XIE HU (she/her/hers)
CURRICULUM VITAE

Assistant Professor   hu.xie@pku.edu.cn; xiehu.sar@gmail.com
College of Urban and Environmental Sciences   Google Scholar
Peking University, Beijing, China   Natural Hazards Remote Sensing Lab

EDUCATION

Ph.D.	Geophysics	Southern Methodist University, Dallas, TX, USA	2014-2018
M.S.	Remote Sensing	Wuhan University, Wuhan, China	2011-2013
B.S.	GIS	China University of Geosciences, Wuhan, China	2007-2011

WORKING EXPERIENCE

Assistant Professor (tenure track), Peking University	2021.7 to present
Assistant Professor (tenure track), University of Houston	2020.9-2021.6
Postdoctoral Researcher, University of California, Berkeley	2018.9-2020.8

HONORS AND AWARDS

International

United Nations Office for Disaster Risk Reduction (UNDRR) Women's International Network for Disaster Risk Reduction (WIN DRR) Rising Star Award Finalists	2025
Cooperative Institute for Research in Environmental Sciences (CIRES) Sabbatical Visiting Fellowship (2025 Spring)	2024
AGU Natural Hazards Early Career	2022
NASA New (Early Career) Investigator Program in Earth Science	2021
NASA Earth and Space Science Fellowship	2015

China

GIS Rising Star (selected from universities in China)	2025
Beijing Association of Science and Technology Early Career Leadership Program	2024
Beijing Emergency Response and Hazard Reduction Early Career Leadership Program	2023
National Natural Science Foundation of China Early Career	2022

PEER-REVIEWED PUBLICATIONS (52) †Students advisee in my lab *Corresponding

Students/postdocs advisee as the 1st author/I am in role of the correspondence (12):

1. Song, Y.†, **Hu, X.***, Xu, Y., Chen, G., Zhang, J., Li, Y., 2025. Co-seismic landslides and a massive lateral spread of the 2023 Jishishan earthquake in China characterized by intelligent remote sensing analysis. *Journal of Geophysical Research: Earth Surface*, 130, e2025JF008702. https://doi.org/10.1029/2025JF008702

2. Lin, Y.†, **Hu, X.***, Wang, F., Tang, Q., Zhao, Y., Li, Y., Li, T., Liu, C., Wang, X., Li, D., 2025. Quantifying the lifespan of 3D flood structures: unlocking the potential of flood detention areas for enhanced flood control in China. *Water Resources Research*. https://doi.org/10.1029/2025WR039992

3. An, N.*, Dai, Z., **Hu, X.***, Wang, B., Huo, Z., Xiao, Y., Zhan, W., Yang, Y., 2025. Comparing landslide patterns and failure mechanisms in restored and native forest ecosystems: Insights from

geomorphology, lithology and vegetation. *Catena*, 260, 109452. https://doi.org/10.1016/j.catena.2025.109452

4. Song, Y.†, **Hu, X.***, Shi, X., Cui, Y., Zhou, C., Xu, Y., 2025. Hydrological proxy derived from InSAR coherence in landslide characterization. *Remote Sensing of Environment*, 322, 114712. https://doi.org/10.1016/j.rse.2025.114712

5. Lin, Y.†, **Hu, X.***, Lu, H.†, Niu, F., Liu, G., Huang, L., Zhu, H., Zhang, S., Liu, J., Liu, Y., 2025. Domain adaptive semantic segmentation of multi-annual retrogressive thaw slumps. *Journal of Geophysical Research: Machine Learning and Computation*, 1, e2024JH000370. https://doi.org/10.1029/2024JH000370

6. Lin, F.†, **Hu, X.***, Lin, Y.†, Li, Y., Liu, Y., Li, D., 2024. Dual-branch multi-modal convergence for crater detection using Chang'e image. *International Journal of Applied Earth Observation and Geoinformation*, 134, 104215. https://doi.org/10.1016/j.jag.2024.104215

