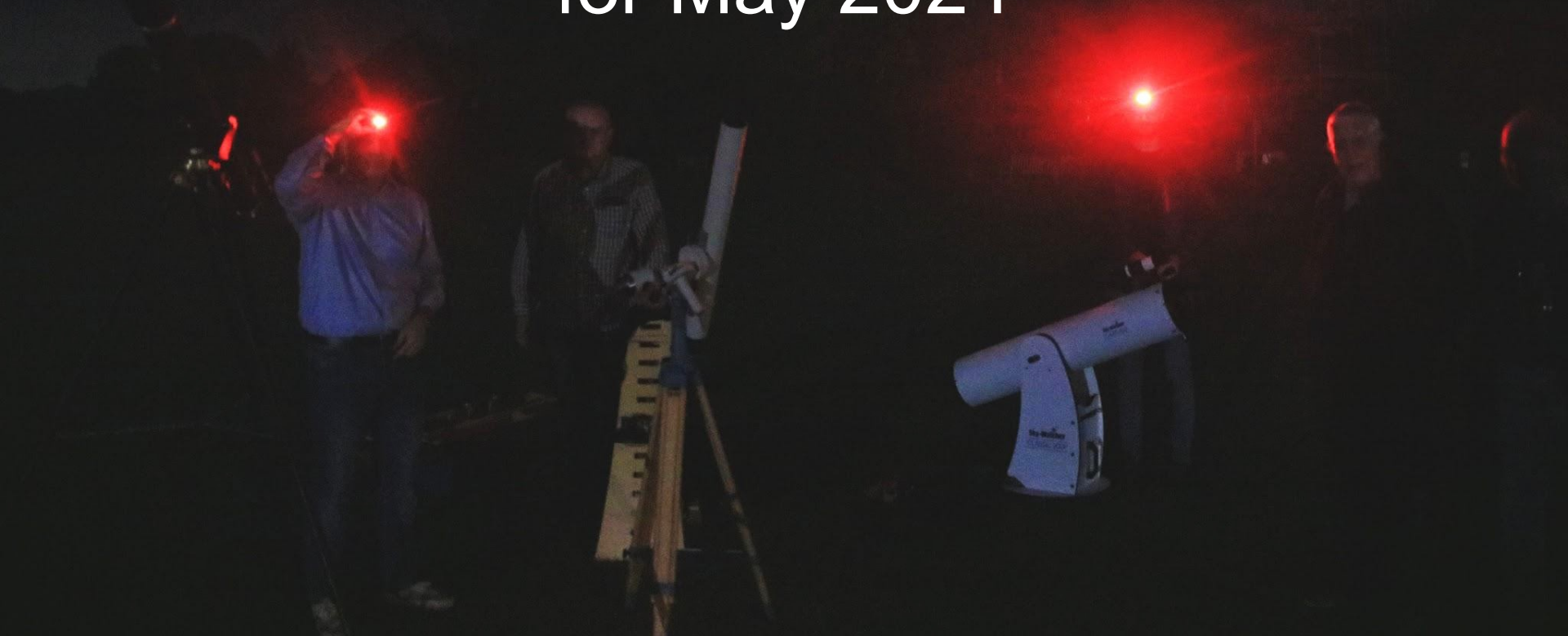




Orpington Astronomical Society

Observing Officer's report for May 2024



Sky chart

1/05/2024

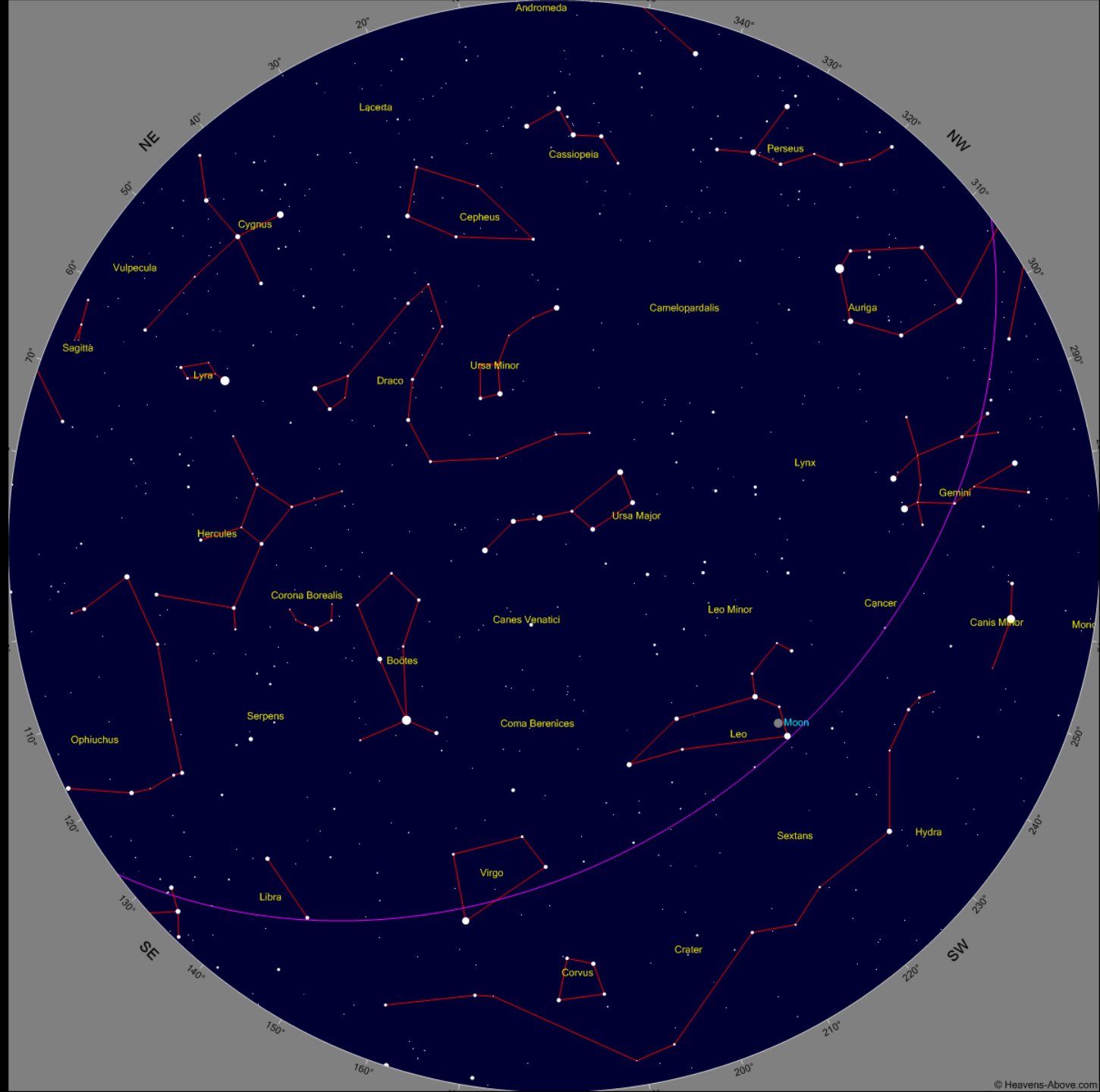
23:00

15/05/2024

22:00

28/05/2024

21:00



Source

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

Phases of the Moon

3rd quarter



1st May
12:27

New Moon



8th May
4:21

1st quarter



15th May
12:48

Full Moon



23rd May
14:53

Sun Phenomena in May

Date	Twilight starts *)	Rise	Set	Twilight ends *)	Day length
1 st	3:02	5:31	20:23	22:53	14:52
15 th	2:06	5:07	20:45	23:49	15:37
28 th	rest of night	4:51	21:02	rest of night	16:11

*) Astronomical twilight

Planets in May

M - Morning sky, before sunrise, E - evening sky, after sunset

Mercury - very difficult to see becoming difficult to see (E)

Venus - not visible (M)

Mars - slightly difficult to see (M)

