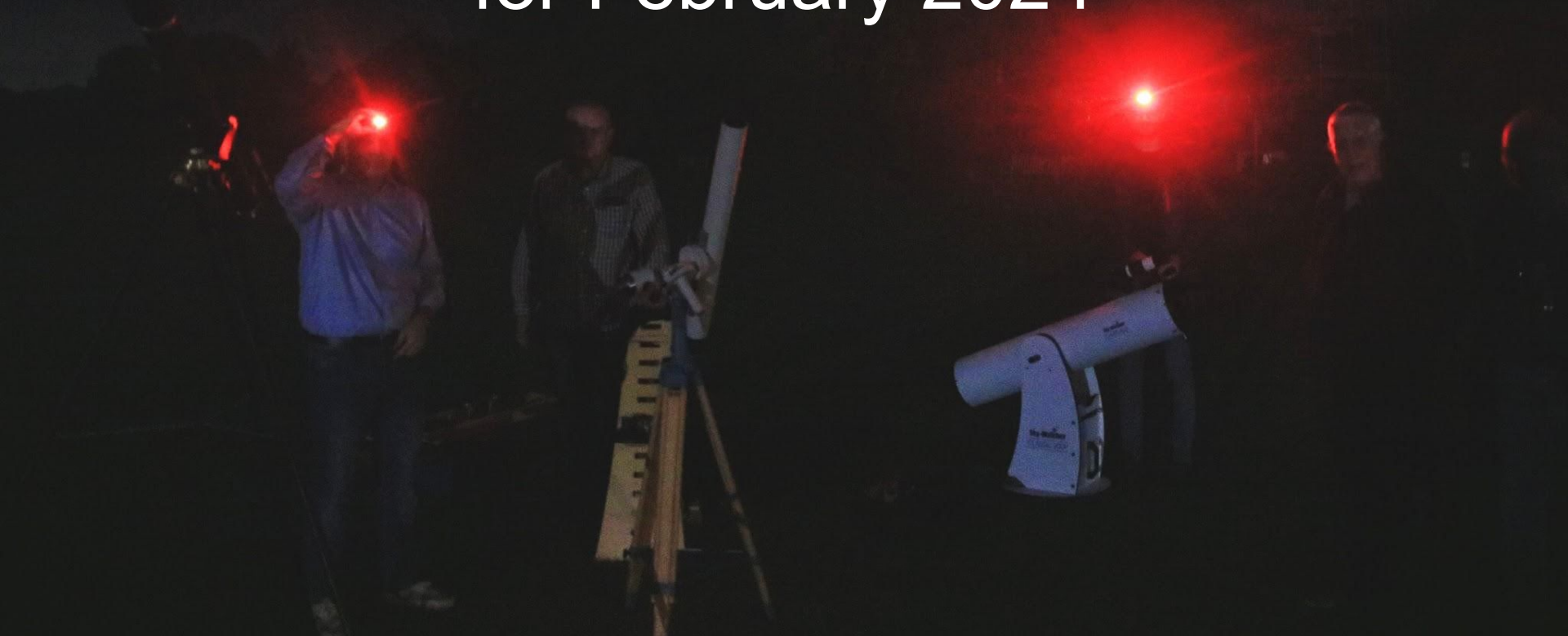




Orpington Astronomical Society

# Observing Officer's report for February 2024



# Sky chart

1/02/2024

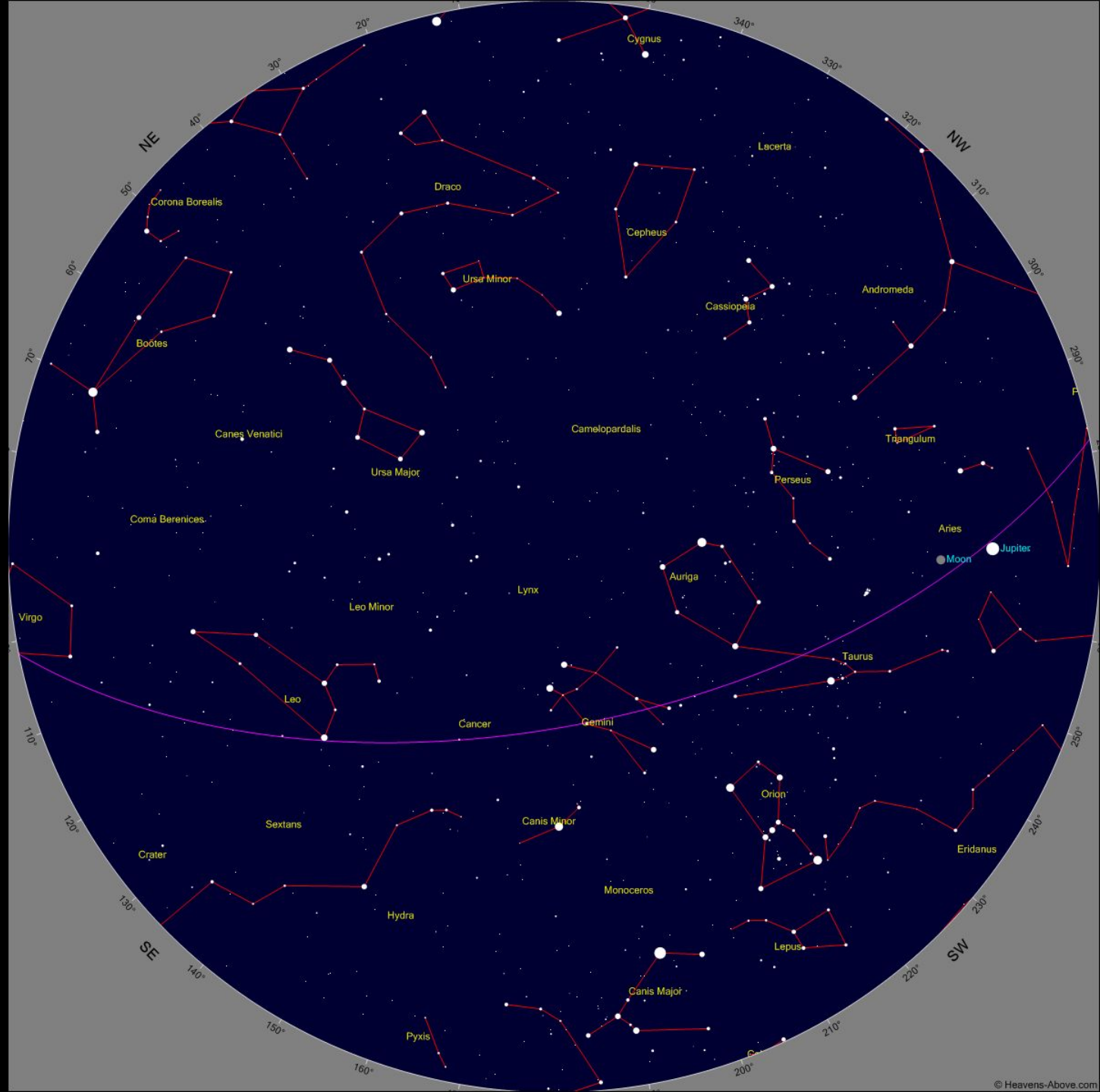
23:00

15/02/2024

22:00

28/02/2024

21:00



Source  
<https://heavens-above.com/>

# Phases of the Moon

3<sup>rd</sup> quarter



2<sup>nd</sup> Feb  
23:18

New Moon



9<sup>th</sup> Feb  
22:59

1<sup>st</sup> quarter



16<sup>th</sup> Feb  
15:00

Full Moon



24<sup>th</sup> Feb  
12:30

# Sun Phenomena in February

Date	Twilight starts *)	Rise	Set	Twilight ends *)	Day length
1 <sup>st</sup>	5:43	7:38	16:48	18:43	9:10
15 <sup>th</sup>	5:22	7:14	17:13	19:06	10:00
28 <sup>th</sup>	4:57	6:47	17:37	19:28	10:49

