

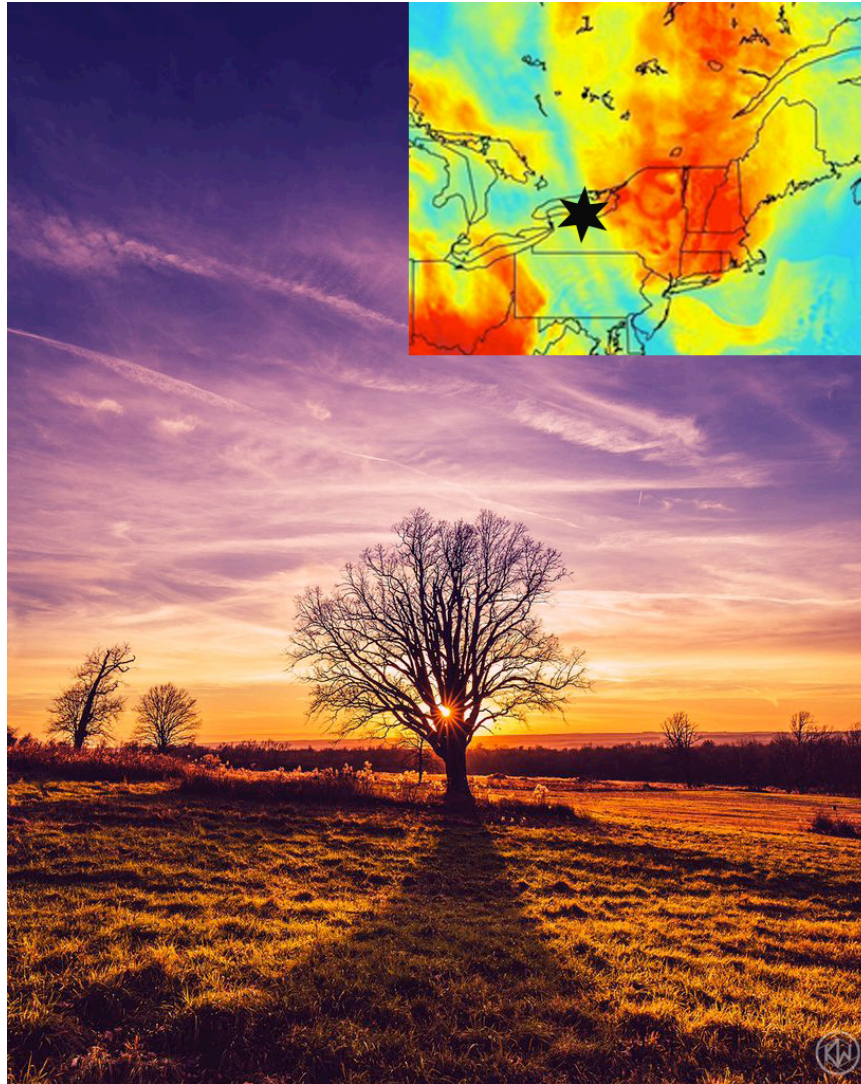
Case Study: Sunset Model

Date: 11/17/15, Valid at 23z

Creators: Jacob DeFlicht, Ben Reppert, Steve Hallett

Verified Locations

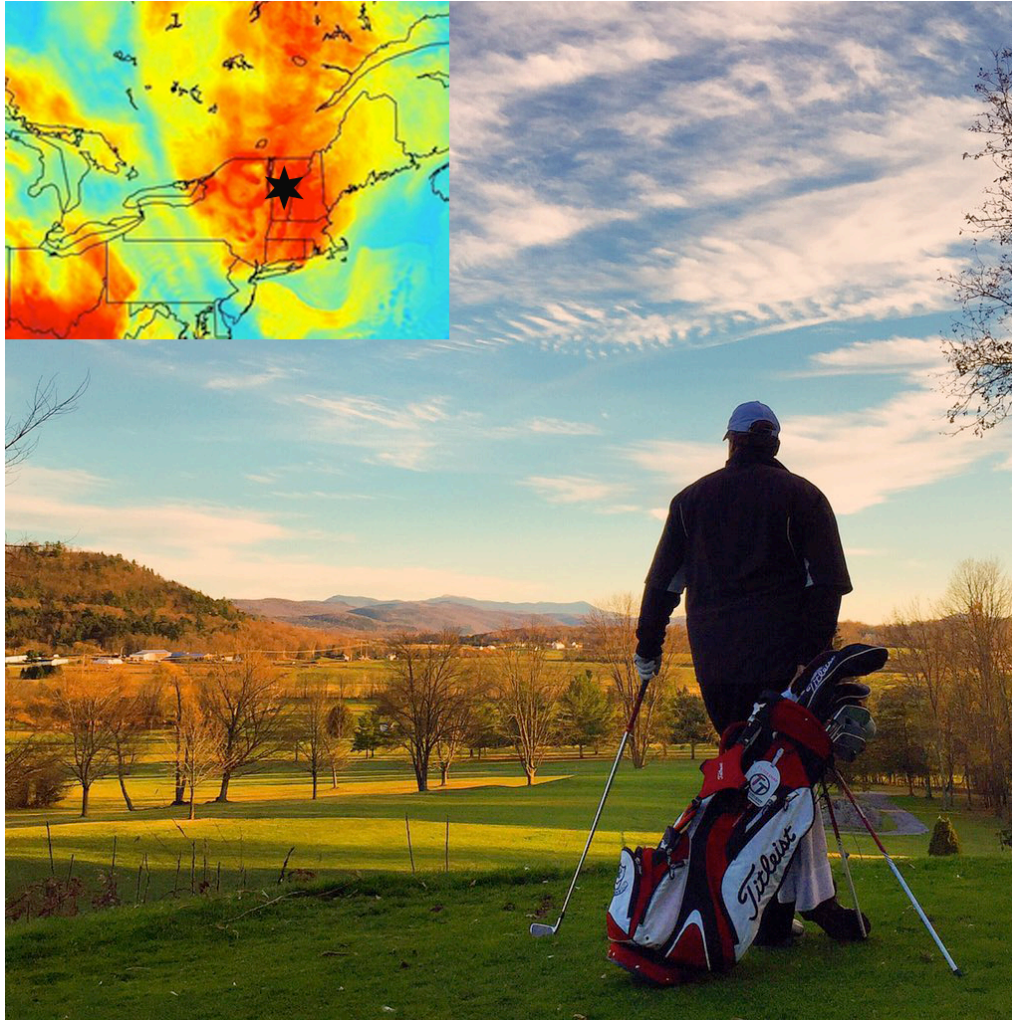
Regions where the resulting sunset was “Vivid” as outputted by our model in the yellow, orange, and red colors.



