar	01:27	01:52	02:11	15:08	15:26	15:52	20:39	21:42	4382	117	35627	297
A9 Bahrain	01:28	01:54	02:13	15:14	15:32	15:58	20:43	21:44	4236	118	35773	298
AP Karachi	00:26	00:51	01:10	14:05	14:24	14:49	19:37	21:04	5419	102	34590	282
AP Lahore	23:40	00:07	00:27	13:49	14:09	14:36	19:08	20:50	5382	90	34627	270
BS7 Scarborough Reef	21:23	21:46	22:03	10:26	10:43	11:06	16:14	18:41	9677	69	30332	249
BV2 Taipei	20:47	21:13	21:31	10:28	10:46	11:11	15:59	18:38	9029	60	30980	240
BV6 Tainan	20:57	21:22	21:40	10:29	10:47	11:12	16:05	18:40	9134	63	30875	243
BV9P Pratas Is	21:16	21:40	21:58	10:39	10:57	11:21	16:18	18:48	9116	67	30893	247
BY Beijing	20:25	20:57	21:20	11:20	11:42	12:14	16:20	19:16	7434	54	32575	234
BY Shanghai	20:32	21:00	21:19	10:40	11:00	11:27	16:00	18:46	8475	57	31534	237
C3 Andorra				19:06	19:30	20:03	23:59	23:39	1340	224	38669	44
C5 Gambia				19:20	19:37	20:01	01:12	00:26	5011	223	34998	43
C9 Mozambique	04:05	04:30	04:48	14:53	15:12	15:37	21:51	22:25	8779	161	31230	341
CN Morocco				19:13	19:34	20:02	00:28	23:56	2481	224	37528	44
CT Portugal				19:35	19:57	20:28	00:37	00:00	2150	237	37859	57
D2 Angola	04:51	05:14	05:31	16:24	16:41	17:04	22:58	23:04	7146	176	32863	356
D6 Comoros	03:05	03:27	03:44	14:40	14:57	15:20	21:12	21:59	7635	148	32374	328
DL Berlin				18:52	19:23	20:10	23:12	23:13	104	19	39905	199
DL Frankfurt				19:02	19:30	20:13	23:31	23:23	356	240	39653	60
DL Munich				18:43	19:10	19:50	23:19	23:17	412	195	39597	15
DU Philippines	21:02	21:25	21:42	09:58	10:15	10:39	15:50	18:21	10233	66	29776	246
E3 Eritrea	02:38	03:01	03:18	15:41	15:58	16:22	21:30	22:10	4660	141	35349	321
E4 Palestine	02:16	02:44	03:03	16:26	16:46	17:13	21:45	22:22	2871	132	37138	312
E7 Bosnia-Herzegovina	02:42	03:17	03:42	18:02	18:27	19:02	22:52	23:02	970	154	39039	334
EA Barcelona				19:00	19:24	19:56	23:57	23:37	1417	220	38592	40
EA Madrid				19:21	19:44	20:16	00:20	23:51	1793	232	38216	52
EA6 Balearic Is				18:52	19:15	19:47	23:53	23:36	1550	213	38459	33
EA8 Canary Is				19:41	20:00	20:26	01:07	00:21	3542	233	36467	53
EA9 Ceuta				19:17	19:38	20:07	00:27	23:55	2281	226	37728	46

EA9 Melilla				19:06	19:27	19:56	00:17	23:50	2225	221	37784	41
EK Armenia	01:10	01:42	02:05	16:07	16:30	17:02	21:06	22:03	2730	105	37279	285
EL Liberia				18:45	19:02	19:25	00:48	00:12	5510	212	34499	32
EP Iran	01:00	01:29	01:50	15:30	15:51	16:20	20:40	21:46	3511	105	36498	285
ER Moldova	01:45	02:24	02:50	17:30	17:56	18:35	22:10	22:40	1265	108	38744	288
ES Estonia				18:33	19:14	20:23	22:21	22:50	1137	41	38872	221
ET Ethiopia	02:50	03:12	03:29	15:32	15:48	16:11	21:30	22:10	5303	144	34706	324
EU Belarus	01:06	01:56	02:29	18:01	18:34	19:24	22:15	22:45	1007	71	39002	251
EX Kyrgyzstan	23:01	23:35	23:59	14:15	14:39	15:13	19:07	20:59	4608	77	35401	257
