

**Dr. Kristy F. Tiampo**  
Director, Earth Science and Observation Center (ESOC)  
Cooperative Institute for Research in Environmental Sciences (CIRES)  
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**Education**

|                                 |                                  |      |      |
|---------------------------------|----------------------------------|------|------|
| Tufts University                | Civil and Geology                | BSCE | 1983 |
| Stanford University             | Civil and Structural Engineering | MSc  | 1984 |
| University of Colorado, Boulder | Geophysics                       | PhD  | 2000 |

**Professional Experience**

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|--------------|-------------------------------|---|
| 2015-present | Professor & Director, ESOC    | CIRES & Dept. of Geological Sciences<br>University of Colorado, Boulder |
| 2003-2015    | Assistant/Associate/Professor | Dept. of Earth Sciences<br>Western University, Canada                   |
| 2010-2011    | Visiting Scholar              | Universidad Complutense<br>Madrid, Spain                                |
| 2000-2003    | Research Associate            | CIRES, University of Colorado, Boulder                                  |
| 1984-1994    | Senior/Project Engineer       | U.S. Army Corps of Engineers<br>New England Division                    |

**Awards**

Outstanding Achievement Award, Tufts Civil and Environmental Engineering Department, 2020  
Meritorious Service Award, Canadian Geophysical Union, 2017.  
Faculty Scholar, University of Western Ontario, 2011-2013.  
NSERC and Aon Benfield/ICLR Industrial Research Chair in Earthquake Hazard Assessment, 2006-2012.  
Professional Engineer, State of Connecticut, 1990-1995.  
CIRES Graduate Research Fellow, 1999-2000.  
NASA Mission to Planet Earth Grant, NGT5-30025, Study and Modeling of the Magmatic Intrusion Source at Long Valley Caldera, CA, 1996-1999.  
General Electric Foundation Fellowship, Stanford University, 1983-1984.  
Robert L. Nichols Award, Geological Sciences, Tufts University, 1983.  
BSCE/ASCE Howard P. Morse Award, Tufts University, 1983.  
Tau Beta Pi, Tufts University, 1982-1983.

**Relevant Activities**

PI, NASA IDS, Interaction of Mass Movements with Natural Hazards under Changing Hydrologic Conditions, 2017-present.  
Co-PI, NSF CSSI, Collaborative Research: GeoSCIFramework: Scalable Real-time Streaming Analytics and Machine Learning for Geoscience and Hazards Research, 2019-present.  
Member, ASF-DAAC User Working Group, 2016-present.  
Canadian representative to the Asia-Pacific Economic Cooperative (APEC) Cooperation for Earthquake Simulation (ACES), 2007-present.

**Selected Publications**

Samsonov, S.V., Tiampo, K.F., Cassotto, R. SAR-derived flow velocity and its link to glacier surface elevation change and mass balance, *Remote Sensing of the Environment (RSE)*, accepted February 2021.  
Jacquemart, M., Tiampo, K. Radar coherence ratio and NDVI ratio as landslide early warning indicators, *Natural Hazards and Earth System Science*, doi:10.5194/nhess-21-629-2021, 2021.

Kelevitz, K., Corsa, B., Tiampo, K.F. Improved real-time natural hazard monitoring using automated DInSAR time series, *Remote Sensing*, 13(867), doi:10.3390/rs13050867021, 2021.

Miguelsanz, L., González, P.J., Tiampo, K.F. Fernández, J. Tidal influence on seismic activity during the 2011-2013 El Hierro volcanic unrest, *Tectonics*, 40(2), doi:10.1029/2020TC006201, 2021.

Jacquemart, M., Loso, M., Leopold, M., Berthier, E., Welty, E., Hansen, J.S.S., Sykes, J., Tiampo, K. Does climate change increase the likelihood of large-scale glacier detachments? Insights from Flat Creek Glacier, St. Elias Mountains, Alaska, *Geology*, doi:10.1130/G47211.1, 2020.

Camacho, A., Fernández, J., Samsonov, S.V., Tiampo, K.F., Palano, M., 3D multi-source model of elastic volcanic ground deformation, *Earth and Planetary Science Letters (EPSL)*, doi:10.1016/j.epsl.2020.116445, 2020.

