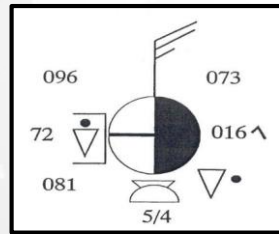


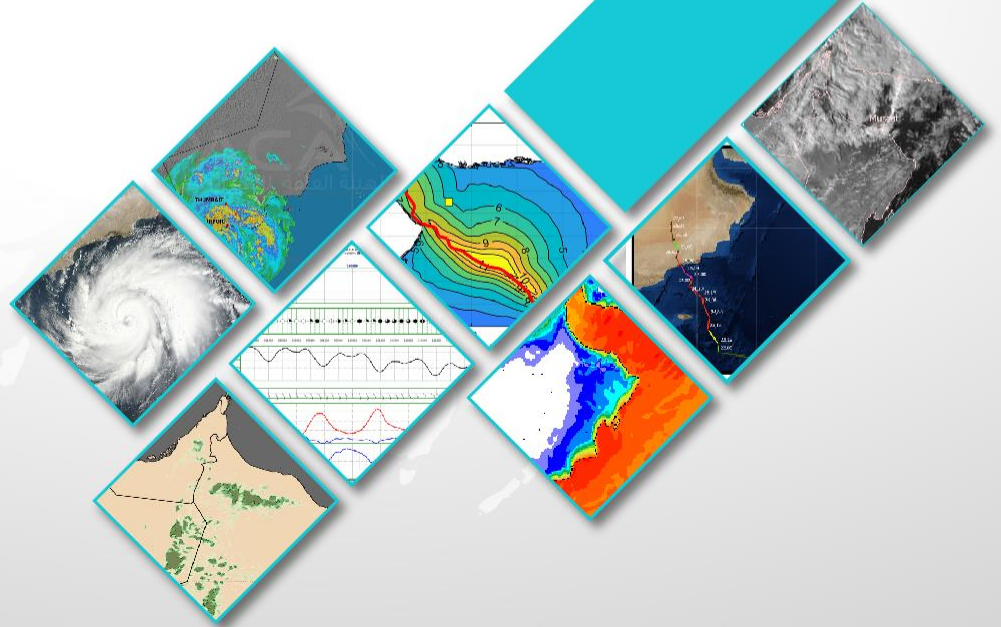


Station Plot



Content creator: [Afada AlHubaishi](#)

Lecturer: [Afada AlHubaishi](#)



Content

- Station Model
- Practice



Station Model / Surface Plot

Simple symbols to display large amounts of meteorological information in a small area



Synoptic Observations:

