Intergovernmental
Oceanographic
Commission

ROSCOP
(3rd edition)

CRUISE SUMMARY REPORT

The Cruise Summary Report is a general purpose form for reporting on measurements and samples collected at sea. It is used to support a global, first level, inventory of data collected at sea and to provide ready access for scientists, programme managers and data managers alike to timely information on who has collected what, when and where. The resulting global summaries of measurements made will be available to scientists and planners through World and National Data Centres and to the Programme Offices of international programmes.

The Cruise Summary Report replaces the ROSCOP (2nd edition), and should be used for cruises ending after January 1st, 1991, although its use prior to that date is strongly encouraged.

For research cruises and voyages of ships of opportunity, it is generally expected that one report will be completed for each port to port operation. It is intended that the report should be completed by the chief scientist(s), or appropriate ship's officer, just before returning to port and that it should be sent as soon as practicable after completion of the cruise or observational programme to:

Please affix the name and address of the collating centre to which the completed report should be submitted

If no address is provided in the above box, then please send to one of the following (as arranged):

* Your National Oceanographic Data Centre or designated agency.

or * World Data Centre A, Oceanography, NOAA, Washington DC 20235, USA.

or * World Data Centre B, Oceanography, 6, Koroleva Street, Obninsk 249020, USSR.

or * World Data Centre D, Oceanography, 77 Qi Wei Road, Hedong District, Tianjin, China

or * ICES Service Hydrographique, Palaegade 2-4, 1261 Copenhagen K, Denmark.

Further copies of these forms may be obtained from any of the above centres.

SC-90/WS-23

CODE LIST OF DATA TYPES

In order to assist computer-based retrieval of information on the data reported on Cruise Summary Reports, you are requested to assign against each of the entries made on Page 2 ("Moorings, bottom mounted gear and drifting systems") and Page 3 ("Summary of measurements and samples taken") one or more data type codes from the following list.

Please note that the list is restricted to the more common types of oceanographic data. For those data types not included on the list you are requested to use codes D90, H90, P90, B90, M90, and G90 (for other types of physical oceanography, chemical oceanography, contamination, biology & fisheries, meteorology, and geology & geophysics data respectively).

For some entries you will find that only one code is required (e.g. for BTs, only H13 is needed), while for others a string of codes may be appropriate (e.g. for water bottle stations with measurements of temperature, salinity, oxygen, nitrate and phosphate, the codes H09, H21, H24 and H22 would be assigned to the entry).

PHYSICAL OCEANOGRAPHY

- H71 Surface measurements underway (T, S)
- H13 Bathythermograph drops
- H09 Water bottle stations
- H10 CTD stations
- H11 Subsurface measurements underway (T, S)
- H72 Thermistor chain
- H16 Transparency (e.g. transmissometer)
- H17 Optics (e.g. underwater light levels)
- H73 Geochemical tracers (e.g. freons)
- D01 Current meters
- D71 Current profiler (e.g. ADCP)
- D03 Currents measured from ship drift
- D04 GEK
- D05 Surface drifters / drifting buoys
- D06 Neutrally buoyant floats
- D09 Sea level measurements (including bottom pressure recorders and inverted echo–sounders)
- D72 Instrumented wave measurements
- D90 Other physical oceanographic measurements

CHEMICAL OCEANOGRAPHY

- H21 Oxygen
- H74 Carbon dioxide
- H33 Other dissolved gases
- H22 Phosphates
- H23 Total–P
- H24 Nitrates
- H25 Nitrites
- H75 Total–N
- H76 Ammonia
- H26 Silicates
- H27 Alkalinity
- H28 pH
- H30 Trace elements
- H31 Radioactivity
- H32 Isotopes
- H90 Other chemical oceanographic measurements

CONTAMINATION

- P01 Suspended matter
- P02 Trace metals
- P03 Petroleum residues
- P04 Chlorinated hydrocarbons
- P05 Other dissolved substances
- P12 Bottom deposits
- P13 Contaminants in organisms
- P90 Other contaminant measurements

BIOLOGY & FISHERIES

- B01 Primary productivity
- B02 Phytoplankton pigments (e.g. chlorophyll, fluorescence)
- B71 Particulate organic matter (e.g. POC, PON)
- B06 Dissolved organic matter (e.g. DOC)
- B72 Biochemical measurements (e.g. lipids, aminoacids)
- B73 Sediment traps
- B08 Phytoplankton
- B09 Zooplankton
- B03 Seston
- B10 Neuston
- B11 Nekton
- B13 Eggs / larvae
- B07 Pelagic bacteria / micro-organisms
- B16 Benthic bacteria / micro-organisms
- B17 Phytobenthos
- B18 Zoobenthos
- B25 Birds
- B26 Mammals & reptiles
- B14 Pelagic fish
- B19 Demersal fish
- B20 Molluscs
- B21 Crustaceans
- B28 Acoustic reflection on marine organisms
- B37 Taggings
- B64 Gear research
- B65 Exploratory fishing
- B90 Other biological / fishery measurements

METEOROLOGY

- M01 Upper air observations
- M02 Incident radiation
- M05 Occasional standard measurements
- M06 Routine standard measurements
- M71 Atmospheric chemistry
- M90 Other meteorological measurements

GEOLOGY & GEOPHYSICS

- G01 Dredge
- G02 Grab
- G03 Core – rock
- G04 Core – soft bottom
- G08 Bottom photography
- G71 In–situ seafloor measurements
- G72 Geophysical measurements made at depth (below near surface and above seafloor)
- G73 Single–beam echosounding
- G74 Multi–beam echosounding
- G24 Long/short range side scan sonar
- G75 Single channel seismic reflection
- G76 Multichannel seismic reflection
- G26 Seismic refraction
- G27 Gravity measurements
- G28 Magnetic measurements
- G90 Other geological or geophysical measurements

CRUISE SUMMARY REPORT

FOR COLLATING CENTRE USE

Centre: ..... Ref. No: .....

Is data exchange restricted? ☐ Yes ☐ In part ☐ No

SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.

Name: ..... Call Sign: .....

Type of ship: .....

CRUISE NO./NAME ..... enter the unique number, name or acronym assigned to the cruise (or cruise leg, if appropriate).

CRUISE PERIOD start (set sail) ☐☐ ☐☐ ☐☐☐☐ day month year to ☐☐ ☐☐ ☐☐☐☐ day month year end (return to port)

PORT OF DEPARTURE (enter name and country) .....

PORT OF RETURN (enter name and country) .....

RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise.

Name: .....

Address: .....

..... Country: .....

CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

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OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so as to provide the context in which the reported data were collected.

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PROJECT (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperative project (or expedition or programme), then enter the name of the project, and of the organisation responsible for coordinating the project.

Project name: .....

Coordinating body: .....

PRINCIPAL INVESTIGATORS: Enter the name and address of the Principal Investigators responsible for the data collected on the cruise, and who may be contacted for further information about the data. (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

A. .....

B. .....

C. .....

D. .....

E. .....

F. .....

MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

This section should be used for reporting moorings, bottom mounted gear and drifting systems (both surface and deep) deployed and/or recovered during the cruise. Separate entries should be made for each location (only deployment positions need be given for drifting systems). This section may also be used to report data collected at fixed locations which are returned to routinely in order to construct 'long time series'.

PI	APPROXIMATE POSITION				DATA TYPE	DESCRIPTION
see top of page.	LATITUDE deg	min N/S	LONGITUDE deg	min E/W	enter code(s) from list on cover page.	identify, as appropriate, the nature of the instrumentation, the parameters (to be) measured, the number of instruments and their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to the site.

Please continue on separate sheet if necessary.

SUMMARY OF MEASUREMENTS AND SAMPLES TAKEN

Except for the data already described on page 2 under 'Moorings, Bottom Mounted Gear and Drifting Systems', this section should include a summary of all data collected on the cruise, whether they be measurements (e.g. temperature, salinity values) or samples (e.g. cores, net hauls).

Separate entries should be made for each distinct and coherent set of measurements or samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurement/sampling techniques that imply distinctly different accuracies or spatial/temporal resolutions. Thus, for example, separate entries would be created for i) BT drops, ii) water bottle stations, iii) CTD casts, iv) towed CTD, v) towed undulating CTD profiler, vi) surface water intake measurements, etc.

Each data set entry should start on a new line - it's description may extend over several lines if necessary.

NO, UNITS : for each data set, enter the estimated amount of data collected expressed in terms of the number of: 'stations'; 'miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under 'NO' and the counting unit should be identified in plain text under 'UNITS'.

PI	NO	UNITS	DATA TYPE	DESCRIPTION
see page 2	see above	see above	enter code(s) from list on cover page.	identify, as appropriate, the nature of the data and of the instrumentation/sampling gear and list the parameters measured. Include any supplementary information that may be appropriate, e.g. vertical or horizontal profiles, depth horizons, continuous recording or discrete samples, etc. For samples taken for later analysis on shore, an indication should be given of the type of analysis planned, i.e. the purpose for which the samples were taken.
				Please continue on separate sheet if necessary.

TRACK CHART: You are strongly encouraged to submit, with the completed report, an annotated track chart illustrating the route followed and the points where measurements were taken.	Insert a tick (✓) in this box if a track chart is supplied. ☐

GENERAL OCEAN AREA(S): Enter the names of the oceans and/or seas in which data were collected during the cruise - please use commonly recognised names (see, for example, International Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas').

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SPECIFIC AREAS: If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates.

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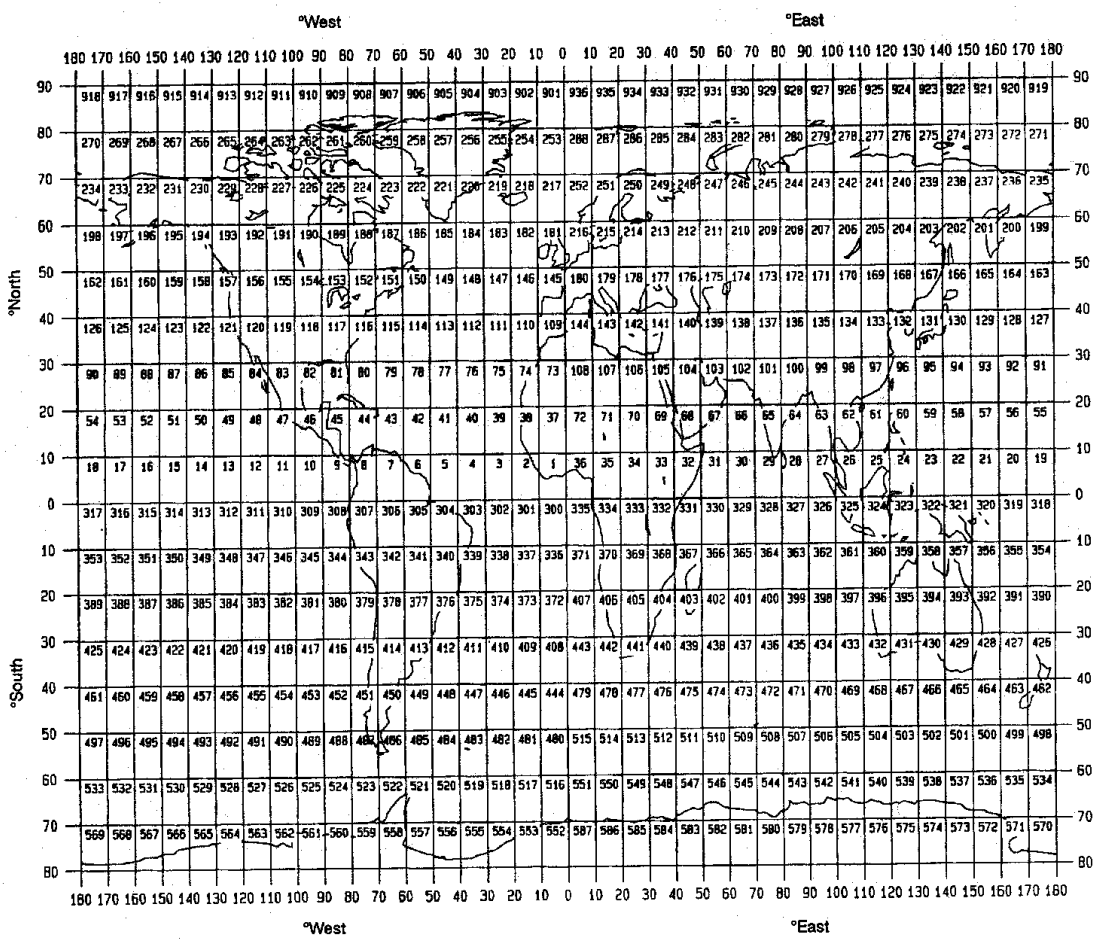
GEOGRAPHIC COVERAGE - INSERT 'X' IN EACH SQUARE IN WHICH DATA WERE COLLECTED



THANK YOU FOR YOUR COOPERATION

Please send your completed report without delay to the collating centre indicated on the cover page

