

ATS/CIRA Colloquium

Josh Hacker

Chief Science Officer, Jupiter Intelligence

Hosted by Elizabeth Barnes

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ATS 101 and Zoom

**The Evolving World of Climate Analytics
as Seen Through One Set of Eyes**

As the world moves to address the climate crisis, many entities are looking to quantify their exposure to physical hazards, and associated risks, in a changing climate. Global economic sectors including financial services, utilities, and various industrial sectors are rapidly engaging with physical hazard and risk analytics providers to address expanding regulatory mandates, shareholder interest, and consumer pressure. Efforts cover the gamut, from cursory to in-depth corporate process transformation. The market for information to support these efforts is thus rapidly expanding, and predicted to be large. The market is new and not yet settled. More to the point, the emerging science of best practices in regards to climate risk analytics is in its infancy.

In this presentation I will survey the evolution and state of the market around physical climate risk, its relationship to transition risk, and current best practices in economic sectors and from providers. Technical topics to build the story will include approaches to downscaling, the use of machine learning, and what technical aspects the market appears to value. Business topics focus on risk analysis, and will include comments on the different foundations that climate risk analytics companies have been built on, using some comparisons, and what I think a mature market will look like in the future. Example customer use cases help fill in gaps. I will argue in favor of the need for physical science expertise in this space, and the importance of communicating uncertainty. The story is, of course, necessarily biased from my own experiences and where Jupiter Intelligence sits in the market. Those biases will hopefully lead to some great conversation!

Colloquia page: atmos.colostate.edu/colloquia