- Surface

- 850 mb

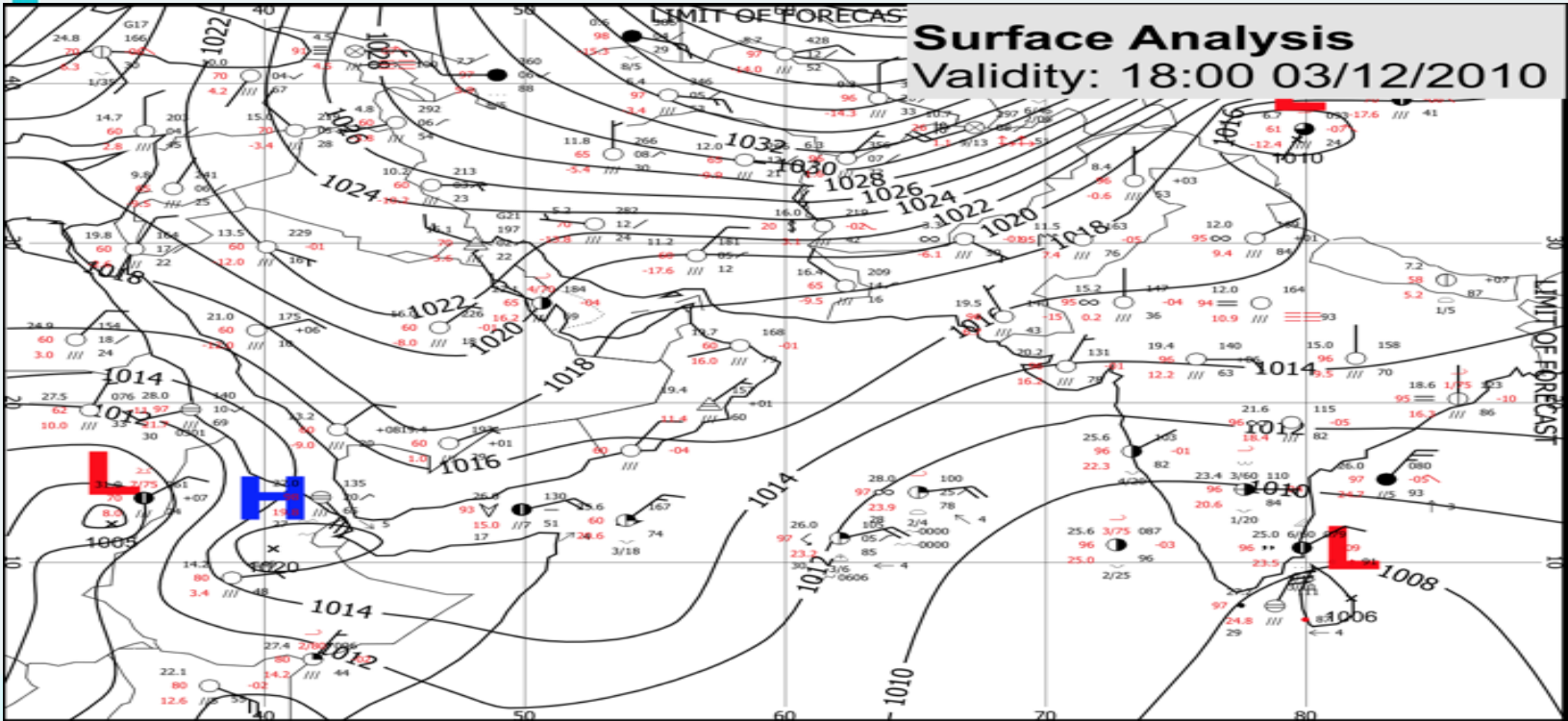
- 700 mb

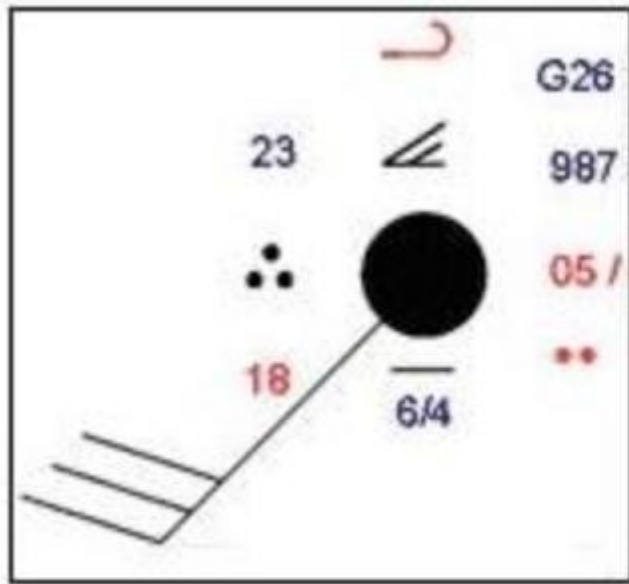
- 500 mb

- 300 mb

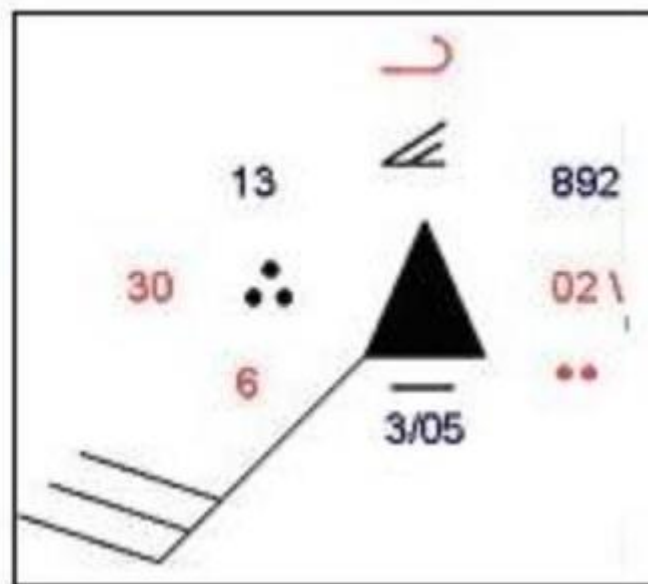
Upper Air Observations





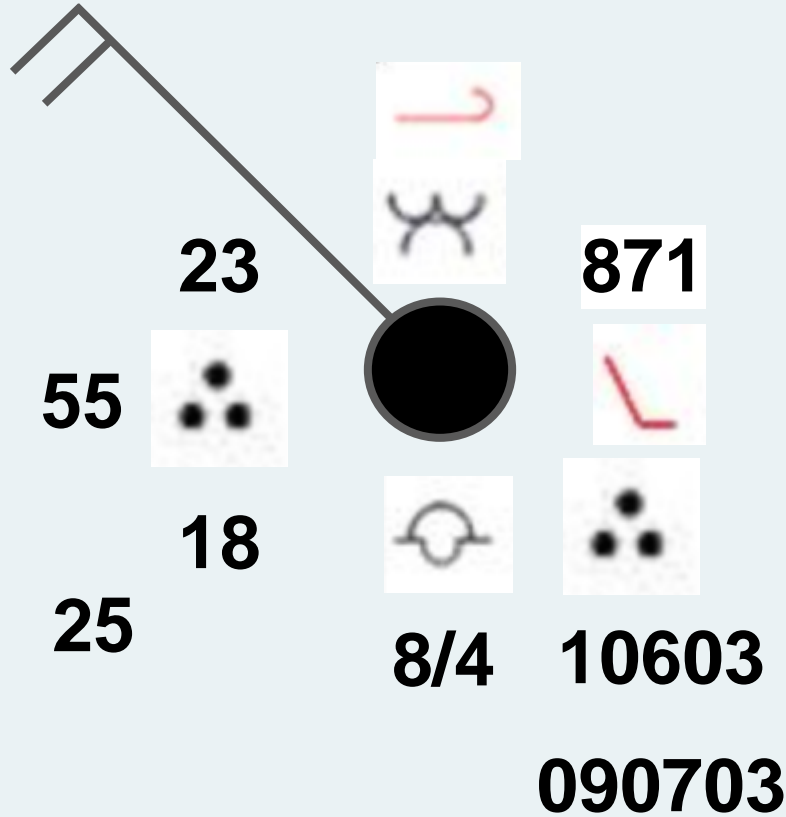


Manual
Observation

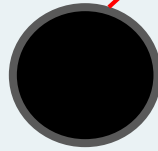


Automatic
Observation





Cloud Cover



-  **No clouds**
-  **Less than one-tenth or one-tenth**
-  **Two-tenths or three-tenths**
-  **Four-tenths**
-  **Five-tenths**
-  **Six-tenths**
-  **Seven-tenths or eight-tenths**
-  **Nine-tenths**
-  **Completely overcast**
-  **Sky obscured**