EY Tajikistan	23:41	00:12	00:34	14:27	14:49	15:20	19:30	21:08	4495	86	35514	266
EZ Turkmenistan	00:24	00:55	01:17	15:07	15:29	15:59	20:12	21:31	3822	96	36187	276
F Marseille				18:53	19:17	19:51	23:44	23:30	1095	214	38914	34
F Nantes				19:33	19:59	20:38	00:12	23:44	1156	250	38853	70
F Paris				19:22	19:50	20:31	23:55	23:35	807	251	39202	71
F Strasbourg				19:00	19:28	20:08	23:34	23:24	503	229	39506	49
FH Mayotte	02:58	03:21	03:38	14:30	14:47	15:10	21:04	21:54	7823	146	32186	326
FK New Caledonia	19:09	19:33	19:51	06:08	06:26	06:50	12:59	15:26	16025	45	23984	225
FK/C Chesterfield Is	19:37	20:01	20:19	06:46	07:03	07:27	13:32	16:09	15355	53	24654	233
FR Reunion	02:31	02:54	03:12	13:35	13:53	14:16	20:23	21:31	9075	140	30934	320
FR/G Glorioso	02:49	03:11	03:28	14:24	14:41	15:04	20:56	21:49	7777	144	32232	324
FR/J Juan de Nova	03:15	03:39	03:56	14:33	14:50	15:14	21:14	22:01	8180	150	31829	330
FR/T Tromelin	02:26	02:49	03:07	13:48	14:05	14:28	20:27	21:32	8530	139	31479	319
FT5/W Crozet	03:37	04:11	04:38	12:38	13:05	13:39	20:38	21:52	11535	154	28474	334
FT5/X Kerguelen	02:36	03:12	03:41	11:16	11:45	12:22	19:29	21:18	12426	144	27583	324
FT5Z Amsterdam	01:33	02:02	02:24	11:26	11:48	12:17	18:55	20:47	11762	132	28247	312
H4 Solomon Is	19:15	19:37	19:54	06:57	07:14	07:37	13:26	15:49	14443	44	25566	224
H40 Temotu	18:51	19:14	19:31	06:28	06:45	07:08	12:59	15:11	14921	37	25088	217
HA Hungary	02:23	03:01	03:27	18:06	18:33	19:11	22:47	23:00	730	135	39279	315
HB Switzerland				18:55	19:22	20:00	23:36	23:25	669	219	39340	39
HB0 Liechtenstein				18:48	19:14	19:52	23:27	23:21	571	207	39438	27
HL South Korea	19:53	20:23	20:44	10:27	10:48	11:18	15:36	18:39	8346	49	31663	229
HS Thailand	22:34	22:57	23:14	11:32	11:49	12:12	17:23	19:31	8647	83	31362	263
HV Vatican City	03:14	03:47	04:11	18:21	18:44	19:17	23:16	23:15	1099	182	38910	2
HZ Saudi Arabia	01:47	02:13	02:31	15:26	15:44	16:10	20:58	21:53	4151	124	35858	304
I Milan				18:43	19:09	19:45	23:28	23:22	754	202	39255	22
I Rome	03:14	03:47	04:10	18:20	18:43	19:16	23:15	23:14	1108	181	38901	1
IS0 Sardinia				18:29	18:52	19:24	23:29	23:22	1341	195	38668	15
J2 Djibouti	02:28	02:50	03:07	15:18	15:35	15:58	21:13	21:59	5226	138	34783	318
J5 Guinea-Bissau				19:14	19:31	19:54	01:08	00:24	5129	221	34880	41
JA Hiroshima	19:39	20:08	20:29	10:03	10:23	10:52	15:16	18:20	8779	47	31230	227
JA Kagoshima	19:55	20:22	20:42	10:04	10:24	10:52	15:23	18:20	8938	50	31071	230
JA Kyoto	19:24	19:53	20:14	09:51	10:11	10:40	15:02	18:11	8884	44	31125	224
JA Sapporo	18:33	19:07	19:31	09:48	10:12	10:47	14:40	18:18	8362	36	31647	216
JA Tokyo	19:06	19:36	19:57	09:36	09:57	10:27	14:47	18:00	9004	41	31005	221
JD/M Minami Torishima	18:39	19:04	19:22	08:16	08:35	09:00	13:49	16:38	10750	35	29259	215
JD/O Ogasawara	19:20	19:46	20:04	09:09	09:27	09:53	14:36	17:32	9956	44	30053	224
