

# Department of Energy Announces \$8 Million for Research on Earth System Model Development and Analysis

Announcement Number: DE-FOA-0003228

List Posted: 7/31/2024

*Selection for award negotiations is not a commitment by DOE to issue an award or provide funding.*

Principal Investigator	Title	Institution	City	State	ZIP Code
Abbaszadeh, Peyman	Online Coupling of E3SM with Machine Learning-enhanced Data Assimilation for Improved Earth System Predictability	Portland State University	Portland	OR	97207-0751
Chen, Min	Understand And Reduce Uncertainty In E3SM's Land-Atmosphere Feedbacks On Carbon, Water, and Energy In Response To Wildfire Disturbance	University of Wisconsin-Madison	Madison	WI	53715-1218
Gnanadesikan, Anand	Using apparent relationships derived from machine learning methods to improve the simulation of marine organisms within the Energy Exascale Earth System Model	The Johns Hopkins University	Baltimore	MD	21218-2686
Huang, Xianglei	Understanding the polar cloud longwave feedback and its confounding factors through a spectral lens	Regents of the University of Michigan	Ann Arbor	MI	48109-1274
Larson, Vincent	Overfitting and uncertainty in the presence of model structural error	University of Wisconsin-Milwaukee	Milwaukee	WI	53201-0340
Lovenduski, Nicole	SOS-Carbon: Southern Ocean Storminess and the Carbon Cycle	University of Colorado	Boulder	CO	80303-1058
McCoy, Daniel	Linking aerosol forcing and cloud feedback to atmospheric moisture processing	University of Wyoming	Laramie	WY	82071-2000
Moore, Jefferson	Improving representations of carbon export and its climate sensitivity in E3SM-MARBL	University of California, Irvine	Irvine	CA	92697-7600
Pu, Zhaoxia	Coupled Land-Atmosphere-Ocean Data Assimilation for E3SM with DART for Understanding Subseasonal-to-Seasonal Predictability of Extreme Events	University of Utah	Salt Lake City	UT	84102-9023
Schiro, Kathleen	Evaluating mean state relationships to high cloud feedbacks and climate sensitivity in CMIP model ensembles and E3SM	University of Virginia	Charlottesville	VA	22904-4195
Shi, Zheng	Experimental-data-informed, machine-learning-enabled benchmarking and development of land carbon cycle in Earth system models	University of Oklahoma	Norman	OK	73019-9705
Song, Yang	An integrated artificial intelligence and E3SM hierarchal modeling framework for elucidating environmental responses of soil carbon and nutrients dynamics and its implications for land carbon-climate	University of Arizona	Tucson	AZ	85721-0158
Sun, Ying	Amazon vs Congo: Understanding the Intercontinental Differences of Tropical Rainforests' Responses to Climate Variability	Cornell University	Ithaca	NY	14850-2820