



Stewart Alex Williams

Laboratory Manager, Earth & Planetary Sciences

Bio

EDUCATION AND CERTIFICATIONS

- PhD, Rice University , Geology (2024)
- MS, Colorado State University , Geology (2019)
- BS, University of Nevada - Las Vegas , Geology (2017)

Publications

PUBLICATIONS

- **Shear-induced dilation and dike formation during mush deformation** *EARTH AND PLANETARY SCIENCE LETTERS*
Ryan, A. G., Hansen, L. N., Dillman, A., Pistone, M., Zimmerman, M. E., Williams, S. A.
2025; 651
- **Using calcite deformation twins to constrain subduction-related paleostress state and deformation temperatures: A case study using the exhumed Sestola-Vidiciatico unit of the Northern Apennines, Italy** *Geosphere*
Williams, S. A., French, M. E., Rubin, C. N., Mckenzie, E. I.
2025
- **Effects of Dilatant Hardening on Fault Stabilization and Structural Development** *GEOPHYSICAL RESEARCH LETTERS*
Williams, S. A., French, M. E.
2024; 51 (10)
- **Sinistral shear during Middle Jurassic emplacement of the Matancilla Plutonic Complex in northern Chile (25.4° S) as evidence of oblique plate convergence during the early Andean orogeny** *JOURNAL OF SOUTH AMERICAN EARTH SCIENCES*
Mavor, S. P., Singleton, J. S., Heuser, G., Gomila, R., Seymour, N. M., Williams, S., Arancibia, G.
2022; 120
- **Magnitude, timing, and rate of slip along the Atacama fault system, northern Chile: implications for Early Cretaceous slip partitioning and plate convergence** *JOURNAL OF THE GEOLOGICAL SOCIETY*
Seymour, N. M., Singleton, J. S., Gomila, R., Mavor, S. P., Heuser, G., Arancibia, G., Williams, S., Stockli, D. F.
2021
- **The early Palaeogene transition from thin-skinned to thick-skinned shortening in the Potosi uplift, Sierra Madre Oriental, northeastern Mexico** *INTERNATIONAL GEOLOGY REVIEW*
Williams, S. A., Singleton, J. S., Prior, M. G., Mavor, S. P., Cross, G. E., Stockli, D. F.
2021; 63 (2): 233-263
- **Timing, Kinematics, and Displacement of the Taltal Fault System, Northern Chile: Implications for the Cretaceous Tectonic Evolution of the Andean Margin** *TECTONICS*
Mavor, S. P., Singleton, J. S., Gomila, R., Heuser, G., Seymour, N. M., Williams, S. A., Arancibia, G., Johnston, S. M., Kylander-Clark, A. C., Stockli, D. F.

2020; 39 (2)

- **Laramide shortening and the influence of Precambrian basement on uplift of the Black Hills, South Dakota and Wyoming, U.S.A** *Rocky Mountain Geology*

Singleton, J. S., Mavor, S. P., Seymour, N. M., Williams, S. A., Patton, A. I., Ruthven, R. C., Johnson, E. P., Prior, M. G.

2019; 54 (1): 1-17