

Inside Typhoon Trami big beautiful eye

Sentinel-3 SLSTR RBT acquired on **24 September 2018** from 13:28:09 to 13:31:09 UTC
Sentinel-3 SLSTR RBT acquired on **25 September 2018** from 01:51:03 to 01:57:03 UTC
Sentinel-3 SLSTR RBT acquired on **25 September 2018** from 13:01:58 to 13:04:58 UTC
Sentinel-1 CSAR EW acquired on **25 September 2018** from 21:19:06 to 21:21:10 UTC
Sentinel-3 SLSTR RBT acquired on **01 October 2018** from 00:51:58 to 00:54:58 UTC

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[2D Layerstack](#)

Fig. 1 - S3 SLSTR (24.09.2018 13:31) - S8 thermal band with colour map - Typhoon Trami near its top power, it showed a large eye. [2D view](#)

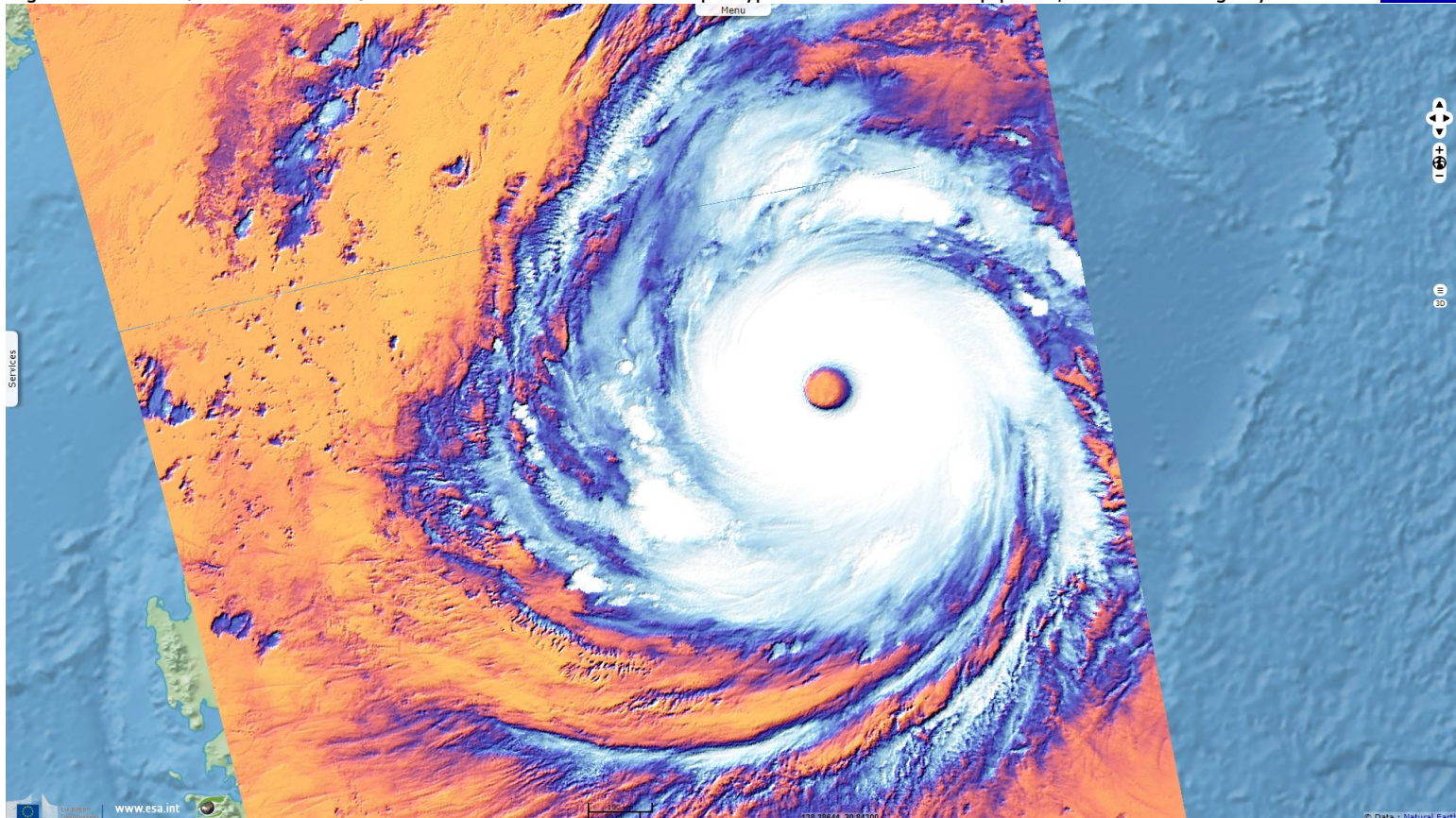


Fig. 2 - S3 SLSTR (25.09.2018 13:04) - Trami as a cat-5 typhoon, it then blew 260km/h winds. [2D view](#)