JT Mongolia	20:28	21:08	21:35	12:21	12:48	13:27	16:58	19:56	6263	53	33746	233
JY Jordan	02:12	02:40	03:00	16:23	16:43	17:11	21:42	22:20	2890	131	37119	311
KH0 N Mariana Is	19:31	19:54	20:11	08:34	08:51	09:14	14:22	17:02	11296	46	28713	226
KH2 Guam	19:38	20:01	20:18	08:35	08:52	09:15	14:26	17:04	11413	48	28596	228
LX Luxembourg				19:10	19:39	20:20	23:41	23:28	525	248	39484	68
LY Lithuania	01:09	02:01	02:34	18:14	18:48	19:40	22:24	22:50	882	64	39127	244
LZ Bulgaria	02:24	02:57	03:21	17:32	17:56	18:29	22:26	22:48	1394	136	38615	316
OD Lebanon	02:09	02:37	02:58	16:29	16:50	17:18	21:43	22:22	2688	129	37321	309
OE Austria				18:24	18:51	19:31	23:00	23:07	464	147	39545	327
OH0 Aland Is				19:07	19:51	21:12	22:45	23:01	1038	22	38971	202
OH1 Pori				19:09	19:57	21:36	22:38	22:58	1205	23	38804	203
OH1 Salo				18:55	19:40	21:03	22:33	22:56	1146	29	38863	209
OH1 Turku				18:59	19:44	21:07	22:36	22:57	1120	27	38889	207
OH2 Hanko				18:52	19:35	20:53	22:34	22:56	1089	31	38920	211
OH2 Helsinki				18:47	19:31	20:52	22:26	22:52	1191	34	38818	214
OH2 Hyvinkaa				18:50	19:35	21:01	22:26	22:53	1228	32	38781	212
OH2 Porvoo				18:45	19:30	20:53	22:23	22:51	1240	34	38769	214
OH3 Forssa				18:56	19:42	21:10	22:31	22:55	1199	29	38810	209
OH3 Hameenlinna				18:54	19:40	21:12	22:27	22:54	1242	30	38767	210
OH3 Lahti				18:49	19:36	21:06	22:23	22:51	1283	32	38726	212
OH3 Tampere				19:01	19:49	21:29	22:30	22:55	1264	27	38745	207
OH4 Mikkeli				18:48	19:37	21:21	22:16	22:49	1402	33	38607	213
OH4 Savonlinna				18:43	19:32	21:22	22:10	22:46	1475	34	38534	214
OH5 Kotka				18:41	19:25	20:49	22:18	22:49	1296	36	38713	216
OH5 Kouvola				18:44	19:30	20:59	22:19	22:50	1314	34	38695	214
OH5 Lappeenranta				18:40	19:26	20:58	22:13	22:47	1390	36	38619	216
OH6 Jyvaskyla				18:59	19:50	21:56	22:22	22:52	1398	28	38611	208
OH6 Seinajoki	--:--	01:00	01:53	19:15	20:08	--:--	22:34	22:57	1358	22	38651	202
OH7 Joensuu				18:46	19:38	--:--	22:06	22:45	1566	33	38443	213
OH7 Kuopio				18:57	19:50	--:--	22:15	22:49	1514	30	38495	210
OH8 Kajaani	--:--	00:19	01:20	19:09	20:10	--:--	22:14	22:49	1627	26	38382	206
OJ0 Market Reef				19:11	19:55	21:17	22:49	23:03	1024	19	38985	199
OK Czech Rep				18:38	19:07	19:49	23:08	23:11	214	150	39795	330
OM Slovakia	02:15	02:55	03:22	18:12	18:40	19:20	22:47	23:00	592	125	39417	305
ON Belgium				19:22	19:51	20:34	23:48	23:31	612	263	39397	83
OZ Denmark				19:17	19:52	20:46	23:24	23:19	438	338	39571	158
P2 Papua New Guinea	20:06	20:28	20:45	07:48	08:05	08:28	14:16	16:51	13758	58	26251	238
P5 North Korea	19:51	20:22	20:45	10:40	11:02	11:34	15:42	18:49	8017	49	31992	229

PA Netherlands				19:23	19:54	20:40	23:45	23:29	539	277	39470	97
PY0T Trindade & Martim Vaz Is				19:15	19:33	19:56	02:03	00:56	9022	220	30987	40
