

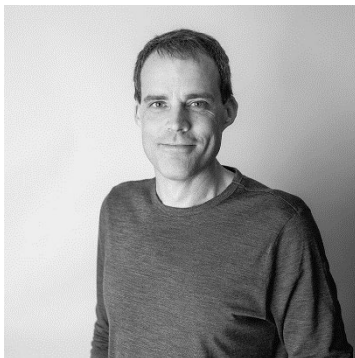
Shooting for the stars: Freely available, high resolution, multispectral, analysis ready, temporal, remotely sensed imagery

Accurate forest inventories and change detection are crucial in meeting economic and sustainability goals. Tesera utilizes 3-10m resolution, 4+ band, analysis ready, remotely sensed imagery, at multiple epochs, for developing forest inventories over large areas. We use the same data for change detection over those forests. We built our data processes to be agnostic to the source data. For example, we use both freely available imagery (e.g. 10m 13-band Sentinel2), and commercial imagery (e.g. 3-4m 8-band Planetscope Basemaps). In this talk, we will present how we currently use remotely sensed imagery, and other data sources, in our data process to derive our forest inventories and change detection. We will also discuss how we navigate the different trade-offs between resolution (spatial, temporal, spectral), cost, and ease of use. As our data process can be adjusted to handle any data source, we are continuously in search of new sources. What does the future hold?



Dr. Max Turgeon PhD - Data Scientist, Tesera Systems Inc.

Max Turgeon brings over 7 years of experience in data science, in both the healthcare system and academia. A passionate teacher and lifelong learner, he is a highly trained statistician with experience with machine learning, high-dimensional data, survival analysis, and anomaly detection. As a Data Scientist, his goal is to leverage his computational and problem-solving skills to provide accurate and actionable insights, based on strong and robust statistical principles.



Michael Kieser - Chief Data Engineer, Tesera Systems Inc.

Michael Kieser brings over 25 years of professional experience in maintaining, storing, and manipulating multi-dimensional spatial and aspatial data. His specialization is in the development of data ETL solutions that run stand-alone and at scale, integrating various open source tools to turn otherwise disparate datasets into valuable information for further advanced analytical processes. He has been a principal developer in the automation of Tesera's HRIS, with his focus being the raw data ETL and building the modeling and prediction inputs.

The goals of the monthly webinars are to:

- Maintain presence and serve general membership.
- Share AEOIP success stories, whether it be through case studies, testimonials, demonstrations, etc.
- Highlight opportunities to participate in or contribute to relevant activities (e.g., AEOIP committees, mission applications, research collaboratives)
- Serve as a venue to learn about actual or potential remote sensing applications for forest and rangeland management.