\*) Astronomical twilight

# Planets in December

Mercury - difficult to see

Venus - poor visibility

Mars - very difficult to see

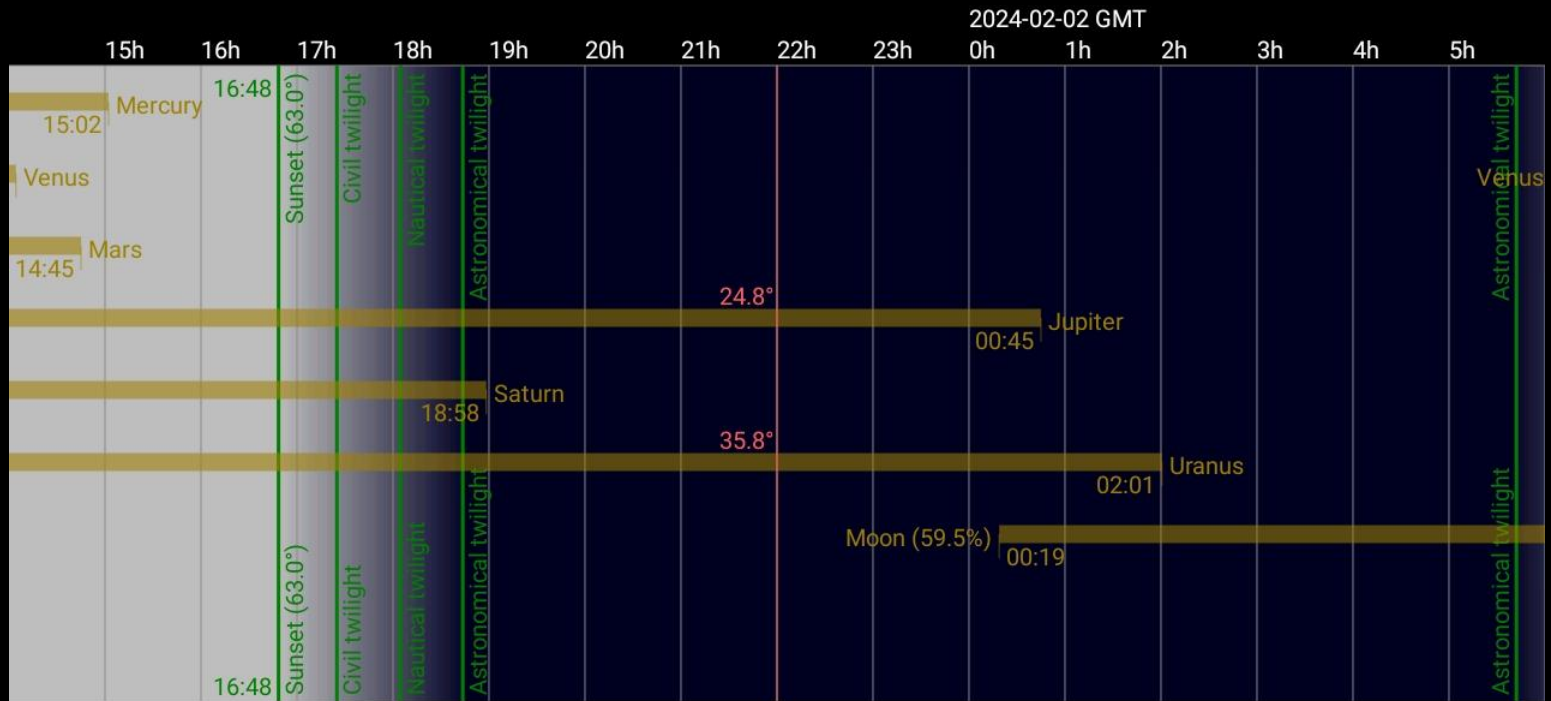
Jupiter - good visibility @-2.3 mag

Saturn - difficult and very difficult to see

Uranus - average visibility

Neptune - extremely difficult to see

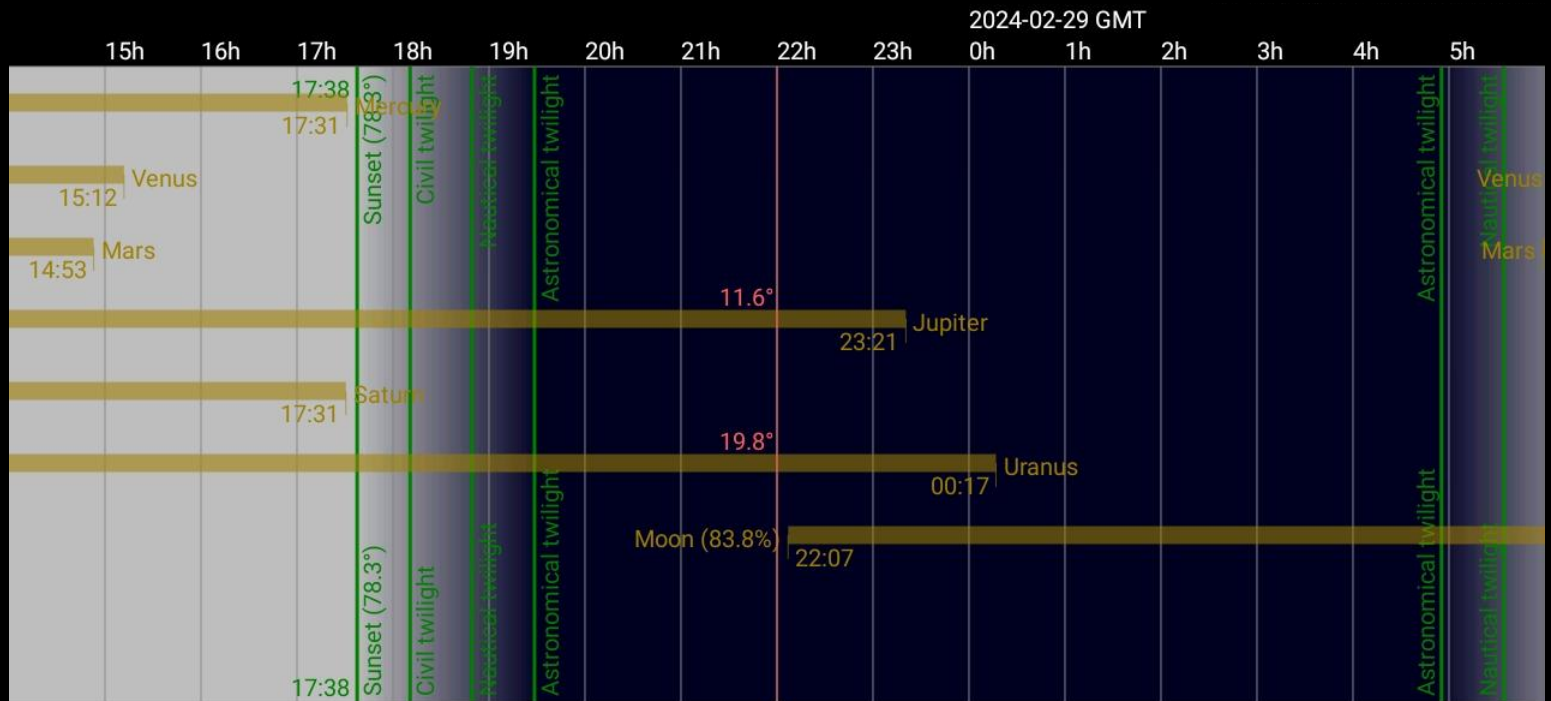
# 1st February



# 15th February



# 28th February





27 Jan 14:58 Mercury-Mars planetary conjunction (not visible due to proximity of Sun)

22 Feb 7 h: Venus-Mars planetary conjunction (not visible)

28 Feb 8 h: Mercury superior conjunction (not visible)

28 Feb 14:58 Mercury-Saturn planetary conjunction (not visible)

28 Feb 21 h: Saturn conjunction (not visible)



**The next Observing evening will be held here  
at the OVMH on Thursday 15<sup>th</sup> February  
at 20:00.**

# At the observing evening we will be observing:

- Moon (6.6 days old, 42% lit) in close proximity of Uranus (5.7 mag)
- Jupiter @-2.3 mag
- Pleiades and Hyades open clusters
- Leo, Cancer, Gemini and Taurus constellations
- Great Orion Nebula
- Leo triplet with a bit of luck

