

## POSTER SESSIONS

### Monday 17. 18:00 - 19:15 (Topics 1, 2, 3 and 4)

#### Topic 1: Physical volcanology

GALINDO, Inés, GARCÍA-DAVALILLO, Juan Carlos, MARRERO-DÍAZ, Rayco, CAMUÑAS PALENCIA, Carlos, LORENZO CARNICERO, Carlos, LÓPEZ-GUTIÉRREZ, Julio, SÁNCHEZ JIMÉNEZ, Nieves, LORENZO PÉREZ, José Heriberto. Preliminary results of the San Bernardino fumaroles: implications for Tajogaite eruptive behavior and vegetation recovery

GISBERT, Guillem, TROLL, Valentin R., DAY, James M. D., GEIGER, Harri, PÉREZ-TORRADO, Francisco J., AULINAS, Meritxell, DEEGAN, Frances M., ALBERT, Helena, CARRACEDO, Juan Carlos. Lava viscosities during the 2021 Tajogaite eruption

MAGLI, Andrea, DEL CARLO, Paola, DI ROBERTO, Alessio, GIORDANO, Guido, MELETIDIS, Stavros, POMPILIO, Massimo, SPERANZA, Fabio. Age-clustered eruptive activity at La Palma (Canary Islands) during the last 4000 years: evidence from paleomagnetic dating

MARCHAMALO-SACRISTÁN, Miguel, FERNÁNDEZ-LORENZO, Octavio, PIRES, Ana, UREÑA-PLIEGO, Miguel, REJAS-AYUGA, Juan Gregorio, DARIAS, Víctor, JORDÁ, Luis, GONZÁLEZ-RODRIGO, Beatriz. Application of geospatial techniques to the mapping of lava tubes formed during the Cumbre Vieja volcanic eruption (September - December 2021, La Palma, Spain)

NÉMETH, Károly. Volcanological similarities of oceanic volcanic islands and mature volcanic fields in intracontinental settings

SÁEZ-GABARRÓN, Lucía, SANZ-MANGAS, David, GALINDO-JIMÉNEZ, Inés, VEGAS, Juana, GARCÍA-DAVALILLO, Juan Carlos, HERNÁNDEZ, Mario, PÉREZ-LÓPEZ, Raúl, CAMUÑAS, Carlos, LOZANO, Gonzalo, LORENZO CARNICERO, Carlos, RODRÍGUEZ-PASCUA, Miguel Ángel, PERUCHA, María Ángeles, LÓPEZ-GUTIÉRREZ, Julio, SÁNCHEZ, Nieves. Lava delta evolution during the 2021 Tajogaite volcano eruption

SANZ-MANGAS, David, GALINDO, Inés, LOZANO, José Antonio, FRAILE-NUEZ, Eugenio, SÁEZ-GABARRÓN, Lucía. Lava morphological types along the Tajogaite lava flow field

SANZ-MANGAS, David, ORDÓÑEZ-CASADO, Berta, MARTÍNEZ-MARTÍNEZ, Javier, MEDIATO, José F., GALINDO, Inés. Tajogaite eruption hyaloclastites studies from geochemical analysis: sea-water interaction insights

ZORN, Edgar U., DE JARNATT, Benjamin, GONZÁLEZ, Pablo J., KENDRICK, Jackie E., LAMUR, Anthony, LAVALLÉE, Yan, WALTER, Thomas R. Post-eruptive subsidence of Tajogaite: quantifying the role of compaction in volcanoclastic clastic materials

#### Topic 2: Volcanotectonics

FERNÁNDEZ-CARABANTES, Javier, MORA, Mauricio, LESSAGE, Philippe, GARCÍA-JEREZ, Antonio, TORTOSA, Javier, ALMENDROS, Javier. Highdensity MHVSR model of the Tajogaite volcán

FERNÁNDEZ-CARABANTES, Javier, TORTOSA, Javier, DENGRA, Miguel, ALMENDROS, Javier. Characterization of shallow seismicity at Tajogaite volcano using a dense seismic deployment

GONZÁLEZ, Pablo J., BOULESTEIX, Thomas, SMETS, Benoit, WALTER, Thomas R. The fracture system associated with the late distal vents of Tajogaite eruption

LEÓN, Ricardo, ROLLWAGE, Luisa, GEERSEN, Jacob, SÁNCHEZ-GUILLAMÓN, Olga, URLAUB, Morelia, KRASTEL, Sebastian, VÁZQUEZ, Juan Tomás. Evidence of recent tectonic activity on the western flank of La Palma (Canary Islands, Spain)

PLANK, Simon, SHEVCHENKO, Alina V., D'ANGELO, Pablo, GSTAIGER, Veronika, GONZÁLEZ, Pablo J., CESCA, Simone, MARTINIS, Sandro, WALTER, Thomas R. Combining thermal, tri-stereo optical and bi-static INSAR satellite imagery to estimate lava effusion rates and volume of the 2021 Tajogaite eruption, La Palma

