Tom Connor

Education:

1998	B. S.	Atmospheric Science, University of Lowell, Lowell MA
2004	M. S.	Atmospheric Science, University of Lowell, Lowell MA

Employment:

Atmospheric and Environmental Research	Director, Data Science	Jan 2016 – present
Verisk Climate	Director, Data Science	Jan 2013 – Jan 2016
Atmospheric and Environmental Research	Staff Scientist	Jan 2005 – Jan 2013
TRC, Inc	Air Quality Meteorologist	Dec 2001 – Jan 2005

Experience:

Tom Connor is the Director of Data Science at Atmospheric and Environmental Research. Tom has a background in meteorology and trace gas remote sensing, but recently he has been focused on using geophysical data to help solve existing business problems. As part of his role, he serves on the Data Science Council for AER's parent company, Verisk Analytics. Through his work on the council, he has been part of groundbreaking research at Verisk that has leveraged the AER capability in remote sensing along with recent developments in Machine Learning / Artificial Intelligence to solve business problems for a range of Verisk customers. For example, Tom and his colleagues have produced data sets derived from aerial and satellite imagery used by insurance companies. One of these data was developed using aerial imagery and a Convolutional Neural Network and is used by insurance underwrites to classify structures that may be prone to damage from falling trees. Another data set allowed insurance underwriters to know which roofs had had solar panels recently installed using a CNN based detection algorithm.

Publications:

Mascio, J., Leroy, S. S., d'Entremont, R. P., Connor, T., & Kursinski, E. R. (2021). Using Radio Occultation to Detect Clouds in the Middle and Upper Troposphere, *Journal of Atmospheric and Oceanic Technology* (published online ahead of print 2021).

Thomas Connor, M. Gioioso (2012) Solar Irraidiance Forecasting System. Fourth Conference on Weather, Climate, and the New Energy Economy, Austin, Texas.
Resource Link: https://ams.confex.com/ams/93Annual/webprogram/Paper222723.html

Connor, T.C., M. W. Shephard, V. H. Payne, K. E. Cady-Pereira, S. S. Kulawik, M. Luo, G. Osterman, and M. Lampel, Long-term stability of TES satellite radiance measurements, Atmospheric Measurement Techniques, 4, 1481–1490, 2011, doi:10.5194/amt-4-1481-2011, July 25, 2011.

Eluszkiewicz, J., J.-L. Moncet, M. W. Shephard, K. Cady-Pereira, T. Connor, and G. Uymin (2008), Atmospheric and surface retrievals in the Mars polar regions from the Thermal Emission Spectrometer measurements, J. Geophys. Res., 113, E10010, doi:10.1029/2008JE003120.