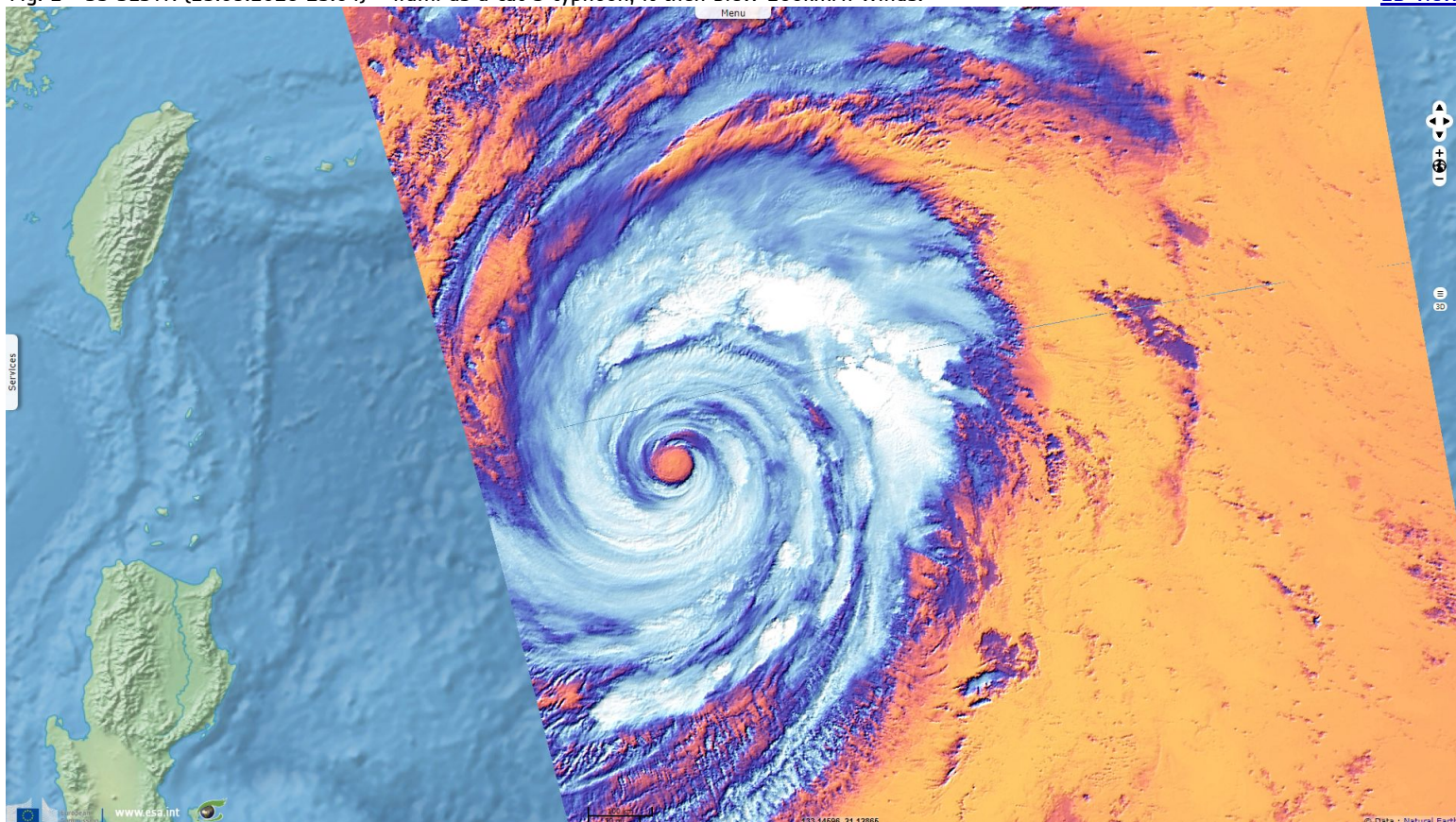
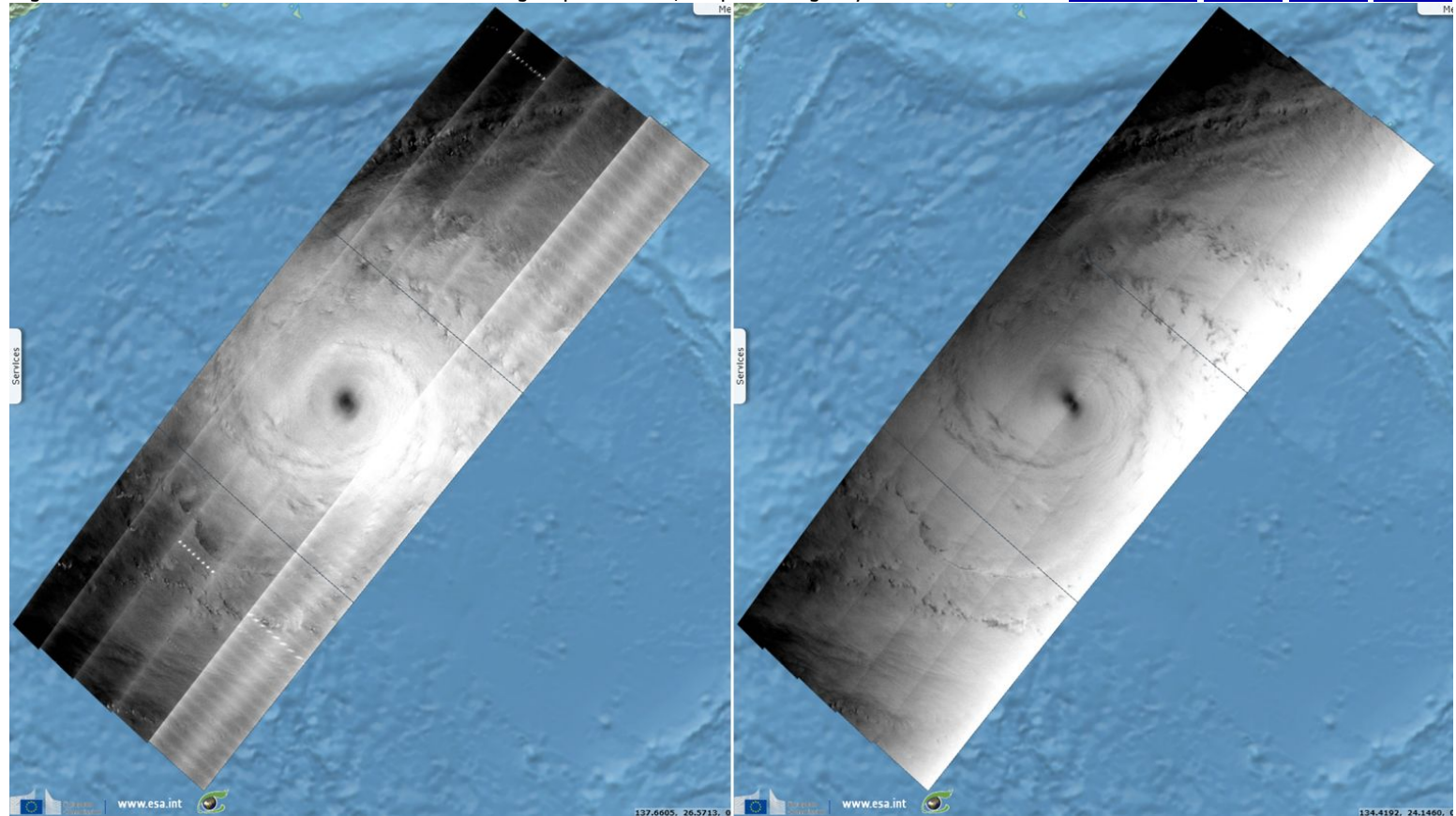