7. Yu, X.†, **Hu, X.***, Song, Y.†, Xu, S., Li, X., Song, X., Fan, X., Wang, F., 2024. Intelligent assessment of building damage of 2023 Turkey-Syria Earthquake by multiple remote sensing approaches. *npj Natural Hazards*, 1. https://doi.org/10.1038/s44304-024-00003-0 (**Annual Cover Paper, one only**)

8. Shi, X., **Hu, X.***, 2023. Characterization of landslide displacements in an active fault zone in Northwest China. *Earth Surface Processes and Landforms*. https://doi.org/10.1002/esp.5594

9. Yu, X.†*, Wang, G., **Hu, X.**, Liu, Y., Bao, Y., 2023. Land subsidence in Tianjin, China: before and after the South-to-North Water Diversion. *Remote Sensing*, *15*(6), 1647. https://doi.org/10.3390/rs15061647

10. Yu, X.†, **Hu, X.***, Wang, G., Wang, K., Chen, X., 2022. Machine-learning estimation of snow depth in 2021 Texas statewide winter storm using SAR imagery. *Geophysical Research Letters*, 49, e2022GL099119. https://doi.org/10.1029/2022GL099119

11. Yu, H.†, **Hu, X.**, 2022. Knowledge-aided InSAR phase unwrapping approach. *IEEE Transactions on Geoscience and Remote Sensing*, 60, 1-8. https://doi.org/10.1109/TGRS.2021.3081039

12. Shi, X.G., **Hu, X.***, Sitar, N., Kayen, R., Qi, S., Jiang, H., Wang, X., 2021. Hydrological control shift from river level to rainfall in the reactivated Guobu Slope besides the Laxiwa hydropower station (China). *Remote Sensing of Environment*, *265*, 112664. https://doi.org/10.1016/j.rse.2021.112664

1st author (13):

13. **Hu, X.***, Xue, L., Bürgmann, R., Fu, Y., 2021. Stress perturbations from hydrological and industrial loads and seismicity in the Salt Lake City region. *Journal of Geophysical Research: Solid Earth*, 126, e2021JB022362. https://doi.org/10.1029/2021JB022362

14. **Hu, X.***, Bürgmann, R., Fielding, E.J., Xu, X., Zhen, L., 2021. Machine-learning characterization of tectonic, hydrological and anthropogenic sources of active ground deformation in California. *Journal of Geophysical Research: Solid Earth*, *126*, e2021JB022373. https://doi.org/10.1029/2021JB022373 (**Annual Top 10 Downloads**)

15. **Hu, X.***, Xue, L., Yu, Y., Guo, S., Cui, Y., Li, Y., Qi, S.*, 2021. Remote sensing characterization of Mountain Excavation and City Construction in Loess Plateau. *Geophysical Research Letters*, *48*, e2021GL095230. https://doi.org/10.1029/2021GL095230

16. **Hu, X.***, Bürgmann, R., Schulz, W., Fielding, E.J., 2020. Four-dimensional surface motions of the Slumgullion landslide and quantification of hydrometeorological forcing. *Nature Communications*, *11*, 2792. https://doi.org/10.1038/s41467-020-16617-7 (**Reported by NASA etc.**)

17. **Hu, X.***, Bürgmann, R., 2020. Aquifer deformation and active faulting in Salt Lake Valley, Utah, USA. *Earth and Planetary Science Letters*, *547*. https://doi.org/10.1016/j.epsl.2020.116471

18. **Hu, X.***, Bürgmann, R., Fielding, E.J., Lee, H., 2020. Internal kinematics of the Slumgullion landslide (USA) from high-resolution UAVSAR InSAR data. *Remote Sensing of Environment*, 251. https://doi.org/10.1016/j.rse.2020.112057

19. **Hu, X.***, Bürgmann, R., 2020. Rheology of a debris slide from the joint analysis of UAVSAR and LiDAR data. *Geophysical Research Letters*, *47*, e2020GL087452. https://doi.org/10.1029/2020GL087452

