

WESLEY A. BROWN, Ph.D.

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EDUCATION:

- 08/06 **Post Doctoral Research Associate**, Texas A&M University System.
- 12/04 **PhD.** Geological Sciences, **University of Texas at El Paso**, El Paso Texas
Dissertation: An Integrated Geophysical Study of the Lithospheric
Structure Beneath Libya.
- 2000 **M.Sc.** Geophysics, **University of Texas at El Paso**, El Paso Texas
Thesis: A Seismotectonic Study of the South-Central Alaskan Margin
Between the 1938 and 1964 Great Alaskan Earthquake Rupture Zones.
- 1997 **B.Sc., Geology**, **University of the West Indies**, Kingston, Jamaica.

WORK EXPERIENCE:

- 06/15 – Pres. **Department Chair**, Stephen F. Austin State University. Responsible for serving as the chief administrator of the Department of Geology. Also responsible for the development and implementation of department, college, and university policy.
- 08/15 – Pres. **Full Professor**, Stephen F. Austin State University. Conduct research in the area of geophysics, present geology and geophysics lectures to graduate and undergraduate students.
- 09/12- 08/15. **Associate Professor**, Stephen F. Austin State University. Conduct research in the area of geophysics, present geology and geophysics lectures to graduate and undergraduate students, while also serving as coordinator of the department's graduate program.
- 08/06–08/12. **Assistant Professor**, Stephen F. Austin State University. Conduct research in the area of geophysics, present geology and geophysics lectures to graduate and undergraduate students.
- 2/05 – 08/06 **Post-Doctoral Research Associate**, Texas A&M University System, El Paso Texas. Prepared, maintained and terminated experiments

emphasizing waste water reuse strategies. Manage experimental data. Assist in manuscript and grant proposal preparation.

- 5/98 – 12/04 **Graduate Research Assistant, Teaching Assistant and Assistant Instructor**, University of Texas at El Paso, El Paso Texas. Taught introductory geology lectures and laboratories.
- 5/02 – 8/02 **IRIS/PASSCAL summer intern**. Managed seismic database, deployed and maintained Data Acquisition Systems (DAS). Represented IRIS/PASSCAL at the Summer of Applied Geophysics Experience (SAGE).
- 7/98 - 8/98 **Jug hustling/Seismic surveying** White Sands Test Facilities, New Mexico. Deployed geophones for seismic reflection surveys and surveyed station locations with GPS.
- 11/97 - 5/98 **Government Geologist**, Engineering Geology Department, Mines and Geology Division, Kingston, Jamaica. Conducted sub-division cite investigations on behalf of the Jamaican government.
- 9/96 - 6/97 **Assistant Seismic Officer**, Seismic Research Unit, University of the West Indies, Kingston, Jamaica. Located and analyzed regional seismic activities. Coordinated outreach activities.

PUBLICATIONS:

Stafford, K., **Brown, W. A.**, Perkins, L. (2021). Hypogene Evaporite Karst Geohazards: Implications for Energy Sector Infrastructure in the Delaware Basin, USA. *Geogulf Transactions*, 71, 281-288.

Woodard, J., **Brown, W. A.**, Stafford, K. (2021). In Johnson, K.S., Land, L., and Decker, D.D. (Ed.), *Geophysical delineation of megaporosity and fluid migration pathways for geohazard characterization within the Delaware Basin, Culberson County, Texas* (Circular 113 ed.). Norman, Oklahoma: Oklahoma Geological Survey. (**Book Chapter**)

Velasco, A. A., K. Aderhold, R. Alfaro-Diaz, **W. Brown**, M. R. Brudzinski, M. Fraiser, M. M. Holt, J. Mori, G. Noriega, K. Scharer, D. Templeton, F. Terra, and S. Williams-Stroud (2021). News and Notes: SSA Task Force on Diversity, Equity, and Inclusion: Toward a Changing, Inclusive Future in Earthquake Science. *Seismological Research Letters* (SRL), 92(5), 3267–3275.
https://pubs.geoscienceworld.org/ssa/srl/article/92/5/3267/606500/News-and-NotesSSA-Task-Force-on-Diversity-Equity?fbclid=IwAR0bY9LofunyBnI5gVYGz5_XPEvUn13pw57CJawg6QafjDTNGyFJMiM0onM

Stafford, K., **Brown, W. A.** In Johnson, K.S., Land, L., and Decker, D.D. (Ed.), Geophysical characterization of gypsum karst geohazards in the Delaware Basin, West Texas. Geological Society of America. (**Accepted, 2019**)

Henry, K., Stafford, K., **Brown, W. A.** 2-D and 3-D temporal modeling of solute migration through low permeable media using Electrical Resistivity, Nacogdoches, Texas. Texas Water Journal. (**Accepted, 2019**)

Minteer, D. R., **Brown, W. A.** (2018). Geophysical Delineation of a Normal Fault within the Gulf Coastal Plain, Montgomery County, Texas. *GCAGS/Gulf Coast Association of Geological Society*, 68, 347-356.

