

No. 1952 11 November 1994

NO. 15 OF 1994: MARITIME ZONES ACT, 1994.

It is hereby notified that the President has assented to the following Act, which is hereby published for general information:

General Explanatory Note:

Words in *italic* indicate insertions in existing enactments.

ACT

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

(Afrikaans text signed by the President.) (Assented to 9 November 1994.)

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

Definitions

1. 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)
- (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.
- (g) Any area situated under or above an installation referred to in paragraph (a) or (b); (iv)

- (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; (v)
- (iv) "low-water" means the mean height of low-water for a tidal cycle of 18,6 years; (vi)
- (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; (vii)
- (vi) "Minister" means the Minister of Transport; (viii)
- (vii) "nautical mile" means the international nautical mile of 1 852 metres; (xii)
- (viii) "officially recognised 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; (i)
- (ix) "prescribed" means prescribed by regulation; (xiii)
- (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); (ix)
- (xi) "sea" means the water of the sea, as well as the bed of the sea and the subsoil thereof; (xi)
- (xii) "straight line" means the shortest distance between two points on a surface; (x)
- (xiii) "this Act" includes the regulations. (iii) Baselines
2. (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.
- ### **Internal waters**
- 3.(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.

Territorial waters

4. (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.

Contiguous zone

5. (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.

Maritime cultural zone

6. (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.

Exclusive economic zone

7. (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.

Continental shelf

8. (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 co-ordinates 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.

Application of laws in respect of installations

9. (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.

Maritime casualties

10. 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.

Self-defence

11. 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.

Amendment of Schedule 3

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

13. The Minister may make regulations regarding-

(a) the recognition of a low-water line indicated on officially recognised large-scale charts or maps as constituting the low-water line for the purposes of section 2(1);

(b) the establishment of co-ordinates on the low-water line at the natural entrance points of bays and at the mouths of rivers and estuaries in addition to those co-ordinates mentioned in Schedule 2;

(c) the definition of the outer limits of internal waters within harbours as indicated on officially recognised 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.

Application of Act to Prince Edward Islands

14. 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).

Repeal and amendment of laws, and savings

15. (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.

Short title

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

Schedule I

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:*

"internal waters" means internal waters referred to in section 3 of the Maritime Zones Act, 1994;".

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:*

"fishing zone" means the territorial waters of the Republic and the exclusive economic zone referred to in sections 4 and 7 of the Maritime Zones Act, 1994, respectively;".

Act No. 129 of 1993 General Law Third Amendment Act, 1993 *Repeal of sections 30 and 31*

Schedule 2

Straight Baselines Of The Republic Of South Africa

(These coordinates are based on the WGS84 Spheroid to an accuracy of 1" (arc))

