Here in Miami, we are regularly reminded about Mother Nature’s awesome power during hurricane season. But since our great state is as flat as a pancake, we don’t spend much time worrying about volcanoes.

Across the Atlantic, Mount Vesuvius in Italy remains an active volcano, though it has been dormant since 1944. Still, hundreds of small seismic events are recorded in the area every year, subtle signs that Vesuvius might one day awaken from its long slumber.

You may be surprised to learn that geologists no longer rely on the Richter scale. It was replaced by the Moment Magnitude (Mw) scale, which provides more accurate readings for large earthquakes.

For smaller, local events like those near Vesuvius, scientists use the Duration Magnitude (Md) scale, which measures how long the ground shook strongly enough to be detected by sensors.

The dataset we looked at this week included measurements on the Md scale. I created a calendar heatmap to visualize the number of seismic events per month over the past decade. You’ll notice activity picked up a bit in 2024—something to keep an eye on!

Check out my full notebook on GitHub: https://github.com/stevenvillalon/tidytuesday/tree/b9913e4bdb14169f3d370b2e193270a6b5da7449/2025-05-13-MOUNT.VESUVIUS

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