

Maritime Zones Act, No. 15 of 1994

ACT to provide for the maritime zones of the Republic; and to provide for matters connected therewith.

BE IT ENACTED by the Parliament of the Republic of South Africa, as follows:

1. Definitions

In this Act, unless the context otherwise indicates:

- (i) "baseline" means a baseline as contemplated in subsection (1), (2) or (3) of section 2;
- (ii) "installation" means any of the following situated within internal waters, territorial waters or the exclusive economic zone or on or above the continental shelf:
 - (a) Any installation, including a pipeline, which is used for the transfer of any substance to or from:
 - i. a ship;
 - ii. a research, exploration or production platform; or
 - iii. the coast of the Republic;
 - (b) Any exploration or production platform used in prospecting for or the mining of any substance;
 - (c) Any exploration or production vessel;
 - (d) A telecommunications line as defined in section 1 of the Post Office Act, 1958 (Act No. 44 of 1958);
 - (e) Any vessel or appliance used for the exploration or exploitation of the seabed;
 - (f) Any area situated within a distance of 500 metres measured from any point on the exterior side of an installation referred to in paragraph (a) or (b) other than a pipeline;
 - (g) Any area situated under or above an installation referred to in paragraph (a) or (b);
- (iii) "low-tide elevation" means a naturally formed area of land which is surrounded by water and which is above water at low tide, but submerged at high tide and situated within a distance of not more than 12 nautical miles from the low water line of the mainland or of an island;
- (iv) "low-water" means the mean height of low water for a tidal cycle of 18,6 years;
- (v) "low-water line" means the intersection of the low-water tidal plane with the land and includes the low-water line on a low-tide elevation;
- (vi) "Minister" means the Minister of Transport;
- (vii) "nautical mile" means the international nautical mile of 1,852 metres;
- (viii) "officially recognized large-scale charts or maps" means large-scale charts or maps supplied by the

Hydrographer of the South African Navy and the Chief Surveyor-General, respectively;

(ix) "prescribed" means prescribed by regulation;

(x) "right of innocent passage" means the right of innocent passage referred to in section 2 of the Marine Traffic Act, 1981 (Act No. 2 of 1981);

(xi) "sea" means the water of the sea, as well as the bed of the sea and the subsoil thereof;

(xii) "straight line" means the shortest distance between two points on a surface;

(xiii) "this Act" includes the regulations.

2. Baselines

(1) Subject to subsections (2) and (3) the low-water line shall be the baseline.

(2) Notwithstanding subsection (1) straight lines joining the grouped coordinates mentioned in Schedule 2 shall be the baselines of the relevant part of the coast.

(3) Notwithstanding subsections (1) and (2) the outer limits prescribed or determined in accordance with subsection (4) or (5) shall be the baselines.

(4) Outer limits of internal waters referred to in section 3(1) (b) shall be established in the prescribed manner.

(5) In the absence of any outer limits of internal waters prescribed in accordance with subsection (4), the outer limits shall be the outermost harbour works which form an integral part of the harbour system.

(6) In any proceedings before a court of law any prescribed chart or map shall be admissible as *prima facie* proof of the contents thereof.

3. Internal waters

(1) The internal waters of the Republic shall comprise:

- (a) all waters landward of the baselines; and
- (b) all harbours.

(2) Any law in force in the Republic, including the common law, shall also apply in its internal waters and the airspace above its internal waters.

(3) The right of innocent passage shall not exist in the internal waters, except if the internal waters concerned were territorial waters before the commencement of this Act.

4. Territorial waters

(1) The sea within a distance of twelve nautical miles from the baselines shall be the territorial waters of the Republic.

(2) Any law in force in the Republic, including the common law, shall also apply in its territorial waters and the airspace above its territorial waters.

- (3) The right of innocent passage shall exist in the territorial waters.

5. Contiguous zone

(1) The sea beyond the territorial waters referred to in section 4, but within a distance of twenty-four nautical miles from the baselines, shall be the contiguous zone of the Republic.

(2) Within the contiguous zone and the airspace above it, the Republic shall have the right to exercise all the powers which may be considered necessary to prevent contravention of any fiscal law or any customs, emigration, immigration or sanitary law and to make such contravention punishable.

6. Maritime cultural zone

(1) The sea beyond the territorial waters referred to in section 4, but within a distance of twenty-four nautical miles from the baselines, shall be the maritime cultural zone of the Republic.

(2) Subject to any other law the Republic shall have, in respect of objects of an archaeological or historical nature found in the maritime cultural zone, the same rights and powers as it has in respect of its territorial waters.

7. Exclusive economic zone

(1) The sea beyond the territorial waters referred to in section 4, but within a distance of two hundred nautical miles from the baselines, shall be the exclusive economic zone of the Republic.

(2) Subject to any other law the Republic shall have, in respect of all natural resources in the exclusive economic zone, the same rights and powers as it has in respect of its territorial waters.

