ESSL Newsletter 2026-6

June 2026

20 years of ESSL – monthly jubilee topic

As part of the celebrations of **20 years of ESSL**, we are publishing a series of monthly jubilee topics highlighting different aspects of our work and community. Each month, we also briefly revisit a historical high-impact event featured as the “topic of the month” in the ESSL calendar. This time, we focus on the **tornado in Alfaro in 1826**.

The Alfaro tornado (La Rioja, Spain) on 10 June 1826

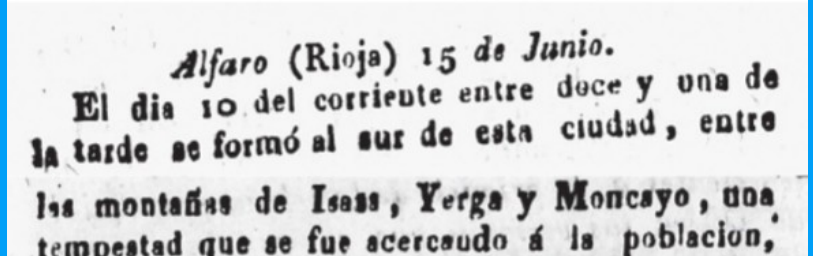
On **10 June 1826, at approximately 14:00 UTC**, a tornado occurred **near Alfaro, in the La Rioja region, Spain**. The event was documented in a newspaper article published on 28 June 1826 in **the Diario de Zaragoza**. The storm, formed in the vicinity of Yerga mountains, produced large hail, which caused significant damage to crops, especially barley and hemp. This was followed by what the report describes as "a furious whirlwind, forming violent eddies and a frightening roar". The tornado uprooted and snapped several thousand olive trees, including “some of the sturdiest trees” in the region, and transported debris to a distance of nearly 3 km. The article also mentioned that people were lifted off the ground by the wind. One

person was carried a distance of roughly 700–800 meters, but fortunately without serious injury. The most severe damage was concentrated in El Cascajo, where olive groves and other cultivated land were left "as if felled by an enemy army".

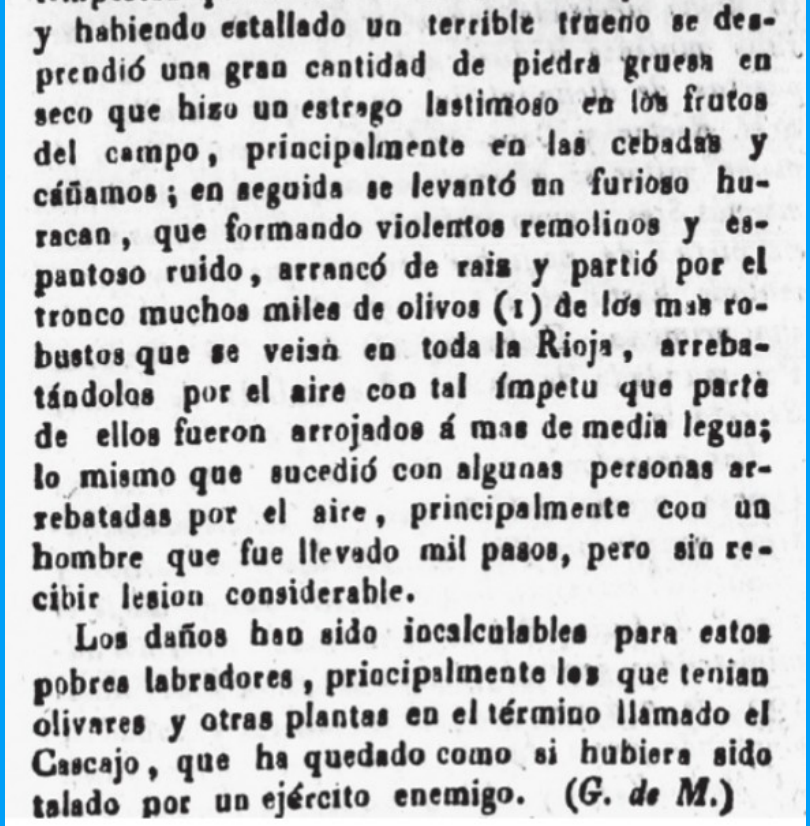
Location of the Alfaro tornado in Spain (red triangle; source: ESWD).

