

PREDICTING A THUNDERSTORM A WEEK AHEAD

Quick Start Now

Go to <https://barometricpressure.app>



Select button
Use my location



Scroll down the screen
and select button



7 days

Move your cursor along the barometric pressure curve until you reach the lowest point on the forecast:



Note down the time and date of lowest point (spike down minimum) if **below 1009 mb** as shown on the curve highlighted by your cursor.

The time needs to be in the afternoon or evening for storms on land. If the pressure is above 1009 mb, there can be no storms.

Storm: evening Saturday 28 Dec.

Storm fundamentals

The sea level pressure at the outermost boundary of a thunderstorm is 1009 mb. A thunderstorm cannot form when the pressure remains above 1009 mb.

Even when the pressure is below 1009 mb, no storms can occur if the pressure is steady or rising, or if falling pressure has not reached the overall minimum.

These fundamentals are based on the laws of physics on which we all rely.

Figure 1. Thunderstorm pressure

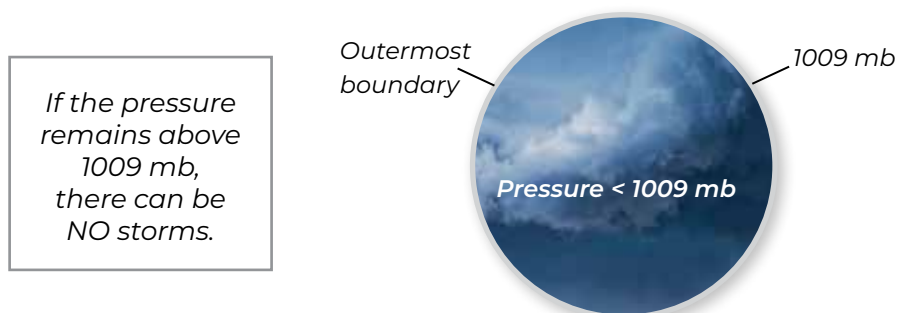
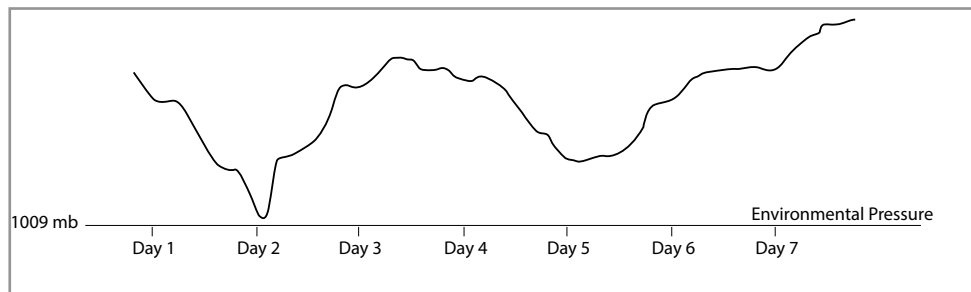


Figure 2. No storms possible if pressure remains above 1009 mb.



You will also now be able to predict with certainty when there will be no storms. This alone will keep you in good stead for the rest of your life!

You are now able to predict when a storm will occur in the next 7 days at home or on your holiday.

Do one storm prediction at a time.

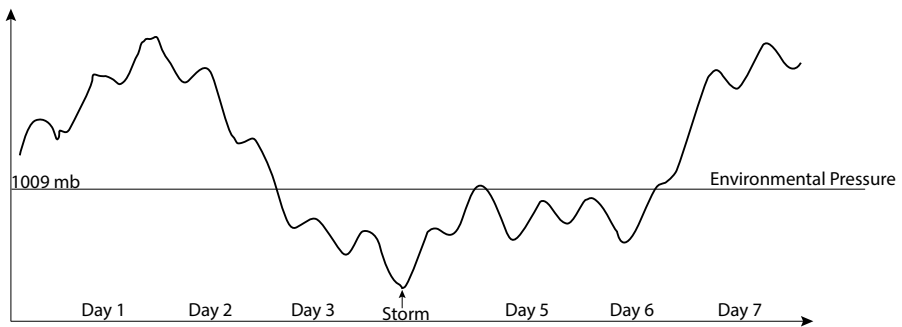
Let me know how you went: (rob@worldstormcentral.co)

Barometric pressure curve forecast

The website *barometricpressure.app* provides a pressure forecast 7-day graph which shows the predominant pressure curve **minimum** over the 7 days. This overall minimum will persist in the forecast over time until eventual storm onset. You will notice that its forecast date will not vary.

Look for when the pressure curve spikes down below 1009 mb to reach the overall lowest point on the 7-day forecast.

Figure 3. 7-day Barometric Pressure Forecast



It requires a **storm** or passing cold front (rare in Storm Season) for the pressure to suddenly go from rapidly falling to rapidly rising.

A storm will occur when the pressure curve spikes down to below 1009 mb to reach the lowest point on the 7-day forecast.

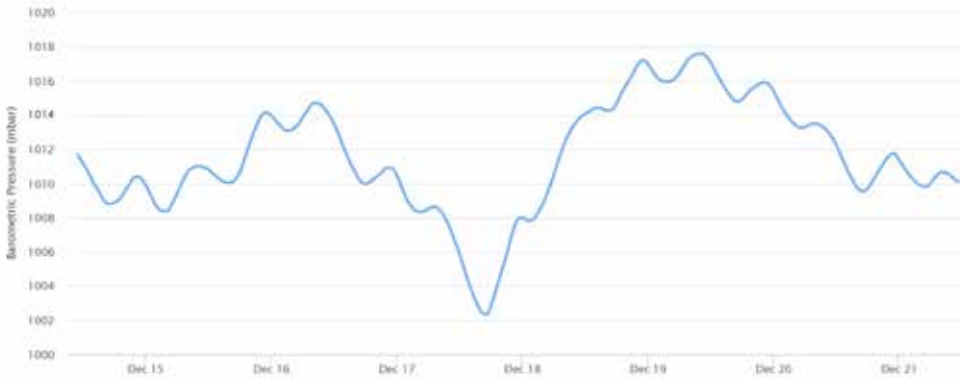
This is how you determine which days are Storm Days.

Example

On 14 December 2024, the following 7-day barometric pressure forecast curve was displayed. You can see that the lowest point on the 7-day forecast curve below 1009 mb occurred on 17 December 2024. The thunderstorm occurred as expected on that day.

See Figure 4 on next page.

Figure 4. Thunderstorm pressure



Predicting a thunderstorm on Storm Day

While over land, thunderstorms are most likely to occur at the warmest, most humid part of the day, which is usually the afternoon or evening. Over the ocean they are most likely to occur in the early hours of the morning before dawn. You will need the **Marine Barograph** app if you wish to predict the type of storm and its intensity. App works on land and at sea. A storm will occur at your **immediate location** when the pressure falls more than 3.0 mb in 3 hours or less to below 1009 mb (*The Thunderstorm Rule*).

Useful Tips

- It is only the overall minimum point (below 1009 mb) on the 7-day curve that marks when the storm will occur. The other parts of the curve are not relevant.
- Make shortcuts to the web address (URL) of the barometric pressure curve for use where you live and one for use where you holiday.

The following will give you independent confirmation of your prediction if ever needed:

- The cloud base height of storm clouds is of the order of 10 km whereas that of other clouds is an order of magnitude less. The predicted temperature fall before storm onset is up to about 10°C. See the Windy.com website.
- Usually, one storm spike will dominate a 7-day period. Check any second curve minimum to see if it is valid. For example, a minimum occurring on land at 4 am may not be valid.