

WMO Publication 47: Consistency Checking and Gap Filling, Version 1.0

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1 Introduction

WMO Publication 47 (Pub. 47) contains information on the Voluntary Observing Ship (VOS) observations contained within ICOADS. However, this data has been collected over a 50 year period by numerous countries and in a number of different formats, ranging from 13 fields in the 1950's up to around 120 fields in the modern editions. The changing formats and contents of Pub. 47 are described in Kent *et al.* (2006). The addition of new fields leads to information becoming available which may be valid for records in earlier editions. As a result, it should be possible to increase the amount of information available from Pub. 47 by copying new fields into earlier additions as they become available.

Due to the operational nature of Pub. 47 and its collection by different agencies there are a large number of coding differences and typographical errors in the metadata. Also, due to WMO regulations, once data has been added to Pub. 47 by a country that data persists until the next entry from that country. This leads to out of date metadata and may lead to ambiguous entries where multiple records for the same ship from different countries exist in the same edition.

This report describes the process used to homogenize the metadata data set, correct typographic and coding errors and to copy information into the earlier editions when new fields are added. Section 2 describes the process of homogenizing the dataset and section 3 makes an assessment of the homogenization.

2 Method

The following sections describe the process undertaken to clean the metadata, merge duplicate entries and correct coding or typographical errors. The process can be broken down into 5 steps:

- 1) Generate list of unique entries and mapping tables for each field
- 2) Perform code mapping and subset Pub. 47 editions by country
- 3) Compare editions by country and generate list of updates

- 4) Read in updates from list generated in (4) and generate master table
- 5) Set validity dates in master table

2.1 Code Mapping

Due to the long time scales over which Pub. 47 has been collected, the operational capacity in which it's collected and the numerous centres used for collection, many coding differences and typographical errors exist. If left uncorrected, these will lead to false negatives in the record matching process (Section 2.3). Hence, to minimize these differences a list of unique entries for the different fields have been generated based on the data available for the period 1973 – 2006. Code mapping tables have then been generated from these lists and used to correct typographical errors and ensure consistent coding of the different elements. Tables 1a – 1p give the code mapping tables used. Column 1 gives the original code, column 2 the new code and column 3 a description of the code.

2.2 Contribution by country

Due to WMO regulations, once a set of entries from a country are submitted to Pub. 47 those details persist until the next set of entries from that country. Hence, if no update is made by that country the records will persist, leading to metadata which may be many years out of date. Additionally, this may lead to multiple entries for a call sign if a different country then recruits a ship by that call sign.

To minimise the impact of data persisting in Pub. 47 a list of updates by each country has been generated. The list has been generated by sub-setting each Pub. 47 edition by country, creating a new set of files each containing only the metadata for an individual country and edition. For each country, these are then compared to each other and where the files are the same the file from the earlier edition is kept. The file from the later edition is deleted. The files kept are assumed to be the updates supplied by the various countries to the WMO for inclusion in Pub. 47. Table 2 gives a list of the updates by individual countries. Column 1 gives the different recruiting countries, column 2 the list of updates by those countries and column 3 any notes about that edition.

At this stage the metadata records are assigned a validity period of one issue, i.e. one year between 1955 and 1998 and 3 months from 1998 onwards, beginning on the first day of that issue. These validity dates are then reset at a later stage to extend 1 year before the

records first appears and for 5 years after the record is last updated (see Section 2.4)

2.3 Record Matching

To minimise the number of entries in the processed metadata but maximise the amount of information available a master table of metadata records has been created. The flowchart below shows the process used to create the master table from the records in the list of updates, with the process being repeated for each record.

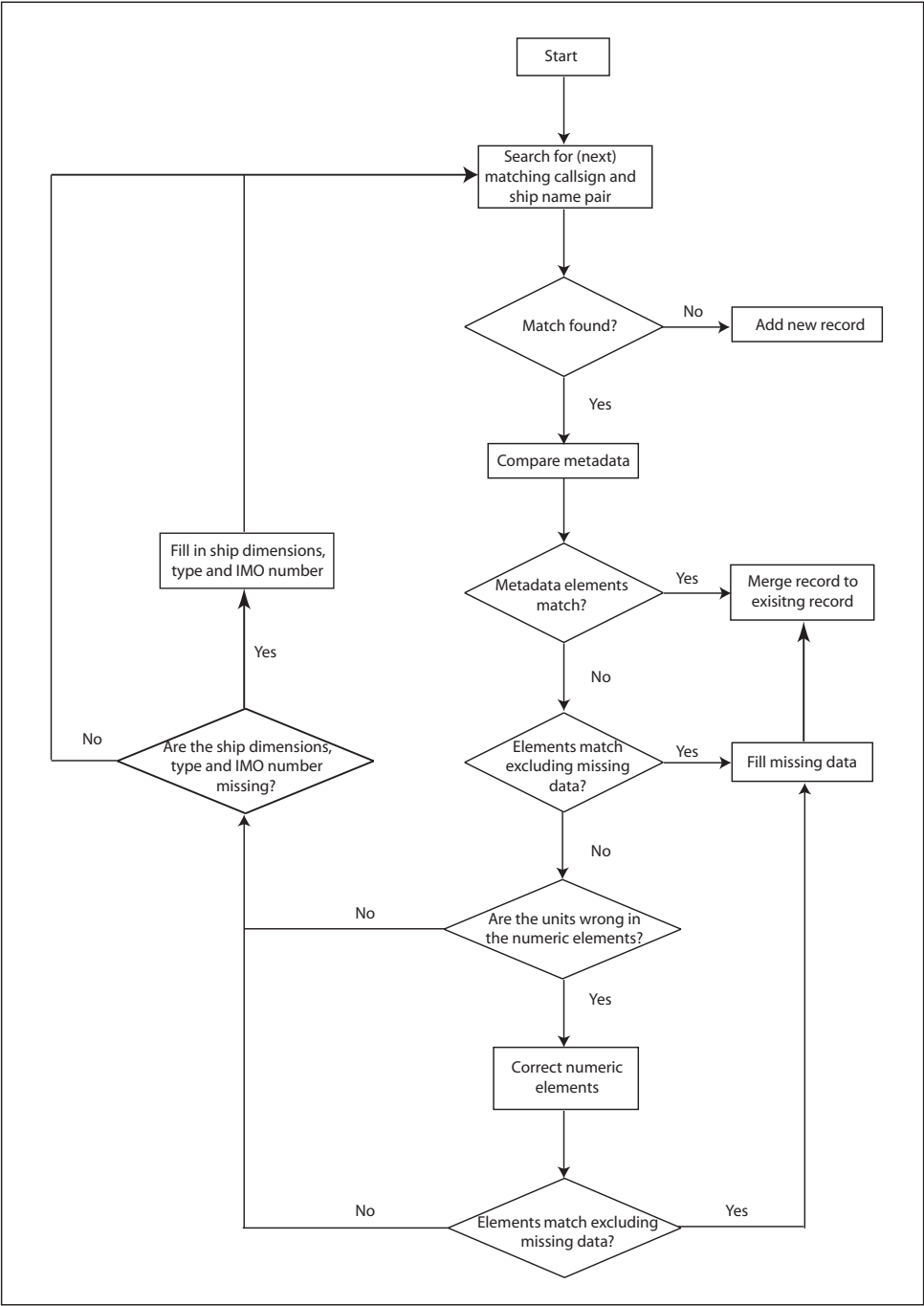


Figure 1. Flowchart of process to create master metadata table

When an entry is entered into the master table it is compared against the other records already in the table. If the call sign and soundex¹ of the ship name for the record being entered match an entry already in the master table the major metadata elements are compared. Soundexes of the ship names are used to avoid false negatives due to typographical errors and spelling differences in the names and to maximise the number of matches. A number of the major elements have multiple sections or sub-elements. These are listed together with the major metadata elements in Table 3.

For metadata elements which include a number of sub-elements the sub elements must all match to be classed as a match. If the sub-elements have data in one record but this information is missing in the other than it is classed as a partial match. A number of the elements can also have multiple values as well as sub-elements. The order in which the instruments are recorded is not specified in Pub. 47 with the exception of the metadata on SST measurement method and depth. Hence, where multiple values exist for a metadata element then all possible combinations are checked for a match. If both metadata records have one instrument set and the other set to missing the set instruments must match for it to be classed as a match or partial match. For SST the order recorded is specified, hence there must a direct match or partial match between the SST instruments for the records to be classed as matching or partially matching. For example, SST method and depth 1 in the record being added must match SST method and depth 1 in the record compared against for the records to be classed as matching.

From the matching process a number of different outcomes are possible

- 1) Identical metadata
- 2) Matching metadata but with missing elements
- 3) Matching metadata but with differences in the numeric elements
- 4) Different metadata

The following sections describe the processes for the above outcomes

¹ A soundex algorithm phonetically encodes a word, with phonetically similar words having identical encoding.

2.3.1 Identical Metadata

For two metadata records to be classed as an identical match all elements and sub elements must have corresponding entries in both records. If an identical match is found the two records are merged and the validity dates set to the earliest valid from date and the latest valid to date. For example, for two records valid from 1st January 1993 to 31st December 1993 and 1st January 1994 to 31st December 1994 the validity period would be set to 1st January 1993 – 31st December 1994.

2.3.2 Partial match - matching metadata but with missing elements

For two records to be classed as partially matching the metadata elements and sub elements present in both files must either have a corresponding entry in each file or be matched to missing data. For records classed as a partial match the records are merged, with the missing elements and sub elements filled from the more complete record and the validity dates set to cover both records, as for identical metadata.

2.3.3 Matching metadata but with differences in the numeric elements

Due to the operational nature of Pub. 47 and the long time scales over which it has been collected a number of the records have been entered in units other than metres or used the height above deck as the reference point for the instrument heights rather than height above max load line. Hence for records where the metadata elements match or form a partial match but the numeric elements are different a number of unit conversions are tried. For two similar records but with different numeric elements conversions from decimetres, centimetres, and millimetres are tried with the larger value converted. If all the values tested are within 0.5 m the conversion is assumed to be correct. If the conversion is not within 0.5 m the original height and depth elements are adjusted by the freeboard. If after adjustment the heights are within 0.5m the adjustment is assumed to be correct.

2.3.4 Different metadata

If the metadata records are different but the call signs and soundexes of the ship names match then both records are checked to see if any of the ship dimensions, type or IMO number are missing. If any of these elements are missing in either the record being added or the record already in the master table but present in the other record then the missing elements

are filled. If the metadata in the records do not match the master table is searched for the next record sharing the call sign / ship name pair. If no other records are found a new record is inserted into the table.

2.4 Setting of validity dates

Once all the records in the updates have been added to the master table the validity dates for the records are extended. To maximise the number of matches with the observations from the VOS the validity dates for the records are extended to be valid for one year before the record first appears and for five years after the last update for that record. If there is any overlap in the validity dates for a call sign then the validity end date of the earlier record is used to set the start date for the validity period of the later one.

3 Results

If the metadata has been improved by the homogenization and cleaning we should see a reduction in the number of metadata records, an increase in the information available from the metadata database and an increase in the number of observations from ICOADS which we can match to the metadata. We should also see a decrease in the number of invalid entries for the different fields.

3.1 Reduction in number of records

Before the cleaning and homogenization Pub. 47 contains around 470 000 different records in 94 different files and 7 different formats. After processing the data are contained in one file with a common format and approximately 90 000 records.

3.2 Completeness of records

As a measure of the completeness of the metadata records a number of the major fields of interest are selected (Table 4). For each record these fields are checked and the fraction complete calculated as the number of fields with data divided by the number of fields checked. The completeness of each record is then averaged over each year between 1954 and 1998 and each quarter from 1998 onwards. Figure 2 shows a time series of the completeness for both the original data and the filled dataset. Only metadata records with observations in ICOADS have been used. Similar results are found using all data.

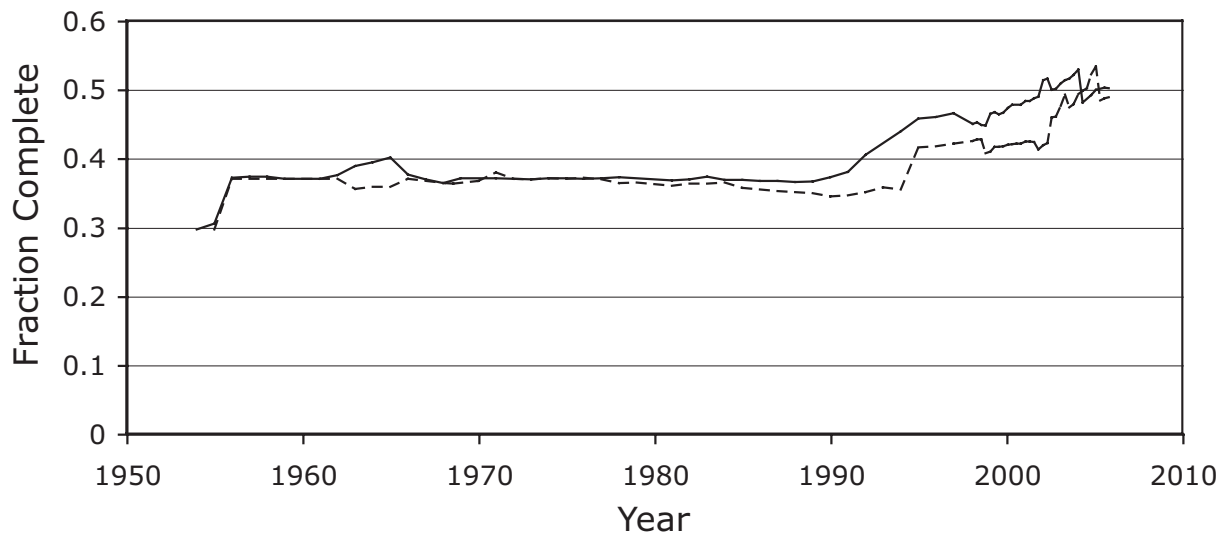


Figure 2. Fractional completeness of Pub. 47 records averaged over editions for the filled (solid line) and original data (dashed line)

Over the early part of the record there is little extra information added through the merging and filling process. This is due to no new fields and little extra information becoming available until the early 1990's. The addition of a number of new fields in 1995 can be seen in the original data. The impact of these new fields can also be seen in the filled dataset, with an increase in the completeness of the records from 1980 onwards due to this information being copied into the earlier records. A similar change is seen around 2002 when additional fields are added. At the end of the record there is a drop in the completeness due to a large number of new records being added to Pub. 47 containing little information other than ship name, type and recruiting country. This drop in completeness appears in the filled dataset first due to the extension of the validity dates.

3.3 Match to Observations

As a result of the extension of the validity dates we should see a greater number of matches to observations from VOS contained in ICOADS. This increase can be seen in Figures 3 and 4. Figure 3 shows the number of unique call signs in ICOADS (blue), the number which can be matched to metadata in the filled dataset (red) and the number matched to metadata in the original files (green). Figure 4 shows the number of VOS observations from ICOADS (blue), the number matched to metadata from the filled dataset (red) and the number matched to the original data (green).