20. **Hu, X.***, Bürgmann, R., Lu, Z., Handwerger, A. L., Wang, T., Miao, R., 2019. Mobility, thickness, and hydraulic diffusivity of the slow-moving Monroe landslide in California revealed by L-band satellite radar interferometry. *Journal of Geophysical Research: Solid Earth*, *124*. https://doi.org/10.1029/2019JB017560

21. **Hu, X.***, Lu, Z., Wang, T., 2018. Characterization of hydrogeological properties in Salt Lake Valley, Utah using InSAR. *Journal of Geophysical Research: Earth Surface*, *123*. https://doi.org/10.1029/2017JF004497

22. **Hu, X.***, Lu, Z., Pierson, T. C., Kramer, R., George, D. L., 2018. Combining InSAR and GPS to determine transient movement and thickness of a seasonally active low-gradient translational landslide. *Geophysical Research Letters*, *45*, 1453–1462. https://doi.org/10.1002/2017GL076623

23. **Hu, X.**, Oommen, T., Lu, Z.*, Wang, T., Kim, J. W., 2017. Consolidation settlement of Salt Lake County tailings impoundment revealed by time-series InSAR observations from multiple radar satellites. *Remote Sensing of Environment*, *202*, 199–209. https://doi.org/10.1016/j.rse.2017.05.023

24. **Hu, X.**, Wang, T., Pierson, T. C., Lu, Z.*, Kim, J. W., Cecere, T. H., 2016. Detecting seasonal landslide movement within the Cascade landslide complex (Washington) using time-series SAR imagery. *Remote Sensing of Environment*, *187*, 49–61. https://doi.org/10.1016/j.rse.2016.10.006

25. **Hu, X.***, Wang, T, Liao, M., 2014. Measuring coseismic displacements with point-like targets offset tracking. *IEEE Geoscience and Remote Sensing Letters*, *11*(1), 283–287. https://doi.org/10.1109/LGRS.2013.2256104

Collaborative work (27)

26. Li, J.*, Shi, J., Meng, H., Sun, C., Qi, C., Pan, L., Fan, S., Wang, T., Chen, L., Xue, L., Tian, Z., **Hu, X.**, Li, C. Near-Surface Liquid Water on Mars Inferred from Seasonal Marsquakes. *Nature Communications* (Accepted)

27. Wang, G.*, Bao, Y., Zhang, S., Huang, G., **Hu, X.**, 2025. ChangePointCNN-GNSS: An AI Model for Assessing Change Points and Optimizing Site Velocity Estimation from Global GNSS Data. *Journal of Geophysical Research: Machine Learning and Computation*, 2, e2025JH000910. https://doi.org/10.1029/ 2025JH000910

28. Yang, L., Zhao, C.*, Lu, Z., **Hu, X.**, 2025. Kinematic glacier thickness inversion using 3D flow velocities from multi-track SAR images. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, *18*. https://doi.org/10.1109/JSTARS.2025.3624258

29. Yang, L., Lu, Z.*, Zhao, C.*, Zhang, Q., **Hu, X.**, Wang, B., 2025. Triggering factors and flooding processes of glacial lake outburst flood at Ranzerio lake. *npj Natural Hazards*, *2*, 90. https://doi.org/10.1038/s44304-025-00147-7

30. Cui, J., Ran, Y.†, **Hu, X.**, Takeda, S., Zhang, J., Cui, S., Ham, K., Huang, X., Sun, F., 2025. Investigating subsidence characteristics of Kyoto Imperial Garden cultural heritage shaped by historical landscape construction, through remote sensing. *npj Heritage Science*, 13, 630. https://doi.org/10.1038/s40494-025-02205-9

31. Xue, L.*, **Hu, X.**, Tang, Q., Qi, S., Moucha, R., 2025. Post-anthropogenic landscape evolution: Terrain reshaping and geomorphic response in the Loess Plateau. *Geomorphology*, 488, 109976. https://doi.org/10.1016/j.geomorph.2025.109976