Fig. 3 - S1 EW (25.09.2018 21:20) - vh (left) & vv (right) polarisation, σ_0 processing - Eye & arms in radar. [2D animation](#) [2D view](#) [2D view](#) [2D view](#)



Harold F. Pierce and Rob Gutro of NASA's Godard Space Flight Center [wrote](#): "*GPM, a joint satellite mission between NASA and the Japan Aerospace Exploration Agency, JAXA, flew over Trami on Sept. 24, 2018 at 12:03 UTC. At that time Trami had maximum sustained winds estimated at [240 km/h]. Rainfall measurements were made using data collected by GPM's Microwave Imager [GMI] and Dual-Frequency Precipitation Radar [DPR] instruments. GPM's GMI showed the locations of extremely heavy rainfall in the super typhoon's well defined circular eye.*"

Fig. 4 - S3 SLSTR (26.09.2018 01:30) - S6,S5,S2 colour composite - Down to cat-3, Trami remained well structured. [2D view](#)

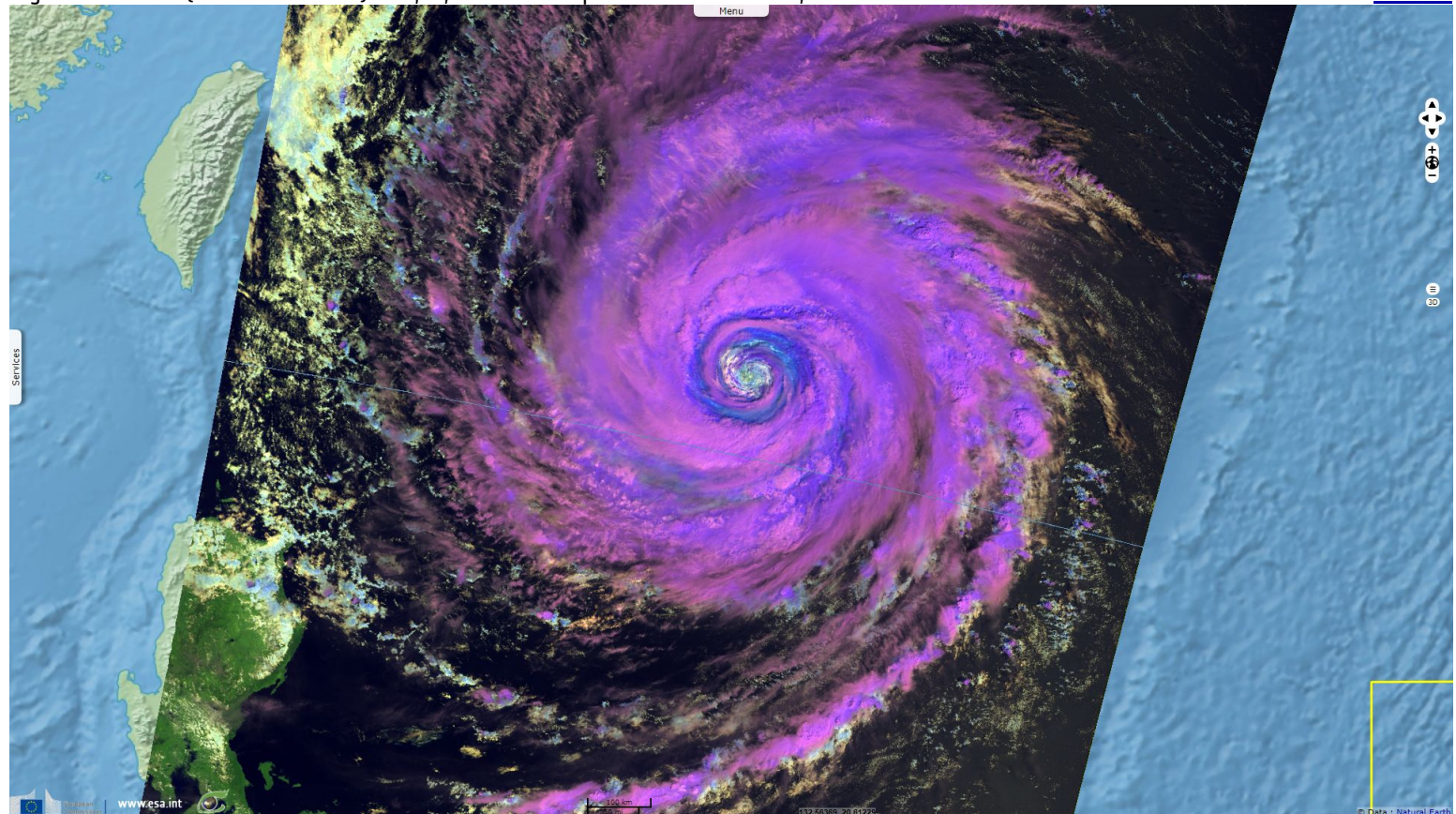
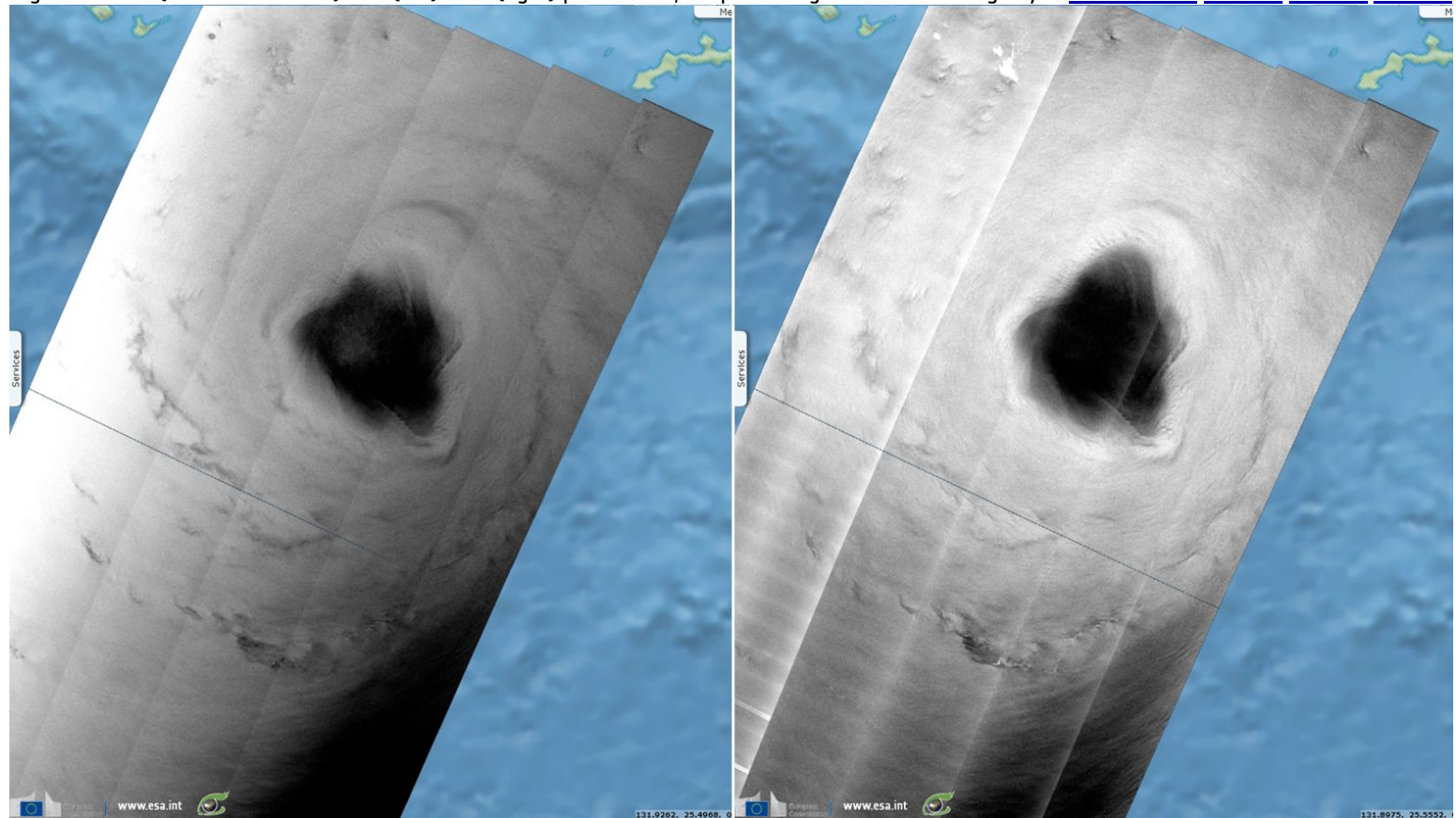


