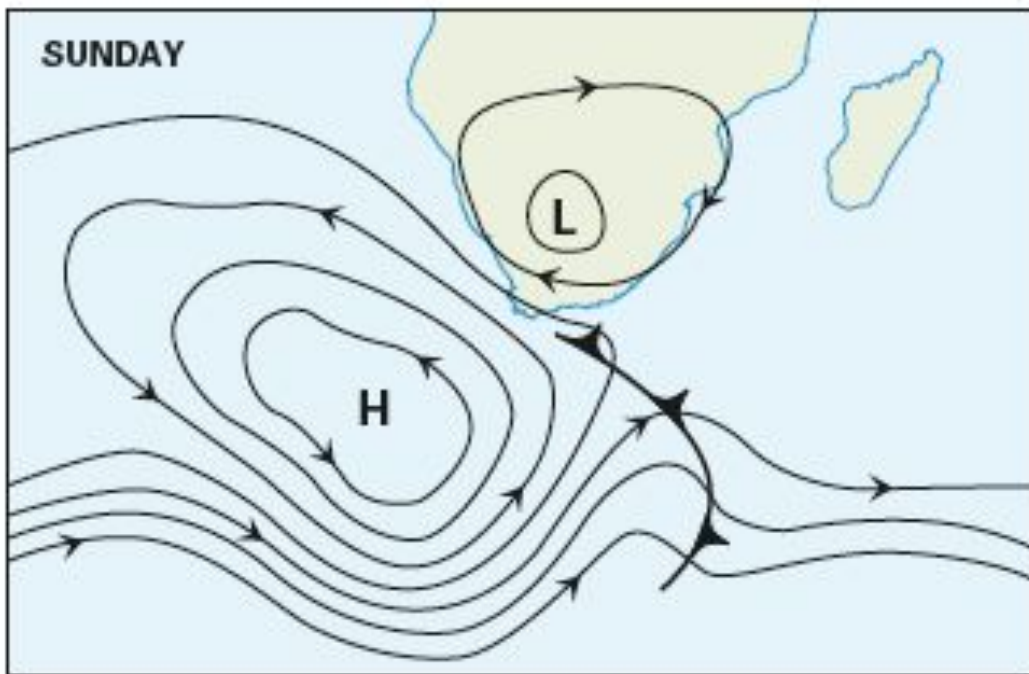


# **SYNOPTIC CHARTS**

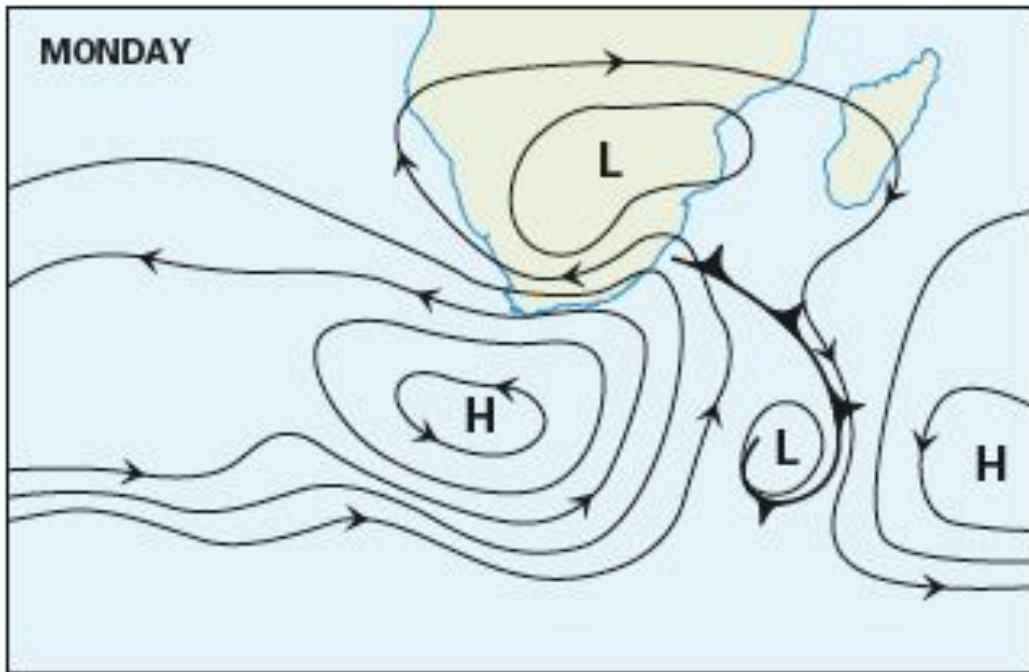
The bottom of the slide features a decorative graphic consisting of several overlapping, wavy lines in various shades of blue, creating a sense of movement and depth.

# Weather

- Weather stations provide us with daily information
- Weather changes over a period of time
- We can identify MLC, TC, Anticyclones and more!
- We can also make predictions for weather to come

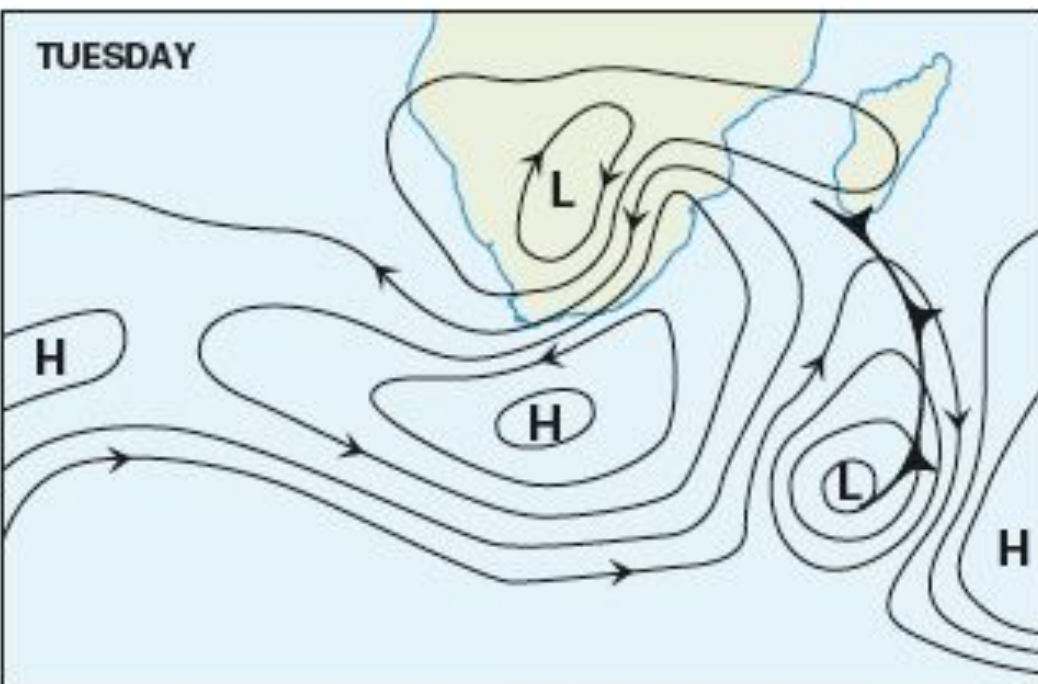


On Sunday, a cold front had passed south of the country and a high-pressure cell had moved in behind it. A pressure gradient built up and the wind started to blow.



