

GOVERNMENT OF BALOCHISTAN
FOREST & WILDLIFE DEPARTMENT

Dated Quetta, the 2nd February, 2010

NOTIFICATION

No.SO(D)5-17/2010/ FST/3029-32/ In exercise of the powers conferred by section 16 of the Balochistan Wildlife Protection Act 1974 (Act No. xix of 1974), the Government of Balochistan is pleased to revise the boundaries of Hingol National Park specified in the schedule given below with immediate effect.

SCHEDULE

- | | |
|----------------|---|
| 1) District(s) | : Lasbela, Awaran & Gwadar |
| 2) Tehsil(s) | : Liari, Jahal Jahoo & Ormarah |
| 3) Locality | : Hingol National Park (Spat, Sarbat, Jabal Ghurab, Dak, Sangal, Wyaro Deokoh, Aghore, Kund Maleer, Jabal Hinglach, Kundrach Ghat Katari, Sher Kumb, Malan, Buzi Pass, Gazab, Jhikain Shoor, Sarbhat, Sorian Chakul, Goran Ghatti, Daud, Sumarnan, Rudia, Dhrun, Kullit, Jogan Koh, Tranchik, Ghari Koh, Jabal Haro, Kahurri and Chander Gup) |
| 4) Area | : 616118 hectare |
| 5) Coordinates | : 65° 03' 45.42" to 65° 57' 56.40" E and 25° 16' 36.05" to 26° 09' 32.35" N |

BOUNDARIES

North:

It starts from the junction of Pao River and Nal River at grid reference point N1/W10 (65° 18' 54.59", 26° 01' 36.42") and moves towards east along the centerline of Nal River up to the junction of Nal River and Nali Kohar Kaur (Nullah) at grid reference point N2 (65° 22' 37.80", 26° 01' 54.84"). From N2 it follows the center line of Nali Kohar Kaur up to grid reference point N3 (65° 26' 41.70", 26° 03' 17.35"). From N3 the boundary moves northeastwards and then follows ridge line eastwards between Nali Kohar Kaur and a tributary of Kohar Kaur up to grid reference point N4 (65° 31' 53.50", 26° 05' 53.89") and extends to grid reference point N5 (65° 36' 40.61", 26° 06' 43.25"). From N5 it moves on the centerline of Kohar Kaur to the junction of Kohar Kaur and Wadi Kaur up to grid reference point N6 (65° 45' 09.22", 26° 08' 03.93") at. From N6 it moves southwards along the centerline of Arra Kaur to grid reference point N7 (65° 46' 06.78", 26° 05' 23.71") and extends up to grid reference point N8 (65° 44' 44.16", 25° 59' 44.63"). From N8 it moves eastwards following a tributary of Mar Kaur to high point 1073m/3520ft on ridgeline to grid reference

point N9 (65° 48' 29.87", 26° 00' 04.13"). From N9 it moves in southeastern direction on the ridge line of Kund Mountain passing through the height point 926m/3038ft and then bends eastward leading to the centerline of Babro Kaur up to grid reference point N10 (65° 57' 04.80", 25° 58' 39.01"). From N10 it extends eastwards along the centerline of Babro Kaur and up to grid reference point N11/E1 (65° 59' 23.81", 26° 00' 08.37") which is the northeastern corner of the Park.

East:

Eastern side of the boundary starts from grid reference point E1 (65° 59' 23.81", 26° 00' 08.37") at the centerline of Babro Kaur and moves towards south on its tributary coming from Garri Mountain. It shifts southwards to another tributary of Babro Kaur and reaches Awaran/Lasbela district boundary at grid reference point E2 (65° 59' 47.64", 25° 55' 10.77"). Then it further extends in southwestern direction along Awaran/Lasbela district boundary and up to grid reference point E3 (65° 53' 04.95", 25° 44' 06.75"). From E3 it moves southwards along the centerline of Garrai Kaur and reaches the center line of Pachhri Kaur at grid reference point E4 (65° 53' 34.56", 25° 42' 20.67"). Then it runs along the center line of Pachri Kaur in the eastern direction to the junction of Karpasi Kaur and Deokoh Wyaro Kaur, and moves on the centerline upto the bend of Deokoh Wyaro Kaur at grid reference point E5 (65° 54' 56.09", 25° 41' 55.15"). From E5 it moves in southwestern direction along the centerline of Deokoh Wyaro Kaur up to grid reference point E6 (65° 52' 54.14", 25° 38' 43.20"), where Rayen Kaur enters in it. Moving on the centerline of Rayen Kaur it forwards in southern direction to the location called "Manjwani Pass" at grid reference point E7 (65° 53' 34.22", 25° 35' 41.71"). From E7 it follows Manjwani Kaur heading to the south up to grid reference point E8 (65° 52' 23.20", 25° 31' 51.35"). From E8 it bends in eastern direction including moderately broken mountains up to the Sharan Wali Kaur then it bends to south including white clay area of approximate 340 ha passing through grid reference point E9 (65° 54' 01.12", 25° 30' 10.34") up to grid reference point E10 (65° 53' 01.98", 25° 29' 14.73"). From E10 it moves on the 5 kilometer buffer line of live mud volcano named "Chander Gup" up to the high water mark of shore line at the grid reference point E11 (65° 53' 58.61", 25° 24' 57.79") at. Then it moves in southern direction and reaches the grid reference point E12/S1 (65° 53' 58.17", 25° 22' 54.69") at the 5 fathom water mark, which is the southeastern corner of the Park.