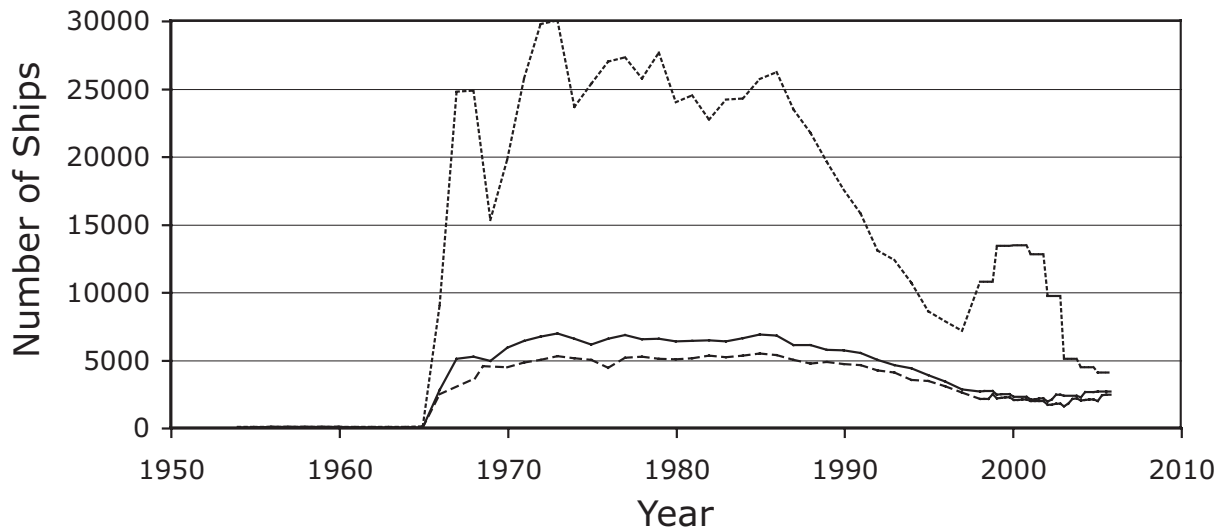


Figure 3. Number of unique call signs in ICOADS (dotted line), the number which can be matched to metadata in the filled dataset (solid line) and the number matched to metadata in the original files (dashed line)

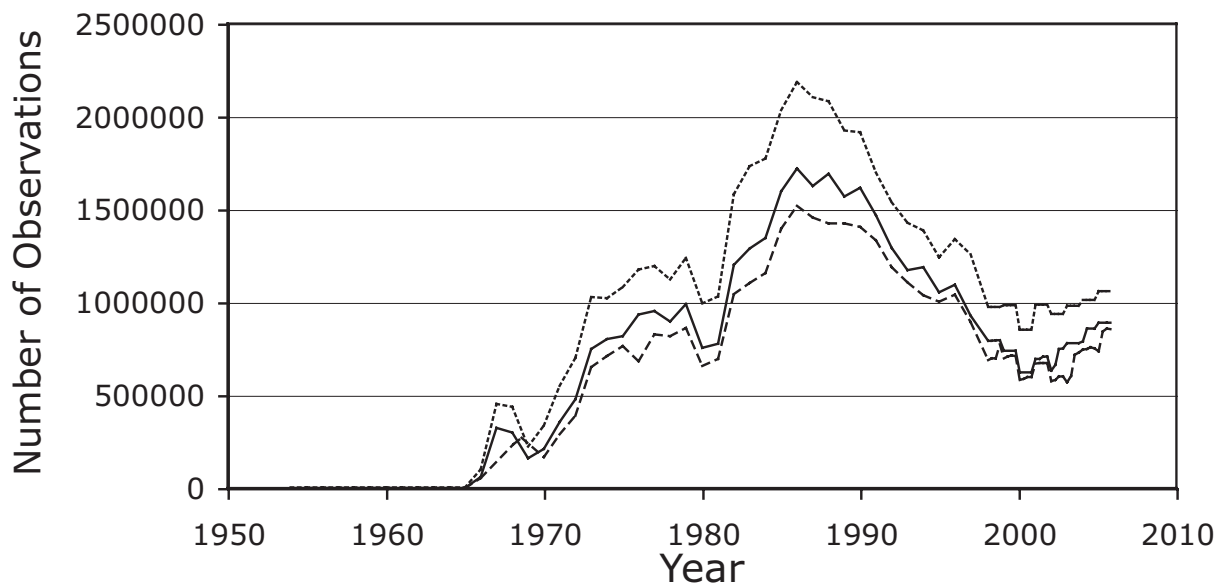


Figure 4. Number of VOS observations from ICOADS (dotted line), the number matched to metadata from the filled dataset (solid line) and the number matched to the original data (dashed line)

Using the filled dataset we are matching approximately 20% more call signs from ICOADS to metadata compared to the original Pub. 47 dataset. However, there are a large number of call signs unmatched from ICOADS. Whilst there are a large number of unmatched call signs Figure 4 shows we do match a large proportion of the observations to

metadata, with around 70 – 80 % of observations matched to metadata. This suggests there may be a small number of observations in ICOADS with corrupted or masked call signs. We see approximately 10 % more matches between observations and metadata using the filled metadata compared to the original Pub. 47.

4 Summary and Future Work

Overall there has been an improvement in the metadata database, with a large reduction in the number of entries, an increase in the amount of information available and an increase in the number of observation in ICOADS matched to metadata. Figure 5 shows the fractional completeness of Pub. 47 from the filled (blue) and original (red) data scaled by the percentage of the observations from ICOADS matched to metadata. Over the majority of the period we see an increase of 20 – 25 % in the amount of information available from the filled dataset compared to the original metadata. This is both from backfilling of metadata as new fields become available and from extending the validity periods of the individual records.

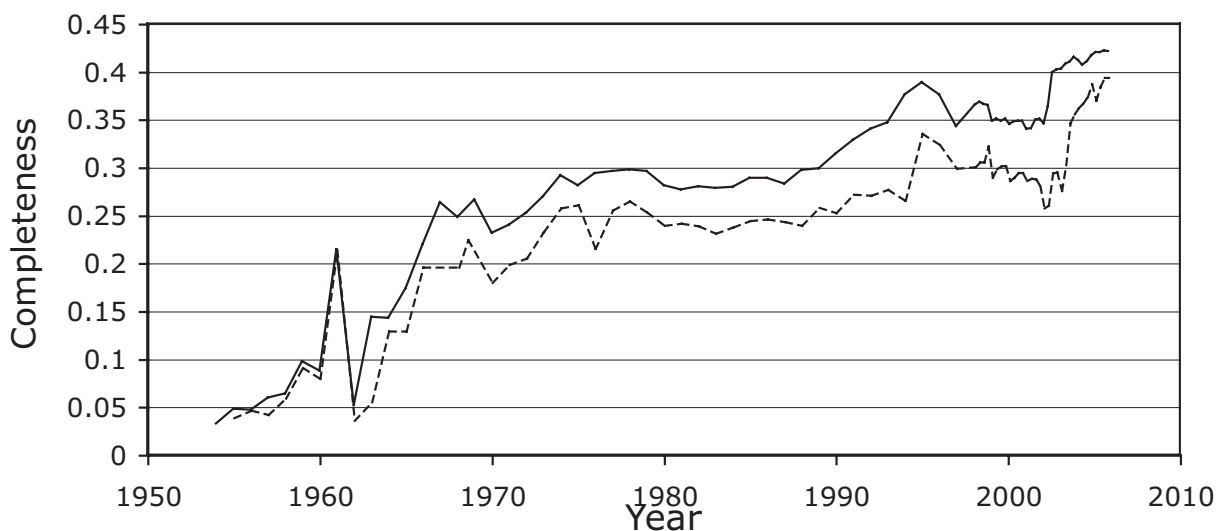


Figure 5. Completeness Index for Pub. 47 / ICOADS based on the filled dataset (solid line) and the original Pub. 47 (dashed line)

Whilst the metadata has been improved and the amount of available information increased by the processed described in this report further improvements are still possible.

- Recovery of instrument heights with ambiguous units
- Spurious changes to measurement methods
- Improved duplicate handling
- Addition of newly digitized metadata

A number of heights have been discarded due to ambiguous units of measurement and it should be possible to manually recover these values.

A number of countries change measurement methods for several editions and then change back to the original values. These changes are thought to be spurious and can also be corrected.

A number of early Pub. 47 editions and other metadata have recently become available, either in digital format or the data are in the process of being digitized. This data will be added to the database as it becomes available.

5 References

Kent, E. C., S. D. Woodruff and D. I. Berry, 2006: WMO Publication No. 47 Metadata and an Assessment of Voluntary Observing Ships Observation Heights in ICOADS, *Journal of Atmospheric and Oceanic Technology*, in press.

6 Tables

Anemometer Model	Mapped Anemometer Model
2106	2106
Aanderaa	Aanderaa
AANDERAA 3400M	AANDERAA 3400M
Aanderal	Aanderaa
Belfort	Belfort
Bendix	Bendix
C	C
CUPVANE	CUP/VANE
CUP/VANE	CUP/VANE
CUP & VANE	CUP/VANE
Daeyang	DAE YANG INSTRUMENT CO LTD
DAE YANG INSTRUMENT	DAE YANG INSTRUMENT CO LTD
DAEYANG	DAE YANG INSTRUMENT CO LTD
DAE YANG INSTRUMENT CO LTD	DAE YANG INSTRUMENT CO LTD
DAE YANG INSTRUMENT CO LTD/9505051	DAE YANG INSTRUMENT CO LTD/9505051
Daeyang Propeller/Vane	Daeyang Propeller/Vane
Daeyang Propellor/Vane	Daeyang Propeller/Vane
DAVIS	DAVIS
DEIF	DEIF
Deuta hand held	Deuta hand held
DIC	DIC
DIEF MALLING	DIEF MALLING
F22EL/N388A	F22EL/N388A
GILL ULTRASONIC	GILL ULTRASONIC
Gill Ultrasonic	GILL ULTRASONIC
Gill US	GILL ULTRASONIC
handle anemometer	handle anemometer
Hornet 4 Propellor/Vane	Hornet 4 Propellor/Vane
Hornet Propellor/Vane	Hornet Propeller/Vane
Hornet Propeller/Vane	Hornet Propeller/Vane

Anemometer Model	Mapped Anemometer Model
INDUCTOR	INDUCTOR
JRC	JRC
Koshin	Koshin
Koshin Denki FF-8-J	Koshin Denki FF-8-J
Koshin Denki KE-500	Koshin Denki KE-500
Koshin Denki Propeller/Vane	Koshin Denki Propeller/Vane
Koshin Denki Propellor/Vane	Koshin Denki Propeller/Vane
KOSHIN DENKI(WIND VANE)	KOSHIN DENKI(WIND VANE)
KOSHIN DENKI(WIND VANE)/UNKNOWN	KOSHIN DENKI(WIND VANE)/UNKNOWN
Koshin Denki/FF-8-J	Koshin Denki/FF-8-J
KOSHIN DENKI/KA-101	KOSHIN DENKI/KA-101
KOSHIN DENKI/KC1570B	KOSHIN DENKI/KC1570B
Koshin Denki/KE-500	Koshin Denki/KE-500
KOSHIN DENKI/SF-34-5-1A	KOSHIN DENKI/SF-34-5-1A
KOSHIN LTD.	KOSHIN LTD
KOSHIN LTD	KOSHIN LTD
KOSHIN LTD/1162	KOSHIN LTD/1162
KOSHIN LTD/A22386-2	KOSHIN LTD/A22386-2
KOSHIN LTD/A23035	KOSHIN LTD/A23035
KOSHIN LTD/A23244-2	KOSHIN LTD/A23244-2
KOSHIN LTD/A23256-2	KOSHIN LTD/A23256-2
KOSHIN LTD/A23283-2	KOSHIN LTD/A23283-2
KOSHIN LTD/A23307-2	KOSHIN LTD/A23307-2
KOSHIN LTD/B-101	KOSHIN LTD/B-101
KOSHIN Propeller/Vane	KOSHIN Propeller/Vane
Koshin Propeller/Vane	KOSHIN Propeller/Vane
Koshin Propellor/Vane	KOSHIN Propeller/Vane
KOSIN DENKI KOGYO CO. LTD	KOSIN DENKI KOGYO CO. LTD
LAMBERCHT/14513 G4 N18	LAMBERCHT/14513 G4 N18
Lambrecht	Lambrecht
Malling	MALLING
MALLING	MALLING
MALLING DEIF	MALLING DEIF
MARINE RADIO CO LTD	MARINE RADIO CO LTD
MARINE RADIO CO LTD/05106	MARINE RADIO CO LTD/05106
MEI ELECTRIC INSTRUMENT	MEI ELECTRIC INSTRUMENT
MEI ELECTLIC INSTRUMENT	MEI ELECTRIC INSTRUMENT
missing	missing
Munro	Munro
Munro IM146	Munro IM146
Munro Mk II S/N 1164/1	Munro Mk II S/N 1164/1
N/A	N/A
NE(CUP)/2889725	NE(CUP)/2889725
NE2889725(WIND VANE)	NE2889725(WIND VANE)
NEI	NEI
NEI(WIND VANE)/88X305	NEI(WIND VANE)/88X305
NEI/954802-2	NEI/954802-2
NEI/MM-54	NEI/MM-54
NEI/N-162D	NEI/N-162D
NEI/UNKNOWN	NEI/UNKNOWN