Stafford, K., Ehrhart, J. T., Majzoub, A., Shields, J., **Brown, W. A.** (2018). Unconfined hypogene evaporite karst: west Texas and southeastern New Mexico, USA. *International Journal of Speleology*, 47(3), 293-305.

Stafford, K., **Brown, W. A.**, Morris, J., O'Shay, L. (2018). *2018 Karst Geohazard Characterization of RM 652: Phase Four of Karst Development and Geohazards Associated with RM 652 in Culberson County, Texas*. El Paso District: Texas Department of Transportation.

Stafford, K., **Brown, W. A.**, Morris, J., O'Shay, L., Shields, J. (2017). *2017 Karst Geohazard Characterization of RM 652: Phase Three of Karst Development and Geohazards Associated with RM 652 in Culberson County, Texas*. El Paso, Texas: Texas Department of Transportation.

Majzoub A., Stafford K. W., **Brown W. A.** and Ehrhart J. T., (2017). Characterization and Delineation of Gypsum Karst Geohazards Using 2D Electrical Resistivity Tomography in Culberson County, Texas, USA. *Journal of Environmental and Engineering Geophysics*, 46(4).

Brown, W. A., Melville, T., and Stafford, K., (2017). Using Ground-Penetrating Radar to Characterize Karst Features in Eddy County, New Mexico and Culberson County, Texas.

Stafford, K., **Brown, W. A.**, Ehrhart, J., Majzoub, A., Woodard, J. (2017). Evaporite karst geohazards in the Delaware Basin, Texas: review of traditional karst studies coupled with geophysical and remote sensing characterization. *International Journal of Speleology*, 46(2).

Frohlich, C., Ellsworth W., **Brown W.A.**, and Brunt M. Luetgert, J., MacDonald, T., and Walter, S. (2013), The 17 May 2012 M4.8 Earthquake Near Timpson, east Texas: An Event Possibly Triggered by Fluid Injection, *Journal of Geophysical Research: Solid Earth*, 119(1), 581-593.

Stafford K.W., Shaw-Faulkner, M.G., and **Brown, W.A.**, (2013), Clastic Sinkhole And Pseudokarst Development In East Texas, 13th Sinkholes Conference, New Mexico. Proceedings of the 13th Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst, 13, 311-319.

Brown, W. A., Stafford, K., Shaw-Faulkner and Grubb, A., (2011) A Comparative Integrated Geophysical Study of the Horse Shoe Chimney Cave, Colorado Bend State Park, Texas, International Journal of Speleology, 40(1), 9-16.

Brown, W. A., Cegon, A., and Sheng, Z., (2011), Utilizing Continuous Resistivity Profiling for Assessment and Characterization of Canal Seepage in El Paso's Lower Valley Irrigation Delivery System, *in* Proceedings, 24th Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Charleston, SC, 235-244.

Brown, W.A. and Dornfeld A., Basement Involvement and Temporal Displacement of the Mt. Enterprise Fault System from Nacogdoches and Rusk Counties, East Texas. (*In Preparation*)

Brown, W. A., and Aziza, V., Ground Conductivity Response and clay Mineralogy of Formations in the Eocene Claiborne Group, Nacogdoches County, Texas. (*In Preparation*)

Brown, W. A., Doser, D. I., Keller, G.R. and Velasco, A. A., The use of Free air Gravity Data to Construct a 3D Density Model for the Region of Libya (**Under Revision**).

Doser, D.I., Vielleux, A. Flores, C. and **Brown W.A.** (2006) Changes in Seismic-Moment Rates along the Rupture of the 1964 Great Alaskan Earthquake, Bull. Seismol. Soc. Am., 96, 1-6.

Doser, D.I., **Brown W.A.** and M. Velasquez, (2002) Seismicity of the Kodiak Island region (1964-2001) and its relation to the 1964 great Alaska earthquake, Bull. Seismol. Soc. Am., 92, 3269-3292.

Doser, D., Velasquez, M., **Brown W. A.** and Veilleux, A.,(2002) Large ($M_w \geq 5.5$) intraplate slab earthquakes (1928-2000) of the Prince William Sound region, Alaska, U. S. Geol. Surv. Open File Report. 62-328, 103-106.

Doser, D.I., **Brown, W. A.**, Velasquez, M. and Hincapie, J.O., (2001). Spatial and temporal variations in seismicity in the Kodiak Island, Alaska region (1934-2000), Seismol. Res. Lett. 72, 286.

Doser, D.I., and **Brown W.A.**, (2001) A study of historic earthquakes of the Prince William Sound, Alaska, region, Bull. Seismol. Soc. Am. 91, 842-857.

SELECTED ABSTRACTS AND PRESENTATIONS:

Perkins, L. D. (Author Only), Brown, W. A. (Author Only), Stafford, K. (Author Only), GEO-GULF, "Using Capacitively-Coupled Electrical Resistivity Methods to Characterize Potential Karst Features along FM 2185, Culberson County, Texas," GCAGS/GCSSEPM Convention and Exposition, Lafayette, Louisiana. (September 30, 2020).

Brown, W. A. (Author Only), Perkins, L. D. (Presenter & Author), Texas Academy of Science (TAS), "Delineation of Potential Karst Features Along FM 2185, Culberson County, Texas Using Capacitively-Coupled Electrical Resistivity," Texas Academy of Science, Nacogdoches. (February 28, 2020).