ROSCOP Parameter Codes Used in the ICES-ROSCOP system

Roscop Code	Description
METEOROLOGY	
M01	Upper air observations
M02	Incident radiation
M05	Occasional standard measurements
M06	Routine standard measurements
M71	Atmospheric chemistry
M90	Other meteorological measurements
PHYSICAL OCEANOGRAPHY	
H71	Surface measurements underway (T,S) *
H13	Bathythermograph
H09	Water bottle stations
H10	CTD stations
H11	Subsurface measurements underway (T,S) *
H72	Thermistor chain
H16	Transparency (eg transmissometer)
H17	Optics (eg underwater light levels)
H73	Geochemical tracers (eg freons)
D01	Current meters
D71	Current profiler (eg ADCP)
D03	Currents measured from ship drift *
D04	GEK
D05	Surface drifters/drifting buoys
D06	Neutrally buoyant floats
D09	Sea level (incl. bottom pressure & inverted echosounder)
D72	Instrumented wave measurements
D90	Other physical oceanographic measurements
CHEMICAL OCEANOGRAPHY	
H21	Oxygen
H74	Carbon dioxide
H33	Other dissolved gases
H22	Phosphate
H23	Total - P
H24	Nitrate
H25	Nitrite
H75	Total - N
H76	Ammonia
H26	Silicate
H27	Alkalinity

H28	PH
H30	Trace elements
H31	Radioactivity
H32	Isotopes
H90	Other chemical oceanographic measurements
MARINE CONTAMINANTS/POLLUTION	
P01	Suspended matter
P02	Trace metals
P03	Petroleum residues
P04	Chlorinated hydrocarbons
P05	Other dissolved substances
P12	Bottom deposits
P13	Contaminants in organisms
P90	Other contaminant measurements
MARINE BIOLOGY/FISHERIES	
B01	Primary productivity
B02	Phytoplankton pigments (eg chlorophyll, fluorescence)
B71	Particulate organic matter (inc POC, PON)
B06	Dissolved organic matter (inc DOC)
B72	Biochemical measurements (eg lipids, amino acids)
B73	Sediment traps
B08	Phytoplankton
B09	Zooplankton
B03	Seston
B10	Neuston
B11	Nekton
B13	Eggs & larvae
B07	Pelagic bacteria/micro-organisms
B16	Benthic bacteria/micro-organisms
B17	Phytobenthos
B18	Zoobenthos
B25	Birds
B26	Mammals & reptiles
B14	Pelagic fish
B19	Demersal fish
B20	Molluscs
B21	Crustaceans
B28	Acoustic reflection on marine organisms.
B37	Taggings
B64	Gear research
B65	Exploratory fishing
B90	Other biological/fisheries measurements
MARINE GEOLOGY/GEOPHYSICS	
G01	Dredge
G02	Grab
G03	Core - rock
G04	Core - soft bottom
G08	Bottom photography
G71	In-situ seafloor measurement/sampling
G72	Geophysical measurements made at depth
G73	Single-beam echosounding *

G74	Multi-beam echosounding *
G24	Long/short range side scan sonar *
G75	Single channel seismic reflection *
G76	Multichannel seismic reflection *
G26	Seismic refraction *
G27	Gravity measurements
G28	Magnetic measurements
G90	Other geological/geophysical measurements
OTHER (BODC/JGOFS) CODES USED IN ROSCOP	
ATTNZR01	(H16)Red light attenuance (unspecified beam)
IRRDPP01	(H17)Downwelling 2-pi PAR irradiance
NPUPRYP4	(H22)Normalised phosphorous uptake (dark with antibiotic)
NPUPRZP4	(H22)Normalised phosphorous uptake (188 uE/m2/s with antibiotic)
NPUPRBP1	(H22)Normalised phosphorous uptake (188 uE/m2/s)
NPUPRDP1	(H22)Normalised phosphorous uptake (dark)
NPUPRDP4	(H22)Normalised phosphorous uptake (dark)
NPUPRPP1	(H22)Normalised phosphorous uptake (azide control)
NPUPRPP4	(H22)Normalised phosphorous uptake (azide control)
SNPURBPB	(H22)Size-fractionated normalised phosphorus uptake (188 uE/m2/s)
SNPURBPF	(H22)Size-fractionated normalised phosphorus uptake (188 uE/m2/s)
SNPURDPB	(H22)Size-fractionated normalised phosphorus uptake (dark)
SNPURDPF	(H22)Size-fractionated normalised phosphorus uptake (dark)
SNPURPPB	(H22)Size-fractionated normalised phosphorus uptake (azide control)
SNPURPPF	(H22)Size-fractionated normalised phosphorus uptake (azide control)
NPUPRBP4	(H22)Normalised phosphorous uptake (188 uE/m2/s)
NNUPRBP1	(H24)Normalised nitrate uptake (188 uE/m2/s)
ALXXLGD2	(H30)Dissolved aluminium
CDRURBP2	(H30)Cadmium relative uptake rate (188 uE/m2/s)
CDRURDP2	(H30)Cadmium relative uptake rate (dark)
CORURBP2	(H30)Cobalt relative uptake rate (188 uE/m2/s)
CORURDP2	(H30)Cobalt relative uptake rate (dark)
MNRURBP2	(H30)Manganese relative uptake rate (188 uE/m2/s)
MNRURDP2	(H30)Manganese relative uptake rate (dark)
ZNRURBP2	(H30)Zinc relative uptake rate (188 uE/m2/s)
ZNRURDP2	(H30)Zinc relative uptake rate (dark)
3H1HMXTX	(H32)Tritium/hydrogen atomic ratio
D13CMOPC	(H32)Particulate organic carbon 13C enrichment
D18OMXFZ	(H32)Unspecified benthic foramenifera test
IORTAMDP	(H32)Iodine 129 to 127 ratio
SEIRAMDP	(H32)Standard Error of I129/127
HEXCMXXX	(H33)Dissolved helium
DSF6GCDX	(H73)Dissolved sulphur hexafluoride
F113GCTX	(H73)Freon - 113
FR11GCTX	(H73)Freon - 11
FR12GCTX	(H73)Freon - 12
QCMXGCTX	(H73)Tetrachloromethane(CCl4)
TCEAGCD3	(H73)Dissolved Trichloroethane (C2H3Cl3)
NCUPRZP4	(H74)Normalised carbon uptake (188 uE/m2/s with antibiotic)
NCUPRBP1	(H74)Normalised carbon uptake (188 uE/m2/s)
NCUPRBP4	(H74)Normalised carbon uptake (188 uE/m2/s)
PCO2C101	(H74)pCO2
PCO2GC01	(H74)pCO2 by Gas chromatography

PCO2PT01	(H74)pCO2 at potential temperature
PCOTXXXX	(H74)Temperature of pCO2 determination
SNCURBPB	(H74)Size-fractionated normalised carbon uptake (188 uE/m2/s)
SNCURBPF	(H74)Size-fractionated normalised carbon uptake (188 uE/m2/s)
SNCURZPB	(H74)Size-fractionated normalised carbon uptake (188 uE/m2/s with antibiotic)
SNCURZPF	(H74)Size-fractionated normalised carbon uptake (188 uE/m2/s with antibiotic)
TCO2C1TX	(H74)Total dissolved inorganic carbon (TCO2)
TCO2CBTX	(H74)Total dissolved inorganic carbon (TCO2)
NAUPRBP1	(H76)Normalised ammonium uptake (188 uE/m2/s)
NUUPRBP1	(H90)Normalised urea uptake (188 uE/m2/s)
UREAMDTX	(H90)Urea (unfiltered)
ALPHPIP1	(B01)ALPHPIP1 Quantum yield (alpha)
PMAXPIP1	(B01)Photosynthetic maximum (Pmax)
SFPXPIPE	(B01)Size frac. photosynthetic maximum (Pmax)
TCUPROPZ	(B01)Carbon uptake over incubation
SNCURSPB	(B01)Size-fractionated normalised carbon uptake (natural light)
CAROSSP1	(B02)Spectrophotometric carotenoid pigments (SCOR)
CHLBSSP1	(B02)Spectrophotometric chlorophyll-b (SCOR)
CHLCSSP1	(B02)Spectrophotometric chlorophyll-c (SCOR)
CPHLPR01	(B02)In-situ fluorometer chlorophyll
CPHLFLP1	(B02)Fluorometric chlorophyll-a
CPHLSSP1	(B02)Spectrophotometric chlorophyll-a (SCOR)
PHAESPP1	(B02)Spectrophotometric phaeopigments (Lorenzen)(GF/F filter)
PHAESPPZ	(B02)Spectrophotometric phaeopigments (Lorenzen)(Unspec filter)
PHFXFLXX	(B02)Fluorometric phaeopigment flux
CORGCOD1	(B06)Dissolved Organic carbon (GFF Filter)
CORGCOD2	(B06)Dissolved Organic carbon (.4um filter)
NTOTCNP1	(B71)Particulate total nitrogen (PON)(C/N analyser GFF filter)
NTOTCNPZ	(B71)Particulate total nitrogen (PON)(C/N analyser unspecified filter)
CORGCAP1	(B71)Particulate organic carbon (POC)(acidified-C/N analysis GFF filter)
CORGCNPZ	(B71)Particulate organic carbon (POC)(Unacidified C/N analysis unspecified filter)
CORGCNP3	(B71)Particulate organic carbon (POC)(Unacicified C/N analysis GFC filter)
OCFXCZXX	(B71)Particulate organic carbon flux (acidification unspecified)

5 DEGREE MARSDEN SQUARES

Longitude	Latitude	Marsden
-177.5	-87.5	605;4
-172.5	-87.5	605;3
-167.5	-87.5	604;4
-162.5	-87.5	604;3
-157.5	-87.5	603;4
-152.5	-87.5	603;3
-147.5	-87.5	602;4
-142.5	-87.5	602;3
-137.5	-87.5	601;4
-132.5	-87.5	601;3
-127.5	-87.5	600;4
-122.5	-87.5	600;3
-117.5	-87.5	599;4
-112.5	-87.5	599;3
-107.5	-87.5	598;4
-102.5	-87.5	598;3
-97.5	-87.5	597;4
-92.5	-87.5	597;3
-87.5	-87.5	596;4
-82.5	-87.5	596;3
-77.5	-87.5	595;4
-72.5	-87.5	595;3
-67.5	-87.5	594;4
-62.5	-87.5	594;3
-57.5	-87.5	593;4
-52.5	-87.5	593;3
-47.5	-87.5	592;4
-42.5	-87.5	592;3
-37.5	-87.5	591;4
-32.5	-87.5	591;3
-27.5	-87.5	590;4
-22.5	-87.5	590;3
-17.5	-87.5	589;4
-12.5	-87.5	589;3
-7.5	-87.5	588;4
-2.5	-87.5	588;3

Longitude	Latitude	Marsden
2.5	-87.5	623;3
7.5	-87.5	623;4
12.5	-87.5	622;3
17.5	-87.5	622;4
22.5	-87.5	621;3
27.5	-87.5	621;4
32.5	-87.5	620;3
37.5	-87.5	620;4
42.5	-87.5	619;3
47.5	-87.5	619;4
52.5	-87.5	618;3
57.5	-87.5	618;4
62.5	-87.5	617;3
67.5	-87.5	617;4
72.5	-87.5	616;3
77.5	-87.5	616;4
82.5	-87.5	615;3
87.5	-87.5	615;4
92.5	-87.5	614;3
97.5	-87.5	614;4
102.5	-87.5	613;3
107.5	-87.5	613;4
112.5	-87.5	612;3
117.5	-87.5	612;4
122.5	-87.5	611;3
127.5	-87.5	611;4
132.5	-87.5	610;3
137.5	-87.5	610;4
142.5	-87.5	609;3
147.5	-87.5	609;4
152.5	-87.5	608;3
157.5	-87.5	608;4
162.5	-87.5	607;3
167.5	-87.5	607;4
172.5	-87.5	606;3
-177.5	-82.5	605;2
-172.5	-82.5	605;1

Longitude	Latitude	Marsden
-167.5	-82.5	604;2
-162.5	-82.5	604;1
-157.5	-82.5	603;2
-152.5	-82.5	603;1
-147.5	-82.5	602;2
-142.5	-82.5	602;1
-137.5	-82.5	601;2
-132.5	-82.5	601;1
-127.5	-82.5	600;2
-122.5	-82.5	600;1
-117.5	-82.5	599;2
-112.5	-82.5	599;1
-107.5	-82.5	598;2
-102.5	-82.5	598;1
-97.5	-82.5	597;2
-92.5	-82.5	597;1
-87.5	-82.5	596;2
-82.5	-82.5	596;1
-77.5	-82.5	595;2
-72.5	-82.5	595;1
-67.5	-82.5	594;2
-62.5	-82.5	594;1
-57.5	-82.5	593;2
-52.5	-82.5	593;1
-47.5	-82.5	592;2
-42.5	-82.5	592;1
-37.5	-82.5	591;2
-32.5	-82.5	591;1
-27.5	-82.5	590;2
-22.5	-82.5	590;1
-17.5	-82.5	589;2
-12.5	-82.5	589;1
-7.5	-82.5	588;2
-2.5	-82.5	588;1
2.5	-82.5	623;1
7.5	-82.5	623;2
12.5	-82.5	622;1