Latitude South ''	Longitude East ' ''	Latitude South ' ''	Longitude East ' ''
32 19 01.04	18 18 54.50	34 01 44.33	18 18 19.78
32 44 12.00	17 52 06.00	34 01 44.33	18 18 19.78
32 44 12.00	17 52 06.00	34 02 12.78	18 18 18.31
32 49 06.25	17 50 47.43	34 02 12.78	18 18 18.31
32 49 06.25	17 50 47.43	34 02 42.02	18 18 23.37
32 49 29.09	17 50 40.60	34 02 42.02	18 18 23.37
32 49 29.09	17 50 40.60	34 03 56.86	18 18 35.74
32 49 30.75	17 50 40.34	34 03 56.86	18 18 35.74
32 49 30.75	17 50 40.34	34 08 45.60	18 19 09.69
32 49 41.32	17 50 44.24	34 23 15.31	18 49 37.02
32 49 41.32	17 50 44.24	34 38 23.66	19 17 19.40
33 00 02.00	17 51 48.00	34 38 23.66	19 17 19.40
33 00 02.00	17 51 48.00	34 38 24.23	19 17 21.14
33 02 29.08	17 53 30.62	34 38 24.23	19 17 21.14
33 02 29.08	17 53 30.62	34 41 24.43	19 24 09.05
33 09 07.08	17 58 48.10	34 41 24.43	19 24 09.05
33 09 07.08	17 58 48.10	34 46 53.08	19 38 05.33
33 24 51.08	18 04 23.49	34 46 53.08	19 38 05.33
33 24 51.08	18 04 23.49	34 47 19.28	19 39 09.17
33 26 00.50	18 04 23.59	34 47 19.28	19 39 09.17
33 26 00.50	18 04 23.59	34 47 19.82	19 39 10.62
33 26 08.45	18 04 24.91	34 47 19.82	19 39 10.62
33 26 08.45	18 04 24.91	34 47 19.88	19 39 11.86
33 26 08.58	18 04 25.24	34 47 19.88	19 39 11.86
33 26 08.58	18 04 25.24	34 49 52.73	19 58 04.62
33 48 07.47	18 21 28.13	34 49 52.73	19 58 04.62
33 48 07.47	18 21 28.13	34 49 53.34	19 58 07.83
34 01 44.04	18 18 19.82	34 26 16.04	21 18 38.90
34 49 53.34	19 58 07.83	34 26 15.54	21 18 40.94
34 50 06.29	19 59 26.45	34 26 15.54	21 18 40.94
34 50 06.29	19 59 26.45	34 23 43.55	21 43 48.63
34 50 06.26	19 59 27.04	34 23 43.55	21 43 48.63
34 50 06.26	19 59 27.04	34 20 18.88	21 54 54.01
34 50 04.57	19 59 51.13	34 20 18.88	21 54 54.01
34 50 04.57	19 59 51.13	34 11 15.44	22 09 39.74
34 50 02.46	20 00 22.48	34 11 15.44	22 09 39.74
34 50 02.46	20 00 22.48	34 05 43.00	22 58 48.00
34 50 01.59	20 00 26.57	34 05 43.00	22 58 48.00
34 50 01.59	20 00 26.57	34 06 40.43	23 24 25.37
34 49 53.62	20 00 52.57	34 06 40.43	23 24 25.37
34 49 53.62	20 00 52.57	34 12 49.36	24 50 12.70
34 48 48.42	20 03 19.31	34 12 49.36	24 50 12.70
34 48 48.42	20 03 19.31	34 12 49.81	24 50 14.69
34 48 47.51	20 03 21.27	34 12 49.81	24 50 14.69

34 48 47.51	20 03 21.27	34 12 49.28	24 50 16.66
34 48 42.82	20 03 29.04	34 12 49.28	24 50 16.66
34 48 42.82	20 03 29.04	34 02 58.11	25 37 41.59
34 28 28.22	20 50 53.92	34 02 58.11	25 37 41.59
34 28 28.22	20 50 53.92	34 01 56.36	25 42 10.97
34 26 18.84	21 17 58.22	34 01 56.36	25 42 10.97
34 26 18.84	21 17 58.22	33 50 34.37	26 17 18.45
34 26 19.51	21 18 00.22	33 50 34.37	26 17 18.45
34 26 19.51	21 18 00.22	33 50 34.29	26 17 22.50
34 26 18.93	21 18 10.18	33 50 34.29	26 17 22.50
34 26 18.93	21 18 10.18	33 46 23.96	26 28 07.66
34 26 16.04	21 18 38.90		

Schedule 3

Limits Of The Continental Shelf Of The Republic Of South Africa (These co-ordinates are based on the WGS84 Spheroid to an accuracy of 10" (arc))