Overcast

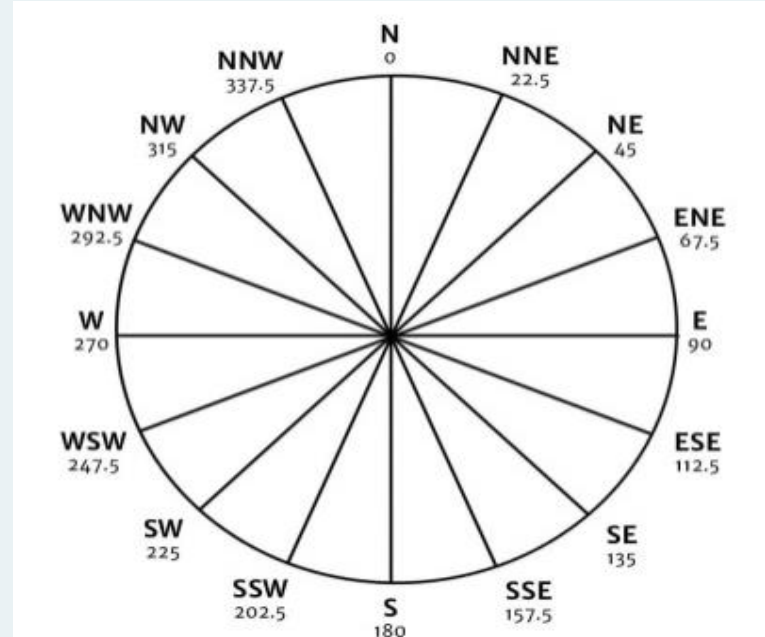


From

Wind Direction



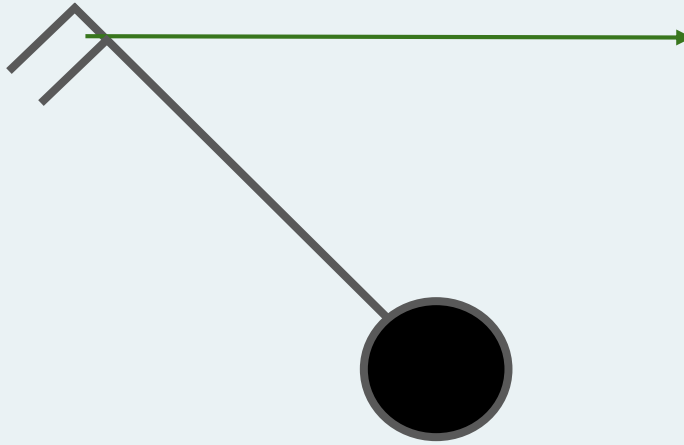
North West



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هيئة الطيران المدني



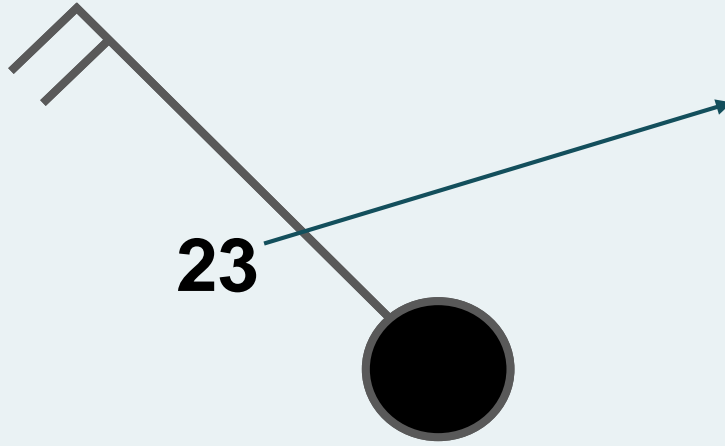
Wind Speed

18-22 Knots

9-11 m/s

Speed (knots)	Symbol	Speed (knots)	Symbol
Less than 1		33-37	
1-2		38-42	
3-7		43-47	
8-12		48-52	
13-17		53-57	
18-22		58-62	
23-27		98-102	
28-32		103-107	



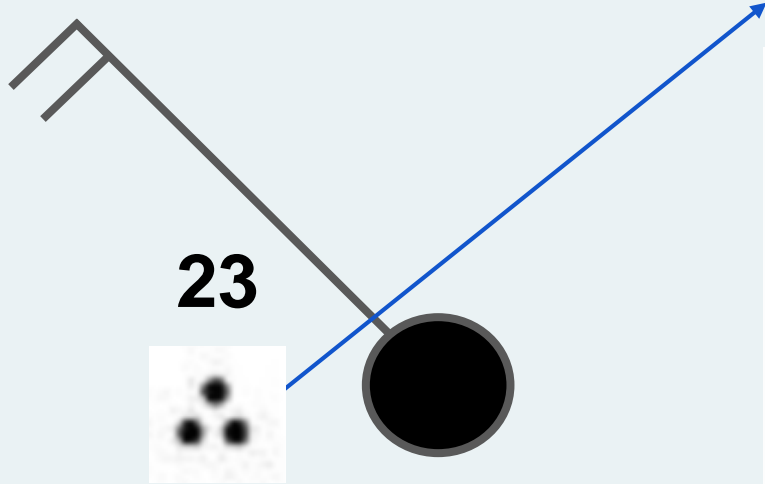


**Air
Temperature**

23 °C



Current Weather

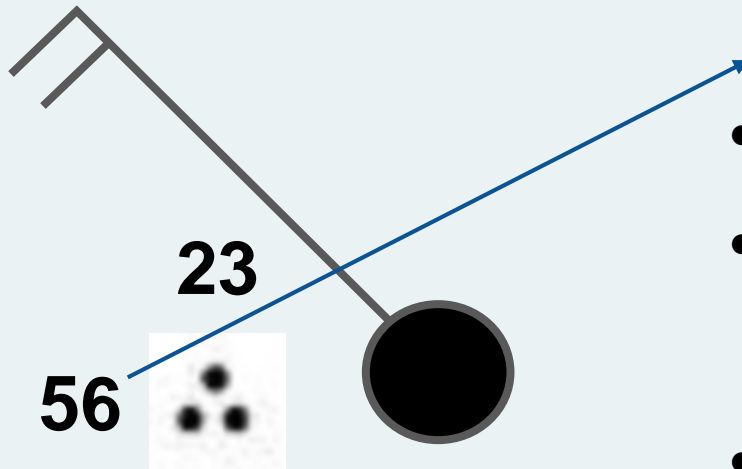


Moderate Rain

••	•••	••••	Rain (light,moderate,heavy)
*••	*•••	*••••	Snow (light,moderate,heavy)
⚡	⚡	⚡	Thunder (with rain,snow,no precipitation)
	▽*	▽*	Shower (rain,snow)
	••		Drizzle
∞	∞		Freezing rain, Freezing drizzle
	△		Ice pellets/Sleet
=	≡		Fog (shallow,deep)
	∞		Haze



Visibility



- In either meters or kilometres
- Visibilities below five kilometres are recorded to the nearest 100 metres
- Visibilities above five kilometres are given to the nearest kilometre

(0-50)----- (0.0-5.0 km)

(56-80)----- (06-30 km)

(81-88)----- (35-70 km)