8. Continental shelf

(1) The continental shelf as defined in article 76 of the United Nations Convention on the Law of the Sea, 1982, adopted at Montego Bay on 10 December 1982, shall be the continental shelf of the Republic.

(2) Subject to any other law the outer limits of the continental shelf shall consist of a series of straight lines joining the coordinates mentioned in Schedule 3.

(3) For the purposes of:

(a) exploration and exploitation of natural resources, as defined in paragraph 4 of article 77 of the United Nations Convention on the Law of the Sea, 1982, and

(b) any law relating to mining of precious stones, metals or minerals, including natural oil, the continental shelf shall be deemed to be unalienated State land.

9. Application of laws in respect of installations

(1) Any law in force in the Republic, including the common law, shall also apply on and in respect of an installation.

(2) For the purposes of subsection (1) an installation shall be deemed to be within the district, as defined in section 1 of the Magistrates' Courts Act, 1944 (Act No. 32 of 1944), designated by the Minister of Justice.

(3) In the absence of a designation contemplated in subsection (2) an installation shall be deemed to be

within the district nearest to that installation.

10. Maritime casualties

Notwithstanding this Act or any other law the Republic may, in any area of the sea or the airspace above the sea, take such measures as are necessary against any vessel or aircraft in order to protect the coastline of the Republic or related interests, including fishing, from pollution or any threat of pollution resulting from a maritime casualty or an act or omission relating to such a casualty and which may reasonably be expected to result in major harmful consequences.

11. Self-defence

Notwithstanding this Act or any other law the Republic may take such action in any area of the sea or in the airspace above the sea, as is necessary in the exercise of the principle of self-defence contained in Article 51 of the Charter of the United Nations.

12. Amendment of Schedule 3

The Minister may by notice in the Gazette amend Schedule 3.

13. Regulations

The Minister may make regulations regarding:

- (a) the recognition of a low-water line indicated on officially recognized large-scale charts or maps as constituting the low-water line for the purposes of section 2(1);
- (b) the establishment of coordinates on the low-water line at the natural entrance points of bays and at the mouths of rivers and estuaries in addition to those coordinates mentioned in Schedule 2;
- (c) the definition of the outer limits of internal waters within harbours as indicated on officially recognized large-scale charts or maps;
- (d) any matter which by this Act is required or permitted to be prescribed or which may be necessary or expedient to be prescribed in order to achieve the objectives of this Act.

14. Application of the Act to Prince Edward Islands

This Act shall also apply to the Prince Edward Islands as defined in section 1 of the Prince Edward Islands Act, 1948 (Act No. 43 of 1948).

15. Repeal and amendment of laws, and savings

- (1) The laws mentioned in Schedule 1 are hereby repealed or amended to the extent set out in the third column of the Schedule.
- (2) Any reference to the internal waters, territorial waters or continental shelf in any other law shall be construed as a reference to the internal waters, territorial waters or continental shelf referred to in this Act, respectively.
- (3) Any reference to the fishing zone in any other law in relation to conservation, management or exploitation of living marine resources shall be construed as a reference to the exclusive economic zone referred to in this Act.

(4) Any reference to the fishing zone in any other law in relation to fiscal matters or matters concerning customs, emigration, immigration or sanitation shall be construed as a reference to the contiguous zone referred to in this Act.

16. Short title

This Act shall be called the Maritime Zones Act, 1994.

SCHEDULE 1 LAWS REPEALED OR AMENDED

(Section 15(1))

No. and year of Act	Title	Extent of repeal or amendment
Act No. 87 of 1963	.Territorial Waters Act, 1963	.Repeal of the whole
Act No. 98 of 1977	.Territorial Waters Amendment Act, 1977	.Repeal of the whole
Act No. 8 of 1978 (Transkei)	.Territorial Waters Act, 1978	.Repeal of the whole
Act No. 2 of 1981	.Marine Traffic Act, 1981	.Amendment of section 1 by the substitution .for the definition of "internal waters" of the .following definition: . " <u>internal waters' means internal</u> . <u>waters referred to in section 3</u> . <u>of the Maritime Zones Act,</u> . <u>1994;</u> ".
Act No. 12 of 1986 (Ciskei)	.Territorial Waters Act, 1986	.Repeal of the whole
Act No. 12 of 1988	.Sea Fishery Act, 1988	.Amendment of section 1 by the substitution .for the definition of "fishing zone" of the .following definition: . " <u>fishing zone' means the</u> . <u>territorial waters of the Republic</u> . <u>and the exclusive economic zone</u> . <u>referred to in sections 4 and 7 of</u> . <u>the Maritime Zones Act, 1994,</u> . <u>respectively;</u> ".