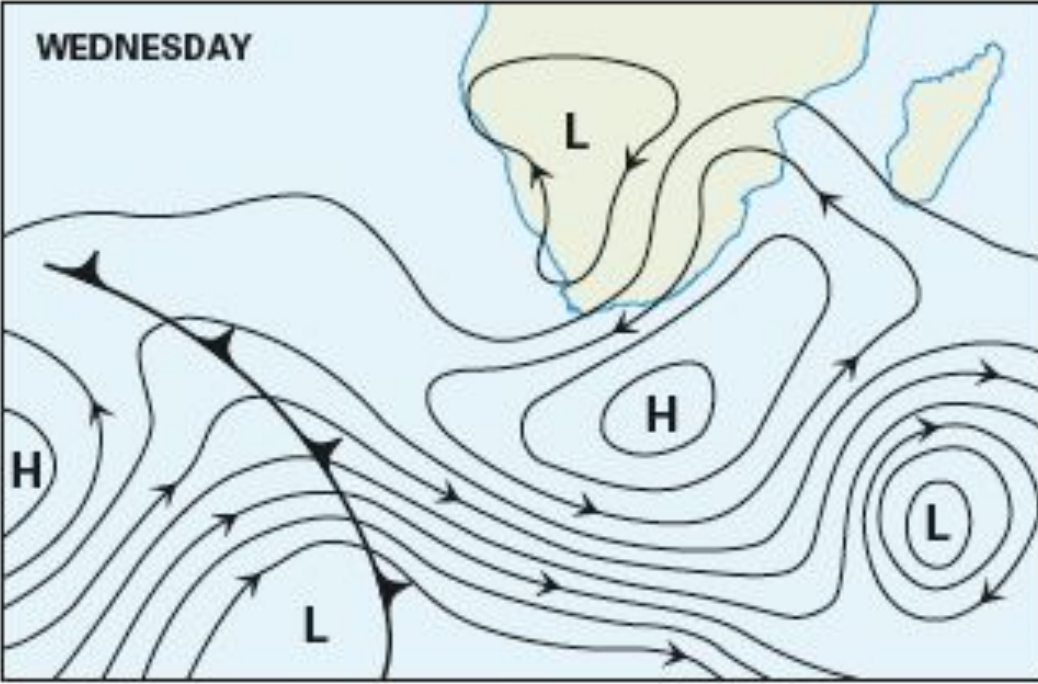
On Monday, the high-pressure cell moved further east and the pressure gradient became steeper, causing the wind to reach gale force.

TUESDAY

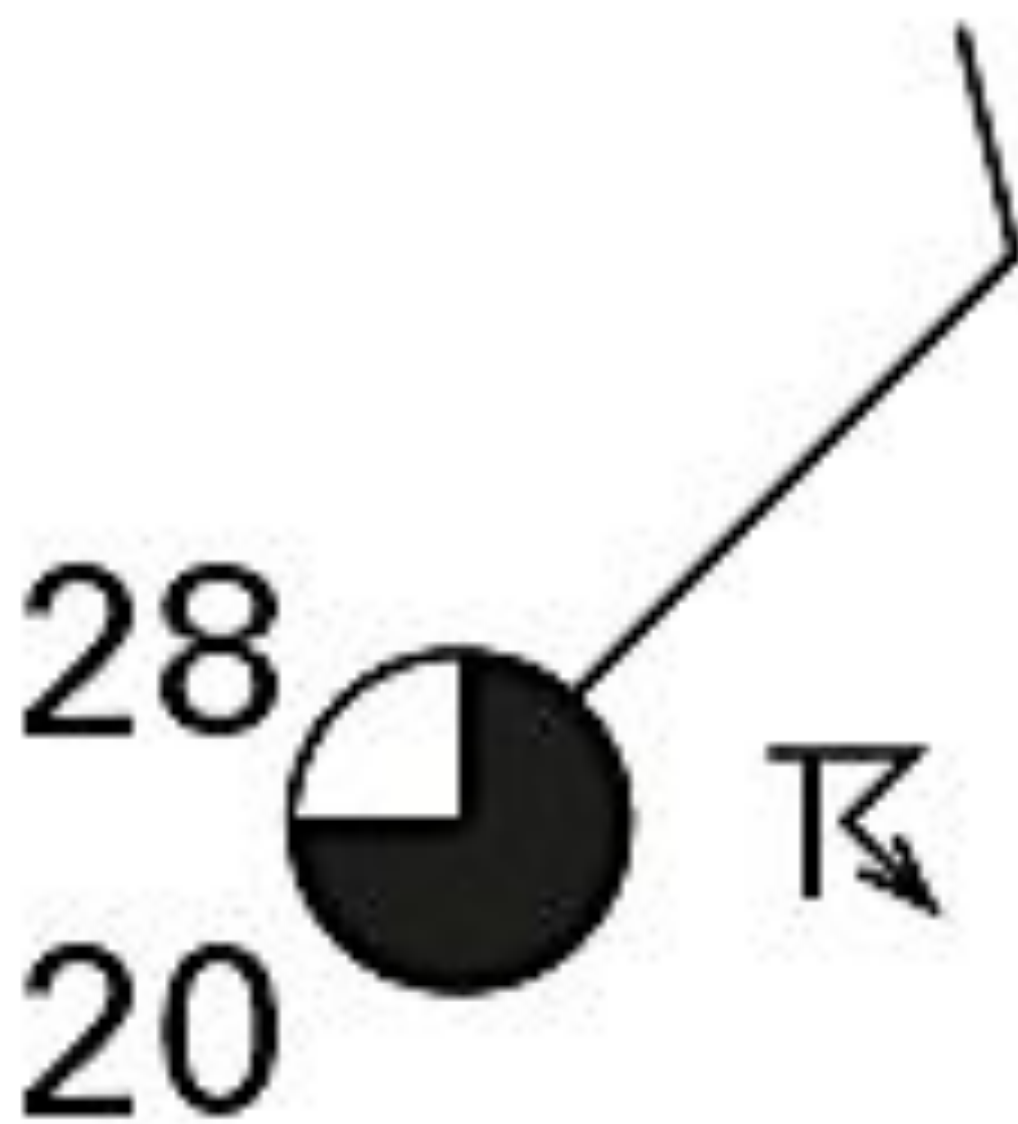


On Tuesday, the high-pressure cell was directly south of the country. The pressure gradient weakened and the wind slowed down.

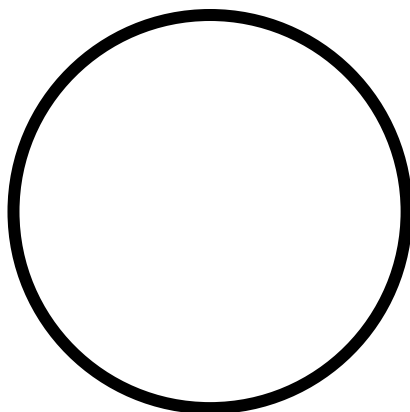
WEDNESDAY



On Wednesday, another cold front arrived and the southeaster 'took a break' before the arrival of the next high-pressure cell.

