

INSTITUTO GEOFISICO ESCUELA POLITECNICA NACIONAL Campus Ing. José Rubén Orellana

CLARIFICATION TO THE COMMUNITY – Tungurahua Volcano



Aerial view of Tungurahua volcano in May 2019

With regard to the news generated by the work of Hickey et al., published in January 2020, which is based on an episode of deformation that occurred in November 2015 at Tungurahua volcano, the Geophysical Institute clarifies that this episode of deformation has not been recorded again and, up to today, the monitoring parameters from the volcano do not show any change in its activity or stability. Therefore:

THE GEOPHYSICAL INSTITUTE ADVISES THAT THERE IS NO EVIDENCE FOR THE GENERATION OF A POTENTIAL COLAPSE OF THE FLANK OF TUNGURAHUA VOLCANO.

ALSO, THERE IS A CALL FOR CALM AND TO VERIFY ANY INFORMATION THAT IS NOT EMITTED BY OFFICIAL SOURCES.

Complementary technical information:

In 2015, one of the most important eruptions occurred at Tungurahua in terms of ash production. This volcano had an eruptive period that lasted 17 years, from October 1999 to March 2016. After March 2016, the volcano has remained in a period of calm, which is evident in the different monitoring parameters. Currently, its seismic activity is characterized by having less than 10 seismic events per day and no deformation or surface activity is observed.



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Figure 1. Aerial infrared photograph of Tungurahua volcano, taken with thermal camera (OPTRIS PI640) from the west. White areas show the fumarole fields in the volcano, the thermal image shows no evidence of fracturing that can be associated with recent deformation on the western flank of the volcano. IR: Marco Almeida - IG EPN, 17-05-2019.



Figure 2. Number of seismic events at Tungurahua Volcano, from January 2015 to February 2020. Since 2016 seismic activity has been low.



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Figure 3. Trend observed in the RETU GPS station, located on Tungurahua volcano, between March 2015 and February 2020. No deformation has been observed at the volcano since its last eruptive phase in 2016.

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