32. Yang, L., Lu, Z.*, Zhao, C., **Hu, X.**, Wang, B., 2025. Studying mass movement sources and potential glacial lake outburst flood at Jiongpu Co, southeastern Tibet, using multiple remote sensing methods and HEC-RAS model. *Journal of Geophysical Research: Earth Surface*, *130*, e2024JF008067. https://doi.org/10.1029/2024JF008067

33. Ma, Z.*, Xu, J., Dong, B., **Hu, X.**, Hu, H., Yan, S., Zhu, S., He, K., Shi, Z., Chen, Y., Fang, X., Zhang, Q., Gu, S., Weng, F., 2025. GMCP: A fully Global multi-source Merging-and-Calibration Precipitation dataset (1-hourly, 0.1°, global, 2000–Present). *Bull. Amer. Meteor. Soc.*, 106(4), E596–E624. https://doi.org/10.1175/BAMS-D-24-0051.1

34. Tian, S., Sha, A., Luo, Y., Ke, Y., Spencer, R., **Hu, X.**, Ning, M., Zhao, Y., Deng, R., Gao, Y., Liu, Y., Li, D.*, 2025. A novel framework for river organic carbon retrieval through satellite data and machine learning. *ISPRS Journal of Photogrammetry and Remote Sensing*, 221, 109-123. https://doi.org/10.1016/j.isprsjprs.2025.01.028

35. Tang, F., Qi, S., Guo, S.*, Li, Y., Guo, X., Lu, X, Zou, Y., Wang, X., **Hu, X.**, Ma, L., Zheng, B., Wang, Z., 2025. The Influence of Reservoirs on Landslide Erosion. *Remote Sensing*, 17, 569. https://doi.org/10.3390/rs17040569

36. Ao, Z., Hu, X.L., Tao, S.*, **Hu, X.**, Wang, G., Li, M., Wang, F., Hu, L., Liang, X., Qi, W., Ran, Q., Yusup, A., Xiao, J., Fang, J., Chang, J., Zeng, Z., Fu, Y., Xue, B., Wang, P., Zhao, K., Li, L., Li, W., Li, Y., Jiang, M., Yang, Y., Shen, H., Zhao, X., Shi, Y., Wu, B., Yan, Z., Wang, M., Su, Y., Hu, T., Ma, Q., Bai, H., Wang, L., Yang, Z., Feng, Y., Zhang, D., Huang, E., Pan, J., Ye, H., Yang, C., Qin, Y., He, C., Guo, Y., Cheng, K., Ren, Y., Yang, H., Zheng, C., Zhu, J., Wang, S., Ji, C., Zhu, B., Liu, H., Tang, Z., Wang, Z., Zhao, S., Tang, Y., Xing, H., Guo, Q., Liu, Y., Fang, J., 2024. A national-scale assessment of land subsidence in China's major cities. *Science*, 384(6693), 301-306. https://doi.org/10.1126/science.adl4366

37. Zheng, W., Hu, J.*, Lu, Z., **Hu, X.**, Sun, Q., Liu, J., Huang, B., 2024. Enhancing 4-D landslide monitoring and block interaction analysis with a novel Kalman-Filter-Based InSAR approach. *Journal of Geophysical Research: Earth Surface*, 129, e2024JF007923. https://doi.org/10.1029/2024JF007923

38. Li, X., Yu, X.†, Burgi, P., Wald, D., **Hu, X.**, Xu, S.*, 2024. Rapid building damage estimates from the M7.8 Turkey Earthquake sequence via causality-informed Bayesian inference from satellite imagery. *Earthquake Spectra*, 41(1). https://doi.org/10.1177/87552930241290 5 (**Editor's Choice; Journal cover image**)

39. Ye, X., Zhu, H.*, Wu, B., Tian, F., Zhang, W., **Hu, X.**, Schenato, L., Pasuto, A., Catani, F., 2024. Near-surface soil hydrothermal response feedbacks landslide activity and mechanism. *Engineering Geology*, 341, 107690. https://doi.org/10.1016/j.enggeo.2024.107690