Longitude	Latitude	Marsden
17.5	-82.5	622;2
22.5	-82.5	621;1
27.5	-82.5	621;2
32.5	-82.5	620;1
37.5	-82.5	620;2
42.5	-82.5	619;1
47.5	-82.5	619;2
52.5	-82.5	618;1
57.5	-82.5	618;2
62.5	-82.5	617;1
67.5	-82.5	617;2
72.5	-82.5	616;1
77.5	-82.5	616;2
82.5	-82.5	615;1
87.5	-82.5	615;2
92.5	-82.5	614;1
97.5	-82.5	614;2
102.5	-82.5	613;1
107.5	-82.5	613;2
112.5	-82.5	612;1
117.5	-82.5	612;2
122.5	-82.5	611;1
127.5	-82.5	611;2
132.5	-82.5	610;1
137.5	-82.5	610;2
142.5	-82.5	609;1
147.5	-82.5	609;2
152.5	-82.5	608;1
157.5	-82.5	608;2
162.5	-82.5	607;1
167.5	-82.5	607;2
172.5	-82.5	606;1
-177.5	-77.5	569;4
-172.5	-77.5	569;3
-167.5	-77.5	568;4
-162.5	-77.5	568;3
-157.5	-77.5	567;4

Longitude	Latitude	Marsden
-152.5	-77.5	567;3
-147.5	-77.5	566;4
-142.5	-77.5	566;3
-137.5	-77.5	565;4
-132.5	-77.5	565;3
-127.5	-77.5	564;4
-122.5	-77.5	564;3
-117.5	-77.5	563;4
-112.5	-77.5	563;3
-107.5	-77.5	562;4
-102.5	-77.5	562;3
-97.5	-77.5	561;4
-92.5	-77.5	561;3
-87.5	-77.5	560;4
-82.5	-77.5	560;3
-77.5	-77.5	559;4
-72.5	-77.5	559;3
-67.5	-77.5	558;4
-62.5	-77.5	558;3
-57.5	-77.5	557;4
-52.5	-77.5	557;3
-47.5	-77.5	556;4
-42.5	-77.5	556;3
-37.5	-77.5	555;4
-32.5	-77.5	555;3
-27.5	-77.5	554;4
-22.5	-77.5	554;3
-17.5	-77.5	553;4
-12.5	-77.5	553;3
-7.5	-77.5	552;4
-2.5	-77.5	552;3
2.5	-77.5	587;3
7.5	-77.5	587;4
12.5	-77.5	586;3
17.5	-77.5	586;4
22.5	-77.5	585;3
27.5	-77.5	585;4
32.5	-77.5	584;3

Longitude	Latitude	Marsden
37.5	-77.5	584;4
42.5	-77.5	583;3
47.5	-77.5	583;4
52.5	-77.5	582;3
57.5	-77.5	582;4
62.5	-77.5	581;3
67.5	-77.5	581;4
72.5	-77.5	580;3
77.5	-77.5	580;4
82.5	-77.5	579;3
87.5	-77.5	579;4
92.5	-77.5	578;3
97.5	-77.5	578;4
102.5	-77.5	577;3
107.5	-77.5	577;4
112.5	-77.5	576;3
117.5	-77.5	576;4
122.5	-77.5	575;3
127.5	-77.5	575;4
132.5	-77.5	574;3
137.5	-77.5	574;4
142.5	-77.5	573;3
147.5	-77.5	573;4
152.5	-77.5	572;3
157.5	-77.5	572;4
162.5	-77.5	571;3
167.5	-77.5	571;4
172.5	-77.5	570;3
-177.5	-72.5	569;2
-172.5	-72.5	569;1
-167.5	-72.5	568;2
-162.5	-72.5	568;1
-157.5	-72.5	567;2
-152.5	-72.5	567;1
-147.5	-72.5	566;2
-142.5	-72.5	566;1
-137.5	-72.5	565;2
-132.5	-72.5	565;1

Longitude	Latitude	Marsden
-127.5	-72.5	564;2
-122.5	-72.5	564;1
-117.5	-72.5	563;2
-112.5	-72.5	563;1
-107.5	-72.5	562;2
-102.5	-72.5	562;1
-97.5	-72.5	561;2
-92.5	-72.5	561;1
-87.5	-72.5	560;2
-82.5	-72.5	560;1
-77.5	-72.5	559;2
-72.5	-72.5	559;1
-67.5	-72.5	558;2
-62.5	-72.5	558;1
-57.5	-72.5	557;2
-52.5	-72.5	557;1
-47.5	-72.5	556;2
-42.5	-72.5	556;1
-37.5	-72.5	555;2
-32.5	-72.5	555;1
-27.5	-72.5	554;2
-22.5	-72.5	554;1
-17.5	-72.5	553;2
-12.5	-72.5	553;1
-7.5	-72.5	552;2
-2.5	-72.5	552;1
2.5	-72.5	587;1
7.5	-72.5	587;2
12.5	-72.5	586;1
17.5	-72.5	586;2
22.5	-72.5	585;1
27.5	-72.5	585;2
32.5	-72.5	584;1
37.5	-72.5	584;2
42.5	-72.5	583;1
47.5	-72.5	583;2
52.5	-72.5	582;1
57.5	-72.5	582;2

Longitude	Latitude	Marsden
62.5	-72.5	581;1
67.5	-72.5	581;2
72.5	-72.5	580;1
77.5	-72.5	580;2
82.5	-72.5	579;1
87.5	-72.5	579;2
92.5	-72.5	578;1
97.5	-72.5	578;2
102.5	-72.5	577;1
107.5	-72.5	577;2
112.5	-72.5	576;1
117.5	-72.5	576;2
122.5	-72.5	575;1
127.5	-72.5	575;2
132.5	-72.5	574;1
137.5	-72.5	574;2
142.5	-72.5	573;1
147.5	-72.5	573;2
152.5	-72.5	572;1
157.5	-72.5	572;2
162.5	-72.5	571;1
167.5	-72.5	571;2
172.5	-72.5	570;1
-177.5	-67.5	533;4
-172.5	-67.5	533;3
-167.5	-67.5	532;4
-162.5	-67.5	532;3
-157.5	-67.5	531;4
-152.5	-67.5	531;3
-147.5	-67.5	530;4
-142.5	-67.5	530;3
-137.5	-67.5	529;4
-132.5	-67.5	529;3
-127.5	-67.5	528;4
-122.5	-67.5	528;3
-117.5	-67.5	527;4
-112.5	-67.5	527;3
-107.5	-67.5	526;4

Longitude	Latitude	Marsden
-102.5	-67.5	526;3
-97.5	-67.5	525;4
-92.5	-67.5	525;3
-87.5	-67.5	524;4
-82.5	-67.5	524;3
-77.5	-67.5	523;4
-72.5	-67.5	523;3
-67.5	-67.5	522;4
-62.5	-67.5	522;3
-57.5	-67.5	521;4
-52.5	-67.5	521;3
-47.5	-67.5	520;4
-42.5	-67.5	520;3
-37.5	-67.5	519;4
-32.5	-67.5	519;3
-27.5	-67.5	518;4
-22.5	-67.5	518;3
-17.5	-67.5	517;4
-12.5	-67.5	517;3
-7.5	-67.5	516;4
-2.5	-67.5	516;3
2.5	-67.5	551;3
7.5	-67.5	551;4
12.5	-67.5	550;3
17.5	-67.5	550;4
22.5	-67.5	549;3
27.5	-67.5	549;4
32.5	-67.5	548;3
37.5	-67.5	548;4
42.5	-67.5	547;3
47.5	-67.5	547;4
52.5	-67.5	546;3
57.5	-67.5	546;4
62.5	-67.5	545;3
67.5	-67.5	545;4
72.5	-67.5	544;3
77.5	-67.5	544;4
82.5	-67.5	543;3

Longitude	Latitude	Marsden
87.5	-67.5	543;4
92.5	-67.5	542;3
97.5	-67.5	542;4
102.5	-67.5	541;3
107.5	-67.5	541;4
112.5	-67.5	540;3
117.5	-67.5	540;4
122.5	-67.5	539;3
127.5	-67.5	539;4
132.5	-67.5	538;3
137.5	-67.5	538;4
142.5	-67.5	537;3
147.5	-67.5	537;4
152.5	-67.5	536;3
157.5	-67.5	536;4
162.5	-67.5	535;3
167.5	-67.5	535;4
172.5	-67.5	534;3
-177.5	-62.5	533;2
-172.5	-62.5	533;1
-167.5	-62.5	532;2
-162.5	-62.5	532;1
-157.5	-62.5	531;2
-152.5	-62.5	531;1
-147.5	-62.5	530;2
-142.5	-62.5	530;1
-137.5	-62.5	529;2
-132.5	-62.5	529;1
-127.5	-62.5	528;2
-122.5	-62.5	528;1
-117.5	-62.5	527;2
-112.5	-62.5	527;1
-107.5	-62.5	526;2
-102.5	-62.5	526;1
-97.5	-62.5	525;2
-92.5	-62.5	525;1
-87.5	-62.5	524;2
-82.5	-62.5	524;1

Longitude	Latitude	Marsden
-77.5	-62.5	523;2
-72.5	-62.5	523;1
-67.5	-62.5	522;2
-62.5	-62.5	522;1
-57.5	-62.5	521;2
-52.5	-62.5	521;1
-47.5	-62.5	520;2
-42.5	-62.5	520;1
-37.5	-62.5	519;2
-32.5	-62.5	519;1
-27.5	-62.5	518;2
-22.5	-62.5	518;1
-17.5	-62.5	517;2
-12.5	-62.5	517;1
-7.5	-62.5	516;2
-2.5	-62.5	516;1
2.5	-62.5	551;1
7.5	-62.5	551;2
12.5	-62.5	550;1
17.5	-62.5	550;2
22.5	-62.5	549;1
27.5	-62.5	549;2
32.5	-62.5	548;1
37.5	-62.5	548;2
42.5	-62.5	547;1
47.5	-62.5	547;2
52.5	-62.5	546;1
57.5	-62.5	546;2
62.5	-62.5	545;1
67.5	-62.5	545;2
72.5	-62.5	544;1
77.5	-62.5	544;2
82.5	-62.5	543;1
87.5	-62.5	543;2
92.5	-62.5	542;1
97.5	-62.5	542;2
102.5	-62.5	541;1
107.5	-62.5	541;2

Longitude	Latitude	Marsden
112.5	-62.5	540;1
117.5	-62.5	540;2
122.5	-62.5	539;1
127.5	-62.5	539;2
132.5	-62.5	538;1
137.5	-62.5	538;2
142.5	-62.5	537;1
147.5	-62.5	537;2
152.5	-62.5	536;1
157.5	-62.5	536;2
162.5	-62.5	535;1
167.5	-62.5	535;2
172.5	-62.5	534;1
-177.5	-57.5	497;4
-172.5	-57.5	497;3
-167.5	-57.5	496;4
-162.5	-57.5	496;3
-157.5	-57.5	495;4
-152.5	-57.5	495;3
-147.5	-57.5	494;4
-142.5	-57.5	494;3
-137.5	-57.5	493;4
-132.5	-57.5	493;3
-127.5	-57.5	492;4
-122.5	-57.5	492;3
-117.5	-57.5	491;4
-112.5	-57.5	491;3
-107.5	-57.5	490;4
-102.5	-57.5	490;3
-97.5	-57.5	489;4
-92.5	-57.5	489;3
-87.5	-57.5	488;4
-82.5	-57.5	488;3
-77.5	-57.5	487;4
-72.5	-57.5	487;3
-67.5	-57.5	486;4
-62.5	-57.5	486;3
-57.5	-57.5	485;4

Longitude	Latitude	Marsden
-52.5	-57.5	485;3
-47.5	-57.5	484;4
-42.5	-57.5	484;3
-37.5	-57.5	483;4
-32.5	-57.5	483;3
-27.5	-57.5	482;4
-22.5	-57.5	482;3
-17.5	-57.5	481;4
-12.5	-57.5	481;3
-7.5	-57.5	480;4
-2.5	-57.5	480;3
2.5	-57.5	515;3
7.5	-57.5	515;4
12.5	-57.5	514;3
17.5	-57.5	514;4
22.5	-57.5	513;3
27.5	-57.5	513;4
32.5	-57.5	512;3
37.5	-57.5	512;4
42.5	-57.5	511;3
47.5	-57.5	511;4
52.5	-57.5	510;3
57.5	-57.5	510;4
62.5	-57.5	509;3
67.5	-57.5	509;4
72.5	-57.5	508;3
77.5	-57.5	508;4
82.5	-57.5	507;3
87.5	-57.5	507;4
92.5	-57.5	506;3
97.5	-57.5	506;4
102.5	-57.5	505;3
107.5	-57.5	505;4
112.5	-57.5	504;3
117.5	-57.5	504;4
122.5	-57.5	503;3
127.5	-57.5	503;4
132.5	-57.5	502;3