South:

Starting from grid reference point S1 (65° 53' 58.17", 25° 22' 54.69"), southern boundary runs in western direction along the 5 fathom (9.14m) line on the Arabian Sea up to the grid reference point S2/W1 (65° 05' 34.81", 25° 16' 56.22").

West:

Western boundary starts form grid reference point W1 (65° 05' 34.81", 25° 16' 56.22") located at 5 fathom mark and extends northwards to the high water mark on shore line where Gazab Kaur enters in the sea at grid reference point W2 (65° 05' 34.81", 25° 18' 34.96"). From W2 the boundary follows the centerline of Gazab Kaur up to grid reference point W3 (65° 05' 29.12", 25°

25' 17.44"). From W3 it moves northwards and then northeastwards along the center line of Manneji Kaur to the point where Koh Sarri Kaur enters in it at grid reference point W4 (65° 06' 25.82", 25° 27' 26.24"). From W4 it moves northwards along the centerline and then on a tributary of Koh Sarri Kaur to grid reference point W5 (65° 05' 56.22", 25° 30' 01.50"). From W5 it moves along the centerline of Gurab Kaur and then on its tributary to the Awaran/Gawadar district Boundary at grid reference point W6 (65° 04' 33.53", 25° 35' 04.59"). From W6 it moves northwards on a tributary and then centerline of Parkin Kaur to grid reference point W7 (65° 04' 43.27", 25° 36' 23.31"). From W7 it moves northeastwards along the centerline of Parkin Kaur to the grid reference W8 (65° 14' 12.86", 25° 43' 34.62"). From W8 it moves along the tributary of Parkin Kaur in northern direction to the junction of Sulari Kaur and Hingol River at grid reference point W9 (65° 13' 55.00", 25° 46' 59.71"). From W9 it moves along the centerline of Hingol River to the junction of Pao River and Nal River at grid reference point W10/N1 (65° 18' 54.59", 26° 01' 36.42"), which is the northwestern corner of the Park.

REFERENCE

Ortho-rectified ASTER (15 m) Satellite Image
1: 250,000 Survey of Pakistan Maps
Projection: Geographic Coordinate System
Spheroid & Datum: World Geodetic System (WGS) 84
(Single frequency GPS receiver was used for the field data collection)

SECRETARY

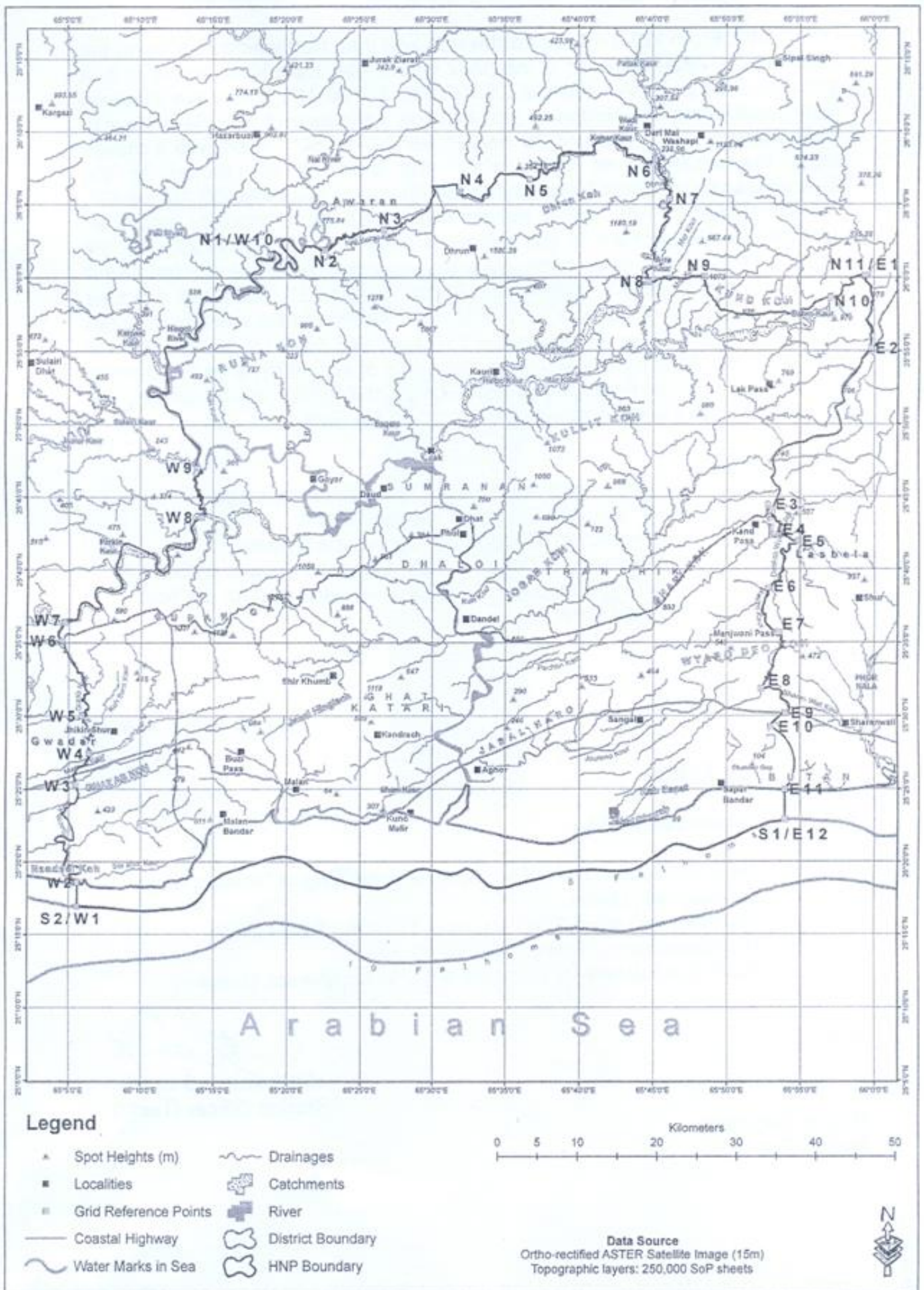
NO.& DATED EVEN.