Anemometer Model	Mapped Anemometer Model
NEI88X305(CUP ANEMOMETER)	NEI88X305(CUP ANEMOMETER)
Nippon Elec Instruments	NIPPON ELECTRIC INSTRUMENT INC
Nippon Elec Instruments	NIPPON ELECTRIC INSTRUMENT INC
NIPPON ELECTRIC INSTRUMENT INC	NIPPON ELECTRIC INSTRUMENT INC
Nippon Electric	NIPPON ELECTRIC INSTRUMENT INC
NIPPON ELECTRIC INSTRUMENT INC/7782	NIPPON ELECTRIC INSTRUMENT INC/7782
NIPPON ELECTRIC INSTRUMENT INC/953801-2	NIPPON ELECTRIC INSTRUMENT INC/953801-2
NIPPON ELECTRIC INSTRUMENT INC/953802-2	NIPPON ELECTRIC INSTRUMENT INC/953802-2
NIPPON ELECTRIC INSTRUMENT INC/954803-2	NIPPON ELECTRIC INSTRUMENT INC/954803-2
NIPPON ELECTRIC INSTRUMENT INC/974801-2	NIPPON ELECTRIC INSTRUMENT INC/974801-2
Nippon Electric Propellor/Vane	Nippon Electric Propeller/Vane
Nippon Electric Propeller/Vane	Nippon Electric Propeller/Vane
NOT FITTED	NOT FITTED
not fitted	NOT FITTED
Obsermet	Obsermet
Obsermet OM150	Obsermet OM150
Obsermet OMC 150	Obsermet OMC 150
OBSERMET/16001271	OBSERMET/16001271
OSAKA NUNDTANI SEIKI/7313	OSAKA NUNDTANI SEIKI/7313
OSAKA NUNOTANI SEIKI CO LTD/F21S	OSAKA NUNOTANI SEIKI CO LTD/F21S
OSAKA NUNOTANI SEIKI CO LTD/N1543	OSAKA NUNOTANI SEIKI CO LTD/N1543
OSAKA NUNOTANI SEIKI/7313	OSAKA NUNOTANI SEIKI/7313
Propellor/vane	PROPELLER & VANE
PROPELLORVANE	PROPELLER & VANE
Propellorvane	PROPELLER & VANE
PRPOPELLOR/VANE	PROPELLER & VANE
propeller vane	PROPELLER & VANE
PROPELLER & VANE	PROPELLER & VANE
propeller	PROPELLER & VANE
Propeller vane	PROPELLER & VANE
PROP / VANE	PROPELLER & VANE
Propeller/Vane	PROPELLER & VANE
PROPELLER VANE	PROPELLER & VANE
Propellor/Vane	PROPELLER & VANE
PROP/VANE	PROPELLER & VANE
Propellor Vane	PROPELLER & VANE
PROPELLOR/VANE	PROPELLER & VANE
RM Young	R M YOUNG
R. M. YOUNG	R M YOUNG
R M YOUNG	R M YOUNG
R.M. YOUNG COMPANY/05106	R.M. YOUNG COMPANY/05106
R.H. YOUNG COMPANY/06206	R.M. YOUNG COMPANY/06206
R.M. YOUNG COMPANY/06206	R.M. YOUNG COMPANY/06206
R.M.YOUNG/09101	R.M.YOUNG/09101
SA	SA
SATO KEIRYOKI PROPELLOR/VANE	Sato Keiryoki Propeller/Vane

Anemometer Model	Mapped Anemometer Model
Sato Keiryoki Propeller/Vane	Sato Keiryoki Propeller/Vane
SATO PROPELLOR	SATO PROPELLOR
SEIKI Propeller vane	SEIKI Propeller vane
Seiki Propellor/Vane	SEIKI Propeller vane
Seiki Propeller/Vane	SEIKI Propeller vane
Simrad	Simrad
sonl	sonic
sonic	sonic
T.Walker	T. WALKER
T. WALKER	T. WALKER
T.WALKER & SONS	T.WALKER & SONS
THEIS CUP & VANE	THEIS CUP & VANE
Thies	Thies
THIES CLIMA PROPELLOR/VANE	THIES CLIMA PROPELLOR/VANE
THIES PROPELLOR/VANE	THIES PROPELLOR/VANE
Thomas Walker	Thomas Walker
THOMAS WALKER PROPELLORQ	THOMAS WALKER PROPELLORQ
Ultrasonic	ULTRASONIC
ULTRASONIC	ULTRASONIC
UNICROWN PROPELLOR/VANE	Unicrown Propeller/Vane
Unicrown Propeller/Vane	Unicrown Propeller/Vane
UNKNOWN	UNKNOWN
VAISALA	VAISALA
Vaisala	VAISALA
VAISALA WAV151 & WAA151	Vaisala Cups WAA151 & Vaisala Vane WAV151
Vaisala Vane WAV151 & Vaisala Cups WAA151	Vaisala Cups WAA151 & Vaisala Vane WAV151
Vaisala Cups WAA151 & Vaisala Vane WAV151	Vaisala Cups WAA151 & Vaisala Vane WAV151
Vaisala Vane WAV151 & Vaisala Cups WAA15A	Vaisala Vane WAV151 & Vaisala Cups WAA15A
VAISALA "WA"	VAISALA WA
VAISALA WA	VAISALA WA
Vaisala WAV 15	Vaisala WAV 15
Vaisala/WAA151	Vaisala/WAA151
Vector Instruments	Vector Instruments
WALKER 7070 PROPELLOR/VANE	WALKER 7070 PROPELLOR/VANE
WALKER 7070 WIND DATA	WALKER 7070 WIND DATA
Walker Propeller/Vane	Walker Propeller/Vane
Walker Propellor/Vane	Walker Propeller/Vane
WALKER PROPELLOR/VANE	Walker Propeller/Vane
WALKER TRANSDUCER	WALKER TRANSDUCER
YOUNG	YOUNG
YOUNG/05106	YOUNG/05106
YOUNGE	YOUNGE

Table 1a. List of values and mapped values for anemometer model element.

Anemometer Distance from Centre Line	Mapped Anemometer Distance from Centre Line
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Anemometer Distance from Centre Line	Mapped Anemometer Distance from Centre Line
0	0
0.0	0
0.00	0
0Port	0 P
0.3po	0.3 P
0.5	0.5
0.50	0.5
0.5 P	0.5 P
0.5PO	0.5 P
0.5po	0.5 P
.5 ST	0.5 S
0.5 S	0.5 S
0.5st	0.5 S
0.8po	0.8 P
0.8St	0.8 S
0.95	0.95
1	1
1.0	1
1.00	1
1 Por	1 P
1 POR	1 P
1.0po	1 P
1.0PO	1 P
1PORT	1 P
1port	1 P
1 Sta	1 S
1 STA	1 S
1.0st	1 S
1star	1 S
1.1	1.1
1.10	1.1
1.1PO	1.1 P
1.1 S	1.1 S
1.2	1.2
1.2PO	1.2 P
1.2 S	1.2 S
1.3PO	1.3 P
1.5	1.5
1.50	1.5
1.5 P	1.5 P
1.5po	1.5 P
1.5PO	1.5 P
1.5 S	1.5 S
1.5st	1.5 S
1.5ST	1.5 S
1.8	1.8
1.9ST	1.9 S
100	100
107.0	107

Anemometer Distance from Centre Line	Mapped Anemometer Distance from Centre Line
11	11
11.0s	11 S
110	110
110.8	110.8
116.0	116.0
120	120
150	15
15.0P	15 P
16.0p	16 P
17 Po	17 P
19.5	19.5
19.8	19.8
2	2
2.0	2
2 Por	2 P
2.0PO	2 P
2.0po	2 P
2PORT	2 P
2port	2 P
2.0st	2 S
2star	2 S
2.1	2.1
2.1 P	2.1 P
2.2	2.2
2.4	2.4
2.4 P	2.4 P
2.4ST	2.4 S
2.5	2.5
2.50	2.5
2.5 P	2.5 P
2.5p	2.5 P
2.5Po	2.5 P
2.5PO	2.5 P
2.5st	2.5 S
2.6	2.6
2.6PO	2.6 P
2.6ST	2.6 S
2.7	2.7
2.7 S	2.7 S
2.8PO	2.8 P
2.9	2.9
2.9s	2.9 S
21.5	21.5
250	250
3 Por	3 P
3.0p	3 P
3.0po	3 P
3.0PO	3 P
3port	3 P

Anemometer Distance from Centre Line	Mapped Anemometer Distance from Centre Line
3.0s	3 S
3.0st	3 S
3.1	3.1
3.2	3.2
3.3	3.3
3.30	3.3
3.3 P	3.3 P
3.3PO	3.3 P
3.4s	3.4 S
3.5	3.5
3.50	3.5
3.5 P	3.5 P
3.5PO	3.5 P
3.6	3.6
3.60	3.6
3.6 P	3.6 P
3.7PO	3.7 P
330	330
350	350
360	360
4	4
4.00	4
4 POR	4 P
4.0po	4 P
4PORT	4 P
4port	4 P
4star	4 S
4.2	4.2
4.20	4.2
4.2 P	4.2 P
4.2po	4.2 P
4.3	4.3
4.30	4.3
4.3 P	4.3 P
4.3PO	4.3 P
4.5	4.5
4.6st	4.6
4.6ST	4.6
4.6po	4.6 P
400	400
420	420
430	430
45.0	45
47.7	47.7
5	5
5.00	5
5 POR	5 P
5.0po	5 P
5.0PO	5 P

Anemometer Distance from Centre Line	Mapped Anemometer Distance from Centre Line
5.0ST	5 S
5star	5 S
5.5	5.5
5.5 P	5.5 P
50	50
500	500
550	550
58.5	58.5
6	6
6.0PO	6 P
6.0po	6 P
6PORT	6 P
6.0st	6 S
68 Po	68 P
69 Po	69 P
7.0PO	7 P
7 STA	7 S
7 Sta	7 S
7.5	7.5
78.1	78.1
78.2	78.2
8	8
8 Por	8 P
86.4	86.4
86.6	86.6
9 Sta	9 S
93.0	93
P	P
Port	P
port	P
PORT	P
STAR	S

Table 1b. List of values and mapped values for distance of anemometer from centre line.

Distance in metres, ‘P’ indicates port and ‘S’ starboard

Barograph Type	Mapped Barograph Type	Description
OS	OS	Open Scale
OS	OS	Open Scale
OS1	OS1	Open Scale, 1 Day Clock
OS3	OS3	Open Scale, 3 Day Clock
OS4	OS4	Open Scale, 4 Day Clock
OS5	OS5	Open Scale, 5 Day Clock
OS7	OS7	Open Scale, 7 Day Clock
OS8	OS8	Open Scale, 8 Day Clock
OT	OT	Other
SSS	SS	Small scale
SS	SS	Small scale

Table 1c. List of values, mapped values and descriptions for type of barograph

Barometer Model	Mapped Barometer Model
32	32
AGR	AGR
ARGO NAVIS	ARGO NAVIS
BARIGO/4102	BARIGO/4102
BARIGO/4105	BARIGO/4105
BARIGO/4115	BARIGO/4115
BARIGO/4117	BARIGO/4117
BARIGO/UNKNOWN	BARIGO/UNKNOWN
BELFORT	Belfort
Belfort	Belfort
CITIZEN/16020042	CITIZEN/16020042
EI/4154	EI/4154
EIWA/008450	EIWA/008450
EIWA/008456	EIWA/008456
EIWA/5040	EIWA/5040
EIWA/UNKNOWN	EIWA/UNKNOWN
FRIEZ	FRIEZ
Fuess	Fuess
HANSEATIC/UNKNOWN	HANSEATIC/UNKNOWN
Hanseatick/UNKNOWN	HANSEATIC/UNKNOWN
HANSEATICK/UNKNOWN	HANSEATIC/UNKNOWN
HASEATICK/UNKNOWN	HANSEATIC/UNKNOWN
HISAMATSU/242587	HISAMATSU/242587
HISAMATSU/242659	HISAMATSU/242659
HITAMATSU/242586	HITAMATSU/242586
HITAMATSU/242657	HITAMATSU/242657
HITAMATSU/242682	HITAMATSU/242682
HITAMATSU/242723	HITAMATSU/242723
IMD	IMD
ISUZU/UNKNOWN	ISUZU/UNKNOWN
KDG	KDG
KEIKI	KEIKI
Lamprecht	Lamprecht
LILLEY AND GILLEY	LILLEY & GILLIE
LILLEY & GILLEY/2574	LILLEY & GILLEY/2574
LILLEY & GILLEY/UNKNOWN	LILLEY & GILLEY/UNKNOWN
LILLEY & GILLEY/UNKNOWN	LILLEY & GILLEY/UNKNOWN
LILLEY & GILLIE	LILLEY & GILLIE
LILLEY & GILLIE	LILLEY & GILLIE
LILLEY & GILLIE/0703902	LILLEY & GILLIE/0703902
LILLEY & GILLIE/4890	LILLEY & GILLIE/4890
LILLEY & GILLIE/5466	LILLEY & GILLIE/5466
LILLEY & GILLIE/6003	LILLEY & GILLIE/6003
LILLEY & GILLIE/6197	LILLEY & GILLIE/6197
LITSUKI KEIKI CO LTD. YOKOHAMA/1079	LITSUKI KEIKI CO LTD. YOKOHAMA/1079
LITSUKI KEIKI CO LTD. YOKOHAMA/34036	LITSUKI KEIKI CO LTD. YOKOHAMA/34036
MECH	MECHANISM LTD
Mech Ltd	MECHANISM LTD

Barometer Model	Mapped Barometer Model
MECH LTD	MECHANISM LTD
Mechanism Ltd	MECHANISM LTD
MECHANISM LTD	MECHANISM LTD
case issued Mechanism LTD Mk I	MECHANISM LTD MK I
issued with case Mechanism LTD Mk I	MECHANISM LTD MK I
Mechanism Ltd Mk I	MECHANISM LTD MK I
Mechanism LTD Mk I	MECHANISM LTD MK I
MECHANISM LTD MK I	MECHANISM LTD MK I
case issued Mechanism LTD Mk II	MECHANISM LTD MK II
issued with case Mechanism LTD Mk II	MECHANISM LTD MK II
issued with case. Mechanism LTD Mk II	MECHANISM LTD MK II
Mechanism Ltd Mechanism LTD Mk II	MECHANISM LTD MK II
Mechanism Ltd Mk II	MECHANISM LTD MK II
Mechanism LTD Mk II	MECHANISM LTD MK II
MECHANISM LTD MK II	MECHANISM LTD MK II
MECHANISM LTD MKII	MECHANISM LTD MK II
MECHANISM LTD/791	MECHANISM LTD/791
Mechanism/847	Mechanism/847
Miros DPA21	Miros DPA21
MK I	MK I
MK II	MK II
Munro	Munro
Munro 48022/5	Munro 48022/5
NEGRATTI	NEGRETTI
Negretti	NEGRETTI
NEGRETTI	NEGRETTI
Nnegretti	NEGRETTI
N & Z	NEGRETTI & ZAMBRA
N&Z	NEGRETTI & ZAMBRA
NEGRETTI & ZAMBRA	NEGRETTI & ZAMBRA
NEGRETTI AND ZAMBRA	NEGRETTI & ZAMBRA
NEGRETTI & ZAMBRA CROYDON/A159	NEGRETTI & ZAMBRA CROYDON/A159
NEGRETTI & ZAMBRA CROYDON/B672	NEGRETTI & ZAMBRA CROYDON/B672
NEGRETTI & ZAMBRA CROYDON/D223	NEGRETTI & ZAMBRA CROYDON/D223
NEGRETTI & ZAMBRA CROYDON/D367	NEGRETTI & ZAMBRA CROYDON/D367
NEGRETTI & ZAMBRA PRECISION ANEROID MK 1	NEGRETTI & ZAMBRA PRECISION ANEROID MK 1
NEGRETTI & ZAMBIA PRECISION ANEROID MK 2	NEGRETTI & ZAMBRA PRECISION ANEROID MK 2
Negretti & Zambra Precision Aneroid Mk 2	NEGRETTI & ZAMBRA PRECISION ANEROID MK 2
NEGRETTI & ZAMBRA PRECISION ANEROID MK 2	NEGRETTI & ZAMBRA PRECISION ANEROID MK 2
Negretti & Zambra Precision Aneroid MK2	NEGRETTI & ZAMBRA PRECISION ANEROID MK 2
issued with case N&Z Mk I	NEGRETTI AND ZAMBRA MK I
N&Z Mk I	NEGRETTI AND ZAMBRA MK I
NEGRETTI AND ZAMBRA MK I	NEGRETTI AND ZAMBRA MK I
N&Z Mk II	NEGRETTI AND ZAMBRA MK II
N&Z MKII	NEGRETTI AND ZAMBRA MK II
NEGRETTI AND ZAMBRA MK II	NEGRETTI AND ZAMBRA MK II