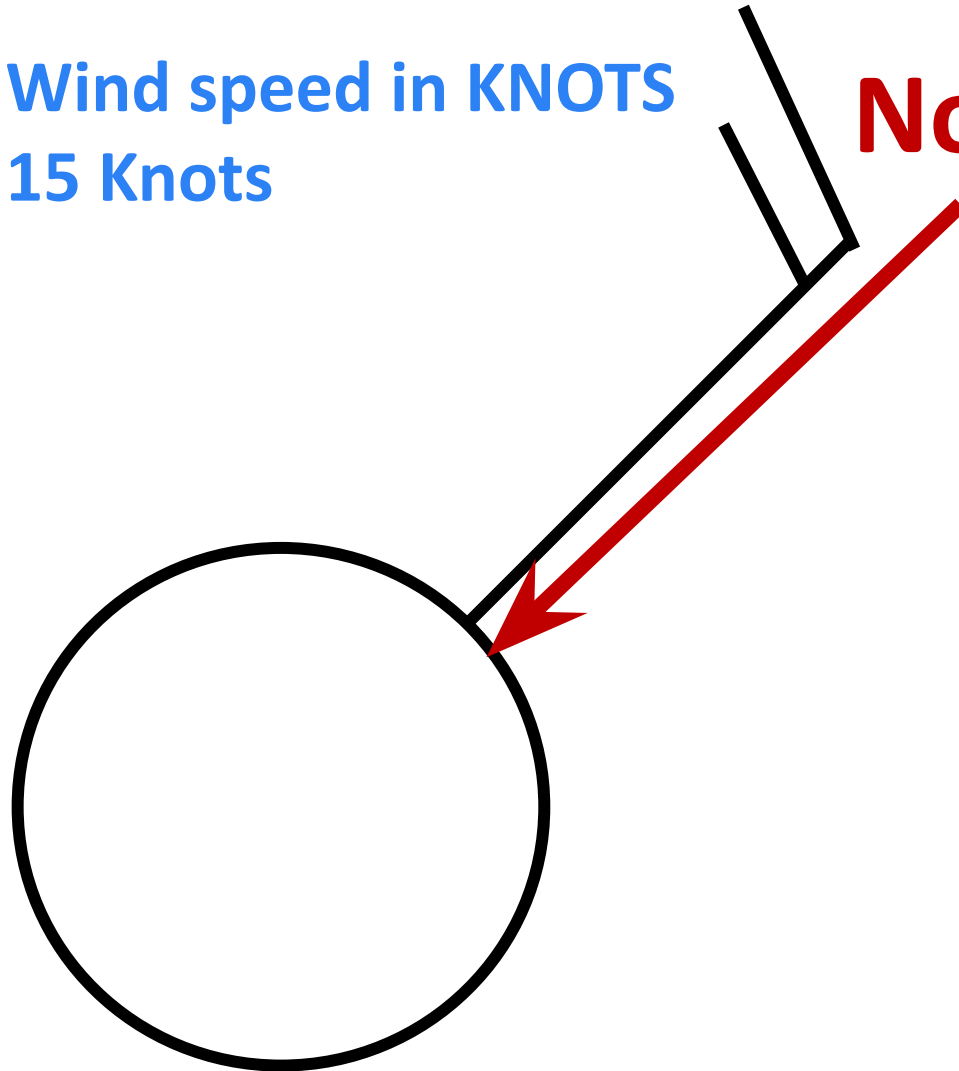


Where is the wind  
coming from?



Wind speed in KNOTS  
15 Knots

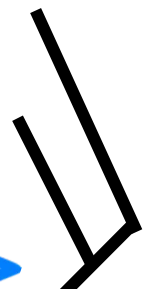
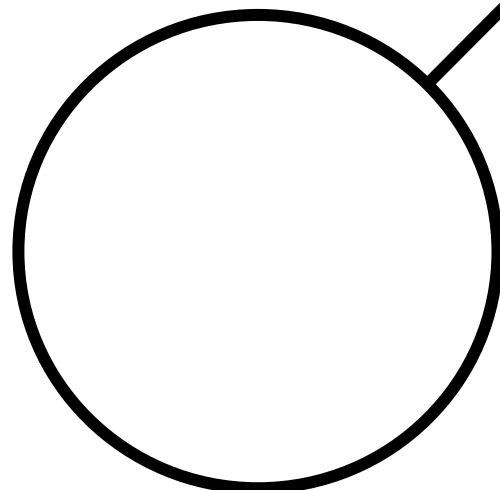
**North East**



Longer = 10



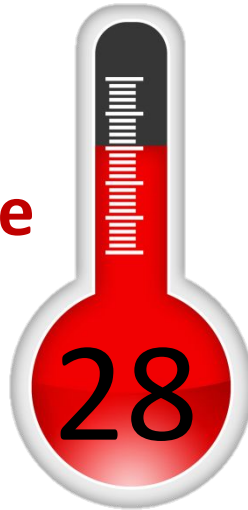
Shorter = 5



Wind Speed	
⊙	calm
—	1-2
—┘	5
—┘┘	10
—┘┘┘	15
—┘┘┘┘	20
—┘┘┘┘┘	25
—┘┘┘┘┘┘	30
—┘┘┘┘┘┘┘	50
—┘┘┘┘┘┘┘┘	65 knots

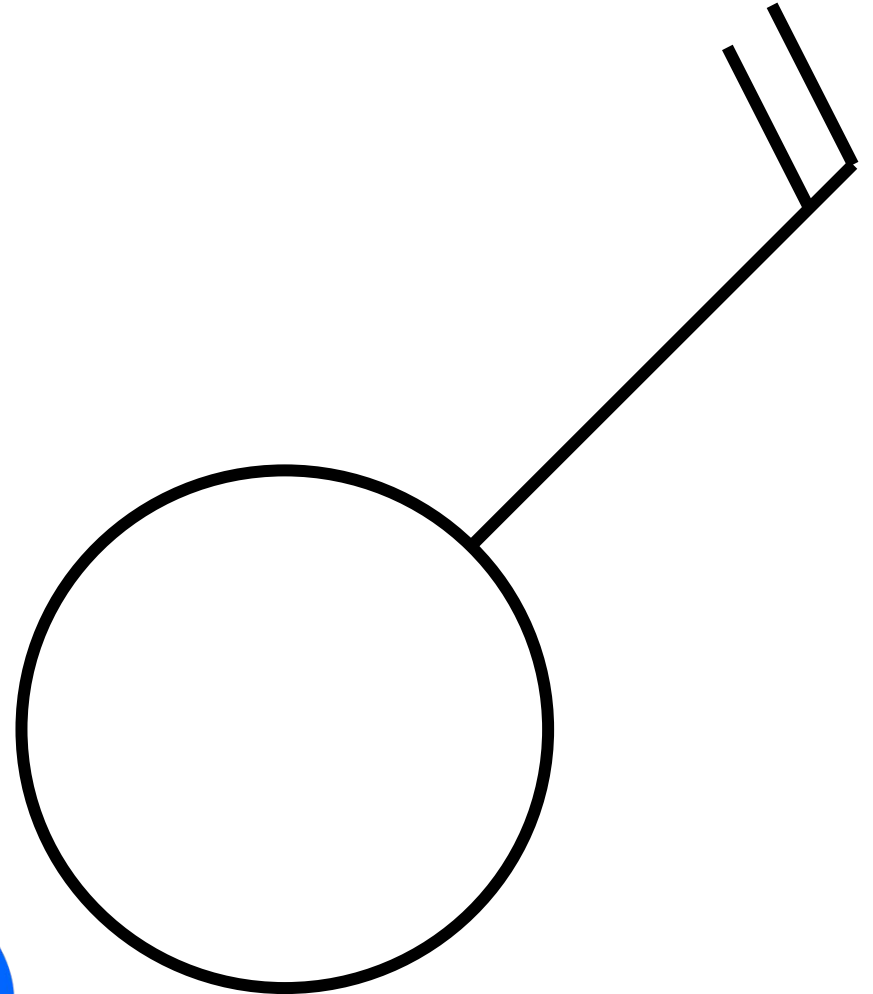


**Maximum temperature**













**Dew Point temperature**

*temp at which the air can no longer "hold" all of the water vapour and will condense*





































































