40. Thomas, J., Klida, R., Oommen, T.*, Sajinkumar, K.S., Zhang, B., **Hu, X.**, 2024. Need for a multi-sensor monitoring approach for embankment failures: lessons learned from the Edenville Dam failure. *Environmental & Engineering Geoscience*, 30(1-2), 19–30. https://doi.org/10.21663/EEG-D-23-00056

41. Li, Y., Cui, Y.*, **Hu, X.**, Lu, Z., Guo, J., Wang, Y., Wang, H., Wang, S., Zhou, X., 2024. Glacier retreat in Eastern Himalaya drives catastrophic glacier hazard chain. *Geophysical Research Letters*, 51(8), e2024GL108202. https://doi.org/10.1029/2024GL108202

42. Zhou, C., Cao, Y.*, Gan, L., Wang, Y., Motagh, M., Roessner, S., **Hu, X.**, Yin, K., 2024. A novel framework for landslide displacement prediction using MT-InSAR and machine learning techniques. *Engineering Geology*, 334, 107497. https://doi.org/10.1016/j.enggeo.2024.107497

43. Welch, J., Wang, G.*, Bao, Y., Zhang, S., Huang, G., **Hu, X.**, 2024. Unveiling the Hidden Threat: Drought-Induced Inelastic Subsidence in Expansive Soils. *Geophysical Research Letters*. https://doi.org/10.1029/2023GL107549

44. Chen, X.*, Xu, X., Ma, Y., Wang, G., Chen, D., Cao, D., Xu, X., Zhang, Q., Li, L., Liu, Y., Liu, L., Li, M., Luo, S., Wang, X., **Hu, X.**, 2024. Investigation of precipitation process in the water vapor channel of

the Yarlung Zsangbo Grand Canyon. *Bulletin of the American Meteorological Society*. https://doi.org/10.1175/BAMS-D-23-0120.2

45. Li, X., Dimasaka, J., Zhang, X., Yu, X.†, Wang, C., **Hu, X.**, Noh, H. Y., Zhao, X., Xu, S.*, 2023. Seismic impacts report for M7.8 and M7.5 Turkey-Syria earthquake using near real-time crowdsourcing and remote sensing information. *DesignSafe-CI*. https://doi.org/10.17603/ds2-vnsc-y870

(15 days after the mainshock, this work was launched as an interactive map in the Turkish earthquake information platform funded by AFET PLATFORMU (Disaster Platform) and Turkish Philanthropy Funds. https://afetharitasi.org/)

46. Yang, L., Lu, Z., Ouyang, C., Zhao, C.*, **Hu, X.**, Zhang, Q., 2023. Glacial lake outburst hazard monitoring and flooding modeling by integrating multiple remote sensing methods and HEC-RAS. *Remote Sensing*. https://doi.org/10.3390/rs15225327

47. Zheng, W., Hu, J.*, Lu, Z., **Hu, X.**, Sun, Q., Liu, J., Zhu, J., Li, Z., 2023. Enhanced kinematic inversion of 3-D displacements, geometry, and hydraulic properties of a north-south slow-moving landslide in Three Gorges Reservoir. *Journal of Geophysical Research: Solid Earth*, 128, e2022JB026232. https://doi.org/10.1029/2022JB026232 (**Annual Top 10 Citation**)

48. Qi, S.*, Hou, X., Yu, Y., Zhang, Y., **Hu, X.**, Zhang, L., Li, Z., Guo, S., Zhang, F., Li, T., Peng, J., 2022. Collapse and subsidence mechanism of compacted loess and suitability of mountain bulldozing and city creation projects in the Loess Plateau of China. *Science Bulletin* (In Chinese).