Barometer Model	Mapped Barometer Model
NEI	NEI
NEI/4154	NEI/4154
NEI/UNKNOWN	NEI/UNKNOWN
Obsermet	Obsermet
Obsermet OMC506	Obsermet OMC506
OGASAWARA	OGASAWARA
OGASAWARA/UNKNOWN	OGASAWARA/UNKNOWN
OS7	OS7
OT-403	OT-403
OTA	OTA
OTA KEIKI SEISAKUSHO/242660	OTA KEIKI SEISAKUSHO/242660
OTA KEIKI SEISAKUSHO/242725	OTA KEIKI SEISAKUSHO/242725
OTA KEIKI SEISAKUSHO/242682	OTA KEIKI SEISAKUSHO/242682
OTA KEIKI SEISAKUSHO/242684	OTA KEIKI SEISAKUSHO/242684
OTA/167178	OTA/167178
OTA/178202	OTA/178202
OTA/243029	OTA/243029
OTA/262671	OTA/262671
OTA/265855	OTA/265855
OTA/274612	OTA/274612
OTA/400098	OTA/400098
OTA/403	OTA/403
OTA/405815	OTA/405815
OTA/405821	OTA/405821
OTA/405830	OTA/405830
OTA/405846	OTA/405846
OTA/405854	OTA/405854
OTA/405856	OTA/405856
OTA/405884	OTA/405884
OTA/405885	OTA/405885
OTA/405887	OTA/405887
OTA/405893	OTA/405893
OTA/405897	OTA/405897
OTA/405910	OTA/405910
OTA/405915	OTA/405915
OTA/4059-18	OTA/4059-18
OTA/405926	OTA/405926
OTA/405952	OTA/405952
OTA/405986	OTA/405986
OTA/405990	OTA/405990
OTA/406007	OTA/406007
OTA/406044	OTA/406044
OTA/406049	OTA/406049
OTA/406079	OTA/406079
OTA/406089	OTA/406089
OTA/406142	OTA/406142
OTA/406167	OTA/406167
OTA/406210	OTA/406210
OTA/406225	OTA/406225
OTA/406250	OTA/406250

Barometer Model	Mapped Barometer Model
OTA/406288	OTA/406288
OTA/416261	OTA/416261
OTA/416291	OTA/416291
OTA/416302	OTA/416302
OTA/416313	OTA/416313
OTA/416327	OTA/416327
OTA/416398	OTA/416398
OTA/416440	OTA/416440
OTA/416466	OTA/416466
OTA/416509	OTA/416509
OTA/416528	OTA/416528
OTA/416531	OTA/416531
OTA/416532	OTA/416532
OTA/416557	OTA/416557
OTA/416582	OTA/416582
OTA/416584	OTA/416584
OTA/416601	OTA/416601
OTA/416610	OTA/416610
OTA/416625	OTA/416625
OTA/416676	OTA/416676
OTA/416689	OTA/416689
OTA/426736	OTA/426736
OTA/426741	OTA/426741
OTA/426764	OTA/426764
OTA/426768	OTA/426768
OTA/426783	OTA/426783
OTA/426786	OTA/426786
OTA/426811	OTA/426811
OTA/426827	OTA/426827
OTA/426837	OTA/426837
OTA/426858	OTA/426858
OTA/426943	OTA/426943
OTA/430226	OTA/430226
OTA/430255	OTA/430255
OTA/436967	OTA/436967
OTA/436971	OTA/436971
OTA/436972	OTA/436972
OTA/436976	OTA/436976
OTA/437027	OTA/437027
OTA/437042	OTA/437042
OTA/437059	OTA/437059
OTA/437061	OTA/437061
OTA/437077	OTA/437077
OTA/437078	OTA/437078
OTA/437079	OTA/437079
OTA/437082	OTA/437082
OTA/437095	OTA/437095
OTA/437101	OTA/437101
OTA/437102	OTA/437102
OTA/437110	OTA/437110

Barometer Model	Mapped Barometer Model
OTA/437134	OTA/437134
OTA/437141	OTA/437141
OTA/437147	OTA/437147
OTA/437170	OTA/437170
OTA/437176	OTA/437176
OTA/437196	OTA/437196
OTA/447301	OTA/447301
OTA/447321	OTA/447321
OTA/447391	OTA/447391
OTA/447485	OTA/447485
OTA/447491	OTA/447491
OTA/447509	OTA/447509
OTA/447529	OTA/447529
OTA/447568	OTA/447568
OTA/447573	OTA/447573
OTA/447594	OTA/447594
OTA/447632	OTA/447632
OTA/447685	OTA/447685
OTA/457734	OTA/457734
OTA/457791	OTA/457791
OTA/457798	OTA/457798
OTA/457808	OTA/457808
OTA/457958	OTA/457958
OTA/485004	OTA/485004
OTA/485024	OTA/485024
OTA/485036	OTA/485036
OTA/485042	OTA/485042
OTA/485072	OTA/485072
OTA/485114	OTA/485114
OTA/485146	OTA/485146
OTA/485154	OTA/485154
OTA/485166	OTA/485166
OTA/485179	OTA/485179
OTA/485189	OTA/485189
OTA/485232	OTA/485232
OTA/485243	OTA/485243
OTA/485245	OTA/485245
OTA/485247	OTA/485247
OTA/485250	OTA/485250
OTA/485254	OTA/485254
OTA/485282	OTA/485282
OTA/495301	OTA/495301
OTA/495328	OTA/495328
OTA/495403	OTA/495403
OTA/495410	OTA/495410
OTA/495411	OTA/495411
OTA/495419	OTA/495419
OTA/495437	OTA/495437
OTA/495441	OTA/495441
OTA/495444	OTA/495444

Barometer Model	Mapped Barometer Model
OTA/495484	OTA/495484
OTA/495491	OTA/495491
OTA/495499	OTA/495499
OTA/495526	OTA/495526
OTA/495556	OTA/495556
OTA/495587	OTA/495587
OTA/495596	OTA/495596
OTA/495604	OTA/495604
OTA/495626	OTA/495626
OTA/495639	OTA/495639
OTA/495640	OTA/495640
OTA/495645	OTA/495645
OTA/495658	OTA/495658
OTA/495659	OTA/495659
OTA/495677	OTA/495677
OTA/495718	OTA/495718
OTA/495747	OTA/495747
OTA/495751	OTA/495751
OTA/495765	OTA/495765
OTA/495774	OTA/495774
OTA/495791	OTA/495791
OTA/737291	OTA/737291
OTA/98501	OTA/98501
OTA/9-A	OTA/9-A
OTA/UNKNOWN	OTA/UNKNOWN
PAB MK1	PAB MK1
pab mk2	PAB MK2
PAB MK2	PAB MK2
PTB20	PTB20
PTB220	PTB220
PTB221	PTB221
PTR 1400	PTR 1400
R. Fuess	R.Fuess
R.Fuess	R.Fuess
R.Fuss	R.Fuess
RFuess	R.Fuess
REGULUS CO LTD	REGULUS CO LTD
Rodolfo Mata Mechanism LTD Mk II	Rodolfo Mata Mechanism LTD Mk II
Rosemount	Rosemount
SANOH/000109	SANOH/000109
SANOH/000253	SANOH/000253
SANOH/007559	SANOH/007559
SANOH/008334	SANOH/008334
SANOH/008558	SANOH/008558
SANOH/7607	SANOH/7607
SANOH/S8	SANOH/S8
SANOH/UNKNOWN	SANOH/UNKNOWN
SATO/037973	SATO/037973
SATO/37973	SATO/37973
SATO/565042	SATO/565042

Barometer Model	Mapped Barometer Model
SATO/566250	SATO/566250
SATO/UNKNOWN	SATO/UNKNOWN
SESTREL	SESTREL
SESTREL/4908	SESTREL/4908
SETRA 470	SETRA 470
SEVIES S/N31549	SEVIES S/N31549
STOCKBURGER	STOCKBURGER
Sundo	Sundo
SUNOH/000225	SUNOH/000225
SUNOH/000332	SUNOH/000332
SUNOH/008157	SUNOH/008157
SUNOH/332	SUNOH/332
SUNOH/67	SUNOH/67
SUNOH/8157	SUNOH/8157
SUNOH/8558	SUNOH/8558
SUNOH/908334	SUNOH/908334
SUNOH/94	SUNOH/94
SUNOH/UNKNOWN	SUNOH/UNKNOWN
TAKAHASHI	TAKAHASHI
TAKAHASHI/3905	TAKAHASHI/3905
TAKAHASHI/4131	TAKAHASHI/4131
TAKAHASHI/5655	TAKAHASHI/5655
TAKAHASHI/UNKNOWN	TAKAHASHI/UNKNOWN
TAMAYA	TAMAYA
Theodor Freidrich	Theodor Freidrich
Theodor Freidrich/50200000	Theodor Freidrich/50200000
THIES CLIMA/98071	THIES CLIMA/98071
Transinstruments	Transinstruments
TWIN DIAPHRAGM DOPPELDOSE	TWIN DIAPHRAGM DOPPELDOSE
UNKNOWN/10096	UNKNOWN/10096
UNKNOWN/16549	UNKNOWN/16549
UNKNOWN/16785	UNKNOWN/16785
Utsuki	Utsuki
UTSUKI KEIKI	UTSUKI KEIKI
UTSUKI KEIKI/9349	UTSUKI KEIKI/9349
UTSUKI/32970	UTSUKI/32970
UTSUKI/33189	UTSUKI/33189
UTSUKI/34113	UTSUKI/34113
UTSUKI/34294	UTSUKI/34294
UTSUKI/34297	UTSUKI/34297
UTSUKI/40009	UTSUKI/40009
UTSUKI/40015	UTSUKI/40015
UTSUKI/40078	UTSUKI/40078
UTSUKI/8121	UTSUKI/8121
UTSUKI/8391	UTSUKI/8391
UTSUKI/8515	UTSUKI/8515
UTSUKI/8633	UTSUKI/8633
UTSUKI/8657	UTSUKI/8657
UTSUKI/8683	UTSUKI/8683
UTSUKI/8716	UTSUKI/8716

Barometer Model	Mapped Barometer Model
UTSUKI/8747	UTSUKI/8747
UTSUKI/8771	UTSUKI/8771
UTSUKI/8862	UTSUKI/8862
UTSUKI/9017	UTSUKI/9017
UTSUKI/9043	UTSUKI/9043
UTSUKI/9052	UTSUKI/9052
UTSUKI/9060	UTSUKI/9060
UTSUKI/9080	UTSUKI/9080
UTSUKI/9171	UTSUKI/9171
UTSUKI/9174	UTSUKI/9174
UTSUKI/9207	UTSUKI/9207
UTSUKI/9223	UTSUKI/9223
UTSUKI/9313	UTSUKI/9313
UTSUKI/9342	UTSUKI/9342
UTSUKI/9379	UTSUKI/9379
UTSUKI/9388	UTSUKI/9388
UTSUKI/9431	UTSUKI/9431
UTSUKI/9452	UTSUKI/9452
UTSUKI/9473	UTSUKI/9473
UTSUKI/9494	UTSUKI/9494
UTSUKI/9502	UTSUKI/9502
UTSUKI/UNKNOWN	UTSUKI/UNKNOWN
Vaisala	VAISALA
VAISALA	VAISALA
VAISALA PA11	VAISALA PA11
Vaisala PTB210	Vaisala PTB210
Vaisala PTB220	Vaisala PTB220
Vaisala/PTB220	Vaisala PTB220
Vaisala PTB220B	VAISALA PTB220B
VAISALA PTB220B	VAISALA PTB220B
Vaisala PTU200	Vaisala PTU200
VAISALA/005363	VAISALA/005363
Vaisala/PTB220A	Vaisala/PTB220A
vibrachoc	vibrachoc
WEMPE/51633	WEMPE/51633
WEMPE/UNKNOWN	WEMPE/UNKNOWN
YAMATAKE HONEY WELL	YAMATAKE HONEY WELL
YANAGI TYPE 8A	YANAGI TYPE 8A
YANAGI INSTRUMENT CO. LTD	YANAGI INSTRUMENT CO. LTD
YANAGI INSTRUMENT CO. LTD/10160	YANAGI INSTRUMENT CO. LTD/10160
YANAGI INSTRUMENT CO. LTD/10223	YANAGI INSTRUMENT CO. LTD/10223
YANAGI INSTRUMENT CO. LTD/13473	YANAGI INSTRUMENT CO. LTD/13473
YANAGI INSTRUMENT CO. LTD/4454	YANAGI INSTRUMENT CO. LTD/4454
YANAGI INSTRUMENT CO. LTD/7165	YANAGI INSTRUMENT CO. LTD/7165
YANAGI INSTRUMENT CO. LTD/7190	YANAGI INSTRUMENT CO. LTD/7190
YANAGI INSTRUMENT CO. LTD/7305	YANAGI INSTRUMENT CO. LTD/7305
YANAGI INSTRUMENT CO. LTD/7340	YANAGI INSTRUMENT CO. LTD/7340
YANAGI INSTRUMENT CO. LTD/7349	YANAGI INSTRUMENT CO. LTD/7349
YANAGI INSTRUMENT CO. LTD/957696	YANAGI INSTRUMENT CO. LTD/957696
YANAGI INSTRUMENT CO. LTD/9645	YANAGI INSTRUMENT CO. LTD/9645