Longitude	Latitude	Marsden
137.5	-57.5	502;4
142.5	-57.5	501;3
147.5	-57.5	501;4
152.5	-57.5	500;3
157.5	-57.5	500;4
162.5	-57.5	499;3
167.5	-57.5	499;4
172.5	-57.5	498;3
-177.5	-52.5	497;2
-172.5	-52.5	497;1
-167.5	-52.5	496;2
-162.5	-52.5	496;1
-157.5	-52.5	495;2
-152.5	-52.5	495;1
-147.5	-52.5	494;2
-142.5	-52.5	494;1
-137.5	-52.5	493;2
-132.5	-52.5	493;1
-127.5	-52.5	492;2
-122.5	-52.5	492;1
-117.5	-52.5	491;2
-112.5	-52.5	491;1
-107.5	-52.5	490;2
-102.5	-52.5	490;1
-97.5	-52.5	489;2
-92.5	-52.5	489;1
-87.5	-52.5	488;2
-82.5	-52.5	488;1
-77.5	-52.5	487;2
-72.5	-52.5	487;1
-67.5	-52.5	486;2
-62.5	-52.5	486;1
-57.5	-52.5	485;2
-52.5	-52.5	485;1
-47.5	-52.5	484;2
-42.5	-52.5	484;1
-37.5	-52.5	483;2
-32.5	-52.5	483;1

Longitude	Latitude	Marsden
-27.5	-52.5	482;2
-22.5	-52.5	482;1
-17.5	-52.5	481;2
-12.5	-52.5	481;1
-7.5	-52.5	480;2
-2.5	-52.5	480;1
2.5	-52.5	515;1
7.5	-52.5	515;2
12.5	-52.5	514;1
17.5	-52.5	514;2
22.5	-52.5	513;1
27.5	-52.5	513;2
32.5	-52.5	512;1
37.5	-52.5	512;2
42.5	-52.5	511;1
47.5	-52.5	511;2
52.5	-52.5	510;1
57.5	-52.5	510;2
62.5	-52.5	509;1
67.5	-52.5	509;2
72.5	-52.5	508;1
77.5	-52.5	508;2
82.5	-52.5	507;1
87.5	-52.5	507;2
92.5	-52.5	506;1
97.5	-52.5	506;2
102.5	-52.5	505;1
107.5	-52.5	505;2
112.5	-52.5	504;1
117.5	-52.5	504;2
122.5	-52.5	503;1
127.5	-52.5	503;2
132.5	-52.5	502;1
137.5	-52.5	502;2
142.5	-52.5	501;1
147.5	-52.5	501;2
152.5	-52.5	500;1
157.5	-52.5	500;2

Longitude	Latitude	Marsden
162.5	-52.5	499;1
167.5	-52.5	499;2
172.5	-52.5	498;1
-177.5	-47.5	461;4
-172.5	-47.5	461;3
-167.5	-47.5	460;4
-162.5	-47.5	460;3
-157.5	-47.5	459;4
-152.5	-47.5	459;3
-147.5	-47.5	458;4
-142.5	-47.5	458;3
-137.5	-47.5	457;4
-132.5	-47.5	457;3
-127.5	-47.5	456;4
-122.5	-47.5	456;3
-117.5	-47.5	455;4
-112.5	-47.5	455;3
-107.5	-47.5	454;4
-102.5	-47.5	454;3
-97.5	-47.5	453;4
-92.5	-47.5	453;3
-87.5	-47.5	452;4
-82.5	-47.5	452;3
-77.5	-47.5	451;4
-72.5	-47.5	451;3
-67.5	-47.5	450;4
-62.5	-47.5	450;3
-57.5	-47.5	449;4
-52.5	-47.5	449;3
-47.5	-47.5	448;4
-42.5	-47.5	448;3
-37.5	-47.5	447;4
-32.5	-47.5	447;3
-27.5	-47.5	446;4
-22.5	-47.5	446;3
-17.5	-47.5	445;4
-12.5	-47.5	445;3
-7.5	-47.5	444;4

Longitude	Latitude	Marsden
-2.5	-47.5	444;3
2.5	-47.5	479;3
7.5	-47.5	479;4
12.5	-47.5	478;3
17.5	-47.5	478;4
22.5	-47.5	477;3
27.5	-47.5	477;4
32.5	-47.5	476;3
37.5	-47.5	476;4
42.5	-47.5	475;3
47.5	-47.5	475;4
52.5	-47.5	474;3
57.5	-47.5	474;4
62.5	-47.5	473;3
67.5	-47.5	473;4
72.5	-47.5	472;3
77.5	-47.5	472;4
82.5	-47.5	471;3
87.5	-47.5	471;4
92.5	-47.5	470;3
97.5	-47.5	470;4
102.5	-47.5	469;3
107.5	-47.5	469;4
112.5	-47.5	468;3
117.5	-47.5	468;4
122.5	-47.5	467;3
127.5	-47.5	467;4
132.5	-47.5	466;3
137.5	-47.5	466;4
142.5	-47.5	465;3
147.5	-47.5	465;4
152.5	-47.5	464;3
157.5	-47.5	464;4
162.5	-47.5	463;3
167.5	-47.5	463;4
172.5	-47.5	462;3
-177.5	-42.5	461;2
-172.5	-42.5	461;1

Longitude	Latitude	Marsden
-167.5	-42.5	460;2
-162.5	-42.5	460;1
-157.5	-42.5	459;2
-152.5	-42.5	459;1
-147.5	-42.5	458;2
-142.5	-42.5	458;1
-137.5	-42.5	457;2
-132.5	-42.5	457;1
-127.5	-42.5	456;2
-122.5	-42.5	456;1
-117.5	-42.5	455;2
-112.5	-42.5	455;1
-107.5	-42.5	454;2
-102.5	-42.5	454;1
-97.5	-42.5	453;2
-92.5	-42.5	453;1
-87.5	-42.5	452;2
-82.5	-42.5	452;1
-77.5	-42.5	451;2
-72.5	-42.5	451;1
-67.5	-42.5	450;2
-62.5	-42.5	450;1
-57.5	-42.5	449;2
-52.5	-42.5	449;1
-47.5	-42.5	448;2
-42.5	-42.5	448;1
-37.5	-42.5	447;2
-32.5	-42.5	447;1
-27.5	-42.5	446;2
-22.5	-42.5	446;1
-17.5	-42.5	445;2
-12.5	-42.5	445;1
-7.5	-42.5	444;2
-2.5	-42.5	444;1
2.5	-42.5	479;1
7.5	-42.5	479;2
12.5	-42.5	478;1
17.5	-42.5	478;2

Longitude	Latitude	Marsden
22.5	-42.5	477;1
27.5	-42.5	477;2
32.5	-42.5	476;1
37.5	-42.5	476;2
42.5	-42.5	475;1
47.5	-42.5	475;2
52.5	-42.5	474;1
57.5	-42.5	474;2
62.5	-42.5	473;1
67.5	-42.5	473;2
72.5	-42.5	472;1
77.5	-42.5	472;2
82.5	-42.5	471;1
87.5	-42.5	471;2
92.5	-42.5	470;1
97.5	-42.5	470;2
102.5	-42.5	469;1
107.5	-42.5	469;2
112.5	-42.5	468;1
117.5	-42.5	468;2
122.5	-42.5	467;1
127.5	-42.5	467;2
132.5	-42.5	466;1
137.5	-42.5	466;2
142.5	-42.5	465;1
147.5	-42.5	465;2
152.5	-42.5	464;1
157.5	-42.5	464;2
162.5	-42.5	463;1
167.5	-42.5	463;2
172.5	-42.5	462;1
-177.5	-37.5	425;4
-172.5	-37.5	425;3
-167.5	-37.5	424;4
-162.5	-37.5	424;3
-157.5	-37.5	423;4
-152.5	-37.5	423;3
-147.5	-37.5	422;4

Longitude	Latitude	Marsden
-142.5	-37.5	422;3
-137.5	-37.5	421;4
-132.5	-37.5	421;3
-127.5	-37.5	420;4
-122.5	-37.5	420;3
-117.5	-37.5	419;4
-112.5	-37.5	419;3
-107.5	-37.5	418;4
-102.5	-37.5	418;3
-97.5	-37.5	417;4
-92.5	-37.5	417;3
-87.5	-37.5	416;4
-82.5	-37.5	416;3
-77.5	-37.5	415;4
-72.5	-37.5	415;3
-67.5	-37.5	414;4
-62.5	-37.5	414;3
-57.5	-37.5	413;4
-52.5	-37.5	413;3
-47.5	-37.5	412;4
-42.5	-37.5	412;3
-37.5	-37.5	411;4
-32.5	-37.5	411;3
-27.5	-37.5	410;4
-22.5	-37.5	410;3
-17.5	-37.5	409;4
-12.5	-37.5	409;3
-7.5	-37.5	408;4
-2.5	-37.5	408;3
2.5	-37.5	443;3
7.5	-37.5	443;4
12.5	-37.5	442;3
17.5	-37.5	442;4
22.5	-37.5	441;3
27.5	-37.5	441;4
32.5	-37.5	440;3
37.5	-37.5	440;4
42.5	-37.5	439;3

Longitude	Latitude	Marsden
47.5	-37.5	439;4
52.5	-37.5	438;3
57.5	-37.5	438;4
62.5	-37.5	437;3
67.5	-37.5	437;4
72.5	-37.5	436;3
77.5	-37.5	436;4
82.5	-37.5	435;3
87.5	-37.5	435;4
92.5	-37.5	434;3
97.5	-37.5	434;4
102.5	-37.5	433;3
107.5	-37.5	433;4
112.5	-37.5	432;3
117.5	-37.5	432;4
122.5	-37.5	431;3
127.5	-37.5	431;4
132.5	-37.5	430;3
137.5	-37.5	430;4
142.5	-37.5	429;3
147.5	-37.5	429;4
152.5	-37.5	428;3
157.5	-37.5	428;4
162.5	-37.5	427;3
167.5	-37.5	427;4
172.5	-37.5	426;3
-177.5	-32.5	425;2
-172.5	-32.5	425;1
-167.5	-32.5	424;2
-162.5	-32.5	424;1
-157.5	-32.5	423;2
-152.5	-32.5	423;1
-147.5	-32.5	422;2
-142.5	-32.5	422;1
-137.5	-32.5	421;2
-132.5	-32.5	421;1
-127.5	-32.5	420;2
-122.5	-32.5	420;1

Longitude	Latitude	Marsden
-117.5	-32.5	419;2
-112.5	-32.5	419;1
-107.5	-32.5	418;2
-102.5	-32.5	418;1
-97.5	-32.5	417;2
-92.5	-32.5	417;1
-87.5	-32.5	416;2
-82.5	-32.5	416;1
-77.5	-32.5	415;2
-72.5	-32.5	415;1
-67.5	-32.5	414;2
-62.5	-32.5	414;1
-57.5	-32.5	413;2
-52.5	-32.5	413;1
-47.5	-32.5	412;2
-42.5	-32.5	412;1
-37.5	-32.5	411;2
-32.5	-32.5	411;1
-27.5	-32.5	410;2
-22.5	-32.5	410;1
-17.5	-32.5	409;2
-12.5	-32.5	409;1
-7.5	-32.5	408;2
-2.5	-32.5	408;1
2.5	-32.5	443;1
7.5	-32.5	443;2
12.5	-32.5	442;1
17.5	-32.5	442;2
22.5	-32.5	441;1
27.5	-32.5	441;2
32.5	-32.5	440;1
37.5	-32.5	440;2
42.5	-32.5	439;1
47.5	-32.5	439;2
52.5	-32.5	438;1
57.5	-32.5	438;2
62.5	-32.5	437;1
67.5	-32.5	437;2

Longitude	Latitude	Marsden
72.5	-32.5	436;1
77.5	-32.5	436;2
82.5	-32.5	435;1
87.5	-32.5	435;2
92.5	-32.5	434;1
97.5	-32.5	434;2
102.5	-32.5	433;1
107.5	-32.5	433;2
112.5	-32.5	432;1
117.5	-32.5	432;2
122.5	-32.5	431;1
127.5	-32.5	431;2
132.5	-32.5	430;1
137.5	-32.5	430;2
142.5	-32.5	429;1
147.5	-32.5	429;2
152.5	-32.5	428;1
157.5	-32.5	428;2
162.5	-32.5	427;1
167.5	-32.5	427;2
172.5	-32.5	426;1
-177.5	-27.5	389;4
-172.5	-27.5	389;3
-167.5	-27.5	388;4
-162.5	-27.5	388;3
-157.5	-27.5	387;4
-152.5	-27.5	387;3
-147.5	-27.5	386;4
-142.5	-27.5	386;3
-137.5	-27.5	385;4
-132.5	-27.5	385;3
-127.5	-27.5	384;4
-122.5	-27.5	384;3
-117.5	-27.5	383;4
-112.5	-27.5	383;3
-107.5	-27.5	382;4
-102.5	-27.5	382;3
-97.5	-27.5	381;4

