

CURRICULUM VITAE

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CITIZENSHIP: U.S.A.

EDUCATION:

B.S. University of North Carolina, Chapel Hill, NC, 1971, Geology

M.S. Brown University, Providence, RI, 1974, Geology

Ph.D. Cornell University, Ithaca, NY, 1978, Major: Geology; Minor: Aquatic Ecology

PRESENT POSITION:

Senior Research Scientist, Institute for Geophysics
The John A. and Katherine G. Jackson School of Geosciences
The University of Texas at Austin

PROFESSIONAL EXPERIENCE:

1993- Senior Research Scientist, Inst. for Geophysics, Univ. Texas at Austin

1981-93 Research Scientist, Inst. for Geophysics, Univ. Texas at Austin

1979-80 Research Scientist Assoc. III, Inst. for Geophysics, Univ. Texas at Austin

1978-79 Post-doc. Research Assoc., Dept. Geological Sciences, Cornell Univ., Ithaca, NY

1973-78 Research Asst., Dept. Geological Sciences, Cornell Univ., Ithaca, NY

1972-73 Research Asst., Dept. Geological Sciences, Brown Univ., Providence, RI

1971-72 Teaching Asst., Dept. Geological Sciences, Brown Univ., Providence, RI

MEMBERSHIPS:

American Geophysical Union American Quaternary Association

Sigma Xi Geological Society of America International Society for Reef Studies

TEACHING EXPERIENCE:

GEO 660 Field Mapping Course: 1984; 1985.

GEO 312 K Physical Geology for Engineers 1988

FIELD PROJECTS:

2015 Refurbish and upgrade GPS/Seismograph Network Western Solomon Islands

2013 Coral Paleogeodesy focus on Ranongga, Solomon Islands

2012 Coral Paleogeodesy of the Earthquake Cycle, Western Solomon Islands

2011 Coral Drilling Vanuatu; LGM corals on Santo

2010 Coral Drilling Vanuatu; GPS installations Solomons

2010 Haiti Earthquake coral geodesy, paleogeodesy

2009 Installation of seismograph and GPS network in W Solomons with Ntnl Taiwan Univ.

2007 Tsunamigenic megablocks, Tongatapu Island, SW Pacific

2007 Rapid Response 1 April 2007 $M_w \sim 8.1$ Solomons Earthquake

2006 Rapid Response to 3 May 2006 large Tonga Earthquake: vertical crustal motions
 2006 MCS survey and sampling corals for paleoclimate record, Sabine Bank, Vanuatu
 2005 Fossil Coral/Speleothem Climate Records from Papua New Guinea, Solomon Islands, and Vanuatu
 2005 CHIRP and Multibeam mapping of Sabine Bank, Vanuatu
 2004 Drilling of live coral climate records near La Paguera, Puerto Rico
 2002 Chief Scientist, R/V LM Gould LMG02-9 Antarctic Peninsula GPS Tectonics
 2002 Coral neotectonics of Woodlark Rift Propagation into Australian plate
 2002 West Antarctic GPS Network: Installation and First Measurements
 2001 Coral Records of Paleosea Level, Barbados, W.I.
 2001 Fossil Coral Paleoclimate Records, Western Solomon Islands
 1998 Chief Scientist: R/V LM Gould Cruise LMG98-10 GPS Antarctic Peninsula
 1998 Coral Paleoclimate records, Rabaul area, East New Britain, PNG
 1997 Chief Scientist: R/V Abel-J Cruise: GPS Antarctic Peninsula
 1997 Reef drilling to the LGM for climate and sea level, PNG
 1996 Reef drilling to the LGM for climate and sea level, PNG
 1996 GPS measurements Vanuatu
 1996 Coral Paleoseismology, islands offshore Sumatra
 1994 Coral climate records, Solomon Islands
 1994 Deep drilling reefs for climate and sea level, central Vanuatu
 1993 Reconnaissance for coral paleoseismology of Sumatran Subduction Zone
 1992 Deep drilling for climate and sea level, central Vanuatu
 1992 Drilling living corals for climate, Vanuatu and New Caledonia
 1992 GPS measurements, SW Pacific GPS network
 1991 Coral neotectonics, New Georgia Group, Western Solomon Islands
 1991 Paleoseismology by trenching faults, Cibao Valley, Dom. Republic
 1990 Coral Paleoseismology of Outer Forearc, Central Vanuatu
 1990 N/O Alis mapping bathymetry of Sabine Bank, Vanuatu
 1990 Sedimentologist, ODP Leg 134 to central Vanuatu
 1990 GPS measurements, SW Pacific GPS network
 1989 GPS measurements, SW Pacific GPS network
 1988 GPS installation and measurements SW Pacific GPS network
 1988 Neotectonics and paleosea level, Huon Pen., PNG
 1987 Neotectonics and Paleoseismology, Dominican Republic
 1983 Coral neotectonics and paleogeodesy, Vanuatu arc
 1983 Coral neotectonics, Dominican Republic
 1990 ODP Leg 134 Proponent and Shipboard Sedimentologist
 1981 Coral neotectonics, Dominican Republic
 1981 Coral neotectonics and paleogeodesy, Vanuatu arc
 1981 Co-Chief Scientist: North Atlantic Transect MCS cruise; Fieldwork Haiti, Dom. Rep.
 1980 Science Staff: Old Bahama Channel MCS cruise; Recon. Dominican Republic
 1980 Reconnaissance of Dom. Republic for coral neotectonics
 1979 Coral neotectonics and paleogeodesy, Vanuatu arc
 1977 Coral neotectonics, Vanuatu island arc
 1976 Coral neotectonics, Vanuatu island arc
 1974 Emerged Coral Reefs and Neotectonics, Tonga and Fiji
 1972 Emerged Coral Reefs and Paleosea Levels, Barbados, W.I.

PUBLICATIONS:

In Press:

1. Burr, G.S., Haynes, C.V., Shen, C-C., Taylor, F., Chang, Y-W., Beck, J.W., Nguyen, V., and Zhou, W., 2015, Temporal variations of radiocarbon reservoir ages in the South Pacific Ocean during the Holocene, *Radiocarbon*,

Published:

2. Partin, J.W., Quinn, T.M., Chen, C.-C., Okumura, Y., Cardenas, M.B., Siringan, F.P., Banner, J.L., Lin, K., Hu, H.-M., and Taylor, F.W., 2015, Gradual onset and recovery of the Younger Dryas abrupt climate event in the tropics, *Nature Comm.*, DOI: 10.1038/ncomms9061
3. Thirumalai, K., Taylor, F.W., Shen, C.-C., Lavier, L.L., Frohlich, C., Wallace, L., Wu, C.-C., Sun, H., and Papabatu, A., 2015, Variable Holocene deformation above a shallow subduction zone extremely close to the trench, *Nature Comm.*, DOI: 10.1038/ncomms8607.
4. Maupin, C., Partin, J.W., Shen, C.C., Quinn, T. M. , Lin, K., Taylor, F.W., Banner, J.L., Thirumalai, K., and Sinclair, D.J., 2014, Persistent decadal-scale rainfall variability in the tropical South Pacific Convergence Zone through the past six centuries, *Climate of the Past Discussions*, 5593-5625, doi:10.5194/cpd-9-5593.
5. Partin, J.W., Quinn, T. M., Shen, C-C, Emile-Geay, J., Taylor, F.W., Maupin, C.R., Lin, K., Jackson, C.S., Banner, J.L., Sinclair D. J., Huh, C.-A., 2013, Multi- Decadal Rainfall Variability of the South Pacific Convergence Zone from 1562 to 2005 CE, *Geology*, doi:10.1130/G34718.1
6. DeLong, K., Quinn, T.M., Taylor, F.W., Shen, C.-C., and Lin, Ke, 2013, Improving coral-base paleoclimate reconstructions by replicating 350 years of coral Sr/Ca variations, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 373, 6-24.
7. DeLong, K. L., Quinn, T.M., Taylor, F.W., Lin, K., and Shen, C.-C., 2012, Sea surface temperature variability in the southwest tropical Pacific since AD 1649, *Nature Climate Change*, 2, 799-804, <http://www.nature.com/doi/10.1038/nclimate1583>.
8. Hereid, K.A., Quinn, T.M., Taylor, F.W., Shen, C.-C, Edwards, R.L., and Cheng, H., 2012, Coral record of reduced El Niño activity in the earth 15th to middle 17th centuries, *Geology*, doi:10.1130/G33510.1.
9. Gorman, M. K., Quinn, T.M., Taylor, F.W., Partin, J.W., Cabioch, G., Austin, J.A., Pelletier, B., Ballu, V., Maes, C., and Sastrup, S., 2012, A coral-based reconstruction of sea surface salinity at Sabine Bank, Vanuatu from 1842 to 2007 CE, *Paleoceanography*, 27, PA3226, doi:10.1029/2012PA002302.
10. Partin, J. W., J. Jenson, J. L. Banner, T. M. Quinn, F. W. Taylor, D. J. Sinclair, B. Hardt, M. Lander, T. Bell, B. Miklavik, J. Jocson, and D. Taboroi, 2012, Relationship between modern rainfall variability, cave dripwater and stalagmite geochemistry in Guam, USA, *Geochem., Geophys., Geosyst.*, 13, Q03013, 2012, [doi:10.1029/2011GC003930](https://doi.org/10.1029/2011GC003930), #2470.
11. Sinclair, D., Taylor, F., Banner, J., Jenson, J., Mylroie, J., Goddard, E., Quinn, T., Partin, J., 2012, Magnesium and strontium systematics in tropical speleothems from the Western Pacific, 2012, *Chemical Geology, Volumes 294–295, 10 February 2012, Pages 1-17*.
12. Kim, W., B. W. Fouke, A. Petter, T. M. Quinn, C. Kerans, and F. Taylor, 2012, Sea-level rise, depth-dependent carbonate sedimentation, and the paradox of drowned platforms, *Sedimentology*, doi: 10.1111/j.1365-3091.2012.01321.x.

13. Chen, M.C., Frohlich, C., Taylor, F.W., Burr, G.S., and van Ufford, A.Q., 2011, Arc segmentation and seismicity in the Solomon Island Arc, SW Pacific, *Tectonophysics*, 507, 47-69.
14. Cabioch, G., and Taylor, F.W., 2011, The Late Quaternary Reefs, in The Natural History of Santo, Bouchet, P., Le Guyader, H., and Pascal, Olivier, The Natural History of Santo, Publications scientifique du Museum national d'Histoire naturel, v. 70 de la collection Patrimoines Naturels, p. 19-24.
15. Taylor, F.W., 2011, Earthquakes and emergence or submergence of coral reefs, in Hopley, D. (ed.) *Encyclopedia of Modern Coral Reefs, Encyclopedia of Earth Science Series, Springer-Verlag*, 327-333.
16. Frohlich, C., Hornbach, M.J., and Taylor F.W., 2011, Megablocks, in Hopley, D. (ed.) *Encyclopedia of Modern Coral Reefs, Encyclopedia of Earth Science Series, Springer-Verlag*, 679-683.
17. Hornbach, M.J., 18 co-authors, Frederick W. Taylor, 2010, High tsunami frequency as a result of combined strike-slip faulting and coastal landslides, *Nature Geoscience*. 3, 783-788, doi:10.1038/NGEO975.
18. Hayes, G., Briggs, R., Sladen, A., Fielding, E., Prentice, C., Hudnut, K., Mann, P., Taylor, F.W., Crone, A., Gold, R., Ito, T., and Simons, M., 2010, Complex rupture during the 12 January 2010 Haiti Earthquake, *Nature Geoscience*, 3, 800-805, doi:10.1038/ngeo977.
19. Hornbach, M.J., Mann, P., Taylor, F.W., and Bowen, S., 2010, Estimating the age of near-shore carbonate slides using coral reefs and erosional markers: A case study from Curacao, Netherlands Antilles, *The Sedimentary Record*, 8, no. 1, 4-10, doi: 10.21/sedred.2010.1.
20. Bevis, M., Kendrick, E., Smalley, R., Dalziel, I., Caccamise, D., Sasgen, I., Helsen, M., Taylor, F.W., Zhou, H., Brown, A., Raleigh, D., Willis, M., Wilson, T., and Konfal, S., 2009, Geodetic measurements of vertical crustal velocity in West Antarctica and the implications for ice mass balance, *Geochim. Geophys. Geosyst.*, 10, Q10005, doi:10.1029/2009GC002642.
21. Burr, G.S., Beck, J.W., Correge, T., Cabioch, G., Taylor, F.W., and Donahue, D.J., 2009, Modern and Pleistocene reservoir ages inferred from South Pacific corals, *Radiocarbon*, 51, 319-335.
22. Frohlich, C. Hornbach, M.J., Taylor, F. W., Shen, C.-C., Moala, 'A., Morton, A.E., and Kruger, J., 2009, Huge erratic boulders in Tonga deposited by a prehistoric tsunami, *Geology* 37, 131-134.
23. Shen, C.-C., Li, K.-S., Sieh, K., Natawidjaja, D., Cheng, H., Wang, X., Edwards, R.L., Lam, D.D., Hsieh, Y.-T., Fan, T.-Y., Melzner, A., Taylor, F.W., Quinn, T.M., Chaing, H.-W., Kilbourne, K.H., 2008, Variation of initial $^{230}\text{Th}/^{232}\text{Th}$ and limits of high precision U-Th dating of shallow-water corals, *Geochim. Cosmochim. Acta*, 72, 4201-4223.
24. Taylor, F.W., Bevis, M.G., Dalziel, I.W.D., Smalley, R., Frohlich, C., Kendrick, E., Foster, J., Phillips, D.A., and Gudipati, K., 2008, Kinematics and segmentation of the South Shetland Islands-Bransfield basin system, northern Antarctic Peninsula, *Geochim., Geophys., Geosys.*, 9, 7 pp, Q04035, doi:10.1029/2007GC001873.
25. Sinclair, D.J., Banner, J.L., Taylor, F.W., 2008, Deglacial climate dynamics in the western Pacific Ocean measured in a stalagmite from Guam, *Geochim. Cosmochim. Acta*, 72, A870-?..
26. Taylor, F. W., Briggs, R.W., Frohlich, C., Brown, A., Hornbach, M., Papabatu, A.K., Meltzner, A., and Billy, D., 2008, Rupture across arc segment and plate boundaries in the 1 April 2007 Solomons earthquake, *Nature Geoscience*, 1, 253-257.