Barometer Model	Mapped Barometer Model
YANAGI INSTRUMENT CO. LTD/9685	YANAGI INSTRUMENT CO. LTD/9685
YANAGI INSTRUMENT CO. LTD/9713	YANAGI INSTRUMENT CO. LTD/9713
YANAGI INSTRUMENT CO. LTD/991850	YANAGI INSTRUMENT CO. LTD/991850
YANAGI/10006	YANAGI/10006
YANAGI/10010	YANAGI/10010
YANAGI/10012	YANAGI/10012
YANAGI/10055	YANAGI/10055
YANAGI/10058	YANAGI/10058
YANAGI/10061	YANAGI/10061
YANAGI/10066	YANAGI/10066
YANAGI/10072	YANAGI/10072
YANAGI/10082	YANAGI/10082
YANAGI/10096	YANAGI/10096
YANAGI/10112	YANAGI/10112
YANAGI/10122	YANAGI/10122
YANAGI/10136	YANAGI/10136
YANAGI/10140	YANAGI/10140
YANAGI/10152	YANAGI/10152
YANAGI/10166	YANAGI/10166
YANAGI/10167	YANAGI/10167
YANAGI/10170	YANAGI/10170
YANAGI/10173	YANAGI/10173
YANAGI/10187	YANAGI/10187
YANAGI/10195	YANAGI/10195
YANAGI/10215	YANAGI/10215
YANAGI/10258	YANAGI/10258
YANAGI/10267	YANAGI/10267
YANAGI/10282	YANAGI/10282
YANAGI/10285	YANAGI/10285
YANAGI/10288	YANAGI/10288
YANAGI/10295	YANAGI/10295
YANAGI/10300	YANAGI/10300
YANAGI/10301	YANAGI/10301
YANAGI/10305	YANAGI/10305
YANAGI/10324	YANAGI/10324
YANAGI/10325	YANAGI/10325
YANAGI/10331	YANAGI/10331
YANAGI/10487	YANAGI/10487
YANAGI/10599	YANAGI/10599
YANAGI/10693	YANAGI/10693
YANAGI/10854	YANAGI/10854
YANAGI/11084	YANAGI/11084
YANAGI/11775	YANAGI/11775
YANAGI/11868	YANAGI/11868
YANAGI/11869	YANAGI/11869
YANAGI/12133	YANAGI/12133
YANAGI/12627	YANAGI/12627
YANAGI/12807	YANAGI/12807
YANAGI/12839	YANAGI/12839
YANAGI/13361	YANAGI/13361

Barometer Model	Mapped Barometer Model
YANAGI/13391	YANAGI/13391
YANAGI/13661	YANAGI/13661
YANAGI/13708	YANAGI/13708
YANAGI/13950	YANAGI/13950
YANAGI/14050	YANAGI/14050
YANAGI/14076	YANAGI/14076
YANAGI/14086	YANAGI/14086
YANAGI/14274	YANAGI/14274
YANAGI/14278	YANAGI/14278
YANAGI/14302	YANAGI/14302
YANAGI/14489	YANAGI/14489
YANAGI/14657	YANAGI/14657
YANAGI/14829	YANAGI/14829
YANAGI/14860	YANAGI/14860
YANAGI/15005	YANAGI/15005
YANAGI/15027	YANAGI/15027
YANAGI/15047	YANAGI/15047
YANAGI/15191	YANAGI/15191
YANAGI/15316	YANAGI/15316
YANAGI/15368	YANAGI/15368
YANAGI/15402	YANAGI/15402
YANAGI/15504	YANAGI/15504
YANAGI/15846	YANAGI/15846
YANAGI/15903	YANAGI/15903
YANAGI/1592	YANAGI/1592
YANAGI/15936	YANAGI/15936
YANAGI/15974	YANAGI/15974
YANAGI/15984	YANAGI/15984
YANAGI/15985	YANAGI/15985
YANAGI/16003	YANAGI/16003
YANAGI/16036	YANAGI/16036
YANAGI/16123	YANAGI/16123
YANAGI/16128	YANAGI/16128
YANAGI/16154	YANAGI/16154
YANAGI/16244	YANAGI/16244
YANAGI/16263	YANAGI/16263
YANAGI/16441	YANAGI/16441
YANAGI/16519	YANAGI/16519
YANAGI/16522	YANAGI/16522
YANAGI/16538	YANAGI/16538
YANAGI/16554	YANAGI/16554
YANAGI/16574	YANAGI/16574
YANAGI/16623	YANAGI/16623
YANAGI/16625	YANAGI/16625
YANAGI/16640	YANAGI/16640
YANAGI/16642	YANAGI/16642
YANAGI/16653	YANAGI/16653
YANAGI/16665	YANAGI/16665
YANAGI/16720	YANAGI/16720
YANAGI/16721	YANAGI/16721

Barometer Model	Mapped Barometer Model
YANAGI/16749	YANAGI/16749
YANAGI/16751	YANAGI/16751
YANAGI/16766	YANAGI/16766
YANAGI/16785	YANAGI/16785
YANAGI/16829	YANAGI/16829
YANAGI/16838	YANAGI/16838
YANAGI/16859	YANAGI/16859
YANAGI/16918	YANAGI/16918
YANAGI/16963	YANAGI/16963
YANAGI/16967	YANAGI/16967
YANAGI/16980	YANAGI/16980
YANAGI/17024	YANAGI/17024
YANAGI/17049	YANAGI/17049
YANAGI/17058	YANAGI/17058
YANAGI/17059	YANAGI/17059
YANAGI/17060	YANAGI/17060
YANAGI/17062	YANAGI/17062
YANAGI/17109	YANAGI/17109
YANAGI/17114	YANAGI/17114
YANAGI/17116	YANAGI/17116
YANAGI/17130	YANAGI/17130
YANAGI/17151	YANAGI/17151
YANAGI/17154	YANAGI/17154
YANAGI/17187	YANAGI/17187
YANAGI/17227	YANAGI/17227
YANAGI/246	YANAGI/246
YANAGI/3537	YANAGI/3537
YANAGI/4035	YANAGI/4035
YANAGI/4305	YANAGI/4305
YANAGI/4306	YANAGI/4306
YANAGI/4350	YANAGI/4350
YANAGI/4552	YANAGI/4552
YANAGI/4772	YANAGI/4772
YANAGI/4892	YANAGI/4892
YANAGI/5181	YANAGI/5181
YANAGI/5198	YANAGI/5198
YANAGI/5201	YANAGI/5201
YANAGI/52214	YANAGI/52214
YANAGI/5342	YANAGI/5342
YANAGI/5415	YANAGI/5415
YANAGI/5813	YANAGI/5813
YANAGI/5956	YANAGI/5956
YANAGI/5982	YANAGI/5982
YANAGI/6023	YANAGI/6023
YANAGI/6031	YANAGI/6031
YANAGI/6032	YANAGI/6032
YANAGI/6089	YANAGI/6089
YANAGI/6118	YANAGI/6118
YANAGI/6292	YANAGI/6292
YANAGI/6340	YANAGI/6340

Barometer Model	Mapped Barometer Model
YANAGI/6416	YANAGI/6416
YANAGI/6419	YANAGI/6419
YANAGI/6446	YANAGI/6446
YANAGI/6535	YANAGI/6535
YANAGI/6568	YANAGI/6568
YANAGI/6665	YANAGI/6665
YANAGI/6698	YANAGI/6698
YANAGI/6731	YANAGI/6731
YANAGI/6754	YANAGI/6754
YANAGI/6781	YANAGI/6781
YANAGI/6782	YANAGI/6782
YANAGI/6846	YANAGI/6846
YANAGI/6869	YANAGI/6869
YANAGI/6875	YANAGI/6875
YANAGI/6894	YANAGI/6894
YANAGI/6895	YANAGI/6895
YANAGI/6903	YANAGI/6903
YANAGI/6970	YANAGI/6970
YANAGI/70083	YANAGI/70083
YANAGI/7016	YANAGI/7016
YANAGI/7036	YANAGI/7036
YANAGI/7040	YANAGI/7040
YANAGI/7167	YANAGI/7167
YANAGI/7168	YANAGI/7168
YANAGI/7178	YANAGI/7178
YANAGI/7180	YANAGI/7180
YANAGI/7188	YANAGI/7188
YANAGI/7190	YANAGI/7190
YANAGI/7207	YANAGI/7207
YANAGI/7341	YANAGI/7341
YANAGI/7356	YANAGI/7356
YANAGI/7371	YANAGI/7371
YANAGI/7389	YANAGI/7389
YANAGI/7395	YANAGI/7395
YANAGI/7397	YANAGI/7397
YANAGI/7440	YANAGI/7440
YANAGI/7460	YANAGI/7460
YANAGI/7468	YANAGI/7468
YANAGI/7487	YANAGI/7487
YANAGI/7509	YANAGI/7509
YANAGI/7519	YANAGI/7519
YANAGI/7552	YANAGI/7552
YANAGI/7586	YANAGI/7586
YANAGI/7589	YANAGI/7589
YANAGI/7602	YANAGI/7602
YANAGI/7611	YANAGI/7611
YANAGI/7619	YANAGI/7619
YANAGI/7661	YANAGI/7661
YANAGI/7681	YANAGI/7681
YANAGI/7699	YANAGI/7699

Barometer Model	Mapped Barometer Model
YANAGI/7700	YANAGI/7700
YANAGI/7703	YANAGI/7703
YANAGI/7720	YANAGI/7720
YANAGI/7733	YANAGI/7733
YANAGI/7791	YANAGI/7791
YANAGI/7838	YANAGI/7838
YANAGI/7841	YANAGI/7841
YANAGI/7854	YANAGI/7854
YANAGI/7880	YANAGI/7880
YANAGI/7889	YANAGI/7889
YANAGI/7902	YANAGI/7902
YANAGI/7908	YANAGI/7908
YANAGI/7957	YANAGI/7957
YANAGI/7971	YANAGI/7971
YANAGI/8005	YANAGI/8005
YANAGI/8006	YANAGI/8006
YANAGI/8022	YANAGI/8022
YANAGI/8054	YANAGI/8054
YANAGI/8056	YANAGI/8056
YANAGI/8108	YANAGI/8108
YANAGI/8117	YANAGI/8117
YANAGI/8119	YANAGI/8119
YANAGI/8126	YANAGI/8126
YANAGI/8149	YANAGI/8149
YANAGI/8210	YANAGI/8210
YANAGI/8223	YANAGI/8223
YANAGI/8242	YANAGI/8242
YANAGI/8248	YANAGI/8248
YANAGI/8259	YANAGI/8259
YANAGI/8261	YANAGI/8261
YANAGI/8270	YANAGI/8270
YANAGI/8288	YANAGI/8288
YANAGI/8292	YANAGI/8292
YANAGI/8296	YANAGI/8296
YANAGI/8345	YANAGI/8345
YANAGI/8398	YANAGI/8398
YANAGI/8421	YANAGI/8421
YANAGI/8441	YANAGI/8441
YANAGI/8524	YANAGI/8524
YANAGI/8569	YANAGI/8569
YANAGI/8578	YANAGI/8578
YANAGI/8579	YANAGI/8579
YANAGI/8602	YANAGI/8602
YANAGI/8615	YANAGI/8615
YANAGI/8676	YANAGI/8676
YANAGI/8678	YANAGI/8678
YANAGI/8747	YANAGI/8747
YANAGI/8817	YANAGI/8817
YANAGI/8868	YANAGI/8868
YANAGI/8877	YANAGI/8877

Barometer Model	Mapped Barometer Model
YANAGI/8889	YANAGI/8889
YANAGI/8892	YANAGI/8892
YANAGI/8898	YANAGI/8898
YANAGI/8921	YANAGI/8921
YANAGI/8947	YANAGI/8947
YANAGI/8950	YANAGI/8950
YANAGI/8959	YANAGI/8959
YANAGI/8961	YANAGI/8961
YANAGI/8976	YANAGI/8976
YANAGI/8A	YANAGI/8A
YANAGI/9001	YANAGI/9001
YANAGI/9010	YANAGI/9010
YANAGI/9040	YANAGI/9040
YANAGI/9043	YANAGI/9043
YANAGI/9046	YANAGI/9046
YANAGI/9059	YANAGI/9059
YANAGI/9063	YANAGI/9063
YANAGI/9088	YANAGI/9088
YANAGI/9119	YANAGI/9119
YANAGI/9120	YANAGI/9120
YANAGI/9159	YANAGI/9159
YANAGI/9179	YANAGI/9179
YANAGI/9182	YANAGI/9182
YANAGI/9216	YANAGI/9216
YANAGI/9223	YANAGI/9223
YANAGI/9289	YANAGI/9289
YANAGI/9314	YANAGI/9314
YANAGI/9341	YANAGI/9341
YANAGI/9343	YANAGI/9343
YANAGI/93513	YANAGI/93513
YANAGI/93514	YANAGI/93514
YANAGI/9390	YANAGI/9390
YANAGI/9445	YANAGI/9445
YANAGI/9453	YANAGI/9453
YANAGI/9471	YANAGI/9471
YANAGI/9478	YANAGI/9478
YANAGI/9498	YANAGI/9498
YANAGI/9554	YANAGI/9554
YANAGI/957696	YANAGI/957696
YANAGI/9602	YANAGI/9602
YANAGI/9633	YANAGI/9633
YANAGI/9641	YANAGI/9641
YANAGI/9642	YANAGI/9642
YANAGI/9666	YANAGI/9666
YANAGI/9692	YANAGI/9692
YANAGI/9814	YANAGI/9814
YANAGI/9820	YANAGI/9820
YANAGI/9867	YANAGI/9867
YANAGI/9868	YANAGI/9868
YANAGI/9876	YANAGI/9876

Barometer Model	Mapped Barometer Model
YANAGI/9885	YANAGI/9885
YANAGI/9887	YANAGI/9887
YANAGI/9892	YANAGI/9892
YANAGI/9898	YANAGI/9898
YANAGI/9906	YANAGI/9906
YANAGI/9934	YANAGI/9934
YANAGI/9938	YANAGI/9938
YANAGI/9939	YANAGI/9939
YANAGI/9947	YANAGI/9947
YANAGI/9968	YANAGI/9968
YANAGI/9969	YANAGI/9969
YANAGI/9991	YANAGI/9991
YANAGI/9999	YANAGI/9999
YANAGI/PAT.NO957696	YANAGI/PAT.NO957696
YANAGI/UNKNOWN	YANAGI/UNKNOWN
YANGAI	YANGAI
YOKOGAWA/F451	YOKOGAWA/F451
YOKOGAWA/F451	YOKOGAWA/F451
YOSHINO KEIKI/61584	YOSHINO KEIKI/61584
YOSHINO/61573	YOSHINO/61573
YOSHINO/61584	YOSHINO/61584

Table 1d. Value and mapped value for barometer model

Barometer Type	Mapped Barometer Type	Description
an	AN	Aneroid Barometer
AH	AN	Aneroid Barometer
A	AN	Aneroid Barometer
AN	AN	Aneroid Barometer
da	DA	Digital Aneroid Barometer
DA	DA	Digital Aneroid Barometer
MER	MER	Mercury Barometer
SA	SAN	Ships Aneroid Barometer
SAN	SAN	Ships Aneroid Barometer
SS	SS	Invalid code

Table 1e. Values, mapped values and description for barometer type

Barometer Location	Mapped Barometer Location	Description
CR	CR	Chart Room
OT	OT	Other
wh	WH	Wheel House
WH	WH	Wheel House