A copy is forwarded to the:-

1. The Chief Conservator of Forests, Balochistan/ Project Director, Hingol National Park, Quetta.
- ✓ 2. The Director General, WWF Pakistan, Feroz Pur Road Lahore.
3. The Conservator of Forests, Wildlife, Quetta.
4. The P.S. to Minister for Forests & Wildlife, Department, Quetta.


(Muhammad Latif)
Section Officer (Tech:)

P.S. to Secretary.
Master File.



(Map Page: GIS map of the Hingol National Park boundary with Grid Reference Points)

List of selective boundary coordinates

No.	Longitude	Latitude	No.	Longitude	Latitude
1	65° 53' 24.69"	25° 48' 00.59"	274	65° 13' 52.95"	25° 45' 54.13"
2	65° 53' 10.26"	25° 47' 34.36"	275	65° 13' 49.54"	25° 46' 02.60"
3	65° 53' 18.37"	25° 46' 44.60"	276	65° 13' 52.70"	25° 46' 07.60"
4	65° 53' 05.66"	25° 46' 14.40"	277	65° 13' 41.55"	25° 46' 12.14"
5	65° 53' 16.70"	25° 45' 51.69"	278	65° 13' 49.42"	25° 46' 24.89"
6	65° 53' 35.44"	25° 45' 36.83"	279	65° 13' 59.31"	25° 46' 29.11"
7	65° 53' 38.38"	25° 45' 22.04"	280	65° 14' 04.44"	25° 46' 41.10"
8	65° 53' 02.09"	25° 43' 53.35"	281	65° 14' 16.92"	25° 46' 42.96"
9	65° 53' 07.71"	25° 43' 36.59"	282	65° 14' 10.70"	25° 46' 52.30"
10	65° 53' 14.96"	25° 43' 38.31"	283	65° 13' 55.24"	25° 46' 59.59"
11	65° 53' 18.92"	25° 43' 33.73"	284	65° 13' 50.52"	25° 47' 09.86"
12	65° 53' 23.72"	25° 43' 16.77"	285	65° 14' 06.08"	25° 48' 02.91"
13	65° 53' 36.27"	25° 43' 16.68"	286	65° 14' 06.00"	25° 48' 19.25"
14	65° 53' 34.53"	25° 43' 11.50"	287	65° 13' 03.75"	25° 49' 21.39"
15	65° 53' 43.37"	25° 43' 02.85"	288	65° 12' 45.22"	25° 50' 28.35"
16	65° 53' 32.68"	25° 42' 44.21"	289	65° 12' 35.95"	25° 50' 46.02"
17	65° 53' 34.33"	25° 42' 21.22"	290	65° 11' 55.56"	25° 51' 01.50"
18	65° 53' 53.78"	25° 42' 22.72"	291	65° 11' 37.80"	25° 51' 38.23"
19	65° 54' 33.45"	25° 41' 56.41"	292	65° 11' 21.15"	25° 51' 57.51"
20	65° 54' 52.96"	25° 41' 57.13"	293	65° 10' 38.77"	25° 51' 58.67"
21	65° 54' 56.19"	25° 41' 53.36"	294	65° 10' 32.60"	25° 52' 09.98"
22	65° 54' 46.16"	25° 41' 43.95"	295	65° 10' 33.61"	25° 52' 20.81"
23	65° 54' 16.39"	25° 41' 41.89"	296	65° 10' 38.27"	25° 52' 27.22"
24	65° 54' 18.51"	25° 41' 23.97"	297	65° 10' 51.24"	25° 52' 29.96"
25	65° 54' 09.46"	25° 41' 10.72"	298	65° 11' 33.07"	25° 52' 12.84"
26	65° 54' 00.21"	25° 41' 09.87"	299	65° 11' 55.28"	25° 52' 16.27"
27	65° 53' 52.15"	25° 41' 22.65"	300	65° 11' 46.88"	25° 53' 43.94"
28	65° 53' 44.91"	25° 41' 18.45"	301	65° 11' 55.24"	25° 54' 12.34"
29	65° 53' 44.71"	25° 41' 07.96"	302	65° 11' 39.26"	25° 55' 10.22"
30	65° 53' 59.89"	25° 40' 46.75"	303	65° 11' 50.56"	25° 55' 18.74"
31	65° 53' 51.52"	25° 40' 16.87"	304	65° 12' 24.58"	25° 55' 14.53"
32	65° 53' 52.70"	25° 39' 53.93"	305	65° 13' 05.66"	25° 55' 26.19"
33	65° 53' 39.97"	25° 39' 38.99"	306	65° 13' 09.12"	25° 55' 34.33"
34	65° 53' 39.31"	25° 39' 14.68"	307	65° 12' 41.23"	25° 56' 07.28"
35	65° 53' 15.77"	25° 39' 05.34"	308	65° 12' 41.87"	25° 56' 17.42"
36	65° 53' 01.13"	25° 38' 50.81"	309	65° 12' 50.89"	25° 56' 26.25"
37	65° 53' 01.47"	25° 38' 42.61"	310	65° 13' 10.20"	25° 56' 24.96"
38	65° 52' 53.89"	25° 38' 42.59"	311	65° 13' 41.40"	25° 55' 51.39"
39	65° 52' 52.46"	25° 38' 17.89"	312	65° 13' 54.86"	25° 55' 55.12"
40	65° 52' 38.91"	25° 37' 55.27"	313	65° 13' 48.21"	25° 56' 21.64"
41	65° 52' 26.84"	25° 37' 10.99"	314	65° 14' 19.56"	25° 56' 59.22"
42	65° 52' 30.52"	25° 36' 53.89"	315	65° 14' 09.28"	25° 57' 24.61"
43	65° 52' 41.08"	25° 36' 52.46"	316	65° 14' 06.55"	25° 57' 47.01"
44	65° 52' 41.03"	25° 36' 20.90"	317	65° 14' 18.66"	25° 58' 34.68"
45	65° 53' 15.83"	25° 35' 42.55"	318	65° 14' 31.62"	25° 58' 42.88"
46	65° 53' 36.68"	25° 35' 40.15"	319	65° 14' 50.69"	25° 58' 34.19"
47	65° 53' 46.57"	25° 35' 24.19"	320	65° 15' 22.09"	25° 58' 39.12"
48	65° 53' 42.44"	25° 35' 12.04"	321	65° 15' 33.93"	25° 58' 48.80"
49	65° 53' 47.59"	25° 35' 02.27"	322	65° 15' 46.72"	25° 59' 17.40"