Brown, W. A. (Author Only), Perkins, L. D. (Presenter & Author), SCGSA, "DELINEATION OF POTENTIAL GEOHAZARDS ALONG FM 2185, CULBERSON COUNTY, TEXAS USING CAPACITIVELY-COUPLED ELECTRICAL RESISTIVITY," South Central Section of the Geological Society of America (SCGSA), Arlington - TX. (March 2020).

Brown, W. A. (Presenter Only), Jaska, R. M. (Presenter & Author), Texas Academy of Science (TAS), "Structural Analysis of the Salt-Sediment Interactions on Top of the Wheeler Dome Salt Tongue Mississippi Canyon area Gulf of Mexico," Texas Academy of Science, Nacogdoches. (February 28, 2020).

Brown, W. A. (Author Only), Jaska, R. M. (Presenter & Author), GEO-GULF, "Structural and Stratigraphic Analysis of the Allochthonous Louann Salt of the Wheeler Dome Salt Tongue, Mississippi Canyon Area, Gulf of Mexico," GCAGS/GCSSEPM Convention and Exposition, Lafayette, Louisiana. (September 30, 2020).

Coplan, P. (Presenter & Author), **Brown, W. A.** (Author Only), GEO-GULF, "Gravitational Analysis of the Subsurface in and around Nacogdoches, Texas," GCAGS/GCSSEPM Convention and Exposition, Lafayette, Louisiana. (September 30, 2020).

Tandy, T. A. (Presenter & Author), **Brown, W. A.** (Author Only), Gulf Coast Association of Geological Societies Convention, "2D ELECTRICAL RESISTIVITY AND HYDROLOGICAL STUDY OF A SOLUTE PLUME'S MIGRATION PATHWAY THROUGH SANDY LOAM WITHIN NACOGDOCHES COUNTY, TEXAS, USA," Gulf Coast Association of Geological Societies, Houston, Texas. (October 24, 2019).

Jaska, R. M. (Presenter & Author), **Brown, W. A.** (Author Only), Gulf Coast Association of Geological Societies Convention, "Structural and Stratigraphic Analysis of the Allochthonous Louann Salt of the Wheeler Dome Salt Tongue Mississippi Canyon Area Gulf of Mexico," Gulf Coast Association of Geological Societies, Houston, Texas. (October 24, 2019).

Tandy, T. A. (Presenter & Author), **Brown, W. A.** (Author Only), South Central Geological Society of America (SCGSA), "2D ELECTRICAL RESISTIVITY AND HYDROLOGICAL SURVEY OF A SOLUTE PLUME'S MIGRATION PATHWAY THROUGH A SANDY LOAM WITHIN NACOGDOCHES COUNTY, TEXAS)," Geological Society of America, Manhattan, Kansas. (May 27, 2019).

Brown, W. A. (Presenter & Author), Stafford, K. (Author Only), Annual Meeting of the American Geophysical Union (AGU), "2.5D Inductively-Coupled Resistivity Assessment of Karst Geohazards Along Ranch to Market 652, Culberson County, Texas," American Geophysical Union (AGU), Washington DC. (December 12, 2018).

Minteer, D. R. (Presenter & Author), **Brown, W. A.** (Author Only), Annual convention of the Gulf Coast Association of Geological Societies (GCAGS), "Geophysical Delineation of a Normal Fault within the Gulf Coastal Plain, Montgomery County, Texas," Gulf Coast Association of Geological Societies, Shreveport, LA. (September 30, 2018).

Minteer, D. R. (Presenter & Author), **Brown, W. A.** (Author Only), GSA South –central Section Meeting, "A Geophysical Delineation of a Listric Fault within the Gulf Coastal Plain, Montgomery County, Texas," SCGSA, Little Rock, AR. (March 12, 2018).

Stafford, K. (Presenter & Author), **Brown, W. A.** (Author Only), Shaw Faulkner, M. G. (Author Only), South Central Geological Society of America, "Delaware Basin evaporite karst geohazard characterization, Texas: coupling of traditional karst analyses with remote sensing characterization," Geological Society of America, Little Rock, Arkansas. (March 12, 2018).

Brown, W. A. (Presenter & Author), Stafford, K. (Author Only), SAGEEP, "2.5 dimensional inductively coupled resistivity study of karst geohazards," Environmental and Engineering Geological Society, Nashville, TN. (March 27, 2018).

Brown, W. A. (Presenter & Author), Stafford, K. (Author Only), Texas Academy of Science, "An Integrated Geophysical Characterization of Karst Related Geohazards along Ranch to Market 652, Culberson County, Texas," Texas Academy of Science (TAS), Midland, TX. (March 3, 2018).

Brown, W. A. (Presenter & Author), Research Seminar - Invited, "Geophysical Characterization of Karst Geohazards along Ranch to Market 652," University of Texas at San Antonio, San Antonio, Texas. (November 3, 2017).