SCHEDULE 2
STRAIGHT BASELINES OF THE REPUBLIC OF SOUTH AFRICA

Latitude South	Longitude East	Latitude South	Longitude East	Latitude South	Longitude East	Latitude South	Longitude East
° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "
32 19 01.04	.18 18 54.50	.34 01 44.33	.18 18 19.78	.34 50 06.29	.19 59 26.45	.34 23 43.55	.21 43 48.63
32 44 12.00	.17 52 06.00	.34 01 44.33	.18 18 19.78	.34 50 06.26	.19 59 27.04	.34 23 43.55	.21 43 48.63
32 44 12.00	.17 52 06.00	.34 02 12.78	.18 18 18.31	.34 50 06.26	.19 59 27.04	.34 20 18.88	.21 54 54.01
32 49 06.25	.17 50 47.43	.34 02 12.78	.18 18 18.31	.34 50 04.57	.19 59 51.13	.34 20 18.88	.21 54 54.01
32 49 06.25	.17 50 47.43	.34 02 42.02	.18 18 23.37	.34 50 04.57	.19 59 51.13	.34 11 15.44	.22 09 39.74
32 49 29.09	.17 50 40.60	.34 02 42.02	.18 18 23.37	.34 50 02.46	.20 00 22.48	.34 11 15.44	.22 09 39.74
32 49 29.09	.17 50 40.60	.34 03 56.86	.18 18 35.74	.34 50 02.46	.20 00 22.48	.34 05 43.00	.22 58 48.00
32 49 30.75	.17 50 40.34	.34 03 56.86	.18 18 35.74	.34 50 01 59	.20 00 26.57	.34 05 43.00	.22 58 48.00
32 49 30.75	.17 50 40.34	.34 08 45.60	.18 19 09.69	.34 50 01 59	.20 00 26.57	.34 06 40.43	.23 24 25.37
32 49 41.32	.17 50 44.24	.34 23 15.31	.18 49 37.02	.34 49 53.62	.20 00 52.57	.34 06 40.43	.23 24 25.37
32 49 41.32	.17 50 44.24	.34 38 23.66	.19 17 19.40	.34 49 53.62	.20 00 52.57	.34 12 49.36	.24 50 12.70
33 00 02.00	.17 51 48.00	.34 38 23.66	.19 17 19.40	.34 48 48.42	.20 03 19.31	.34 12 49.36	.24 50 12.70
33 00 02.00	.17 51 48.00	.34 38 24.23	.19 17 21.14	.34 48 48.42	.20 03 19.31	.34 12 49.81	.24 50 14.69
33 02 29.08	.17 53 30.62	.34 38 24.23	.19 17 21.14	.34 48 47.51	.20 03 21.27	.34 12 49.81	.24 50 14.69
33 02 29.08	.17 53 30.62	.34 41 24.43	.19 24 09.05	.34 48 47.51	.20 03 21.27	.34 12 49.28	.24 50 16.66
33 09 07.08	.17 58 48.10	.34 41 24.43	.19 24 09.05	.34 48 42.82	.20 03 29.04	.34 12 49.28	.24 50 16.66
33 09 07.08	.17 58 48.10	.34 46 53.08	.19 38 05.33	.34 48 42.82	.20 03 29.04	.34 02 58.11	.25 37 41.59
33 24 51.08	.18 04 23.49	.34 46 53.08	.19 38 05.33	.34 28 28.22	.20 50 53.92	.34 02 58.11	.25 37 41.59
33 24 51.08	.18 04 23.49	.34 47 19.28	.19 39 09.17	.34 28 28.22	.20 50 53.92	.34 01 56.36	.25 42 10.97
33 26 00.50	.18 04 23.59	.34 47 19.28	.19 39 09.17	.34 26 18.84	.21 17 58.22	.34 01 56.36	.25 42 10.97
33 26 00.50	.18 04 23.59	.34 47 19.82	.19 39 10.62	.34 26 18.84	.21 17 58.22	.33 50 34.37	.26 17 18.45
33 26 08.45	.18 04 24.91	.34 47 19.82	.19 39 10.62	.34 26 19.51	.21 18 00.22	.33 50 34.37	.26 17 18.45
33 26 08.45	.18 04 24.91	.34 47 19.88	.19 39 11.86	.34 26 19.51	.21 18 00.22	.33 50 34.29	.26 17 22.50
33 26 08.58	.18 04 25.24	.34 47 19.88	.19 39 11.86	.34 26 18.93	.21 18 10.18	.33 50 34.29	.26 17 22.50
33 26 08.58	.18 04 25.24	.34 49 52.73	.19 58 04.62	.34 26 18.93	.21 18 10.18	.33 46 23.96	.26 28 07.66
33 48 07.47	.18 21 28.13	.34 49 52.73	.19 58 04.62	.34 26 16.04	.21 18 38.90	.	.
33 48 07.47	.18 21 28.13	.34 49 53.34	.19 58 07.83	.34 26 16.04	.21 18 38.90	.	.
34 01 44.04	.18 18 19.82	.34 49 53.34	.19 58 07.83	.34 26 15.54	.21 18 40.94	.	.
34 01 44.04	.18 18 19.82	.34 50 06.29	.19 59 26.45	.34 26 15.54	.21 18 40.94	.	.