50	65° 53' 58.10"	25° 35' 02.83"	323	65° 16' 05.40"	25° 59' 29.37"
51	65° 53' 42.99"	25° 34' 49.72"	324	65° 16' 18.30"	25° 59' 22.57"
52	65° 53' 51.90"	25° 34' 41.01"	325	65° 16' 27.69"	25° 58' 59.73"
53	65° 53' 22.33"	25° 34' 11.87"	326	65° 16' 39.11"	25° 58' 50.05"
54	65° 53' 13.99"	25° 33' 51.10"	327	65° 17' 17.00"	25° 59' 05.82"
55	65° 53' 11.30"	25° 33' 18.32"	328	65° 18' 00.58"	25° 59' 01.78"
56	65° 52' 55.52"	25° 32' 57.92"	329	65° 18' 09.99"	25° 59' 05.35"
57	65° 53' 01.65"	25° 32' 51.43"	330	65° 18' 13.49"	25° 59' 22.54"
58	65° 52' 42.56"	25° 32' 36.56"	331	65° 17' 37.26"	25° 59' 51.95"
59	65° 52' 49.20"	25° 32' 28.49"	332	65° 17' 34.62"	26° 00' 08.20"
60	65° 52' 23.13"	25° 31' 53.59"	333	65° 17' 44.13"	26° 00' 22.50"
61	65° 52' 32.50"	25° 31' 49.17"	334	65° 18' 03.31"	26° 00' 28.92"
62	65° 52' 56.78"	25° 31' 56.44"	335	65° 18' 11.64"	26° 00' 40.24"
63	65° 53' 11.19"	25° 31' 48.76"	336	65° 18' 11.22"	26° 00' 48.96"
64	65° 53' 39.66"	25° 31' 45.58"	337	65° 17' 57.92"	26° 01' 03.89"
65	65° 53' 50.15"	25° 31' 31.85"	338	65° 17' 59.75"	26° 01' 16.62"
66	65° 53' 42.15"	25° 31' 21.13"	339	65° 18' 16.47"	26° 01' 20.44"
67	65° 53' 42.74"	25° 31' 09.42"	340	65° 18' 59.71"	26° 01' 15.78"
68	65° 54' 10.64"	25° 30' 54.28"	341	65° 19' 03.36"	26° 01' 24.58"
69	65° 54' 15.85"	25° 30' 43.98"	342	65° 18' 54.64"	26° 01' 40.59"
70	65° 54' 16.94"	25° 30' 26.77"	343	65° 19' 03.95"	26° 01' 48.75"
71	65° 54' 10.35"	25° 30' 13.41"	344	65° 19' 13.87"	26° 01' 48.61"
72	65° 53' 43.41"	25° 30' 03.50"	345	65° 19' 26.88"	26° 01' 39.57"
73	65° 53' 13.84"	25° 29' 37.97"	346	65° 19' 34.44"	26° 01' 24.85"
74	65° 53' 00.91"	25° 29' 18.17"	347	65° 19' 30.73"	26° 01' 09.53"
75	65° 53' 06.52"	25° 29' 09.62"	348	65° 19' 13.59"	26° 00' 56.35"
76	65° 53' 44.35"	25° 28' 44.09"	349	65° 19' 17.10"	26° 00' 39.60"
77	65° 54' 08.17"	25° 28' 17.33"	350	65° 19' 54.80"	26° 00' 40.29"
78	65° 54' 26.73"	25° 27' 43.10"	351	65° 19' 59.70"	26° 00' 59.12"
79	65° 54' 36.35"	25° 27' 07.00"	352	65° 20' 08.19"	26° 01' 05.38"
80	65° 54' 37.66"	25° 26' 32.70"	353	65° 20' 28.87"	26° 00' 36.01"
81	65° 54' 30.94"	25° 25' 56.33"	354	65° 20' 38.09"	26° 00' 35.23"
82	65° 54' 19.20"	25° 25' 27.98"	355	65° 20' 42.50"	26° 00' 50.22"
83	65° 53' 58.66"	25° 24' 57.12"	356	65° 20' 34.85"	26° 01' 08.99"
84	65° 53' 57.51"	25° 22' 54.52"	357	65° 20' 06.18"	26° 01' 36.97"
85	65° 52' 32.91"	25° 22' 33.86"	358	65° 19' 38.41"	26° 02' 17.74"
86	65° 48' 32.07"	25° 20' 51.62"	359	65° 19' 38.15"	26° 02' 29.11"
87	65° 48' 09.64"	25° 20' 49.30"	360	65° 19' 46.86"	26° 02' 35.79"
88	65° 47' 09.02"	25° 21' 06.38"	361	65° 20' 08.71"	26° 02' 36.13"
89	65° 46' 22.95"	25° 21' 08.73"	362	65° 20' 56.89"	26° 01' 46.60"
90	65° 45' 58.68"	25° 20' 56.63"	363	65° 21' 04.92"	26° 01' 47.69"
91	65° 44' 18.14"	25° 19' 45.44"	364	65° 21' 12.48"	26° 02' 07.32"
92	65° 43' 35.40"	25° 19' 25.36"	365	65° 21' 18.54"	26° 02' 11.00"
93	65° 42' 33.07"	25° 19' 19.92"	366	65° 21' 50.57"	26° 02' 11.40"
94	65° 40' 32.16"	25° 19' 25.17"	367	65° 22' 23.84"	26° 01' 53.80"
95	65° 39' 17.33"	25° 19' 18.65"	368	65° 22' 51.84"	26° 01' 55.44"
96	65° 38' 16.15"	25° 19' 06.91"	369	65° 23' 02.54"	26° 02' 05.76"
97	65° 35' 09.28"	25° 18' 14.88"	370	65° 22' 55.80"	26° 02' 10.28"
98	65° 34' 31.14"	25° 18' 09.79"	371	65° 23' 08.00"	26° 02' 10.28"
99	65° 33' 50.19"	25° 18' 21.79"	372	65° 23' 06.25"	26° 02' 16.63"
100	65° 33' 06.69"	25° 19' 04.96"	373	65° 23' 17.73"	26° 02' 17.55"
101	65° 32' 41.55"	25° 19' 24.69"	374	65° 23' 28.71"	26° 02' 44.34"

