

Matthew T. Heizler

List of Publications
Current to June. 11, 2023

In the works

- Cluzel, D., Ferrari, E., Secchiar, A., Montanini, A., Heizler, M., Jourdan, F., Meffre, S., Teyssier, C., (in prep), New geochemical and age constraints ($^{40}\text{Ar}/^{39}\text{Ar}$ and U-Pb) on forearc intrusive rocks from New Caledonia Ophiolite (SW Pacific); diversity of melts generated at hot subduction inception.
- Flynn, A., Brusatte, Peppe, D., Williamson, T., Heizler, M.T., Alessandro, A., S., Giron, J.G., Secord, R., (in prep), Dinosaur provinciality and mass extinction recorded in the Late Cretaceous Naashobito Formation, San Juan Basin, NM, Nature Geoscience.
- Heizler, M.T., Karlstrom, K.E., Williams, M., Hillenbrand, I., (in prep), $^{40}\text{Ar}/^{39}\text{Ar}$ and U-Pb xenotime record of the demise of Grand Canyon's Vishnu mountains and formation of the Great Unconformity.
- Henry, C.D., John, D.A., Heizler, M.T., Leonardson, R.W., Colgan, J.P., Watts, K.A., (in prep), Jurassic, Cretaceous, Eocene, and Miocene Magmatism and Hydrothermal Systems, Cortez Region of the Battle Mountain – Eureka Trend, Nevada, USA: Implications for Origin of World Class Carlin-Type Gold Deposits, Economic Geology.
- Martin, A.J., Fan, M., Dávila-Harris, P., Heizler, M.T., Chamberlain, K.R., Valencia, V.A., Oligocene rise of the Sierra Madre Occidental, Mexico, and its impact on the North American Monsoon.
- Vermillion, K.B., Johnson, E.R., Amato, J.M., Heizler, M.T., Lente, J., (in prep), Onset and tempo of ignimbrite flare-up volcanism in the eastern and central Mogollon-Datil Volcanic Field, southern New Mexico, Geosphere.

In review/revision

- Albonico, M., Karlstrom, K.E., Heizler, M.T., Gillam, M.L., Aslan, A., Crossey, L., (in revision), The Birth and Incision History of the San Juan River in the Past 5 Ma, Geosphere.
- Holland, M. and Heizler, M., (in revision), Maximizing the Thermochronological Potential of Muscovite: Recovering Argon Diffusion Coefficients via *in vacuo* Heating, Frontiers in Earth Science.
- Karlstrom, K.E., Heizler, M.T., Albonico, M., Gillam, M.L., Aslan, A., Crossey, L., Crow, R., (in revision), Detrital sanidine dating of terraces across the Lees Ferry knickzone on the Colorado River: testing surface uplift of the Colorado Plateau in the past 5 Ma, Earth Planet. Sci. Letters.
- Thurston, O.G., Guenther, W.R., Karlstrom, K.E., Heizler, M.T., Ricketts, J.W. McDannell, K., (in revision), Parsing the Great Unconformities in Grand Canyon using combined zircon (U-Th)/He and K-feldspar $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronometers and geologic constraints, Geosphere.

In press

- Attia, S., Allen, B.D., Heizler, M.T., Ricci, J., (in press), Quaternary age of the Gatuña Formation at Livingston Ridge, New Mexico Geological Society Guidebook, 73rd Fall Field Conference, 2023, p. x-x.
- Cather, S.M. and Heizler, M.T., (in press), A north-flowing precursor to the Pecos River in the Gatuña Formation of southeastern New Mexico and Texas, New Mexico Geological Society Guidebook, 73rd Fall Field Conference, 2023, p. 147–164.

Cather, S.M., Heizler, M.T., McIntosh, W.C., (in press), Middle Eocene to Pliocene Volcanic, Volcaniclastic, and Intrusive Rocks of the Quebradas Region, In: *Geology of the Quebradas Region, Socorro County, New Mexico*, Steven M. Cather and Daniel J. Koning, eds., New Mexico Bureau of Geology Memoir.

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243. Conley, A., Ramirez, S.E., Ricketts, J.W., Langford, R.P., Pavlis, T.L., Heizler, M.T., 2023, Reconstructing the erosional and tectonic record of Laramide contraction to Rio Grande rift extension, southern Indio Mountains, western Texas, USA, *Geosphere*, 19 (3): 849–877, <https://doi.org/10.1130/GES02620.1>
242. Henry, C.D., John, D.A., Leonardson, R.W., McIntosh, W.C., Heizler, M.T., Colgan, J.P., Watts, K.E., 2023, Timing of Rhyolite Intrusion and Carlin-Type Gold Mineralization at the Cortez Hills Carlin-Type Deposit, Nevada, USA, *Economic Geology*, 118 (1), pp. 57–91. <https://doi.org/10.5382/econgeo.4976>
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237. Haproff, P.J., Levy, D.A., Zuza, A.V., Hooker, J.D., Heizler, M.T., Stockli, D.F. (in press), Cenozoic kinematic history of the Tidding and Lohit thrusts in the easternmost Himalaya: Implications for crustal thickening and exhumation of Gangdese lower arc crust along the India-Asia suture zone, *Geol. Soc. Am. Bull.*, <https://doi.org/10.1130/B36323.1>
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234. Love, David W.; McCraw, David J.; Chamberlin, Richard M.; Heizler, Matthew; Rinehart, Alex, 2022, The structural and depositional context and a new age estimate of the type Sierra Ladrone Formation in the southern Albuquerque Basin and vicinity, central New Mexico, *in*: New Mexico Geological Society, 72nd Fall Field Conference, Sept. 2022, Socorro, New Mexico, Koning, Daniel J.; Hobbs, Kevin J.; Phillips, Fred M.; Nelson, W. John; Cather, Steven M.; Jakle, Anne C.; Van Der Werff, Brittney, New Mexico Geological Society, Field Conference, pp. 239-251. <https://doi.org/10.56577/FFC-72.239>
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232. Smellie, J. L., Martin, A. P., DiVincenzo, G., Townsend, D. B., Heizler, T., Ruth, D. C. S., 2022, Eruptive history of Mason Spur, a Miocene—Pleistocene polygenetic volcanic complex in southern Victoria Land, West Antarctic Rift System, Antarctica, *Bulletin of Volcanology*, p. 84:93, <https://doi.org/10.1007/s00445-022-01601-4>.

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