Longitude	Latitude	Marsden
-92.5	-27.5	381;3
-87.5	-27.5	380;4
-82.5	-27.5	380;3
-77.5	-27.5	379;4
-72.5	-27.5	379;3
-67.5	-27.5	378;4
-62.5	-27.5	378;3
-57.5	-27.5	377;4
-52.5	-27.5	377;3
-47.5	-27.5	376;4
-42.5	-27.5	376;3
-37.5	-27.5	375;4
-32.5	-27.5	375;3
-27.5	-27.5	374;4
-22.5	-27.5	374;3
-17.5	-27.5	373;4
-12.5	-27.5	373;3
-7.5	-27.5	372;4
-2.5	-27.5	372;3
2.5	-27.5	407;3
7.5	-27.5	407;4
12.5	-27.5	406;3
17.5	-27.5	406;4
22.5	-27.5	405;3
27.5	-27.5	405;4
32.5	-27.5	404;3
37.5	-27.5	404;4
42.5	-27.5	403;3
47.5	-27.5	403;4
52.5	-27.5	402;3
57.5	-27.5	402;4
62.5	-27.5	401;3
67.5	-27.5	401;4
72.5	-27.5	400;3
77.5	-27.5	400;4
82.5	-27.5	399;3
87.5	-27.5	399;4
92.5	-27.5	398;3

Longitude	Latitude	Marsden
97.5	-27.5	398;4
102.5	-27.5	397;3
107.5	-27.5	397;4
112.5	-27.5	396;3
117.5	-27.5	396;4
122.5	-27.5	395;3
127.5	-27.5	395;4
132.5	-27.5	394;3
137.5	-27.5	394;4
142.5	-27.5	393;3
147.5	-27.5	393;4
152.5	-27.5	392;3
157.5	-27.5	392;4
162.5	-27.5	391;3
167.5	-27.5	391;4
172.5	-27.5	390;3
-177.5	-22.5	389;2
-172.5	-22.5	389;1
-167.5	-22.5	388;2
-162.5	-22.5	388;1
-157.5	-22.5	387;2
-152.5	-22.5	387;1
-147.5	-22.5	386;2
-142.5	-22.5	386;1
-137.5	-22.5	385;2
-132.5	-22.5	385;1
-127.5	-22.5	384;2
-122.5	-22.5	384;1
-117.5	-22.5	383;2
-112.5	-22.5	383;1
-107.5	-22.5	382;2
-102.5	-22.5	382;1
-97.5	-22.5	381;2
-92.5	-22.5	381;1
-87.5	-22.5	380;2
-82.5	-22.5	380;1
-77.5	-22.5	379;2
-72.5	-22.5	379;1

Longitude	Latitude	Marsden
-67.5	-22.5	378;2
-62.5	-22.5	378;1
-57.5	-22.5	377;2
-52.5	-22.5	377;1
-47.5	-22.5	376;2
-42.5	-22.5	376;1
-37.5	-22.5	375;2
-32.5	-22.5	375;1
-27.5	-22.5	374;2
-22.5	-22.5	374;1
-17.5	-22.5	373;2
-12.5	-22.5	373;1
-7.5	-22.5	372;2
-2.5	-22.5	372;1
2.5	-22.5	407;1
7.5	-22.5	407;2
12.5	-22.5	406;1
17.5	-22.5	406;2
22.5	-22.5	405;1
27.5	-22.5	405;2
32.5	-22.5	404;1
37.5	-22.5	404;2
42.5	-22.5	403;1
47.5	-22.5	403;2
52.5	-22.5	402;1
57.5	-22.5	402;2
62.5	-22.5	401;1
67.5	-22.5	401;2
72.5	-22.5	400;1
77.5	-22.5	400;2
82.5	-22.5	399;1
87.5	-22.5	399;2
92.5	-22.5	398;1
97.5	-22.5	398;2
102.5	-22.5	397;1
107.5	-22.5	397;2
112.5	-22.5	396;1
117.5	-22.5	396;2

Longitude	Latitude	Marsden
122.5	-22.5	395;1
127.5	-22.5	395;2
132.5	-22.5	394;1
137.5	-22.5	394;2
142.5	-22.5	393;1
147.5	-22.5	393;2
152.5	-22.5	392;1
157.5	-22.5	392;2
162.5	-22.5	391;1
167.5	-22.5	391;2
172.5	-22.5	390;1
-177.5	-17.5	353;4
-172.5	-17.5	353;3
-167.5	-17.5	352;4
-162.5	-17.5	352;3
-157.5	-17.5	351;4
-152.5	-17.5	351;3
-147.5	-17.5	350;4
-142.5	-17.5	350;3
-137.5	-17.5	349;4
-132.5	-17.5	349;3
-127.5	-17.5	348;4
-122.5	-17.5	348;3
-117.5	-17.5	347;4
-112.5	-17.5	347;3
-107.5	-17.5	346;4
-102.5	-17.5	346;3
-97.5	-17.5	345;4
-92.5	-17.5	345;3
-87.5	-17.5	344;4
-82.5	-17.5	344;3
-77.5	-17.5	343;4
-72.5	-17.5	343;3
-67.5	-17.5	342;4
-62.5	-17.5	342;3
-57.5	-17.5	341;4
-52.5	-17.5	341;3
-47.5	-17.5	340;4

Longitude	Latitude	Marsden
-42.5	-17.5	340;3
-37.5	-17.5	339;4
-32.5	-17.5	339;3
-27.5	-17.5	338;4
-22.5	-17.5	338;3
-17.5	-17.5	337;4
-12.5	-17.5	337;3
-7.5	-17.5	336;4
-2.5	-17.5	336;3
2.5	-17.5	371;3
7.5	-17.5	371;4
12.5	-17.5	370;3
17.5	-17.5	370;4
22.5	-17.5	369;3
27.5	-17.5	369;4
32.5	-17.5	368;3
37.5	-17.5	368;4
42.5	-17.5	367;3
47.5	-17.5	367;4
52.5	-17.5	366;3
57.5	-17.5	366;4
62.5	-17.5	365;3
67.5	-17.5	365;4
72.5	-17.5	364;3
77.5	-17.5	364;4
82.5	-17.5	363;3
87.5	-17.5	363;4
92.5	-17.5	362;3
97.5	-17.5	362;4
102.5	-17.5	361;3
107.5	-17.5	361;4
112.5	-17.5	360;3
117.5	-17.5	360;4
122.5	-17.5	359;3
127.5	-17.5	359;4
132.5	-17.5	358;3
137.5	-17.5	358;4
142.5	-17.5	357;3

Longitude	Latitude	Marsden
147.5	-17.5	357;4
152.5	-17.5	356;3
157.5	-17.5	356;4
162.5	-17.5	355;3
167.5	-17.5	355;4
172.5	-17.5	354;3
-177.5	-12.5	353;2
-172.5	-12.5	353;1
-167.5	-12.5	352;2
-162.5	-12.5	352;1
-157.5	-12.5	351;2
-152.5	-12.5	351;1
-147.5	-12.5	350;2
-142.5	-12.5	350;1
-137.5	-12.5	349;2
-132.5	-12.5	349;1
-127.5	-12.5	348;2
-122.5	-12.5	348;1
-117.5	-12.5	347;2
-112.5	-12.5	347;1
-107.5	-12.5	346;2
-102.5	-12.5	346;1
-97.5	-12.5	345;2
-92.5	-12.5	345;1
-87.5	-12.5	344;2
-82.5	-12.5	344;1
-77.5	-12.5	343;2
-72.5	-12.5	343;1
-67.5	-12.5	342;2
-62.5	-12.5	342;1
-57.5	-12.5	341;2
-52.5	-12.5	341;1
-47.5	-12.5	340;2
-42.5	-12.5	340;1
-37.5	-12.5	339;2
-32.5	-12.5	339;1
-27.5	-12.5	338;2
-22.5	-12.5	338;1

Longitude	Latitude	Marsden
-17.5	-12.5	337;2
-12.5	-12.5	337;1
-7.5	-12.5	336;2
-2.5	-12.5	336;1
2.5	-12.5	371;1
7.5	-12.5	371;2
12.5	-12.5	370;1
17.5	-12.5	370;2
22.5	-12.5	369;1
27.5	-12.5	369;2
32.5	-12.5	368;1
37.5	-12.5	368;2
42.5	-12.5	367;1
47.5	-12.5	367;2
52.5	-12.5	366;1
57.5	-12.5	366;2
62.5	-12.5	365;1
67.5	-12.5	365;2
72.5	-12.5	364;1
77.5	-12.5	364;2
82.5	-12.5	363;1
87.5	-12.5	363;2
92.5	-12.5	362;1
97.5	-12.5	362;2
102.5	-12.5	361;1
107.5	-12.5	361;2
112.5	-12.5	360;1
117.5	-12.5	360;2
122.5	-12.5	359;1
127.5	-12.5	359;2
132.5	-12.5	358;1
137.5	-12.5	358;2
142.5	-12.5	357;1
147.5	-12.5	357;2
152.5	-12.5	356;1
157.5	-12.5	356;2
162.5	-12.5	355;1
167.5	-12.5	355;2

Longitude	Latitude	Marsden
172.5	-12.5	354;1
-177.5	-7.5	317;4
-172.5	-7.5	317;3
-167.5	-7.5	316;4
-162.5	-7.5	316;3
-157.5	-7.5	315;4
-152.5	-7.5	315;3
-147.5	-7.5	314;4
-142.5	-7.5	314;3
-137.5	-7.5	313;4
-132.5	-7.5	313;3
-127.5	-7.5	312;4
-122.5	-7.5	312;3
-117.5	-7.5	311;4
-112.5	-7.5	311;3
-107.5	-7.5	310;4
-102.5	-7.5	310;3
-97.5	-7.5	309;4
-92.5	-7.5	309;3
-87.5	-7.5	308;4
-82.5	-7.5	308;3
-77.5	-7.5	307;4
-72.5	-7.5	307;3
-67.5	-7.5	306;4
-62.5	-7.5	306;3
-57.5	-7.5	305;4
-52.5	-7.5	305;3
-47.5	-7.5	304;4
-42.5	-7.5	304;3
-37.5	-7.5	303;4
-32.5	-7.5	303;3
-27.5	-7.5	302;4
-22.5	-7.5	302;3
-17.5	-7.5	301;4
-12.5	-7.5	301;3
-7.5	-7.5	300;4
-2.5	-7.5	300;3
2.5	-7.5	335;3

Longitude	Latitude	Marsden
7.5	-7.5	335;4
12.5	-7.5	334;3
17.5	-7.5	334;4
22.5	-7.5	333;3
27.5	-7.5	333;4
32.5	-7.5	332;3
37.5	-7.5	332;4
42.5	-7.5	331;3
47.5	-7.5	331;4
52.5	-7.5	330;3
57.5	-7.5	330;4
62.5	-7.5	329;3
67.5	-7.5	329;4
72.5	-7.5	328;3
77.5	-7.5	328;4
82.5	-7.5	327;3
87.5	-7.5	327;4
92.5	-7.5	326;3
97.5	-7.5	326;4
102.5	-7.5	325;3
107.5	-7.5	325;4
112.5	-7.5	324;3
117.5	-7.5	324;4
122.5	-7.5	323;3
127.5	-7.5	323;4
132.5	-7.5	322;3
137.5	-7.5	322;4
142.5	-7.5	321;3
147.5	-7.5	321;4
152.5	-7.5	320;3
157.5	-7.5	320;4
162.5	-7.5	319;3
167.5	-7.5	319;4
172.5	-7.5	318;3
-177.5	-2.5	317;2
-172.5	-2.5	317;1
-167.5	-2.5	316;2
-162.5	-2.5	316;1

Longitude	Latitude	Marsden
-157.5	-2.5	315;2
-152.5	-2.5	315;1
-147.5	-2.5	314;2
-142.5	-2.5	314;1
-137.5	-2.5	313;2
-132.5	-2.5	313;1
-127.5	-2.5	312;2
-122.5	-2.5	312;1
-117.5	-2.5	311;2
-112.5	-2.5	311;1
-107.5	-2.5	310;2
-102.5	-2.5	310;1
-97.5	-2.5	309;2
-92.5	-2.5	309;1
-87.5	-2.5	308;2
-82.5	-2.5	308;1
-77.5	-2.5	307;2
-72.5	-2.5	307;1
-67.5	-2.5	306;2
-62.5	-2.5	306;1
-57.5	-2.5	305;2
-52.5	-2.5	305;1
-47.5	-2.5	304;2
-42.5	-2.5	304;1
-37.5	-2.5	303;2
-32.5	-2.5	303;1
-27.5	-2.5	302;2
-22.5	-2.5	302;1
-17.5	-2.5	301;2
-12.5	-2.5	301;1
-7.5	-2.5	300;2
-2.5	-2.5	300;1
2.5	-2.5	335;1
7.5	-2.5	335;2
12.5	-2.5	334;1
17.5	-2.5	334;2
22.5	-2.5	333;1
27.5	-2.5	333;2

