

Talk	Time	Presenter
Intro and welcome Note: Workshop will be recorded	9:30	Debbie Hudson
Getting started		Chair: Harrison
Introduction to ML	9:40	Sanaa Hobeichi
Key developments in ML for weather and climate modelling in the last ~18 months	10:05	Cat de Burgh-Day
Has there been anything said that you are confused about? Anything you need clarification on? (you can also put it on the Jamboard)	10:25	All
Morning Tea	10:30	
Applications of ML		Chair: Cat
Siteboost: Gradient Boosted Decision Trees for Site Optimised Forecasts	11:00	Tennessee Leeuwenburg
Random Forests for identifying predictors of flash droughts.	11:15	Pallavi Goswami
Dynamic Bayesian networks for evaluation of Granger causal relationships in climate models	11:30	Terry O’Kane
Harnessing the Potential of Remote Sensing and Machine Learning for Improving Bushfire Fuels Data	11:45	Abolfazl Abdollahi
A framework for embedding ML physics into climate models	12:00	Steve/Abhnil/David
A deep learning model for forecasting global monthly mean sea surface temperature anomalies using CNN (Unet-LSTM) and transformers (TUnet)	12:15	John Taylor
Lunch	12:30	
Applications of ML (continued)		Chair: Pallavi
Cutting the cost of downscaling using Machine Learning	1:30	Sanaa Hobeichi
Optimized use of CPUs and GPUs: Enhancing Machine Learning in Droughts and Downscaling	1:45	Sam Green
ML Big and small - what hardware and software do you need?	2:00	Tennessee Leeuwenburg Harrison Cook
Discussion Jamboard link <ul style="list-style-type: none"> (Steve) Any ML research you are doing/interested in doing. Collaboration opportunities (Harrison/Pallavi) How can ACCESS-NRI support (data, software, infrastructure, resources/info/guides) (Sanaa) How to coordinate across community better (Tennessee) Increasing ML research transparency, increasing collaboration and open source code 	2:15	Chairs: Steve Sherwood Harrison Cook/Pallavi Goswami Sanaa Hobeichi Tennessee Leeuwenburg
Afternoon tea	3:00	
Discussion (continued)	3:30	
Wrap up <ul style="list-style-type: none"> Next steps Follow-on workshop? 	4:15	Debbie Hudson Tennessee Leeuwenburg
Close	4:30	