Rochester, NY – KWPhotography



Mount Washington, NH – MWObservatory



Montpelier, VT – Ed Coleman



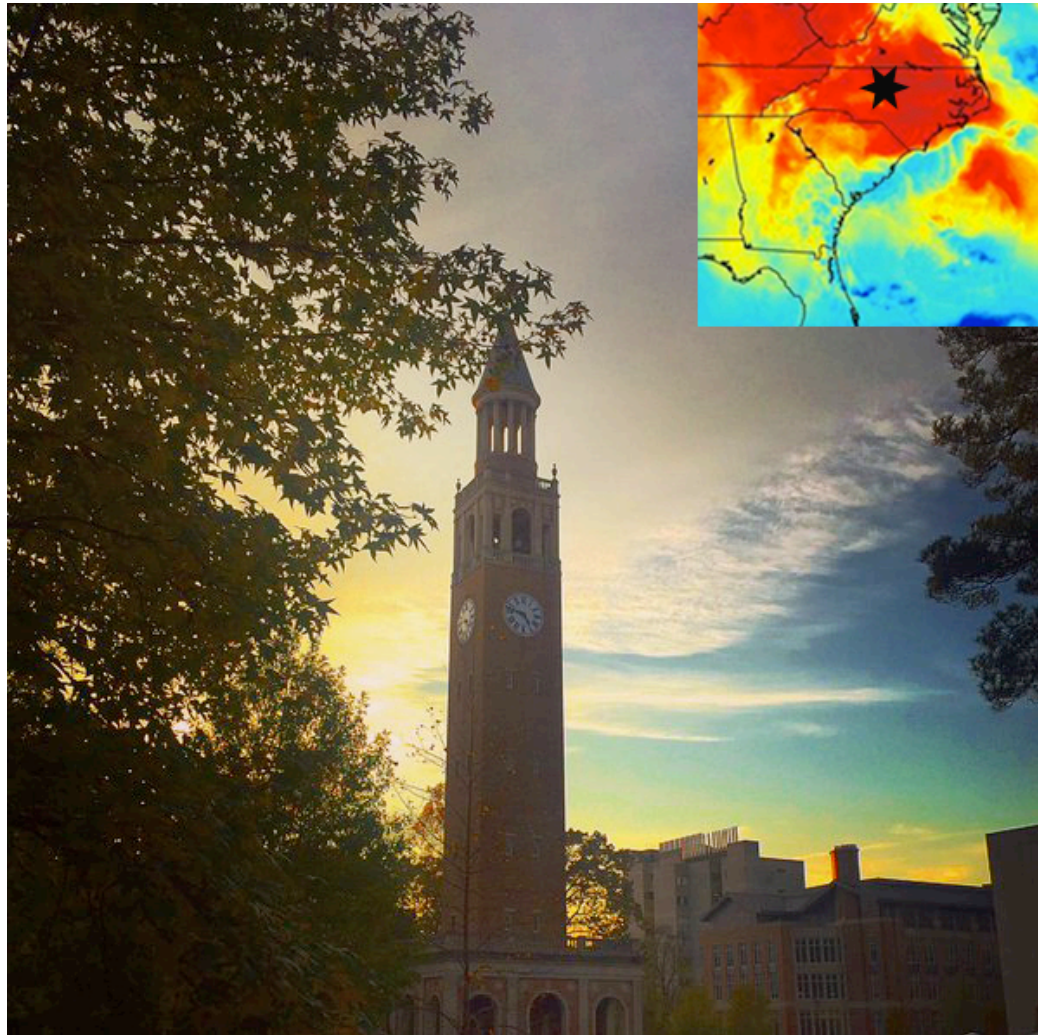