Longitude	Latitude	Marsden
32.5	-2.5	332;1
37.5	-2.5	332;2
42.5	-2.5	331;1
47.5	-2.5	331;2
52.5	-2.5	330;1
57.5	-2.5	330;2
62.5	-2.5	329;1
67.5	-2.5	329;2
72.5	-2.5	328;1
77.5	-2.5	328;2
82.5	-2.5	327;1
87.5	-2.5	327;2
92.5	-2.5	326;1
97.5	-2.5	326;2
102.5	-2.5	325;1
107.5	-2.5	325;2
112.5	-2.5	324;1
117.5	-2.5	324;2
122.5	-2.5	323;1
127.5	-2.5	323;2
132.5	-2.5	322;1
137.5	-2.5	322;2
142.5	-2.5	321;1
147.5	-2.5	321;2
152.5	-2.5	320;1
157.5	-2.5	320;2
162.5	-2.5	319;1
167.5	-2.5	319;2
172.5	-2.5	318;1
-177.5	2.5	018;2
-172.5	2.5	018;1
-167.5	2.5	017;2
-162.5	2.5	017;1
-157.5	2.5	016;2
-152.5	2.5	016;1
-147.5	2.5	015;2
-142.5	2.5	015;1
-137.5	2.5	014;2

Longitude	Latitude	Marsden
-132.5	2.5	014;1
-127.5	2.5	013;2
-122.5	2.5	013;1
-117.5	2.5	012;2
-112.5	2.5	012;1
-107.5	2.5	011;2
-102.5	2.5	011;1
-97.5	2.5	010;2
-92.5	2.5	010;1
-87.5	2.5	009;2
-82.5	2.5	009;1
-77.5	2.5	008;2
-72.5	2.5	008;1
-67.5	2.5	007;2
-62.5	2.5	007;1
-57.5	2.5	006;2
-52.5	2.5	006;1
-47.5	2.5	005;2
-42.5	2.5	005;1
-37.5	2.5	004;2
-32.5	2.5	004;1
-27.5	2.5	003;2
-22.5	2.5	003;1
-17.5	2.5	002;2
-12.5	2.5	002;1
-7.5	2.5	001;2
-2.5	2.5	001;1
2.5	2.5	036;1
7.5	2.5	036;2
12.5	2.5	035;1
17.5	2.5	035;2
22.5	2.5	034;1
27.5	2.5	034;2
32.5	2.5	033;1
37.5	2.5	033;2
42.5	2.5	032;1
47.5	2.5	032;2
52.5	2.5	031;1

Longitude	Latitude	Marsden
57.5	2.5	031;2
62.5	2.5	030;1
67.5	2.5	030;2
72.5	2.5	029;1
77.5	2.5	029;2
82.5	2.5	028;1
87.5	2.5	028;2
92.5	2.5	027;1
97.5	2.5	027;2
102.5	2.5	026;1
107.5	2.5	026;2
112.5	2.5	025;1
117.5	2.5	025;2
122.5	2.5	024;1
127.5	2.5	024;2
132.5	2.5	023;1
137.5	2.5	023;2
142.5	2.5	022;1
147.5	2.5	022;2
152.5	2.5	021;1
157.5	2.5	021;2
162.5	2.5	020;1
167.5	2.5	020;2
172.5	2.5	019;1
-177.5	7.5	018;4
-172.5	7.5	018;3
-167.5	7.5	017;4
-162.5	7.5	017;3
-157.5	7.5	016;4
-152.5	7.5	016;3
-147.5	7.5	015;4
-142.5	7.5	015;3
-137.5	7.5	014;4
-132.5	7.5	014;3
-127.5	7.5	013;4
-122.5	7.5	013;3
-117.5	7.5	012;4
-112.5	7.5	012;3

Longitude	Latitude	Marsden
-107.5	7.5	011;4
-102.5	7.5	011;3
-97.5	7.5	010;4
-92.5	7.5	010;3
-87.5	7.5	009;4
-82.5	7.5	009;3
-77.5	7.5	008;4
-72.5	7.5	008;3
-67.5	7.5	007;4
-62.5	7.5	007;3
-57.5	7.5	006;4
-52.5	7.5	006;3
-47.5	7.5	005;4
-42.5	7.5	005;3
-37.5	7.5	004;4
-32.5	7.5	004;3
-27.5	7.5	003;4
-22.5	7.5	003;3
-17.5	7.5	002;4
-12.5	7.5	002;3
-7.5	7.5	001;4
-2.5	7.5	001;3
2.5	7.5	036;3
7.5	7.5	036;4
12.5	7.5	035;3
17.5	7.5	035;4
22.5	7.5	034;3
27.5	7.5	034;4
32.5	7.5	033;3
37.5	7.5	033;4
42.5	7.5	032;3
47.5	7.5	032;4
52.5	7.5	031;3
57.5	7.5	031;4
62.5	7.5	030;3
67.5	7.5	030;4
72.5	7.5	029;3
77.5	7.5	029;4

Longitude	Latitude	Marsden
82.5	7.5	028;3
87.5	7.5	028;4
92.5	7.5	027;3
97.5	7.5	027;4
102.5	7.5	026;3
107.5	7.5	026;4
112.5	7.5	025;3
117.5	7.5	025;4
122.5	7.5	024;3
127.5	7.5	024;4
132.5	7.5	023;3
137.5	7.5	023;4
142.5	7.5	022;3
147.5	7.5	022;4
152.5	7.5	021;3
157.5	7.5	021;4
162.5	7.5	020;3
167.5	7.5	020;4
172.5	7.5	019;3
-177.5	12.5	054;2
-172.5	12.5	054;1
-167.5	12.5	053;2
-162.5	12.5	053;1
-157.5	12.5	052;2
-152.5	12.5	052;1
-147.5	12.5	051;2
-142.5	12.5	051;1
-137.5	12.5	050;2
-132.5	12.5	050;1
-127.5	12.5	049;2
-122.5	12.5	049;1
-117.5	12.5	048;2
-112.5	12.5	048;1
-107.5	12.5	047;2
-102.5	12.5	047;1
-97.5	12.5	046;2
-92.5	12.5	046;1
-87.5	12.5	045;2

Longitude	Latitude	Marsden
-82.5	12.5	045;1
-77.5	12.5	044;2
-72.5	12.5	044;1
-67.5	12.5	043;2
-62.5	12.5	043;1
-57.5	12.5	042;2
-52.5	12.5	042;1
-47.5	12.5	041;2
-42.5	12.5	041;1
-37.5	12.5	040;2
-32.5	12.5	040;1
-27.5	12.5	039;2
-22.5	12.5	039;1
-17.5	12.5	038;2
-12.5	12.5	038;1
-7.5	12.5	037;2
-2.5	12.5	037;1
2.5	12.5	072;1
7.5	12.5	072;2
12.5	12.5	071;1
17.5	12.5	071;2
22.5	12.5	070;1
27.5	12.5	070;2
32.5	12.5	069;1
37.5	12.5	069;2
42.5	12.5	068;1
47.5	12.5	068;2
52.5	12.5	067;1
57.5	12.5	067;2
62.5	12.5	066;1
67.5	12.5	066;2
72.5	12.5	065;1
77.5	12.5	065;2
82.5	12.5	064;1
87.5	12.5	064;2
92.5	12.5	063;1
97.5	12.5	063;2
102.5	12.5	062;1

Longitude	Latitude	Marsden
107.5	12.5	062;2
112.5	12.5	061;1
117.5	12.5	061;2
122.5	12.5	060;1
127.5	12.5	060;2
132.5	12.5	059;1
137.5	12.5	059;2
142.5	12.5	058;1
147.5	12.5	058;2
152.5	12.5	057;1
157.5	12.5	057;2
162.5	12.5	056;1
167.5	12.5	056;2
172.5	12.5	055;1
-177.5	17.5	054;4
-172.5	17.5	054;3
-167.5	17.5	053;4
-162.5	17.5	053;3
-157.5	17.5	052;4
-152.5	17.5	052;3
-147.5	17.5	051;4
-142.5	17.5	051;3
-137.5	17.5	050;4
-132.5	17.5	050;3
-127.5	17.5	049;4
-122.5	17.5	049;3
-117.5	17.5	048;4
-112.5	17.5	048;3
-107.5	17.5	047;4
-102.5	17.5	047;3
-97.5	17.5	046;4
-92.5	17.5	046;3
-87.5	17.5	045;4
-82.5	17.5	045;3
-77.5	17.5	044;4
-72.5	17.5	044;3
-67.5	17.5	043;4
-62.5	17.5	043;3

Longitude	Latitude	Marsden
-57.5	17.5	042;4
-52.5	17.5	042;3
-47.5	17.5	041;4
-42.5	17.5	041;3
-37.5	17.5	040;4
-32.5	17.5	040;3
-27.5	17.5	039;4
-22.5	17.5	039;3
-17.5	17.5	038;4
-12.5	17.5	038;3
-7.5	17.5	037;4
-2.5	17.5	037;3
2.5	17.5	072;3
7.5	17.5	072;4
12.5	17.5	071;3
17.5	17.5	071;4
22.5	17.5	070;3
27.5	17.5	070;4
32.5	17.5	069;3
37.5	17.5	069;4
42.5	17.5	068;3
47.5	17.5	068;4
52.5	17.5	067;3
57.5	17.5	067;4
62.5	17.5	066;3
67.5	17.5	066;4
72.5	17.5	065;3
77.5	17.5	065;4
82.5	17.5	064;3
87.5	17.5	064;4
92.5	17.5	063;3
97.5	17.5	063;4
102.5	17.5	062;3
107.5	17.5	062;4
112.5	17.5	061;3
117.5	17.5	061;4
122.5	17.5	060;3
127.5	17.5	060;4

Longitude	Latitude	Marsden
132.5	17.5	059;3
137.5	17.5	059;4
142.5	17.5	058;3
147.5	17.5	058;4
152.5	17.5	057;3
157.5	17.5	057;4
162.5	17.5	056;3
167.5	17.5	056;4
172.5	17.5	055;3
-177.5	22.5	090;2
-172.5	22.5	090;1
-167.5	22.5	089;2
-162.5	22.5	089;1
-157.5	22.5	088;2
-152.5	22.5	088;1
-147.5	22.5	087;2
-142.5	22.5	087;1
-137.5	22.5	086;2
-132.5	22.5	086;1
-127.5	22.5	085;2
-122.5	22.5	085;1
-117.5	22.5	084;2
-112.5	22.5	084;1
-107.5	22.5	083;2
-102.5	22.5	083;1
-97.5	22.5	082;2
-92.5	22.5	082;1
-87.5	22.5	081;2
-82.5	22.5	081;1
-77.5	22.5	080;2
-72.5	22.5	080;1
-67.5	22.5	079;2
-62.5	22.5	079;1
-57.5	22.5	078;2
-52.5	22.5	078;1
-47.5	22.5	077;2
-42.5	22.5	077;1
-37.5	22.5	076;2

Longitude	Latitude	Marsden
-32.5	22.5	076;1
-27.5	22.5	075;2
-22.5	22.5	075;1
-17.5	22.5	074;2
-12.5	22.5	074;1
-7.5	22.5	073;2
-2.5	22.5	073;1
2.5	22.5	108;1
7.5	22.5	108;2
12.5	22.5	107;1
17.5	22.5	107;2
22.5	22.5	106;1
27.5	22.5	106;2
32.5	22.5	105;1
37.5	22.5	105;2
42.5	22.5	104;1
47.5	22.5	104;2
52.5	22.5	103;1
57.5	22.5	103;2
62.5	22.5	102;1
67.5	22.5	102;2
72.5	22.5	101;1
77.5	22.5	101;2
82.5	22.5	100;1
87.5	22.5	100;2
92.5	22.5	099;1
97.5	22.5	099;2
102.5	22.5	098;1
107.5	22.5	098;2
112.5	22.5	097;1
117.5	22.5	097;2
122.5	22.5	096;1
127.5	22.5	096;2
132.5	22.5	095;1
137.5	22.5	095;2
142.5	22.5	094;1
147.5	22.5	094;2
152.5	22.5	093;1

Longitude	Latitude	Marsden
157.5	22.5	093;2
162.5	22.5	092;1
167.5	22.5	092;2
172.5	22.5	091;1
-177.5	27.5	090;4
-172.5	27.5	090;3
-167.5	27.5	089;4
-162.5	27.5	089;3
-157.5	27.5	088;4
-152.5	27.5	088;3
-147.5	27.5	087;4
-142.5	27.5	087;3
-137.5	27.5	086;4
-132.5	27.5	086;3
-127.5	27.5	085;4
-122.5	27.5	085;3
-117.5	27.5	084;4
-112.5	27.5	084;3
-107.5	27.5	083;4
-102.5	27.5	083;3
-97.5	27.5	082;4
-92.5	27.5	082;3
-87.5	27.5	081;4
-82.5	27.5	081;3
-77.5	27.5	080;4
-72.5	27.5	080;3
-67.5	27.5	079;4
-62.5	27.5	079;3
-57.5	27.5	078;4
-52.5	27.5	078;3
-47.5	27.5	077;4
-42.5	27.5	077;3
-37.5	27.5	076;4
-32.5	27.5	076;3
-27.5	27.5	075;4
-22.5	27.5	075;3
-17.5	27.5	074;4
-12.5	27.5	074;3