Barba-Sevilla, M., Baird, B.W., Liel, A.B., Tiampo, K.F. Hazard implications of the 2016 Mw 5.0 Cushing, OK earthquake from a joint analysis of damage and InSAR data., *Remote Sensing*, 10, 1715, doi:10.3390/rs10111715, 2018.

Tiampo, K.F., McGinnis, S., Kropivnitskaya, Y., Qin, J., Bauer, M.A. Big data challenges and hazards modelling, invited chapter, *Risk Modeling for Hazards and Disasters*, ed. G. Michel, doi:10.1016/B978-0-12-804071-3.00007-0, 2018.

Tiampo, K.F., González, P.J. Samsonov, S., Fernández, J., Camacho, A., Principal component analysis of MSBAS DInSAR time series from Campi Flegrei, Italy, *Journal of Volcanology and Geothermal Research*, doi:10.1016/j.jvolgeores.2017.03.004, 2017.

Atkinson, G.M., Eaton, D., Ghofrani, H., Walker, D., Cheadle, B., Schultz, R., Shcherbakov, R., Tiampo, K., Gu, J., Harrington, R., Liu, Y., van der Baan, M., Kao, H. Hydraulic fracturing and seismicity in the Western Canada Sedimentary Basin, *Seismological Research Letters*, doi:10.1785/0220150263, 2016.

Shirzaie, M., Ellsworth, W., Tiampo, K., González, P., Manga, M. Surface uplift and time-dependent seismic hazard due to fluid-injection in eastern Texas, *Science*, doi:10.1126/science.aag0262, 2016.

Samsonov, S.V., Tiampo, K.F., Feng, W. Fast subsidence in downtown of Seattle observed with satellite radar, *Remote Sensing Applications: Society and Environment*, doi:10.1016/j.rsase.2016.10.001, 2016.

Samsonov, S., d'Oreye, N., González, P., Tiampo, K., Ertolahti, L., Clague, J.J. Rapidly accelerating subsidence in the Greater Vancouver region from two decades of ERS-ENVISAT-RADARSAT-2 DInSAR measurements, *RSE*, doi:10.1016/j.rse.2013.12.017, 2014.

Samsonov, S.V., Tiampo, K.F., Camacho, A., Fernández, J., González, P.J. Spatiotemporal analysis and interpretation of 1993-2013 ground deformation at Campi Flegrei, Italy, observed by advanced DInSAR, *Geophysical Research Letters (GRL)*, doi:10.1002/2014GL061307, 2014.

Samsonov, S.V., Trishchenko, A.P., Tiampo, K.F., González, P.J., Zhang, Y., Fernández, J., Removal of systematic seasonal atmospheric signal from interferometric synthetic aperture radar ground deformation time series, *GRL*, doi:10.1002/2014GL060595, 2014.

Tiampo, K.F., González, P.J., Samsonov, S., Results for aseismic creep on the Hayward fault using polarization persistent scatterer InSAR, *EPSL*, doi:10.1016/j.epsl.2013.02.019, 2013.

González, P.J., Samsonov, S., Pepe, S., Tiampo, K., Tizzani, P., Casu, F., Fernández, J., Camacho, A.G., Sansosti, E. Magma storage and migration associated with the 2011-2012 El Hierro eruption: implications for crustal magmatic systems at oceanic island volcanoes, *Journal of Geophysical Research*, doi:10.1002/jgrb.50289, 2013.

Alipour, S., Tiampo, K., Samsonov, S., González, P. Multibaseline PolInSAR Using RADARSAT-2 quad-pol data: Improvements in interferometric phase analysis, *IEEE Geoscience and Remote Sensing Letters (GRSL)*, doi:10.1109/LGRS.2012.2237501, 2013.

Alipour, S., Tiampo, K., Samsonov, S., González, P. Short-term surface deformation on the northern Hayward fault, CA, and nearby landslides using Polarimetric SAR Interferometry (PolInSAR), *PAGEOPH*, doi:10.1007/s00024-013-0747-x, 2013.

González, P.J., Tiampo, K.F., Palano, M., Cannavó, F., Fernández, J., The 2011 Lorca earthquake slip distribution controlled by groundwater crustal unloading, *Nature Geo.*, doi:10.1038/ngeo1610, 2012.

Samsonov, S. and Tiampo, K. Polarization phase difference analysis for selection of persistent scatterers in SAR interferometry, *IEEE GRSL*, doi:10.1109/LGRS.2010.2072904, 8, 331-335, 2011.