6 km

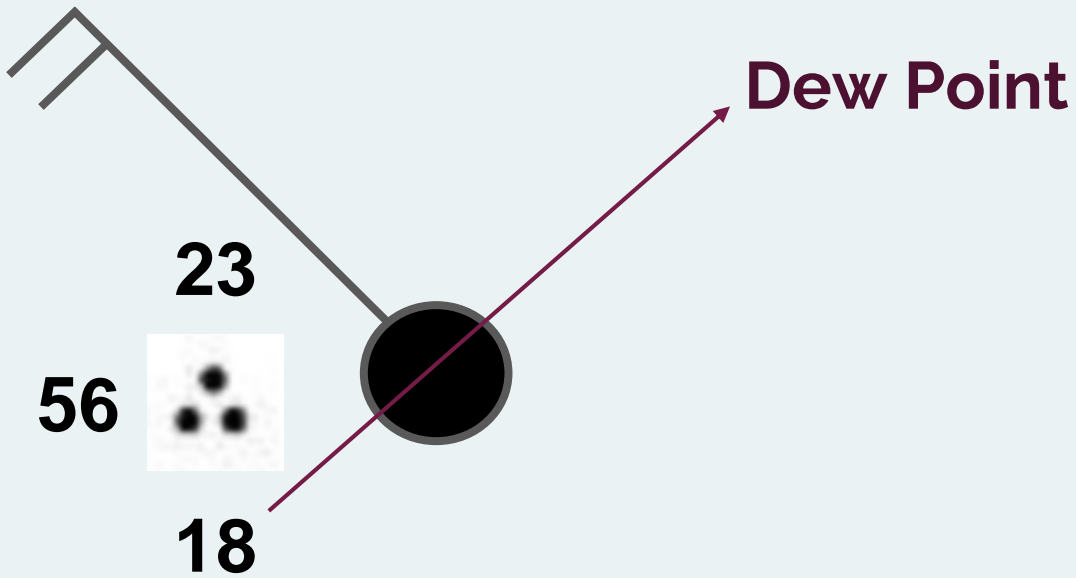


Table 1: Codes for visibilities of less than five kilometres

Code	Distance (km)	Code	Distance (km)	Code	Distance (km)
00	<0.0	19	1.9	38	3.8
01	0.1	20	2.0	39	3.9
02	0.2	21	2.1	40	4.0
03	0.3	22	2.2	41	4.1
04	0.4	23	2.3	42	4.2
05	0.5	24	2.4	43	4.3
06	0.6	25	2.5	44	4.4
07	0.7	26	2.6	45	4.5
08	0.8	27	2.7	46	4.6
09	0.9	28	2.8	47	4.7
10	1.0	29	2.9	48	4.8
11	1.1	30	3.0	49	4.9
12	1.2	31	3.1	50	5.0

Table 2: Codes for visibilities of more than five kilometres

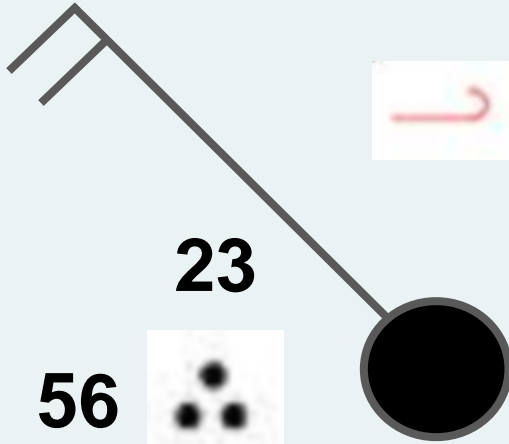
Code	Distance (km)	Code	Distance (km)
56	6	73	23
57	7	74	24
58	8	75	25
59	9	76	26
60	10	77	27
61	11	78	28
62	12	79	29
63	13	80	30
64	14	81	35
65	15	82	40
66	16	83	45
67	17	84	50
68	18	85	55
69	19	86	60
70	20	87	65
71	21	88	70
72	22	89	>70



18 °C



High Cloud Type



23

56

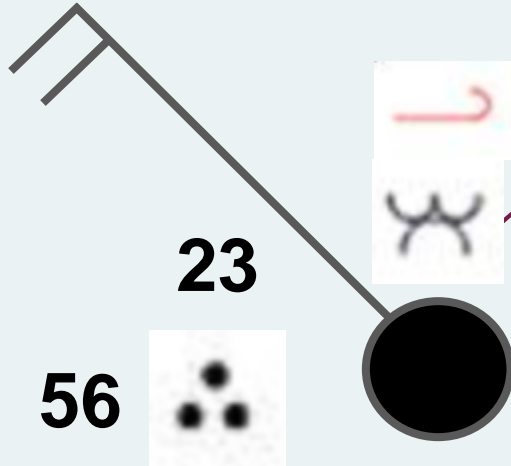
18



- Cirrus in the form of filaments, strands or hooks, not progressively invading the sky.
- Dense cirrus in patches, which do not increase and seem to be the remains of the upper part of cumulonimbus; or cirrus with sproutings in the form of small turrets or battlements.
- Dense cirrus, often in the form of an anvil; being the remains of the upper parts of cumulonimbus.
- Cirrus in the form of hooks or of filaments, or both, progressively invading the sky; they generally become denser as a whole.
- Cirrus and cirrostratus, or cirrostratus alone; progressively invading the sky, but not reaching 45° above the horizon.
- Cirrus and cirrostratus, or cirrostratus alone; progressively invading the sky, reaching more than 45° above the horizon, but without the sky being totally covered.
- Veil of cirrostratus covering the celestial dome.
- Cirrostratus not progressively invading the sky and not completely covering the celestial dome.
- Cirrocumulus alone, or cirrocumulus accompanied by cirrus or cirrostratus or both, but cirrocumulus is predominant.