# Symbols

## Cloud cover (in eighths)

	clear
	1
	2
	3
	4
	5
	6
	7
	overcast
	sky obscured

	rain
	drizzle
	showers
	snow
	hail
	fog
	mist
	thunderstorms
	thunderstorms with hail

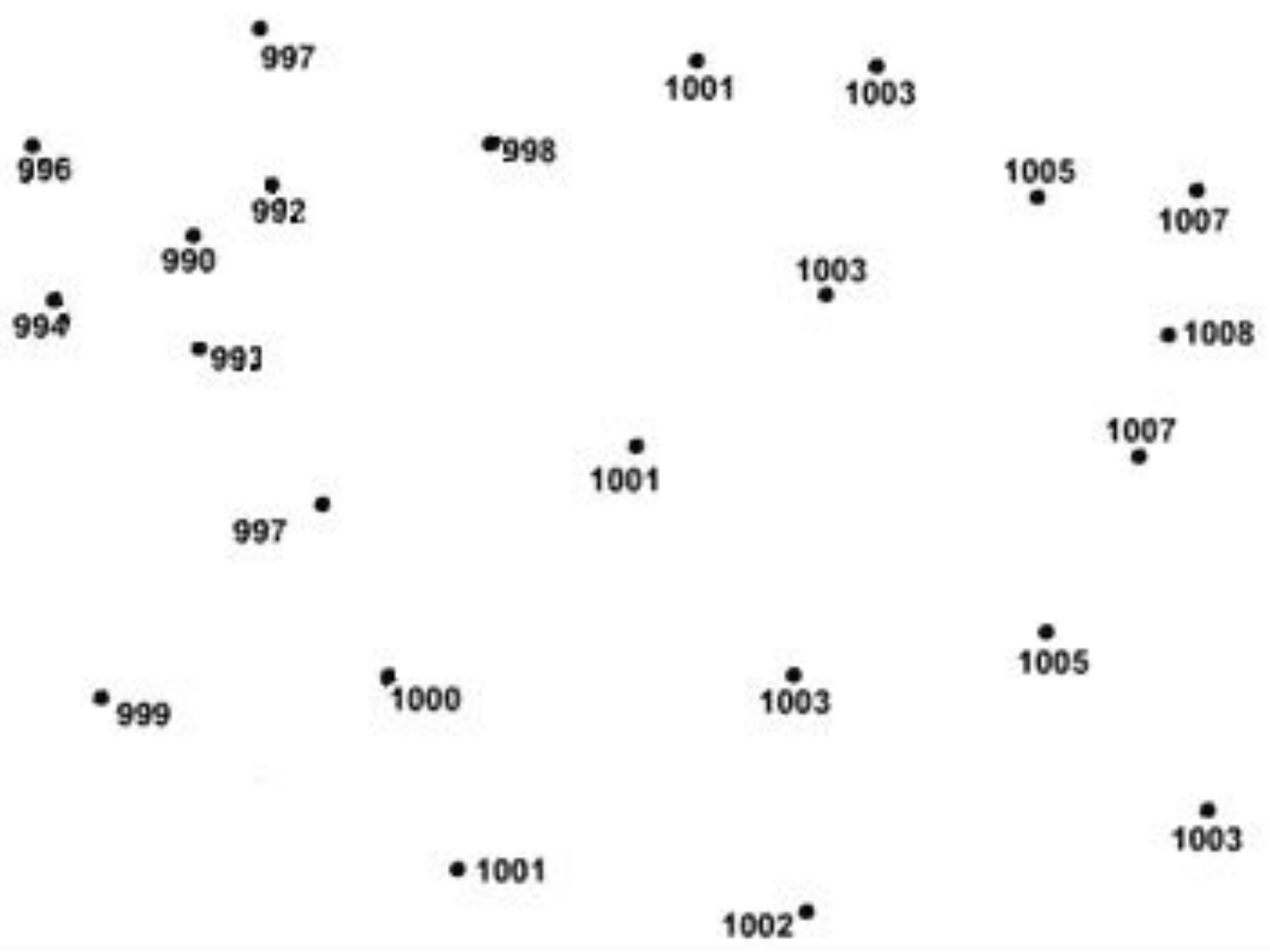
00  Cloud development not observed/observable during past hour.	01  Clouds generally dissolving during past hour.	02  Slate of sky unchanged during past hour.	03  Clouds generally forming or developing during past hour.	04  Visibility reduced by smoke.	05  Haze.	06  Dust suspended in the air, but not raised by wind.	07  Dust or sand raised by wind.	08  Dust devils now or within past hour.	09  Duststorm or sandstorm not at station but within sight.
10  Mist.	11  Patches of shallow fog at station, not deeper than 2 m (10 m at sea).	12  Continuous shallow fog at station, not deeper than 2 m (10 m at sea).	13  Lightning visible, but no thunder heard.	14  Precipitation visible but not reaching ground at station.	15  Precipitation reaching the ground not at or near the station but at a distance.	16  Precipitation reaching the ground not at the station but nearby.	17  Thunder heard but no precipitation at the station.	18  Wind squall now or during the past hour.	19  Tornado, waterspout, or funnel cloud observed now or during past hour.
20  Recent drizzle (not freezing, not showers) during past hour.	21  Recent rain (not freezing, not showers) during past hour.	22  Recent snow (not showers) during past hour.	23  Recent rain and snow (not showers) during past hour.	24  Freezing drizzle or rain (not showers), not now but during past hour.	25  Rain showers, not now but during past hour.	26  Snow showers, not now but during past hour.	27  Hail or hail and rain, not now but during past hour.	28  Fog, not now but during past hour.	29  Thunderstorm, with or without precipitation, not now but during past hour.
30  Slight/moderate duststorm or sandstorm, decreased during hour.	31  Slight/moderate duststorm or sandstorm, no change during hour.	32  Slight/moderate duststorm or sandstorm, increased during hour.	33  Severe duststorm or sandstorm, which has decreased during hour.	34  Severe duststorm or sandstorm, no change during past hour.	35  Duststorm or sandstorm, severe, has increased during past hour.	36  Drifting snow, slight or moderate.	37  Drifting snow, heavy.	38  Blowing snow, slight or moderate.	39  Blowing snow, heavy.
40  Fog at a distance but not at station during past hour.	41  Patchy fog.	42  Fog, sky discernable, and has become thinner during past hour.	43  Fog, sky not discernable, and has become thinner during past hour.	44  Fog, sky discernable, no change during past hour.	45  Fog, sky not visible, no change during past hour.	46  Fog, sky visible, has begun or become thicker during past hour.	47  Fog, sky not visible, has begun or become thicker during past hour.	48  Freezing fog, sky visible.	49  Freezing fog, sky not visible.
50  Drizzle, light, intermittent, not freezing.	51  Drizzle, light, continuous, not freezing.	52  Drizzle, moderate, intermittent, not freezing.	53  Drizzle, moderate, continuous, not freezing.	54  Drizzle, heavy, intermittent, not freezing.	55  Drizzle, heavy, continuous, not freezing.	56  Freezing drizzle, light.	57  Freezing drizzle, moderate or heavy.	58  Drizzle and rain mixed, light.	59  Drizzle and rain mixed, moderate or heavy.
60  Rain, light, intermittent, not freezing.	61  Rain, light, continuous, not freezing.	62  Rain, moderate, intermittent, not freezing.	63  Rain, moderate, continuous, not freezing.	64  Rain, heavy, intermittent, not freezing.	65  Rain, heavy, continuous, not freezing.	66  Freezing rain, light.	67  Freezing rain, moderate or heavy.	68  Rain and snow mixed, light.	69  Rain and snow mixed, moderate or heavy.
70  Snow, light, intermittent.	71  Snow, light, continuous.	72  Snow, moderate, intermittent.	73  Snow, moderate, continuous.	74  Snow, heavy, intermittent.	75  Snow, heavy, continuous.	76  Ice needles, with or without fog.	77  Snow grains, with or without fog.	78  Snow crystals, with or without fog.	79  Ice pellets (sleet).
80  Rain showers, light.	81  Rain showers, moderate or heavy.	82  Rain showers, torrential.	83  Rain/snow showers mixed, light.	84  Rain/snow showers mixed, moderate or heavy.	85  Snow showers, light.	86  Snow showers, moderate or heavy.	87  Ice pellet showers, light.	88  Ice pellet showers, moderate or heavy.	89  Hail, light, not associated with thunder.
90  Hail, moderate or heavy, not associated with thunder.	91  Rain, light. Thunder heard during past hour but not now.	92  Rain, moderate or heavy. Thunder heard during past hour but not now.	93  Light snow or rain/snow mixed with hail. Thunder heard during past hour.	94  Moderate or heavy snow or rain/snow with hail. Thunder in past hour.	95  Thunderstorm, light or moderate. Rain or snow, but no hail.	96  Thunderstorm, light or moderate, with hail.	97  Thunderstorm, severe. Rain or snow, but no hail.	98  Thunderstorm, with duststorm or sandstorm.	99  Thunderstorm, severe, with hail.

