

2022

- Laura Antoni-Micollier, Daniele Carbone, Vincent M enoret, Jean Lautier-Gaud, Thomas King, Filippo Greco, Alfio Messina, Danilo Contrafatto, and Bruno Desruelle. Detecting volcano-related underground mass changes with a quantum gravimeter. *Geophysical Research Letters*, 49(13): e2022GL097814, 2022. doi: <https://doi.org/10.1029/2022GL097814>. URL <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2022GL097814>.
- C. Bizouard, L. I. Fern andez, and L. Zotov. Admittance of the earth rotational response to zonal tide potential. *Journal of Geophysical Research: Solid Earth*, 127(3):e2021JB022962, 2022. doi: <https://doi.org/10.1029/2021JB022962>. URL <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2021JB022962>.
- Daniel Boddice, Nicole Metje, and George Tuckwell. Microgravity surveying before, during and after distant large earthquakes. *Journal of Applied Geophysics*, 197:104542, 2022. doi: <https://doi.org/10.1016/j.jappgeo.2022.104542>. URL <https://www.sciencedirect.com/science/article/pii/S0926985122000131>.
- B Bramanto, K Breili, C Gerlach, V Ophaug, and J G O Gjevestad. Reducing hydrological disturbances in absolute gravity observations by combining global hydrological models with a regional run-off model. *Geophysical Journal International*, 230(2):976–994, 2022. doi: 10.1093/gji/ggac054. URL <https://doi.org/10.1093/gji/ggac054>.
- Q Chaffaut, J Hinderer, F Masson, D Viville, S Pasquet, J P Boy, J D Bernard, N Lesparre, and M C Pierret. New insights on water storage dynamics in a mountainous catchment from superconducting gravimetry. *Geophysical Journal International*, 228(1):432–446, 08 2022a. doi: 10.1093/gji/ggab328. URL <https://doi.org/10.1093/gji/ggab328>.
- Quentin Chaffaut, Nolwenn Lesparre, Fr ed eric Masson, Jacques Hinderer, Daniel Viville, Jean-Daniel Bernard, Gilbert Ferhat, and Solenn Cotel. Hybrid gravimetry to map water storage dynamics in a mountain catchment. *Frontiers in Water*, 3, 2022b. doi: 10.3389/frwa.2021.715298. URL <https://www.frontiersin.org/articles/10.3389/frwa.2021.715298>.
- Olivier Francis. Gravimetric method. In *Engineering Geophysics*, pages 53–57. CRC Press, 2022.
- Filippo Greco, Elena Motta, Giuseppe Siligato, Michele Mangiameli, and Giuseppe Mussumeci. A new tool to enhance field operations during combined gravity and GNSS surveys to monitor Etna volcano (Sicily, Italy). *AIP Conference Proceedings*, 2425(1), 2022. doi: 10.1063/5.0081418. URL <https://doi.org/10.1063/5.0081418>.
- Landon J.S. Halloran. Improving groundwater storage change estimates using time-lapse gravimetry with gravi4gw. *Environmental Modelling & Software*, 150:105340, 2022. ISSN 1364-8152. doi: <https://doi.org/10.1016/j.envsoft.2022.105340>. URL <https://www.sciencedirect.com/science/article/pii/S1364815222000469>.
- Qianqian He, Xiaodong Chen, Heping Sun, Jianqiao Xu, Ziwei Liu, Shijian Zhou, and Zhigao Chen. Quantitative separation of the local vadose zone water storage changes using the superconductive gravity technique. *Journal of Hydrology*, 609:127734, 2022. ISSN 0022-1694. doi: <https://doi.org/10.1016/j.jhydrol.2022.127734>. URL <https://www.sciencedirect.com/science/article/pii/S0022169422003092>.
- J. Hinderer, R. J. Warburton, S. Rosat, U. Riccardi, J.-P. Boy, F. Forster, P. Jousset, A. G untner, K. Erbas, F. Littel, and J.-D. Bernard. Intercomparing superconducting gravimeter records in a