Longitude	Latitude	Marsden
-7.5	27.5	073;4
-2.5	27.5	073;3
2.5	27.5	108;3
7.5	27.5	108;4
12.5	27.5	107;3
17.5	27.5	107;4
22.5	27.5	106;3
27.5	27.5	106;4
32.5	27.5	105;3
37.5	27.5	105;4
42.5	27.5	104;3
47.5	27.5	104;4
52.5	27.5	103;3
57.5	27.5	103;4
62.5	27.5	102;3
67.5	27.5	102;4
72.5	27.5	101;3
77.5	27.5	101;4
82.5	27.5	100;3
87.5	27.5	100;4
92.5	27.5	099;3
97.5	27.5	099;4
102.5	27.5	098;3
107.5	27.5	098;4
112.5	27.5	097;3
117.5	27.5	097;4
122.5	27.5	096;3
127.5	27.5	096;4
132.5	27.5	095;3
137.5	27.5	095;4
142.5	27.5	094;3
147.5	27.5	094;4
152.5	27.5	093;3
157.5	27.5	093;4
162.5	27.5	092;3
167.5	27.5	092;4
172.5	27.5	091;3
-177.5	32.5	126;2

Longitude	Latitude	Marsden
-172.5	32.5	126;1
-167.5	32.5	125;2
-162.5	32.5	125;1
-157.5	32.5	124;2
-152.5	32.5	124;1
-147.5	32.5	123;2
-142.5	32.5	123;1
-137.5	32.5	122;2
-132.5	32.5	122;1
-127.5	32.5	121;2
-122.5	32.5	121;1
-117.5	32.5	120;2
-112.5	32.5	120;1
-107.5	32.5	119;2
-102.5	32.5	119;1
-97.5	32.5	118;2
-92.5	32.5	118;1
-87.5	32.5	117;2
-82.5	32.5	117;1
-77.5	32.5	116;2
-72.5	32.5	116;1
-67.5	32.5	115;2
-62.5	32.5	115;1
-57.5	32.5	114;2
-52.5	32.5	114;1
-47.5	32.5	113;2
-42.5	32.5	113;1
-37.5	32.5	112;2
-32.5	32.5	112;1
-27.5	32.5	111;2
-22.5	32.5	111;1
-17.5	32.5	110;2
-12.5	32.5	110;1
-7.5	32.5	109;2
-2.5	32.5	109;1
2.5	32.5	144;1
7.5	32.5	144;2
12.5	32.5	143;1

Longitude	Latitude	Marsden
17.5	32.5	143;2
22.5	32.5	142;1
27.5	32.5	142;2
32.5	32.5	141;1
37.5	32.5	141;2
42.5	32.5	140;1
47.5	32.5	140;2
52.5	32.5	139;1
57.5	32.5	139;2
62.5	32.5	138;1
67.5	32.5	138;2
72.5	32.5	137;1
77.5	32.5	137;2
82.5	32.5	136;1
87.5	32.5	136;2
92.5	32.5	135;1
97.5	32.5	135;2
102.5	32.5	134;1
107.5	32.5	134;2
112.5	32.5	133;1
117.5	32.5	133;2
122.5	32.5	132;1
127.5	32.5	132;2
132.5	32.5	131;1
137.5	32.5	131;2
142.5	32.5	130;1
147.5	32.5	130;2
152.5	32.5	129;1
157.5	32.5	129;2
162.5	32.5	128;1
167.5	32.5	128;2
172.5	32.5	127;1
-177.5	37.5	126;4
-172.5	37.5	126;3
-167.5	37.5	125;4
-162.5	37.5	125;3
-157.5	37.5	124;4
-152.5	37.5	124;3

Longitude	Latitude	Marsden
-147.5	37.5	123;4
-142.5	37.5	123;3
-137.5	37.5	122;4
-132.5	37.5	122;3
-127.5	37.5	121;4
-122.5	37.5	121;3
-117.5	37.5	120;4
-112.5	37.5	120;3
-107.5	37.5	119;4
-102.5	37.5	119;3
-97.5	37.5	118;4
-92.5	37.5	118;3
-87.5	37.5	117;4
-82.5	37.5	117;3
-77.5	37.5	116;4
-72.5	37.5	116;3
-67.5	37.5	115;4
-62.5	37.5	115;3
-57.5	37.5	114;4
-52.5	37.5	114;3
-47.5	37.5	113;4
-42.5	37.5	113;3
-37.5	37.5	112;4
-32.5	37.5	112;3
-27.5	37.5	111;4
-22.5	37.5	111;3
-17.5	37.5	110;4
-12.5	37.5	110;3
-7.5	37.5	109;4
-2.5	37.5	109;3
2.5	37.5	144;3
7.5	37.5	144;4
12.5	37.5	143;3
17.5	37.5	143;4
22.5	37.5	142;3
27.5	37.5	142;4
32.5	37.5	141;3
37.5	37.5	141;4

Longitude	Latitude	Marsden
42.5	37.5	140;3
47.5	37.5	140;4
52.5	37.5	139;3
57.5	37.5	139;4
62.5	37.5	138;3
67.5	37.5	138;4
72.5	37.5	137;3
77.5	37.5	137;4
82.5	37.5	136;3
87.5	37.5	136;4
92.5	37.5	135;3
97.5	37.5	135;4
102.5	37.5	134;3
107.5	37.5	134;4
112.5	37.5	133;3
117.5	37.5	133;4
122.5	37.5	132;3
127.5	37.5	132;4
132.5	37.5	131;3
137.5	37.5	131;4
142.5	37.5	130;3
147.5	37.5	130;4
152.5	37.5	129;3
157.5	37.5	129;4
162.5	37.5	128;3
167.5	37.5	128;4
172.5	37.5	127;3
-177.5	42.5	162;2
-172.5	42.5	162;1
-167.5	42.5	161;2
-162.5	42.5	161;1
-157.5	42.5	160;2
-152.5	42.5	160;1
-147.5	42.5	159;2
-142.5	42.5	159;1
-137.5	42.5	158;2
-132.5	42.5	158;1
-127.5	42.5	157;2

Longitude	Latitude	Marsden
-122.5	42.5	157;1
-117.5	42.5	156;2
-112.5	42.5	156;1
-107.5	42.5	155;2
-102.5	42.5	155;1
-97.5	42.5	154;2
-92.5	42.5	154;1
-87.5	42.5	153;2
-82.5	42.5	153;1
-77.5	42.5	152;2
-72.5	42.5	152;1
-67.5	42.5	151;2
-62.5	42.5	151;1
-57.5	42.5	150;2
-52.5	42.5	150;1
-47.5	42.5	149;2
-42.5	42.5	149;1
-37.5	42.5	148;2
-32.5	42.5	148;1
-27.5	42.5	147;2
-22.5	42.5	147;1
-17.5	42.5	146;2
-12.5	42.5	146;1
-7.5	42.5	145;2
-2.5	42.5	145;1
2.5	42.5	180;1
7.5	42.5	180;2
12.5	42.5	179;1
17.5	42.5	179;2
22.5	42.5	178;1
27.5	42.5	178;2
32.5	42.5	177;1
37.5	42.5	177;2
42.5	42.5	176;1
47.5	42.5	176;2
52.5	42.5	175;1
57.5	42.5	175;2
62.5	42.5	174;1

Longitude	Latitude	Marsden
67.5	42.5	174;2
72.5	42.5	173;1
77.5	42.5	173;2
82.5	42.5	172;1
87.5	42.5	172;2
92.5	42.5	171;1
97.5	42.5	171;2
102.5	42.5	170;1
107.5	42.5	170;2
112.5	42.5	169;1
117.5	42.5	169;2
122.5	42.5	168;1
127.5	42.5	168;2
132.5	42.5	167;1
137.5	42.5	167;2
142.5	42.5	166;1
147.5	42.5	166;2
152.5	42.5	165;1
157.5	42.5	165;2
162.5	42.5	164;1
167.5	42.5	164;2
172.5	42.5	163;1
-177.5	47.5	162;4
-172.5	47.5	162;3
-167.5	47.5	161;4
-162.5	47.5	161;3
-157.5	47.5	160;4
-152.5	47.5	160;3
-147.5	47.5	159;4
-142.5	47.5	159;3
-137.5	47.5	158;4
-132.5	47.5	158;3
-127.5	47.5	157;4
-122.5	47.5	157;3
-117.5	47.5	156;4
-112.5	47.5	156;3
-107.5	47.5	155;4
-102.5	47.5	155;3

Longitude	Latitude	Marsden
-97.5	47.5	154;4
-92.5	47.5	154;3
-87.5	47.5	153;4
-82.5	47.5	153;3
-77.5	47.5	152;4
-72.5	47.5	152;3
-67.5	47.5	151;4
-62.5	47.5	151;3
-57.5	47.5	150;4
-52.5	47.5	150;3
-47.5	47.5	149;4
-42.5	47.5	149;3
-37.5	47.5	148;4
-32.5	47.5	148;3
-27.5	47.5	147;4
-22.5	47.5	147;3
-17.5	47.5	146;4
-12.5	47.5	146;3
-7.5	47.5	145;4
-2.5	47.5	145;3
2.5	47.5	180;3
7.5	47.5	180;4
12.5	47.5	179;3
17.5	47.5	179;4
22.5	47.5	178;3
27.5	47.5	178;4
32.5	47.5	177;3
37.5	47.5	177;4
42.5	47.5	176;3
47.5	47.5	176;4
52.5	47.5	175;3
57.5	47.5	175;4
62.5	47.5	174;3
67.5	47.5	174;4
72.5	47.5	173;3
77.5	47.5	173;4
82.5	47.5	172;3
87.5	47.5	172;4

Longitude	Latitude	Marsden
92.5	47.5	171;3
97.5	47.5	171;4
102.5	47.5	170;3
107.5	47.5	170;4
112.5	47.5	169;3
117.5	47.5	169;4
122.5	47.5	168;3
127.5	47.5	168;4
132.5	47.5	167;3
137.5	47.5	167;4
142.5	47.5	166;3
147.5	47.5	166;4
152.5	47.5	165;3
157.5	47.5	165;4
162.5	47.5	164;3
167.5	47.5	164;4
172.5	47.5	163;3
-177.5	52.5	198;2
-172.5	52.5	198;1
-167.5	52.5	197;2
-162.5	52.5	197;1
-157.5	52.5	196;2
-152.5	52.5	196;1
-147.5	52.5	195;2
-142.5	52.5	195;1
-137.5	52.5	194;2
-132.5	52.5	194;1
-127.5	52.5	193;2
-122.5	52.5	193;1
-117.5	52.5	192;2
-112.5	52.5	192;1
-107.5	52.5	191;2
-102.5	52.5	191;1
-97.5	52.5	190;2
-92.5	52.5	190;1
-87.5	52.5	189;2
-82.5	52.5	189;1
-77.5	52.5	188;2

Longitude	Latitude	Marsden
-72.5	52.5	188;1
-67.5	52.5	187;2
-62.5	52.5	187;1
-57.5	52.5	186;2
-52.5	52.5	186;1
-47.5	52.5	185;2
-42.5	52.5	185;1
-37.5	52.5	184;2
-32.5	52.5	184;1
-27.5	52.5	183;2
-22.5	52.5	183;1
-17.5	52.5	182;2
-12.5	52.5	182;1
-7.5	52.5	181;2
-2.5	52.5	181;1
2.5	52.5	216;1
7.5	52.5	216;2
12.5	52.5	215;1
17.5	52.5	215;2
22.5	52.5	214;1
27.5	52.5	214;2
32.5	52.5	213;1
37.5	52.5	213;2
42.5	52.5	212;1
47.5	52.5	212;2
52.5	52.5	211;1
57.5	52.5	211;2
62.5	52.5	210;1
67.5	52.5	210;2
72.5	52.5	209;1
77.5	52.5	209;2
82.5	52.5	208;1
87.5	52.5	208;2
92.5	52.5	207;1
97.5	52.5	207;2
102.5	52.5	206;1
107.5	52.5	206;2
112.5	52.5	205;1

Longitude	Latitude	Marsden
117.5	52.5	205;2
122.5	52.5	204;1
127.5	52.5	204;2
132.5	52.5	203;1
137.5	52.5	203;2
142.5	52.5	202;1
147.5	52.5	202;2
152.5	52.5	201;1
157.5	52.5	201;2
162.5	52.5	200;1
167.5	52.5	200;2
172.5	52.5	199;1
-177.5	57.5	198;4
-172.5	57.5	198;3
-167.5	57.5	197;4
-162.5	57.5	197;3
-157.5	57.5	196;4
-152.5	57.5	196;3
-147.5	57.5	195;4
-142.5	57.5	195;3
-137.5	57.5	194;4
-132.5	57.5	194;3
-127.5	57.5	193;4
-122.5	57.5	193;3
-117.5	57.5	192;4
-112.5	57.5	192;3
-107.5	57.5	191;4
-102.5	57.5	191;3
-97.5	57.5	190;4
-92.5	57.5	190;3
-87.5	57.5	189;4
-82.5	57.5	189;3
-77.5	57.5	188;4
-72.5	57.5	188;3
-67.5	57.5	187;4
-62.5	57.5	187;3
-57.5	57.5	186;4
-52.5	57.5	186;3