This article is a good example of the kind of documentary evidence that can extend the historical tornado records. Newspaper reports like the one from the Diario de Zaragoza, when carefully assessed, can provide information on the date, time, location, path, and damage characteristics of past severe convective storms. This information can then be used to supplement severe weather databases with cases from the eighteenth and nineteenth centuries.

Source: Diario de Zaragoza, no. 179, 28 June 1826, "Noticias de España," correspondence from Alfaro (Rioja), dated 15 June 1826.


Alfaro (Rioja) 15 de Junio.

El dia 10 del corriente entre doce y una de la tarde se formó al sur de esta ciudad, entre las montañas de Isasa, Yerga y Moncayo, una tempestad que se fue acercando á la poblacion,



y habiendo estallado un terrible trueno se desprendió una gran cantidad de piedra gruesa en seco que hizo un estrago lastimoso en los frutos del campo, principalmente en las cebadas y cáñamos; en seguida se levantó un furioso huracan, que formando violentos remolinos y espantoso ruido, arrancó de raiz y partió por el tronco muchos miles de olivos (1) de los mas robustos que se veian en toda la Rioja, arrebatándolos por el aire con tal ímpetu que parte de ellos fueron arrojados á mas de media legua; lo mismo que sucedió con algunas personas arrebatadas por el aire, principalmente con un hombre que fue llevado mil pasos, pero sin recibir lesion considerable.

Los daños han sido incalculables para estos pobres labradores, principalmente los que tenian olivares y otras plantas en el término llamado el Cascajo, que ha quedado como si hubiera sido talado por un ejército enemigo. (*G. de M.*)

Excerpt from the *Diario de Zaragoza* (28 June 1826) reporting on the Alfaro tornado.

Partnerships with ESSL's Institutional Members

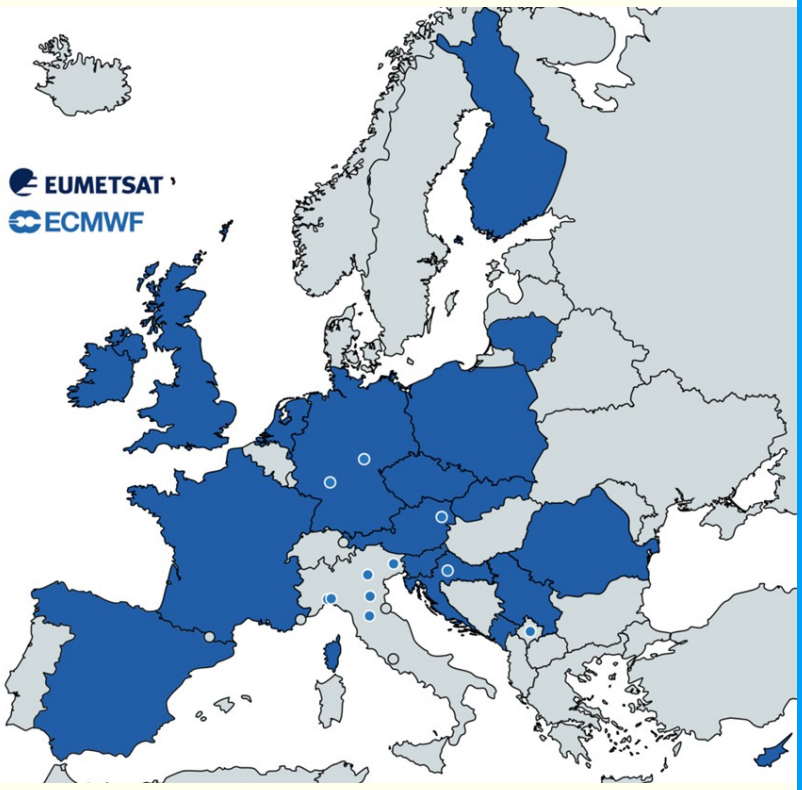
For this month's jubilee topic, we turn to ESSL's partnerships with its Institutional Members and the many ways these collaborations support research, training, and the development of services for the severe storms community.