# Isobars

Connect places of equal pressure

**Isobars are also helpful because they help us to understand the direction and strength of the wind in a particular area.**

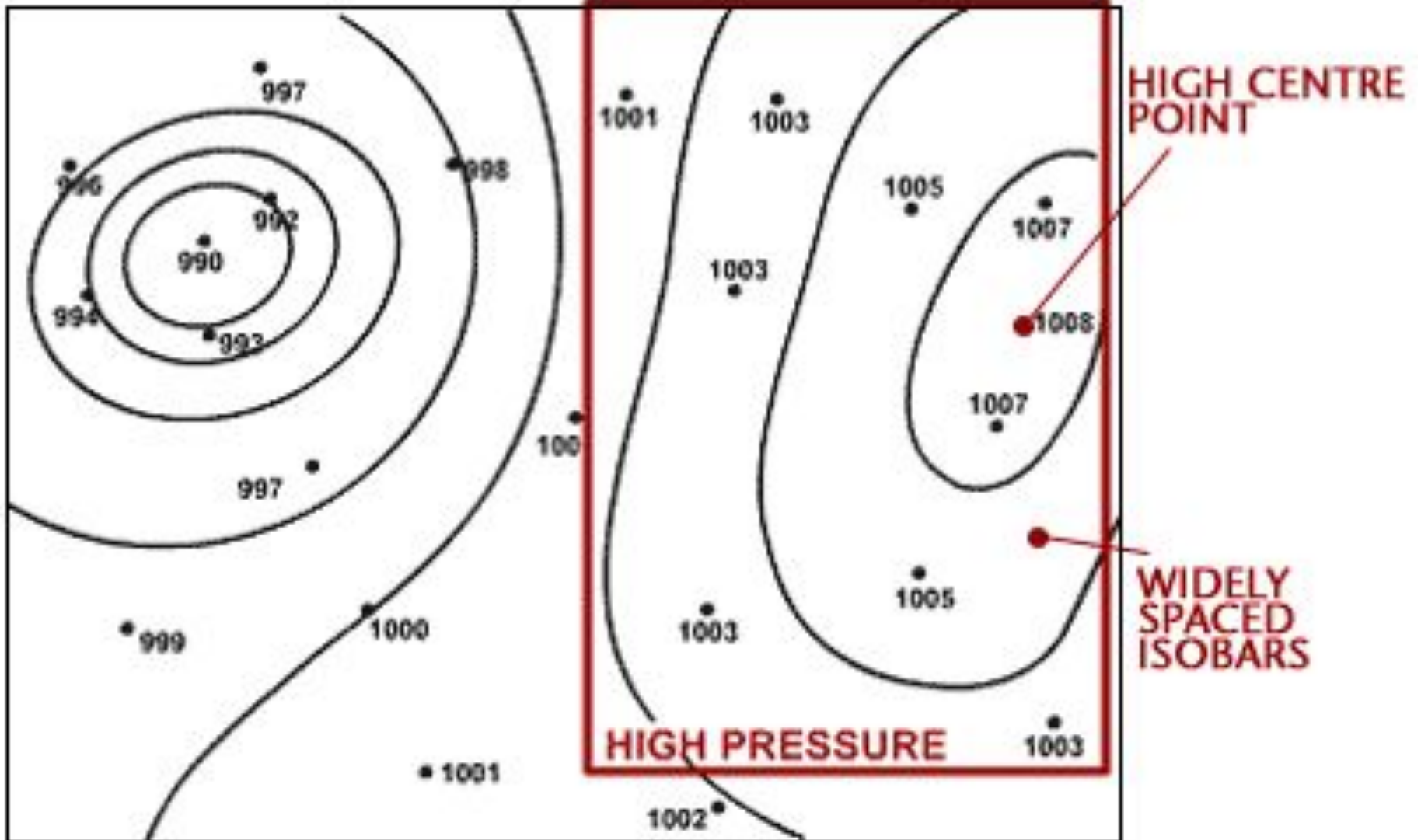
- very close together, for example near a depression, they indicate strong winds
- **more widely spaced, near an anticyclone for example, they indicate light winds**