ROLLWAGE, Luisa, URLAUB, Morelia, SÁNCHEZ-GUILLAMÓN, Olga, LEÓN, Ricardo, VÁZQUEZ, Juan Tomás, KRASTEL, Sebastian, GEERSEN, Jacob. Localizing deformation along unstable volcanic flanks in the Canary Islands through semi-automated geomorphological mapping

TORTOSA, Javier, CABRERA-PÉREZ, Iván, STUMPP, Douglas, D'AURIA, Luca, HEIT, Benjamin, YUAN, Xiaohui, ABELLA, Rafael, ALMENDROS, Javier. High-resolution ambient noise tomography of La Palma Island: revealing the shallow crustal structure

TORTOSA, Javier, PARERA-PORTELL, Joan Antoni, MANCILLA, Flor de Lis, ORTEGA-RAMOS, Víctor, HEIT, Benjamin, YUAN, Xiaohui, ABELLA, Rafael, ALMENDROS, Javier. Imaging the Moho and an underplating layer below La Palma Island using receiver function analysis

### Topic 3: Petrology

ANDÚJAR, Joan, SCAILLET, Bruno, FRASCERRA, Diletta, DI CARLO, Ida, CASILLAS, Ramón, SUÁREZ, Eduardo D., DOMÍNGUEZ-CERDEÑA, Itahiza, MELETLIDIS, Stavros, LÓPEZ, Carmen, SŁODCZYK, Aneta, MARTÍ, Joan, NÚÑEZ-GUERRERO, Elena. Unravelling the inner structure and temporal reactivation of the crustal reservoir feeding La Palma 2021 eruption

CASSETTA, Federico, SANDOVAL-VELÁSQUEZ, Andrés, NTAFLLOS, Theodoros, RIZZO, Andrea L., AIUPPA, Alessandro, ALONSO, Mar, PADRÓN, Eleazar, PÉREZ, Nemesio M. Melt/fluid-rock reactions in the lithosphere beneath La Palma (Canary Islands): clues from mineral and fluid inclusion chemistry in ultramafic xenoliths

CHICHARRO, Nicolás, HUERTAS, María José, MÁRQUEZ, Álvaro, ANCOCHEA, Eumenio, HERRERA, Raquel, COELLO-BRAVO, Juan Jesús. Petrologic evolution of El Charco eruption (1712, Cumbre Vieja, La Palma)

DAVIES, Bridie V., BUSO, Roxane, ASENSIO-RAMOS, María, BURGESS, Raymond, BURTON, Mike, CHAMBERLAIN, Katy J., EVANS, Elizabeth, FALVARD, Simon, NEAVE, David A., PADRÓN, Eleazar, PANKHURST, Matthew J., PAPPALARDO, Lucia, PÉREZ, Nemesio M., POLACCI, Marguerita, LEONARDI, Alberto, HARTLEY, Margaret E. Magmatic volatiles in the fourth dimension (MV4D): innovative techniques for quantifying mantle source volatile signatures

HIDAS, Károly, PEDRERA, Antonio, GONZÁLEZ-MENÉNDEZ, Luis, SANZ-MANGAS, David, GARCÍA SANZ, Jesús. Preliminary results on the spatial variability of crustal and mantle xenoliths in La Palma (Canary Islands, Spain): insights into the lithospheric structure and crust-mantle interaction

LOZANO RODRÍGUEZ, José Antonio, CASILLAS, Ramón, ÁLVAREZVALERO, Antonio M., PUIG MONTELLÀ, Eduard, VÁZQUEZ, Juan Tomás, GONZÁLEZ-VEGA, Alba, MARTÍN-DÍAZ, Juan Pablo, RAMÍREZ-CRUZADO AGUILAR-GALINDO, Samuel, SANZ-MANGAS, David, GALINDO, Inés, FRAILE-NUEZ, Eugenio. Megapillow bodies within the lava delta of the 2021 Tajogaite volcano at La Palma (Canary Islands)

PÉREZ-LÓPEZ, Raúl, ORDÓÑEZ, Berta, SAINZ DE BARANDA, Borja, SANZ-MANGAS, David, LÓPEZ-GUTIÉRREZ, Julio. Thermochromism of sulfates of Cu<sup>2+</sup> and Pb<sup>2+</sup> in hot fumarole at the Tajogaite cinder cone

SCARROW, Jane H., PANKHURST, Matthew J., BARBEE, Olivia A., CHAMBERLAIN, Katy J., MORGAN, Daniel J., LONGPRÉ, Marc-Antoine, HICKEY Samantha James, NEAVE, David A., ROLLINSON, GAVYN K., STEWART, Alexander G., WIESER, Penny E., COLDWELL, Beverly C., HERNÁNDEZ, William, D'AURIA, Luca, PÉREZ, Nemesio M. Decoding links between magmatic processes and eruption dynamics: whole-rock time series petrology of the 2021 Tajogaite eruption, La Palma