- dense meter-scale network at the j9 gravimetric observatory of strasbourg, france. *Pure and Applied Geophysics*, 179, 2022. doi: 10.1007/s00024-022-03000-4. URL <https://doi.org/10.1007/s00024-022-03000-4>.
- Xing Huang, Xinning Hu, Chunyan Cui, Hao Wang, Zili Zhang, Feifei Niu, Yuan Zhang, and Qiuliang Wang. Numerical simulation of ac losses in superconducting gravimeter. *Superconductor Science and Technology*, 35(10):105001, 2022a. doi: 10.1088/1361-6668/ac87da. URL <https://dx.doi.org/10.1088/1361-6668/ac87da>.
- Xing Huang, Xinning Hu, Feifei Niu, Qiuliang Wang, Chunyan Cui, Hao Wang, and Xiaodong Chen. Study on room-temperature effect of a superconducting gravimeter prototype. *Sensor Review*, 42:463–473, 2022b. doi: 10.1108/SR-03-2022-0159. URL <https://doi.org/10.1108/SR-03-2022-0159>.
- Xing Huang, Xinning Hu, Zili Zhang, Chunyan Cui, Hao Wang, Feifei Niu, Yuan Zhang, Luzhong Wang, and Qiuliang Wang. Analytical calculation and optimization of superconducting gravimeter temperature effect. *IEEE Transactions on Applied Superconductivity*, 32(5):1–7, 2022c. doi: 10.1109/TASC.2022.3168880.
- Yuichi Imanishi. Inertial effects due to eruption-induced atmospheric disturbances identified by superconducting gravimeter observations at matsushiro, japan. *Earth, Planets and Space*, 74, 2022. doi: 10.1186/s40623-022-01615-4. URL <https://doi.org/10.1186/s40623-022-01615-4>.
- Yuichi Imanishi, Kazunari Nawa, Yoshiaki Tamura, and Hiroshi Ikeda. Effects of vertical nonlinearity on the superconducting gravimeter ct# 036 at ishigakijima, japan. *Earth, Planets and Space*, 74(1):73, 2022. doi: 10.1186/s40623-022-01609-2. URL <https://doi.org/10.1186/s40623-022-01609-2>.
- Camille Janvier, Vincent Ménoret, Bruno Desruelle, Sébastien Merlet, Arnaud Landragin, and Franck Pereira dos Santos. Compact differential gravimeter at the quantum projection-noise limit. *Phys. Rev. A*, 105:022801, Feb 2022. doi: 10.1103/PhysRevA.105.022801. URL <https://link.aps.org/doi/10.1103/PhysRevA.105.022801>.
- Bo-Nan Jiang and Yu-Zhu Wang. Estimating gravity acceleration from an atomic gravimeter by kalman filtering. *Europhysics Letters*, 140(4):45002, nov 2022. doi: 10.1209/0295-5075/aca42e. URL <https://dx.doi.org/10.1209/0295-5075/aca42e>.
- Hojjat Kabirzadeh, Jeong Woo Kim, Arezou Hadi Najafabadi, Joe enton, Ricky Kao, and Michael G. Sideris. Microgravity effect of inter-seismic crustal dilatation. *Communications Earth & Environment*, 3, 2022. doi: 10.1038/s43247-022-00586-4. URL <https://doi.org/10.1038/s43247-022-00586-4>.
- Kamila Karkowska and Monika Wilde-Piórko. Determination of the earth’s structure based on intermediate-period surface wave recordings of tidal gravimeters: a case study. *Earth, Planets and Space*, 74(1):150, 2022. doi: 10.1186/s40623-022-01712-4. URL <https://doi.org/10.1186/s40623-022-01712-4>.
- G. Kim, I.S. Kim, and I.M. Choi. Design and fabrication of a heat switch for a squid-based superconducting gravimeter. *Physica C: Superconductivity and its Applications*, 598:1354064, 2022. ISSN 0921-4534. doi: <https://doi.org/10.1016/j.physc.2022.1354064>. URL <https://www.sciencedirect.com/science/article/pii/S0921453422000521>.
- Tzuyi Lien, Emmy T. Chang, Cheinway Hwang, Ching-Chung Cheng, Rou-Fei Chen, and Chung-Hsiang Mu. Delineating a volcanic aquifer using groundwater-induced gravity changes in the tatun volcano group, taiwan. *Terrestrial, Atmospheric and Oceanic Sciences*, 33, 2022a. URL <https://doi.org/10.1007/s44195-022-00031-1>.