27. Delong, K., Quinn, T. M., and Taylor, F.W., 2007, Reconstructing 20th century SST variability in the southwest Pacific: A replication study using multiple coral Sr/Ca records from New Caledonia, *Paleoceanography*, 22, PA4212, doi:10.1029/2007PA001444.
28. Kilbourne, K.H., Quinn, T.M., Guilderson, T.P., Webb, R.S., and Taylor, F.W., 2007, Decadal- to interannual-scale source water variations in the Caribbean Sea recorded by Puerto Rican coral radiocarbon, *Climate Dynamics*, DOI 10.1007/s00382-007-0224-2.
29. Smalley R. Jr., Dalziel, I.W.D., Bevis, M.G., Kendrick, E., Stamps, D.S., King, E.C., Taylor, F.W., Lauría, E., Zakrajsek, A., and Parra, H., 2007, Scotia arc kinematics from GPS geodesy, *Geophys. Res. Lett.*, 34, L21308, doi:10.1029/2007GL031699.
30. Holland, C.L., Scott, R., An, Soon-II, and Taylor, F.W., 2007, Propagating Decadal Sea Surface Temperature Signal Identified in Modern Proxy Records of the Tropical Pacific, *Climate Dynamics*, DOI 10.1007/s00382-006-0174-0.
31. Quinn, T. M. and Taylor, F.W., 2006, SST artifacts in coral proxy records produced by early marine diagenesis in a modern coral from Rabaul, Papua New Guinea, *Geophys. Res. Letts.*, 33, L04601, doi:10,1029/2005GL024972.
32. Quinn, T. M. and Taylor, F.W., and Crowley, T.M., 2006, Coral-based climate variability in the Western Pacific Warm Pool since 1867, *J. Geophys. Res.*, 111, doi: 10.1029/2005JC003243.
33. Gallup C. D., D. M. Olson, R. L. Edwards, L. M. Gruhn, A. Winter, F W. Taylor, 2006, Sr/Ca-Sea surface temperature calibration in the branching Caribbean coral *Acropora palmata*, *Geophys. Res. Lett.*, 33, L03606, doi:10.1029/2005GL024935.
34. Caccamise, D.J., Merrifield, M.A., Bevis, M., Foster, J., Taylor, F.W., Schenewerk, M.S., and Firing, Y.L., 2005, Sea Level Rise at Honolulu and Hilo, Hawaii: GPS Estimates of Differential Land Motion, *Geophys. Res. Lett.*, 32, L03607, doi:10,1029/2004GL021380.
35. Taylor, F.W., Bevis, M.G., Edwards, R. L., Cheng, H., Gray, S., Burr, G.S., Beck, W., Cutler, K.B., Phillips, D.A., Cabioch, G., Recy, J., and Mann, P., 2005, Rapid forearc uplift and subsidence caused by impinging bathymetric features: examples from the New Hebrides and Solomon Arcs, *Tectonics*, 24, TC6005 10.1029/2004TC001650.
36. Reimer, P. J., et al., and F. W. Taylor, 2004, IntCal04 terrestrial radiocarbon age calibration, 0-26 cal kyr BP, *Radiocarbon*, 46, 1029-1058.
37. Hughen, K.A., co-authors alphabetically through Taylor, F.W., 2004, Marine04 Marine Radiocarbon Age Calibration, 0-26 Cal KYR BP, *Radiocarbon* 46, 1058-1086.
38. Cutler, K.B.; Gray, S.C.; Burr, G.S.; Edwards, R.L.; Taylor, F.W.; Cabioch, G.; Beck, J.W.; Cheng, H.; Moore, J. 2004, Radiocarbon Calibration and Comparison to 50 Kyr BP with Paired ¹⁴C and ²³⁰TH Dating of Corals from Vanuatu and Papua New Guinea, *Radiocarbon* 46, 1127-1160.
39. Burr, G.S., Galang, C., Taylor, F.W., Gallup, C., Edwards, R.L., Cutler, K., Quirk, B., 2004, Radiocarbon results from a 13-KYR BP Coral from the Huon Peninsula, Papua, New Guinea, *Radiocarbon*, 46, 1127-1160.
40. Kilbourne, H., Quinn, T.E., Taylor, F.W., Delcroix, T., and Gouriou, Y. 2004, El Niño–Southern Oscillation–related salinity variations recorded in the skeletal geochemistry of a *Porites* coral from Espiritu Santo, Vanuatu, *Paleoceanography*, 19, PA4002, doi:10.1029/2004PA001033.
41. Stephans, C., Quinn, T.L., Taylor, F.W., and Correge, T., 2004, Assessing the reproducibility of coral-based climate records, *Geophys. Res. Letts.*, 31, L18210, doi:10.1029/2004GL020343.
42. Schmidt, A., Burr, G.S., Taylor, F.W., O'Malley, J., and Beck, J.W., 2004, A semiannual

- radiocarbon record of a modern coral from the Solomon Islands, *Nucl. Instr. And Meth. In Phys. Res. B. Beam Interactions with Materials and Atoms*, V 223-224, 420-427.
43. Kilbourne, H., Quinn, T.E., and Taylor, F.W., 2004, A fossil coral perspective on western tropical Pacific climate ~350 ka, *Paleoceanography*, 19, PA1019, doi:10.1029/2003PA000944.
 44. Smalley, R., Kendrick, E., Bevis, M., Dalziel, I., Taylor, F., Lauria, E., Barriga, R., Casassa, G., Olivero, E., and Piana, E., 2003, Geodetic determination of relative motion and crustal deformation across the Scotia-South America plate boundary in eastern Tierra del Fuego, *Geochemistry Geophysics, Geosystems*, v. 4, 1070, doi:10.1029/2002GC000446.
 45. Cabioch, G., Cutler, K.B., Beck, J.W., Burr, G.S., Correge, T., Edwards, R.L., and Taylor, F.W., 2003, Continuous reef growth during the last 23 ka in a tectonically active zone (Vanuatu, Southwest Pacific), *Quaternary Science Reviews*, 22, 1771-1786.
 46. Cutler, K.B., Edwards, R.L., Taylor, F.W., Cheng, H., Adkins, J., Gallup, C.D., Cutler, P.M., Burr, G.S., Chappell, J. and Bloom, A.L. 2003. Rapid sea-level fall and deep-ocean temperature change since the last interglacial. *Earth & Planet. Sci. Letts.*, 206, 253-271.
 47. Calmant, S.; Pelletier, B., Lebellegard, P., Bevis, Taylor, F. W., and Phillips, D. A., 2003, New insights on the tectonics along the New Hebrides subduction zone based on GPS results, *J. Geophys. Res.*, 108, 2319, doi:10.1029/2001JB000644.
 48. Gallup, C.D., Cheng, H., Taylor, F.W., and Edwards, R.L., 2002, Direct determination of the timing of sea level change during Termination II, *Science*, 295, 310-313.
 49. Zachariassen, J., F.W. Taylor, K. Sieh, and W.S. Hantoro, 2000, Modern vertical deformation above the Sumatran subduction zone: Paleogeodetic Insights from Coral Microatolls, *Bull. Seism. Soc. America*, 90, 897-913.
 50. Buddemeier, R.W., and Taylor, F.W., 2000, Sclerochronology, in J.M., Noller, Sowers, J.S. and Lettis, W.R. (eds.), *Quaternary Geochronology: Methods and Applications, American Geophysical Union Reference Shelf 4*, 25-40.
 51. Cabioch, G., Taylor, F.W., Correge, T., Recy, J., Edwards, R.L., Burr, G.S., Le Cornec, F., and Banks, K.A., 1999, Occurrence and significance of microbialites in the uplifted Tasmaloum reef (SW Espiritu Santo, SW Pacific), *Sedimentary Geology* 126, 305-316.
 52. Zachariassen, J., Sieh, K., Taylor, F.W., Edwards, R.L., and Hantoro, W.S., 1999, Submergence and uplift associated with the giant 1833 Sumatran subduction earthquake: Evidence from coral microatolls, *J. Geophys. Res.* 104, 895-919.
 53. Beck, J.W., Gagan, M., Tudhope, S., Recy, J., Taylor, F., Edwards, R.L., and Cabioch, G., 1998, Abrupt changes in early Holocene tropical sea surface temperature from coral Sr/Ca, U/Ca and ¹⁸O thermometry, In: Eiji Matsumoto (editor), *Quaternary Environmental Change in the Asia and Western Pacific Region*, Proc. Third Int'l Marine Sci. Symp. on Coral Climatology by Annual Bands 16-17 Oct. 1997, Japan association for Quaternary Research 42-49.
 54. Burr, G.S., Beck, J.W., Taylor, F., Recy., J., Edwards, R.L., Cabioch, G., Correge, T., Donahue, D.J., and O'Malley, J.K., 1998, A coral-based radiocarbon calibration between 11.7 and 12.4 kyr BP derived from ²³⁰Th ages of corals from Espiritu Santo Island, Vanuatu, *Radiocarbon*, 40, 1093-1106.
 55. Mann, P., Prentice, C.S., Burr, G., Peña, L., and Taylor, F.W., 1998, Tectonic geomorphology and paleoseismicity of the Septentrional fault system, Dominican Republic, in Dolan, J., and Mann, P. (eds.), "Active Strike-Slip and Collisional Tectonics of the Northern Caribbean Plate Boundary Zone", *Geol. Soc.. America Spec. Paper* 326, 63-123.
 56. Buddemeier, R.W., and Taylor, F.W., 1998, CHAPTER 4: SCLEROCHRONOLOGY, in Sowers, J.M., Noller, J.S. and Lettis, W.R. (eds.), *Dating and earthquakes: review of*