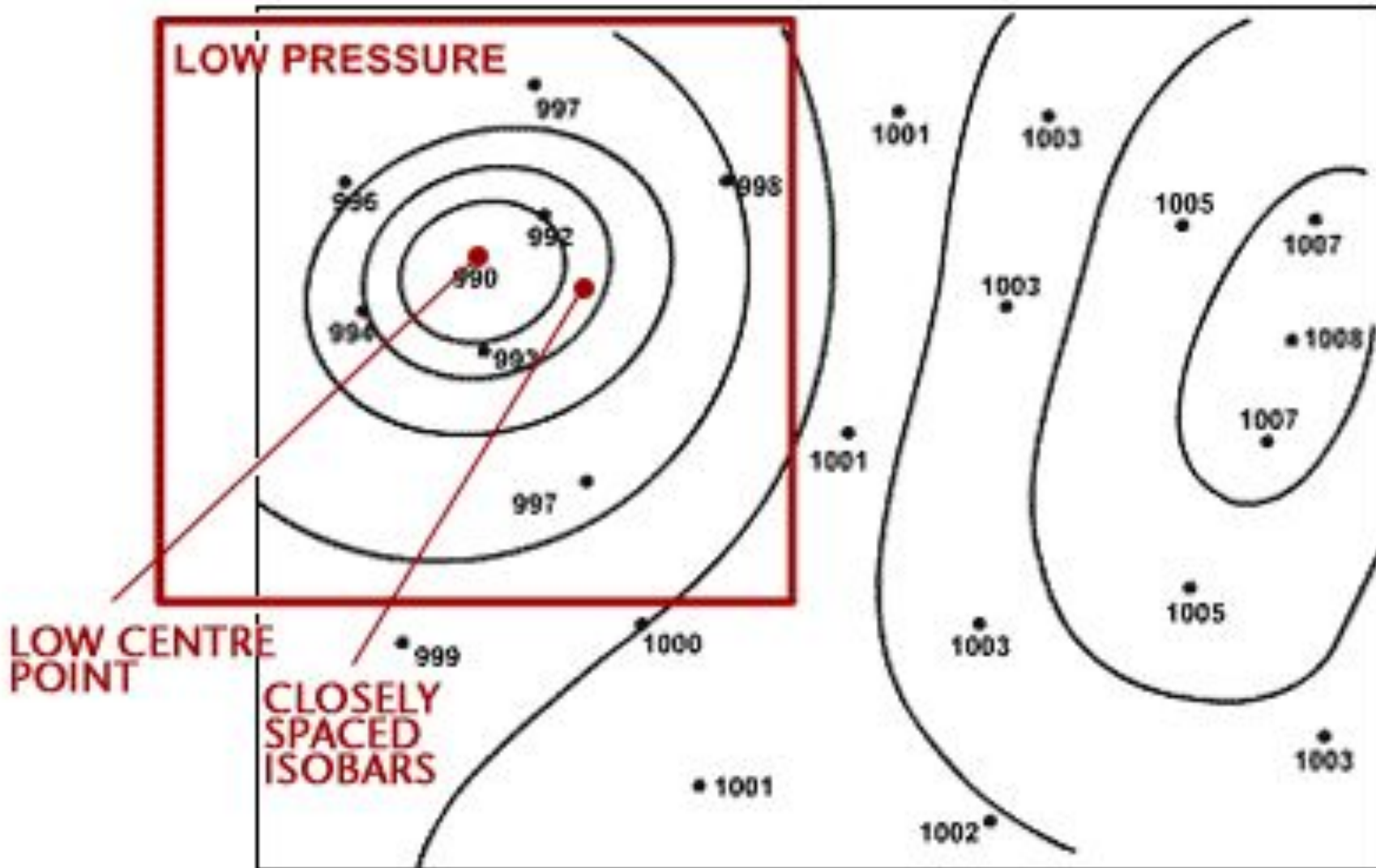
# Identifying Systems



# Anticyclone - High Pressure

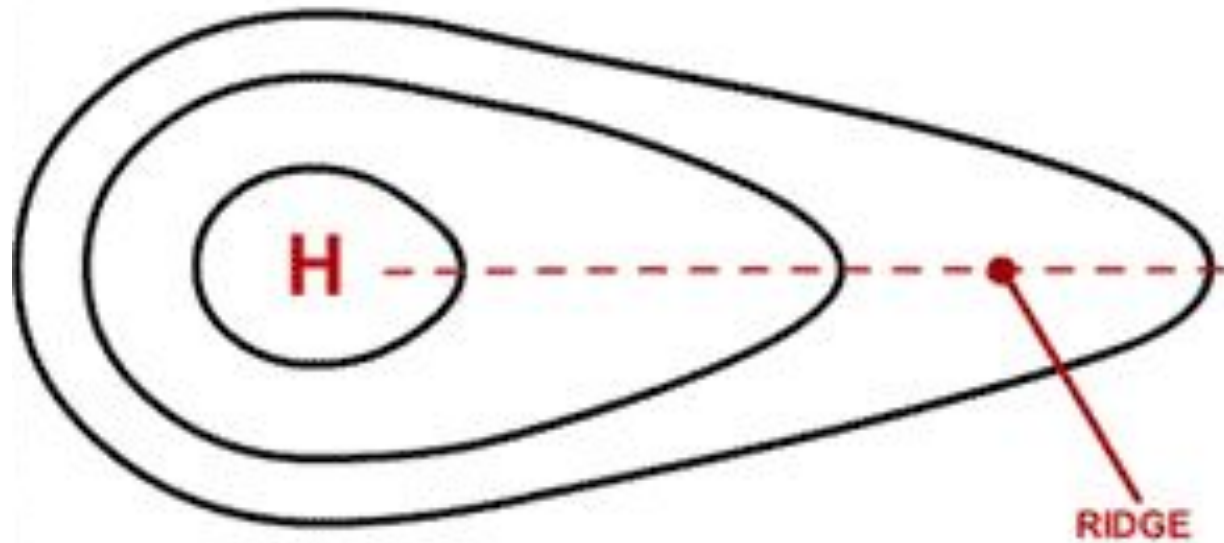
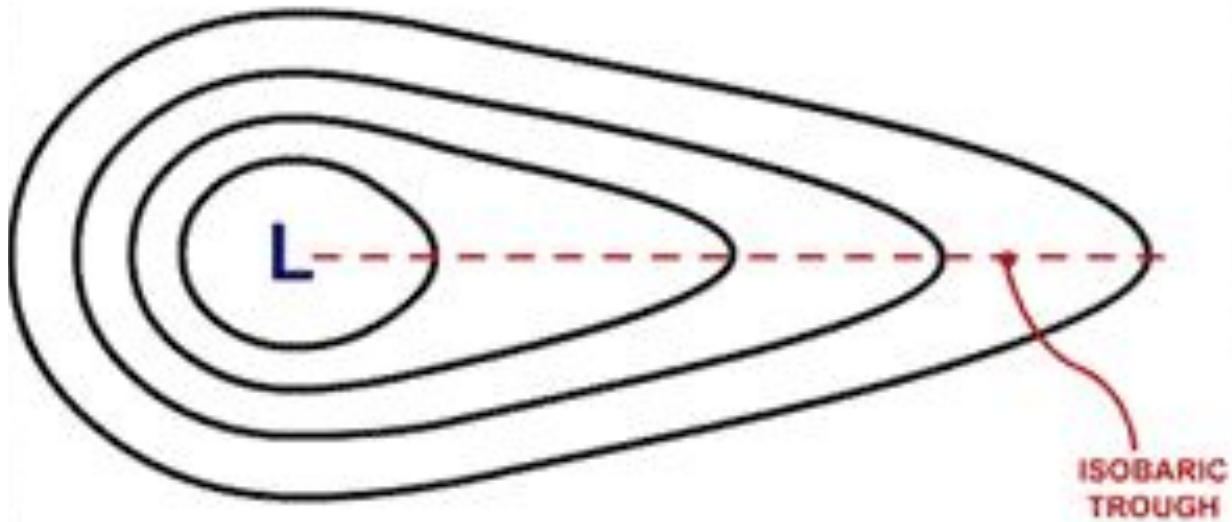