S0 Western Sahara				19:24	19:42	20:08	00:52	00:12	3464	226	36545	46
S2 Bangladesh	22:55	23:20	23:38	12:30	12:48	13:13	18:04	20:03	7116	84	32893	264
S5 Slovenia	02:48	03:25	03:51	18:24	18:50	19:27	23:07	23:10	650	169	39359	349
S7 Seychelles	02:05	02:27	02:44	14:03	14:20	14:42	20:24	21:28	7448	133	32561	313
S9 Sao Tome	05:12	05:34	05:51	17:26	17:43	18:05	23:38	23:29	5752	188	34257	8
SM Sweden				19:20	20:01	21:14	23:04	23:10	846	9	39163	189
SP Krakow	02:04	02:46	03:15	18:16	18:45	19:27	22:46	22:59	527	108	39482	288
SP Warsaw				18:20	18:51	19:37	22:41	22:58	556	82	39453	262
ST Sudan	03:03	03:26	03:43	16:07	16:24	16:48	21:55	22:26	4385	149	35624	329
SU Egypt	02:36	03:03	03:23	16:38	16:58	17:25	22:00	22:31	2846	141	37163	321
SV Greece	02:41	03:13	03:35	17:32	17:54	18:26	22:34	22:51	1582	147	38427	327
SV2/A Mt Athos	02:33	03:05	03:27	17:28	17:51	18:23	22:28	22:48	1558	141	38451	321
SV5 Dodecanese	02:30	03:00	03:21	17:04	17:25	17:55	22:12	22:39	2087	139	37922	319
SV9 Crete	02:46	03:15	03:36	17:14	17:35	18:04	22:25	22:46	2071	147	37938	327
T5 Somalia	02:35	02:57	03:14	14:54	15:11	15:33	21:04	21:53	6296	140	33713	320
T7 San Marino	03:06	03:41	04:05	18:26	18:51	19:26	23:16	23:15	872	183	39137	3
T8 Palau	20:30	20:52	21:09	09:06	09:23	09:45	15:07	17:41	11430	60	28579	240
TA1 Istanbul	02:12	02:45	03:08	17:13	17:36	18:08	22:10	22:39	1701	129	38308	309
TA2 Ankara	02:00	02:31	02:54	16:54	17:16	17:48	21:54	22:30	2017	123	37992	303
TA3 Izmir	02:28	02:59	03:21	17:13	17:35	18:06	22:17	22:42	1851	138	38158	318
TA5 Adana	02:00	02:30	02:52	16:37	16:58	17:28	21:44	22:23	2403	124	37606	304
TJ Cameroon	04:47	05:10	05:26	17:13	17:29	17:51	23:19	23:17	5330	182	34679	2
TK Corsica				18:35	18:59	19:32	23:30	23:23	1140	198	38869	18
TL Central African Rep	04:18	04:40	04:57	16:45	17:01	17:24	22:51	23:00	5294	172	34715	352
TN Congo	04:45	05:07	05:23	16:49	17:06	17:28	23:06	23:09	6045	178	33964	358
TR Gabon	04:52	05:14	05:31	17:05	17:21	17:43	23:18	23:16	5770	181	34239	1
TT Chad	04:19	04:42	04:59	17:12	17:28	17:51	23:05	23:09	4415	177	35594	357
TU Cote d'Ivoire	05:47	06:09	06:26	18:17	18:34	18:56	00:21	23:55	5370	203	34639	23
TY Benin	05:20	05:42	05:59	17:53	18:09	18:32	23:56	23:40	5142	195	34867	15
TZ Mali				18:44	19:01	19:24	00:37	00:05	4743	211	35266	31
UA Komsomolsk Amur	18:12	18:55	19:25	10:30	10:59	11:42	14:57	19:00	7488	35	32521	215
UA Krasnoyarsk	20:25	21:22	21:57	13:50	14:26	15:22	17:54	20:44	4963	52	35046	232
UA Moscow	00:09	01:05	01:40	17:30	18:05	19:01	21:35	22:27	1672	65	38337	245
UA Nizhniy Novgorod	23:39	00:36	01:12	17:07	17:43	18:40	21:09	22:15	2073	64	37936	244
UA Omsk	21:54	22:47	23:20	15:03	15:37	16:30	19:12	21:18	3900	60	36109	240
UA Samara	23:40	00:29	01:01	16:29	17:00	17:49	20:45	22:01	2498	71	37511	251
UA Yekaterinburg	22:26	23:25	00:02	16:04	16:41	17:40	20:03	21:45	3080	61	36929	241