SCHEDULE 3
LIMITS OF THE CONTINENTAL SHELF OF THE REPUBLIC OF SOUTH AFRICA

Latitude South	Longitude East	Latitude South	Longitude East	Latitude South	Longitude East	Latitude South	Longitude East
° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "

MAINLAND	.	.31 05 00	.10 02 00	.39 37 50	.15 20 10	.39 13 20	.29 06 40
.39 08 40		.29 19 50					
.....							
22 16 40	.08 08 50	.31 16 50	.10 10 30	.39 57 50	.16 15 30	.38 55 50	.29 53 30
.....							
22 23 00	.08 07 50	.31 50 20	.10 39 10	.39 58 50	.16 17 50	.38 49 20	.30 09 50
.....							
22 31 40	.08 06 50	.31 53 40	.10 42 20	.40 03 50	.16 30 20	.38 47 00	.30 15 40
.....							
23 23 00	.08 05 20	.31 55 00	.10 43 40	.40 25 20	.17 43 10	.38 39 50	.30 32 00
.....							
23 27 50	.08 05 30	.31 57 30	.10 44 30	.40 34 00	.18 34 20	.38 29 00	.30 54 50
.....							
23 44 30	.08 05 40	.32 30 30	.10 56 40	.40 37 20	.19 00 00	.38 29 00	.30 55 00
.....							
23 46 00	.08 05 40	.32 53 20	.10 55 10	.40 40 30	.19 59 30	.38 15 00	.31 20 00
.....							
23 47 10	.08 05 30	.33 19 40	.10 55 40	.40 40 10	.20 18 30	.38 06 10	.31 34 10
.....							
24 23 00	.08 05 00	.33 50 30	.10 58 20	.40 40 00	.20 23 50	.37 52 40	.31 55 20
.....							
24 53 00	.08 07 40	.33 53 10	.10 58 50	.40 38 30	.20 46 20	.37 52 40	.31 55 30
.....							
25 23 00	.08 09 40	.34 51 50	.11 13 30	.40 32 00	.21 36 20	.37 49 30	.32 00 30
.....							
26 21 50	.08 22 10	.35 01 10	.11 17 10	.40 16 30	.22 40 20	.37 37 50	.32 19 20
.....							
26 26 30	.08 23 40	.35 10 10	.11 20 50	.40 13 10	.22 50 40	.37 34 10	.32 24 40
.....							
26 54 20	.08 27 50	.35 13 10	.11 21 50	.40 08 00	.23 05 20	.37 15 30	.32 50 00
.....							
27 21 20	.08 31 20	.35 18 10	.11 22 50	.40 05 00	.23 24 00	.37 11 40	.32 55 00
.....							
27 28 50	.08 32 50	.35 50 00	.11 31 10	.40 04 50	.23 24 50	.36 58 40	.33 12 30
.....							
28 13 50	.08 45 00	.36 14 00	.11 40 10	.40 00 50	.23 44 40	.35 24 10	.37 12 20
.....							
28 19 40	.08 46 40	.36 43 50	.11 53 50	.39 59 50	.23 49 00	.35 18 40	.37 19 50
.....							
28 26 10	.08 48 30	.36 46 40	.11 55 20	.39 59 50	.23 49 10	.35 09 30	.37 30 00
.....							
28 35 40	.08 51 20	.37 39 30	.12 30 40	.40 01 30	.24 05 50	.35 09 20	.37 30 10

28 42 50	.08 53 30	.37 54 30	.12 43 50	.40 02 20	.25 23 40	.35 09 10	.37 30 20
29 11 50	.09 02 10	.38 11 20	.13 00 30	.39 52 00	.26 40 20	.35 08 50	.37 30 40
29 17 40	.09 04 20	.38 26 30	.13 17 30	.39 47 20	.27 00 50	.35 08 30	.37 31 00
30 07 00	.09 27 50	.38 32 20	.13 24 30	.39 41 50	.27 30 50	.35 08 10	.37 31 20
30 11 30	.09 30 10	.39 00 10	.14 04 20	.39 36 10	.27 55 10	.34 52 20	.37 44 10
30 13 00	.09 30 50	.39 06 30	.14 14 40	.39 26 00	.28 29 30	.34 47 40	.37 46 50
30 42 00	.09 47 10	.39 18 00	.14 35 50	.39 19 50	.28 46 30	.34 40 50	.37 50 30