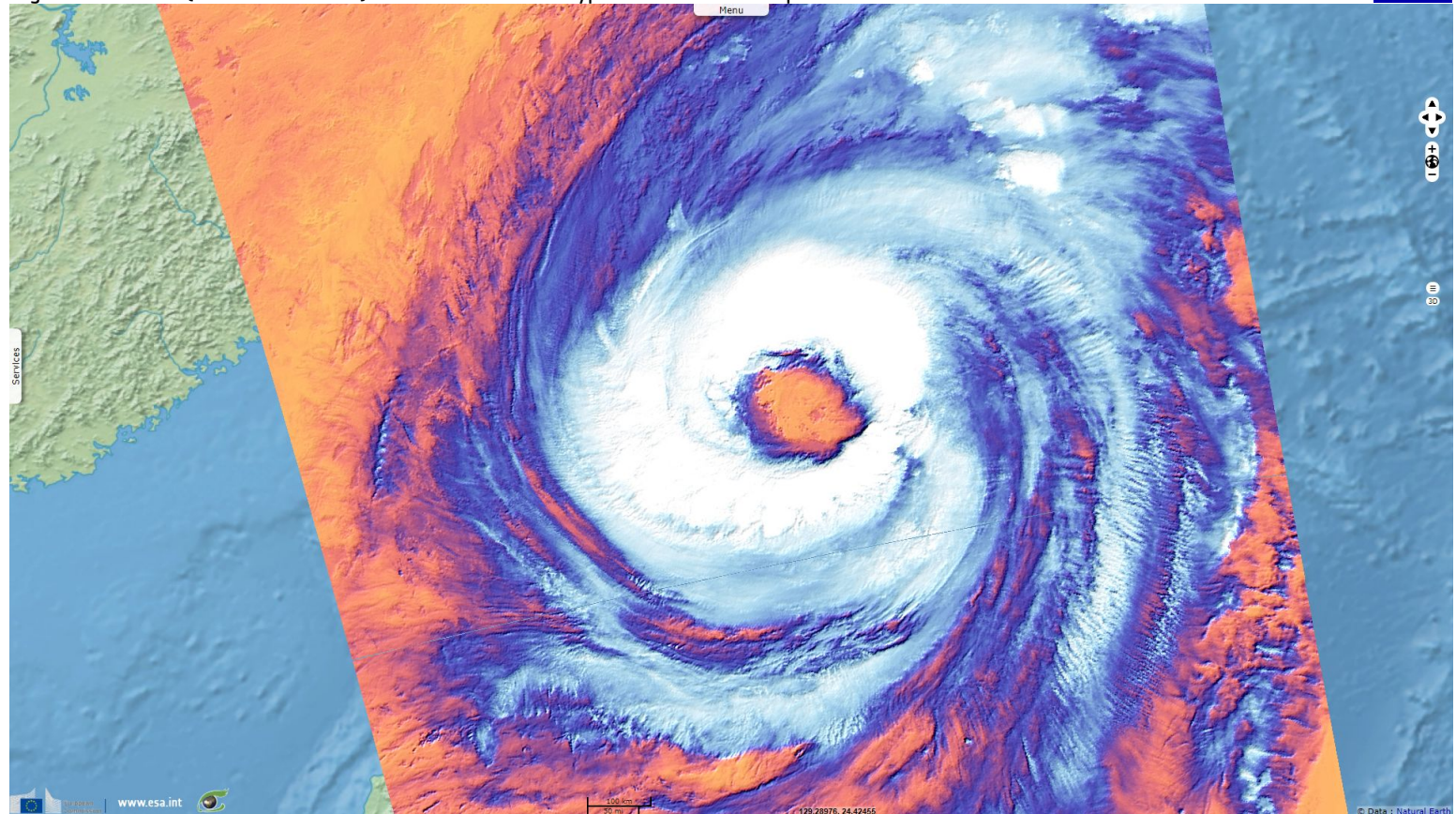
Fig. 5 - S1 EW (28.09.2018 09:35) - vh (left) & vv (right) polarisation, σ_0 processing - Zoom on its large eye. [2D animation](#) [2D view](#) [2D view](#) [2D view](#)