ZANON, Vittorio, D'AURIA, Luca, SCHIAVI, Federica. Looking inside the magmatic system of the erupting Tajogaite volcano through a joint analysis of fluid inclusions and seismicity

#### Topic 4: Volcanic hazards

AFONSO-FALCÓN, David, GONZÁLEZ DE VALLEJO, Luis I., HERNÁNDEZGUTIÉRREZ, Luis E., DE LOS RÍOS DÍAZ, Héctor, ÁLVAREZ HERNÁNDEZ, Aarón, MIRANDA-HARDISSON, Ana, RODRÍGUEZ-LOSADA, José A., PÁEZPADILLA, Javier, ORTEGA-RAMOS, Víctor, HERNÁNDEZ, Pedro A., PÉREZ, Nemesio M. Geotechnical mapping for territorial planning in the Aridane Valley following the Tajogaite eruption (La Palma, Canary Islands)

ÁLVAREZ HERNÁNDEZ, Aaron, GONZÁLEZ DE VALLEJO, Luis, FERRER, Mercedes, DE VILLEPREUX, Ernaud, CERVIGÓN-TOMICO, Germán, LOCKWOOD, John P., MIRANDA-HARDISSON, Ana, RODRÍGUEZ-LOSADA, José A., AFONSO-FALCÓN, David, DE LOS RÍOS, Héctor, PÁEZ-PADILLA, Javier, HERNÁNDEZ-GUTIÉRREZ, Luis E., HERNÁNDEZ, Pedro A., PÉREZ, Nemesio M. Thermal modeling of lava flow cooling dynamics from the Tajogaite eruption

DAY, James M. D., GEIGER, Harri, TROLL, Valentin R., PÉREZ-TORRADO, Francisco J., AULINAS, Meritxell, GISBERT, Guillem, CARRACEDO, Juan Carlos. Bouncing spallation bombs during the 2021 La Palma eruption, Canary Islands, Spain

FELPETO, Alicia, POZATEK, Martyna, MELETIDIS, Stavros. Operational forecasts during unrest and eruption of La Palma 2021 eruption\_lessons learned

GONZÁLEZ DE VALLEJO, Luis I., MÉNDEZ, Tomás Luis, HERNÁNDEZ-GUTIÉRREZ, Luis E., DE LOS RÍOS DÍAZ, Héctor, AFONSO FALCÓN, David, ÁLVAREZ HERNÁNDEZ, Aarón, ORTEGA-RAMOS, Víctor, PÉREZ MARTÍN, Óscar, HERNÁNDEZ, Pedro A., PÉREZ, Nemesio M. Thermal and geotechnical assessment to support urban redevelopment in zones affected by the Tajogaite lava flows (La Palma, Canary Islands)

KRIPPNER, Janine, KILGOUR, Geoff, IRELAND, Ben, BACKHOUSE, Tamsin, BACKHOUSE, Sharon, MACORPS, Elodie, SOLDATI, Arianna, JONES, Ajay Wynne. Tajogaite's lava flow field impact: a warning for Auckland's volcanic resiliency

MARRERO-DÍAZ, Rayco, MARTÍN-LUIS, M. Candelaria, SALAZARCARBALLO, Pedro A., GONZÁLEZ, Pablo J., MEJÍAS, Miguel, GALINDO, Inés, SÁNCHEZ, Nieves. Continuous monitoring of indoor CO<sub>2</sub> and Radon in two water wells at Aridane Valley, La Palma

MARTÍNEZ VAN DORTH, David, CABRERA-PÉREZ, Iván, D'AURIA, Luca, FERICHE, Mercedes, PALAU ERENA, Arià, PÉREZ, Nemesio M. Characterization of local seismic response in the Aridane Valley (La Palma) through HVSR analysis

PÁEZ-PADILLA, Javier, GONZÁLEZ DE VALLEJO, Luis, TRUJILLO-VARGAS, Laura, ANGULO-SANTANA, José Luis, AFONSO-FALCÓN, David, DE LOS RÍOS, Héctor, ÁLVAREZ HERNÁNDEZ, Aarón, ORTEGA-RAMOS, Víctor, HERNÁNDEZ-GUTIÉRREZ, Luis E., GARCÍA-HERNÁNDEZ, Rubén, CABRERA-PÉREZ, Iván, HERNÁNDEZ, Pedro A., PÉREZ, Nemesio M. Thermal and geomechanical analysis of lava flows from Tajogaite eruption for the recovery of agricultural activity (La Palma, Canary Islands)

