

Journal Publications of Warren D. Sharp

52. Mertz-Kraus, R., Jochum, K.P., **Sharp, W.D.**, 2010. In situ Th-230-Th-232-U-234-U-238 analysis of silicate glasses and carbonates using laser ablation single-collector sector-field ICP-MS. *Journal of Analytical Atomic Mass Spectrometry* 25 (12), 1895-1904.
51. **Sharp, W.D.**, Kahn, J.G., Polito, C.M., and Kirch, P.V., 2010. Rapid evolution of ritual architecture in central Polynesia indicated by precise ²³⁰Th/U coral dating. *Proceedings National Academy of Sciences*, 107(30), 13234-13239. doi:10.1073/pnas.1005063107
50. Oster J.L., Montanez, I.P., Guilderson, T.P., **Sharp, W.D.**, Banner, J.L. 2010. Modeling speleothem delta C-13 variability in a central Sierra Nevada cave using C-14 and Sr-87/Sr-86. *Geochimica Et Cosmochimica Acta* 74 (18), 5228-5242.
49. Fletcher, K.E., **Sharp, W.D.**, Kendrick, K.J., Behr, W.M., Hudnut, K.W., and Hanks, T.C., 2010. ²³⁰Th/U dating of a late Pleistocene alluvial fan along the southern San Andreas fault. *Geological Society of America Bulletin* 122: (9-10), 1347-1359.
48. Behr, W.M., Rood, D.H., Fletcher, K.E., Guzman, N., Finkel, R., Hanks, T.C., Hudnut, K.W., Kendrick, K.J., Platt, J.P., **Sharp, W.D.**, Weldon, R.J., Yule, J.D., 2010. Uncertainties in slip-rate estimates for the Mission Creek strand of the southern San Andreas fault at Biskra Palms Oasis, southern California. *Geological Society of America Bulletin* 122: (9-10), 1360-1377.
47. Oster, J. L., Montanez, I.P., **Sharp, W.D.**, and Cooper, K.M., 2009. Late Pleistocene California droughts during deglaciation and Arctic warming. *Earth and Planetary Science Letters* 288(3-4), 434-443. doi: 10.1016/j.epsl.2009.10.003
46. Pigati J.S., Zreda M., Zweck C., Almasi P.F., **Sharp, W.D.**, 2008. Ages and inferred causes of Late Pleistocene glaciations on Mauna Kea, Hawai'i. *Journal of Quaternary Science* 23 (6-7), 683-702.
45. Kato T.T., **Sharp, W.D.**, Godoy E., 2008. Inception of a Devonian subduction zone along the southwestern Gondwana margin: ⁴⁰Ar-³⁹Ar dating of eclogite-amphibolite assemblages in blueschist boulders from the Coastal Range of Chile (41°S). *Canadian Journal of Earth Sciences*: 45 (3), 337-351.
44. Owen, L.A., Bright, J., Finkel, R.C., Jaiswal, M.K., Kaufman, D.S., Mahan, S., Radtke, U., Schneider, J.S., **Sharp, W.** Singhvi, A.K., Warren, C.N., 2007. Numerical dating of a Late Quaternary spit-shoreline complex at the northern end of Silver Lake playa, Mojave Desert, California: A comparison of the applicability of radiocarbon, luminescence, terrestrial cosmogenic nuclide, electron spin resonance, U-series and amino acid racemization methods, *Quaternary International* 166: 87-110.

43. Cruz, F.W., Burns, S.J., Jercinovic, M., Karmann, I., **Sharp, W.D.**, and Vuille, M., 2007. Evidence of rainfall variations in Southern Brazil from trace element ratios (Mg/Ca and Sr/Ca) in a Late Pleistocene stalagmite, *Geochimica et Cosmochimica Acta* 71: 2250-2263.
42. Ewing, S.A., Sutter, B., Owen, J., Nishiizumi, K., **Sharp, W.**, Cliff, S.S., Perry, K., Dietrich, W., McKay, C.P., and Amundson, R., 2006. A threshold in soil formation at Earth's arid-hyperarid transition. *Geochimica et Cosmochimica Acta* 70: 5293-5322, doi:10.1016/j.gca.2006.08.020.