Latitude South ° ° °	Longitude East ° ° °	Latitude South ' ° °	Longitude East ' ° °
Mainland	08 16 00	34 51 50	11 13 30
21 41 20	08 08 50	35 01 10	11 17 10
22 16 40	08 07 50	35 10 10	11 20 50
22 23 00	08 06 50	35 13 10	11 21 50
22 31 40	08 05 20	35 18 10	11 22 50
23 23 00	08 05 30	35 50 00	11 31 10
23 27 50	08 05 40	36 14 00	11 40 10
23 44 30	08 05 40	36 43 50	11 53 50
23 46 00	08 05 30	36 46 40	11 55 20
23 47 10	08 05 00	37 39 30	12 30 40
24 23 00	08 07 40	37 54 30	12 43 50
24 53 00	08 09 40	38 11 20	13 00 30
25 23 00	08 22 10	38 26 30	13 17 30
26 21 50	08 23 40	38 32 20	13 24 30
26 26 30	08 27 50	39 00 10	14 04 20
26 54 20	08 31 20	39 06 30	14 14 40
27 21 20	08 32 50	39 18 00	14 35 50
27 28 50	08 45 00	39 37 50	15 20 10
28 13 50	08 46 40	39 50 30	15 57 10
28 19 40	08 48 30	39 57 50	16 15 30
28 26 10	08 51 20	39 58 50	16 17 50
28 35 40	08 53 30	40 03 50	16 30 20
28 42 50	09 02 10	40 25 20	17 43 10
29 11 50	09 04 20	40 34 00	18 34 20
29 17 40	09 27 50	40 37 20	19 00 00
30 07 00	09 30 10	40 40 30	19 59 30
30 11 30	09 30 50	40 40 10	20 18 30
30 13 00	09 47 10	40 40 00	20 23 50
30 42 00	10 02 00	40 38 30	20 46 20
31 05 00	10 02 50	40 32 00	21 36 20
31 06 20	10 10 30	40 16 30	22 40 20
31 16 50	10 39 10	40 13 10	22 50 40

31 50 20	10 42 20	40 08 00	23 05 20
31 53 40	10 43 40	40 05 00	23 24 00
31 55 00	10 44 30	40 04 50	23 24 50
31 57 30	10 56 40	40 00 50	23 44 40
32 30 30	10 55 10	39 59 50	23 49 00
32 53 20	10 55 40	39 59 50	23 49 10
33 19 40	10 58 20	40 01 30	24 05 50
33 50 30	10 58 50	40 02 20	25 23 40
33 53 10	27 00 50	39 52 00	26 40 20
39 47 20	27 30 50	34 12 30	38 02 10
39 41 50	27 55 10	34 12 10	38 02 30
39 36 10	28 29 30	34 11 40	38 02 40
39 26 00	28 46 30	34 00 20	38 11 20
39 19 50	29 06 40	33 49 40	38 17 10
39 13 20	29 19 50	33 49 20	38 17 20
39 08 40	29 53 30	33 37 00	38 22 10
38 55 50	30 09 50	33 36 30	38 22 20
38 49 20	30 15 40	33 36 00	38 22 30
38 47 00	30 32 00	33 34 50	38 22 50
38 39 50	30 54 50	33 33 40	38 23 20
38 29 00	30 55 00	33 32 20	38 23 40
38 29 00	31 20 00	33 06 10	38 27 10
38 15 00	31 34 10	33 06 00	38 27 10
38 06 10	31 55 20	33 05 50	38 27 10
37 52 40	31 55 30	33 05 40	38 27 10
37 52 40	32 00 30	33 05 30	38 27 10
37 49 30	32 19 20	33 05 20	38 27 10
37 37 50	32 24 40	33 05 10	38 27 10
37 34 10	32 50 00	33 05 00	38 27 10
37 15 30	32 55 00	32 50 30	38 25 40
37 11 40	33 12 30	32 47 50	38 25 10
36 58 40	37 12 20	32 46 00	38 24 40
35 24 10	37 19 50	32 45 50	38 24 40
35 18 40	37 30 00	32 42 10	38 24 00
35 09 30	37 30 10	32 38 30	38 23 00
35 09 20	37 30 20	32 32 50	38 24 50
35 09 10	37 30 40	32 08 00	38 28 00
35 08 50	37 31 00	32 07 50	38 28 00
35 08 30	37 31 20	32 07 40	38 28 00
35 08 10	37 44 10	32 07 30	38 28 00
34 52 20	37 46 50	32 07 20	38 28 00
34 47 40	37 50 30	32 07 10	38 28 00
34 40 50	37 55 40	32 07 00	38 27 50
34 27 20	37 56 50	32 06 50	38 27 50
34 22 50	37 57 20	32 06 40	38 27 50
34 22 00	37 58 10	32 06 30	38 27 50
34 20 30	38 00 20	32 06 20	38 27 50
34 16 00	38 00 40	32 06 10	38 27 50
34 15 30	38 01 30	32 06 00	38 27 50
34 14 00	38 27 50	32 05 50	38 27 50
32 05 40	38 27 50	Prince Edward	44 39 50
32 05 30	38 27 50	Islands	43 50 10
32 05 20	38 25 50	41 54 40	45 43 10
31 48 00	38 24 40	42 33 00	46 16 40