PÉREZ-MARTÍN, Óscar, HERNÁNDEZ-GUTIÉRREZ, Luis E., MEDINA, Jorge, PADILLA, Germán D., ORTEGA, Víctor, ÁLVAREZ, Aarón, GARCÍA-HERNÁNDEZ, Rubén, PÉREZ, Nemesio M. Application of

geospatial techniques for the study of the lahar hazard of the Tajogaite volcano (La Palma, Canary Islands)

TROLL, Valentin R., JÄGERUP, S. Beatrice, DEEGAN, Frances M., GEIGER, Harri, AULINAS, Meritxell, DAY, James M. D., CARRACEDO, Juan Carlos, HARRIS, Chris, SOLER, Vicente, PÉREZ-TORRADO, Francisco J., ZACZEK, Kirsten, VAN DER ZWAN, Froukje M. Messengers from below an ocean island: xeno-pumice in historical eruptions on La Palma

## **Tuesday 18. 18:15 - 19:15 (Topics 5, 6, 7, 8 and 9)**

Topic 5: Geophysical and geodesy monitoring

ÁLVAREZ HERNÁNDEZ, Aarón, D'AURIA, Luca, CABRERA-PÉREZ, Iván, SOUBESTRE, Jean, BENÍTEZ, Carmen, IBÁÑEZ, Jesús M., REYDEVESA, Pablo, GUTIÉRREZ, Ligdamis, PRUDENCIO, Janire, ORTEGARAMOS, Víctor, GARCÍA-HERNÁNDEZ, Rubén, MARTÍNEZ VAN DORTH, David, PÉREZ, Nemesio M. Entropy-based seismic monitoring of the Tajogaite volcano, La Palma

CABRERA-PÉREZ, Iván, D'AURIA, Luca, SOUBESTRE, Jean, PRZEOR, Monika, GARCÍA-HERNÁNDEZ, Rubén, IBÁÑEZ, Jesús M., KOULAKOV, Ivan, MARTÍNEZ VAN DORTH, David, ORTEGA, Víctor, PADILLA, Germán D., SAGIYA, Takeshi, PÉREZ, Nemesio M. Spatio-temporal velocity variations observed during the pre-eruptive episode of Tajogaite eruption inferred from ambient noise interferometry

DE PABLO, Manuel B., CHARCO, María, GONZÁLEZ, Pablo J., GARCÍA PALLERO, José Luis. A digital twin prototype of the 2021 La Palma eruption bases on data-driven modeling of magma chamber pressure evolution

GARCÍA-CAÑADA, Laura, SUÁREZ, Eduardo D., LAMOLDA, Héctor, MOLINA-ARIAS, Antonio J., DOMÍNGUEZ CERDEÑA, Itahiza F., DOMÍNGUEZ-VALBUENA, Jorge, PEREDA-DE-PABLO, Jorge, MELETLIDIS, Stavros, QUIRÓS, Francisco, GONZÁLEZ-ALONSO, Elena, DEL FRESNO, Carmen, FERNÁNDEZ-GARCÍA, Antonio, PRIETO LLANOS, Fernando. GNSS monitoring during the 2021 La Palma eruption

GARCÍA-HERNÁNDEZ, Rubén, FALCÓN GARCÍA, Alberto, PRECIADO GARBAYO, Javier, ÁLVAREZ HERNÁNDEZ, Aarón, MARTÍNEZ VAN DORTH, David, PADILLA, Germán D., ORTEGA-RAMOS, Víctor, PÉREZ, Nemesio M. Edge-detection techniques applied to a DAS dataset recorded during the 2021 Tajogaite eruption (La Palma, Canary Islands)

GONZÁLEZ-ALONSO, Elena, FERNÁNDEZ-GARCÍA, Antonio, PRIETO LLANOS, Fernando, GARCÍA-CAÑADA, Laura, FERNÁNDEZ, L. TSX-TDX-PAZ InSAR time series of La Palma eruption 2021: a radar highresolution interpretation of ground deformation

ORTEGA-RAMOS, Víctor, D'AURIA, Luca, GRANJA-BRUÑA, José Luis, CABRERA-PÉREZ, Iván, PAPPALARDO, Lucia, BUONO, G., PÉREZ, Nemesio M. Study of the magmatic source and crustal structure of Cumbre Vieja by receiver functions

PIÑA-VARAS, Perla, LEDO, Juan, QUERALT, Pilar N., MARTÍNEZ VAN DORTH, David, MARCUELLO, Alejandro, MARTÍ, Anna, CABRERA, Iván, D'AURIA, Luca, PÉREZ, Nemesio M. Volcanic monitoring using long-period magnetotelluric data: Canary Islands

PRZEOR, Monika, CASTALDO, Raffaele, D'AURIA, Luca, PEPE, Antonio, PEPE, Susi, SAGIYA, Takeshi, SOLARO, Giuseppe, TIZZANI, Pietro, PÉREZ, Nemesio M. Magma ascent during the 2021 Tajogaite eruption through geodetic imaging

SUÁREZ, Eduardo D., DOMÍNGUEZ CERDEÑA, Itahiza. F., VILLASEÑOR, Antonio, SAINZ-MAZA APARICIO, Sergio, DEL FRESNO, Carmen, GARCÍA-CAÑADA, Laura, POZATEK-STANCZYK, Martyna.