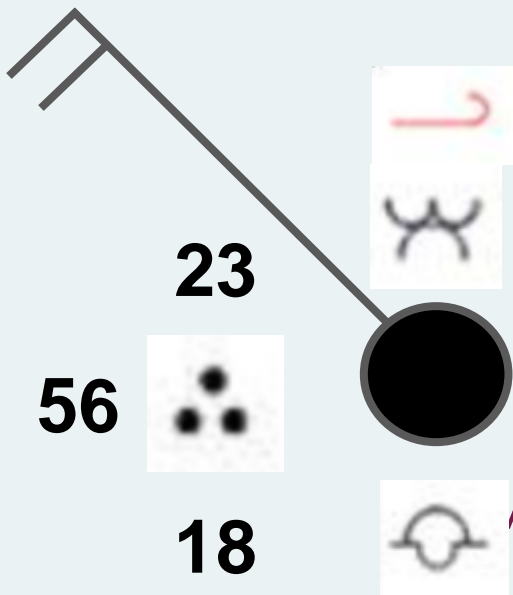
Medium Cloud Type












- ☞ Altostratus through which the sun or moon may be weakly visible.
- ☞ Altostratus, dense enough to hide the sun or moon, or nimbostratus.
- ☞ Altocumulus, the greater part of which is semi-transparent and at a single level
- ☞ Patches of altocumulus, the greater part of which is semi-transparent the clouds occur at one or more levels
- ☞ Semi-transparent altocumulus in bands, or altocumulus in one or more fairly continuous layers, progressively invading the sky.
- ☞ Altocumulus resulting from the spreading out of cumulus (or cumulonimbus).
- ☞ Altocumulus in two or more layers, not progressively invading the sky or altocumulus together with altostratus or nimbostratus.
- ☞ Altocumulus with sproutings in the form of small towers or battlements.
- ☞ Altocumulus of a chaotic sky, generally at several levels.



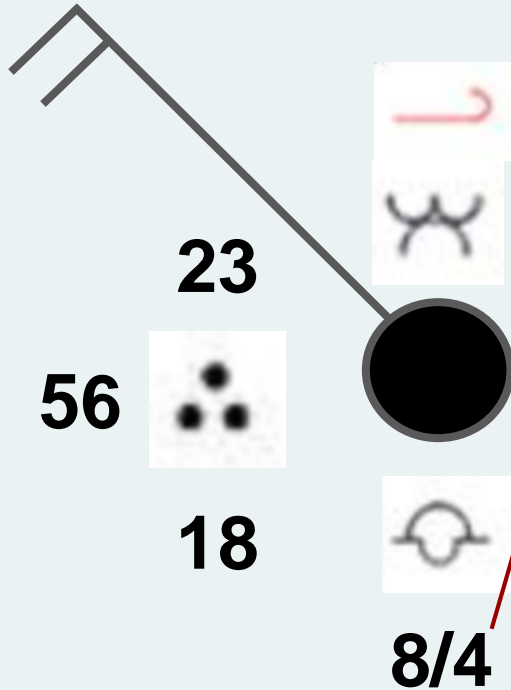
Low Cloud Type



-  Cumulus with little vertical extent
-  Cumulus of moderate or strong vertical extent,
-  Cumulonimbus without fibrous or anvil top
-  Stratocumulus formed by the spreading out of cumulus
-  Stratocumulus not resulting from the spreading out of cumulus
-  Stratus in a more or less continuous sheet or layer,
-  Stratus fractus of bad weather
-  Cumulus and stratocumulus at a different levels
-  Cumulonimbus, fibrous or anvil top

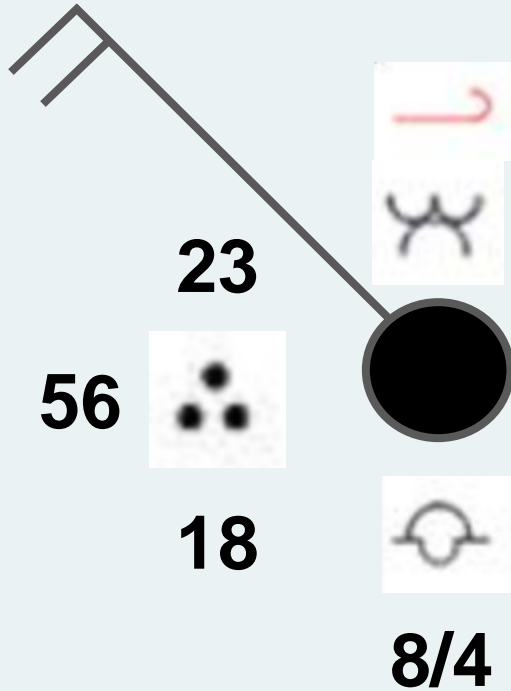


Low Cloud Cover/ Hight



Cloud heights for manned stations	
Code	Height in feet
0	0-149
1	150-299
2	300-599
3	600-999
4	1,000-1,999
5	2,000-2,999
6	3,000-4,999
7	5,000-6,499
8	6,500-7,999
9	8,000 or above
/	Cloud height unknown