31 43 20	38 23 30	41 18 20	46 52 10
31 39 30	38 23 10	41 03 20	48 05 10
31 38 20	38 21 40	40 48 50	49 21 40
31 33 50	38 21 30	40 27 00	49 54 50
31 33 30	38 21 30	40 14 00	49 56 20
31 33 20	38 21 20	40 11 20	49 58 00
31 32 50	38 18 10	40 08 30	49 58 40
31 25 00	38 17 50	40 08 00	50 03 50
31 24 10	38 18 10	40 07 50	50 10 00
31 23 30	38 19 00	40 06 30	50 10 50
31 22 20	38 19 10	40 05 20	50 11 40
31 22 10	38 25 10	40 05 10	50 15 20
31 12 10	38 27 30	40 05 00	50 15 40
31 07 40	38 27 40	40 04 20	50 16 30
31 07 20	38 32 40	40 04 10	50 21 00
30 54 50	38 32 50	40 04 00	50 26 10
30 54 20	38 34 40	40 03 00	50 26 50
30 47 00	38 34 50	40 01 50	50 27 30
30 46 40	38 34 50	40 01 40	50 28 30
30 46 30	38 35 20	40 01 30	50 37 30
30 45 20	38 35 50	40 01 20	51 22 20
30 44 10	38 35 20	39 58 40	51 24 40
30 45 10	38 38 20	39 45 10	51 25 10
30 38 30	38 42 50	39 44 30	51 25 40
30 27 00	38 46 10	39 44 20	51 26 10
30 17 10	38 48 00	39 44 10	51 35 00
30 11 40	38 52 50	39 44 00	51 36 10
29 58 20	38 55 30	39 40 40	51 40 20
29 50 20	38 58 30	39 40 10	51 47 50
29 39 30	38 59 30	39 38 30	51 48 10
29 36 20	38 59 40	39 35 00	51 48 30
29 35 20	39 01 10	39 34 50	51 48 50
29 29 10	39 04 20	39 34 40	51 49 10
29 14 50	51 50 30	39 34 30	51 49 30
39 33 40	51 50 50	39 34 20	51 49 50
39 33 30	51 51 10	39 34 10	51 50 10
39 33 20	51 51 30	39 34 00	53 56 10
39 33 10	51 51 50	39 33 50	54 04 30
39 33 00	51 59 10	38 49 20	54 11 10
39 29 00	52 02 30	38 45 50	54 11 30
39 27 00	52 16 50	38 42 50	54 11 50
39 16 50	52 17 40	38 42 40	54 12 10
39 16 20	52 26 40	38 42 30	54 26 30
39 08 10	52 27 10	38 42 20	54 26 50
39 07 50	52 27 50	38 33 50	54 44 50
39 07 10	52 31 50	38 33 30	54 45 00
39 03 50	52 33 50	38 18 40	54 51 20
39 02 10	52 36 50	38 18 30	55 07 40
39 02 10	52 37 00	38 11 30	55 11 20
39 02 10	52 38 00	37 41 10	55 11 40
39 02 10	52 39 00	37 15 00	55 15 20
39 02 10	52 40 00	37 14 40	55 15 40
39 02 10	52 41 00	37 12 20	55 33 30
39 02 10	52 42 00	37 12 00	55 41 10