41. Cruz, Jr., F.W., Burns, S.J., Karmann, I., **Sharp, W.D.**, Vuille, M., Cardoso, A.O., Ferrari, J.A., 2006. A stalagmite record of changes in atmospheric circulation and soil processes in the Brazilian subtropics during the Late Pleistocene. *Quaternary Science Reviews* 25 (21-22): 2749-2761.
40. Winograd, I., Landwehr, J.M., Coplen, T.B., **Sharp, W.D.**, Riggs, A.C., Ludwig, K.R., Kolesar, P.T., 2006. Devils Hole, Nevada, d¹⁸O record extended to the mid-Holocene. *Quaternary Research* 66: 202-212.
39. Cruz, Jr., F.W., Burns, S.J., Karmann, I., **Sharp, W.D.**, Vuille, M., 2006. Reconstruction of regional atmospheric circulation features during the late Pleistocene in subtropical Brazil from oxygen isotope composition of speleothems. *Earth and Planet Science Letters* 248 (1-2): 495-507.
38. **Sharp, W.D.**, and Clague, D.A., 2006. 50-Ma Initiation of Hawaiian-Emperor Bend Records Major Change in Pacific Plate Motion. *Science* 313: 1281-1284.
37. Johnson, K.R., Ingram, B.L., **Sharp, W.D.**, and Zhang, P., 2006. East Asian summer monsoon variability during Marine Isotope Stage 5 based on speleothem ¹⁸O records from Wanxiang Cave, central China. *Palaeogeography, Palaeoclimatology, Palaeoecology* 236 (1-2): 5-19.
36. O'Brien G. R., Kaufman D. S., **Sharp W. D.**, Atudorei V., Parnell R. A., Crossey L. J., 2006. Oxygen isotope composition of annually banded modern and mid-Holocene travertine and evidence of paleomonsoon floods, Grand Canyon, Arizona, USA. *Quaternary Research* 65 (3): 366-379.
35. Pederson, J.L., Anders, M.D., Rittenour, T.M., **Sharp, W.D.**, Gosse, J.C., and Karlstrom, K.E., 2006. Using fill terraces to understand incision rates and evolution of the Colorado River in eastern Grand Canyon, Arizona. *Journal Geophysical Research*, 111: F02003, doi:10.1029/2004JF000201.
34. Anders, M.D., Pederson, J.L. Rittenour, T.M., **Sharp, W.D.**, Gosse, J.C., Karlstrom, K.E., Crossey, L.J., Goble, R.J., Stockli, L., and Yang, G., 2005. Pleistocene geomorphology and geochronology of eastern Grand Canyon: linkages of landscape components during climate changes. *Quaternary Science Reviews*, 24: 2428-2448.
33. Nomade, S., Renne, P.R., Vogel, N., Deino, A.L., **Sharp, W.D.**, Becker, T.A., Jaouni, A.R., and Mundil, R., 2005. Alder Creek sanidine (ACs-2): A Quaternary ⁴⁰Ar/³⁹Ar dating standard. *Chemical Geology*, 318(3-4): 315-338.
32. **Sharp, W.D.** and Renne, P.R., 2005. The ⁴⁰Ar/³⁹Ar dating of core recovered by the Hawaii Scientific Drilling Project (phase 2), Hilo, Hawaii. *Geochemistry, Geophysics, Geosystems*, 6(4), Q04G17, doi:10.1029/2004GC000846.

31. Cruz, J., F.W., Burns, S.J., Karmann, I., **Sharp, W.D.**, Vuille, M., Cardoso, A.O., Ferrari, J.A., Silva Dias, P.L. and Viana, J., O., 2005. Insolation-driven changes in atmospheric circulation over the past 116,000 years in subtropical Brazil. *Nature*, 434: 63-66.
30. Kirch, P.V. and **Sharp, W.D.**, 2005. Coral ^{230}Th Dating of the Imposition of a Ritual Control Hierarchy in Precontact Hawaii. *Science*, 307: 102-104.
29. Kirch, P.V., Hartshorn, A.S., Chadwick, O.A., Vitousek, P.M., Sherrod, D.R., Coil, J., Holm, L. and **Sharp, W.D.**, 2004. Environment, agriculture, and settlement patterns in a marginal Polynesian landscape. *Proceedings of the National Academy of Sciences, USA*, 101(26): 9336-9341.
28. Mertz, D.F., **Sharp, W.D.** and Haase, K.M., 2004. Volcanism on the Eggvin Bank (Central Norwegian-Greenland Sea, latitude 71degreesN): age, source, and relationship to the Iceland and putative Jan Mayen plumes. *Journal of Geodynamics*, 38: 57-83.