Quaternary geochronology and its application to paleoseismology, U.S. Nuclear Regulatory Commission, NUREG/CR 5562, 2-43 - 2-66.

57. Quinn, T.M., Crowley, T.J., Taylor, F. W., Henin, C., Joannot, P., and Join, Y., 1998, A multicentury stable isotope record from a New Caledonia coral: Interannual and decadal sea surface temperature variability in the Southwest Pacific since 1657 A.D., *Paleoceanography* 13, 412-426.
58. Mann, P., Taylor, F.W., Lagoe, M.B., and Quarles, A., 1998, Late Quaternary uplift of the New Georgia Islands (Solomon island arc) in response to subduction of the Woodlark spreading center, *Tectonophysics* 295, 259-306.
59. Calmant S., Pelletier B., Pillet, R., Régnier, M., Lebellegard, P., Maillard, D., Taylor, F.W., Bevis, M., and Recy, J., 1997, Aseismic and co-seismic motions in GPS series related to the Ms 7.3 July 13, 1994, Malekula earthquake, central New Hebrides subduction zone, *Geophys. Res. Letts.* 24, 3077-3080.
60. Cabioch, G. Taylor, F.W., Recy, J., et al., 1998, Environmental and tectonic influences on growth and internal structure of a fringing reef at Tasmaloum (SW Espiritu Santo, New Hebrides Island Arc, SW Pacific), *Spec. Publs Int. Ass. Sediment.*, 25, 261-277.
61. Crowley, T.J., Quinn, T.M., and Taylor, F.W., Henin, C., and Joannot, P., 1997, Evidence for a volcanic cooling signal in a 335 year coral record from New Caledonia, *Paleoceanography* 12, 633-639.
62. Beck, J.W., Recy, J., Taylor, F., Edwards, R.L., and Cabioch, G., 1997, Abrupt changes in early Holocene sea surface temperature derived from coral records, *Nature*, 385, 705-707.
63. Quinn, T.M., Taylor, F. W., Crowley, T.J., and Link, S.M., 1996, Evaluation of sampling resolution in coral stable isotope records: A case study using monthly stable isotope records from New Caledonia and Tarawa, *Paleoceanography* 11, 529-542.
64. Quinn, T.M., Crowley, T.J., and Taylor, F.W., 1996, New stable isotope results from a 173-year coral record from Espiritu Santo, Vanuatu, *Geophys. Res. Lett.*, 23, 3413-3416.
65. Taylor, F.W. Bevis, M.G., Schutz, B.E., Kuang, D., Recy, J., Calmant, S., Charley, D., Regnier, M., Perin, B., Jackson, M., and Reichenfeld, C., 1995, Geodetic measurements of convergence at the New Hebrides island arc indicate arc fragmentation due to an impinging aseismic ridge: *Geology*, 23, 1011-1014.
66. Calmant, S., Lebellegard, P., Taylor, F., Bevis, M., Maillard, D., Recy, J., and Bonneau, J., 1995, Geodetic measurements of convergence across the New Hebrides subduction zone; *Geophys. Res. Letts.*, 22, 2573-2576.
67. Chen, J.K., Taylor, F.W., Edwards, R.L., Cheng, H., and Burr, G.S., 1995, Recent emerged reef terraces of the Yenkahe resurgent block, Tanna, Vanuatu: Implications for volcanic, landslide, and tsunami hazards: *J. Geology*, 103, 577-590.
68. Mann, P., Taylor, F.W., Edwards, R.L., and Ku, T.L., 1995, Actively evolving microplate formation by oblique collision and sideways motion along strike-slip faults: an example from the northeastern Caribbean plate margin: *Tectonophysics*, 246, 1-69.
69. Min, G.R., Edwards, R.L., Taylor, F.W., Recy, J., Gallup, C.D., and Beck, J.W., 1995, Annual cycles of U/Ca in coral skeletons and U/Ca thermometry: *Geochim. Cosmochim. Acta*, 59, 2025-2042.
70. Bevis, M., Taylor, F.W., Schutz, B.E., Recy, J., Isacks, B.L., Helu, S., Singh, R., Kendrick, E., Stowell, J., Taylor, B., and Calmant, S., 1995, Geodetic observations of convergence and back-arc spreading at the Tonga island arc, *Nature*, 374, 249-251.
71. Quinn, T. M., Taylor, F. W., and Halliday, A.N., 1994, Strontium isotopic dating of neritic