49. Zhou, C., Cao, Y., **Hu, X.**, Yin, K.*, 2022. Enhanced dynamic landslide hazard assessment using MT-InSAR method in the Three Gorges Reservoir Area. *Landslides*, 19, 1585–1597. https://doi.org/10.1007/s10346-021-01796-1

50. Shi, G.Q., Ma, P.*, **Hu, X.**, Song, X., Huang, B., Lin, H., 2021. Surface response and subsurface features during the restriction of groundwater exploitation in Suzhou (China) inferred from decadal SAR interferometry. *Remote Sensing of Environment*, *256*, 112327. https://doi.org/10.1016/j.rse.2021.112327

51. Shi, Z.M., **Hu, X.**, Wang, C.Y.*, 2021. Hydro-mechanical coupling in the shallow crust – insight from groundwater level and satellite radar imagery in a mining area. *Journal of Hydrology*, *594*, 125649. https://doi.org/10.1016/j.jhydrol.2020.125649

52. Kim, J.W., Lu, Z.*, Qu, F., **Hu, X.**, 2015. Pre-2014 mudslides at Oso revealed by InSAR and multi-source DEM analysis. *Geomatics, Natural Hazards and Risk*, *6*(3), 184–194. https://doi.org/10.1080/19475705.2015.1016556

PAPERS CURRENTLY UNDER REVIEW (15) †Students advisee in my lab *Corresponding

1. Wang, L., Ao, Z., Tao, S.*, **Hu, X.***, Hu, X., Wang, G., Zhao, K., Bai, H., Xiao, J., Xue, B., Zhao, X., Zhang, F., Jiang, K., Lin, Y., Huang, Y., Gao, Y., Jiang, T., Peng, Z., Zhu, J., Zhao, S., Wang, S., Zhu, B., Wang, Z., Liu, H., Tang, Z., Xing, H., Liu, Y., Fang, J. Spatiotemporal dynamics of global urban subsidence during 2014-2023. *Nature Cities*. (Under 2nd round of review)

2. **Hu, X.***, Song, Y.†, Mirzadeh, S.M.J.†, Wu, Q., Li, D., Lin, Y.†, Zhou, Y.†, Chen, M.†, Qi, S., Tiampo, K., Linking permafrost deformation to active layer freeze-thaw dynamics in the Qinghai-Tibet engineering corridor. *The Cryosphere*. (Under 1st round of review; preprint available at EGUsphere https://doi.org/10.5194/egusphere-2025-4184)

3. **Hu, X.***, Bürgmann, R. Partial activation of a landslide in Washington, USA: Analogue for Martian slope failures. *Journal of Geophysical Research: Earth Surface*. (In revision after 1st round of review)

4. Lin, Y.†, **Hu, X.***, Duan, X., Lin, F., Lu, H., Wang, L., Fa, W. Zero-shot generalized Martian crater mapping model based on segment anything model. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*. (Under 3rd round of review)

5. Lin, Y.†, **Hu, X.***, Mitchell, W.H., Cui, Y., Li, J., De Quay, G.S. Three-million sub-kilometer craters in Mars' largest canyon system revealed by deep learning. (with Editor)

6. Yu, X.†, **Hu, X.***, Fang, J., Ballarini, R., Tao, S., Bian, W., Ran, Y., Tiampo, K. Sinking land and rising seas: a case study of future coastline changes in Miami Beach Island Communities. *Journal of Geophysical Research: Solid Earth* (Under 1st round of review)

7. Zhou, Y.†, **Hu, X.***, Lu, Z., Ma, Z., Lin, Y., Shi, X. Decoupling hydroclimatic controls on displacement of retrogressive thaw slumps in Qinghai-Tibet Plateau. *Geophysical Research Letters* (Under 2nd round of review)

8. Ran, Y.†, **Hu, X.***, Wang, F., Tao, S., Yu, X., Liu-Zeng, J., Ao, Z., Liang, X., Wang, G. Inundation crisis in North China coastal gateway amid sinking lowlands, rising sea levels, and engineering initiatives. *Earth's Future* (Under 2nd round of review)

9. Lin, F.†, **Hu, X.***, Yu, X., Xu, Y., An, N. Intelligent damage assessment of the 2025 Tibet Earthquake by multi-source remote sensing. (In transfer)