"The Joint Typhoon Warning Center (JTWC) used that GPM pass in an evaluation of super typhoon Trami. JTWC's summary and analysis said that, 'A 241201Z (Sept 24 at 12:01 UTC) GPM 89GHZ microwave image clearly reveals an ongoing eyewall replacement cycle with concentric rings and a moat feature evident.'"

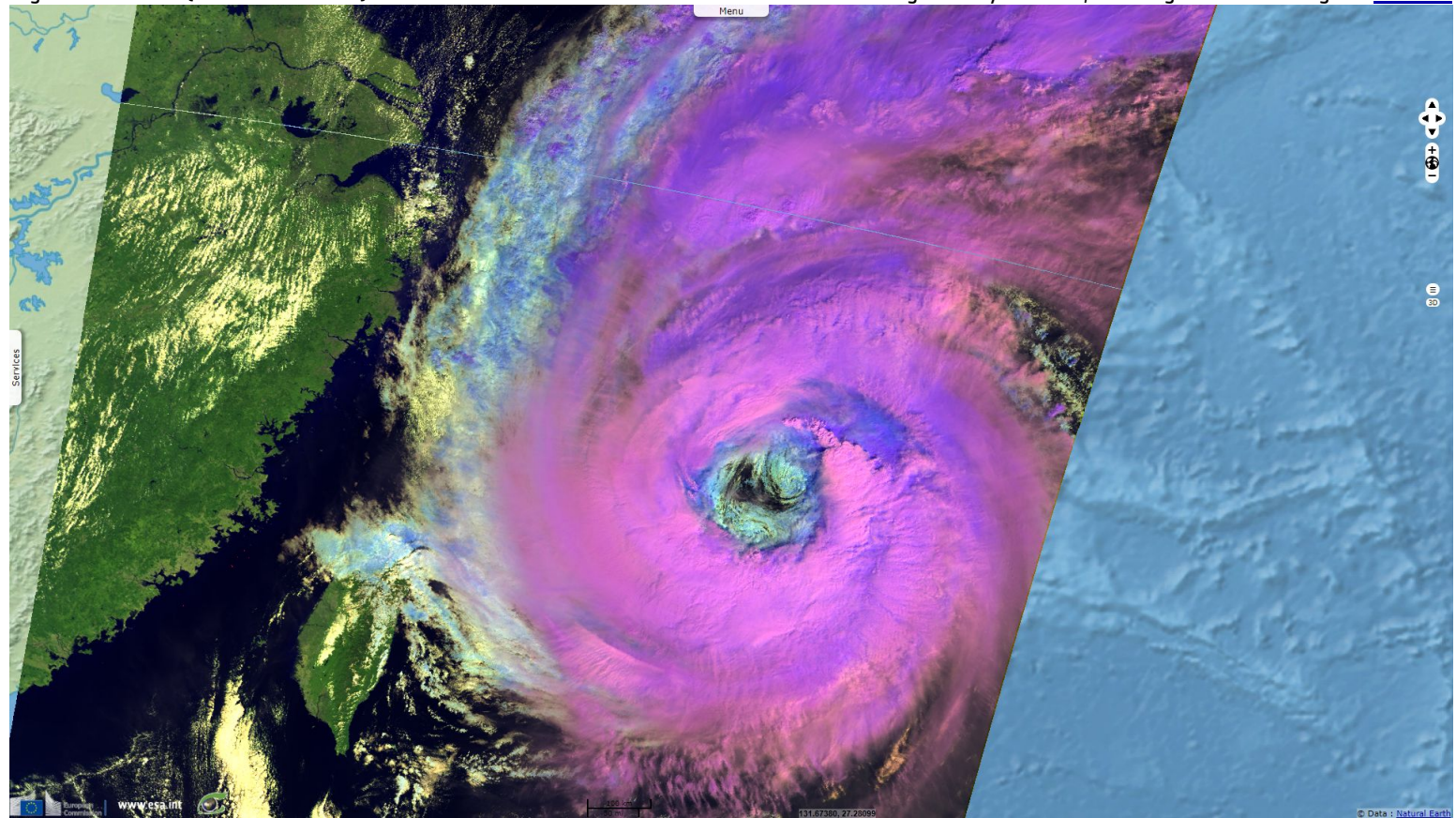
Fig. 6 - S3 SLSTR (28.09.2018 13:27) - Trami was a cat-2 typhoon when it hit Japan coast.

