AI2ES talks at AMS 2026

Sunday, January 25, 2026
- 7:00 - 7:15 PM (25th Annual Student Conference): GRB, Hall B3 - A FourCastNetv2 Tutorial: AI Weather Forecasting and Robustness Tests. By Shane Stevenson (computer science undergraduate student), Sam Shen (Professor and Lab Director), and more co-authors from San Diego State University, https://ams.confex.com/ams/106ANNUAL/student/papers/viewonly.cgi?password=715421&username=473178
- 7:00 PM–9:00 PM (25th Annual Student Conference): Poster Presentation - Semaphore: A software platform to accelerate the live deployment of coastal AI models. By Quintero, C., Kastl, M.A., Stephenson, S.L., Beasley, A., Tissot, F., Nguyen, S., and Tissot, P.E. - https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/478993

Monday, January 26, 2026
- 8:30 AM - 9:00 AM: 322A (George R. Brown Convention Center), 1B.1 - 2026 Update on the NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography (AI2ES) (Amy McGovern) https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/474551
- 9:00 AM - 9:15 AM: NCAI talk of potential interest: 322A (George R. Brown Convention Center), 1B.2 - AI-Readying the NOAA Workforce - Vision to Practice, https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/463831
- 9:45 AM - 10:00 AM: 330A, 1A.6 - A Hybrid LSTM-Vision Transformer Architecture for Predicting Short-Term NWP Forecast Errors (David Aaron Evans: SUNY Albany) https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/468616
- 11:00 AM - 11:15 AM: 351A 2.2 - Applications for a Machine Learning Camera Image Classifier trained on the New York State Mesonet (Brian T. Horan, SUNY Albany) https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/473537
- 11:30 AM - 11:45 AM: 322A (George R. Brown Convention Center) Dynamically Linking Interactive Perturbations with Model Inference (Charlie Becker: NSF NCAR) https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/478108
- 3:00 PM - 4:30 PM: Hall B3 (George R. Brown Convention Center) Deep Learning for Probabilistic Nowcasting of Radar Reflectivity in Tornadic Storms - https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/470037
- 4:45 PM–5:00 PM: 330A (4A.2) - AI comparison of physics-informed and XAI-driven feature selection and extraction methods on the performance of coastal visibility predictions using ML models by Colburn, B., Collins, W.G., Tissot, P.E., Williams, J.K., Gaudet, L., and King, S.A. - https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/474467

Tuesday, January 27, 2026

- 12:15 PM - 1:15 PM, 352D, Town Hall Meeting - AI Ethics and Policy in the Environmental Science Community, Organizers include Ann Bostrom and Sue Ellen Haupt. Panelists include David Hall and Imme Ebert-Uphoff.
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Session/73596

- 1:45 PM - 2:00 PM, 360D(J7.1), *George R. Brown Convention Center*-OceanAI: A Conversational Agent for Accurate, Transparent, Near-Real-Time Oceanographic Insights by Chen, B., He, R., Liu, P., Xu, D., Dusek, G., Redmon, R., and Hogan, P.
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/473784

- 2:00 PM - 2:15 PM, 360D(J7.2),*George R. Brown Convention Center*-A Multi-Agent Large Language Model Framework for Expert-Assisted Coastal and Oceanographic Report Generation by Chen, B. , Wu, T., Deng, Y., He, R., Liu, P., Xu, D., Dusek, G., and Redmon, R https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/473801

- 2:15 PM–2:30 PM, 351A (J7.3) - How decision makers trust and use machine learning predictions for managing marine cold-stunning risks by White, M.C., Wirz, C.D., Cains, M.G., Flores, E., Demuth, J.L., and Tissot, P.E. -
 https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/474402

- 2:15 PM - 2:30 PM, 360D (J7.3) Multi-Model Ensemble Forecast for the Loop Current System with a Physics-Informed Deep Learning Ocean Emulator by Wu, T., He, R., Lupin-Jimenez, L., Chattopadhyay, A. K., Gray, M. -
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/468394

- 2:30 PM–2:45 PM, 360D (J7.4) - Machine learning–based groundwater level predictions as a proxy for compound flooding events in Miami, Florida by Estrada Jr., B., Tissot, P.E., and King, S.A. -
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/473776

- 2:45 PM–3:00 PM, 360D (J7.5) - Assessing uncertainty quantification method performance for machine learning using operational data sources for the prediction of cold-stunning events by Marrero Colominas, H., Woodall, J.T., White, M.C., Tissot, P.E., Duff, C., King, S.A., and Colburn, B. -
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/475732

- 3:00 PM–4:30 PM, Hall B3, Poster Presentation - Compound coastal flooding observations and predictions with low-cost water level sensors along the mid-Texas coast by Cattell, J., Tissot, P.E., Marrero Colominas, H.M., Taylor, A., Shelly, R., Glazer, B., and Mukai, K. -
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/476109

