

PROFESSIONAL VITAE
Steven C. Clemens
Earth, Environmental and Planetary Sciences, Brown University

Address

Earth, Environmental and Planetary Sciences, Box 1846
Brown University
Providence, RI., 02912-1846
(401) 863-1964, (fax 2058)
Steven_Clemens@brown.edu

Professional Positions, Brown University

Professor, Research, 2021 to present
Associate Professor, Research, 2005-2021
Senior Research Associate, 1993-2005
Adjunct Lecturer, 1992, 1995, 1997, 2003, 2004
Postdoctoral Research, 1990-1993

Research Publications in Preparation and in Review

- McGrath, SM, Clemens SC, Huang, Y., Sea Surface Temperatures Influence Southeast Asia Monsoon Precipitation Isotopes. Paleoceanography, in Prep.
Kubota, Y, Clemens, SC, Lee, K-E, Holbourn, A, Wakisaka, E, Horikawa, K, Tada, R, & Kimoto, K. (2023 In Review). Drivers of East Asian millennial-scale climate over the past 400,000 years. Nature Protfolio.
*Thirumalai K, Clemens SC, Rosenthal Y, Bu K, Giosan L, Zhou L, et al. Indian paleomonsoon variability and extremes over the deglaciation and Holocene. Nature Geoscience. in prep.
*Thirumalai K, Partin JW, Yadava MG, Shen CC, Clemens SC, Lone M, et al. Non-stationary response of southern Indian monsoon hydroclimate to orbital forcing during MIS 9. Geology. in prep.

Research Publications (No Abstracts, *graduate student, post-doc., advisee, visiting scientist)

- Clemens, SC, Thirumalai, K, & Oppo, D. (2023). Indian margin methane hydrate dissociation recorded in the carbon isotopes of benthic (Miliolida) foraminifera. Earth and Planetary Science Letters, 609, 118101. <https://doi.org/10.1016/j.epsl.2023.118101>
<https://www.sciencedirect.com/science/article/pii/S0012821X23001140>
- *McGrath, SM, Clemens, SC, & Huang, Y. (2023). Pleistocene Sunda Shelf submersion-exposure cycles initiate vegetation Walker Circulation feedback. Geology.
<https://doi.org/10.1130/G51412.1>
- Podder, RSIS, Gupta, AK, Sanyal, P, & Clemens, S. (2023). Changes in surface hydrography of the western equatorial Indian Ocean during the Pleistocene: Implications for East African climate variability. Global and Planetary Change, 231, 104322.
<https://doi.org/10.1016/j.gloplacha.2023.104322>
- Podder, RI, Gupta, AK, Clemens, S, Sanyal, P, & Panigrahi, MK. (2023). Changes in the Indian Ocean surface hydrography driven by the seaway closure and monsoonal circulation since the late Oligocene. Global and Planetary Change, 232, 104335
<https://doi.org/10.1016/j.gloplacha.2023.104335>
- Kaushik, A, Gupta, AK, Clemens, SC, Kumar, P, Sanyal, P, Gupta, P, Jaiswal, MK, Maurya, AS, Sengupta, S, Sharma, R, & Pawar, R. (2023). Paleoclimatic reconstruction of northwest Himalaya since CE 475 using lake sediments from Tadag Taal, Kumaun, India. Palaeogeography, Palaeoclimatology, Palaeoecology, 111544.
<https://doi.org/10.1016/j.palaeo.2023.111544>

- Kaushik, A, Gupta, AK, Clemens, SC, Kumar, P, Sanyal, P, Gupta, P, Jaiswal, MK, Maurya, AS, Sengupta, S, Sharma, R, & Pawar, R. (2023). Paleoclimatic reconstruction of northwest Himalaya since CE 475 using lake sediments from Tadag Taal, Kumaun, India. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 111544. <https://doi.org/10.1016/j.palaeo.2023.111544>. <https://www.sciencedirect.com/science/article/pii/S0031018223001621>
- Clemens, SC. (2022). Data report: Site U1448 Pleistocene benthic foraminiferal stable isotopes, Andaman Sea, IODP Expedition 353. In S.C. Clemens, W. Kuhnt, & L.J. LeVay (Eds.). I.O.D. Program (Series Ed.), Indian Monsoon Rainfall (Vol. 353). College Station, TX. USA: International Ocean Discovery Program. Retrieved from http://publications.iodp.org/proceedings/353/203/353_203.html doi:10.14379/iodp.proc.353.203.2022
- Clift, PD, Betzler, C, Clemens, SC, Christensen, B, Eberli, GP, France-Lanord, C, Gallagher, S, Holbourn, A, Kuhnt, W, Murray, R, Rosenthal, Y, Tada, R, & Wan, S. (2022). A synthesis of monsoon exploration in the Asian marginal seas. *Scientific Drilling*, 10, 1-29. 10.5194/sd-10-1-2022.
- Guo, F, Clemens, S, Liu, Y, Wang, T, Fan, H, Liu, X, & Sun, Y. (2022). Greenhouse gases modulate the strength of millennial-scale subtropical rainfall, consistent with future predictions. *Clim. Past*, 18(7), 1675-1684. 10.5194/cp-18-1675-2022. <https://cp.copernicus.org/articles/18/1675/2022/>
- Sun, Y, Wang, T, Yin, Q, Lyu, A, Crucifix, M, Cai, Y, Ai, L, Clemens, S, & An, Z. (2022). A review of orbital-scale monsoon variability and dynamics in East Asia during the Quaternary. *Quaternary Science Reviews*, 288, 107593. <https://doi.org/10.1016/j.quascirev.2022.107593>.
- Novak, J, McGrath, SM, Jiaxi Wang, K, Liao, S, Clemens, SC, Kuhnt, W, & Huang, Y. (2022). U38MEK' Expands the Linear Dynamic Range of the Alkenone Sea Surface Temperature Proxy. *Geochimica et Cosmochimica Acta*. <https://doi.org/10.1016/j.gca.2022.04.021>.
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- Clemens, SC, Yamamoto, M, Thirumalai, K, Giosan, L, Richey, JN, Nilsson-Kerr, K, Rosenthal, Y, Anand, P, & McGrath, SM. (2021). Remote and local drivers of Pleistocene South Asian summer monsoon precipitation: A test for future predictions. *Science Advances*, 7(23), eabg3848. 10.1126/sciadv.abg3848.
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- Sun, Y, McManus, JF, Clemens, SC, Zhang, X, Vogel, H, Hodell, DA, Guo, F, Wang, T, Liu, X, & An, Z. (2021). Persistent orbital influence on millennial climate variability through the Pleistocene. *Nature Geoscience*, 14(11), 812-818. 10.1038/s41561-021-00794-1. <https://doi.org/10.1038/s41561-021-00794-1>.
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