[2D view](#)



In another report, Rob Gutro [continued](#): "At 05:05 UTC on Sept. 28, Trami beginning to affect the Ryukyu Arc, a chain of Japanese islands that stretch southwest from Kyushu to Taiwan. Infrared satellite imagery shows Trami continues to have a wide eye with convection around the eye beginning to re-intensify."

Fig. 7 - S3 SLSTR (29.09.2018 01:50) - S1-A & -B as well as S3-A offered a mean of two images a day of Trami, allowing a close tracking. [2D view](#)



"At 11 a.m. EDT (1500 UTC) on Sunday, Sept. 30, the Joint Typhoon Warning Center issued the final advisory on the system. At that time, Typhoon Trami was located about 157 miles west-southwest of Camp Fuji, Japan and moving northeast at 28 knots (32 mph/52 kph). Maximum sustained winds were near 75 knots (86 mph/139 kph). Trami was weakening rapidly and becoming extra-tropical as it tracked very rapidly over Honshu."

Fig. 8 - S1 IW (29.08.2018 09:28) - vh (left) & vv (right) polarisation, σ_0 processing - Trami over Okinawa. [2D animation](#) [2D view](#) [2D view](#) [2D view](#)

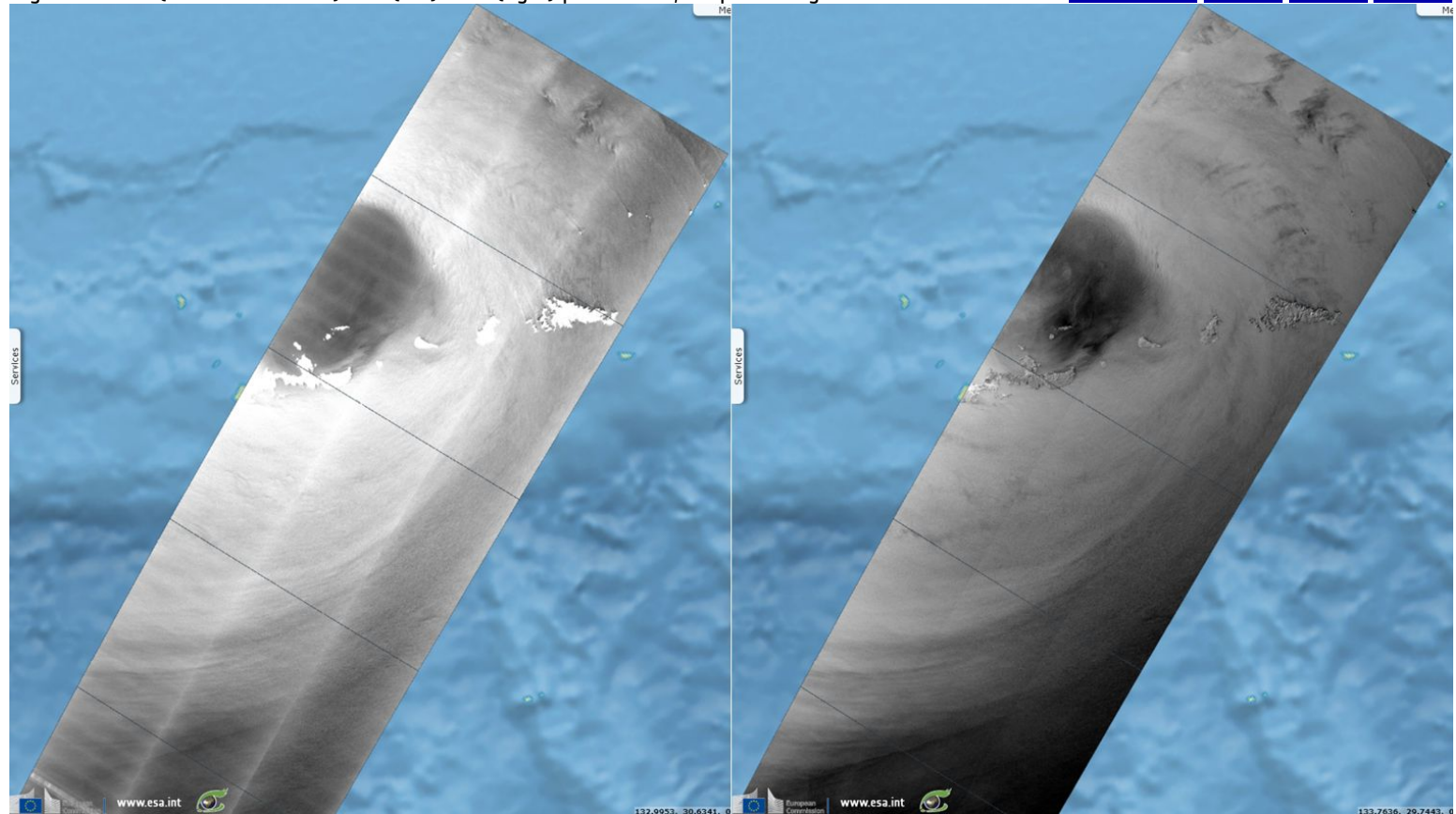
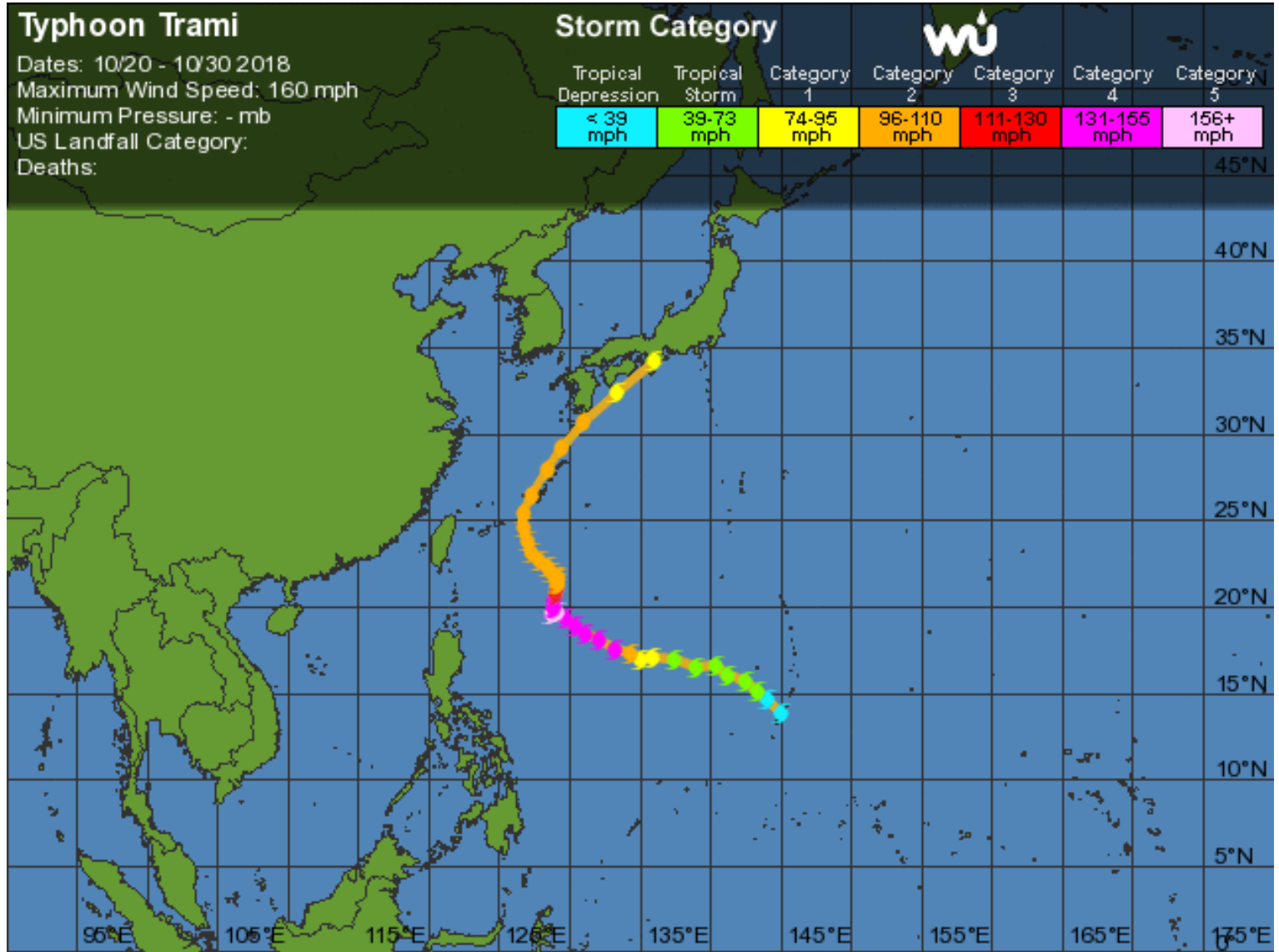
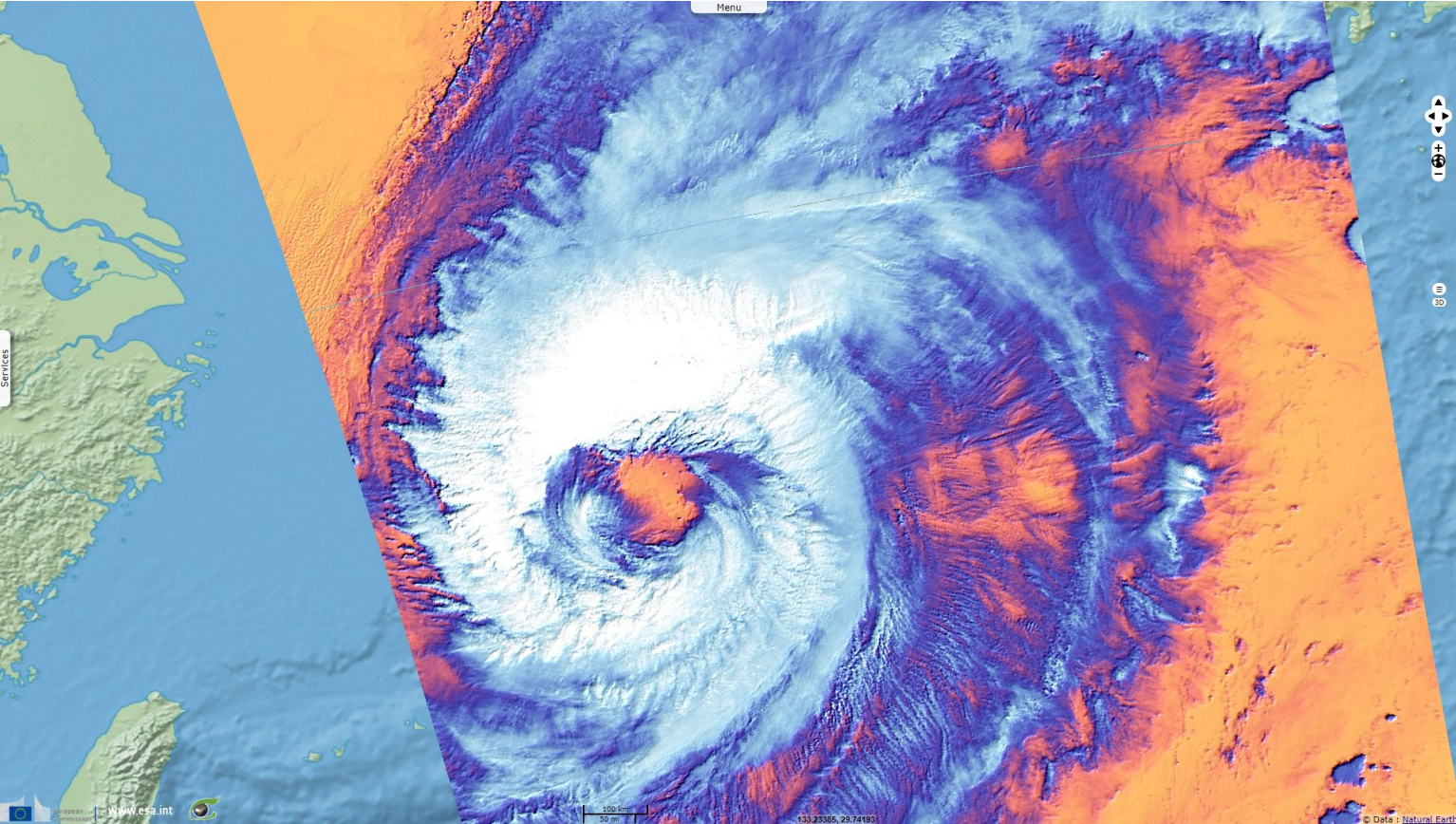