Table 1f. Values, mapped values and description for barometer location

Footnote	Mapped Footnote
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Footnote	Mapped Footnote
1	1
1	1
10	10
10	10
12	12
12	12
13	13
13	13
14	14
15	15
16	16
17	17
17	17
18	18
18	18
1st floor	1st floor
1stfloor	1st floor
2	2
3	3
4	4
5	5
6	6
7	7
7	7
8	8
ADCP	ADCP
adjacent helideck	adjacent helideck
Aft	aft
aft	aft
aft column	aft column
AFT OF FLYING BRIDGE ON CENTRELINE ON OPEN HANDRAI	AFT OF FLYING BRIDGE ON CENTRELINE ON OPEN HANDRAI
aft. Top of deaerator vessel	aft. Top of deaerator vessel
ANEMOMETER ON PORT SIDE SIGNAL MAST ON MONKEY ISLA	ANEMOMETER ON PORT SIDE SIGNAL MAST ON MONKEY ISLA
Anemometer on port side signal mast on monkey isla	ANEMOMETER ON PORT SIDE SIGNAL MAST ON MONKEY ISLA
Australia - Mexico	Australia - Mexico
Australia and SW Pacific	Australia and SW Pacific
Australia to Antarctic	Australia to Antarctica
Australia to Antarctica	Australia to Antarctica
Automet AWS reporting air temperature & pressure	Automet AWS reporting air temperature & pressure
AWS SUTRON 9000RTU	AWS SUTRON 9000RTU
AWS reporting under callsign AMET	AWS reporting under callsign AMET
AWS reporting under callsign MINUK00	AWS reporting under callsign MINUK00
AWS shelter	AWS shelter
be TurboWin 3.02	be TurboWin 3.02
be TurboWin 3.02	be TurboWin 3.02
Below helideck	Below helideck

Footnote	Mapped Footnote
beneath helideck	beneath helideck
Beside helideck	Beside helideck
beside helideck	Beside helideck
Buoy-Laying Vessel	Buoy-Laying Vessel
CABLE SHIP	CABLE SHIP
Cable ship	CABLE SHIP
CAR CARRIER	CAR CARRIER
ceilometer	ceilometer
Chofu-Maru.jpg	Chofu-Maru.jpg
Customs patrol boat	Customs Patrol Boat
Customs Patrol Boat	Customs Patrol Boat
deep sea drilling vessel	deep sea drilling vessel
Doppeler radar	Doppeler radar
Electronic	Electronic
Extreme forward location	Extreme forward location
Fixed Drilling Rig (in North Sea)	Fixed Drilling Rig (in North Sea)
Fixed production platform	Fixed production platform
Fixed semi-submersible production platform	Fixed semi-submersible production platform
fixed to open rail	fixed to open rail
Fixed to outside wall	Fixed to outside wall
Floating Production	Floating Production
for labolatory	FOR LABORATORY
for laboratory	FOR LABORATORY
FOR LABORATORY	FOR LABORATORY
For'd bulkhead on Bermuda Deck (Deck 7)	For'd bulkhead on Bermuda Deck (Deck 7)
Forward	Forward
forward	Forward
forward of departure lounge	forward of departure lounge
FujitsuSiemens Lifebook C with TurboWin Version 3.	FujitsuSiemens Lifebook C with TurboWin Version 3.
FujitsuSiemens Lifebook C with TurboWin Version 30	FujitsuSiemens Lifebook C with TurboWin Version 3.
GDS cabinet	GDS cabinet
h9to.jp	h9to.jpg
h9to.jpg	h9to.jpg
Half way up vent stack on neighbouring platform	Half way up vent stack on neighbouring platform
icebreaker	icebreaker
In Stevenson screen	In Stevenson screen
intake water from bow thruster	intake water from bow thruster
IRRADIATED NUCLEAR FUEL CARRIER	IRRADIATED NUCLEAR FUEL CARRIER
Irregular	Irregular
Jacking Control Room	Jacking Control Room
JAPAN - NORTH ASIA	JAPAN - NORTH ASIA
jdss.jpg	jdss.jpg
jdva.jpg	jdva.jpg
jfcl.jpg	jfcl.jpg
jfmc.jpg	jfmc.jpg
jigger mast port yardarm	jigger mast port yardarm

Footnote	Mapped Footnote
jigger mast starboard yardarm	jigger mast starboard yardarm
jilly.jpg	jilly.jpg
jnsr.jpg	jnsr.jpg
Keifu-maru.jpg	Keifu-maru.jpg
Keifu-MarU.jpg	Keifu-MarU.jpg
Kofu-MarU.jpg	Kofu-MarU.jpg
laboratory	LABORATORY
LABORATORY	LABORATORY
Laptop	Laptop
LAPTOP COMPUTER WITH TURBOWIN 3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Laptop computer with TurboWin 3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
LAPTOP COMPUTER WITH TURBOWIN 303	LAPTOP COMPUTER WITH TURBOWIN 3.03
Laptop computer with TurboWin 303	LAPTOP COMPUTER WITH TURBOWIN 3.03
LAPTOP COMPUTER WITH TURBOWIN V.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Laptop computer with TurboWin v.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
LAPTOP PC WITH TURBOWIN V.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Laptop pc with TurboWin v.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Laptop pc with TurboWin v303	LAPTOP COMPUTER WITH TURBOWIN 3.03
NOTEBOOK COMPUTER FIITED WITH TURBOWIN 3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer fiited with TurboWin 3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer fiited with TurboWin 303	LAPTOP COMPUTER WITH TURBOWIN 3.03
NOTEBOOK COMPUTER FITTED WITH TURBOWIN V.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer fitted with TurboWin V.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer fitted with TurboWin v.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer fitted with TurboWin V303	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer fitted with TurboWin v303	LAPTOP COMPUTER WITH TURBOWIN 3.03
NOTEBOOK COMPUTER WITH TURBOWIN 3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer with TurboWin 3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
NOTEBOOK COMPUTER WITH TURBOWIN V.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer with TurboWin v.3.03	LAPTOP COMPUTER WITH TURBOWIN 3.03
Notebook computer with TurboWin v303	LAPTOP COMPUTER WITH TURBOWIN 3.03
Laptop computer with T/W 3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
LAPTOP COMPUTER WITH TURBOWIN 3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Laptop computer with TurboWin 3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Laptop computer with TurboWin 35	LAPTOP COMPUTER WITH TURBOWIN 3.5
Laptop computer with TurboWin v.3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Laptop computer with TurboWin v35	LAPTOP COMPUTER WITH TURBOWIN 3.5
Notebook computer fiited with TurboWin 3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Notebook computer fitted with TurboWin V.3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5

Footnote	Mapped Footnote
Notebook computer fitted with TurboWin v.3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Notebook computer fitted with TurboWin v35	LAPTOP COMPUTER WITH TURBOWIN 3.5
Notebook computer with TurboWin 3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Notebook computer with TurboWin 35	LAPTOP COMPUTER WITH TURBOWIN 3.5
Notebook computer with TurboWin v.3.5	LAPTOP COMPUTER WITH TURBOWIN 3.5
Laptop computer with TurboWin 3.6	Laptop computer with TurboWin 3.6
Laptop computer with TurboWin3.6	Laptop computer with TurboWin 3.6
Notebook computer with TurboWin v.3.6	Laptop computer with TurboWin 3.6
Light mast installed on top of air-conditioning ma	Light mast installed on top of air-conditioning ma
Livestock carrier	Livestock Carrier
Livestock Carrier	Livestock Carrier
LOWER BRIDGE	LOWER BRIDGE
LT	LT
LT 229	LT 229
LT TurboWin 3.02	LT TurboWin 3.02
LT TurboWin 302	LT TurboWin 3.02
LT TurboWin 3.02	LT TurboWin 3.02
LT TurboWin 3.02	LT TurboWin 3.02
LT TurboWin 3.02	LT TurboWin 3.02
LT/TurboWin3.0	LT/TurboWin3.0
LT/TurboWin30	LT/TurboWin3.0
LT064 TurboWin 3.02	LT064 TurboWin 3.02
LT085	LT085
LT105	LT105
LT117	LT117
LT172	LT172
LT221, TurboDOS 1,0	LT221, TurboDOS 1,0
LT238	LT238
LT253	LT253
LT403 TurboWin 3.02	LT403 TurboWin 3.02
LT443	LT443
LT446 TurboWin 3.02	LT446 TurboWin 3.02
Marine Control Room	Marine Control Room
MET O CAPSAT & NOTEBOOK COMPUTER WITH TURBOWIN V.3	MET O CAPSAT & NOTEBOOK COMPUTER WITH TURBOWIN V.3
Met O CapSat & notebook computer with TurboWin v.3	MET O CAPSAT & NOTEBOOK COMPUTER WITH TURBOWIN V.3
Minos AWS reporting air temperature & pressure	Minos AWS reporting air temperature & pressure
Miros Wave radar	Miros Wave radar
missing	missing
Mobile jack-up drilling rig	Mobile jack-up drilling rig
New Zealand - Pacific Islands	New Zealand - Pacific Islands
NOTEBOOK COMPUTER WITH TURBOWIN SOFTWARE VERSION 2	NOTEBOOK COMPUTER WITH TURBOWIN SOFTWARE VERSION 2
Notebook computer with TurboWin software version 2	NOTEBOOK COMPUTER WITH TURBOWIN SOFTWARE VERSION 2

Footnote	Mapped Footnote
NOTEBOOK COMPUTER WITH TURBOWIN SOFTWARE VERSION 3	NOTEBOOK COMPUTER WITH TURBOWIN SOFTWARE VERSION 3
Notebook computer with TurboWin software version 3	NOTEBOOK COMPUTER WITH TURBOWIN SOFTWARE VERSION 3
NOTEBOOK COMPUTER WITH TURBOWIN V.3.03L	NOTEBOOK COMPUTER WITH TURBOWIN V.3.03L
Notebook computer with TurboWin v.3.03L	NOTEBOOK COMPUTER WITH TURBOWIN V.3.03L
Notebook computer with TurboWin v303L	NOTEBOOK COMPUTER WITH TURBOWIN V.3.03L
observation room	observation room
Obtained from standby vessel	Obtained from standby vessel
Old Morecambe Log	Old Morecambe Log
On a pole	On a pole
On pole	On a pole
On a pole. Starboard	On a pole. Starboard
On forward mast on Bridge roof	On forward mast on Bridge roof
On guyed mast on top of module roof on FTP platfor	On guyed mast on top of module roof on FTP platfor
on helideck	on helideck
on open safety rail	on open safety rail
On open safety rail	on open safety rail
On open safety rail outside BCR	On open safety rail outside BCR
On pole above Radio Room on Q platform	On pole above Radio Room on Q platform
On Radio Room roof	On Radio Room roof
On roof of Radio Room	On Radio Room roof
on roof of Radio Room	On Radio Room roof
On top of south crane A-Frame	On top of south crane A-Frame
On walkway midway between Q and A platforms	On walkway midway between Q and A platforms
Open safety rail immediately outside Radio Room	Open safety rail immediately outside Radio Room
Open safety rail west side	Open safety rail west side
outside Heli-lounge	outside Heli-lounge
Outside Pilot House	Outside Pilot House
outside Pilot House	Outside Pilot House
outside Radio Room	outside Radio Room
outside Telecomms	outside Telecomms
port aft corner	port aft corner
port corner	port corner
Port side	Port side
port side	Port side
Production Control Room	Production Control Room
Production oil platform moored in Timor Sea	Production oil platform moored in Timor Sea
Radio Room	Radio Room
Rain detector	Rain detector
Rain detector	Rain detector
rear chart room for sailing	rear chart room for sailing
Replica Sailing Ship	Replica Sailing Ship
Reports during Austral Summer	Reports during Austral Summer

Footnote	Mapped Footnote
round-the-world	round-the-world
Ryofu-Maru.jpg	Ryofu-Maru.jpg
SAIL TRAINING SHIP	SAIL TRAINING SHIP
Sail Training Ship	SAIL TRAINING SHIP
SAIL TRAINING VESSEL	SAIL TRAINING SHIP
Sail Training Vessel	SAIL TRAINING SHIP
training sailing ship	SAIL TRAINING SHIP
SATA-KEIRYOKI SIGMA-II	SATA-KEIRYOKI SIGMA-II
SE corner	SE corner
Seifu-Maru.jpg	Seifu-Maru.jpg
Semi-submersible mobile drilling rig	Semi-submersible mobile drilling rig
SHIP'S OWN	SHIP'S OWN
Ship's own	SHIP'S OWN
SINGLE SCREEN 2M AFT OF BRIDGE	SINGLE SCREEN 2M AFT OF BRIDGE
South Africa to East Asia	South Africa to East Asia
South Africa to Honk Kong	South Africa to Honk Kong
Southern Ocean - Antarctica	Southern Ocean - Antarctica
Southern Ocean, Sub-Antarctic Islands and Antarcti	Southern Ocean, Sub-Antarctic Islands and Antarcti
SS OUTBOARD ON LOCKERS	SS OUTBOARD ON LOCKERS
SST DOPPLER LOG	SST DOPPLER LOG
starboard side	starboard side
Storage and Offloading vessel	Storage and Offloading vessel
SYNOP-SHIP call sign is MANE	SYNOP-SHIP call sign is MANE
SYNOP-SHIP call sign is TOUR	SYNOP-SHIP call sign is TOUR
Telecomms Equipment Room	Telecomms Equipment Room
Top of derrick	Top of derrick
Top of starboard	Top of starboard
TRAINING	TRAINING
TRAINNING	TRAINING
Transit Lounge	Transit Lounge
TSK infra-red wave height monitor	TSK infra-red wave height monitor
Turbo DOS 1,0 TurboWin 3.02	Turbo DOS 1,0 TurboWin 3.02
Turbo1	Turbo1
Turbo1 software V. 4.52	Turbo1 software V. 4.52
TurboDOS 1,0 bordeig.PC	TurboDOS 1,0 bordeig.PC
TurboDos 1.0	TurboDos 1.0
TurboWin	TurboWin
TurboWin 3.02 be PC	TurboWin 3.02 be PC
TurboWin 3.02 LT	TurboWin 3.02 LT
TurboWin 1.71	TurboWin 1.71
TurboWin 2.0	TurboWin 2.0
TURBOWIN 2.12	TurboWin 2.12
TURBOWIN VER 2.12	TurboWin 2.12
Turbowin 2.12	TurboWin 2.12
TURBOWIN 2.12	TurboWin 2.12
TurboWin 2.12	TurboWin 2.12
TURBOWIN SOFTWARE VERSION 2.12	TurboWin 2.12
TurboWin software version 2.12	TurboWin 2.12
TurboWin software version 212	TurboWin 2.12

