

Aerological data

1 File Name

yymmdd.AER

where, yy: Year (last 2 digits)
mm: Month
dd: Day

2 File Format

Aerological data consist of ASCII records of variable length.

Aerological data files are composed of all the station data groups on the same date in UTC. The station data groups are composed of HEADER-1, HEADER-2 and DATA.

HEADER-1 and HEADER-2 represent an observation declaration and station information, respectively. DATA includes observation data at the station. The character '63' on the "LEVEL INDICATOR" of DATA represents the end record of each station data group. An example of Aerological data file is shown in page 3.

HEADER-1 (Observation declaration)

Element	Start Position	Field Type	Description of Field
DECLARATION	1	A4	'AERO'

HEADER-2 (Station information)

Element	Start Position	Field Type	Description of Field
AERO_CODE	3	A11	AERO_CODE (listed in Table1)
LATITUDE	16	I5	Latitude in hundredths of degrees (positive for North and negative for South Latitude)
LONGITUDE	22	I6	Longitude in hundredths of degrees (positive for East and negative for West Longitude)
LAUNCHER HEIGHT	29	I4	Height of launcher in meters.
YEAR	34	I4	Year in UTC (last two or four digit)
MONTH	39	I2	Month in UTC
DAY	42	I2	Day in UTC
HOURL	46	I2	Hour in UTC of sonde launch time
MINUTE	49	I2	Minute in UTC of sonde launch time
SENSOR S/N	52	I9	Sonde sensor serial number

DATA (Observation data)

Element	Start Position	Field Type	Description of Field
LEVEL INDICATOR	1	I2	Standard pressure level and significant level indicator (listed in Table2):
PRESSURE	5	I5	Pressure in tenths of hectopascals

Element	Start Position	Field Type	Description of Field
HEIGHT	12	I5	Height in meters
TEMPERATURE	19	I5	Temperature in tenths of degrees Celsius
HUMIDITY	26	I3	Relative humidity in percent(%)
WIND DIRECTION	32	I3	Wind direction in degrees
WIND SPEED	37	I4	Wind speed in the units of 0.1 m/s

Table 1: Ship codes.

Ship Name	CALL SIGN	Hydrographic	Subsurface current	BT	AERO_CODE
Kofu Maru	JDWX	KH/KO	AH/AO	TH/TO	1 2 47 002
Ryofu Maru	JGQH	RF	AF	TF	1 2 47 646
Keifu Maru I	JBOA	KE	AE	TE	
Keifu Maru II	JPBN	KS	AS	TS	1 2 47 000
Shumpu Maru	JFDG	SH	AH	TH	
Chofu Maru	JCCX	NC	AC	TC	1 2 47 001
Seifu Maru	JIVB	SM	AM	TM	1 2 47 003

Table 2: Aerological level indicator.

Code	Definition
01	Significant level for temperature and/or humidity
02	Standard pressure level
05	Tropopause
16	Significant level for wind direction/speed
17	Significant level for temperature/humidity and wind
24	Wind speed maximum
63	End record

Data sample

4. Aerological data

AERO												
1	2	47	646	3050	13700	5	1	01	21	23	32	046308300
17	10199		5	138	52	3		62				
02	10000		171	123	54	11		86				
02	9250		817	61	77	1		78				
16	9241		825	60	77	1		78				
02	9000		1041	40	86	344		73				
16	8959		1078	36	88	340		70				
16	8779		1242	22	87	303		66				
02	8500		1503	0	95	301		75				
16	8458		1543	-2	94	299		73				
01	8384		1613	-7	93	284		61				
17	8270		1723	33	14	240		66				
01	8225		1767	50	7	234		72				
01	8120		1872	53	5	230		76				
16	8088		1904	52	4	230		75				
02	8000		1994	53	3	241		61				
16	7922		2073	50	8	245		50				
16	7754		2248	40	10	228		76				
:												
17	1519	13809	-623		2	263		632				
02	1500	13886	/////	/////	/////	/////						
63	/////	/////	/////	51145	1/////	3/////						P3156=