102	65° 32' 25.48"	25° 19' 30.35"	375	65° 23' 42.18"	26° 02' 38.94"
103	65° 31' 21.31"	25° 19' 07.84"	376	65° 23' 45.70"	26° 02' 43.72"
104	65° 30' 05.93"	25° 19' 24.20"	377	65° 23' 55.47"	26° 02' 42.00"
105	65° 29' 07.79"	25° 19' 28.70"	378	65° 23' 50.67"	26° 02' 56.91"
106	65° 28' 36.24"	25° 19' 17.04"	379	65° 23' 59.52"	26° 02' 49.43"
107	65° 26' 41.56"	25° 18' 12.97"	380	65° 24' 00.99"	26° 02' 56.41"
108	65° 26' 16.95"	25° 18' 09.62"	381	65° 24' 07.98"	26° 02' 47.68"
109	65° 25' 01.66"	25° 18' 17.09"	382	65° 24' 27.40"	26° 02' 44.51"
110	65° 24' 02.22"	25° 18' 32.28"	383	65° 24' 29.31"	26° 02' 50.57"
111	65° 22' 03.82"	25° 19' 21.52"	384	65° 24' 36.73"	26° 02' 52.71"
112	65° 21' 10.93"	25° 19' 58.49"	385	65° 24' 32.05"	26° 03' 02.60"
113	65° 19' 49.95"	25° 20' 20.92"	386	65° 24' 42.51"	26° 02' 56.37"
114	65° 18' 50.89"	25° 20' 12.64"	387	65° 25' 05.69"	26° 03' 11.77"
115	65° 15' 40.53"	25° 19' 08.13"	388	65° 25' 12.04"	26° 03' 04.65"
116	65° 14' 54.00"	25° 18' 35.03"	389	65° 25' 19.62"	26° 03' 13.76"
117	65° 14' 10.06"	25° 17' 32.46"	390	65° 25' 26.69"	26° 03' 11.55"
118	65° 13' 47.06"	25° 17' 10.99"	391	65° 25' 34.50"	26° 03' 17.99"
119	65° 13' 07.92"	25° 16' 49.74"	392	65° 25' 41.80"	26° 03' 12.81"
120	65° 10' 22.35"	25° 16' 36.10"	393	65° 25' 52.80"	26° 03' 18.23"
121	65° 05' 35.01"	25° 16' 56.74"	394	65° 26' 15.59"	26° 03' 12.17"
122	65° 05' 34.68"	25° 18' 34.59"	395	65° 26' 57.75"	26° 03' 24.49"
123	65° 05' 09.71"	25° 18' 47.47"	396	65° 27' 18.11"	26° 03' 21.24"
124	65° 05' 04.05"	25° 19' 03.22"	397	65° 27' 51.29"	26° 03' 30.34"
125	65° 05' 08.67"	25° 19' 09.08"	398	65° 27' 51.07"	26° 03' 41.40"
126	65° 05' 41.84"	25° 19' 13.38"	399	65° 28' 04.77"	26° 03' 44.04"
127	65° 05' 47.54"	25° 19' 31.25"	400	65° 28' 12.01"	26° 03' 56.10"
128	65° 05' 38.70"	25° 19' 39.42"	401	65° 28' 31.55"	26° 03' 56.25"
129	65° 05' 10.89"	25° 19' 45.11"	402	65° 28' 57.84"	26° 04' 18.13"
130	65° 04' 58.73"	25° 19' 42.31"	403	65° 29' 32.28"	26° 04' 33.90"
131	65° 04' 46.70"	25° 19' 26.68"	404	65° 29' 47.41"	26° 04' 48.61"
132	65° 04' 35.30"	25° 19' 29.60"	405	65° 30' 09.68"	26° 05' 49.69"
133	65° 04' 34.25"	25° 19' 40.02"	406	65° 30' 09.91"	26° 05' 57.70"
134	65° 04' 56.06"	25° 20' 34.97"	407	65° 29' 59.98"	26° 06' 10.51"
135	65° 04' 39.36"	25° 20' 50.85"	408	65° 30' 01.56"	26° 06' 16.48"
136	65° 04' 42.92"	25° 21' 21.87"	409	65° 31' 40.71"	26° 06' 20.70"
137	65° 04' 13.45"	25° 21' 23.04"	410	65° 31' 41.65"	26° 06' 07.66"
138	65° 04' 04.38"	25° 21' 31.91"	411	65° 32' 04.03"	26° 05' 38.05"
139	65° 04' 11.85"	25° 21' 41.74"	412	65° 32' 28.09"	26° 05' 41.49"
140	65° 04' 29.96"	25° 21' 47.89"	413	65° 33' 28.14"	26° 05' 16.17"
141	65° 04' 44.91"	25° 21' 44.77"	414	65° 33' 28.30"	26° 05' 33.61"
142	65° 05' 03.51"	25° 21' 30.69"	415	65° 33' 35.62"	26° 05' 42.84"
143	65° 05' 18.67"	25° 21' 32.44"	416	65° 33' 53.90"	26° 05' 40.23"
144	65° 05' 17.71"	25° 22' 02.08"	417	65° 33' 53.23"	26° 06' 03.31"
145	65° 04' 57.65"	25° 22' 52.00"	418	65° 34' 19.89"	26° 06' 32.76"
146	65° 04' 29.17"	25° 23' 18.20"	419	65° 34' 20.43"	26° 06' 48.54"
147	65° 04' 59.16"	25° 23' 46.59"	420	65° 34' 38.18"	26° 07' 07.99"
148	65° 05' 06.66"	25° 24' 00.16"	421	65° 35' 50.65"	26° 07' 06.74"
149	65° 05' 24.07"	25° 24' 01.60"	422	65° 36' 06.72"	26° 07' 02.90"
150	65° 05' 35.08"	25° 24' 19.00"	423	65° 36' 42.01"	26° 06' 42.74"
151	65° 05' 39.90"	25° 24' 41.79"	424	65° 37' 00.63"	26° 06' 42.34"
152	65° 05' 19.28"	25° 25' 56.95"	425	65° 37' 16.19"	26° 06' 56.47"
153	65° 05' 29.06"	25° 26' 04.85"	426	65° 37' 20.78"	26° 07' 24.28"