39 02 10	52 43 00	36 57 20	55 42 10
39 02 10	52 44 00	36 48 30	55 42 50
39 02 10	52 45 00	36 48 20	55 53 50
39 02 10	52 46 00	36 48 10	55 54 20
39 02 10	52 47 00	36 44 50	55 55 10
39 02 10	52 48 00	36 44 40	56 09 20
39 02 10	52 49 00	36 44 30	56 10 30
39 02 10	52 49 30	36 39 00	56 18 10
39 02 10	53 02 50	36 38 20	56 18 50
39 01 30	53 12 10	36 36 40	56 29 50
39 00 40	53 19 40	36 36 30	56 30 20
38 59 30	53 29 10	36 33 20	56 36 10
38 57 40	53 45 10	36 33 10	56 40 00
38 53 20	53 45 40	36 31 00	56 50 40
38 53 10	53 46 00	36 29 30	56 51 00
38 53 00	53 46 30	36 24 40	56 51 20
38 52 50	53 47 00	36 24 30	56 51 40
38 52 40	53 47 50	36 24 20	56 52 00
38 52 20	53 48 30	36 24 10	56 52 20
38 52 10	53 54 00	36 24 00	56 53 20
38 50 10	57 44 10	36 23 50	56 55 10
35 52 50	58 00 00	36 23 20	57 16 20
35 31 40	58 04 30	36 22 50	57 44 00
35 29 20	58 21 20	36 13 40	55 28 50
35 17 50	58 30 50	35 53 00	55 28 40
35 09 10	58 31 00	31 33 20	55 28 30
35 09 00	58 40 50	31 33 20	55 28 10
34 57 30	58 49 30	31 33 20	55 22 40
34 43 00	58 49 50	31 33 20	55 04 40
34 42 20	58 54 40	31 33 20	54 53 20
34 30 10	58 56 30	31 35 20	54 42 50
34 23 10	58 58 40	31 37 40	54 17 00
34 02 10	58 58 40	31 40 40	54 12 00
34 02 00	58 58 40	31 52 30	54 11 00
34 01 50	58 58 40	31 55 40	54 05 10
34 01 40	58 58 40	31 56 20	53 52 50
34 01 30	58 58 40	32 00 30	53 52 30
34 01 20	58 58 40	32 10 50	53 52 10
34 01 10	58 58 40	32 11 10	53 49 00
34 01 00	58 58 40	32 11 40	53 35 40
34 00 50	58 56 30	32 14 50	53 35 20
33 44 00	58 53 30	32 20 30	53 21 20
33 33 40	58 29 20	32 20 40	53 13 10
32 56 20	58 29 10	32 28 50	52 57 30
32 56 10	58 29 00	32 34 50	52 57 10
32 56 00	58 28 50	32 41 30	52 26 20
32 55 50	58 24 00	32 41 40	52 26 00
32 51 20	58 03 40	33 03 30	52 25 00
32 37 10	57 51 10	33 03 50	52 06 50
32 22 30	57 51 00	33 04 40	52 06 40
32 22 10	57 50 40	33 29 20	52 06 30
32 22 00	57 50 30	33 29 40	51 57 50
32 21 50	57 34 40	33 30 00	51 54 10
32 08 50	57 33 00	33 55 00	51 45 40