Towards real-time monitoring of pre-eruptive seismic activity using deep learning: lessons from the 2021 Tajogaite eruption

#### Topic 6: Geochemical monitoring

ASENSIO-RAMOS, María, PARDO COFRADES, Ana, BURTON, Mike, LA SPINA, Alessandro, ALLARD, Patrick, BARRANCOS, José, HAYER, Catherine, ESSE, Benjamin, D'AURIA, Luca, HERNÁNDEZ, Pedro A., PADRÓN, Eleazar, MELIÁN, Gladys V., PÉREZ, Nemesio M. Tracking magma degassing dynamics during the 2021 Tajogaite eruption using daily OP-FTIR measurements

CHAMBERLAIN, Katy J., OAKES, Matthew, BLACKBURN, J., UTLEY, James, PANKHURST, Matthew J., HICKEY, James, LONGPRÉ, Marc-Antoine, SCARROW, Jane H. Development of portable XRF as a tool for rapid magma characterization: initial application to 2021 Tajogaite eruption

DI NARDO, Daniel, PÉREZ, Nemesio M., HERNÁNDEZ, Pedro A., PADRÓN, Eleazar, PADILLA, Germán, ASENSIO-RAMOS, María. Precursory geochemical signals of the 2021 Tajogaite eruption through automatic geochemical stations

LEAL, Victoria, MELIÁN, Gladys V., ASENSIO-RAMOS, María, PADRÓN, Eleazar, CARTAYA, Sttefany, PADILLA, Germán D., HERNÁNDEZ, Pedro, A., PÉREZ, Nemesio M., D'AURIA, Luca. Tracking hydrogeochemical changes associated with volcanic activity on La Palma (Canary Islands)

LUENGO-OROZ, Natividad, TORRES-GONZÁLEZ, Pedro, D'ALESSANDRO, Walter. Dissolved hydrogen and seismicity in volcanic oceanic islands: the Canary Islands case

MELIÁN, Gladys V., ASENSIO-RAMOS, María, PADRÓN, Eleazar, PADILLA, Germán D., CARTAYA, Sttefany, MÉNDEZ, Carla, DI NARDO, Daniel, HERNÁNDEZ, Pedro A., PÉREZ, Nemesio M. Diffuse He/CO<sub>2</sub> and H<sub>2</sub>/CO<sub>2</sub> degassing ratios at Cumbre Vieja volcano: a geochemical telegram of the Tajogaite eruption (La Palma, Canary Islands)

RODRÍGUEZ PULIDO, Francisco José. Citizen science and collaborative monitoring: key tools for managing the risk of diffuse CO<sub>2</sub> emissions in Puerto Naos and La Bombilla

RODRÍGUEZ PULIDO, Francisco José. The impact of diffuse CO<sub>2</sub> emissions in inhabited areas of the Aridane Valley coast: influence on sewer networks and cesspool

TORRES-GONZÁLEZ, Pedro, D'ALESSANDRO, Walter, LUENGO-OROZ, Natividad. Mantle heterogeneity beneath La Palma Island revealed by Helium isotopes measured in gas and water samples

#### Topic 7: Other methods of monitoring

DE LOS RÍOS, Héctor, AFONSO-FALCÓN, David, ORTEGA-RAMOS, Víctor, GONZÁLEZ DE VALLEJO, Luis, ÁLVAREZ HERNÁNDEZ, Aarón, PÁEZ-PADILLA, Javier, TRUJILLO-VARGAS, Laura, ANGULO-SANTANA, José Luis, CABRERA-PÉREZ, Iván, HERNÁNDEZ GUTIÉRREZ, Luis E., HERNÁNDEZ, Pedro A., PÉREZ, Nemesio M. Unveiling heat patterns: integrating drone thermography and geospatial analysis of lava flows from the Tajogaite volcano

GÓMEZ-HURTADO, Juan S., MEDIATO, José F., MÁRQUEZ, Álvaro. Geochemical characterization of volcanic materials using a portable XRF equipment: evaluation of its applicability for syn-eruptive petrological monitoring (La Palma, 2021, Canary Islands)

NÚÑEZ, Alberto, PINTOR, Pablo, TORDESILLAS, José Manuel. A new approach to 1993 magnetic anomaly data in La Palma Island