UA2 Kaliningrad				18:32	19:06	19:58	22:41	22:58	635	55	39374	235
UJ Uzbekistan	23:44	00:16	00:38	14:37	14:59	15:31	19:37	21:13	4294	86	35715	266
UN Kazakhstan	22:32	23:14	23:43	14:43	15:11	15:53	19:13	21:10	4121	68	35888	248
UR Ukraine	01:19	02:02	02:31	17:35	18:04	18:47	22:03	22:38	1235	90	38774	270
V5 Namibia	05:07	05:31	05:49	16:05	16:23	16:47	22:57	23:04	8276	176	31733	356
V6 Micronesia	18:55	19:18	19:34	07:30	07:47	08:10	13:32	15:57	12706	38	27303	218
V8 Brunei	21:52	22:14	22:31	10:21	10:37	11:00	16:26	18:45	10397	78	29612	258
VK0H Heard	02:31	03:12	03:45	10:38	11:11	11:52	19:11	21:14	12944	144	27065	324
VK0M Macquarie Is	20:56	21:39	22:14	04:46	05:21	06:04	13:30	18:47	17745	112	22264	292
VK1 Canberra	20:43	21:11	21:32	06:47	07:08	07:36	14:09	17:27	16123	80	23886	260
VK2 Sydney	20:32	20:59	21:20	06:43	07:04	07:31	14:01	17:15	16145	76	23864	256
VK3 Melbourne	21:04	21:33	21:55	06:56	07:18	07:47	14:25	17:49	16028	87	23981	267
VK4 Brisbane	20:12	20:37	20:56	06:51	07:10	07:35	13:53	16:49	15747	66	24262	246
VK5 Adelaide	21:23	21:51	22:12	07:30	07:51	08:19	14:51	18:01	15368	88	24641	268
VK6 Perth	22:48	23:15	23:35	09:08	09:29	09:55	16:22	19:04	13593	102	26416	282
VK7 Hobart	21:06	21:38	22:02	06:30	06:55	07:26	14:16	18:00	16500	92	23509	272
VK8 Darwin	21:16	21:38	21:55	08:48	09:05	09:28	15:22	17:56	13003	75	27006	255
VK9C Cocos-Keeling	23:31	23:54	00:11	11:05	11:22	11:45	17:38	19:40	10653	102	29356	282
VK9L Lord Howe	19:55	20:21	20:41	06:17	06:37	07:03	13:29	16:32	16465	64	23544	244
VK9M Mellish Reef	19:43	20:07	20:24	07:00	07:17	07:40	13:42	16:18	15005	54	25004	234
VK9N Norfolk	19:15	19:40	20:00	05:47	06:07	06:32	12:54	15:33	16754	49	23255	229
VK9W Willis	20:05	20:28	20:46	07:25	07:43	08:06	14:05	16:45	14557	60	25452	240
VK9X Christmas	22:53	23:16	23:33	10:33	10:49	11:12	17:03	19:15	11111	94	28898	274
VP8 Falkland				19:32	20:03	20:42	03:57	01:35	13274	222	26735	42
VP8G South Georgia	09:56	10:38	11:13	17:51	18:26	19:08	02:32	00:50	12652	209	27357	29
VP8H South Shetland				17:58	18:56	19:56	03:57	01:13	14095	214	25914	34
VP80 South Orkney	11:01	11:56	12:47	17:28	18:19	19:15	03:08	00:56	13534	209	26475	29
VP8S South Sandwich	09:30	10:18	11:00	16:42	17:24	18:13	01:51	00:26	12696	202	27313	22
VQ9 Chagos	01:01	01:24	01:40	12:51	13:08	13:30	19:16	20:45	8651	119	31358	299
VR2 Hong Kong	21:23	21:47	22:05	10:52	11:10	11:35	16:29	18:57	8814	68	31195	248
VU Chennai	23:56	00:20	00:37	12:52	13:09	13:32	18:44	20:25	7319	100	32690	280
VU Kolkata	23:05	23:30	23:48	12:36	12:54	13:19	18:12	20:08	7057	86	32952	266
VU Mumbai	00:15	00:39	00:56	13:32	13:49	14:13	19:14	20:47	6296	102	33713	282
VU New Delhi	23:36	00:02	00:21	13:32	13:51	14:17	18:57	20:40	5806	90	34203	270
VU4 Andaman & Nicobar	23:08	23:31	23:48	12:01	12:17	12:40	17:54	19:51	8265	90	31744	270