Latitude South	Longitude .East	Latitude South	Longitude .East	Latitude South	Longitude .East	Latitude South	Longitude .East
° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "	° ' "
34 27 20	.37 55 40	.32 46 00	.38 24 40	.31 32 50	.38 21 20	.PRINCE EDWARD ISLANDS	
34 22 50	.37 56 50	.32 45 50	.38 24 40	.31 25 00	.38 18 10	.41 54 40	.44 39 50
34 22 00	.37 57 20	.32 42 10	.38 24 00	.31 24 10	.38 17 50	.42 33 00	.43 50 10
34 20 30	.37 58 10	.32 38 30	.38 23 00	.31 23 30	.38 18 10	.41 18 20	.45 43 10
34 16 00	.38 00 20	.32 32 50	.38 24 50	.31 22 20	.38 19 00	.41 03 20	.46 16 40
34 15 30	.38 00 40	.32 08 00	.38 28 00	.31 22 10	.38 19 10	.40 48 50	.46 52 10
34 14 00	.38 01 30	.32 07 50	.38 28 00	.31 12 10	.38 25 10	.40 27 00	.48 05 10
34 12 30	.38 02 10	.32 07 40	.38 28 00	.31 07 40	.38 27 30	.40 14 00	.49 21 40
34 12 10	.38 02 30	.32 07 30	.38 28 00	.31 07 20	.38 27 40	.40 11 20	.49 54 50
34 11 40	.38 02 40	.32 07 20	.38 28 00	.30 54 50	.38 32 40	.40 08 30	.49 56 20
34 00 20	.38 11 20	.32 07 10	.38 28 00	.30 54 20	.38 32 50	.40 08 00	.49 58 00
33 49 40	.38 17 10	.32 07 00	.38 27 50	.30 47 00	.38 34 40	.40 07 50	.49 58 40

33 49 20	.38 17 20	.32 06 50	.38 27 50	.30 46 40	.38 34 50	.40 06 30	.50 03 50
33 37 00	.38 22 10	.32 06 40	.38 27 50	.30 46 30	.38 34 50	.40 05 20	.50 10 00
33 36 30	.38 22 20	.32 06 30	.38 27 50	.30 45 20	.38 35 20	.40 05 10	.50 10 50
33 36 00	.38 22 30	.32 06 20	.38 27 50	.30 44 10	.38 35 50	.40 05 00	.50 11 40
33 34 50	.38 22 50	.32 06 10	.38 27 50	.30 45 10	.38 35 20	.40 04 20	.50 15 20
33 33 40	.38 23 20	.32 06 00	.38 27 50	.30 38 30	.38 38 20	.40 04 10	.50 15 40
33 32 20	.38 23 40	.32 05 50	.38 27 50	.30 27 00	.38 42 50	.40 04 00	.50 16 30
33 06 10	.38 27 10	.32 05 40	.38 27 50	.30 17 10	.38 46 10	.40 03 00	.50 21 00
33 06 00	.38 27 10	.32 05 30	.38 27 50	.30 11 40	.38 48 00	.40 01 50	.50 26 10
33 05 50	.38 27 10	.32 05 20	.38 27 50	.29 58 20	.38 52 50	.40 01 40	.50 26 50
33 05 40	.38 27 10	.31 48 00	.38 25 50	.29 50 20	.38 55 30	.40 01 30	.50 27 30
33 05 30	.38 27 10	.31 43 20	.38 24 40	.29 39 30	.38 58 30	.40 01 20	.50 28 30
33 05 20	.38 27 10	.31 39 30	.38 23 30	.29 36 20	.38 59 30	.39 58 40	.50 37 30
33 05 10	.38 27 10	.31 38 20	.38 23 10	.29 35 20	.38 59 40	.39 45 10	.51 22 20
33 05 00	.38 27 10	.31 33 50	.38 21 40	.29 29 10	.39 01 10	.39 44 30	.51 24 40
32 50 30	.38 25 40	.31 33 30	.38 21 30	.29 14 50	.39 04 20	.39 44 20	.51 25 10
32 47 50	.38 25 10	.31 33 20	.38 21 30	.	.	.39 44 10	.51 25 40