- Tzuyi Lien, Emmy T Chang, Cheinway Hwang, Ching-Chung Cheng, Rou-Fei Chen, and Chung-Hsiang Mu. Delineating a volcanic aquifer using groundwater-induced gravity changes in the tatun volcano group, taiwan. *Terrestrial, Atmospheric and Oceanic Sciences*, 33(1):31, 2022b. doi: 10.1007/s44195-022-00031-1. URL <https://doi.org/10.1007/s44195-022-00031-1>.
- Haibo Liu, Yan Zhou, Jim Ray, and Jiesi Luo. Excitations of seasonal polar motions derived from satellite gravimetry and general circulation models: Comparisons of harmonic and inharmonic analyses. *Remote Sensing*, 14(15), 2022. doi: 10.3390/rs14153567. URL <https://www.mdpi.com/2072-4292/14/15/3567>.
- José A. López-Pérez, João S. Ferreira, Javier González-García, Francisco J. Beltrán-Martínez, Carlos Albo-Castaño, Beatriz Vaquero-Jiménez, Abel García-Castellano, Javier López-Ramasco, Esther Azcue-Infanzón, Pablo de Vicente-Abad, José A. López-Fernández, Francisco M. Wallenstein, Luís R. Santos, and Sara Pavão. *The Atlantic Network of Geodynamic and Space Stations (RAEGE)*, pages 1–5. Springer Berlin Heidelberg, Berlin, Heidelberg, 2022. doi: 10.1007/1345_2022_152. URL https://doi.org/10.1007/1345_2022_152.
- Adam NOVÁK and Juraj JANÁK. Estimating the thermal effect in gphonex observations. *Contributions to Geophysics and Geodesy*, 52(4):501–515, 2022. doi: 10.31577/congeo.2022.52.4.1. URL <https://journal.geo.sav.sk/cgg/article/view/432>.
- Gábor Papp, Dániel István Csáki, and Judit Benedek. Newtonian (moving mass) calibration of tilt and gravity meters and the investigation of some factors influencing its accuracy. *Journal of Geodesy*, 96(12):98, 2022. doi: 10.1007/s00190-022-01676-z. URL <https://doi.org/10.1007/s00190-022-01676-z>.
- Nolwenn Portier, Florian Forster, Jacques Hinderer, Kemal Erbas, Philippe Jousset, Vincent Drouin, Siqi Li, Freysteinn Sigmundsson, Ingvar Magnússon, Gylfi Páll Hersir, et al. Hybrid microgravity monitoring of the theistareykir geothermal reservoir (north iceland). *Pure and Applied Geophysics*, 179(5):1935–1964, 2022. doi: 10.1007/s00024-022-03018-8. URL <https://doi.org/10.1007/s00024-022-03018-8>.
- Slawomir Porzucek, Monika Loj, and Kajetan d’Obyrn. Surface microgravity monitoring of underground water migration: A case study in wieliczka, poland. *Energies*, 15(11), 2022. doi: 10.3390/en15114012. URL <https://www.mdpi.com/1996-1073/15/11/4012>.
- Abhinav Prasad, Richard P Middlemiss, Andreas Noack, Kristian Anastasiou, Steven G Bramsiepe, Karl Toland, Phoebe R Utting, Douglas J Paul, and Giles D Hammond. A 19 day earth tide measurement with a mems gravimeter. *Scientific Reports*, 12(1):13091, 2022. doi: 10.1038/s41598-022-16881-1. URL <https://doi.org/10.1038/s41598-022-16881-1>.
- Krzysztof Pyrchla, Małgorzata Pajak, Julia Golyga, and Jerzy Pyrchla. A model of the response of the mgs-6 gravity sensor to tilting. *Measurement*, 188:110573, 2022. ISSN 0263-2241. doi: <https://doi.org/10.1016/j.measurement.2021.110573>. URL <https://www.sciencedirect.com/science/article/pii/S0263224121014469>.
- Adam T Ringler, Robert E Anthony, Peter Davis, Carl Ebeling, Katrin Hafner, Robert Mellors, Simon Schneider, and David C Wilson. Improved resolution across the global seismographic network: A new era in low-frequency seismology. *The Seismic Record*, 2(2):78–87, 2022. doi: 10.1785/0320220008. URL <https://doi.org/10.1785/0320220008>.
- Yue Shen, QiuYu Wang, WeiLong Rao, and WenKe Sun. Spatial distribution characteristics and mechanism of nonhydrological time-variable gravity in china continent. *Earth and Planetary Physics*,