Pressure

- Pressure is recorded in millibars and tenths and the last three digits are plotted

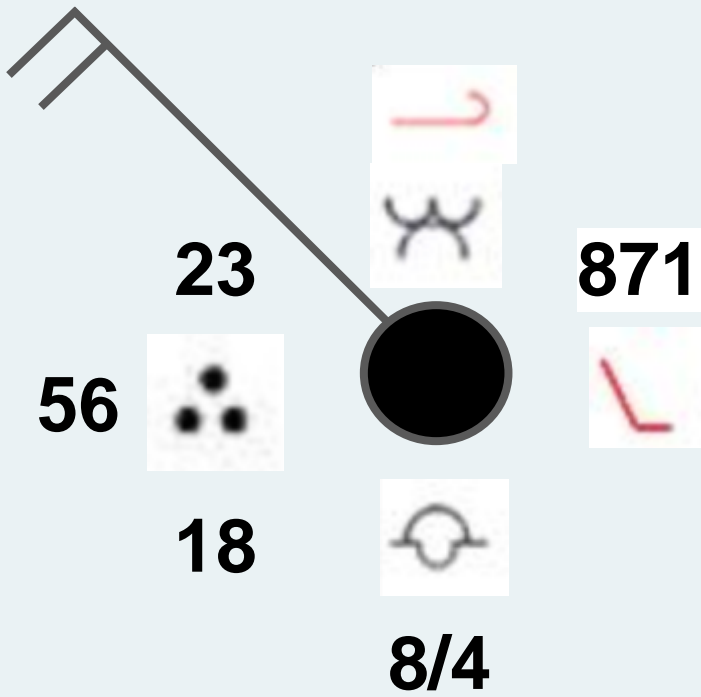
(0-4)----- Add 10 and point

(5-9)----- Add 9 and point

987.1 mb

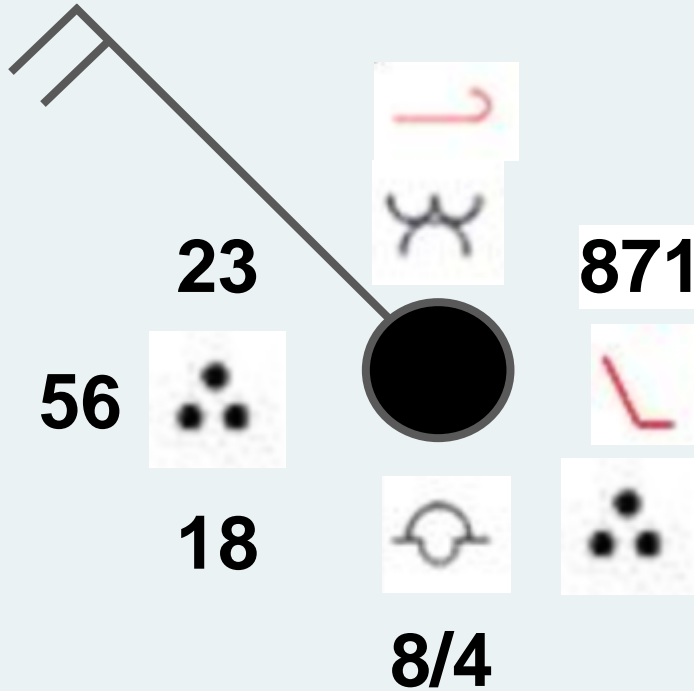


Pressure Tendency



	Continuously falling		Continuously rising
	Falling, then steady		Rising, then steady
	Falling before a lesser rise		Falling before a greater rise
	Rising before a greater fall		Rising before a lesser fall
		Steady	