Latitude South ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude East .° ' "	Latitude .South ° ' "	Longitude East .° ' "	Latitude .South ° ' "	Longitude .East ° ' "
39 44 00	.51 26 10	.39 02 10	.52 39 00	.38 42 20	.54 12 10	.36 24 10	.56 51 40
39 40 40	.51 35 00	.39 02 10	.52 40 00	.38 33 50	.54 26 30	.36 24 00	.56 52 00
39 40 10	.51 36 10	.39 02 10	.52 41 00	.38 33 30	.54 26 50	.36 23 50	.56 52 20
39 38 30	.51 40 20	.39 02 10	.52 42 00	.38 18 40	.54 44 50	.36 23 20	.56 53 20
39 35 00	.51 47 50	.39 02 10	.52 43 00	.38 18 30	.54 45 00	.36 22 50	.56 55 10
39 34 50	.51 48 10	.39 02 10	.52 44 00	.38 11 30	.54 51 20	.36 13 40	.57 16 20
39 34 40	.51 48 30	.39 02 10	.52 45 00	.37 41 10	.55 07 40	.35 53 00	.57 44 00
39 34 30	.51 48 50	.39 02 10	.52 46 00	.37 15 00	.55 11 20	.35 52 50	.57 44 10
39 34 20	.51 49 10	.39 02 10	.52 47 00	.37 14 40	.55 11 40	.35 31 40	.58 00 00
39 34 10	.51 49 30	.39 02 10	.52 48 00	.37 12 20	.55 15 20	.35 29 20	.58 04 30
39 34 00	.51 49 50	.39 02 10	.52 49 00	.37 12 00	.55 15 40	.35 17 50	.58 21 20
39 33 50	.51 50 10	.39 02 10	.52 49 30	.36 57 20	.55 33 30	.35 09 10	.58 30 50
39 33 40	.51 50 30	.39 01 30	.53 02 50	.36 48 30	.55 41 10	.35 09 00	.58 31 00
39 33 30	.51 50 50	.39 00 40	.53 12 10	.36 48 20	.55 42 10	.34 57 30	.58 40 50
39 33 20	.51 51 10	.38 59 30	.53 19 40	.36 48 10	.55 42 50	.34 43 00	.58 49 30
39 33 10	.51 51 30	.38 57 40	.53 29 10	.36 44 50	.55 53 50	.34 42 20	.58 49 50
39 33 00	.51 51 50	.38 53 20	.53 45 10	.36 44 40	.55 54 20	.34 30 10	.58 54 40
39 29 00	.51 59 10	.38 53 10	.53 45 40	.36 44 30	.55 55 10	.34 23 10	.58 56 30
39 27 00	.52 02 30	.38 53 00	.53 46 00	.36 39 00	.56 09 20	.34 02 10	.58 58 40

39 16 50	.52 16 50	.38 52 50	.53 46 30	.36 38 20	.56 10 30	.34 02 00	.58 58 40
.....							
39 16 20	.52 17 40	.38 52 40	.53 47 00	.36 36 40	.56 18 10	.34 01 50	.58 58 40
.....							
39 08 10	.52 26 40	.38 52 20	.53 47 50	.36 36 30	.56 18 50	.34 01 40	.58 58 40
.....							
39 07 50	.52 27 10	.38 52 10	.53 48 30	.36 33 20	.56 29 50	.34 01 30	.58 58 40
.....							
39 07 10	.52 27 50	.38 50 10	.53 54 00	.36 33 10	.56 30 20	.34 01 20	.58 58 40
.....							
39 03 50	.52 31 50	.38 49 20	.53 56 10	.36 31 00	.56 36 10	.34 01 10	.58 58 40
.....							
39 02 10	.52 33 50	.38 45 50	.54 04 30	.36 29 30	.56 40 00	.34 01 00	.58 58 40
.....							
39 02 10	.52 36 50	.38 42 50	.54 11 10	.36 24 40	.56 50 40	.34 00 50	.58 58 40
.....							
39 02 10	.52 37 00	.38 42 40	.54 11 30	.36 24 30	.56 51 00	.33 44 00	.58 56 30
.....							
39 02 10	.52 38 00	.38 42 30	.54 11 50	.36 24 20	.56 51 20	.33 33 40	.58 53 30

Latitude ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude .East ° ' "
32 56 20	.58 29 20	.31 56 20	.54 11 00	.34 32 30	.51 25 10	.35 34 40	.48 58 40
32 56 10	.58 29 10	.32 00 30	.54 05 10	.34 32 50	.51 25 00	.35 34 50	.48 58 20
32 56 00	.58 29 00	.32 10 50	.53 52 50	.34 35 50	.51 23 20	.35 42 50	.48 44 20
32 55 50	.58 28 50	.32 11 10	.53 52 30	.34 44 10	.51 10 00	.35 49 50	.48 34 40
32 51 20	.58 24 00	.32 11 40	.53 52 10	.34 49 00	.51 03 50	.35 50 40	.48 31 10
32 37 10	.58 03 40	.32 14 50	.53 49 00	.34 51 40	.50 59 00	.35 53 10	.48 12 00
32 22 30	.57 51 10	.32 20 30	.53 35 40	.34 55 10	.50 53 20	.35 53 20	.48 11 10
32 22 10	.57 51 00	.32 20 40	.53 35 20	.34 58 00	.50 49 20	.35 56 10	.47 59 10
32 22 00	.57 50 40	.32 28 50	.53 21 20	.35 10 20	.50 34 20	.35 57 00	.47 56 30
32 21 50	.57 50 30	.32 34 50	.53 13 10	.35 10 40	.50 34 00	.35 58 40	.47 51 10
32 08 50	.57 34 40	.32 41 30	.52 57 30	.35 10 50	.50 33 50	.35 58 50	.47 50 40
32 07 40	.57 33 00	.32 41 40	.52 57 10	.35 11 00	.50 33 40	.36 02 00	.47 42 00
32 00 00	.57 19 30	.33 03 30	.52 26 20	.35 11 10	.50 33 30	.36 02 30	.47 39 20
31 59 50	.57 19 10	.33 03 50	.52 26 00	.35 11 20	.50 33 20	.36 05 40	.47 26 40
31 52 40	.57 02 00	.33 04 40	.52 25 00	.35 11 30	.50 33 10	.36 15 10	.47 01 50
31 46 10	.56 30 30	.33 29 20	.52 06 50	.35 11 50	.50 33 00	.36 20 30	.46 52 00
31 45 50	.56 27 20	.33 29 40	.52 06 40	.35 12 00	.50 32 50	.36 23 20	.46 47 40
31 35 20	.55 52 30	.33 30 00	.52 06 30	.35 12 10	.50 32 40	.36 37 50	.46 29 40
31 33 20	.55 29 00	.33 55 00	.51 57 50	.35 12 20	.50 32 30	.36 38 00	.46 29 30