27. Blisniuk, P.M. and **Sharp, W.D.**, 2003. Rates of late Quaternary normal faulting in central Tibet from U-series dating of pedogenic carbonate in displaced fluvial gravel deposits. *Earth and Planet Science Letters*, 215: 169-186.
26. Cousens, B.L., Clague, D.A. and **Sharp, W.D.**, 2003. Chronology, chemistry, and origin of trachytes from Hualalai Volcano, Hawaii. *Geochemistry, Geophysics, Geosystems*, 4(9): 1-27.
25. **Sharp, W.D.**, Ludwig, K.R., Chadwick, O.A., Amundson, R. and Glaser, L.L., 2003. Dating fluvial terraces by $^{230}\text{Th}/\text{U}$ on pedogenic carbonate, Wind River Basin, Wyoming. *Quaternary Research*, 59: 139-150.
24. Dusel-Bacon, C., Lanphere, M., **Sharp, W.D.**, Layer, P. and Hansen, V., 2002. Mesozoic thermal history and timing of structural events for the Yukon-Tanana Upland, east-central Alaska: $^{40}\text{Ar}/^{39}\text{Ar}$ data from metamorphic and plutonic rocks. *Canadian Journal of Earth Sciences*, 39: 1013-1051.
23. Pederson, J., Karlstrom, K., **Sharp, W.** and McIntosh, W., 2002. Differential incision of the Grand Canyon related to Quaternary faulting - constraints from U-series and Ar/Ar dating. *Geological Society of America Bulletin*, 30(8): 739-742.
22. Mertz, D.F., Weinrich*, A., **Sharp, W.D.** and Renne, P.R. 2001. Alkaline intrusions in a near-trench setting, Franciscan Complex, California: Constraints from geochemistry, petrology, and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology. *American Journal of Science*, 301: 877-911.
21. Renne, P.R., Farley, K.A., Becker, T.A. and **Sharp, W.D.**, 2001. Terrestrial cosmogenic argon. *Earth and Planetary Science Letters*, 188: 435-440.
20. Renne, P.R., **Sharp, W.D.**, Montanez, I.P., Becker, T.A. and Zierenberg, R.A., 2001. $^{40}\text{Ar}/^{39}\text{Ar}$ dating of Late Permian evaporites, southeastern New Mexico, USA. *Earth and Planetary Science Letters*, 193: 539-547.
19. Hasse, K.M., Mertz, D.F., **Sharp, W.D.** and Garbe-Schonberg, C.D., 2000. Sr-Nd-Pb isotope ratios, geochemical compositions and $^{40}\text{Ar}/^{39}\text{Ar}$ data of lavas

- from San Felix Island (southwest Pacific): Implications for magma genesis and sources. *Terra Nova*, 12: 90-96.
18. Hemming, S.R., Bond, G.C., Broecker, W.S., **Sharp, W.D.** and Klas-Mendelson, M., 2000. Evidence from $^{40}\text{Ar}/^{39}\text{Ar}$ ages of individual hornblende grains from Orphan Knoll for varying Laurentide sources of iceberg discharges 22,000 to 10,500 14C years B.P. *Quaternary Research*, 54: 372-383.
 17. **Sharp, W.D.**, Tobisch, O.T. and Renne, P.R., 2000. Development of Cretaceous transpressional cleavage synchronous with batholith emplacement, central Sierra Nevada, California. *Geological Society of America Bulletin*, 112(7): 1059-1066.
 16. Aalto, K.R., **Sharp, W.D.** and Renne, P.R., 1998. $^{40}\text{Ar}/^{39}\text{Ar}$ dating of detrital micas from Oligocene-Pleistocene sandstones of the Olympic Peninsula, Klamath Mountains and northern California coast ranges: Provenance and paleodrainage patterns. *Canadian Journal of Earth Sciences*, 35: 735-745.
 15. Duebendorfer, E.M. and **Sharp, W.D.**, 1998. Variation in displacement along strike of the South Virgin-White Hills detachment fault: perspective from the northern White Hills, northwestern Arizona. *Geological Society of America Bulletin*, 110(12): 1574-1589.