Brown, W. A. (Presenter & Author), Stafford, K. (Author Only), Annual Meeting of the American Geophysical Union (AGU), "2.5D Inductively-Coupled Resistivity Assessment of Karst Geohazards Along Ranch to Market 652, Culberson County, Texas," American Geophysical Union (AGU), Washington DC. (December 12, 2018).

Minteer, D. R. (Presenter & Author), **Brown, W. A.** (Author Only), Annual convention of the Gulf Coast Association of Geological Societies (GCAGS), "Geophysical

Delineation of a Normal Fault within the Gulf Coastal Plain, Montgomery County, Texas," Gulf Coast Association of Geological Societies, Shreveport, LA. (September 30, 2018).

Minteer, D. R. (Presenter & Author), **Brown, W. A.** (Author Only), GSA SOUTH-CENTRAL SECTION MEETING, "A GEOPHYSICAL DELINEATION OF A LISTRIC FAULT WITHIN THE GULF COASTAL PLAIN, MONTGOMERY COUNTY, TEXAS," SCGSA, Little Rock, AR. (March 12, 2018).

Stafford, K. (Presenter & Author), **Brown, W. A.** (Author Only), Shaw, M. G. (Author Only), South Central Geological Society of America, "Delaware Basin evaporite karst geohazard characterization, Texas: coupling of traditional karst analyses with remote sensing characterization," Geological Society of America, Little Rock, Arkansas. (March 12, 2018).

Woodard, J. (Presenter & Author), Stafford, K. (Author Only), **Brown, W. A.** (Author Only), South Central Geological Society of America, "Capacitively-Coupled Resistivity Characterization of Karst Geohazards and Delineation of Megaporosity and Fluid Migration Pathways Within the Delaware Basin, Culberson County, Texas," Geological Society of America, Baton Rouge, LA. (March 2017).

Okocha, F. (Presenter & Author), **Brown, W. A.** (Author Only), South-Central Section Meeting of the Geological Society of America, "Gravitational study of the Hasting Salt Dome and associated faults in Brazoria and Galveston Counties, Texas," Geological Society of America, San Antonio, Texas. (March 14, 2017).

Brown, W.A., Melville T.K., and Stafford, K.W. "Utilizing Ground Penetrating Radar for Characterization of Karst Features" Annual Meeting of the Texas Academy of Science. (Mar. 8, 2015)

Brown W.A. (Presenter and Author), Frohlich, C., Brunt M., Ellsworth W. and Luetgert, "The 17 May 2012 M4.8 earthquake near Timpson, east Texas: Was it natural or was it induced?" Fall Meeting, AGU, San Francisco, Calif., (Dec. 7, 2012)

Brunt M., **Brown W.A.**, Frohlich, C., Ellsworth W. and Luetgert, "Felt reports and intensity maps for two M4.8 Texas earthquakes: 17 May 2012 near Timpson and 20 October 2011 near Fashing" Fall Meeting, AGU, San Francisco, Calif., (Dec. 7, 2012)

Dornfeld, A. (Presenter & Author), **Brown, W. A.** (Author Only), Stafford, K. (Author Only), SC GSA, "*Basement Control As Origins Of The Mount Enterprise Fault System (MEfS) A Possible Degassing Mechanism Of The Haynesville Shale, Rusk County, Texas,*" Geological Society of America, Alpine, Texas. (March 8, 2012).

Tate, B. P. (Presenter & Author), Stafford, K. (Author Only), **Brown, W. A.** (Author Only), SC GSA, "*Characterization Of Shallow Groundwater Systems In East Texas Forested Watersheds,*" Geological Society of America, Alpine, Texas. (March 8, 2012).

Ivy, K. M. (Presenter & Author), Stafford, K. (Author Only), **Brown, W. A.** (Author Only), SC GSA, "*Determining Groundwater Influence To The Guadalupe River By Spring Delineation And Spatial Variability Of Karst Development In Kendall County, South-Central Texas,*" Geological Society of America, Alpine, Texas. (March 8, 2012).

Bryant, A. W. (Presenter & Author), Stafford, K. (Author Only), **Brown, W. A.** (Author Only), SC GSA, "*Geologic And Hydrogeologic Characterization Of Groundwater Resources In The Edwards Group, North Nolan Creek Region, Bell County, Texas,*" Geological Society of America, Alpine, Texas. (March 9, 2012).

Brown, W. A., (presenter) "*Utilizing Continuous Resistivity Profiling for Assessment and Characterization of Canal Seepage in El Paso's Lower Valley Irrigation Delivery System*", 24th Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Charleston, South Carolina, (04/10/11).

Brown, W. A. (Co-presenter), South Central Section of the Geological Society of America 45th Annual Meeting, "*Shallow groundwater characterization with capacitively coupled resistivity in forested watersheds, East Texas*" Geological Society of America Sectional Meeting, New Orleans, Louisiana (03/27/11).

Brown, W. A. (Presenter), South Central Section of the Geological Society of America Annual Meeting, "*A Comparative Integrated Geophysical Study of The Horse Shoe Chimney Cave, Colorado Bend State Park, Texas*" Geological Society of America Sectional Meeting, Branson, Missouri (04/13/10).

Brown, W. A. (Co-presenter), "Pseudokarst of East Texas: *Geomorphic Features and Evolution*" Geological Society of America Sectional Meeting, Branson, Missouri (04/13/10).