Footnote	Mapped Footnote
TURBOWIN V2.12	TurboWin 2.12
TURBOWIN VER 2.12	TurboWin 2.12
TurboWin 2.2	TurboWin 2.2
TurboWin 3.02	TurboWin 3.02
TurboWin 3.02	TurboWin 3.02
TurboWin 302	TurboWin 3.02
TurboWin v3.02	TurboWin 3.02
TurboWin 3.02 be	TurboWin 3.02 be
Turbo Win 3.6	TurboWin 3.6
TurboWin 3.6	TurboWin 3.6
TurboWin v3.0	TurboWin v3.0
TurboWin v3.03 installed	TurboWin v3.03 installed
TurboWin v3.5	TurboWin v3.5
TurboWin v3.5PRO	TurboWin v3.5PRO
US Gulf/US East Coast to Mediterranean	US Gulf/US East Coast to Mediterranean
Vaisala AWS	Vaisala AWS
Vaisala Milos AWS	Vaisala Milos AWS
ventilated cylinder	ventilated cylinder
vessel type is cable-layer	vessel type is cable-layer
wave recorder	WAVE RECORDER
WAVE RECORDER	WAVE RECORDER
west side	west side
Worldwide trade	Worldwide trade

Table 1g. Values and mapped values for footnote elements

Footnote Field	Mapped Footnote Field	Description
anHL	anHL	Anemometer Height Max Load Line
anmL	anmL	Anemometer Location
anml	anmL	Anemometer Location
Atm	Atm	Automation of Observations
barg	barg	Barograph Type
barm	barm	Barometer Type
brmL	brmL	Barometer Location
BRML	brmL	Barometer Location
brml	brmL	Barometer Location
CALL	CALL	Call sign
hgrE	hgrE	Hygrometer Exposure
name	name	Ship name
OTHI	othl	Other Instruments
othl	othl	Other Instruments
phGr	phGr	Telephony and Telegraphy
rte	rtes	Routes
rtes	rtes	Routes
sstM	sstM	SST Method
thmE	thmE	Thermometer Exposure
thml	thml	Thermometer Location
VSSL	vssl	Vessel Type
vssl	vssl	Vessel Type

Footnote Field	Mapped Footnote Field	Description
vssIM	vssIM	Type of Meteorological Reporting Ship
vssIP	vssIP	Vessel Digital Image

Table 1h. Values and mapped values for footnote field element

Barometer Location	Mapped Barometer Location	Description
CR	CR	Chart Room
OT	OT	Other
wh	WH	Wheel House
WH	WH	Wheel House

Table 1i. Values, mapped values and description for barometer location

Hygrometer Exposure	Mapped Hygrometer Exposure	Description
A	A	Aspirated (Assman Type)
S	S	Screen (not ventilated)
SG	SG	Ships Sling
SL	SL	Sling
SN	SN	Ships Screen
US	US	Unscreened
VS	VS	Ventilated Screen
W	W	Whirling

Table 1j. Values, mapped values and description for hygrometer exposure

Hygrometer Type	Mapped Hygrometer Type	Description
A	A	
C	C	Capacitance
Cm	Cm	Chilled Mirror
E	E	Electric
H	H	Hair Hygrometer
Hg	Hg	Hygristor
OT	OT	Other
P	P	Psychrometer

Table 1k. Values, mapped values and description for type of hygrometer

Other Instrument	Mapped Other Instrument	Description
26	26	
32	32	
39	39	
A	A	
AG	AG	
AHA	AHA	
AV	AV	
BAT	BAT	
BT	BT	
C	C	
HA	HA	

Other Instrument	Mapped Other Instrument	Description
I	I	
LWR	LWR	
MAX	MAX	
MIN	MIN	
ot	OT	
OT	OT	
P	P	
PR	PR	
PRW	PRW	
R	R	
RAD	RAD	
RG	RG	
RSD	RSD	
RT	RT	
RW	RW	
SA	SA	
SAT	SAT	
SL	SL	
ST	ST	
SWR	SWR	
T	T	
TSD	TSD	
W	W	
XBT	XBT	

Table 1l. Values, mapped values and description for other instruments

SST Method	Mapped SST Method	Description
'	'	
BTT	BTT	Bait Tanks Thermometer
BU	BU	Bucket
bu	BU	Bucket
C	C	Engine Room Intake
c	C	Engine Room Intake
ELE	ELE	
HC	HC	Hull Contact
HT	HT	Through Hull
OT	OT	Other
RAD	RAD	Radiation Thermometer
TT	TT	Trailing Thermistor

Table 1m. Values, mapped values and description for method of SST measurement

Thermometer Exposure	Mapped Thermometer Exposure	Description
A	A	Aspirated (Assman Type)
S	S	Screen (Unventilated)
SG	SG	Ships Sling
SL	SL	Sling
AL	SL	Sling

SN	SN	Ships Screen
US	US	Unscreened
V	VS	Ventilated Screen
VS	VS	Ventilated Screen
W	W	Whirling

Table 1n. Values, mapped values and description for thermometer exposure

Thermometer Model	Mapped Thermometer Model
-40 to +40 range (Tas Region stock - spare) Dobbie	-40 to +40 range (Tas Region stock - spare) Dobbie
-40 to +40 range (Tas Region stock) Dobbie	-40 to +40 range (Tas Region stock) Dobbie
AMA	AMA
AMA ORD	AMA ORD
AMA/Dobie	AMA/Dobie
ANDO	ANDO
ANDO/UNKNOWN	ANDO/UNKNOWN
Dobbie	DOBBIE
DOBBIE	DOBBIE
Dobros	DOBROS
DOBROS	DOBROS
Eigenbrodt	Eigenbrodt
Eigenbrotd	Eigenbrodt
IMD	IMD
ISUZU	ISUZU
ISUZU/UNKNOWN	ISUZU/UNKNOWN
Koshin Denki R005-341	Koshin Denki/R005-341
Koshin Denki/R005-341	Koshin Denki/R005-341
KOSHIN DENKI/RS-N1-0	KOSHIN DENKI/RS-N1-0
Marine (In sheath) Amarol	Marine (In sheath) Amarol
MIROS PT-100	MIROS PT-100
NEI	NEI
NEI/MP408A	NEI/MP408A
NEI/N-59E	NEI/N-59E
NEI/UNKNOWN	NEI/UNKNOWN
OGASAWARA	OGASAWARA
OGASAWARA/UNKNOWN	OGASAWARA/UNKNOWN
OTA	OTA
OTA/UNKNOWN	OTA/UNKNOWN
PT100	PT100
Pt100	PT100
pyrocontrol	pyrocontrol
Rosemount	ROSEMOUNT
ROSEMOUNT	ROSEMOUNT
ROSEMOUNT 4A - BS 1904	ROSEMOUNT 4A - BS 1904
Rosemount ST2401	Rosemount ST2401
Rosemount ST401	ROSEMOUNT ST401
ROSEMOUNT ST401	ROSEMOUNT ST401
S/C BS692	S/C BS692
SC BS692	SC BS692
VAISALA	VAISALA

Thermometer Model	Mapped Thermometer Model
Vaisala	VAISALA
Vaisala HMT361	Vaisala HMT361
Vaisala/HMP45A	Vaisala/HMP45A
Vaisala HMP45D	Vaisala/HMP45D
Vaisala/HMP45D	Vaisala/HMP45D
WIKA	WIKA
YOSHINO	YOSHINO
YOSHINO/731246	YOSHINO/731246
YOSHINO/SY	YOSHINO/SY
YOSHINO/SY-8	YOSHINO/SY-8
YOSHINO/UNKNOWN	YOSHINO/UNKNOWN
YOYAMA	YOYAMA
YOYAMA/UNKNOWN	YOYAMA/UNKNOWN
Zeal	ZEAL
ZEAL	ZEAL
2/C - BS 692	ZEAL 2/C - BS 692
2/C BS692	ZEAL 2/C - BS 692
2/CBS692	ZEAL 2/C - BS 692
2C - BS 692	ZEAL 2/C - BS 692
2C BS692	ZEAL 2/C - BS 692
BS692 Zeal	ZEAL 2/C - BS 692
Zeal 2/c - BS 692	ZEAL 2/C - BS 692
ZEAL 2/C - BS 692	ZEAL 2/C - BS 692
Zeal 2/C - BS692	ZEAL 2/C - BS 692
ZEAL 2/C BS 692	ZEAL 2/C - BS 692
ZEAL 2C - BS 692	ZEAL 2/C - BS 692

Table 1o. Values and mapped values for thermometer model

Type of Vessel	Mapped Type of Vessel	Description
B	B	Barge
BC	BC	Bulk Carrier
BS	BS	Banana Ship
CC	CC	Closed Container Ship
CG	CG	Coast Guard Ship
CS	CS	Container Ship
F	F	Ferry
FV	FV	Fishing Vessel
Gc	GC	General Cargo
GC	GC	General Cargo
GT	GT	Gas Tanker
IF	IF	Inshore Fishing Vessel
LT	LT	Liquid Tanker
ML	ML	Liquid Tanker???
MS	MS	Military Ship
O	OT	Other
OT	OT	Other
OW	OW	Ocean Weather Ship
PL	PL	Passenger Liner
PV	PV	Passenger Vessel

RF	RF	Ro/Ro Ferry
RR	RR	Ro/Ro Container
RV	RV	Research Vessel
SV	SV	Support Vessel
T	T	Trawler
TU	TU	Tug
Y	Y	Yacht

Table 1p. Values, mapped values and description for type of vessel

Country	Update	Notes
United Arab Emirates	1-Jan-1959	
	1-Jan-1960	
Argentina	1-Jan-1955	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1986	
	1-Jan-1987	
1-Jan-1988		
1-Jan-1989		
1-Jan-1990		
1-Jan-1991		
1-Jan-1992		
1-Jan-1993		
1-Jan-1995		
1-Apr-1999		
1-Oct-2001		
1-Jul-2003		
Australia	1-Jan-1955	
	1-Jan-1956	

Country	Update	Notes
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a, heights converted from feet to metres
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1997	
	1-Jan-1998	
	1-Apr-1998	
	1-Jul-1998	
	1-Oct-1998	
	1-Jan-1999	
	1-Apr-1999	
	1-Jul-1999	
	1-Oct-1999	
	1-Jan-2000	
	1-Apr-2000	
	1-Jul-2000	
	1-Oct-2000	
	1-Jan-2001	
	1-Jul-2001	
	1-Oct-2001	

Country	Update	Notes
	1-Jan-2002	
	1-Apr-2002	
	1-Jul-2002	
	1-Oct-2002	
	1-Jan-2003	
	1-Apr-2003	
	1-Jul-2003	
	1-Oct-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
	1-Jul-2005	
	1-Oct-2005	
	1-Jan-2006	
	Azerbaijan	1-Jan-1995
1-Apr-1999		
Bangladesh	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1995	
	1-Jan-1996	
1-Oct-2000		
Belgium	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
1-Jan-1976		
1-Jan-1977		

Country	Update	Notes
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1988	
	1-Jan-1995	
Bulgaria	1-Jan-1974	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1986	
	1-Jan-1995	
Bermuda	1-Apr-1999	
	1-Jan-1956	
	1-Jan-1957	
Brazil	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1966	
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1988	
	1-Jan-1989	
1-Jan-1990		
1-Jan-1991		
1-Jan-1995		
1-Apr-1999		
1-Oct-1999		
1-Jan-2000		
1-Apr-2000		
Canada	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	

Country	Update	Notes
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1997	
	1-Jan-1999	
	1-Apr-1999	
	1-Jul-1999	
	1-Oct-2001	
Switzerland	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1990	
	1-Oct-2001	
Chile	1-Jan-1956	
	1-Jan-1968	1968a
	1-Jan-1970	

Country	Update	Notes
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1986	
	1-Jan-1988	
	1-Jan-1995	
	China	1-Jan-1955
1-Jan-1956		
1-Jan-1957		
1-Jan-1958		
1-Jan-1961		
1-Jan-1962		
1-Jan-1963		
1-Jan-1966		
1-Jan-1968		1968a
1-Jan-1968		1968b
1-Jan-1970		
1-Jan-1971		
1-Jan-1980		
1-Jan-1981		
1-Jan-1982		
1-Jan-1987		
1-Jan-1991		
1-Jan-1995		
1-Apr-1999		
Cuba	1-Jan-1977	
	1-Jan-1991	
	1-Jan-1995	
German Democratic Republic	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
1-Jan-1988		
1-Jan-1989		
1-Jan-1991		

Country	Update	Notes
Federal Republic of Germany	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1999	
	1-Apr-1999	
1-Oct-2001		
1-Jul-2003		
1-Jan-2004		
1-Apr-2004		
1-Jul-2004		
1-Oct-2004		
1-Jan-2005		
1-Apr-2005		
1-Jul-2005		
1-Oct-2005		
1-Jan-2006		

Country	Update	Notes
Denmark	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
1-Jan-1995		
1-Oct-1998		
1-Apr-1999		
1-Oct-2001		
1-Jan-2004		
1-Apr-2004		
1-Jul-2004		
1-Oct-2004		
1-Jan-2005		
1-Apr-2005		
1-Jul-2005		
1-Oct-2005		
1-Jan-2006		
East Africa (Kenya, Tanzania, Uganda)	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
Ecuador	1-Jan-1995	
	1-Apr-1999	

Country	Update	Notes
Egypt	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1958	
Spain	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1966	
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1988	
	1-Jan-1995	
	1-Oct-2001	
	1-Jan-2004	
	1-Jul-2004	
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
1-Oct-2005		
1-Jan-2006		
Finland	1-Jan-1956	
	1-Jan-1958	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1987	
	1-Jan-1990	
1-Jan-1992		
1-Jan-1995		
1-Apr-1999		
1-Oct-2001		
France	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	

Country	Update	Notes
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1997	
	1-Jan-1998	
	1-Apr-1998	
	1-Jul-1998	
	1-Jan-1999	
	1-Apr-1999	
	1-Jul-1999	
	1-Oct-1999	
	1-Apr-2001	
	1-Oct-2001	
	1-Apr-2002	
	1-Jul-2002	
	1-Jan-2003	
	1-Jul-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	

Country	Update	Notes
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
	1-Jul-2005	
	1-Oct-2005	
	1-Jan-2006	
British Caribbean	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
West Indies, Bahamas, British Guiana, British Honduras and Barbados	1-Jan-1959	
	1-Jan-1960	
Great Britain	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	Heights converted from feet to metres
	1-Jan-1968	1968a, heights converted from feet to metres
	1-Jan-1968	1968b, no units specified for heights but assumed to be metres
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
1-Jan-1981		
1-Jan-1982		
1-Jan-1983		
1-Jan-1984		
1-Jan-1985		
1-Jan-1986		
1-Jan-1987		
1-Jan-1988		
1-Jan-1989		
1-Jan-1990		
1-Jan-1991		

Country	Update	Notes
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1997	
	1-Oct-1998	
	1-Apr-1999	
	1-Jan-2000	
	1-Oct-2000	
	1-Oct-2001	
	1-Jul-2002	
	1-Jan-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	
	1-Oct-2004	
	1-Apr-2005	
	1-Jul-2005	
	1-Oct-2005	
	1-Jan-2006	
Greece	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1984	
	1-Jan-1986	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
	1-Jan-1995	
	1-Apr-1999	
	1-Oct-2000	
	1-Oct-2001	
	1-Jan-2003	
	1-Apr-2003	
	1-Jul-2003	
	1-Oct-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	