Sunset 17:13

Astronomical twilight: 19:06



# Informal meetings

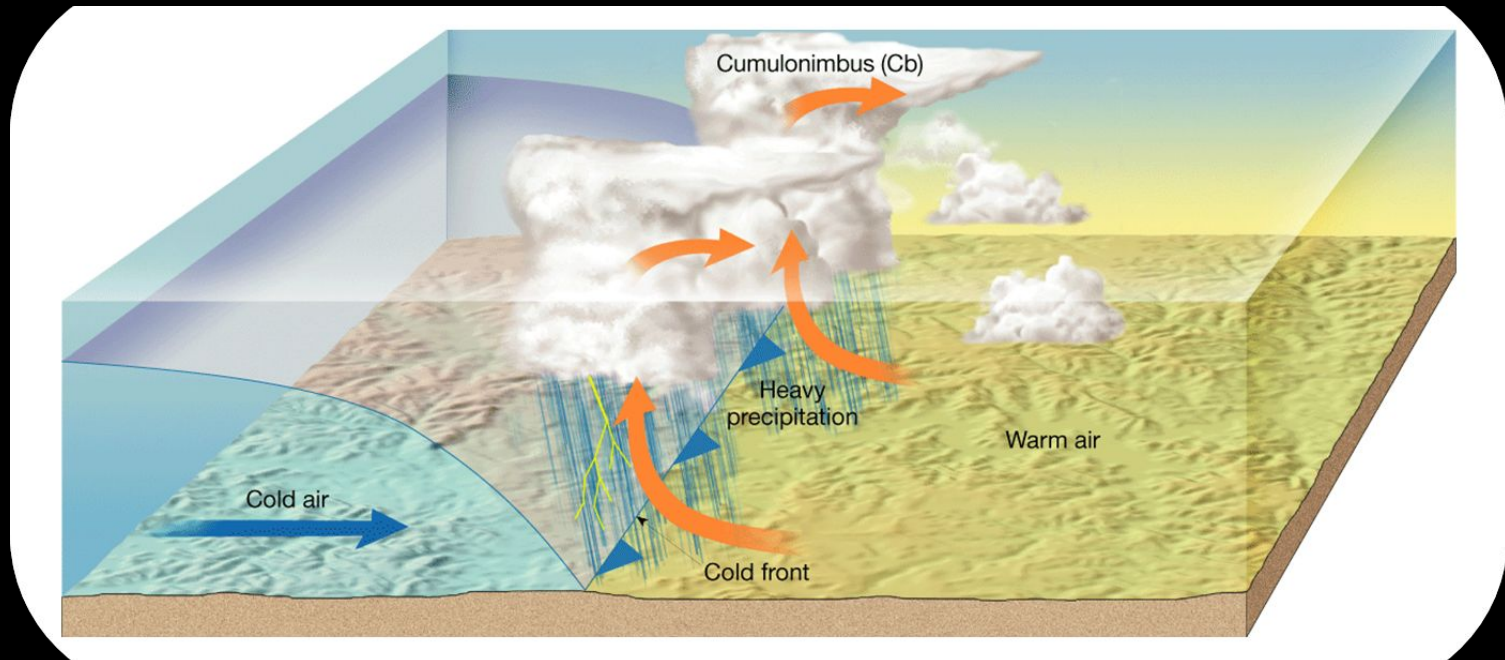
The first informal observing meeting will take place in the carpark of Otford Memorial Hall on Friday, 9th February, 8pm.

These will hopefully be taking place on every second Friday of the month from January to May, and again from September to December.

There will be no access to facilities at the hall so come prepared, especially if evening is cold.