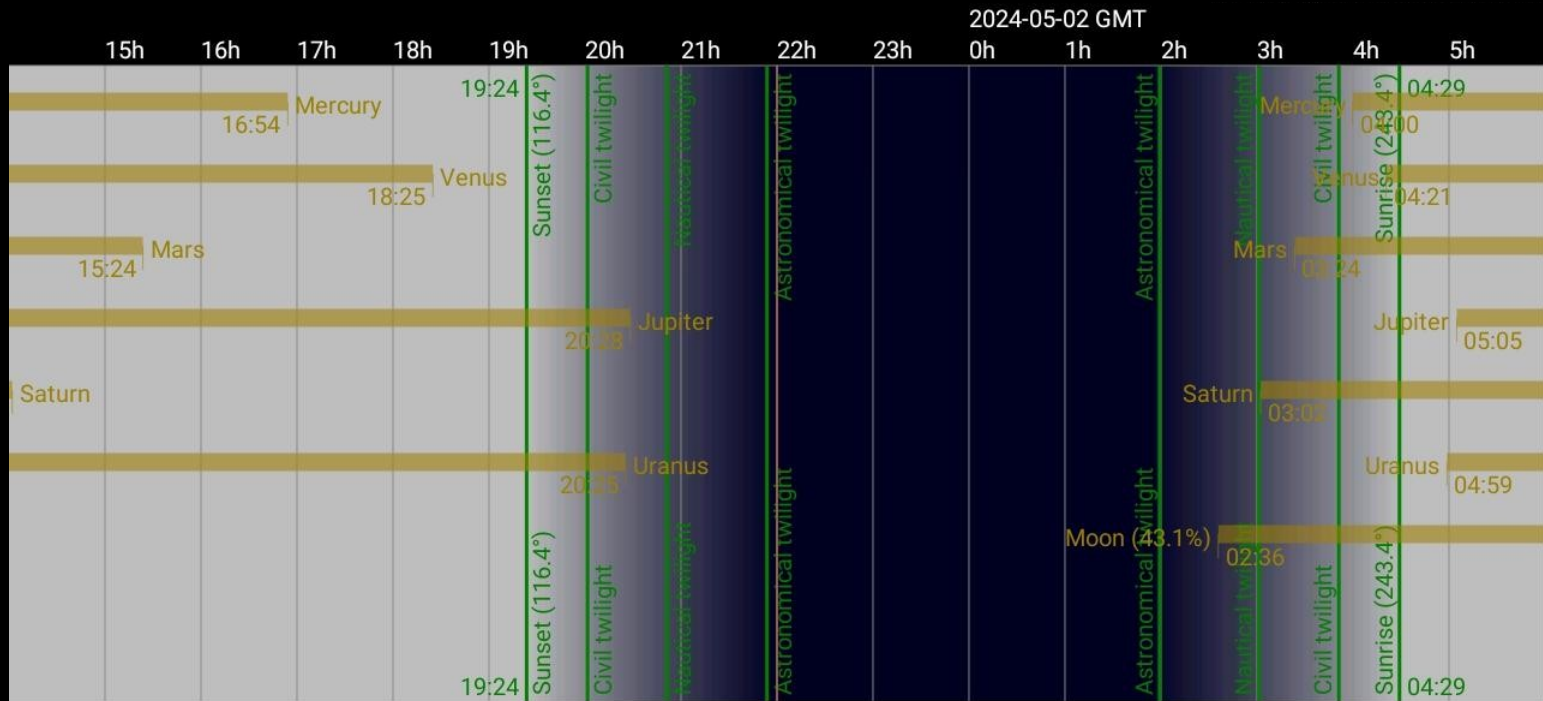
Jupiter - not visible

Saturn - slightly difficult to see (M)

Uranus - extremely difficult to see (E)

Neptune - extremely difficult to see (M)

