Professor Adam D. Switzer

Full Professor in Coastal Science

About Me

I am an Australian academic based at Nanyang Technological University, Singapore, specializing in coastal studies, including sea level changes, tsunamis, and storm surges. My research integrates historical data, geological records, and innovative analytical methods to investigate past high-impact coastal events and their implications for future hazards. I am passionate about advancing knowledge in coastal resilience and have a strong track record of supervising PhD and postdoctoral researchers in the Earth and Environmental Sciences.

Contact and Profiles

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Professional Preparation

PhD Geoscience 2005, University of Wollongong, Australia BSc Geology 1999, University of Wollongong, Australia

Summary of achievements and service

I have made significant contributions to the field of geosciences in Asia, supervising 14 PhD students and 12 postdoctoral fellows, many of whom have achieved successful careers in academia and government agencies. As a dedicated member of the scientific community. I served as Treasurer and Executive council member, Chaired the Award and Education Committees and gave public lectures for the Asia Oceania Geosciences Society (AOGS). I also served as a founding editorial board member of both Geoscience Letters and Communications Earth & Environment. In 2022 I received the prestigious Wing Ip Medal from AOGS. Additionally, I have been the principal investigator or co-principal investigator on competitive grants totalling over 15 million SGD. With a prolific publication record of over 125 papers, more than 4,500 citations, and an H-index of 39. After 20 years of active academic effort I continue to advance the frontiers of geoscientific research in Asia.

Work History

2023 : present Director, CIFAL Singapore

- 2023 : present Professor, Asian School of the Environment, NTU
- 2021 : present Assistant Dean (Development), College of Science
- 2009 : present. Principal Investigator, Earth Observatory of Singapore (EOS)
- 2021 : 2024. Director, Undergraduate Research Experience on Campus (URECA)
- 2016 : 2023. Associate Professor, Asian School of the Environment, NTU
- 2011 : 2016. Nanyang Assistant Professor, Asian School of the Environment, NTU
- 2010: 2015. National Research Foundation (NRF) Fellow
- 2007 : 2009. Research Assistant Professor, University of Hong Kong, Hong Kong SAR, China
- 2005 : 2007. Postdoctoral Fellow, University of Hong Kong, Hong Kong SAR, China

Selected publications

Huynh, L.T.M., Su, J., Wang, Q., Stringer, L.C., Switzer, A.D., & Gasparatos, A. (2024). Meta-analysis indicates better climate adaptation and mitigation performance of hybrid engineeringnatural coastal defence measures. *Nature Communications*, 15(1), 2870.

Hill, E.M., McCaughey, J.W., Switzer, A.D., Lallemant, D., Wang, Y., & Sathiakumar, S. (2024). Human amplification of secondary earthquake hazards through environmental modifications. *Nature Reviews Earth & Environment*, 1-14.

Switzer, A.D., Christensen, J., Aldridge, J., Taylor, D., Churchill, J., Watson, H., ... & Shaw, J. (2023). The utility of historical records for hazard analysis in an area of marginal cyclone influence. *Communications Earth & Environment*, 4(1), 193.

Chua, S., Switzer, A. D., Li, T., Chen, H., Christie, M., Shaw, T. A., ... & Horton, B. P. (2021). A new Holocene sea-level record for Singapore. *The Holocene*, 31(9), 1376-1390.

Bradley, K., Mallick, R., Andikagumi, H., Hubbard, J., Meilianda, E., Switzer, A., ... & Hill, E.M. (2019). Earthquaketriggered 2018 Palu Valley landslides enabled by wet rice cultivation. *Nature Geoscience*, 12(11), 935-939.

Li, L., Switzer, A.D., Wang, Y., Chan, C.H., Qiu, Q., & Weiss, R. (2018). A modest 0.5-m rise in sea level will double the tsunami hazard in Macau. *Science Advances*, 4(8), eaat1180.

Soria, J.L.A., Switzer, A.D., Villanoy, C.L., Fritz, H.M., Bilgera, P.H.T., Cabrera, O.C., ... & Fernandez, I.Q. (2016). Repeat storm surge disasters of Typhoon Haiyan and its 1897 predecessor in the Philippines. *Bulletin of the American Meteorological Society*, 97(1), 31-48.