- 3:00 PM–4:30 PM, Hall B3, Poster Presentation - AI machine learning cold-stunning predictions for Espíritu Santo Bay, Texas by Khan, A.A., Marrero Colominas, H.M., Tissot, P.E., White, M.C., Duff, C., Berger, B., Berger, A., and Hardy, R. -
 https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/473521

- 3:00 PM–4:30, Hall B3, Poster Presentation - AI machine learning inland compound flooding predictions for Corpus Christi, Texas by Fuentes III, F.F., and Tissot, P.E. -
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/474405

- 4:30 PM - 4:45 PM, 330A (George R. Brown Convention Center), 8A.1 - ExtremeWeatherBench 1.0: A Flexible Evaluation Framework for Extreme Weather

Events, Tuesday, January 27, 2026,
https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/477140 (NOTE: This is not AI2ES funded but it is related to our work and likely to be of interest for people attending, Amy McGovern)

- 5:15p - 5:30p, 330A, 8A.4: Artificial Intelligence Weather Prediction Model Performance for Hurricane Helene (2024), Undergraduate Researcher Evan Sudler
- 5:15 PM - 5:30 PM, J8B.4, 322A, Utilizing Diffusion Modeling for Satellite Observation Nowcasting and Synthetic Imagery Replication, Katherine Haynes (with co-authors). https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/473633

Wednesday, January 28, 2026
- 11:00 - 11:15am, 362C, J10A.2: AI-MLP: Severe Weather Probabilities from Global AI Weather Models, OU graduate student Evan White
- 11:15 AM–11:30 AM, 362C (J10A.3): R2O lessons learned from the NSF AI Institute AI2ES by Williams, J.K., McGovern, A., Tissot, P.E., Demuth, J.L., Gagne II, D.J., Harrison, D.R., Hill, A.J., Musgrave, K., and Wirz, C.D. - https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/477857
- 11:30 AM–11:45 AM, 322A, J10B.4: AI machine learning uncertainty quantification for cold-stunning events by White, M.C., Tissot, P.E., Woodall, J.T., Duff, C., Marrero Colominas, H.M., King, S.A., Fagg, A.H., Sterba-Boatwright, B., Shotande, M.O., and Stewart, J.Q. - https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/474540
- 12:15 PM - 1:15 PM, 352D (George R. Brown Convention Center), Town Hall Meeting - The Emerging Role of AI in Weather Forecasting Operations and Weather Services: As a Co-Pilot, Not an Auto-Pilot, Panelists include Amy McGovern. https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Session/73572
- 1:45 PM-3:00 PM, 342A, Panel discussion 11: Beyond Boundaries: Mobilizing Convergence and Translational Science for Earth System Resilience, by E Joseph, JL Demuth, OV Wilhelmi, J. Correia, A. Bostrom, MG Cains, T. Fourment, L. Groswold. https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Session/73577 (This isn't funded by AI2ES, but AI2ES research is represented and it might be of interest to people attending.)
- 2:30 PM-2:45 PM, 332A, 11B.4: Prediction of Drought and Flash Drought in Africa at the Seasonal-to-Subseasonal Scale using the Community Earth Digital Intelligence Twin Framework, by Edris, S. G., A. McGovern, J. Hickey. https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/472747
- 5:00-5:15pm, 330A, 12A.3: Bias Correction in Data Preparation and Its Implications for AI Model Performance, by Yan Xie, Amy McGovern, Ann Bostrom, Douglas Rao. https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/466615
- 5:15-5:30pm, 330A, 12A.4: A Diffusion-Based Framework for 1-km Spatial Resolution Precipitation Forecasting over CONUS, https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/467387, Marina Vicens-Miquel (OU Postdoc)

Thursday, January 29, 2026

- 8:45 AM - 9:00 AM, 13A.2, 330A, Navigating the Complexities of Introducing Large Language Models in Weather Forecasting Operations, I. Ebert-Uphoff, and D. D. Nietfeld, S. Rhodes, K. Musgrave, and J. R. Fooks (all CIRA), https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/472363, (NOTE: This is not AI2ES funded but might be of interest for people attending)
- 9:45 - 10:00 am, 371A, 13B.6: Preliminary Evaluation of Artificial Intelligence Weather Prediction (AIWP) Models for the 2025 Hurricane Season (Kate Musgrave, CIRA), https://ams.confex.com/ams/106ANNUAL/meetingapp.cgi/Paper/477844, (NOTE: This is not AI2ES funded but might be of interest for people attending)
- 11:30-11:45 AM, GRB, 350D: Should we teach calculus for atmospheric and oceanic sciences in a faster pace and with more modern materials, Professor Sam Shen, San Diego State University, as part of 35th Conference on Education Session title: Janet Liou Mark Memorial Session: Increasing Early Career Participation in Geosciences https://ams.confex.com/ams/106ANNUAL/education/papers/viewonly.cgi?password=896863&username=472256