

APASVO

Scientific and technical publications (peer-reviewed) derived from the project and patents

1. I. Álvarez, L. García, S. Mota, G. Cortés, C. Benítez, y A. de la Torre. An Automatic P-Phase Picking Algorithm Based on Adaptive Multiband Processing. IEEE-Geoscience and Remote Sensing Letters, Vol. 10, N° 6, 1488-1492, Noviembre 2013. Q1 in the category ENGINEERING, ELECTRICAL & ELECTRONIC.

2. G. Cortés, L. García, I. Álvarez, C. Benítez, A. de la Torre, J. Ibáñez. Parallel System Architecture (PSA): An Efficient Approach for Automatic Recognition of Volcano-Seismic Events. Journal of Volcanology and Geothermal Research. Volume 271, 1-10 February 2014. Q2 in the category GEOSCIENCES, MULTIDISCIPLINARY.

3. Cortés, G., Benítez, C., García, L., Álvarez, I., Ibáñez, J.. A Comparative Study of Dimensionality Reduction Algorithms Applied to Volcano-Seismic signals. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS). Vo. 99, 1-11. September 2015. Q1 in the category ENGINEERING, ELECTRICAL & ELECTRONIC.

4. Boué, A., Lesage, P., Cortés, G., Valette, B., Reyes-Dávila, G.. Real Time Eruption Forecasting Using the Material Failure Forecast Method with a Bayesian Approach. Journal of Geophysical Research: Solid Earth. Vol.120, no.4, pp. 2143-2161, 2015. Q1 in the category de GEOSCIENCES, MULTIDISCIPLINARY.

5. J. Prudencio, J. M. Ibáñez, E. Del Pezzo, J. Martí. A. García-Yeguas, L. De Siena. 3D Attenuation Tomography of the Volcanic Island of Tenerife (Canary Islands). Surveys in Geophysics, Vol 36, pp 693-716, Sep. 2015. Q1 in the category de GEOCHEMISTRY & GEOPHYSICS.

6. J. E. Romero, M. Titos, I. Álvarez, L. García, A. de la Torre, C. Benítez. APASVO: a Free Software Tool for Automatic P-Phase Picking and Event Detection in Seismic Traces. Accepted for publication in COMPUTERS & GEOSCIENCES. Q1 in the category de COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS.

7. L. García, I. Álvarez, C. Benítez, M. Titos, A. Bueno, A. de la Torre, J. M. Ibáñez, G. Alguacil, J. Prudencio, A. Díaz-Moreno, A. García-Yeguas. Advances on the Automatic Estimation of the P-Wave Onset Time. Accepted for Annals of Geophysics. Q3 in the category GEOCHEMISTRY & GEOPHYSICS.

8. Koulakov I., Díaz-Moreno A., García-Yeguas A., Cocina O, Barberi, G., Jakovlev A., Prudencio J., Zuccarello L., Álvarez I., García L., Benítez C., Scarfì, L., Patanè D., Ibáñez J. M. PARTOS Code for Integration of Passive and Active Tomography: Description and Preliminary Analysis Using TOMO-ETNA Experiment's Dataset. Accepted for Annals of Geophysics. Q3 in the category GEOCHEMISTRY & GEOPHYSICS.

9. M. Titos, A. Bueno, L. García, C. Benítez, H. LaRochelle. Building Automatic Recognition Systems for Volcano Seismic Events Based on Deep Learning. Submitted for publication to JSTARS.

Attendance at conferences, lectures and workshops related to the project

1. Application of a Cross Correlation-Based Picking Algorithm to Active Seismic Signals from Experiments in Tenerife Island (Canary Islands, Spain). Araceli García-Yeguas, M^a Carmen Granados, Luz García, Carmen Benítez, Ángel de la Torre, Isaac Álvarez, Alejandro Díaz, Jesús M. Ibáñez. 2013 AGU Fall Meeting, 9-13 December 2013, Moscone Convention Center, San Francisco, California. Poster.

2. A New Real-Time Forecasting Approach Based on Seismic Activity: Applications to Explosive Eruptions. Anais Boue, Philippe Lesage, Guillermo Cortés, Bernard Valette, Gabriel Reyes-Dávila, Raúl Arambula, Agus Budi-Santoso, Carmen Benítez, Isaac Álvarez, Luz García. Cities on Volcanoes, 8th Edition. Yogyakarta, Indonesia 2014. Poster.

3. A Study of Classifiers Based on NM, HMM, GMM and SVM for the VT, LP and Noises Discrimination Task. Luz García, Manuel Titos, Alberto Alos, Carmen Benítez, Janire Prudencio, Isaac Álvarez, Ángel de la Torre. Cities on Volcanoes, 8th Edition. Yogyakarta, Indonesia 2014. Poster.

4. APASVO: A Free Software Tool for Automatic Onset Time Picking. Carmen Benítez, José Emilio Romero, Ángel de la Torre, Isaac Álvarez, Luz García. Cities on Volcanoes, 8th Edition. Yogyakarta, Indonesia 2014. Poster.

5. Automatic Detection of Volcanic Tremors and Other Long-Duration Volcanic Events. Carmen Benítez, Isaac Álvarez, Luz García, Ángel de la Torre, Alejandro Díaz, Araceli García-Yeguas, Anais Boue, Philippe Lesage, Raúl Arambula, Gabriel Reyes-Dávila. Cities on Volcanoes, 8th Edition. Yogyakarta, Indonesia 2014. Poster.

6. Robust Real-Time Eruption Forecasting Using a Probabilistic (Bayesian) Approach of the Material Failure Forecast Method. Anais Boue, Philippe Lesage, Guillermo Cortés, Bernard Valette, Gabriel Reyes-Dávila, Carmen Benítez, Isaac Álvarez, Luz García, Ángel de la Torre. Cities on Volcanoes, 8th Edition. Yogyakarta, Indonesia 2014. Poster.

7. A Study of Classifiers Based on HMM, GMM and SVM for the VT, LP and Noises Discrimination Task. Luz García, Manuel Titos, Alberto Alos, Carmen Benítez, Janire Prudencio, Isaac Álvarez, Ángel de la Torre. EGU General Assembly Viena, Austria. 2014. Poster.

8. Application of a Cross Correlation-Based Picking Algorithm to an Active Seismic Experiment in Sicily and Aeolian Islands. Alejandro Díaz, Isaac Álvarez, Ángel de la Torre, Luz García, Carmen Benítez, Guillermo Cortés. EGU General Assembly Viena, Austria. 2014. Poster.

9. Tomo-Etna: An active Seismic Experiments at Etna Volcano. Ornella Cocina, Luciano Zuccarello, Alejandro Díaz-Moreno, Janire Prudencio, Danilo Cavallaro, Marco Firetto, Mauro Coltelli, Francisco Carrión, C. Carmisciano, G. D'Anna, Birger Lühr, Jesús Ibáñez, Domenico Patané. Catania, 2014.