10. Zhang, J., Wang, F.*, Dong, Y., Mao, S., Zhang, C., **Hu, X.**, Ning, C., Chen, J., Liu, J., Chen, Y., Liu, J., Fang, Q. Rapid social progress but slow water adaptation of early China settlements. *Nature Cities*. (Under 3rd round of review)

11. Zhao, Y., Li, D.*, Nitzbon, J., Nan, Z., Song, Y.†, **Hu, X.**, Ran, Y., Tian, S., Deng, R., Luo, Y., Li, Y. Permafrost ground ice anomaly driven by westerlies-induced climate wetting on the Tibetan Plateau. *Science Advances* (Under 1st round of review)

12. Yang, Y., Fang, J.*, Yu, X.†, Bian, W., Xia, H., **Hu, X.**, Hu, T., Building damage assessment in storm-induced disasters using multi-source remote sensing data and NBDANet. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*. (In transfer)

13. Li, Y., Cui, Y.*, Long, D., **Hu, X.**, Lu, Z., Li, D., Ouyang, C., Veh, G. Escalating occurrence of glacier-related mass movements in High Mountain Asia. *Nature Geosciences*. (Under 1st round of review)

14. An, N.*, Zhou, J., Fan, T., Peranić, J., **Hu, X.**, Zhao, Y., Wang, B., Yu, Y., Lv, Q. Rainfall-induced landslide in Songxi County, China: failure mechanisms and human impact analysis. *Landslides*. (Under 2nd round of review)

15. Chen, J., Li, Q., Huang, C., **Hu, X.**, Shen, Z*. Landslide susceptibility assessment in the Central Yunnan Plateau by assembling optimized statistical and machine learning models. *Landslides*. (Under 1st round of review)

RESEARCH GRANTS

In China - total grant funding to Hu as PI: ✕✕✕ USD

Beijing Natural Science Foundation (✕✕✕ USD; **PI**)   2025-2027

   Monitoring and diagnosis of geological and flood disasters in Beijing-Tianjin-Hebei region

Ministry of Science and Technology of China (✕✕✕ **USD; PI of the sector on remote sensing**)

                                                                                            2024-2027

State Key Laboratory of Cryospheric Science (✕✕ USD; **PI**)   2024-2026
   Permafrost deformation and disasters on the Tibetan Plateau

China Geological Survey (✕✕ USD; **PI**)   2024-2025
   The applicability and deformation prediction of landslide deformation monitoring based on SAR\GNSS

PKU interdisciplinary Grant (✕✕✕ USD; **Co-I**)   2024
   Inversion of sediment change in the Brahmaputra River based on multi-source remote sensing and its impact on cascade reservoirs

China National Space Science Data Center (✕✕✕ USD; **PI**)   2024
   Inventorying lunar impact craters based on multi-modal remote sensing data

NSF-China Regular Grant (✕✕✕ USD; **PI**)   2024-2027
   Investigation of landslide mechanisms in active tectonics using SAR remote sensing

NSF-China Special Topics Grant (✕✕✕ USD; **PI**)   2023

Deep-learning multi-landforms in Valles Marineris on the Mars and analogs on the Earth

NSF-China Early Career Grant (XXXX USD; **PI**)   2023-2025
Geohazard remote sensing

PKU interdisciplinary Grant (XXX USD; **PI**)   2023
Inventorying retrogressive thaw slumps in Qinghai-Tibet Plateau based on deep learning and multi-source remote sensing datasets

In the U.S. - total grant funding to Hu as PI: XXXX USD

NASA New (Early Career) Investigator Program in Earth Science (XXXXX; **PI**)   2021-2024
Four-dimensional landslide quantification in the Western U.S. using remote sensing big data

Southern California Earthquake Center (SCEC) ($20,217; senior participant)   2020-2021
Separation of tectonic, hydrological and anthropogenic sources of ground deformation in Southern California

California Energy Commission Program grant ($148,626; senior participant)   2018-2021
Development of an integrated methodology for assessing integrity of levees protecting natural gas infrastructure

NASA Earth Surface & Interior Program grant ($210,097; senior participant)   2018-2019
Environmental controls on landslide motion revealed by InSAR and pixel offset tracking

