Format of Wave and Wind Data (Delayed Mode) from Chinese Stations

1. Station Information

The wave and wind (delayed mode) data are from the following four Chinese stations:

Code	Station
001	Shidao
002	Xiaomaidao
003	Lianyungang
004	Yinshuichuan

2. Naming Rule of Data File

The wave and wind data (delayed mode) files in the ODINWESTPAC are named according to the following rule:

YYYYMMNNN.XXX

YYYYMM indicates the observation time (YYYY is the year when making the observation and MM is the month when making the observation), NNN indicates the station code (see 1. Station Information). XXX indicates the type of data, here is 'txt'.

3. Data Format

The format used for the delivery of the wave and wind data (delayed mode) is an ASCII (character) format.

The data are organized in the following manner. A Head record always appears first followed by one or more Data records. And the Remark records maybe appear following the data records in the end. The detail description of the fields of the format is as follows:

◇ **Head Record**

Column	Parameter	Description	Condition
1	Present record type	Always '1'	Indicator

2	Next record type	Always '2'	Indicator
3	Data type code		
4-7	Observation station code		
8-15	Data processing number	Blank	
16-23	Order code	Blank	
24-25	Latitude (degree)	0-90	(°)
26-27	(minute)	0-59	(′)
28	(minute to tenths)	0-9	
29	Latitude hemisphere	'N' or 'S'	
30-32	Longitude (degree)	0-180	(°)
33-34	(minute)	0-59	(′)
35	(minute to tenths)	0-9	
36	Longitude hemisphere	'E' or 'W'	
37-40	Observation time (year)	YYYY	
41-42	(month)	MM,01-12	
43-48	Instrument code		
49-51	Height above the sea level of the coastal optical wave meter	**.*	m
52-55	Horizontal distance of the optical wave meter apart from the buoy	***.*	m
56-58	Direction of the optical wave meter to the buoy	***	(°)
59-61	Open degree of observing point	000-359	(°)
62-64	Buoy sensor depth	**.*	m
65-67	Wind speed sensor height	**.*	m
68	Depth code	1=observed 2=no observation	
69-71	Observation point height above the sea level	**.*	m
72	Wave accuracy code	1=±10% 2=±15%	
73	Blank		

◇ Data Record

Column	Parameter	Description	Condition
1	Present record type	Always '2'	
2	Next record type		

3-4	Observation time (day)	0-31	
5-6	Observation time (hour)		
7-9	Wind direction	***	(°)
10	Indicator of wind direction	blank	
11-13	Wind speed	**.*	m/s
14	Quality indicator		
15-16	Indicator of wind speed sampling	02=2 min average wind speed 10=10 min average wind speed	
17	Sea state	0 – 9	Grade
18-20	Wave type		
21-23	Wave direction	***	(°)
24	Indicator of wave direction	Blank	
25-27	Swell direction	***	(°)
28	Indicator of swell direction	Blank	
29-31	Maximum wave height	**.*	m
32	Quality indicator		
33-35	Period	**.*	s
36	Quality indicator		
37	Observation method code	1=optical wave meter 2=eyes 3=auto recording	
38-43	Instrument code		
44-46	One-tenth maximum Wave height	**.*	m
47	Quality indicator		
48-50	Period	**.*	s
51	Quality indicator		
52	Observation method code	1=optical wave meter 2=eyes 3=auto recording	
53-58	Instrument code		
59-61	Significant wave height	**.*	m
62	Quality indicator		
63-65	Period	**.*	s
66	Quality indicator		
67	Observation method code	1=optical wave meter 2=eyes	

		3=auto recording	
68-73	Instrument code		
74-76	Average wave height	**.*	m
77	Quality indicator		
78-80	Period	**.*	s
81	Quality indicator		
82	Observation method code	1=optical wave meter 2=eyes 3=auto recording	
83-88	Instrument code		
89-91	Number of wave		
92-94	Depth water	**.*	m
96-128	Blank		

◇ Remark Record

Column	Parameter	Description	Condition
1	Present record type	Always '5'	
2	Next record type		
3	Number	0-9	
4-128	Remarks		

①数据项wave type中U是涌浪、F是风浪，U/F是风浪和涌浪都有，但是涌浪为主导
②数据项swell direction及wave direction在海面无海浪或者有海浪但是测不出波高、周期时，波向记为C；若能测出波高、周期而测不出波向时，波向记为X
③要素值为997代表此站不观测该要素，要素值为998代表此站观测该要素，但是未能获取有效数据