# Depression - Low Pressure



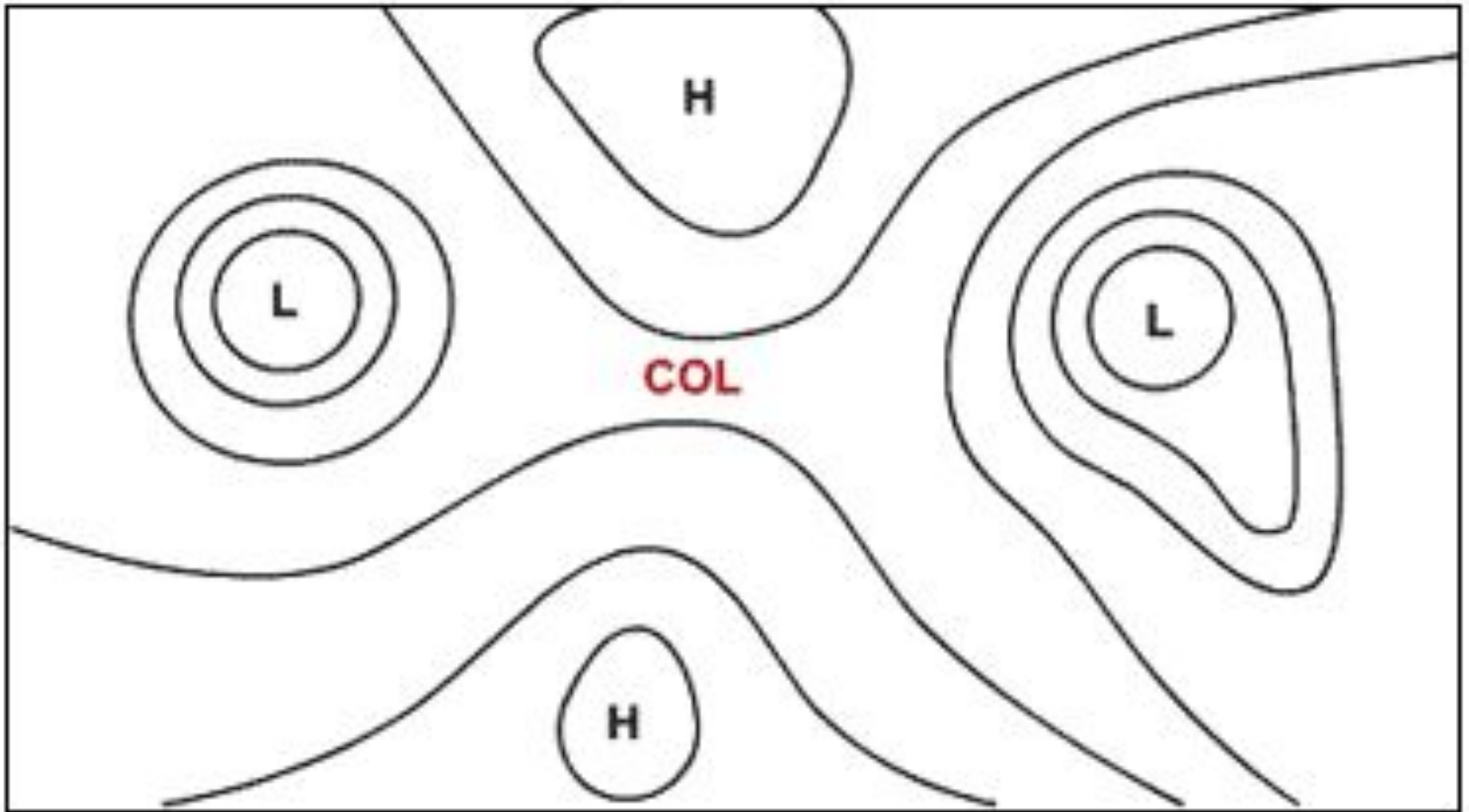


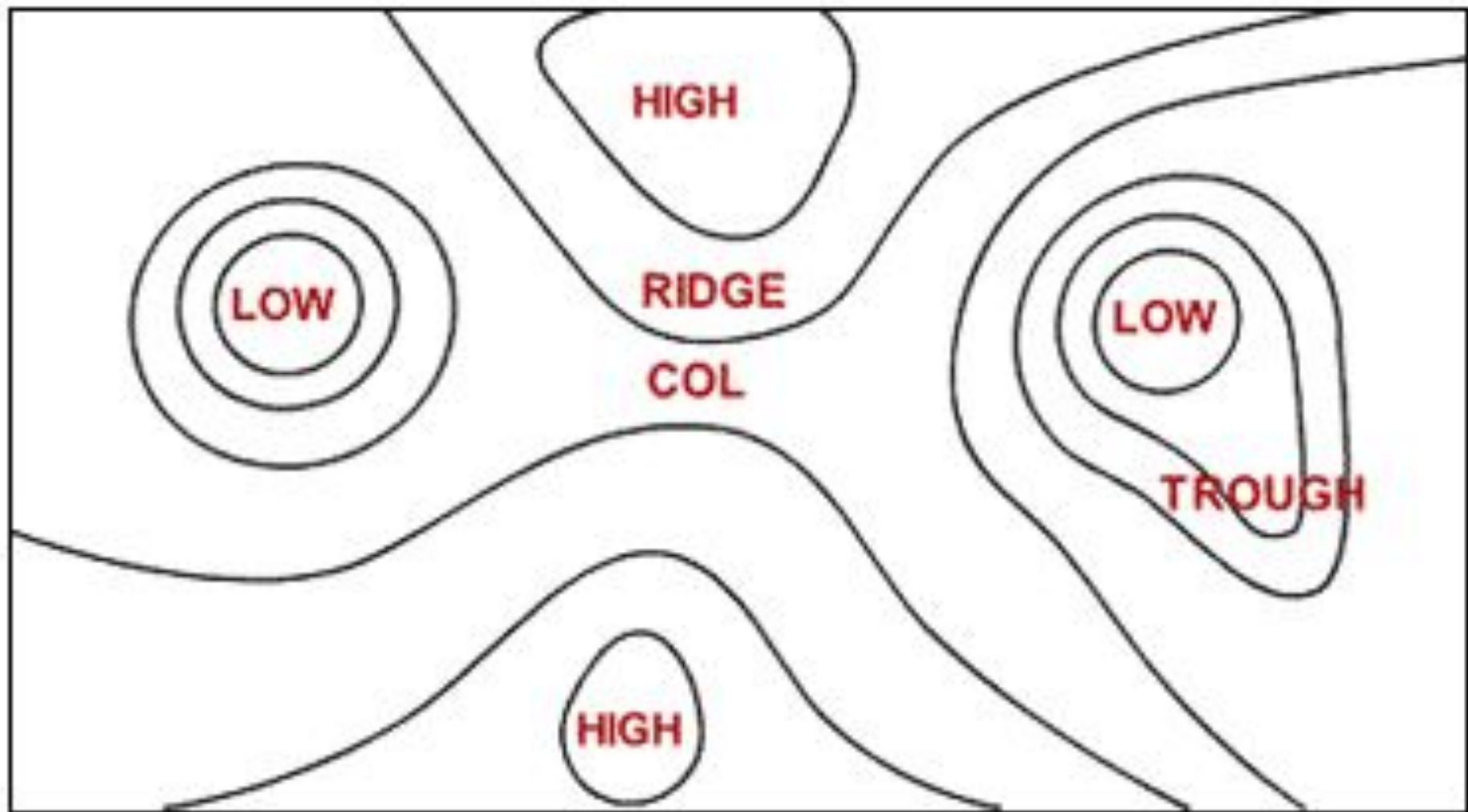
# Trough & Ridge



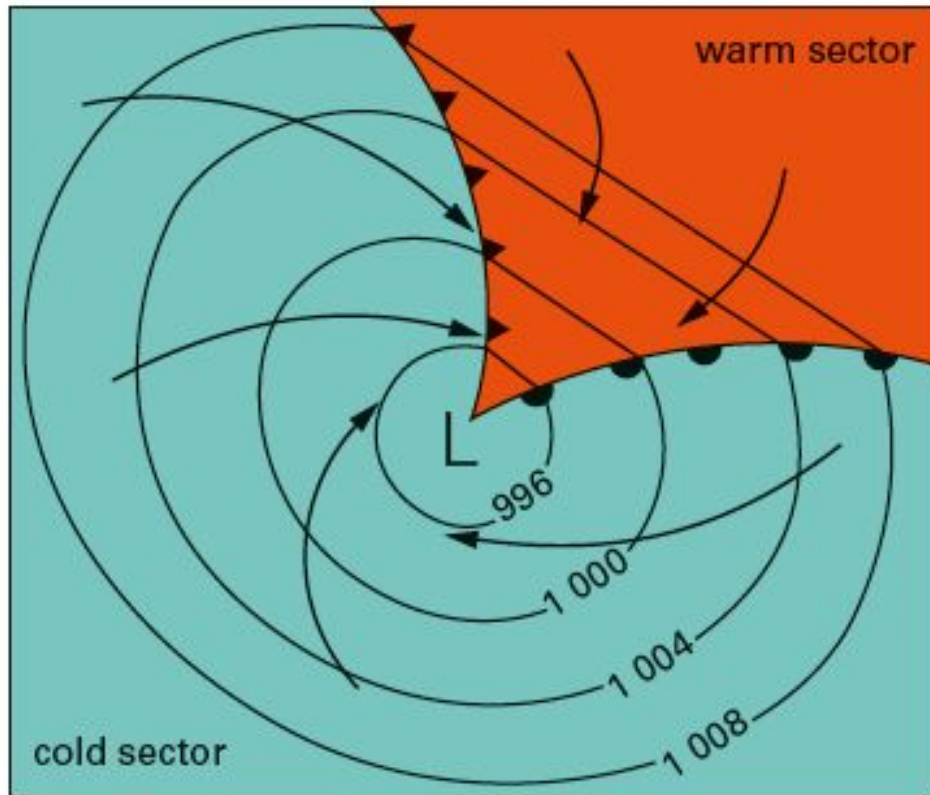
# Col

- area of slack pressure between two anticyclones and two depressions.

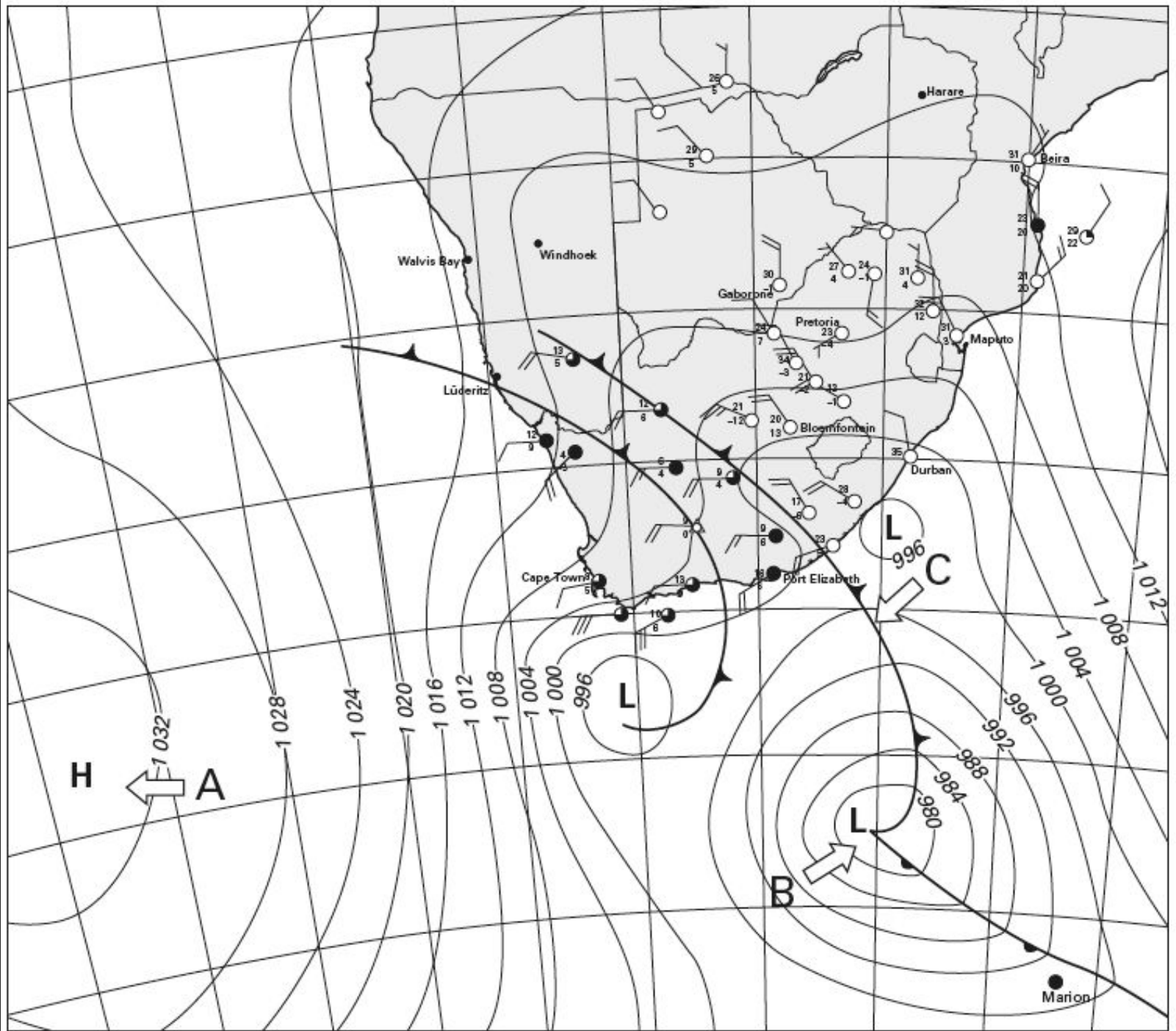




# Cold Front & Warm Front



996 air pressure in hectopascals (hPa)    cold air    cold front  
warm air    warm front





Platinum Activity 5 pg 123

# Check list



## Can you identify:

- MLC
- TC
- Anticyclone
- Berg winds
- Cut-off Low
- Southeaster “Cape Doctor”

## Can you :

- Read a weather station  
Temp, DP, wind direction, weather
- Write a weather report
- Predict weather
- Name features “SAHP”
- Read off a satellite image