PADILLA, Germán D., DI NARDO MÉNDEZ, Daniel, PÉREZ, Nemesio M., HERNÁNDEZ, Pedro A., AFONSO, David, LEAL, Victoria, GONZÁLEZ PÉREZ, Alexis M., CARBALLA, Oliver, CABRERA, David, PÉREZ, Daniel, RODRÍGUEZ, Nuria, RODRÍGUEZ ROCHA, Rafael. Ground pressure gradient analysis as

a tool for monitoring diffuse gas degassing at Puerto Naos and La Bombilla (La Palma, Canary Islands)

ROSADO-BELZA, David, D'AURIA, Luca, SELVA, Jacopo, PÉREZ, Nemesio M. CABINET: a bayesian decision-support tool for near real-time probabilistic eruption forecasting in the Canary Islands

VEGA VÁSQUEZ, Katherin, GONZÁLEZ-GARCÍA, Diego, MÁRQUEZ, Álvaro. Evaluation of scanning electron microscopy as a petrological monitoring tool: application to volcanic glass from the Cumbre Vieja 2021 eruption (La Palma, Canary Islands)

Topic 8: Emissions to the atmosphere

BELBACHIR, Ibtissem, LÓPEZ-DARIAS, Jessica, ÁLVAREZ-VALERO, Güize, VILLENA-ARMAS, Gorka, PÉREZ-GIL, Borja, RODRÍGUEZ, Sergio. Sea water solubility of trace metals in the volcanic aerosols of Tajogaite

GONZÁLEZ, Yenny, SÁNCHEZ-BARRERO, María F., GONZÁLEZ-SICILIA, Pablo, BARRETO, África, ROMÁN, Roberto, POPOVICI, Ioana, VICTORI, Stephane, ALMANSA, Fernando A. Tracking sulphate transport during Tajogaite eruption (La Palma) with compact dual-wavelength lidars and photometer observations at IZO and Atoll

HERRERO DEL BARRIO, Celia, ROMÁN, Roberto, GARCÍA, Rosa D., BARRETO, África, GONZÁLEZ-SICILIA, Pablo, HERRERO-ANTA, Sara, GONZÁLEZ-FERNÁNDEZ, Daniel, GONZÁLEZ, Ramiro, MATEOS, David, CALLE, Abel, TOLEDANO, Carlos, CACHORRO, Victoria E., DE FRUTOS, Ángel. Analysis of aerosol properties from the Cumbre Vieja volcanic eruption using multi-instrumental observations

LÓPEZ-DARIAS, Jessica, RODRÍGUEZ, Sergio, DE LA ROSA, Jesús, VILCHES, Jon, BOULESTEIX, Thomas, TAQUET, Noémie, BELBACHIR, Ibtissem, VILLENA-ARMAS, Gorka, SÁNCHEZ DE LA CAMPA, Ana M., GARCÍA, Omaira, AYALA, Juan H. Quantitative stoichiometric apportionment of aerosol salts of the Tajogaite volcanic eruption

PADRÓN, Eleazar, PÉREZ, Nemesio M., MELIÁN, Gladys V., ASENSIO-RAMOS, María, HERNÁNDEZ, Pedro A., PADILLA, Germán D., FISCHER, Tobias P. Carbon isotopic characterization of CO<sub>2</sub> emissions from the Tajogaite eruption, Cumbre Vieja volcano, La Palma (Canary Islands)

PÉREZ, Nemesio M., RODRÍGUEZ, Óscar, ORTEGA, Víctor, HERNÁNDEZ, Pedro A., CUTILLAS, Juan. Monitoring post-eruptive SO<sub>2</sub> emissions from Tajogaite volcano (La Palma, Canary Islands)

RODRÍGUEZ, Sergio, LÓPEZ-DARIAS, Jessica, DE LA ROSA, Jesús, BOULESTEIX, Thomas, TAQUET, Noémie, SÁNCHEZ DE LA CAMPA, Ana M. The contributions of primary emissions and condensation to trace elements in the aerosol of the Tajogaite eruption

SALAZAR CARBALLO, Pedro A., MARTÍN LUIS, M. Candelaria, LÓPEZ PÉREZ, María, DUARTE RODRÍGUEZ, Xiomara, RODRÍGUEZ MARRERO, José Luis, CATALÁN, Antonio. Nonlinear and multifractal analysis of Radon time series at different locations in Puerto Naos and La Bombilla (La Palma, Canary Islands)

TAQUET, Noémie, BOULESTEIX, Thomas, GARCÍA, Omaira, CAMPION, Robin, STREMME, Wolfgang, RODRÍGUEZ, Sergio, LÓPEZ-DARIAS, Jessica, MARRERO, Carlos, GONZÁLEZ-GARCÍA, Diego, KLÜGEL, Andreas, HASE, Frank, FREY, Matthias, SCHNEIDER, Matthias, GARCÍA, M. Isabel, RAMOS, Ramón, RIVAS-SORIANO, Pedro, LÉON-LUIS, Sergio, CARREÑO, Virgilio, ALCÁNTARA, Antonio, SEPÚLVEDA, Eliezer, MILFORD, Celia, GONZÁLEZ-SICILIA, Pablo, TORRES, Carlos. Tajogaite volatile budgets using ground-based direct-sun spectroscopic measurements

