

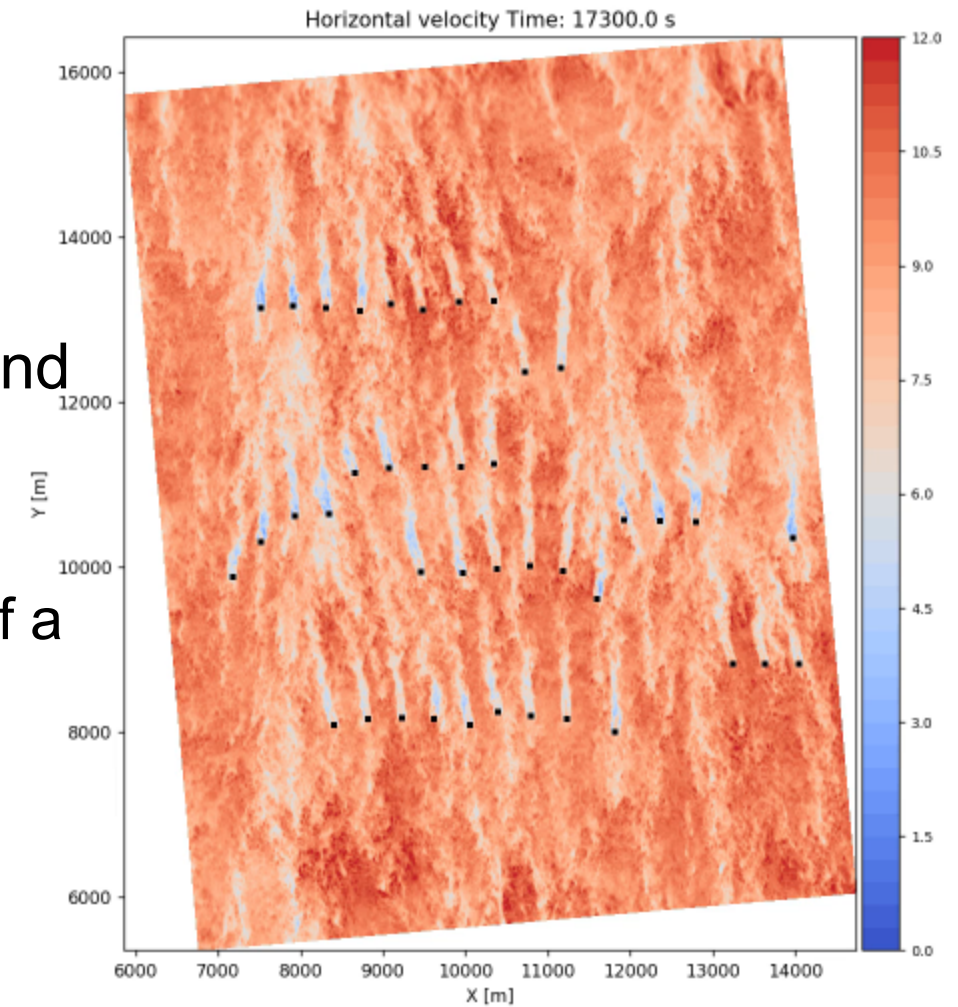
# Sandia National Labs: Effects of Stability on Blockage in LES Simulations

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This paper describes objective technical results and analysis. Any subjective views or opinions that might be expressed in the paper do not necessarily represent the views of the U.S. Department of Energy or the United States Government.



- Alan Hsieh – talk on Thurs at 1pm
- Joint collaboration between SNL, PNNL, NREL
- Use HPC resources to examine AWAKEN wind farms (**King Plains**, Thunder Ranch) under stable and unstable ABL conditions
- Relevant science questions
  - What is the range of wind speed reduction upstream of a wind plant and the impact on wind plant power production
  - What is the sensitivity of blockage to atmospheric conditions?
  - How do we observe blockage effectively in the field?



Eastern King Planes -  
Unstable Conditions

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