VU7 Lakshadweep Is	00:31	00:54	01:11	13:19	13:35	13:58	19:15	20:45	7027	108	32982	288
XT Burkina Faso	05:25	05:48	06:05	18:18	18:35	18:58	00:11	23:49	4573	202	35436	22
XU Kampuchea	22:21	22:43	23:00	11:11	11:28	11:51	17:06	19:17	9139	81	30870	261
XW Laos	22:13	22:37	22:54	11:32	11:50	12:14	17:13	19:27	8299	77	31710	257
XX9 Macau	21:25	21:50	22:08	10:54	11:12	11:37	16:31	18:59	8784	68	31225	248
XZ Myanmar	22:46	23:09	23:27	11:55	12:12	12:36	17:41	19:44	8094	85	31915	265
YA Afghanistan	23:52	00:21	00:42	14:16	14:36	15:05	19:29	21:04	4811	91	35198	271
YB Jakarta	22:42	23:04	23:21	10:35	10:52	11:14	16:58	19:10	10817	91	29192	271
YB Kupang	21:41	22:04	22:21	09:22	09:38	10:01	15:51	18:20	12309	80	27700	260
YB Medan	22:59	23:21	23:38	11:24	11:40	12:02	17:31	19:33	9395	91	30614	271

YB Palembang	22:45	23:08	23:24	10:49	11:05	11:27	17:06	19:16	10396	90	29613	270
YB Surabaya	22:20	22:43	22:59	10:10	10:27	10:49	16:34	18:53	11315	87	28694	267
YB Ujungpandang	21:50	22:12	22:29	09:46	10:03	10:25	16:07	18:31	11590	80	28419	260
YI Iraq	01:35	02:03	02:23	15:52	16:13	16:41	21:08	22:01	3247	117	36762	297
YJ Vanuatu	18:54	19:17	19:35	06:09	06:27	06:50	12:52	15:06	15660	39	24349	219
YK Syria	02:07	02:35	02:56	16:25	16:46	17:14	21:40	22:20	2763	128	37246	308
YL Latvia				18:30	19:07	20:07	22:29	22:53	923	47	39086	227
YO Romania	02:05	02:42	03:07	17:39	18:04	18:41	22:23	22:47	1146	122	38863	302
YT Serbia	02:30	03:06	03:30	17:57	18:22	18:58	22:44	22:58	952	141	39057	321
Z2 Zimbabwe	04:11	04:34	04:52	15:20	15:38	16:01	22:06	22:33	8086	163	31923	343
Z3 Macedonia	02:37	03:11	03:34	17:43	18:06	18:39	22:38	22:54	1306	146	38703	326
Z8 South Sudan	03:25	03:48	04:04	15:54	16:10	16:33	21:59	22:28	5495	155	34514	335
ZA Albania	02:46	03:19	03:42	17:49	18:12	18:45	22:45	22:58	1282	152	38727	332
ZB2 Gibraltar				19:17	19:39	20:08	00:27	23:55	2262	227	37747	47
ZC4 UK Bases on Cyprus	02:17	02:46	03:06	16:41	17:01	17:30	21:53	22:28	2492	132	37517	312
ZD7 St Helena	06:27	06:50	07:08	17:49	18:06	18:29	00:28	23:59	7743	199	32266	19
ZD8 Ascension				18:37	18:54	19:16	01:03	00:21	7134	210	32875	30
ZD9 Tristan da Cunha	07:31	08:00	08:21	17:28	17:50	18:18	00:55	00:11	10183	200	29826	20
ZL1 Auckland	19:03	19:31	19:53	05:00	05:22	05:50	12:26	15:16	17831	48	22178	228
ZL2 Wellington	19:12	19:43	20:07	04:46	05:10	05:40	12:26	15:46	18212	57	21797	237
ZL7 Chatham	18:43	19:16	19:41				11:51	14:43	18906	43	21103	223
ZL9 Auckland & Campbell	20:13	20:51	21:21	04:40	05:11	05:49	13:01	17:57	18155	97	21854	277
ZS Cape Town	05:22	05:49	06:10	15:33	15:54	16:21	22:51	23:01	9546	175	30463	355
ZS Johannesburg	04:29	04:54	05:13	15:14	15:32	15:57	22:13	22:38	8793	166	31216	346
ZS8 Pr Edward & Marion	04:34	05:09	05:36	13:33	14:00	14:34	21:34	22:22	11220	163	28789	343