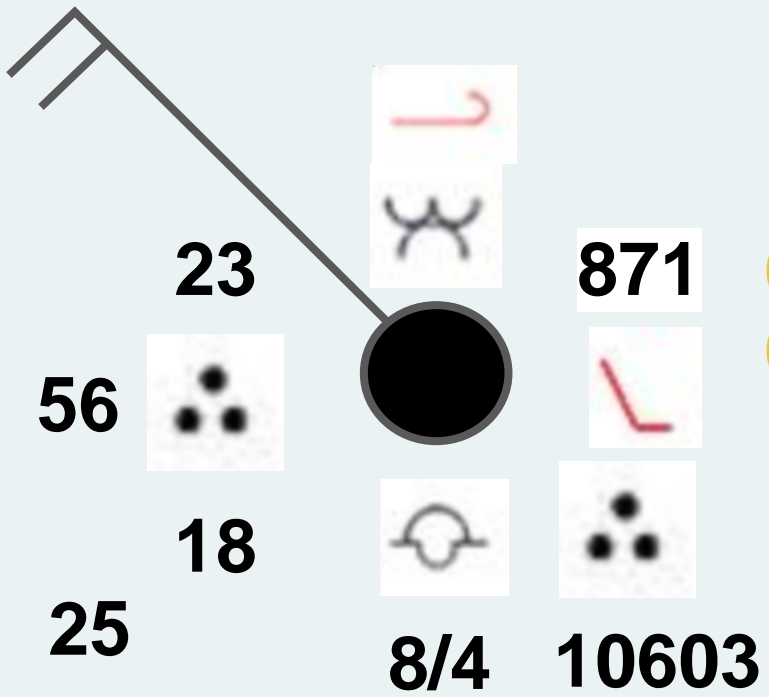
Past Weather

••	•••	••••	Rain (light, moderate, heavy)
**	**•	**••	Snow (light, moderate, heavy)
⊝	⊝	⊝	Thunder (with rain, snow, no precipitation)
▽	▽		Shower (rain, snow)
	„		Drizzle
∞	∞		Freezing rain, Freezing drizzle
	△		Ice pellets/Sleet
=	≡		Fog (thin, thick)
	∞		Haze

Or Cloud Cover



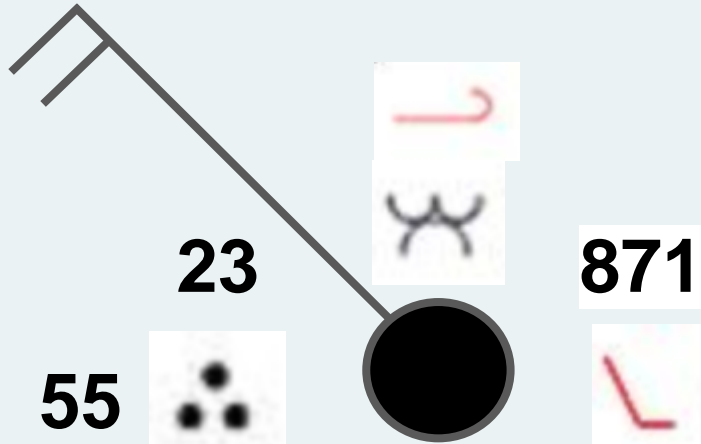
Wave Information



- 1: Group Identifier (Bouey)
- 06: Wave Period 6 Seconds
- 03: Wave Height 3 Half meters

2: Group Identifier (Ship)

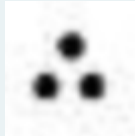




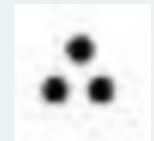
23

871

55



18



25

8/4

10603

090703

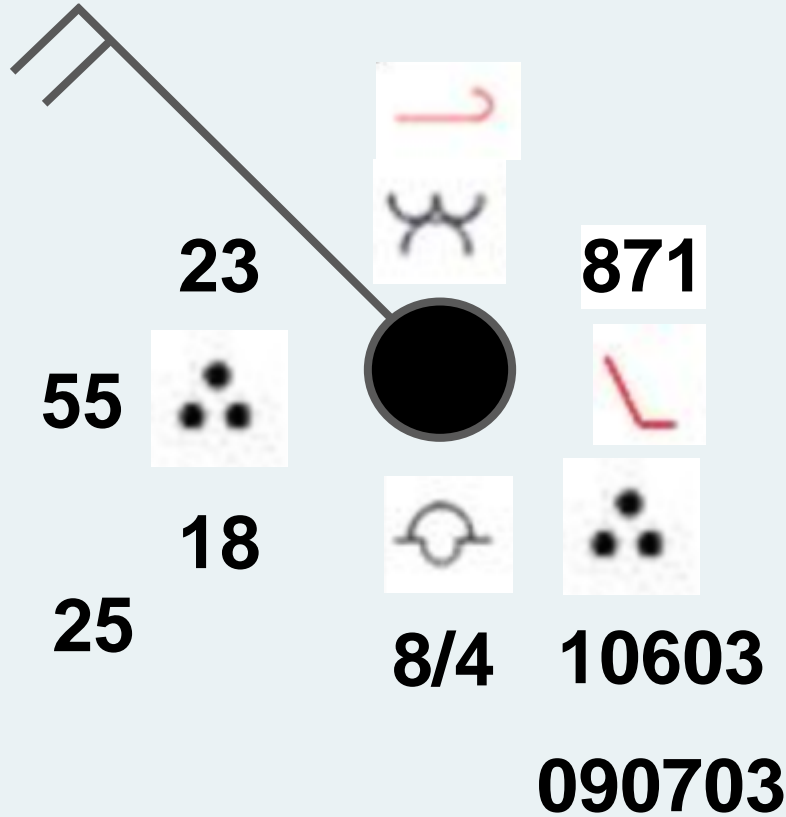
Swell Information

09: Swell Direction (From 90°)

07: Swell Period 7 Seconds

03: Swell Height 3 Half meters







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ations



Thank you

Kindly scan this "QR code"
to evaluate this lecture