31 33 20	.55 28 50	.33 57 50	.51 54 10	.35 12 30	.50 32 20	.36 38 30	.46 28 50
.....							
31 33 20	.55 28 40	.34 05 10	.51 45 40	.35 21 00	.50 24 30	.36 38 50	.46 27 50
.....							
31 33 20	.55 28 30	.34 05 20	.51 45 30	.35 20 00	.50 15 30	.36 41 30	.46 17 10
.....							
31 33 20	.55 28 10	.34 05 30	.51 45 20	.35 19 40	.50 05 00	.36 42 10	.46 14 20
.....							
31 33 20	.55 22 40	.34 05 40	.51 45 10	.35 19 40	.50 04 40	.36 24 30	.45 58 30
.....							
31 35 20	.55 04 40	.34 05 50	.51 45 00	.35 19 40	.50 04 30	.36 05 40	.45 30 40
.....							
31 37 40	.54 53 20	.34 06 00	.51 44 50	.35 19 40	.50 04 20	.36 05 30	.45 30 10
.....							
31 40 40	.54 42 50	.34 06 10	.51 44 40	.35 19 40	.50 04 10	.35 54 50	.45 01 00
.....							
31 52 30	.54 17 00	.34 06 20	.51 44 30	.35 19 40	.50 03 50	.35 53 40	.44 56 10
.....							
31 55 40	.54 12 00	.34 22 00	.51 31 20	.35 31 50	.49 04 40	.35 50 10	.44 23 50

Latitude South ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude .East ° ' "	Latitude .South ° ' "	Longitude .East ° ' "
35 50 10	.44 23 40	.36 22 40	.42 41 00	.37 34 00	.41 42 10	.38 52 40	.40 10 00
35 50 10	.44 23 30	.36 23 50	.42 39 10	.37 37 30	.41 40 50	.38 57 50	.40 02 10
35 50 10	.44 23 20	.36 25 10	.42 37 30	.37 49 00	.41 27 10	.39 02 30	.39 56 00
35 50 10	.44 23 10	.36 28 10	.42 33 30	.38 02 10	.41 15 40	.39 05 50	.39 51 50
35 50 10	.44 22 50	.36 28 50	.42 32 40	.38 14 20	.41 08 00	.39 12 10	.39 44 50
35 50 10	.44 22 40	.36 33 00	.42 27 40	.38 14 40	.41 07 50	.39 12 20	.39 44 40
35 50 10	.44 22 30	.36 38 40	.42 21 30	.38 15 00	.41 07 40	.39 12 30	.39 44 30
35 50 10	.44 22 20	.36 38 50	.42 21 10	.38 15 20	.41 07 30	.39 12 40	.39 44 20
35 50 10	.44 22 00	.36 39 10	.42 21 00	.38 15 40	.41 07 20	.39 12 50	.39 44 10
35 50 10	.44 21 50	.36 39 20	.42 20 40	.38 26 20	.41 00 50	.39 13 00	.39 44 00
35 50 10	.44 21 40	.36 39 40	.42 20 30	.38 26 40	.41 00 40	.39 13 10	.39 43 50
35 53 10	.43 51 10	.36 39 50	.42 20 10	.38 27 00	.41 00 30	.39 13 30	.39 43 40
35 55 00	.43 43 20	.36 40 20	.42 19 50	.38 27 20	.41 00 20	.39 13 30	.39 43 20
35 56 20	.43 38 30	.36 45 10	.42 15 10	.38 32 10	.40 57 50	.39 25 20	.39 32 50
35 56 40	.43 37 20	.36 48 50	.42 11 40	.38 34 10	.40 50 50	.39 29 10	.39 30 10
35 58 40	.43 30 40	.36 50 00	.42 10 40	.38 43 30	.40 26 50	.39 33 30	.39 27 20
36 00 40	.43 24 00	.36 55 00	.42 06 30	.38 43 40	.40 26 30	.39 40 00	.39 23 30
36 08 20	.43 05 30	.36 57 30	.42 04 30	.38 43 50	.40 26 10	.39 40 20	.39 23 20
36 08 30	.43 05 10	.37 01 50	.42 01 20	.38 44 00	.40 25 50	.39 40 40	.39 23 10