New York City, NY – Garkhan



Put-In-Bay, OH - Lance Woodworth



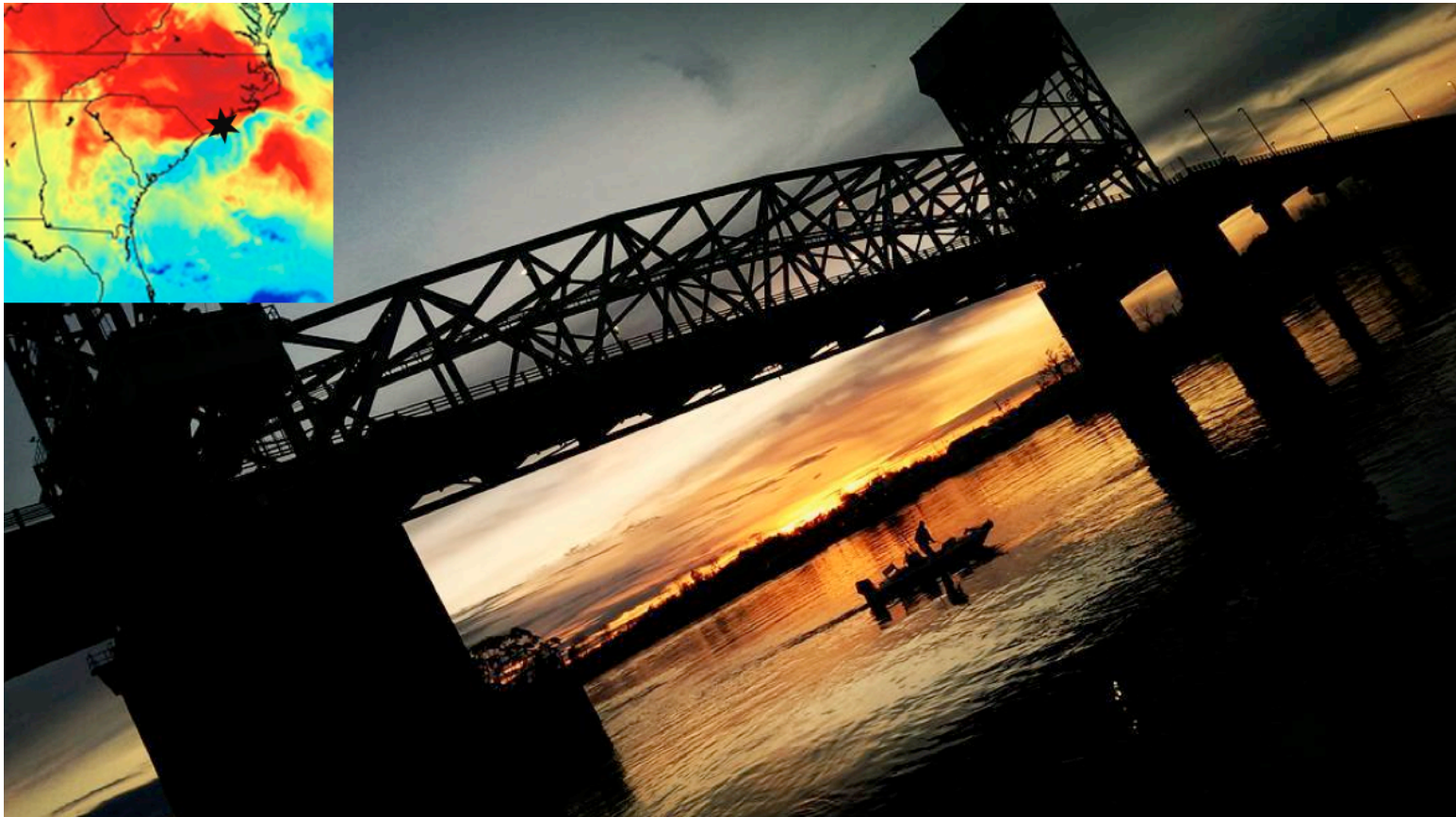
Annisquam, MA – Peter Fullerton