NASA Earth and Space Science Fellowship (XXXXX; **PI**)   2015-2018
Quantifying landslide dynamics using InSAR: applications to landslides in northwestern USA

Satellite imagery grant to Hu as PI:

Joint DLR-INTA Scientific Announcement of Opportunity (PI)   2022-2025
Joint TSX/TDX/PAZ characterization of mountain excavation and city construction

The 3rd Research Announcement on the Earth Observations (60 scenes quota; PI)   2022-2025
Slow-moving landslide characterization using SAR remote sensing

Utilization of TerraSAR-X / TanDEM-X Data for Scientific Use (150 scenes quota; PI)   2021-2023
High-accuracy land deformation and surface change mapping for coastal resilience

INVITED PRESENTATIONS/SEMINAR TALKS IN THE U.S./UK

COMET+ Webinar (virtual)	8/20/2025
University of Edinburgh (virtual)	7/10/2025
U.S. Geological Survey, Golden, CO	5/6/2025
University of California, Berkeley (Berkeley Seismology Lab)	4/22/2025
University of Connecticut (virtual)	2/2023
AGU Fall Meeting invited talk	12/2022
University of Texas, Austin (virtual)	9/17/2021
Washington University in St. Louis (virtual)	5/17/2021
University of Oregon, Eugene, OR (virtual)	10/7/2020
Southern Methodist University, Dallas	1/31/2020
University of Houston	1/29/2020
Berkeley Seismology Lab Earthquake Research Affiliates Meeting	5/1/2019
University of California, Berkeley (Department of Civil and Environmental Engineering)	3/20/2019

University of Oregon, Eugene	11/27/2018
U.S. Geological Survey, Menlo Park, CA	11/14/2018
University of California, Berkeley (Berkeley Seismology Lab)	9/25/2018

PROFESSIONAL SERVICES

AGU Canvassing Committees
| Natural Hazards Section | 2024-present |

Associate Editor
| *Journal of Geophysical Research: Machine Learning and Computation* (Wiley) | 2024-present |
| *Pure and Applied Geophysics* (Springer) | 2021-present |

Co-convenor
| European Geosciences Union Natural Hazards Session | Since 2021 per annua |

JOURNAL REVIEWER (SELECTED)

1. *Nature*; 2. *Nature Communications*; 3. *Nature Reviews Earth & Environment*; 4. *Nature Water*; 5. *Earth-Science Reviews*; 6. *Geophysical Research Letters*; 7. *Water Resources Research*; 8. *Journal of Geophysical: Solid Earth;* 9. *Journal of Geophysical Research: Earth Surface*; 10. *Remote Sensing of Environment*; 11. *Catena*; 12. *Landslides*; 13. *Engineering Geology*; 14. *International Journal of Disaster Risk Science*; 15. *Applied Geography*; 16. *Human and Ecological Risk Assessment*; 17. *Earth, Planets and Space*; 18. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*

TEACHING

Advanced GIS Techniques and Applications (PKU undergraduate course; 3 credits)	2022F	2023F	2024F
SAR Remote Sensing (PKU and UH graduate course; 3 credits)	2024F	2023S	2020F
Special Topics on Microwave Remote Sensing in Geoscience (PKU graduate course; 2 credits)	2023F

MEMBERSHIP

AGU | EGU | IEEE | AOGS

STUDENTS AND POSTDOCS ADVISEE

PhD: Yuqi Song (2022-), Yongxuan Ran (2023-), Feng Lin (2024-), Yi Hu (2025-), Yiling Lin (2026-; transfer from Master to PhD program), Xiao Yu (act as her 2nd adviser @UH; correspondence for two of Xiao's papers)

Master: Penghui Wu (2022-2025), Jinghui Xiao (2024-), Yuanzhuo Zhou (2025-), Mei Chen (2026-; from undergraduate program)

Postdoc: Hanwen Yu (2021@UH), Sayyed Mohammad Javad Mirzadeh (2023-2024)