6:96, 2022. doi: 10.26464/epp2022009. URL <http://www.eppcgs.org/en/article/doi/10.26464/epp2022009>.

Roman Sulzbach, Hartmut Wziontek, Michael Hart-Davis, Henryk Dobslaw, Hans-Georg Scherneck, Michel Van Camp, Ove Christian Dahl Omang, Ezequiel D. Antokoletz, Christian Voigt, Denise Dettmering, and Maik Thomas. Modeling gravimetric signatures of third-degree ocean tides and their detection in superconducting gravimeter records. *Journal of Geodesy*, 96:35, 2022. doi: 10.1007/s00190-022-01609-w. URL <https://doi.org/10.1007/s00190-022-01609-w>.

Michel Van Camp, Olivier de Viron, Alain Dassargues, Laurent Delobbe, Kristel Chanard, and Kevin Gobron. Extreme hydrometeorological events, a challenge for gravimetric and seismology networks. *Earth's Future*, 10(4):e2022EF002737, 2022. doi: <https://doi.org/10.1029/2022EF002737>. URL <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2022EF002737>.

L. Vitushkin, L. Elinson, A. Krasnov, V. G. Peshekhonov, A. Sokolov, Yu. Smoller, and S. Yurist. *Instruments for Measuring Gravity*, pages 1–61. Springer International Publishing, 2022. doi: 10.1007/978-3-031-11158-7_1. URL https://doi.org/10.1007/978-3-031-11158-7_1.

Z. Wang. From one-dimensional to three-dimensional: Effect of lateral inhomogeneity on tidal gravity derived by analytical expression. *EGUsphere*, 2022:1–33, 2022. doi: 10.5194/egusphere-2022-661. URL <https://egusphere.copernicus.org/preprints/2022/egusphere-2022-661/>.

Lelin Xing, Xiaowei Niu, Lei Bai, and Yaowen Yang. Monitoring groundwater storage changes in a karst aquifer using superconducting gravimeter osg-066 at the lijiang station in china. *Pure and Applied Geophysics*, 179(5):1853–1870, 2022. doi: 10.1007/s00024-022-03024-w. URL <https://doi.org/10.1007/s00024-022-03024-w>.

Lujia Yang, Xiaochao Xu, Qian Wang, Ji'ao Tian, Yanyan Fang, Chun Zhao, Fangjing Hu, and Liangcheng Tu. A highly stable and sensitive mems-based gravimeter for long-term earth tides observations. *IEEE Transactions on Instrumentation and Measurement*, 71:1–9, 2022. doi: 10.1109/TIM.2022.3210969. URL <https://doi.org/10.1109/TIM.2022.3210969>.

Min Zhang, Ziwei Liu, Qiong Wu, Yuntian Teng, Xiaotong Zhang, Feibai Du, and Ying Jiang. Hydrologic changes of in-situ gravimetry. *Geophysics*, 87(2):B117–B127, 2022. doi: 10.1190/geo2021-0037.1. URL <https://doi.org/10.1190/geo2021-0037.1>.

W Zürn, T Forbriger, R Widmer-Schmidrig, P Duffner, and A T Ringler. Modelling tilt noise caused by atmospheric processes at long periods for several horizontal seismometers at BFO—a reprise. *Geophysical Journal International*, 228(2):927–943, 2022. doi: 10.1093/gji/ggab336. URL <https://doi.org/10.1093/gji/ggab336>.