Article by ESSL Director Pieter Groenemeijer

ESSL has cultivated diverse collaborations with its members over the years. Shortly after its establishment, the German Weather Service (DWD) became ESSL's first institutional full member. Membership benefits include access to the European Severe Weather Database, while membership fees support ESSL's costs for storm report data collection, quality control, and database development. A key early collaboration involved DWD assisting ESSL in enhancing the storm database, which, after several upgrades, remained operational from 2006 until August

2025.

Since then, ESSL's membership has expanded to include more weather services, research centres, and university departments. As of 2026, ESSL has **32 Institutional Full Members**, comprising 18 national, 3 regional, and 3 aviation weather services, as well as 2 international organizations: EUMETSAT and ECMWF.



ESSL Institutional Full Members. Full countries are blue where the National (Hydro-)Meteorological Service is a member. EUMETSAT and ECMWF are Institutional Full Members as well.

Beyond storm report data, ESSL's collaborations extend further. Since the launch of the ESSL Testbed in 2012, DWD has been a vital partner, annually requesting ESSL to evaluate its latest forecasting and nowcasting tools. These evaluations are based on input from forecasters across Europe who gather on site to work with the tools. Additionally, the Testbeds have served as a platform for collaboration with **ECMWF to test the Additive Regression Convective Hazard Models (AR-CHaMo)**. These models provide forecasters with probabilities of severe weather events, such as large hail and severe winds, using data from ECMWF's Ensemble Prediction System.

A significant partnership began in 2021 between ESSL and EUMETSAT, leveraging ESSL's expertise to introduce European forecasters to data from **Meteosat Third Generation satellites**. This initiative included organizing expert workshops, developing new data visualizations, and training over 300 forecasters to use data from the Lightning Imager and the Flexible Combined Imager, which delivers high-resolution imagery to the forecasting community.

For collaborations and services that ESSL, as a non-profit, cannot provide for legal reasons, its private spin-off, **ESSL Services**, launched in 2024, steps in. ESSL Services offers permanent access to visualization platforms like the **Weather Data Displayer and Radar Displayer**, as well as analyses to help estimate the risk of convective storms across Europe and globally.

ESSL training calendar and Testbed 2026 and 2027

Date	Activity
22 – 26 June 2026	ESSL Testbed 2026 – expert week (on invitation only)
7 – 11 September 2026	EMS Annual Meeting (co-sponsored by ESSL)
14 – 18 September 2026	ESSL-EUMETSAT Forecaster Testbed (MTG focus)
28 September 2026	20th Anniversary of the ESSL – jubilee event
29 September – 1 October 2026	IF Scale and wind damage assessment workshop
5 – 9 October 2026	ESSL-EUMETSAT Forecaster Testbed (MTG focus)
15 – 19 February 2027	HIGHLIGHT - 2nd edition of **new radar course**: Optimal use of radar data in severe storm nowcasting
1 – 5 March 2027	The legendary STANDARD every forecaster should attend at least once: Course on Forecasting Severe Convection
15 – 19 March 2027	Course – spring edition: Aviation Forecasting of Severe Convection
10 – 14 May 2027	EUMETSAT-ESSL Forecaster Training Testbed with focus on MTG – week 1
31 May – 4 June 2027	EUMETSAT-ESSL Forecaster Training Testbed with focus on MTG – week 2
7 – 11 June 2027	ESSL Testbed with focus on radar, nowcasting products and NWP – week 1
21 – 25 June 2027	ESSL Testbed with focus on radar, nowcasting products and NWP – week 2
28 June – 2 July 2027	ESSL Testbed – expert week This event is by invitation only.
13 – 17 September 2027	EUMETSAT-ESSL Forecaster Training Testbed with focus on MTG – week 3
18 – 22 October 2027	European Conference on Severe Storms – ECSS2027 in Genova, Italy
22 – 26 November 2027	Course – autumn edition: Aviation Forecasting of Severe Convection

You can find details about all events and registration at

https://www.events.essl.org/.

Unsure which course to attend? Try our online quiz!

For further information about registration, please contact us via email at events@essl.org.

Or contact us for tailored training or forecaster training on the job.

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European Severe Storms Laboratory