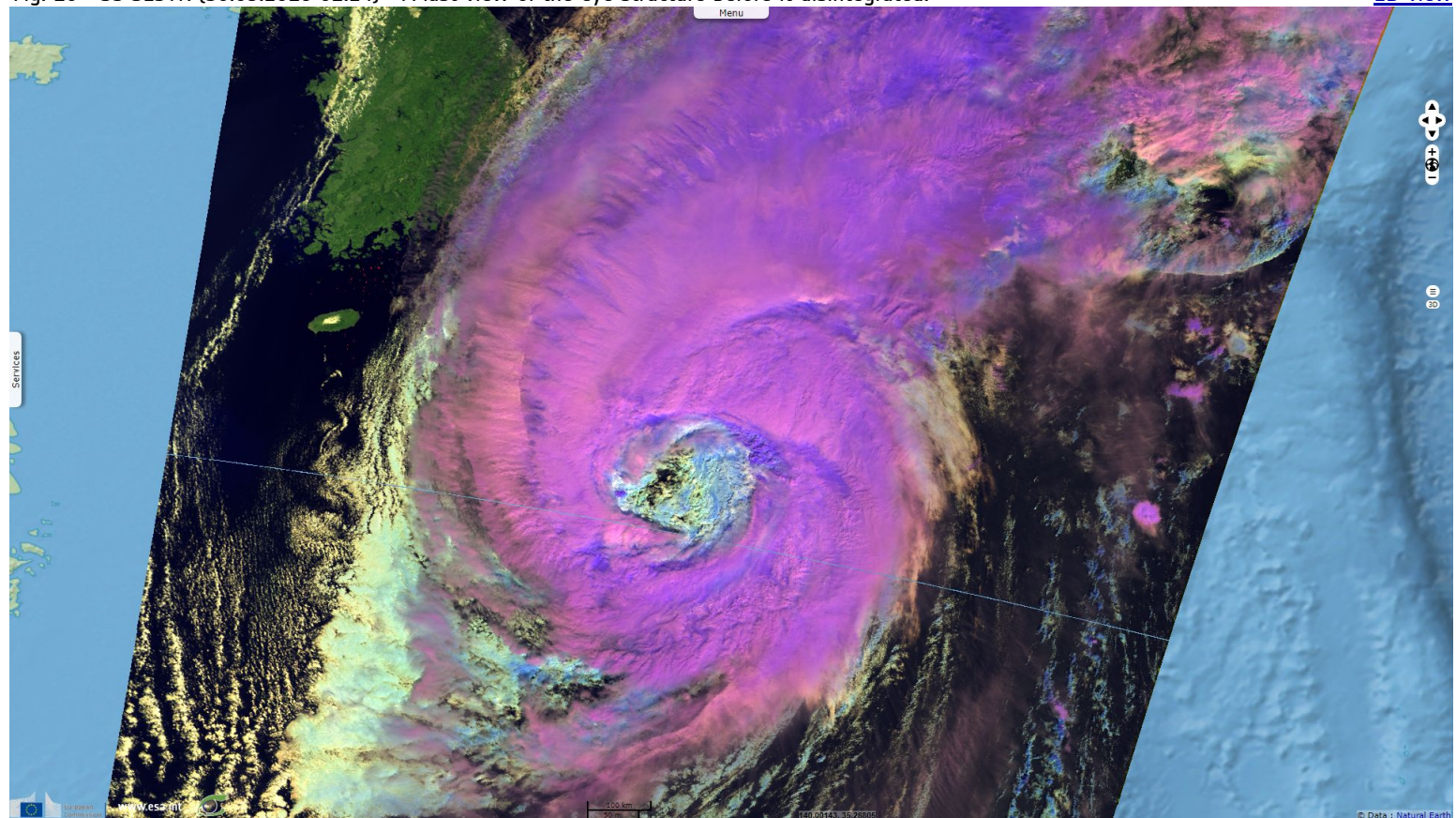
Fig. 9 - S3 SLSTR (29.09.2018 13:01) - Trami wind speed remained at 170km/h for 3 days before definitely weakening. [3D view](#)



Track followed by Trami in the Pacific - source: [Weather Underground](#)













Fig. 10 - S3 SLSTR (30.09.2018 01:24) - A last view of the eye structure before it disintegrated.

[2D view](#)



theweathernetwork.com [reports](#) the final advance of Trami over Japan before it disintegrated: "*Typhoon Trami made landfall in western Japan on Sunday 30 evening and threatened heavy rains, strong winds and landslides on the northern-most main island of Hokkaido, the Japan Meteorological Agency said. The island was hit by a deadly earthquake last month.*"

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