TORRES, Carlos, GARCÍA, Omaira E., SUÁREZ-MOLINA, David, RAMOS, Ramón, BARRETO, África, HERNÁNDEZ, Miguel, QUINTERO, Víctor, TOLEDANO, Carlos, SICARD, Michaël, CÓRDOBA-JABONERO,

Carmen, IARLORI, Marco, RIZI, Vincenzo, ROININEN, Reijo, LÓPEZ, César, VILCHES, Jon, WEIS, Maximilian, CARREÑO, Virgilio, TAQUET, Noémie, BOULESTEIX, Thomas, FRAILE, Eugenio, PRATS, Natalia, ALCÁNTARA, Antonio, LEÓN, Sergio, RIVAS, Pedro P., ÁLVAREZ, Óscar, PARRA, Francisco, DE LUIS, Javier, GONZÁLEZ, César, ARMAS, Cristina, ROMERO, Pedro M., DE BUSTOS, Juan J., REDONDAS, Alberto, MARRERO, Carlos, MILFORD, Celia, GARCÍA, Rosa D., ROMÁN, Roberto, GONZÁLEZ, Ramiro, LÓPEZ-CAYUELA, María Á., CHINEA, Nayra A., ALMANSA, Fernando, GONZÁLEZ, Yenny, BAYO, Concepción, BULLÓN, Fernando, POGGIO, Marta, RIVERA, Clemente, REY, Fernando. Tajogaite 2021 volcanic eruption (La Palma, Spain): a rapid deployment for atmospheric monitoring

#### Topic 9: Air quality and health

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#### **Thursday 20. 17:45 - 19:15 (Topics 11, 12, and 14)**

Topic 11: Marine and coastal environment

ARMENGOL, Laia, SARMIENTO-LEZCANO, Airam N., FERNÁNDEZMACÍAS, Henar, COURET, María, GONZÁLEZ-VEGA, Alba, PRESASNAVARRO, Carmen, ARRIETA, Jesús María, FRAILE-NUEZ, Eugenio, HERNÁNDEZ-LEÓN, Santiago. Effects of the Tajogaite volcanic eruption on zooplankton abundance and biomass around La Palma Island

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CABALLERO, María José, FERNÁNDEZ, Antonio, CASTRO-ALONSO, Ayoze. Veterinary pathology contributions to volcanic eruptions in the Canary Islands

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FALCÓN, Jesús M., MARTÍN-GARCÍA, Laura, GARCÍA-MAÑÉ, Bertín, DIONIS-INSENSÉ, Noemi, JIMÉNEZ-NAVARRO, Sebastián, GONZÁLEZPORTO, Marcos, CRUZ-DELGADO, Paula, JURADO-RUZAFÁ, Alba, MENDOZA, José C., PUNZÓN, Antonio, MARTÍN-SOSA, Pablo. Fisheries disrupted: assessing the spatial and socioeconomic impacts of the 2021 Tajogaite eruption on artisanal fisheries in La Palma (Canary Islands)

GONZÁLEZ-CARBALLO, Marta, RODRÍGUEZ RIESCO, Jaime. E., GONZÁLEZ RODRÍGUEZ, Yulimar, MARINA-UREÑA, Pablo, GONZÁLEZ DUARTE, Manuel M., ARROYO HAILVOTO, Nina L., MALLOL MARTÍNEZ, Sandra. Monitoring benthic communities in the submarine lava flow of Tajogaite volcano under the framework of the marine strategy directive

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#### Topic 12: Terrestrial biodiversity

GARCÍA BECERRA, Rafael, MARRERO, Patricia, GUERRERO-CAMPOS, María, MEDINA, Félix M., NOGALES, Manuel. Changes in the dynamics of invertebrate communities after a volcanic eruption

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MARRERO, Patricia, GUERRERO-CAMPOS, María, GARCÍA BECERRA, Rafael, MEDINA, Félix M., NOGALES, Manuel. Spatio-temporal biodiversity patterns along the altitudinal cline of Tajogaite volcano

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#### Topic 14: Social-community framework

ALONSO-GONZÁLEZ, Andrea, PRIETO, Daniel, RODRÍGUEZ, Óscar, PAÉZPADILLA, Javier, ORTEGA-RAMOS, Víctor, GARCÍA-HERNÁNDEZ, Rubén, AFONSO, David, PADILLA, Germán D., RODRÍGUEZ-PÉREZ, Claudia, PÉREZ, Nemesio N. Engaging communities in volcanic risk awareness: an educational initiative in La Palma (Canary islands)

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JONES, Ajay Wynne, QUEAY, Isabel, IRELAND, Ben, BACKHOUSE, Sharon. The design principles of open-access science: volcanostories 4 years in