- carbonates at Bougainville Guyot (Site 831), New Hebrides Island Arc, *Proc. ODP, Sci. Results, 134*, College Station, TX (Ocean Drilling Program), 89-95.
72. Taylor, F. W., Quinn, T. M., Gallup, C. G., and Edwards, R. L., 1994, Quaternary plate convergence rates at the New Hebrides arc from the chronostratigraphy of Bougainville Guyot (Site 831), *Proc. ODP, Sci. Results, 134*, College Station, TX (Ocean Drilling Program) 47-57.
 73. Quinn, T. M., Taylor, F. W., and Crowley, T.J., 1993, A 173 year stable isotope record from a tropical South Pacific coral: *Quaternary Science Reviews 12*, 407-418.
 74. Burr, G., Edwards, R. L., Donahue, D. J., Druffel, E., and Taylor, F. W., 1992, Mass spectrometric ^{14}C and U-Th measurements in corals, *Radiocarbon, 34*, 611-618.
 75. Edwards, R. L., Beck, J.W., Burr, G.S., Donahue, D.J., Chappell, J.M.A., Bloom, A.L., Druffel, E.R.M., and Taylor, F.W., 1993, A large drop in atmospheric $^{14}\text{C}/^{12}\text{C}$ and reduced melting in the Younger Dryas, documented with ^{230}Th ages of corals, *Science, 260*, 962-968.
 76. Prentice, C. S., Mann, P., Taylor, F. W., Burr, G., and Valastro, S., 1993, Paleoseismicity of the North American-Caribbean plate boundary (Septentrional Fault), Dominican Republic, *Geology, 21*, 49-52.
 77. Schutz, B. E., Bevis, M. G., Taylor, F. W., Kuang, D., Watkins, M., Recy, J., Perin, B., and Peyroux, O., 1993, The Southwest Pacific GPS Project: Geodetic results from burst 1 of the 1990 field campaign, *Bull. Geodesique.67*, 224-240.
 78. Beck, W. Edwards, R. L., Ito, E., Taylor, F. W., Recy, J., Rougerie, F., Joannot, P., and Henin, C., 1992, Sea surface temperature from coral skeletal Sr/Ca ratios, *Science, 257*, 644-647.
 79. Taylor, F. W. 1992, Quaternary vertical tectonics of the central New Hebrides Arc, In *Proc. Ocean Drilling Prog., Init. Repts, 134*, 33-42.
 80. Taylor, F. W., Recy, J., Larue, B.M., Bevis, M., and Schutz, B., 1991, A geodetically positioned shallow platform for tectonics and oceanographic research, in Kumar, M., and Maul, G. A. (eds.), *Marine Positioning into the 1990's, Proc. International Symp. on Marine Positioning*, October 15-19, 1990, (Rosenstiel School of Marine and Atmospheric Science) Miami, Florida, PIP Printing, Rockville, Maryland, 278-287.
 81. Taylor, F.W., and Mann, P., 1991, Late Quaternary Folding of Coral Reef Terraces, Barbados, *Geology, 19*, 103-106.
 82. Taylor, F. W., R. L. Edwards, G. J. Wasserburg, and C. Frohlich, 1990, Seismic Recurrence Intervals and timing of aseismic subduction inferred from emerged corals and reefs of the central New Hebrides (Vanuatu) Island Arc, *J. Geophys. Res.*, 95, 393-408.
 83. Edwards, R. L., F. W. Taylor, and G. J. Wasserburg, 1988, Dating earthquakes with high precision thorium-230 ages of very young corals, *Earth and Planetary Science Letts.*, 90, 371-381.
 84. Austin, J.A., F.W. Taylor, and C. D. Cagle, 1989, Seismic stratigraphy of the central Tonga arc system, *Marine and Petroleum Geology, v. 6*, 71-92.
 85. Edwards, R. L., F. W. Taylor, J. H. Chen, and G. J. Wasserburg, 1988, High precision thorium-230 dating of corals using thermal ionization mass spectrometry: applications to paleoseismology, A. J. Crone and E. M. Omdahl (eds.), *Directions in Paleoseismology, U. S. Geol. Surv. Open File Report 87-673*, 30.
 86. Taylor, F.W., Frohlich, C., Lecolle, J., and Strecker, M., 1987, Analysis of Partially Emerged Corals and Reef Terraces in the Central Vanuatu Arc: Comparison of Contemporary Coseismic and Nonseismic with Quaternary Vertical Movements, *J. Geophys. Res.*, 92, 4905-

4933.

87. Strecker, M. R., Bloom, A. C., Gilpin, L. M., and Taylor, F. W., 1986, Karst morphology of uplifted Quaternary coral limestone terraces: Santo Island, Vanuatu: *Z. Geomorph., N.F.*, 30, 387-405.
88. Taylor, F. W., Jouannic, C., and Bloom, A.L., 1985, Quaternary uplift history of the Torres Islands, northern New Hebrides frontal arc: Comparison with Santo and Malekula Islands, central New Hebrides frontal arc, *J. Geology*, v. 93, 419-438.
89. Taylor, F. W., Mann, P., Burke, K., and Valastro, S., 1985, Stratigraphy and radiocarbon chronology of a subaerially exposed Holocene coral reef, Dominican Republic, *J. Geology*, v. 93, 311- 332.
90. Mann, P., Taylor, F. W., Burke, K., and Kulstad, R., 1984, Subaerially exposed Holocene coral reef, Enriquillo Valley, Dominican Republic, *Geol. Soc. America Bull.*, v. 95, 1084-1092.
91. Jouannic, C., Taylor, F. W., Bloom, A. L., 1982, Sur la surrection et la deformation d'un arc jeune: l'arc des Nouvelles Hebrides: In: Contribution a l'etude geodynamique du sudouest Pacifique, *Travaux et documents de L'O.R.S.T.O.M.*, No. 147, 223-246.
92. Taylor, F. W., Jouannic, C., Gilpin, L., and Bloom, A. L., 1981, Coral colonies as monitors of changes in relative level of the land and sea: Application to vertical tectonism: *Fourth International Coral Reef Symposium, Manila, The Philippines*, v. 2, 485-492.
93. Buskirk, R. E., Taylor, F. W., O'Brien, W. P., and Maillet, P., 1981, Seasonal growth patterns and mortality of corals in the New Hebrides: *Fourth International Coral Reef Symposium, Manila, The Philippines*, v. 2, 197-200.
94. Jouannic, C., Taylor, F. W., and Bloom, A. L., 1980, Late Quaternary uplift history from emerged reef terraces on Santo and Malekula Islands, central New Hebrides island arc: *UN ESCAP, CCOP/SOPAC, Tech. Bull. No. 3*, 91-108.
95. Taylor, F. W., Isacks, B. L., Jouannic, C., Bloom, A. L., and Dubois, J., 1980, Coseismic and Quaternary vertical movements, Santo and Malekula Islands, New Hebrides island arc: *J. Geophys. Res.*, v. 84, no. B-10, 5367-5381.
96. Gaven, C., Bernat, M., Jouannic, C., and Taylor, F.W., 1980, Mouvement Verticaux des Nouvelles-Hebrides pendant les derniers 120,000 ans. Datations de coraux par la methode Io-U: *Comptes Rendus Acad. Sci. Paris, Serie D*, v. 290, 175-178.
97. Bender, M. L., Fairbanks, R. G., Taylor, F. W., Matthews, R. K., Goddard, J., and Broecker, W. S., 1979, Uranium-series dating of the Pleistocene reef tracts of Barbados, West Indies: *Geol. Soc. America Bull.*, v. 90, 577-594.
98. Bloom, A. L., Jouannic, C., and Taylor, F. W., 1978, Preliminary radiometric ages from the uplifted Quaternary coral reefs of Efate, New Hebrides: Appendix 1, in A. Macfarlane, Geology of Efate, *New Hebrides Geol. Surv. Regional Rept.*, 47-49.
99. Taylor, F. W., and Bloom, A. L., 1977, Coral reefs on tectonic blocks, Tonga island arc: *Third International Coral Reef Symposium, Miami*, v. 2, 275-281.
100. Bender, M. L., Taylor, F. W., and Matthews, R. K., 1973, Helium-uranium dating of corals from middle Pleistocene Barbados reef tracts: *Quaternary Research*, 3, 142-146.

EOS Cover

Taylor, F. W., 1985, Tectonically emerged living corals: *EOS Trans.*, v. 66, p. 555; 568.

Book Review

Taylor, F. W., 1984, Review: Geomorphology of the Great Barrier Reef by David Hopley, *American Jour. of Science*, v. 284, p. 1082-1084.