154	65° 05' 26.44"	25° 26' 11.73"	427	65° 37' 28.55"	26° 07' 24.38"
155	65° 05' 37.77"	25° 26' 27.44"	428	65° 37' 46.17"	26° 07' 07.92"
156	65° 06' 10.36"	25° 26' 41.25"	429	65° 37' 59.15"	26° 07' 23.75"
157	65° 06' 22.32"	25° 27' 04.27"	430	65° 38' 16.78"	26° 07' 31.94"
158	65° 06' 30.44"	25° 27' 35.65"	431	65° 38' 30.20"	26° 07' 31.11"
159	65° 06' 14.48"	25° 27' 59.72"	432	65° 38' 38.58"	26° 07' 54.88"
160	65° 06' 17.38"	25° 28' 13.32"	433	65° 38' 38.04"	26° 08' 15.54"
161	65° 06' 03.41"	25° 28' 27.69"	434	65° 38' 49.02"	26° 08' 27.57"
162	65° 06' 11.55"	25° 28' 31.50"	435	65° 39' 16.65"	26° 08' 34.91"
163	65° 06' 24.67"	25° 28' 22.84"	436	65° 40' 54.43"	26° 08' 32.18"
164	65° 06' 27.09"	25° 28' 38.32"	437	65° 41' 00.73"	26° 08' 40.29"
165	65° 06' 42.01"	25° 28' 38.11"	438	65° 40' 59.68"	26° 09' 00.32"
166	65° 06' 32.94"	25° 28' 49.99"	439	65° 41' 04.75"	26° 09' 08.76"
167	65° 06' 33.76"	25° 29' 04.59"	440	65° 42' 04.27"	26° 09' 38.63"
168	65° 06' 22.46"	25° 28' 53.27"	441	65° 42' 18.87"	26° 09' 37.96"
169	65° 06' 06.33"	25° 28' 55.91"	442	65° 42' 33.62"	26° 09' 05.72"
170	65° 06' 14.76"	25° 29' 00.46"	443	65° 42' 53.12"	26° 08' 50.60"
171	65° 06' 13.09"	25° 29' 11.25"	444	65° 43' 12.47"	26° 08' 48.70"
172	65° 06' 19.33"	25° 29' 15.51"	445	65° 43' 14.71"	26° 08' 22.47"
173	65° 06' 12.83"	25° 29' 26.92"	446	65° 43' 38.03"	26° 08' 23.85"
174	65° 05' 58.93"	25° 29' 34.75"	447	65° 44' 09.41"	26° 08' 15.80"
175	65° 06' 01.97"	25° 29' 41.20"	448	65° 44' 35.15"	26° 07' 52.23"
176	65° 05' 57.07"	25° 30' 05.19"	449	65° 44' 55.69"	26° 07' 56.35"
177	65° 06' 12.50"	25° 30' 02.37"	450	65° 45' 06.47"	26° 08' 03.91"
178	65° 06' 09.15"	25° 30' 20.80"	451	65° 45' 15.39"	26° 07' 59.72"
179	65° 06' 21.47"	25° 30' 24.84"	452	65° 45' 24.66"	26° 07' 45.21"
180	65° 06' 23.91"	25° 30' 34.06"	453	65° 45' 24.79"	26° 07' 16.24"
181	65° 06' 18.88"	25° 30' 48.55"	454	65° 45' 32.86"	26° 07' 02.10"
182	65° 05' 54.96"	25° 31' 05.07"	455	65° 45' 52.37"	26° 06' 45.87"
183	65° 06' 07.08"	25° 31' 12.25"	456	65° 45' 51.43"	26° 06' 07.90"
184	65° 06' 05.86"	25° 31' 25.25"	457	65° 46' 09.77"	26° 05' 53.11"
185	65° 06' 26.04"	25° 31' 34.47"	458	65° 46' 04.88"	26° 05' 31.77"
186	65° 06' 11.29"	25° 31' 48.54"	459	65° 46' 09.82"	26° 05' 12.62"
187	65° 06' 12.13"	25° 32' 11.58"	460	65° 45' 57.88"	26° 04' 54.40"
188	65° 06' 04.04"	25° 32' 08.33"	461	65° 46' 10.93"	26° 04' 41.53"
189	65° 06' 05.88"	25° 32' 24.94"	462	65° 45' 50.54"	26° 04' 22.30"
190	65° 05' 57.94"	25° 32' 33.03"	463	65° 45' 46.82"	26° 04' 12.09"
191	65° 06' 06.14"	25° 32' 38.40"	464	65° 45' 49.39"	26° 04' 07.82"
192	65° 05' 54.17"	25° 32' 43.88"	465	65° 46' 01.91"	26° 04' 08.44"
193	65° 05' 55.93"	25° 32' 55.59"	466	65° 46' 03.47"	26° 04' 01.17"
194	65° 05' 38.63"	25° 32' 58.29"	467	65° 45' 37.01"	26° 03' 31.33"
195	65° 05' 35.05"	25° 33' 14.07"	468	65° 45' 25.44"	26° 02' 51.08"
196	65° 05' 24.14"	25° 33' 27.10"	469	65° 44' 53.20"	26° 01' 53.17"
197	65° 05' 25.13"	25° 33' 34.48"	470	65° 45' 04.26"	26° 01' 41.48"
198	65° 05' 18.60"	25° 33' 32.79"	471	65° 45' 06.33"	26° 01' 16.80"
199	65° 05' 21.16"	25° 33' 41.43"	472	65° 45' 29.41"	26° 01' 16.16"
200	65° 05' 10.58"	25° 33' 43.57"	473	65° 45' 35.26"	26° 01' 05.29"
201	65° 05' 10.63"	25° 33' 56.10"	474	65° 45' 21.10"	26° 00' 46.49"
202	65° 05' 00.81"	25° 33' 56.26"	475	65° 44' 55.92"	26° 00' 40.08"
203	65° 05' 04.64"	25° 34' 07.10"	476	65° 44' 31.26"	26° 00' 26.12"
204	65° 04' 58.56"	25° 34' 07.96"	477	65° 44' 44.33"	25° 59' 44.93"
205	65° 04' 51.54"	25° 34' 24.26"	478	65° 45' 04.10"	25° 59' 42.73"