Country	Update	Notes
	1-Jan-2005	
	1-Apr-2005	
	1-Jul-2005	
	1-Jan-2006	
Hong Kong	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
1-Jan-1995		
1-Jan-1996		
1-Jan-1997		
1-Jan-1998		
1-Apr-1998		
1-Oct-1998		
1-Jan-1999		
1-Apr-1999		
1-Jul-1999		
1-Oct-1999		
1-Jan-2000		

Country	Update	Notes
	1-Apr-2000	
	1-Oct-2000	
	1-Jan-2001	
	1-Apr-2001	
	1-Jul-2001	
	1-Oct-2001	
	1-Apr-2002	
	1-Jul-2002	
	1-Oct-2002	
	1-Jan-2003	
	1-Apr-2003	
	1-Jul-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
	1-Jul-2005	
	1-Oct-2005	
	1-Jan-2006	
	1-Jan-1995	
Croatia	1-Jan-1996	
	1-Jan-1999	
	1-Apr-1999	
	1-Oct-1999	
	1-Oct-2001	
	1-Apr-2002	
	1-Jul-2002	
Indonesia	1-Jan-1980	
	1-Jan-1982	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1995	
Ireland	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1960	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	

Country	Update	Notes
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1990	
	1-Jan-1992	
	1-Jan-1995	
	1-Jan-1996	
	1-Apr-1999	
	1-Jul-2000	
	1-Jan-2001	
	1-Oct-2001	
	1-Jul-2002	
	1-Jan-2003	
	1-Apr-2003	
	1-Jul-2003	
	1-Jan-2004	
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
	1-Jul-2005	
	1-Oct-2005	
Israel	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	

Country	Update	Notes
	1-Jan-1988	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1995	
	1-Apr-1999	
India	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a, metres specified but more like feet. Converted from feet to meters
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
1-Jan-1993		
1-Jan-1994		
1-Jan-1995		
1-Jan-1996		
1-Jan-1997		
1-Jan-1998		
1-Jan-1999		
1-Apr-1999		
1-Oct-1999		

Country	Update	Notes
	1-Oct-2000	
	1-Oct-2001	
	1-Jan-2003	
	1-Oct-2003	
	1-Apr-2004	
	1-Jan-2005	
	1-Apr-2005	
	1-Oct-2005	
Iceland	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1991	
1-Jan-1992		
1-Jan-1993		
1-Jan-1994		
1-Jan-1995		
1-Oct-2001		
1-Jan-2004		
1-Apr-2004		
1-Apr-2005		
Italy	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1963	

Country	Update	Notes
	1-Jan-1966	
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1986	
	1-Jan-1995	
	1-Apr-1999	
	Jamaica	1-Jan-1977
	1-Jan-1995	
Japan	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
1-Jan-1991		
1-Jan-1992		
1-Jan-1993		
1-Jan-1994		
1-Jan-1995		

Country	Update	Notes
	1-Jan-1996	
	1-Jan-1997	
	1-Apr-1998	
	1-Apr-1999	
	1-Jan-2000	
	1-Jan-2001	
	1-Oct-2001	
	1-Jan-2002	
	1-Oct-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	
	1-Oct-2005	
	1-Jan-2006	
Kenya	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1973	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1988	
1-Jan-1995		
Democratic People's Republic of Korea	1-Jan-1995	
	1-Apr-1999	
Republic of Korea	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1964	
	1-Jan-1966	Heights converted from feet to metres
	1-Jan-1968	1968a, heights converted from feet to metres
	1-Jan-1970	
	1-Jan-1971	Metres specified for heights but appears to be in 10's of metres or feet. All heights discarded
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
1-Jan-1982		

Country	Update	Notes
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
	1-Jan-1995	
	1-Oct-1998	
	1-Apr-1999	
	1-Oct-2001	
	1-Apr-2003	
Sri Lanka	1-Jan-1983	
	1-Jan-1993	
	1-Jan-1995	
Lithuania	1-Jan-1995	
	1-Apr-1999	
Latvia	1-Jan-1995	
	1-Jan-1996	
	1-Apr-1999	
	1-Oct-2001	
	1-Apr-2004	
Malaysia	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1990	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1995	
1-Jan-1996		
1-Apr-1999		
1-Oct-2001		
New Caledonia	1-Jan-1955	

Country	Update	Notes
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1961	
	1-Jan-1963	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1993	
Netherlands	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
1-Jan-1981		
1-Jan-1982		
1-Jan-1983		
1-Jan-1984		
1-Jan-1985		
1-Jan-1986		
1-Jan-1987		
1-Jan-1988		
1-Jan-1989		
1-Jan-1990		

Country	Update	Notes
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1997	
	1-Jan-1998	
	1-Apr-1998	
	1-Oct-1998	
	1-Jan-1999	
	1-Apr-1999	
	1-Oct-1999	
	1-Oct-2000	
	1-Oct-2001	
	1-Jul-2002	
	1-Jul-2003	
	1-Jul-2004	
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
	1-Jul-2005	
	1-Oct-2005	
	1-Jan-2006	
Norway	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1988	

Country	Update	Notes
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1995	
	1-Jan-1997	
	1-Apr-1998	
	1-Apr-1999	
	1-Oct-2001	
	1-Jan-2004	
	1-Jan-2006	
	New Zealand	1-Jan-1955
1-Jan-1956		
1-Jan-1957		
1-Jan-1958		
1-Jan-1959		
1-Jan-1960		
1-Jan-1961		
1-Jan-1962		
1-Jan-1963		
1-Jan-1964		
1-Jan-1968		1968a
1-Jan-1968		1968b
1-Jan-1970		
1-Jan-1971		
1-Jan-1972		
1-Jan-1973		
1-Jan-1974		
1-Jan-1975		
1-Jan-1976		
1-Jan-1977		
1-Jan-1978		
1-Jan-1980		
1-Jan-1981		
1-Jan-1982		
1-Jan-1984		
1-Jan-1985		
1-Jan-1986		
1-Jan-1987		
1-Jan-1988		
1-Jan-1989		
1-Jan-1990		
1-Jan-1991		
1-Jan-1992		
1-Jan-1993		
1-Jan-1994		
1-Jan-1995		
1-Jan-1996		
1-Jan-1997		
1-Jan-1998		

Country	Update	Notes
	1-Apr-1998	
	1-Jul-1998	
	1-Oct-1998	
	1-Jan-1999	
	1-Apr-1999	
	1-Jul-1999	
	1-Oct-1999	
	1-Apr-2000	
	1-Jul-2000	
	1-Oct-2000	
	1-Jan-2001	
	1-Oct-2001	
	1-Apr-2002	
	1-Oct-2002	
	1-Jan-2003	
	1-Jul-2003	
	1-Oct-2003	
	1-Jan-2004	
	1-Apr-2004	
	1-Jul-2004	
	1-Oct-2004	
	1-Jan-2005	
	1-Apr-2005	
	Philippines	1-Jan-1955
1-Jan-1956		
1-Jan-1957		
1-Jan-1958		
1-Jan-1959		
1-Jan-1960		
1-Jan-1961		
1-Jan-1962		
1-Jan-1963		
1-Jan-1964		
1-Jan-1966		
1-Jan-1968		1968a
1-Jan-1970		
1-Jan-1971		
1-Jan-1972		
1-Jan-1973		
1-Jan-1974		
1-Jan-1977		
1-Jan-1978		
1-Jan-1980		
1-Jan-1981		
1-Jan-1984		
1-Jan-1995		
1-Apr-1999		
1-Oct-2001		
1-Apr-2004		
Pakistan	1-Jan-1955	
	1-Jan-1956	

Country	Update	Notes
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1970	
	1-Jan-1971	Heights specified as metres but appears to be tens of feet or metres. Heights discarded
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1988	
	1-Jan-1989	
1-Jan-1990		
1-Jan-1995		
1-Apr-1999		
Poland	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1985	
	1-Jan-1987	
	1-Jan-1988	
1-Jan-1989		
1-Jan-1990		
1-Jan-1991		
1-Jan-1992		
1-Jan-1993		

Country	Update	Notes
	1-Jan-1994	
	1-Jan-1995	
	1-Jan-1996	
	1-Jan-1997	
	1-Oct-1998	
	1-Apr-1999	
	1-Apr-2000	
	1-Oct-2000	
	1-Oct-2001	
	1-Oct-2002	
	1-Jan-2005	
St. Pierre and Miquelon	1-Jan-1971	
	1-Jan-1973	
	1-Jan-1977	
Portugal	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
1-Jan-1984		
1-Jan-1986		
1-Jan-1988		
1-Jan-1992		
1-Jan-1995		
Russia	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	
	1-Jan-1968	1968a
1-Jan-1968	1968b	

Country	Update	Notes
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
	1-Jan-1995	
	1-Apr-1999	
	1-Oct-2001	
	1-Apr-2003	
	1-Apr-2004	
Saudi Arabia	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1994	
	1-Jan-1995	
	1-Jan-1997	
	1-Jan-1999	
	1-Apr-1999	
	1-Oct-2001	
	1-Apr-2004	
Sweden	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	

Country	Update	Notes
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
1-Jan-1995		
1-Apr-1999		
1-Oct-2001		
Singapore	1-Jan-1966	Heights converted from feet to metres
	1-Jan-1968	1968a, metres specified but appears to be in feet. Converted to from feet to metres
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
1-Jan-1989		
1-Jan-1990		
1-Jan-1991		
1-Jan-1992		

Country	Update	Notes
	1-Jan-1993	
	1-Jan-1995	
	1-Apr-1999	
Thailand	1-Jan-1955	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1971	
	1-Jan-1973	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1983	
	1-Jan-1985	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1990	
	1-Jan-1995	
1-Apr-1999		
Tanzania	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1995	
	1-Apr-1999	
	1-Oct-2001	
United States of America	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1964	
	1-Jan-1966	Heights converted from feet to metres
	1-Jan-1968	1968a, heights converted from feet to metres
	1-Jan-1968	1968b, no units specified but heights appear to be in metres
	1-Jan-1970	

Country	Update	Notes
	1-Jan-1971	Heights in appear to be in tens of metres or feet but unclear which. Heights discarded
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1987	
	1-Jan-1988	
	1-Jan-1989	
	1-Jan-1990	
	1-Jan-1991	
	1-Jan-1992	
	1-Jan-1993	
	1-Jan-1994	
	1-Jan-1995	
	1-Jan-1997	
	1-Jan-1998	
	1-Oct-1998	
	1-Jan-1999	
	1-Apr-1999	
	1-Jul-1999	
	1-Jan-2000	
	1-Jul-2000	
	1-Oct-2001	
	1-Apr-2005	
	1-Oct-2005	
Yugoslavia	1-Jan-1957	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1962	
	1-Jan-1963	
	1-Jan-1966	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	

Country	Update	Notes
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1978	
	1-Jan-1980	
	1-Jan-1981	
	1-Jan-1982	
	1-Jan-1983	
	1-Jan-1984	
	1-Jan-1985	
	1-Jan-1986	
	1-Jan-1988	
	1-Jan-1993	
	1-Jan-1995	
	1-Apr-1999	
South Africa	1-Jan-1955	
	1-Jan-1956	
	1-Jan-1958	
	1-Jan-1959	
	1-Jan-1960	
	1-Jan-1961	
	1-Jan-1964	
	1-Jan-1968	1968a
	1-Jan-1968	1968b
	1-Jan-1970	
	1-Jan-1971	
	1-Jan-1972	
	1-Jan-1973	
	1-Jan-1974	
	1-Jan-1975	
	1-Jan-1976	
	1-Jan-1977	
	1-Jan-1981	
	1-Jan-1983	
	1-Jan-1986	
1-Jan-1992		
1-Jan-1995		
1-Apr-1999		

Table 2. List of updates by Country

Major element	Sub-element	Notes
Ship details	Call sign	
	Ship name	
	Vessel Type	
	Length of vessel	
	Breadth of vessel	
	Draft of vessel	
	Freeboard of vessel	
	Cargo height	
	Distance from bridge to bow	
IMO Number		
Recruiting Country		
Change Date		
Baseline Check		
Automation		
Barometer 1	Barometer Model / Manufacturer / Serial Number	
	Calibration Date	
	Units	
	Type	
	Location	
	Height	
Barometer 2	Barometer Model / Manufacturer / Serial Number	
	Calibration Date	
	Units	
	Type	
	Location	
	Height	
Barograph 1		
Barograph 2		
Thermometer 1	Thermometer Model / Manufacturer / Serial Number	
	Type	
	Exposure	
	Location	
	Scale	
	Height	
Thermometer 2	Thermometer Model / Manufacturer / Serial Number	
	Type	
	Exposure	
	Location	
	Scale	
	Height	
Platform Height		Replaced by barometer and thermometer heights after 19xx
Hygrometer 1	Type	
	Exposure	
Hygrometer 2	Type	

Major element	Sub-element	Notes
	Exposure	
SST 1	Type	
	Depth	
SST 2	Type	
	Depth	
SST 3	Type	
	Depth	
Anemometer 1	Anemometer Model / Manufacturer / Serial Number	
	Distance from Centre Line	
	Calibration Date	
	Location	
	Height from Max Load Line	
	Height from Deck Installed On	
	Distance from Bow	
Anemometer 2	Anemometer Model / Manufacturer / Serial Number	
	Distance from Centre Line	
	Calibration Date	
	Location	
	Height from Max Load Line	
	Height from Deck Installed On	
	Distance from Bow	
Anemometer Usage		
Anemometer Height		Replaced by heights for individual instruments after 19xx
Wind Wave Observing Height		
Other Instrument 1		
Other Instrument 2		
Other Instrument 3		
Other Instrument 4		
Other Instrument 5		
Other Instrument 6		
Footnote 1	Field	
	Footnote	
Footnote 2	Field	
	Footnote	
Footnote 3	Field	
	Footnote	
Footnote 4	Field	
	Footnote	
Footnote 5	Field	
	Footnote	
Footnote 6	Field	
	Footnote	
Footnote 7	Field	
	Footnote	

Major element	Sub-element	Notes
Footnote 8	Field	
	Footnote	
Footnote 9	Field	
	Footnote	
Footnote 10	Field	
	Footnote	

Table 3. List of major metadata elements checked

Ship name	Thermometer Type
Callsign	Thermometer Exposure
IMO Number	Thermometer Height
Recruiting Country	Hygrometer Type
Length	Hygrometer Exposure
Breadth	SST Method
Freeboard	SST Depth
Draft	Barograph Type
Cargo Height	Anemometer Height from Max Load Line
Distance from Bow to Bridge	Anemometer Height from Deck
Vessel Type	Anemometer Distance from Bow
Barometer Type	Visual Wind Wave Observing Height
Barometer Height	Platform Height

Table 4. List of metadata elements used in calculating completeness of records