

Postdoctoral Research Associate Position, Tulane University

1. Using InSAR to Measure Subsidence in the Mississippi Delta

Applications are invited for a postdoctoral research position based in the Department of River-Coastal Science and Engineering at Tulane University, New Orleans, Louisiana, USA. The position is for two years and will ideally commence in September-October 2018. The position is part of a joint research project between Tulane and the NASA Jet Propulsion Laboratory and is funded by the State of Louisiana Coastal Restoration and Protection Authority. This research is part of a larger State-Federal initiative (Lower Mississippi River Management Program) focused on the Mississippi River deltaic reach. The successful candidate will be embedded in the first year of the project in the NASA-JPL laboratory of Dr. Cathleen Jones in Pasadena, California and will spend the second year at Tulane. The position involves utilizing Interferometric Synthetic Aperture Radar (InSAR) data collected by the ESA Sentinel-1 satellite over the Mississippi Delta since 2016 to better our understanding of spatial subsidence trends and their relationship to key drivers such as sediment compaction, subsurface fluid withdrawal, and fault/salt tectonics. Additional responsibilities include the training of other team personnel on InSAR processing while at Tulane, participation in other LMRMP research activities, and potentially supervision of undergraduate students and assisting with mentoring graduate students within the department. Salary is commensurate with experience but includes a stipend appropriate for residence in southern California, and funds for travel and research.

Qualifications:

Candidates must have a recent PhD degree in geophysics, geology, or related field. Knowledge of and experience with time-series InSAR processing (DS-InSAR, SBAS, and/or variants) is required, along with good English language writing skills. Prior experience with processing data from satellite SARs, preferably including Sentinel-1a/b, is essential. An understanding of the geological and human-induced processes driving subsidence in deltaic settings is also desirable.

Application Instructions:

Applicants for Postdoctoral Fellow, Mississippi Delta Subsidence should go to apply.interfolio.com/53300 to apply.)

Applications should include a cover letter, CV, statement of research interests, and names and contact information of three referees. Citizenship information should also be provided as it may affect the ability of a candidate to be resident in a U.S. federal laboratory. Review of applications will start on August 15, 2018; later applicants will receive consideration as long as the position remains unfilled. Further information can be obtained from Prof. Mead Allison (meadallison@tulane.edu) and Dr. Cathleen Jones (cathleen.e.jones@jpl.nasa.gov).