Brown, W. A. (Co-presenter), Bright Ideas Conference (BIC), "*Productivity and Extent of the Maxon Formation, Bell and Knox Counties.*" Stephen F Austin State University (04/08/10).

Brown, W. A. (Presenter), College of Science Seminar, "*A century of Seismology,*" College of Science and Mathematics seminar series, Stephen F. Austin State University (03/12/10).

Brown, W. A. (Presenter), American Geophysical Union (AGU) Annual Meeting, "*Utilizing Continuous Resistivity Profiling for Assessment and Characterization of Canal Seepage in El Paso's Lower Valley Irrigation Delivery System*" San Francisco, California. (12/20/09).

Brown, W. A. (Presenter), Departmental Seminar, "*Utilizing Geophysical Methods for Assessment and Characterization of Seepage from the Irrigation Canals in El Paso Lower Valley, Texas,*" SFA Geology Department (CoSM), Geology Department. (03/11/09).

Brown, W. A. (Presenter), Texas Academy of Science Annual Meeting, "*Utilizing Geophysical Methods for Assessment of seepage loss from Irrigation canals in El Paso, Texas,*" Texas Academy of Science (TAS), Texas Tech University (Junction, Texas). (03/06/09).

Brown, W. A., Doser, D. I., Keller, G.R. and Velasco, A. A. (2007). The use of Free air Gravity Data to Construct a 3D Density Model for the Region of Libya, AGU Fall meeting, San Francisco, California. Abstract in proceedings. EOS T23A-1216, 88 no. 52

Huseynova, N., and **Brown, W. A.**, (2008). Utilizing Geophysical Exploration Data to Estimate Hydrocarbon Potential in the South Caspian Basin Fields, Bright Ideas Conference, Stephen F. Austin State University, Nacogdoches, TX.

Nielson, L. R., Barker, C., Sharp, P., Shaw, M., and **Brown W. A.**, (2006) Weathering and slope stability of grave markers in four cemeteries in central Texas, Texas Academy of Science, Waco, TX.

Crawford C., Gonzales E., **Brown W. A.**, Villalobos J., Sheng Z., (2006) Gray Water Reuse to Conserve Fresh Water Sources, New Mexico Water Research Symposium, Socorro, NM.

Brown, W. A., and Assadian, N.W., (2006). A Kinetic Study of hypothetical concentrates of varying Ionic Strength from Inland desalination. 10th Annual Water Reuse Research Conference. Phoenix, Az

Brown, W. A., and Assadian, N.W., (2005). Developing Strategies to Extract Salts and Water From Concentrate for Beneficial Use. 2005 International Annual meeting of the Soil Science Society of America. Salt Lake City, UT.

Brown, W. A., VandeMark, T., Doser D. I., and Velasco A. A., (2004). An Integrated Geophysical study of the Lithospheric Structure Beneath Libya. 26th Seismic Research Review (SRR) Orlando, Florida.

Brown, W. A., Doser, D., Keller, G., and Velasco, A. (2004). Using Integrated Geophysics to Develop Seismic Velocity Models for the Libya Region. *Seismol. Res. Lett.* 75, 256.

Brown, W. A., Doser D. I., Keller G. R., (2003). An Integrated Geophysical study of the Lithospheric Structure Beneath Libya. AGU Fall meeting, San Francisco, California. Abstract in proceedings. EOS T51F-07, 84, no. 46

Brown, W. A., VandeMark, T., Doser D. I., Keller G. R., (2003). An Integrated Geophysical study of the Lithospheric Structure Beneath Libya. 25th Seismic Research Review (SRR) Tucson, Arizona.

Brown, W. A., Doser D. I., Keller G. R., (2002). The Use of Gravity Models to constrain Velocity Models in the Libya Area. AGU Fall meeting, San Francisco, California. Abstract in proceedings. EOS T51A-1126, 83, no. 47

Brown, W. A., Doser D. I., Keller G. R., (2002). The Use of Gravity Models to constrain Velocity Models in the Libya Area. 24th Seismic Research Review (SRR) Ponte Vedra Beach, Florida.

Doser, D.I., **Brown, W. A.,** Velasquez, M. and Hincapie, J.O., (2001). Spatial and temporal variations in seismicity in the Kodiak Island, Alaska region. Seismological Society of America 96th Annual Meeting, San Francisco, CA (USA), 18-20 Apr 21. (World Meeting Number 000 5625).

Brown, W. A., Velazquez, M., and Doser D. I. (2000). A Seismotectonic Study of the Edges of the Kodiak Asperity, Alaska Aleutian Megathrust Subduction Zone. IRIS meeting, Rockport, Maine.

Brown, W. A., Velazquez, M., and Doser D. I. (1999). A Seismotectonic Study of the Edges of the Kodiak Asperity, Alaska Aleutian Megathrust Subduction Zone. (1999) An Integrated Geophysical study of the Lithospheric Structure Beneath Libya. AGU Fall meeting, San Francisco California. Abstract in proceedings. EOS F725, 80, no. 26.