1st May



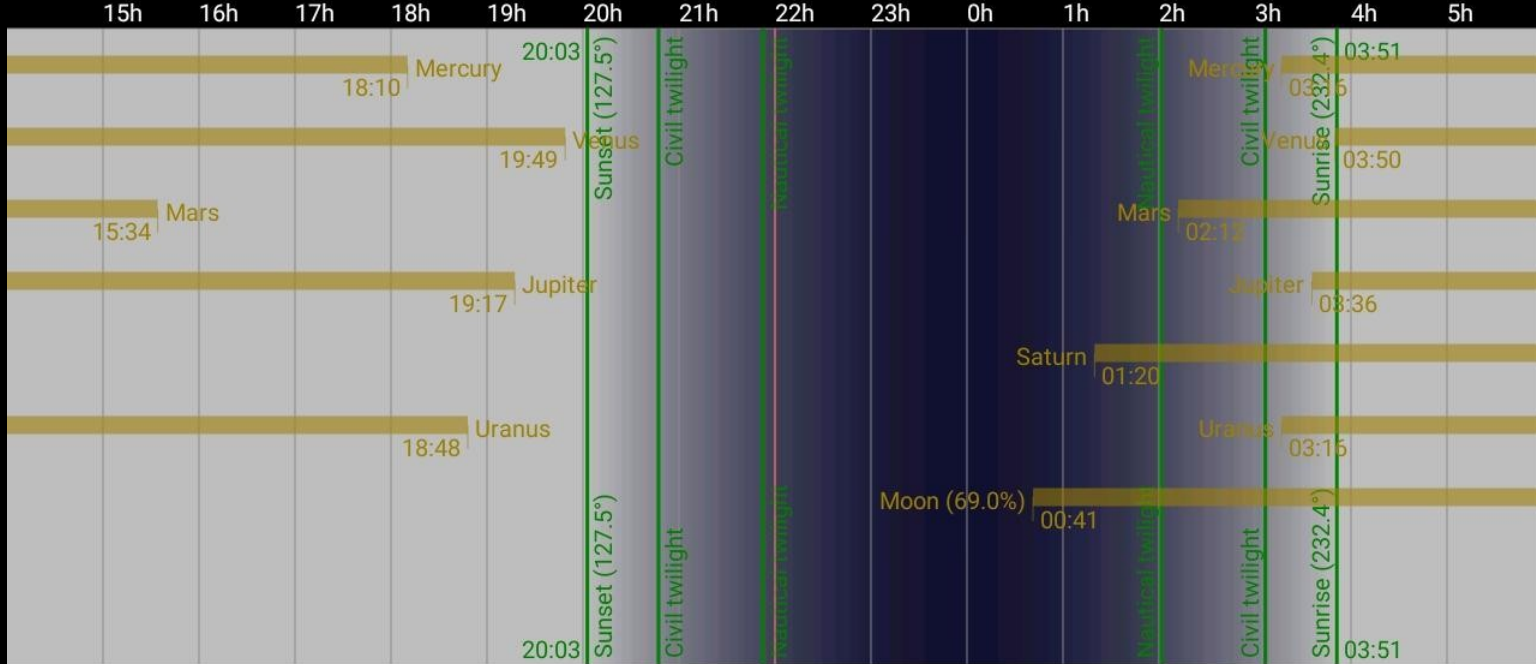
15th May

2024-05-16 GMT



28th May

2024-05-29 GMT



5-6 May: Eta Aquarids meteor shower

09 May 21 h: Mercury greatest western elongation

13 May: Uranus conjunction with Sun (not visible)

18 May: Jupiter conjunction with Sun (not visible)

23 May: Jupiter-Venus planetary conjunction (not visible)

Eta Aquarids meteor shower

Period: 19 Apr – 28 May

Peak: 5–6 May

Maximum intensity: Up to 50 meteors per hour

Parent: 1P/Halley

The Eta Aquarids are a meteor shower associated with Halley's Comet.

There is no sharp peak for this shower, but rather a broad maximum with good rates that last approximately one week centered on 5th May



https://en.wikipedia.org/wiki/Eta_Aquariids



**The next Observing evening will be held here
at the OVMH on Thursday 16th May
at 20:00.**

At the observing evening we will be observing:

- Moon (8 days old, 63% lit) in Virgo passing Meridian @20:13
- Galaxies M31, M81
- Open clusters M44, The Perseus Double Cluster (C14)
- Globular clusters M13, M3, M92

Sunset 20:46

Astronomical twilight: 23:55



Informal meetings

The next, and last for this season, informal observing meeting will take place in the carpark of Otford Memorial Hall on Friday, 3rd **May**, 9pm (change of time due to late twilight) with alternative fallback dates on Saturday, 4th or Sunday, 5th.

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 changes might be announced at a short notice.

Weather forecasting history

In 650 BC, the Babylonians predicted the weather from cloud patterns as well as astrology.

In about 350 BC, Aristotle described weather patterns in *Meteorologica*.

Chinese and Indian weather prediction methods date as far back as 300 BC.

In 904 AD, Ibn Wahshiyya's *Nabatean Agriculture*, discussed the weather forecasting of atmospheric changes; signs of rain based on observation of the lunar phases; and weather forecasts based on the movement of winds.

Weather forecasting history

- 17th century: first kind-of-thermometer invented by Galileo Galilei, barometer by Evangelista Torricelli and anemometer by Robert Hooke
- 18th century: mercury thermometer invented by Daniel Gabriel Fahrenheit, Celsius temperature scale proposed by Anders Celsius (also done some work on aurora borealis)