Keep an eye on WhatsApp channel as these might be announced or cancelled at a short notice.

# Cold weather front



Cold air is advancing and pushing underneath warmer air. This is because the cold air is 'heavier,' or denser, than the warm air. Cold weather front arrives almost unexpectedly bringing much more sudden change of weather with heavier rainfall, stronger, gusty winds and even thunderstorms.

## Weather and astronomy

On average, cold fronts are about twice as steep as warm fronts and advance more rapidly than warm fronts do.

As a cold front approaches, towering clouds often can be seen in the distance.

Once the cold front has passed, temperatures drop and wind shifts. The weather behind a cold front is dominated by a cold air mass and weather clears quickly...

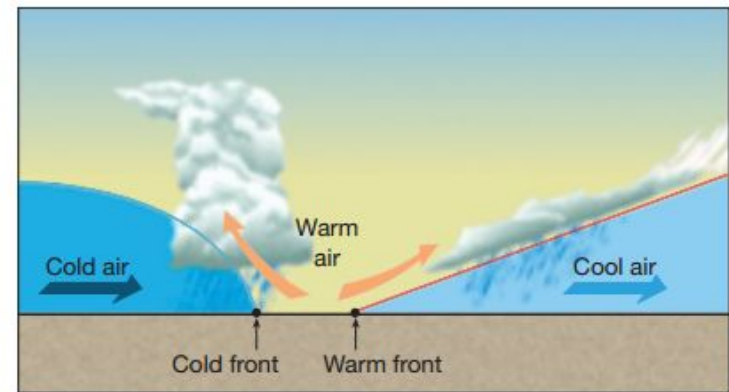
but some isolated showers might follow behind the front.

# Occluded front

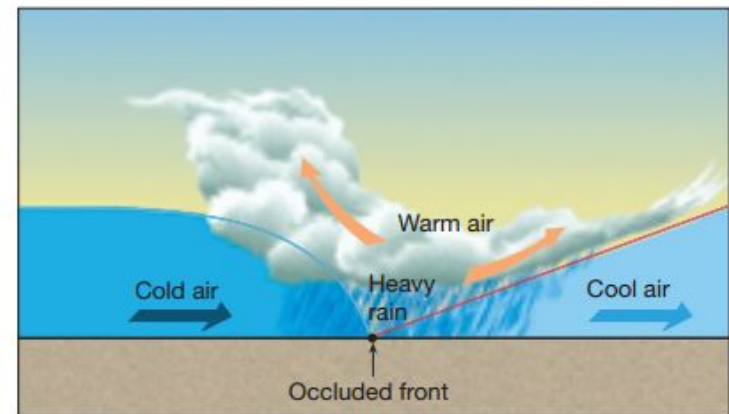
Cold air is always advancing faster and catches up with the warm weather front.

A wide variety of weather can be found along an occluded front and depends on the level of advance of the cold front against the warm.

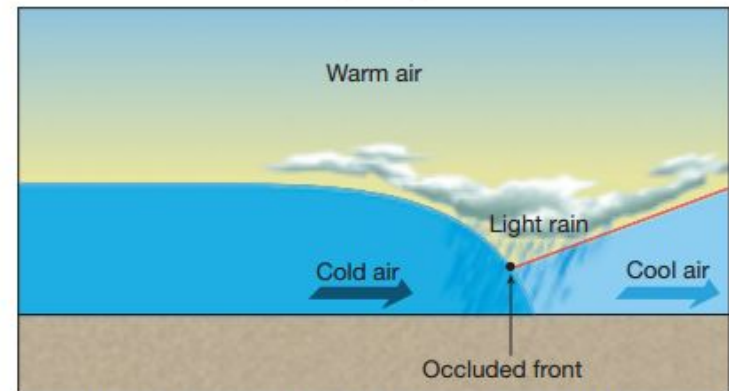
... to be continued



**A** A cold front moves toward a warm front, forcing warm air aloft.



**B** A cold front merges with the warm front to form an occluded front that drops heavy rains.



**C** Because occluded fronts often move slowly, light precipitation can fall for several days.



Thank you