CHAPTERS IN BOOKS

Stafford, K., Shaw, M. G., **Brown, W. A.** (2013). In nd, L., Doctor, D.H., and Stephenson, J.B. (Ed.), Clastic sinkhole and pseudokarst development in East Texas (vol. 13, pp. 311-319). National Cave and Karst Research Institute, Carlsbad, NM: NCKRI Symposium 2: Proceedings of the 13th Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst.

MEDIA CONTRIBUTION

Brown, W. A. (Discussant), American Geophysical Union (AGU) Annual Meeting, "The May 17th, 2012 M4.8 earthquake near Timpson, east Texas: Was it natural or was it induced?" American Geophysical Union, San Francisco, CA. (December 6, 2013).

TV, KTRE. (May 18, 2012).

Provided expert analysis of the May 17 Magnitude 4.8 Timpson Earthquake.
<http://www.ktre.com/story/18510930/expert-quakes-could-be-a-good-thing>

Newspaper, Nacogdoches Daily Sentinel. (May 17, 2012).

Provided information to the Nacogdoches Daily Sentinel regarding the May 17th Magnitude 4.8 east Texas earthquake, through telephone interview.

Newspaper, Nacogdoches Daily Sentinel. (May 11, 2012).

Provided information to the Nacogdoches Daily Sentinel regarding the May 10th Magnitude 3.7 east Texas earthquake, through telephone interview.

Other, Press Release. (May 11, 2012).

Provided facts on the May 11 Timpson earthquake to the county judge (Judge English) for press release.

http://www.youreasttexas.com/print_page.php?contentId=10592601&contentType=4

TV, KTRE. (May 11, 2012).

Provided expert analysis of the May 10th Magnitude 3.7 Timpson earthquake, through telephone interview.

<http://www.ktre.com/story/18313028/expert-trying-to-determine-cause-of-e-texas-quake>.

TV, KETK. (May 10, 2012).

Provided expert opinion regarding the May 10 Magnitude 3.7 east Texas earthquake. This was reported on the evening news.

PROFESSIONAL SOCIETIES:

Jamaica Geological Society (JGS), Society of Exploration Geophysicists (SEG), American Association of Petroleum Geologist (AAPG), American Geophysical Union (AGU), Seismological Society of America (SSA), Geological Society of America (GSA), East Texas Geological Society, Sigma Gamma Epsilon (SGE), Sigma Xi.

MASTER'S THESIS SUPERVISION AND COMMITTEES:

Thesis Director:

Aziza, Vincent: Ground Conductivity Response and Clay Mineralogy of Formations in the Eocene Claiborne Group, Nacogdoches County, Texas (*In Progress*).

Bass, Evan: Characterization and Delineation of Potential Geohazards Along FM 2185 Using Traditional Electrical Resistivity, Culberson County, Texas (*In Progress*)

Busing, Mark: Porosity Prediction from Seismic through Multi-Attribute and Artificial Neural Network Analysis, San Andres Formation, Lea County, New Mexico. (*Completed, 12/15*)

Coplan, Patrick: Gravitational study of the Subsurface beneath Nacogdoches county. (*In progress*)

Cegon, Amanda: Utilizing Geophysical Methods for Assessment and Characterization of Canal Seepage in El Paso's Lower Valley Irrigation Delivery Systems (*Completed, 08/10*)

Dornfeld, Alex: Basement Involvement and Temporal Displacement of the Mt. Enterprise Fault System from Nacogdoches and Rusk Counties, East Texas (*Completed, 08/12*).

England, Janette: Utilizing Capacitively Coupled Resistivity Techniques for Assessment of Compaction Rates of closed Cells in the Nacogdoches, Municipal Landfill, Nacogdoches, Texas (*Completed, 10/12*).

Heyt, Kelly: Quantitative differences in 2D and 3D seismic data (*Completed, 08/13*).

Jaska, Ryan: Comparative study of 3D Electrical Resistivity Arrays. (*In progress*)

Majzoub, Adam: Characterization and Delineation of Karst Geo-Hazards Along RM 652 Using Electrical Resistivity Tomography, Culberson County, Texas (**Completed, 08/17**)

Melville, Trina K.: The Use of Ground Penetrating Radar to Locate Voids in Karst Area, West Texas (**Completed, 12/09**).

Minteer, Danielle: A Geophysical Delineation of a Normal Fault Within the Gulf Coastal Plain, Montgomery County, Texas (**completed, 08/18**)

Okocha, Francis: Gravitational Study of the Hastings Salt dome and Associated Faults, Brazoria County, Texas.

Okoronkwo, Kelechi C.: Salt-Sediment Interactions at the Sigsbee Escarpment and the Origin of Tar Beds in the Green Canyon Block of the Gulf of Mexico (**Completed, 08/12**)

Owojori, Nicholas: Geologic overview of the McMurray formation and the extraction process of the Athabasca oil sands (**Completed 05/15**).

Pawan, Karkarla: Artificial Neural Network approach for estimation of shear strength parameters of rocks from the Rodessa Formation (**Complete, 08/16**).