206	65° 04' 44.26"	25° 34' 24.39"	479	65° 45' 43.24"	26° 01'
207	65° 04' 47.43"	25° 34' 35.85"	480	65° 46' 09.41"	25° 59'
208	65° 04' 41.82"	25° 34' 54.17"	481	65° 46' 22.30"	26° 01'
209	65° 04' 18.63"	25° 35' 22.38"	482	65° 47' 14.06"	25° 59'
210	65° 04' 16.27"	25° 35' 44.31"	483	65° 47' 37.26"	26° 01'
211	65° 04' 43.89"	25° 36' 23.55"	484	65° 48' 27.79"	26° 01'
212	65° 04' 59.19"	25° 36' 31.84"	485	65° 48' 43.06"	25° 59'
213	65° 05' 25.31"	25° 36' 32.97"	486	65° 49' 16.69"	25° 58'
214	65° 05' 35.91"	25° 36' 40.18"	487	65° 49' 33.34"	25° 57'
215	65° 05' 43.81"	25° 37' 28.23"	488	65° 50' 48.47"	25° 57'
216	65° 05' 53.90"	25° 37' 41.91"	489	65° 51' 48.17"	25° 57'
217	65° 06' 19.42"	25° 37' 42.63"	490	65° 53' 02.00"	25° 57'
218	65° 06' 49.41"	25° 37' 20.05"	491	65° 53' 57.14"	25° 57'
219	65° 07' 12.09"	25° 37' 23.14"	492	65° 54' 13.37"	25° 57'
220	65° 07' 11.94"	25° 37' 34.10"	493	65° 54' 53.25"	25° 57'
221	65° 06' 55.77"	25° 37' 51.83"	494	65° 55' 08.84"	25° 57'
222	65° 06' 50.26"	25° 38' 08.86"	495	65° 55' 41.22"	25° 57'
223	65° 06' 51.08"	25° 38' 29.31"	496	65° 56' 02.01"	25° 58'
224	65° 06' 59.44"	25° 38' 44.55"	497	65° 56' 55.71"	25° 58'
225	65° 07' 14.74"	25° 38' 45.16"	498	65° 57' 16.28"	25° 58'
226	65° 08' 01.94"	25° 38' 28.58"	499	65° 57' 36.56"	25° 58'
227	65° 08' 22.96"	25° 38' 31.35"	500	65° 57' 44.79"	25° 58'
228	65° 08' 37.07"	25° 38' 40.77"	501	65° 57' 53.31"	25° 59'
229	65° 08' 40.61"	25° 39' 05.59"	502	65° 58' 02.31"	25° 59'
230	65° 08' 34.14"	25° 39' 25.37"	503	65° 58' 34.16"	25° 59'
231	65° 08' 16.43"	25° 39' 50.64"	504	65° 58' 35.52"	25° 59'
232	65° 08' 16.11"	25° 40' 14.13"	505	65° 58' 24.38"	25° 59'
233	65° 08' 33.40"	25° 40' 55.21"	506	65° 58' 55.68"	26° 00'
234	65° 08' 39.48"	25° 41' 32.75"	507	65° 59' 24.26"	26° 00'
235	65° 08' 52.57"	25° 41' 46.44"	508	65° 59' 17.80"	25° 59'
236	65° 09' 09.76"	25° 41' 46.21"	509	65° 59' 26.61"	25° 59'
237	65° 10' 57.81"	25° 40' 56.55"	510	65° 59' 29.03"	25° 59'
238	65° 11' 09.61"	25° 40' 38.52"	511	65° 59' 45.29"	25° 59'
239	65° 11' 03.40"	25° 40' 09.53"	512	65° 59' 49.19"	25° 58'
240	65° 11' 17.84"	25° 39' 51.64"	513	65° 59' 58.90"	25° 58'
241	65° 11' 34.83"	25° 39' 47.91"	514	65° 59' 49.45"	25° 58'
242	65° 11' 49.93"	25° 39' 53.38"	515	65° 59' 53.25"	25° 58'
243	65° 11' 56.94"	25° 40' 05.96"	516	65° 59' 47.60"	25° 57'
244	65° 11' 59.85"	25° 40' 33.76"	517	65° 59' 26.74"	25° 57'
245	65° 11' 48.13"	25° 41' 16.16"	518	65° 59' 32.97"	25° 57'
246	65° 11' 51.45"	25° 41' 33.59"	519	65° 59' 33.98"	25° 56'
247	65° 12' 17.88"	25° 41' 37.36"	520	65° 59' 39.77"	25° 56'
248	65° 13' 15.01"	25° 41' 21.15"	521	65° 59' 41.20"	25° 56'
249	65° 13' 30.44"	25° 41' 25.25"	522	65° 59' 48.88"	25° 56'
250	65° 13' 39.79"	25° 41' 33.84"	523	65° 59' 47.12"	25° 56'
251	65° 13' 43.55"	25° 42' 05.22"	524	65° 59' 52.57"	25° 56'
252	65° 13' 32.46"	25° 42' 44.52"	525	65° 59' 50.04"	25° 56'
253	65° 13' 34.84"	25° 43' 01.63"	526	65° 59' 54.06"	25° 56'
254	65° 13' 47.57"	25° 43' 21.14"	527	65° 59' 42.47"	25° 56'
255	65° 14' 12.00"	25° 43' 33.78"	528	65° 59' 48.63"	25° 55'
256	65° 14' 29.19"	25° 43' 54.58"	529	65° 59' 41.87"	25° 55'
257	65° 14' 22.32"	25° 44' 01.58"	530	65° 59' 47.59"	25° 55'

