

Making documentation relating to the marine codes and formats available on the web

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Introduction

Marine codes and formats have been changed several times in the long history of marine observation and data accumulation. Because codes and formats prescribe the way of recording observations and therefore influence the quality of the data record, it is necessary to understand the code and format change in order to make correct interpretation of the data record contained in long term archives. A study on the history of marine codes and formats was carried out based on the WMO documents which has been providing regulations and international standards for marine observations and how to record the observations since the early days of international exchange of marine data. Along with the study, an effort to digitize past WMO CSM/CBS and CIMM summary reports, in which resolutions, recommendations and those annexes relating to codes and formats changes are contained, was made. The digitized summary reports are made available on the web, so that they could be easily referred by all people concerned to facilitate the study that use the historical marine observations.

A study on the history of marine codes and formats

Changes of the marine ship code for marine meteorological data exchange, the IMMPC (International Maritime Meteorological Punch Card) /IMMT (International Marine Meteorological Tape) format for long-term archives, and the MQCS (Minimum Quality Control Standard) for marine meteorological data quality control were traced based on the past WMO documents such as Manual on Codes, Guide to Marine Meteorological Services, and meeting reports of CSM/CBS and CIMM/JCOMM sessions. Result of the study was summarized in tables which contain concise description of each change, the date when the change became in effect, and the reference of resolution or recommendation concerning the change. Each of these references is linked to the full text of relevant resolution or recommendation and its annexes, so that users could reach the original complete information on the change.

The table has been made available on the web.
This study will be extended to oceanographic code such as BATHY and TESAC for sub-surface profile data, DRT-TERBUOY for drifting and moored buoy and TRACKOB for underway oceanographic observations.

Digitization of past publications on codes and formats

Among a lot of marine meteorological related publications, summary reports of the past sessions of WMO CSM (Commission for Synoptic Meteorology) and CBS (Commission for Basis System, the successor of CSM), which is in charge of all meteorological codes including marine codes for real time international exchange, and CIMM (Commission for Marine Meteorology), which is in charge of marine data format and quality control procedure, such as IMMPC/IMMT and MQCS, were digitized. All the scanned image files were converted into searchable PDF files under the NOAA Climate Database Modernization Program (CDMP), and made available on the web.

Digitized "Final reports of the sessions of CIMM/JCOMM and CSM/CBS" web page

"History of SHIP codes" web page: http://goss.kishou.go.jp/wse/TMCcode_task

Date in effect	Description of change	Resolution	Recommendation
5 Nov. 2003	FM 13-VI SHIP is made (amendments to FM 13-VI SHIP) - Amendment to the regulation on reporting - Amendment to the regulation on reporting past weather	Res. 8 ECAV (Nov. 2003)	Res. 4 CBS-Ext. (Oct. 2002)
3 May 2000	FM 13-VI SHIP is made (amendments to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather	Res. 8 ECAV (May 1999)	Res. 7 CBS-Ext. (Sept. 1998)
5 Nov. 1997	FM 13-VI SHIP is made (amendments to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. and wind - Amendment to the regulation on reporting past weather temp. and wind - Amendment to the regulation on reporting past weather temp. and wind - Amendment to the regulation on reporting past weather temp. and wind	Res. 4 ECAV (Nov. 1997)	Res. 7 CBS-Ext. (Oct. 1996)
2 Nov. 1994	FM 13-VI SHIP is made (amendments to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 4 ECAV (Nov. 1994)	Res. 7 CBS-Ext. (Oct. 1993)
3 Nov. 1993	FM 13-VI SHIP is made (amendments to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 4 ECAV (Nov. 1993)	Res. 7 CBS-Ext. (Oct. 1992)
1 Nov. 1989	FM 13-VI SHIP is made (modification to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 1 ECAV (Nov. 1989)	Res. 12 CBS-Ext. (Jan. 1988)
1 Nov. 1987	FM 13-VI SHIP is made (modification to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 4 ECAV (Nov. 1987)	Res. 5 CBS-Ext. (Oct. 1986)
1 Jan. 1984	FM 13-VI SHIP is made (modification to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 4 ECAV (Jan. 1984)	Res. 5 CBS-Ext. (Oct. 1983)
1 Jan. 1982	FM 13-VI SHIP is made (modification to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 4 ECAV (Jan. 1982)	Res. 5 CBS-Ext. (Oct. 1981)
1 Jan. 1979	FM 13-VI SHIP is made (modification to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 3 ECAV (Jan. 1979)	Res. 12 CBS-Ext. (Jan. 1978)
1 Jan. 1977	FM 13-VI SHIP is made (modification to FM 13-VI SHIP) - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp. - Amendment to the regulation on reporting past weather temp.	Res. 3 ECAV (Jan. 1977)	Res. 12 CBS-Ext. (Jan. 1976)

Date in effect	Description of change	Resolution	Recommendation
1 Jan. 2003	IMMT-2 is introduced (modifications) - To incorporate new data elements required for the VOSCLIM Project	Res. 7 ECAV (Jan. 2002)	Res. 8 CIMM/J. (June 2001)
1 Jan. 1998	Introduction of ISO Alpha-2 country code into IMMT format - The country codes in the IMMT format	Res. 8 ECAV (Jan. 1997)	Res. 8 CIMM/J. (Mar. 1997)
2 Nov. 1994	IMMT-1 is introduced (modifications) - IMMT-1 is introduced	Res. 10 ECAV (Nov. 1993)	Res. 13 CIMM/J. (Apr. 1993)
1 Mar. 1985	Modification to IMMPC and IMMT format - Modification of weather data indicator to IMMPC and IMMT	Res. 8 ECAV (Mar. 1985)	Res. 8 CIMM/J. (Oct. 1984)
1 Jan. 1982	Revision of the IMMPC and introduction of the IMMT format - Revision of IMMPC in accordance with introduction of IMMT	Res. 8 ECAV (Jan. 1982)	Res. 8 CIMM/J. (Sept. 1981)
1 Jan. 1986	Amendments to IMMPC - Visibility, height of cloud, etc. are modified	Res. 14 ECAV (Jan. 1986)	Res. 28 CIMM/J. (Nov. 1984)
1 Jan. 1982	Amendments to technical regulations, etc. - Re-allocation of numbers indicating the type of observation - Date of changing IMMPC	Res. 18 and 20 ECAV (Jan. 1982)	Res. 23 CIMM/J. (Aug. 1980)
-	Amendments to technical regulations, etc. - Date of changing IMMPC	Res. 19 ECAV (May 1981)	Res. 24 and 25 CIMM/J. (Aug. 1980)
-	Amendments to technical regulations, etc. - International maritime punch card should be used	Res. 33 ECAV (May 1987)	Res. 30 CIMM/J. (Oct. 1986)
1987	Adoption of international code form res. cards from ship observations.	Res. 23 (Oct. 1985)	

Each reference is linked to the full text of relevant resolution or recommendation and its annexes.