Perkins, Lenora: Characterization and Delineation of Potential Geohazards Along FM 2185 Using Capacitively-Coupled Electrical Resistivity, Culberson County, Texas (**In progress**)

Stover, Kenneth: Seismic Interpretation and Analysis of the Etouffee Reservoir Sand and the Surrounding Area in Terrebonne Parish, Southeast Louisiana (**Completed, 12/16**)

Worrel, Matthew: Petroleum Systems Analysis of the NaKika/Isabella/Santa Cruz Anticline Mississippi Canyon, Gulf of Mexico, Using 3D Seismic Data (**Completed, 05/17**),

Woodard, Jonathan: Geophysical Delineation of Megaporosity and Fluid Migration Pathways for Geohazard Characterization within the Delaware Basin, Culberson County, Texas (**Completed, 12/17**)

Yarbrough, Joshua: Seismic study of the hydrologic system at the Scientific Research Center (SRC) – SFASU (**In progress, Non-thesis**)

Thesis Committee Member:

Andersson, Gregory: Depositional Environment, Diagenesis and Petrology of the Catahoula Formation, Jasper County, Texas (**Completed, 08/12**).

Aniekwesi, Fabian C.: Petrophysical and Sequence Stratigraphic Analysis of Nacogdoches Oil Fields in Nacogdoches County, TX (**Completed, 08/10**).

Bertram, Harold: Evaluating the Deposition, Lithology and Diagenesis of the San Andres Formation in the Eastern Shelf of the Midland Basin, Tom Green County, Texas (**Completed, 12/11**)

Brillon, Andrew: Sinkhole Characterization Using DC Resistivity, Fort Hood Military Reservation, Central Texas. (**In progress**)

Bryant, Aaron: Spleogenetic Evolution of Kuykendall Cave and Associated Hydrogeology of the Northern Edwards Aquifer, Bell County, Texas (**completed, 08/12**)

Byrd, Shandra: Self-Esteem, Body Image Satisfaction, and Self-Perception Level Differences in Relation to Body Mass Index Among African American and Caucasian Females (**Psychology, completed, 08/07**).

Deleon, Jessica: Characterizing the Temporal and Spatial Variability of Spring Discharge along the Colorado River, near Colorado Bend State Park (**Completed, 12/10**).

Grey, Alexcia: The Use of GIS to Study the Effect of Hurricane IKE on the Galveston Coast, Texas (**Completed, 12/09**).

Ivy, Kesli: Determining Groundwater Influence to the Guadalupe River by Spring Delineation and Spatial Variability of Karst Development in Kendall County, South-Central Texas (**completed, 05/12**).

Kaufmann, Emily: The Paleodepositional Environment and Stratigraphy of the Upper Cretaceous Ozan Formation in Collin County, Texas USA (**completed, 12/14**).

Lebus, John: Depositional Environment, History and Diagenesis of the Carrizo Sandstone in East Texas (**Completed, 05/11**).

Lines-Anderson, Chantel: Paleoecology, biostratigraphy, deposition and fossil assemblages of the Palo Pinto and Mineral Wells Formation in Palo Pinto County north of Strawn, Texas (**Completed, 12/09**).

Maxey, Ben: Depositional Environment, History and Diagenesis of the Weches Formation in Marshall, Texas, Harrison County (**Completed, 05/11**).

McCann Andrew: Fracture-Trace and Lineament Analysis using Remote Sensing Techniques for Major and Minor Aquifers, Central Texas (**Completed, 08/12**).

Mckinney, Jacob: Geologic Comparison and Correlation between Santa Elena Peninsula and Rio San Juan Region, Northern Costa Rica and Southern Nicaragua, Central America (**In Progress**).

Suter, Amanda: Travis Peak Reservoirs Of East Texas: An Integrated Study Of Formation Characterization, Reservoir Engineering Properties, And Reservoir Production Procedures (**Completed, 12/12**).

Robison, Annie: Sinkhole Characterization Using DC Resistivity, Fort Hood Military Reservation, Central Texas (**In progress**)

Tate, Brandon: Shallow groundwater characterization with capacitively coupled resistivity in forested watersheds, East Texas (**In Progress**).

Taylor, Travis: Mesoproterozoic Geology of the Inks Lake and Southeast Lake Buchanan Region, Northeastern Llano Uplift, Llano and Burnet Counties, Texas.

Thompson, John: Secondary Mineralization and Speleogenic Origins in Amazing Maze Cave, West Texas (**Completed, 08/17**).

Warshauer, Casey: Milankovitch Cyclicity, Stratigraphy And Sedimentology Of The Ellenburger Group In Colorado Bend State Park, San Saba, Texas

UNIVERSITY SERVICE

- Scholarship Committee, Reviewer. (September 1, 2008 - Present).
- Geophysical Equipment Maintenance, Coordinator. (August 2006 - Present).
- Geophysical Software Maintenance, Coordinator. (August 2006 - Present).
- Showcase Saturday, Volunteer. (November 1, 2008 - Present).
- Strategic planning Committee, Member. (September 1, 2008 - Present).
- Academic Council, Board Member. (August 2007 - Present).
- Grievance and appeals Panel, Member. (September 1, 2008 - Present).
- Faculty Advisor for Student Club (Caribbean Student Association). (August, 2007 - Present).