258	65° 14' 27.43"	25° 44' 06.94"	531	65° 59' 32.29"	25° 54' 59.80"
259	65° 14' 24.66"	25° 44' 14.15"	532	65° 59' 09.43"	25° 54' 28.11"
260	65° 14' 05.46"	25° 44' 12.31"	533	65° 59' 08.42"	25° 54' 13.11"
261	65° 14' 05.52"	25° 44' 26.13"	534	65° 58' 57.61"	25° 53' 50.01"
262	65° 14' 14.62"	25° 44' 34.44"	535	65° 57' 49.38"	25° 52' 23.64"
263	65° 14' 08.74"	25° 44' 51.53"	536	65° 57' 54.62"	25° 51' 29.54"
264	65° 14' 17.39"	25° 44' 59.95"	537	65° 57' 21.33"	25° 51' 06.97"
265	65° 14' 07.32"	25° 45' 07.05"	538	65° 57' 42.96"	25° 50' 01.40"
266	65° 13' 58.55"	25° 45' 06.52"	539	65° 57' 42.56"	25° 49' 32.54"
267	65° 14' 06.94"	25° 45' 15.09"	540	65° 57' 19.10"	25° 49' 16.76"
268	65° 13' 58.16"	25° 45' 17.68"	541	65° 55' 57.05"	25° 49' 06.33"
269	65° 14' 02.85"	25° 45' 25.86"	542	65° 55' 19.78"	25° 48' 46.56"
270	65° 13' 59.97"	25° 45' 31.47"	543	65° 54' 46.52"	25° 48' 42.85"
271	65° 13' 51.39"	25° 45' 29.16"	544	65° 54' 09.59"	25° 48' 31.57"
272	65° 13' 51.77"	25° 45' 40.49"	545	65° 53' 35.79"	25° 48' 13.78"
273	65° 13' 45.60"	25° 45' 44.30"	546	65° 53' 25.18"	25° 48' 01.23"