32 07 40	57 19 30	33 57 50	51 45 30
32 00 00	57 19 10	34 05 10	51 45 20
31 59 50	57 02 00	34 05 20	51 45 10
31 52 40	56 30 30	34 05 30	51 45 00
31 46 10	56 27 20	34 05 40	51 44 50
31 45 50	55 52 30	34 05 50	51 44 40
31 35 20	55 29 00	34 06 00	51 44 30
31 33 20	51 23 20	34 06 10	51 31 20
34 35 50	51 10 00	34 06 20	51 25 10
34 44 10	51 03 50	34 22 00	51 25 00
34 49 00	50 59 00	34 32 30	47 01 50
34 51 40	50 53 20	34 32 50	46 52 00
34 55 10	50 49 20	36 15 10	46 47 40
34 58 00	50 34 20	36 20 30	46 29 40
35 10 20	50 34 00	36 23 20	46 29 30
35 10 40	50 33 50	36 37 50	46 28 50
35 10 50	50 33 40	36 38 00	46 27 50
35 11 00	50 33 30	36 38 30	46 17 10
35 11 10	50 33 20	36 38 50	46 14 20
35 11 20	50 33 10	36 41 30	45 58 30
35 11 30	50 33 00	36 42 10	45 30 40
35 11 50	50 32 50	36 24 30	45 30 10
35 12 00	50 32 40	36 05 40	45 01 00
35 12 10	50 32 30	36 05 30	44 56 10
35 12 20	50 32 20	35 54 50	44 23 50
35 12 30	50 24 30	35 53 40	44 23 40
35 21 00	50 15 30	35 50 10	44 23 30
35 20 00	50 05 00	35 50 10	44 23 20
35 19 40	50 04 40	35 50 10	44 23 10
35 19 40	50 04 30	35 50 10	44 22 50
35 19 40	50 04 20	35 50 10	44 22 40
35 19 40	50 04 10	35 50 10	44 22 30
35 19 40	50 03 50	35 50 10	44 22 20
35 19 40	49 04 40	35 50 10	44 22 00
35 31 50	48 58 40	35 50 10	44 21 50
35 34 40	48 58 20	35 50 10	44 21 40
35 34 50	48 44 20	35 50 10	43 51 10
35 42 50	48 34 40	35 50 10	43 43 20
35 49 50	48 31 10	35 53 10	43 38 30
35 50 40	48 12 00	35 55 00	43 37 20
35 53 10	48 11 10	35 56 20	43 30 40
35 53 20	47 59 10	35 56 40	43 24 00
35 56 10	47 56 30	35 58 40	43 05 30
35 57 00	47 51 10	36 00 40	43 05 10
35 58 40	47 50 40	36 08 20	43 04 50
35 58 50	47 42 00	36 08 30	43 04 30
36 02 00	47 39 20	36 08 40	43 04 10
36 02 30	47 26 40	36 08 50	43 03 50
36 05 40	43 02 30	36 09 00	43 03 30
36 09 50	42 56 30	36 09 10	43 03 10
36 13 00	42 49 50	36 09 20	43 02 50
36 16 50	42 41 00	36 09 30	41 00 50
36 22 40	42 39 10	36 09 40	41 00 40
36 23 50	42 37 30	38 26 20	41 00 30