- Faculty Committee member “Academic Assistance & Resource center (AARC)” (2006 – 2008).
- Stephen F. Austin State University teaching circle participant. “Basic Classroom Issues.” (2006 – 2007).
- Raguet Elementary School, Nacogdoches, Texas, Guest Speaker. (May 13, 2009).
- Invited Speaker Dr. Zhuping Sheng, Water Conservation: Strategies for Water Resources Management in Arid and Semi-Arid Regions. (02/19/2010).
- Co-Coached Stephen F. Austin State University’s Imperial Barrel Award Team.
- Coordinator of the Graduate Program here at SFASU Department of Geology.

Contracts, Grants, and Sponsored Research

Stevens, Liane Marie, **Brown, Wesley**, "Acquisition of a Research-Grade Petrographic Microscope for the Department of Geology" (Not Funded), Sponsored by Office of Research and Graduate Studies, Stephen F. Austin State University, \$15,477.54. (April 19, 2021 - Present).

Bloxson, Julie M (Principal), **Brown, Wesley** (Co-Principal), "Expansion of the East Texas Core Repository to create hub for education, research and industry collaboration in the Deep East Texas Region" (Currently Under Review), Sponsored by CARRI Grant, Stephen F. Austin State University, \$80,000.00. (2021 - Present).

Stafford, Kevin (Principal), **Brown, Wesley A (Co-Principal)**, "Characterization of Karst and Geology along RM 652 and future road FM 2185 in Culberson County, Texas" (Funded), Sponsored by TxDOT El Paso District Office, State, \$889,279.00. (May 2019 - August 2021).

Bloxson, Julie M (Principal), **Brown, Wesley A** (Co-Principal), Stafford, Kevin W (Co-Principal), "New Petroleum Laboratory Startup Funds for a Niton XL3t 950 GOLDD+ Handheld X-Ray Fluorescence to Establish the Black Shale Research Facility" (Funded), Sponsored by Stephen F Austin State University- Office of Research and Sponsored Programs, Stephen F. Austin State University, \$18,982.00. (December 5, 2018 - Present).

Stafford, Kevin (Principal), **Brown, Wesley A** (Co-Principal), Shaw Faulkner, Melinda G (Co-Principal), "PulseEKKO PRO 100 SmartCart system for increased geophysical research and enhanced grant funding success and community service" (Funded), Sponsored by ORGS - SFASU, Stephen F. Austin State University, \$44,731.00. (May 2021 - June 2021).

Stafford, Kevin (Principal), **Brown, Wesley A** (Co-Principal), "Upgrade of Geometrics OhmMapper System for Increased Geophysical Research and Enhanced Grant Funding Success" (Funded), Sponsored by ORGS - SFASU, Stephen F. Austin State University, \$17,286.00. (January 2020 - May 2020).

Stafford, Kevin (Principal), **Brown, Wesley (Co-Principal)**, "Upgrade of SuperSting R2 (28 electrode) System to a SuperStingR8 (112 electrode) System for Increased

Geophysical Research and Enhanced Grant Funding Success" (Currently Under Review), Sponsored by ORSP-SFASU, Stephen F. Austin State University, \$22,022.00. (October 25, 2017 - Present).

Stafford, Kevin W (Principal), **Brown, Wesley A (Co-Principal)**, "Geohazard Characterization of RM652 in Culberson Co., Texas" (Funded), Sponsored by TxDOT El Paso District Office, State, \$705,704.00. (May 16, 2016 - Present). Geohazard delineation and characterization associated with RM 652 in Culberson County, Texas as it is related to redesign as an energy sector, high priority thoroughfare.

Brown, Wesley A, "Matching Funds Request for Purchase of 18 Polarizing Microscopes" (Funded), Sponsored by Office of Research and Sponsored projects (ORSP), Stephen F. Austin State University, \$17,934.00. (November 17, 2015 - February 9, 2016).

Brown, Wesley A, "Matching Funds Request for Purchase of 18 Polarizing Microscopes" (Funded), Sponsored by Office of the Dean, College of Science and Mathematics (CoSM), Stephen F. Austin State University, \$17,934.00. (November 17, 2015 - February 9, 2016).

Stafford, Kevin (Principal), McBroom, Matthew W (Co-Principal), **Brown, Wesley A (Co-Principal)**, "Groundwater Susceptibility and Potential Induced Seismicity Associated with Hydrocarbon Activities in the Timpson area, Nacogdoches and Shelby Counties, Texas" (Not Funded), Sponsored by Groundwater Research & Education Foundation, Private, \$63,912.00. (January 1, 2013 - November 2013). Pre-proposal accepted July 2013.

Other Honors and Awards:

2007	Faculty Mini Grant
2004	Dodson Fellowship, Graduate School Excellence Award
2003	Dodson Fellowship, Graduate School Excellence Award
2002	Dodson Fellowship, Graduate School Excellence Award
2001	Dodson Fellowship, Graduate School Excellence Award
2000	Dodson Fellowship, Graduate School Excellence Award
2000	Became a member of the Sigma Xi, (A National Honor Society)
1999	Texas Public Education Grant