ABSTRACTS and/or PRESENTATIONS (past five years):

1. Inoue, M., Quinn, T.M., Taylor, F.W., Suzuki, A., Kawahata, H., Araoka, D, Mitsukawa, Y., Ikehara, M., Cheng, H., Edwards, R.L., Salinity change in the tropical western Pacific at 5.2 ka when an abrupt tropical climate change occurred, Japanese Conf JPGU, Abst.
2. Quinn, T., et al., 2014, A Multi-Proxy Perspective on Climate Variability in the Tropical Pacific over the Last Millennium; European Geophysical Union Meeting Abst.
3. Frederick W Taylor, Kaustubh Thirumalai, Luc L Lavier, Alison K Papabatu, Thomas Toba, Chuan-Chou Shen and Binggui Cai, 2014, The Western Solomons Forearc: Independent Inner and Outer Forearc Paleo-Uplift Histories and Relationship to Megathrust Rupture, Fall AGU meeting abst.
4. Quinn, T.M., Partin, J.W., Thirumalai, K., Maupin, C.R., Vara, M., Shen, C.-C., and Taylor, F.W., 2014, A southwest Pacific coral perspective on ENSO variability: Precessional forcing vs. internal variability, AGU Abst.
5. Gilman R. Ouellette, Kristine L. DeLong, K. Halimeda Kilbourne, Frederick W. Taylor, 2014, Replicating and calibrating Haitian microatoll coral Sr/Ca variations to build confidence in sea surface temperature reconstructions, Fall AGU meeting abst.
6. Wallace, L., Taylor, F W, Bevis, M., Phillips, D., Kendrick, E., and Walter, J., 2015, Interseismic, coseismic, and slow slip event deformation above a shallow subduction thrust in the western Solomon Islands, GSNZ Conf, Wellington, New Zealand Abst.
7. Ouellette, G.R., DeLong, K.L., Kilbourne, K.H., and Taylor, F.W., 2015, Sea surface temperature variability inferred from coral Sr/Ca values extracted from microatolls from the Haitian coast, AAG meeting Abst.
8. **Invited:** Taylor, F.W., 2014, Coral Records of Paleo-Uplifts in Southwest Pacific Forearcs: Recurrence Times, Geography of Uplift, and Uplift Rates Varied Drastically Over a Few Thousand Years" 26 Sept., 2014
9. **Invited:** Taylor, F.W., Coral records of paleo-uplifts in southwest Pacific forearcs: Central New Hebrides and Western Solomons uplift varied drastically in time and space, IRD at GeoAzur, Sofia Antipolis, France.
10. Kristine L. DeLong, Terrence M. Quinn, Frederick W. Taylor, Ke Lin and Chuan-Chou Shen, 2014, Hydrological shifts in seawater $\delta^{18}\text{O}$ in southwest tropical Pacific since 1649 CE, Fall AGU meeting abst.
11. Yu-Ting Kuo, Chin-Shang Ku, Yu Wang, Yu-Nung Nina Lin, Yue-Gau Chen, Kuan-Chuan Lin, Bor-Shouh Huang, Ya-Ju Hsu, Frederick W. Taylor, 2014, Crustal deformation in the Western Solomon Islands revealed by GPS observation and D_InSAR during 2009 – 2013, Fall AGU meeting abst.
12. **Invited:** Taylor, F.W., Lavier, L., Thirumalai, K., and Shen, R., 2014 Coral Reef Records of Vertical Forearc Motions Across the Megathrust Seismogenic Zone: Perhaps Emerged Forearcs Provide Clues to Fundamental Tectonic Processes, Institut de Physique du Globe de Paris, oral presentation.
13. DeLong, K.L., Quinn, T.M., Taylor, F.W., Lin, K., and Shen, C.-C., 2014, Insights from coral isotopic and strontium-calcium ratio records from the southwest tropical Pacific since 1649 CE, Ocean Sciences Meeting Abst., Honolulu, HI.
14. Bojarski, A., DeLong, K.L., Quinn, T.M., and Taylor, F.W., 2014, Assessing millimeter-scale Sr/Ca variability within the corallite fan structure of *Porites lutea* for improving coral-based paleoclimate reconstructions, Ocean Sciences Meeting Abst, Honolulu, HI.

15. Partin, J.W., Quinn, T.M., Thirumalai, K., Taylor, F.W., Okumura, Y.M., Jackson, C.S., 2014, Tropical Climate Variability in the Western Pacific on Sub-annual to Orbital Timescales, PMIP2 workshop, March 2014, London.
16. Taylor, F.W., Thirumalai, K.R., Lavier, L.L., Frohlich, C., Shen, C.C., Wu, C.C., Sun, H., Papabatu, A., 2013, Coral Paleo-Uplift History Overlying a Very Shallow AD 2007 Megathrust Rupture of the Western Solomons Forearc: Deficit of Interseismic Subsidence Results in Net Long-Term Uplift, AGU Abst., Fall Meeting.
17. Partin, J.W., Quinn, T.M., Shen, C.C., Cardenas, M.B., Okumura, Y., Siringan, F., Banner, J.L., Lin, K., and Taylor, F.W., 2013, Insolation and abrupt climate change effects on the Western Pacific maritime monsoon, Abst. Int'l Conf. on Paleoceanography, Spain.
18. Vara, M.A., Quinn, T.M., Taylor, F.W., Partin, J.W., Gorman, M.K., Maupin, C.R., Edwards, R.L., Cheng, H., Inoue, Mayuri, and Nakedau, D., 2013, Investigating ENSO Variability in the mid-Holocene using a Fossil Coral from the South Pacific, AGU Abst., Fall Meeting.
19. Partin, J.W., Quinn, T.M., Shen, C.C., Cardenas, M.B., Siringan, F.P., Banner, J.L., Lin, K., Jiang, X., Taylor, F.W., 2013, Insolation and Abrupt Climate Change Effects on the Western Pacific Maritime Monsoon, AGU abst, Fall Meeting.
20. Kuo, Y.T., Lin, K.C., Ku, C.S., Taylor, F.W., Chen, Y.G., and Huang, B.S., 2012, Crustal deformation in the Western Solomon Islands revealed by GPS observation during 2009-2012, AGU abst., Fall meeting
21. Gorman, M.K., Quinn, T.E., Taylor, F.W., Shen, C.C., Maupin, C.R., and Wu, C.C., 2012, ENSO variability in the western tropical Pacific during the 20th and 14th centuries: preliminary results from a ~700 year coral, AGU abst., Fall Meeting.
22. Kuo, Y.T., Ku, C.S., Taylor, F., Chen, Y.G., Lin K.C., Shou, B.S., 2012 Crustal Deformation in the Western Solomon Islands Revealed by GPS Observation During 2009 – 2011, AOGS Spring Meeting.
23. Partin, J.W., Quinn, T.E., Shen, C.C., Cardenas, M.B., Siringan, F.P., Banner, J.L., Lin, K., Taylor, F.W., 2012, Insolation and Abrupt Climate Change Effects on the Western Pacific Maritime Monsoon, AGU Abst, Fall Meeting.
24. Maupin, C.R., Quinn, T.E., Taylor, F.W., Lin, K., and Shen, C.C., 2012, Toward a three-century reconstruction of climate variability from a slow-growing coral in the Western Province, Solomon Islands, AGU Abst., Fall Meeting.
25. Invited: Taylor, F.W., Austin, J.A., Pelletier, B., Cabich, G., Quinn, T.M., and Wallace, L., 2012, Sabine Bank, Vanuatu: Drilling the late Quaternary coral climate record on a rapidly subsiding reef. International Workshop on IODP Scientific Drilling in the Southwest Pacific, Sydney Australia, Oct. 9-12, 2012.
26. Invited: Taylor, F.W., Lavier, L.L., and Bevis, M.G., Thirumalai, K., and Frohlich, C., 2012, Relationships between plate convergence, the earthquake cycle, and long-term accumulation of net tectonic deformation at island arcs; not so simple as it seems, AGU Abst, Fall Meeting.
27. Taylor, F.W., Thirumalai, K., Shen, C.C., Wu, C.C., Papabatu, A., Lavier, L.L., and Bevis, M.G., Coral record of paleoseismic uplifts at Ranongga Island, Western Solomon Islands megathrust: Was the 2007 Mw 8.1 event smaller than usual?, AGU Abst., Fall Meeting.
28. Vara, M.A., Quinn, T.M., Taylor, F.W., Partin, J.W., Gorman, M.K., Maupin, C.R., Edwards, R.L., Cheng, H., and Inoue, Mayuri, 2012, Investigating ENSO Variability in the mid-Holocene using a Fossil Coral from the South Pacific, AGU Abst., Fall Meeting.
29. Taylor, F.W., Mann, P., Briggs, R.W., Prentice, C., Jean, P., Shen, C.-S., Chiang, H.-W. and Jiang, X., 2011, Late Holocene paleo-uplift events at the Tapion restraining bend in Haiti:

- Implications for earthquake recurrence in the vicinity of the 2010 rupture zone, AGU Abst., Fall Meeting.
30. DeLong, K.L., Quinn, T. M Quinn, Taylor, F.W., Shen, C.C., Lin, K., 2011, Surface ocean temperature variability in the southwest tropical Pacific since 1649 CE, AGU Abst., Fall Meeting.
 31. Hereid, K.A., Quinn, T.M., Taylor, F.W., Edwards, R.L., Cheng, H., and Shen, C.-C., 2011, ENSO Variability at Vanuatu during the Medieval Climate Anomaly, AGU Abst., Fall Meeting.
 32. Inoue, M., Quinn, T.M., Taylor, F.W., Suzuki, A., Ishimura, T., Kawahata, H., Cheng, H., and Edwards, R.L., 2011, Reconstruction of temperature and oxygen isotopes in the surface water of the Mid-Holocene tropical western Pacific, Japan Geoscience Union Meeting.
 33. Moore, M.W., Hardt, B.F., Partin, J.W., Banner, J.L., Jenson, J.W., Sinclair, D.J., and Taylor, F., 2011, Paleoclimatic Study of the West Pacific Warm Pool using Oxygen Isotope Variations in a Stalagmite from Guam, AGU Abst., Fall Meeting.
 34. Maupin, C.R., Partin, J.W., Quinn, T.M., Shen, C.-C., Banner, J.L., Lin, K., Taylor, F.W., and Sinclair, D.J., 2011, Replicated Stalagmite Records of Rainfall Variability in the Solomon Islands since the Little Ice Age, AGU Abst., Fall Meeting.
 35. Partin, J.W., Quinn, T.M., Shen, C.-C., Taylor, F.W., Banner, J.L., Maupin, C.R., Lin, K., Sinclair, D.J., Huh, C.-A., 2011, Multi-Decadal Rainfall Variability under the South Pacific Convergence Zone from 1570-2005, AGU Abst., Fall Meeting.
 36. Gorman, M.K., Quinn, T.M., Taylor, F.W., Dunn, E.M., Cabioch, G., Vallu, V., Maes, C., Austin, J.A., Saustrup, S., and Pelletier, B., 2011, A Coral-based Reconstruction of Sea Surface Salinity at Sabine Bank, Vanuatu from 2007 to 1843 CE, AGU Abst., Fall Meeting.
 37. Kim, W., Petter, P., Fouke, B., Quinn, T., Kerans, C., Taylor, F., Mohrig, D., and Paola, C., 2010, Decoupling allogenic forcing from autogenic processes: Clastic and Carbonate Experimental Stratigraphy, AAPG Abst.,
 38. Mann, P., Prentice, C.S., Briggs, R.W., Taylor, F.W., Crone, A.J., Gold, R.D., Hudnut, K.W., Koehler, R.D., and Jean, P., 2010, Geologic Effects of the January 12, 2010, Haiti Earthquake: Tectonic Geomorphology, Surface Rupture, and Coastal Uplift (*Invited*), Abst., Meeting of Americas, Brazil.
 39. P. Mann, C. S. Prentice, R. W. Briggs, F. W. Taylor, A. J. Crone, R. D. Gold, K. W. Hudnut,; R. D. Koehler, P. Jean, 2010, Geologic Effects of the January 12, 2010, Haiti Earthquake: Tectonic Geomorphology, Surface Rupture, and Coastal Uplift (*Invited*), Meeting of the Americas, Brazil.
 40. Yu-Ting Kuo, Chin-Shang Ku, Fred Taylor, Bor-Shouh Huang, Yue-Gau Chen, Wei-An Chao, Hsin-Hua Huang, Yu-Ju Kuo, Yih-Min Wu, John Suppe, 2010, Seismogenic Fault Geometry of 2010 Mw 7.1 Solomon Islands Earthquake, AGU Abst., Fall Meeting.
 41. Richard W Briggs, Gavin P Hayes, Anthony Sladen, Eric J Fielding, Carol S Prentice, Kenneth W Hudnut, Paul Mann, Frederick W Taylor, Anthony J Crone, Ryan D Gold, Takeo Ito, Mark Simons, Phedy Jean , 2010, Complex rupture source of the 12 January 2010 Léogâne, Haiti earthquake derived from geologic, geodetic, and seismologic observations, AGU Abst., Fall Meeting.
 42. F. W. Taylor, Luc Lavier, M.G. Bevis, Cliff Frohlich, Steven Grand, 2010, Subduction of very rugged seafloor topography imposes stronger interplate coupling and elevated mean stress levels at the Western Solomon Islands forearc, AGU Abst., Fall Meeting.
 43. Meaghan K. Gorman, Terrence M. Quinn, Frederick W. Taylor, Elizabeth M. Powell, Guy Cabioch, Valérie Ballu, Christophe Maes, James A. Austin, Steffen Saustrup, Bernard

- Pelletier, 2010, A record of ENSO variability in the Western Pacific Warm Pool during the 19th century, AGU Abst., Fall Meeting
44. Christopher R. Maupin, Judson W. Partin, Terrence M. Quinn, Chuan-Chou Shen, Ke Lin, Frederick W. Taylor, Daniel J. Sinclair, Jay L. Banner, 2010, Stable isotope records of convection variability in the West Pacific Warm Pool from fast-growing stalagmites, AGU Abst., Fall Meeting.
 45. Quinn, Terrence M.; Taylor, F. W., Partin, Judson W., Maupin, Chris R., Hereid, K., Gorman, M., 2010, Tales from the South (and West) Pacific in the Common Era: A Climate Proxy Perspective, AGU Abst., Fall Meeting
 46. Paul Mann, Carol S. Prentice, Richard W. Briggs, Frederick Taylor, Anthony J. Crone, Ryan D. Gold, Kenneth W. Hudnut, Richard D. Koehler, Phedy Jean, 2010, Geologic Effects of the January 12, 2010, Haiti Earthquake: Tectonic Geomorphology, Surface Rupture, and Coastal Uplift, AGU Abst., Fall Meeting
 47. K.A. Hereid, T.M. Quinn, F.W. Taylor, C.C. Shen, J.L. Banner, 2010, ENSO Variability during the Little Ice Age from the Perspective of a Long Coral Record from the Western Pacific Warm Pool, AGU Abst., Fall Meeting
 48. Partin, Judson W.; Quinn, Terrence M.; Shen, C.C, Maupin, Chris R.; Taylor, Frederick W., Sinclair, Daniel; Banner, Jay L, 2010, Rainfall Variability under the South Pacific Convergence Zone as Reconstructed from a Speleothem Record (1670-2005) from Vanuatu, AGU Abst., Fall Meeting
 49. Daniel J. Sinclair, Judson W. Partin, Jay L. Banner, Frederick W. Taylor, John W. Jenson, John E. Mylroie, Ethan Goddard, Terrence M. Quinn, 2010, Changing Atmospheric Circulation over the Western Pacific During the Early-Mid Holocene: Preliminary Results from a Speleothem from Guam ICP Abst
 50. Wonsuck Kim, Andrew Petter, Bruce Fouke, Terry Quinn, Charles Kerans, Fred Taylor, David Mohrig, and Chris Paola, 2010, Decoupling allogenic forcing from autogenic processes: Clastic and Carbonate Experimental Stratigraphy, AAPG Meeting Abst.