36 08 40	.43 04 50	.37 03 00	.42 00 30	.38 44 10	.40 25 20	.39 41 00	.39 23 00
.....							
36 08 50	.43 04 30	.37 03 20	.42 00 10	.38 44 20	.40 25 00	.39 48 00	.39 19 40
.....							
36 09 00	.43 04 10	.37 04 00	.41 59 40	.38 44 30	.40 24 40	.39 50 50	.39 18 30
.....							
36 09 10	.43 03 50	.37 04 40	.41 59 10	.38 44 40	.40 24 20	.39 54 30	.39 17 00
.....							
36 09 20	.43 03 30	.37 07 30	.41 57 00	.38 44 50	.40 24 00	.39 58 40	.39 15 30
.....							
36 09 30	.43 03 10	.37 08 40	.41 56 10	.38 45 00	.40 23 40	.40 02 10	.39 14 30
.....							
36 09 40	.43 02 50	.37 11 30	.41 54 10	.38 45 10	.40 23 20	.40 06 40	.39 13 20
.....							
36 09 50	.43 02 30	.37 15 50	.41 51 20	.38 45 20	.40 23 00	.40 13 30	.39 12 00
.....							
36 13 00	.42 56 30	.37 26 40	.41 45 20	.38 45 30	.40 22 40	.40 17 50	.39 06 20
.....							
36 16 50	.42 49 50	.37 29 10	.41 44 20	.38 50 50	.40 13 00	.40 18 30	.39 05 30

Latitude ° ' "	South .Longitude .East ° ' "	Longitude .Latitude .South ° ' "	Latitude .Longitude .East ° ' "	Longitude .Latitude .South ° ' "	Latitude .Longitude .East ° ' "	Longitude .Latitude .South ° ' "	Latitude .Longitude .East ° ' "
40 19 50	.39 03 50	.43 27 10	.31 03 30	.52 51 40	.37 53 40	.	.
40 21 50	.39 01 30	.43 27 20	.31 03 20	.52 51 40	.37 53 50	.	.
40 28 10	.38 54 20	.43 44 40	.30 45 10	.52 51 40	.37 54 00	.	.
40 28 30	.38 54 00	.44 35 50	.30 02 10	.52 51 40	.37 54 10	.	.
40 28 40	.38 53 50	.45 12 00	.29 40 00	.52 51 30	.38 11 40	.	.
40 28 50	.38 53 40	.45 31 20	.29 30 30	.52 43 40	.39 49 30	.	.
40 29 00	.38 53 20	.46 29 40	.29 11 40	.52 24 40	.41 22 20	.	.
40 29 20	.38 53 00	.46 40 30	.29 09 50	.51 55 20	.42 47 00	.	.
40 36 00	.38 46 50	.47 29 20	.29 07 00	.51 36 40	.43 25 40	.	.
40 43 10	.38 40 50	.47 59 00	.29 10 10	.51 36 30	.43 26 00	.	.
40 43 30	.38 39 50	.48 28 50	.29 17 20	.51 36 20	.43 26 30	.	.
40 45 10	.38 33 40	.49 26 00	.29 43 20	.51 16 40	.44 00 10	.	.
40 48 50	.38 22 00	.50 03 40	.30 10 30	.50 51 10	.44 56 10	.	.
40 49 30	.38 20 20	.50 03 50	.30 10 50	.43 04 20	.44 30 40	.	.
40 49 10	.37 58 10	.50 04 00	.30 10 50	.42 22 00	.43 33 20	.	.
40 49 10	.37 58 00	.50 53 10	.31 02 50	.	.	.	.
40 49 50	.37 25 40	.51 35 40	.32 08 50	.	.	.	.
40 58 20	.36 07 30	.51 35 50	.32 09 10	.	.	.	.
41 15 50	.34 51 50	.51 35 50	.32 09 30	.	.	.	.

41 32 30	.34 03 30	.51 36 00	.32 09 30	.	.	.	.
41 42 00	.33 40 20	.51 57 40	.32 55 50	.	.	.	.
41 50 30	.33 21 50	.52 10 10	.33 28 30	.	.	.	.
41 50 40	.33 21 30	.52 34 40	.34 57 30	.	.	.	.
42 16 10	.32 34 30	.52 47 10	.36 19 10	.	.	.	.
42 57 40	.31 36 00	.52 48 20	.36 33 10	.	.	.	.
43 09 40	.31 22 10	.52 50 30	.37 07 00	.	.	.	.
43 24 50	.31 06 00	.52 51 20	.37 27 20	.	.	.	.
43 26 50	.31 03 50	.52 51 40	.37 53 20	.	.	.	.
43 27 00	.31 03 40	.52 51 40	.37 53 30	.	.	.	.