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RICE, Rosie Frances, OPPENHEIMER, Clive. Faith in the fire: Christian imaginaries and the 2021 volcán de Tajogaite eruption

RILEY, Olivia, SANGSTER, Heather, MAHABIR, Ron, SOLANA, Carmen, GONZÁLEZ, Pablo. Exploring past human responses to volcanic events in the Canary Islands through traditional media using topic and sentiment analysis

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### **Friday 21. 13:00 - 13:45 (Topics 10, and 13)**

Topic 10: Geological Heritage

BECERRA-RAMÍREZ, Rafael, GOSÁLVEZ, Rafael U., ESCOBAR, Estela, SANTANA-CORDERO, Aarón M., PÉREZ, Nemesio M. Changes in the natural landscapes in the eruption of Tajogaite 2021 (La Palma, Canary Islands, Spain)

COELLO BRAVO, Juan J., COELLO BRAVO, Jaime. 5 georoutes: first pase for the creation of a geological park in La Palma

DÓNIZ PÁEZ, Javier, BECERRA-RAMÍREZ, Rafael, PÉREZ, Nemesio M. An approach to the anthropogenic technofossils of the 2021 Tajogaite eruption (La Palma, Canary Islands) and their geotourism interest

GONZÁLEZ, María Elena, BECERRA-RAMÍREZ, Rafael, ESCOBAR, Estela, GOSÁLVEZ, Rafael, MORENO, Margarita. Tajogaite 2021: Geoheritage or hated geoheritage?

GUILLEN MARTÍN, Cayetano, HERNÁNDEZ FARIÑA, Lorena, ROMERO RUIZ, Carmen, DÓNIZ PÁEZ, Javier, ROJAS HERNÁNDEZ, Judith. Lava breakout from 2021 Tajogaite volcanic eruption, La Palma, Spain

VEGAS, Juana, GALINDO, Inés, SÁNCHEZ, Nieves, RODRÍGUEZ, Cecilio, HERNÁNDEZ, Omar, SUÁREZ, Juanjo. Sustainable geotourism development and training initiatives for the Llano del Jable-Cabeza de Vaca-Tajogaite volcano trail, La Palma Island

Topic 13: New resources opportunities

BECERRA-RAMÍREZ, Rafael, GOSÁLVEZ, Rafael U., ESCOBAR, Estela, GONZÁLEZ, Elena, GUEVARA, Darío, NAVAS, Adrián, MORALES PÉREZ, Beatriz. Education and scientific outreach: understanding

volcanic geomorphology, geoheritage, and volcanic hazard through Tajogaite eruption 2021 (La Palma, Spain)

D'AURIA, Luca, CABRERA-PÉREZ, Iván, SOUBESTRE, Jean, GARCÍAHERNÁNDEZ, Rubén, MARTÍNEZ VAN DORTH, David, ORTEGA-RAMOS, Víctor, PADILLA, Germán D., PÉREZ, Nemesio M. Evaluating the geothermal potential in La Palma Island (Canary Islands) through geophysical techniques

DEL CASTILLO ARMAS, Carla, ALBA DORADO, María Isabel. Water as a structuring agent: new territorial strategies after the Tajogaite eruption

DÓNIZ PÁEZ, Javier, BECERRA-RAMÍREZ, Rafael, PÉREZ, Nemesio M. Sites of geoturistic interest from 2021 Tajogaite eruption (La Palma, Spain)

GARCÍA-LODEIRO, Inés, MARTÍN-RODRÍGUEZ, Pablo, CAÑO, Andrés, ALONSO, María del Mar, FERNÁNDEZ-JIMÉNEZ, Ana. La Palma volcanic ash as a new resource for making low carbon cementitious binders

HERNÁNDEZ-MARTÍN, Helena, HERNÁNDEZ-MARTÍN, Luis, SANTAMARTA, Juan C., HERNÁNDEZ-GUTIÉRREZ, Luis E. Volcanic tubes as a geotourism resource: protocols for radon measurement

IZQUIERDO, Desire. Abora Expeditions: regenerative tourism and ecological restoration in post-eruption volcanic landscapes

MARTÍN-LORENZO, Alba, PÉREZ, Nemesio M., MELIÁN, Gladys V., ASENSIO-RAMOS, María, HERNÁNDEZ, Pedro A., PADRÓN, Eleazar. Soil and soil-gas surveys for geothermal exploration at Cumbre Vieja volcano (La Palma, Canary Islands, Spain)

MELIÁN, Gladys V., PÉREZ, Nemesio M., ASENSIO-RAMOS, María, CARTAYA, Sttefany, PADRÓN, Eleazar, PADILLA, Germán D., HERNÁNDEZ, Pedro A. Multi-scale surface geochemical surveys for geothermal resource exploration in the southern sector of the Tajogaite lava flows (La Palma, Canary Islands, Spain)

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