 14. Hemming, S.R., Broecker, W.S., **Sharp, W.D.**, Bond, G.C., Gwiazda, R.H., McManus, J.F., Klas, M. and Hajdas, I., 1998. Provenance of Heinrich layers in core V28-82 northeastern Atlantic: $^{40}\text{Ar}/^{39}\text{Ar}$ ages of ice-rafted hornblende, Pb isotopes in feldspar grains, and Nd-Sr-Pb isotopes in the fine sediment fraction. *Earth and Planetary Science Letters*, 164: 317-333.
 13. Moore, T.E., Hemming, S. and **Sharp, W.D.**, 1997. Provenance of the Carboniferous Nuka Formation, Brooks Range, Alaska: A multicomponent isotope provenance study with implications for age of cryptic crystalline basement. In: J.A. Dumoulin and J.E. Gray (Editors), *Geologic Studies in Alaska by the U.S. Geological Survey, 1995: U.S. Geological Survey Professional Paper*, 1574: 173-194.
 12. Renne, P.R., **Sharp, W.D.**, Deino, A.L., Orsi, G. and Civetta, L., 1997. $^{40}\text{Ar}/^{39}\text{Ar}$ Dating Into the Historical Realm: Calibration Against Pliny the Younger. *Science*, 277(5330): 1279-1280.
 11. Speed, R.C., **Sharp, W.D.** and Foland, K.A., 1997. Late Paleozoic granitoid gneisses of northeastern Venezuela and the North America-Gondwana collision zone. *Journal of Geology*, 105: 457-470.
 10. **Sharp, W.D.**, Turrin, B.D., Renne, P.R. and Lanphere, M.A., 1996. $^{40}\text{Ar}/^{39}\text{Ar}$ and K/Ar dating of lavas from the Hilo 1-km core hole, Hawaii Scientific Drilling Project. *Journal of Geophysical Research*, 101(5): 11,607-11,616.
 9. Renne, P. R., A.L. Deino, R.C. Walter, B.D. Turrin, C.C. Swisher, T.A. Becker, G.H. Curtis, **W.D. Sharp**, and A.-R. Jaouni, 1994. Intercalibration of astronomical and radioisotopic time. *Geology*, 22: 783-786.
 8. Herzig, C. T., and **W.D. Sharp**, 1992. The Sullivan Creek Terrane: A composite Jurassic arc assemblage, western Sierra Nevada metamorphic belt, California. *Geological Society of America Bulletin*, 104: 1292-1300.

7. Edelman, S. H., and **W.D. Sharp**, 1989. Terranes, early faults, and pre- Late Jurassic amalgamation of the western Sierra Nevada metamorphic belt, California. *Geological Society of America Bulletin*, 101: 1420-1433.
6. **Sharp, W.D.**, 1988. Pre-Cretaceous crustal evolution in the Sierra Nevada region, California, in *Metamorphism and Crustal Evolution of the Western United States*, edited by W. G. Ernst, Ruby Volume VII, 823-886 pp, Prentice Hall.
5. Ross, J. A., and **W.D. Sharp**, 1988. The effects of sub-blocking temperature metamorphism on the K-Ar systematics of hornblendes: $^{40}\text{Ar}/^{39}\text{Ar}$ dating of polymetamorphic garnet amphibolite from the Franciscan Complex, California. *Contributions to Mineralogy and Petrology*, 100: 213-221.
4. Irwin, J. J., **W.D. Sharp**, R. R. Spangler, and R. E. Drake, 1987. Some paleomagnetic constraints on the tectonic evolution of the coastal cordillera of central Chile. *Journal of Geophysical Research* 92: 3603-3614,
3. Snoke, A. W., **W.D. Sharp**, J. E. Wright, and J. Saleeby, 1982. Significance of mid-Mesozoic peridotitic to dioritic intrusive complexes, Klamath Mountains-western Sierra Nevada, California. *Geology*, 10: 160-166.
2. Saleeby, J., G. D. Harper, A. W. Snoke, and **W.D. Sharp**, 1982. Time relations and structural-stratigraphic patterns in ophiolitic accretion, west- central Klamath Mountains, California. *Journal of Geophysical Research*, 87: 3831-3848.
1. Saleeby, J., and **Sharp, W.** 1980. Chronology (U-Pb and K-Ar) of the structural and petrologic development of the southwest Sierra Nevada foothills, California. *Geological Society of America Bulletin*, 91: 317-320 (Part I) and 1416-1535 (Part I).