EQUIPMENT DEVELOPMENT:

Hydraulic core drilling system for coring living corals underwater; funded by NSF Tectonics. Prototype built by Texas Process Equipment, Houston, TX. Eddie Wheeler of TECH 2000, Georgetown, TX, made many improvements to the basic design of the drill head and the power unit. At least 30 units have been delivered by Tech 2000 for use in at least ten countries with the most recent going to Brazil and India.

Water hydraulic core drilling system that uses sea water as a hydraulic fluid instead of oil. This drill is based on seawater hydraulic pumps and motors that originated with the US Navy 1980's underwater tools program. We designed it for drilling where spillage of even biodegradable hydraulic oil would be unacceptable. The low viscosity of water and the lack of need for return hoses delivers a higher proportion of engine power to the drill than the original oil hydraulic system. Funded by NOAA and currently in use by WHOI, AIMS of James Cook Univ., and ourselves.

GPS Masts: The Tech 2000 fixed-height GPS mast in use by numerous researchers was developed in collaboration with Mike Bevis and Eddie Wheeler. Both UNAVCO and the Geological Survey of Canada are among the main users of this device.

M.S. THESIS:

The Uplifted Reef Tracts of Barbados, West Indies: Detailed Mapping and Radiometric Dating of

Selected Areas, Unpub. M. S. Thesis, Brown University, Providence, R. I., 226 p, 1974.

PH.D. DISSERTATION:

Quaternary tectonic and sea-level history, Tonga and Fiji, Southwest Pacific, Ph. D. Dissertation, Cornell University, Ithaca, N. Y., 355 p., 1978.

THESIS ADVISORS:

- M. S. Brown University: R.K. Matthews (chairman)
- Ph. D. Cornell University: A. L. Bloom (chairman), Bryan Isacks, Dan Karig, John Anderson

POST-DOCTORAL FELLOW SPONSORED:

- Daniel J. Sinclair 2005-2007

GRADUATE STUDENT/ OTHER ACADEMIC COMMITTEES: Total number =7

o Clinton D. Cagle: UT M.S Thesis Com.: Seismic stratigraphy of the central Tongan arc

o Jeffrey Chen: UT M.S. Thesis Com.: Quaternary Crustal Motions of Tanna Island and the Yenkahe Horst area near Yasour Volcano from Uplifted Coral Reefs

o D. Kuang: UT Ph.D. Dissert. Com.; GPS results from the Tonga-Fiji area

o David A. Phillips - Univ. of Hawaii Ph.D. Diss. Com. GPS measurements of subduction deformation at the New Hebrides and Solomons Arcs

• Pat Mickler – UT-Ph.D. Dissert. Com., Speleothem Chemistry

• Guy Cabioch Jury Habilitation de Directeur de Recherche de Guy Cabioch, Universite Aix en Provence

• Ming-Chu Chen – UT-M.S. Thesis Com.: Forearc Segmentation of the Solomon Islands Arc

• Elizabeth Dunn – UT-M.S.. Thesis Com.: Coral Climate Record, Sabine Bank.

• Kelly Hereid –UT-Ph.D. Dissert. Com.:El Niño-Southern Oscillation Variability during the Little Ice Age and Medieval Climate Anomaly Reconstructed from Fossil Coral Geochemistry and Pseudoproxy Analysis

• Morris Jim Harrison – Univ. South Pacific M.S. Thesis. A study of vertical tectonics using coral on northwest Malekula, Vanuatu

• Frédérique Leclerc – Institut de Physiques du Globe Paris, Déformation active permanente induite par le méga-chevauchement dans l’arc antillais: Apport des complexes récifaux quaternaires, Rapporteur for dissertation defense.

UNDERGRADUATE MENTORING

• Myriam Bailly: 1993. Contradictions sur le Paleoniveaux de la Mer a la fin du Quaternaire, Internship in Geophysics at UTIG. From Universite de Franche-Comte a Besancon

• Peter Abel: 2000-2001. Peter worked on coral climate data and participated in fieldwork in the Solomon Islands as an authentic research experience in 2001.

• Brandon Johnson: 2004-2006. Brandon completed a research project course for credit with Jay Banner. I supervised his research which he completed in August 2006: Title: Fidelity of oxygen isotope data from an Efate Island, Vanuatu, coral as a proxy for recorded sea surface temperature

SCIENTISTS WITH WHOM THERE HAS BEEN A LONG-TERM ASSOCIATION OR COLLABORATION ON PROJECT OR PAPER WITHIN THE LAST 48 MONTHS:

Austin, J.A.	Univ. Texas	Gallup, C.	Univ. Minnesota	Mann, P.	Univ. Houston
Ballu, V.	Univ. Rochelle	Garaebiti, E.	Hazards, Vanuatu	Maupin, C.	Texas A&M Univ
Banner, J.L.	Univ. Texas	Goddard, E., Gorman, M.	Univ S Florida	Miklavik, B.	Univ. Guam
Bell, T.	Univ. Guam	K	Stat Oil	Mylroie, J.	Miss. St Univ
Bevis, M.	Ohio State U Helmholz Ctr.	Hardt, B.	Univ Texas	Partin, J.W.	Univ Texas
Bowen, S	Potsdam	Harrison, M.	Hazards, Vanuatu	Pelletier, B.,	IRD France
Briggs, R.	USGS	Hereid, K.A.	Unknown	Petter, A.	Univ Texas
Burr, G.S.	Univ. Arizona	Hornbach, M.	S Methodist Univ.	Prentice, C.	USGS
Cabioch, G.	IRD, France	Huh, C.-A	Acad Sinica Taiwan	Quinn, T. M.	Univ Texas
Chen, M.C.	Unknown	Jackson, C.S	Univ. Texas	Saustrup, S	Univ Texas
Chen, Y.-G.	Natl Taiwan Univ.	Jocson, J.	Univ. Guam	Shen, C.C.	Natl Taiwan Univ.
Cheng, H.,	Univ. Minnesota	Kerans, C.	Univ Texas	Sinclair, D.J.	Victoria Univ, NZ
Dalziel, I.	Univ. Texas	Kim, W.,	Univ Texas	Smalley, R.	Univ Memphis
DeLong, K.,	Louisiana State	Lander, M.	Univ Guam	Taborosi, D.	Univ Guam
Edwards, R.L.	Univ. Minnesota	Lavier, L.	Univ Texas	Thirumalai, K.	Univ Texas
Emile-Geay, J	Univ. S Calif. LA	Lin, K.	Natl Taiwan Univ.		
Fouke, B.W.	Univ Illinois	Maes, C.	IRD France	Wallace, L.	Univ Texas
Frohlich, C.	Univ Texas				