36 25 10	42 33 30	38 26 40	41 00 20
36 28 10	42 32 40	38 27 00	40 57 50
36 28 50	42 27 40	38 27 20	40 50 50
36 33 00	42 21 30	38 32 10	40 26 50
36 38 40	42 21 10	38 34 10	40 26 30
36 38 50	42 21 00	38 43 30	40 26 10
36 39 10	42 20 40	38 43 40	40 25 50
36 39 20	42 20 30	38 43 50	40 25 20
36 39 40	42 20 10	38 44 00	40 25 00
36 39 50	42 19 50	38 44 10	40 24 40
36 40 20	42 15 10	38 44 20	40 24 20
36 45 10	42 11 40	38 44 30	40 24 00
36 48 50	42 10 40	38 44 40	40 23 40
36 50 00	42 06 30	38 44 50	40 23 20
36 55 00	42 04 30	38 45 00	40 23 00
36 57 30	42 01 20	38 45 10	40 22 40
37 01 50	42 00 30	38 45 20	40 13 00
37 03 00	42 00 10	38 45 30	40 10 00
37 03 20	41 59 40	38 50 50	40 02 10
37 04 00	41 59 10	38 52 40	39 56 00
37 04 40	41 57 00	38 57 50	39 51 50
37 07 30	41 56 10	39 02 30	39 44 50
37 08 40	41 54 10	39 05 50	39 44 40
37 11 30	41 51 20	39 12 10	39 44 30
37 15 50	41 45 20	39 12 20	39 44 20
37 26 40	41 44 20	39 12 30	39 44 10
37 29 10	41 42 10	39 12 40	39 44 00
37 34 00	41 40 50	39 12 50	39 43 50
37 37 30	41 27 10	39 13 00	39 43 40
37 49 00	41 15 40	39 13 10	39 43 20
38 02 10	41 08 00	39 13 30	39 32 50
38 14 20	41 07 50	39 13 30	39 30 10
38 14 40	41 07 40	39 25 20	39 27 20
38 15 00	41 07 30	39 29 10	39 23 30
38 15 20	41 07 20	39 33 30	39 23 20
38 15 40	39 18 30	39 40 00	39 23 10
39 50 50	39 17 00	39 40 20	39 23 00
39 54 30	39 15 30	39 40 40	39 19 40
39 58 40	39 14 30	39 41 00	29 40 00
40 02 10	39 13 20	39 48 00	29 30 30
40 06 40	39 12 00	45 12 00	29 11 40
40 13 30	39 06 20	45 31 20	29 09 50
40 17 50	39 05 30	46 29 40	29 07 00
40 18 30	39 03 50	46 40 30	29 10 10
40 19 50	39 01 30	47 29 20	29 17 20
40 21 50	38 54 20	47 59 00	29 43 20
40 28 10	38 54 00	48 28 50	30 10 30
40 28 30	38 53 50	49 26 00	30 10 50
40 28 40	38 53 40	50 03 40	30 10 50
40 28 50	38 53 20	50 03 50	31 02 50
40 29 00	38 53 00	50 04 00	32 08 50
40 29 20	38 46 50	50 53 10	32 09 10
40 36 00	38 40 50	51 35 40	32 09 30
40 43 10	38 39 50	51 35 50	32 09 30

40 43 30	38 33 40	51 35 50	32 55 50
40 45 10	38 22 00	51 36 00	33 28 30
40 48 50	38 20 20	51 57 40	34 57 30
40 49 30	37 58 10	52 10 10	36 19 10
40 49 10	37 58 00	52 34 40	36 33 10
40 49 10	37 25 40	52 47 10	37 07 00
40 49 50	36 07 30	52 48 20	37 27 20
40 58 20	34 51 50	52 50 30	37 53 20
41 15 50	34 03 30	52 51 20	37 53 30
41 32 30	33 40 20	52 51 40	37 53 40
41 42 00	33 21 50	52 51 40	37 53 50
41 50 30	33 21 30	52 51 40	37 54 00
41 50 40	32 34 30	52 51 40	37 54 10
42 16 10	31 36 00	52 51 40	38 11 40
42 57 40	31 22 10	52 51 40	39 49 30
43 09 40	31 06 00	52 51 30	41 22 20
43 24 50	31 03 50	52 43 40	42 47 00
43 26 50	31 03 40	52 24 40	43 25 40
43 27 00	31 03 30	51 55 20	43 26 00
43 27 10	31 03 20	51 36 40	43 26 30
43 27 20	30 45 10	51 36 30	44 00 10
43 44 40	30 02 10	51 36 20	44 56 10
44 35 50		51 16 40	44 30 40
		50 51 10	43 33 20
		43 04 20	
		42 22 00	