Longitude	Latitude	Marsden
-47.5	57.5	185;4
-42.5	57.5	185;3
-37.5	57.5	184;4
-32.5	57.5	184;3
-27.5	57.5	183;4
-22.5	57.5	183;3
-17.5	57.5	182;4
-12.5	57.5	182;3
-7.5	57.5	181;4
-2.5	57.5	181;3
2.5	57.5	216;3
7.5	57.5	216;4
12.5	57.5	215;3
17.5	57.5	215;4
22.5	57.5	214;3
27.5	57.5	214;4
32.5	57.5	213;3
37.5	57.5	213;4
42.5	57.5	212;3
47.5	57.5	212;4
52.5	57.5	211;3
57.5	57.5	211;4
62.5	57.5	210;3
67.5	57.5	210;4
72.5	57.5	209;3
77.5	57.5	209;4
82.5	57.5	208;3
87.5	57.5	208;4
92.5	57.5	207;3
97.5	57.5	207;4
102.5	57.5	206;3
107.5	57.5	206;4
112.5	57.5	205;3
117.5	57.5	205;4
122.5	57.5	204;3
127.5	57.5	204;4
132.5	57.5	203;3
137.5	57.5	203;4

Longitude	Latitude	Marsden
142.5	57.5	202;3
147.5	57.5	202;4
152.5	57.5	201;3
157.5	57.5	201;4
162.5	57.5	200;3
167.5	57.5	200;4
172.5	57.5	199;3
-177.5	62.5	234;2
-172.5	62.5	234;1
-167.5	62.5	233;2
-162.5	62.5	233;1
-157.5	62.5	232;2
-152.5	62.5	232;1
-147.5	62.5	231;2
-142.5	62.5	231;1
-137.5	62.5	230;2
-132.5	62.5	230;1
-127.5	62.5	229;2
-122.5	62.5	229;1
-117.5	62.5	228;2
-112.5	62.5	228;1
-107.5	62.5	227;2
-102.5	62.5	227;1
-97.5	62.5	226;2
-92.5	62.5	226;1
-87.5	62.5	225;2
-82.5	62.5	225;1
-77.5	62.5	224;2
-72.5	62.5	224;1
-67.5	62.5	223;2
-62.5	62.5	223;1
-57.5	62.5	222;2
-52.5	62.5	222;1
-47.5	62.5	221;2
-42.5	62.5	221;1
-37.5	62.5	220;2
-32.5	62.5	220;1
-27.5	62.5	219;2

Longitude	Latitude	Marsden
-22.5	62.5	219;1
-17.5	62.5	218;2
-12.5	62.5	218;1
-7.5	62.5	217;2
-2.5	62.5	217;1
2.5	62.5	252;1
7.5	62.5	252;2
12.5	62.5	251;1
17.5	62.5	251;2
22.5	62.5	250;1
27.5	62.5	250;2
32.5	62.5	249;1
37.5	62.5	249;2
42.5	62.5	248;1
47.5	62.5	248;2
52.5	62.5	247;1
57.5	62.5	247;2
62.5	62.5	246;1
67.5	62.5	246;2
72.5	62.5	245;1
77.5	62.5	245;2
82.5	62.5	244;1
87.5	62.5	244;2
92.5	62.5	243;1
97.5	62.5	243;2
102.5	62.5	242;1
107.5	62.5	242;2
112.5	62.5	241;1
117.5	62.5	241;2
122.5	62.5	240;1
127.5	62.5	240;2
132.5	62.5	239;1
137.5	62.5	239;2
142.5	62.5	238;1
147.5	62.5	238;2
152.5	62.5	237;1
157.5	62.5	237;2
162.5	62.5	236;1

Longitude	Latitude	Marsden
167.5	62.5	236;2
172.5	62.5	235;1
-177.5	67.5	234;4
-172.5	67.5	234;3
-167.5	67.5	233;4
-162.5	67.5	233;3
-157.5	67.5	232;4
-152.5	67.5	232;3
-147.5	67.5	231;4
-142.5	67.5	231;3
-137.5	67.5	230;4
-132.5	67.5	230;3
-127.5	67.5	229;4
-122.5	67.5	229;3
-117.5	67.5	228;4
-112.5	67.5	228;3
-107.5	67.5	227;4
-102.5	67.5	227;3
-97.5	67.5	226;4
-92.5	67.5	226;3
-87.5	67.5	225;4
-82.5	67.5	225;3
-77.5	67.5	224;4
-72.5	67.5	224;3
-67.5	67.5	223;4
-62.5	67.5	223;3
-57.5	67.5	222;4
-52.5	67.5	222;3
-47.5	67.5	221;4
-42.5	67.5	221;3
-37.5	67.5	220;4
-32.5	67.5	220;3
-27.5	67.5	219;4
-22.5	67.5	219;3
-17.5	67.5	218;4
-12.5	67.5	218;3
-7.5	67.5	217;4
-2.5	67.5	217;3

Longitude	Latitude	Marsden
2.5	67.5	252;3
7.5	67.5	252;4
12.5	67.5	251;3
17.5	67.5	251;4
22.5	67.5	250;3
27.5	67.5	250;4
32.5	67.5	249;3
37.5	67.5	249;4
42.5	67.5	248;3
47.5	67.5	248;4
52.5	67.5	247;3
57.5	67.5	247;4
62.5	67.5	246;3
67.5	67.5	246;4
72.5	67.5	245;3
77.5	67.5	245;4
82.5	67.5	244;3
87.5	67.5	244;4
92.5	67.5	243;3
97.5	67.5	243;4
102.5	67.5	242;3
107.5	67.5	242;4
112.5	67.5	241;3
117.5	67.5	241;4
122.5	67.5	240;3
127.5	67.5	240;4
132.5	67.5	239;3
137.5	67.5	239;4
142.5	67.5	238;3
147.5	67.5	238;4
152.5	67.5	237;3
157.5	67.5	237;4
162.5	67.5	236;3
167.5	67.5	236;4
172.5	67.5	235;3
-177.5	72.5	270;2
-172.5	72.5	270;1
-167.5	72.5	269;2

Longitude	Latitude	Marsden
-162.5	72.5	269;1
-157.5	72.5	268;2
-152.5	72.5	268;1
-147.5	72.5	267;2
-142.5	72.5	267;1
-137.5	72.5	266;2
-132.5	72.5	266;1
-127.5	72.5	265;2
-122.5	72.5	265;1
-117.5	72.5	264;2
-112.5	72.5	264;1
-107.5	72.5	263;2
-102.5	72.5	263;1
-97.5	72.5	262;2
-92.5	72.5	262;1
-87.5	72.5	261;2
-82.5	72.5	261;1
-77.5	72.5	260;2
-72.5	72.5	260;1
-67.5	72.5	259;2
-62.5	72.5	259;1
-57.5	72.5	258;2
-52.5	72.5	258;1
-47.5	72.5	257;2
-42.5	72.5	257;1
-37.5	72.5	256;2
-32.5	72.5	256;1
-27.5	72.5	255;2
-22.5	72.5	255;1
-17.5	72.5	254;2
-12.5	72.5	254;1
-7.5	72.5	253;2
-2.5	72.5	253;1
2.5	72.5	288;1
7.5	72.5	288;2
12.5	72.5	287;1
17.5	72.5	287;2
22.5	72.5	286;1

Longitude	Latitude	Marsden
27.5	72.5	286;2
32.5	72.5	285;1
37.5	72.5	285;2
42.5	72.5	284;1
47.5	72.5	284;2
52.5	72.5	283;1
57.5	72.5	283;2
62.5	72.5	282;1
67.5	72.5	282;2
72.5	72.5	281;1
77.5	72.5	281;2
82.5	72.5	280;1
87.5	72.5	280;2
92.5	72.5	279;1
97.5	72.5	279;2
102.5	72.5	278;1
107.5	72.5	278;2
112.5	72.5	277;1
117.5	72.5	277;2
122.5	72.5	276;1
127.5	72.5	276;2
132.5	72.5	275;1
137.5	72.5	275;2
142.5	72.5	274;1
147.5	72.5	274;2
152.5	72.5	273;1
157.5	72.5	273;2
162.5	72.5	272;1
167.5	72.5	272;2
172.5	72.5	271;1
-177.5	77.5	270;4
-172.5	77.5	270;3
-167.5	77.5	269;4
-162.5	77.5	269;3
-157.5	77.5	268;4
-152.5	77.5	268;3
-147.5	77.5	267;4
-142.5	77.5	267;3

Longitude	Latitude	Marsden
-137.5	77.5	266;4
-132.5	77.5	266;3
-127.5	77.5	265;4
-122.5	77.5	265;3
-117.5	77.5	264;4
-112.5	77.5	264;3
-107.5	77.5	263;4
-102.5	77.5	263;3
-97.5	77.5	262;4
-92.5	77.5	262;3
-87.5	77.5	261;4
-82.5	77.5	261;3
-77.5	77.5	260;4
-72.5	77.5	260;3
-67.5	77.5	259;4
-62.5	77.5	259;3
-57.5	77.5	258;4
-52.5	77.5	258;3
-47.5	77.5	257;4
-42.5	77.5	257;3
-37.5	77.5	256;4
-32.5	77.5	256;3
-27.5	77.5	255;4
-22.5	77.5	255;3
-17.5	77.5	254;4
-12.5	77.5	254;3
-7.5	77.5	253;4
-2.5	77.5	253;3
2.5	77.5	288;3
7.5	77.5	288;4
12.5	77.5	287;3
17.5	77.5	287;4
22.5	77.5	286;3
27.5	77.5	286;4
32.5	77.5	285;3
37.5	77.5	285;4
42.5	77.5	284;3
47.5	77.5	284;4

Longitude	Latitude	Marsden
52.5	77.5	283;3
57.5	77.5	283;4
62.5	77.5	282;3
67.5	77.5	282;4
72.5	77.5	281;3
77.5	77.5	281;4
82.5	77.5	280;3
87.5	77.5	280;4
92.5	77.5	279;3
97.5	77.5	279;4
102.5	77.5	278;3
107.5	77.5	278;4
112.5	77.5	277;3
117.5	77.5	277;4
122.5	77.5	276;3
127.5	77.5	276;4
132.5	77.5	275;3
137.5	77.5	275;4
142.5	77.5	274;3
147.5	77.5	274;4
152.5	77.5	273;3
157.5	77.5	273;4
162.5	77.5	272;3
167.5	77.5	272;4
172.5	77.5	271;3
-177.5	82.5	918;2
-172.5	82.5	918;1
-167.5	82.5	917;2
-162.5	82.5	917;1
-157.5	82.5	916;2
-152.5	82.5	916;1
-147.5	82.5	915;2
-142.5	82.5	915;1
-137.5	82.5	914;2
-132.5	82.5	914;1
-127.5	82.5	913;2
-122.5	82.5	913;1
-117.5	82.5	912;2

Longitude	Latitude	Marsden
-112.5	82.5	912;1
-107.5	82.5	911;2
-102.5	82.5	911;1
-97.5	82.5	910;2
-92.5	82.5	910;1
-87.5	82.5	909;2
-82.5	82.5	909;1
-77.5	82.5	908;2
-72.5	82.5	908;1
-67.5	82.5	907;2
-62.5	82.5	907;1
-57.5	82.5	906;2
-52.5	82.5	906;1
-47.5	82.5	905;2
-42.5	82.5	905;1
-37.5	82.5	904;2
-32.5	82.5	904;1
-27.5	82.5	903;2
-22.5	82.5	903;1
-17.5	82.5	902;2
-12.5	82.5	902;1
-7.5	82.5	901;2
-2.5	82.5	901;1
2.5	82.5	936;1
7.5	82.5	936;2
12.5	82.5	935;1
17.5	82.5	935;2
22.5	82.5	934;1
27.5	82.5	934;2
32.5	82.5	933;1
37.5	82.5	933;2
42.5	82.5	932;1
47.5	82.5	932;2
52.5	82.5	931;1
57.5	82.5	931;2
62.5	82.5	930;1
67.5	82.5	930;2
72.5	82.5	929;1

Longitude	Latitude	Marsden
77.5	82.5	929;2
82.5	82.5	928;1
87.5	82.5	928;2
92.5	82.5	927;1
97.5	82.5	927;2
102.5	82.5	926;1
107.5	82.5	926;2
112.5	82.5	925;1
117.5	82.5	925;2
122.5	82.5	924;1
127.5	82.5	924;2
132.5	82.5	923;1
137.5	82.5	923;2
142.5	82.5	922;1
147.5	82.5	922;2
152.5	82.5	921;1
157.5	82.5	921;2
162.5	82.5	920;1
167.5	82.5	920;2
172.5	82.5	919;1