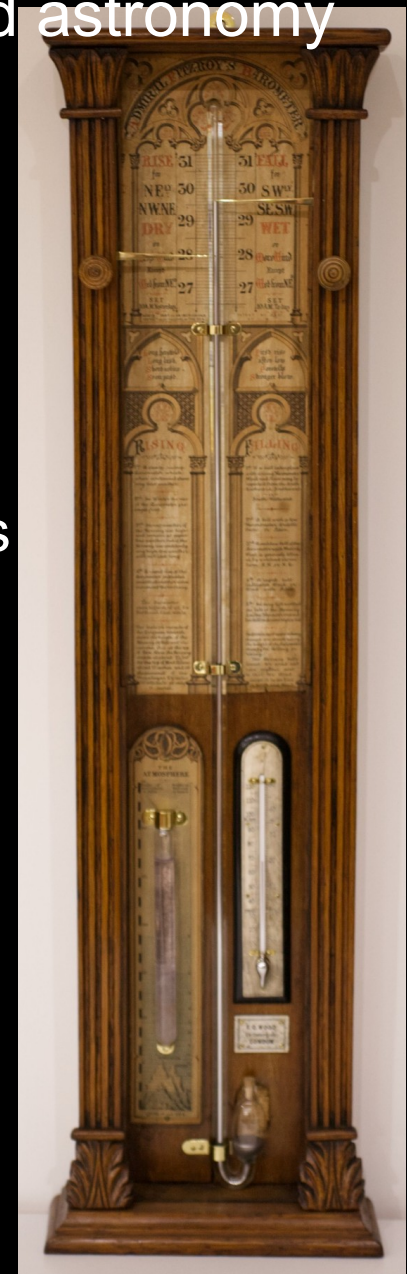
Weather forecasting history

The modern age of weather forecasting began and got significantly accelerated with the invention of the electric telegraph in 1835.

An officer of the Royal Navy Francis Beaufort and his protégé Robert FitzRoy are credited with the birth of forecasting as a science.

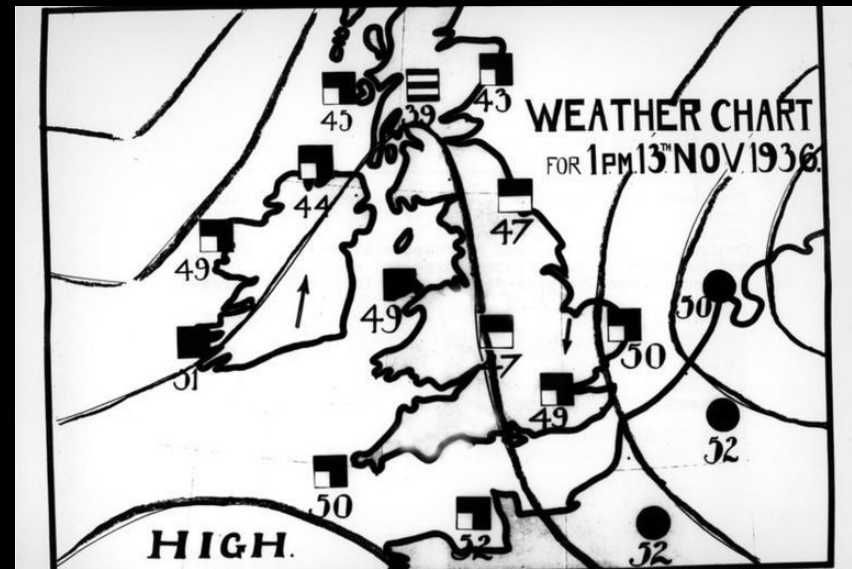
Robert FitzRoy

- developed system of charts
- set up 15 land stations to transmit to him daily reports of weather at set times
- warning service for shipping was initiated in February 1861
- the first daily weather forecasts in The Times in 1861



Weather forecasting history

- 1911, the Met Office began issuing the first marine weather forecasts via radio transmission
- The world's first televised weather forecasts, including the use of weather maps, were experimentally broadcast by the BBC in November 1936.



- ... and became a norm in 1949.
- first TV weather forecast in front of the map in 1954

Sources of information

- traditional tools: thermometers, barometers, hygrometers, anemometers, pyranometers (solar radiation), rain gauges, wind vanes,
- more sophisticated: present weather sensors (type of precipitation), disdrometers (drop size distribution), transmissometer (visibility), ceilometer (cloud ceiling), ultraviolet index sensors etc.
- radiosondes (balloons with automated miniature weather stations)
- satellite data (first weather satellite 1957)
- weather radars (doppler radar effects discovered during World War II)

Weather websites

weatheronline.co.uk

metoffice.gov.uk

metoffice.gov.uk/weather/maps-and-charts/surface-pressure

accuweather.com

lightningmaps.org

bbc.co.uk/weather

The Weather Channel

weather.com

wunderground.com

smhi.se/en/q/Swanley/2636439

Astronomy related

clearoutside.com

theweatheroutlook.com

astrospheric.com

metcheck.com/HOBBIES/astronomy_forecast.asp?location=Orpington+Astronomical+Society&locationID=&lat=51.3133&lon=0.189

Thank you