Chapel Hill, NC – UNC Young Alumni



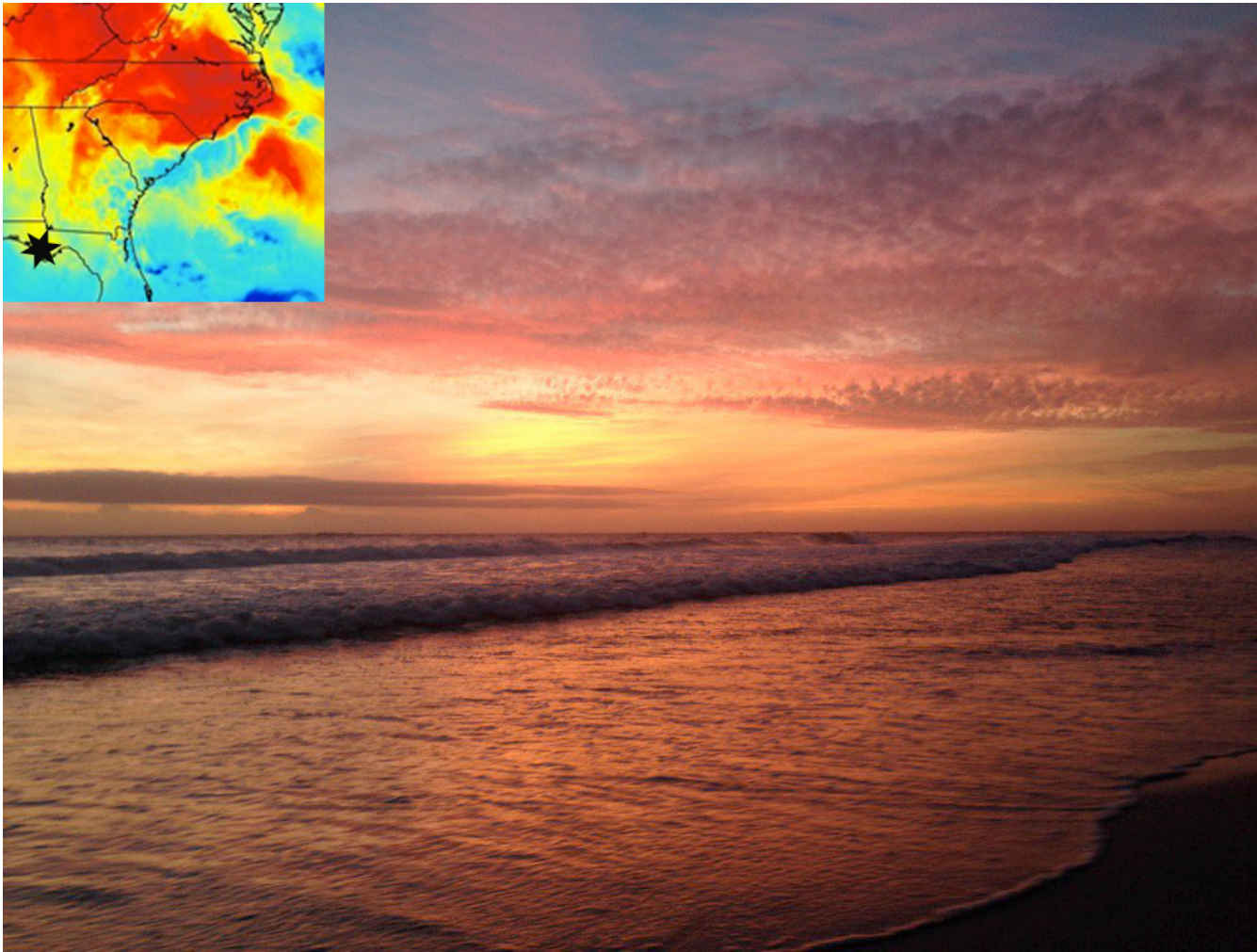
Cleveland, TN – Daniel Alvarez



Wilmington, NC – Kaisho Studios



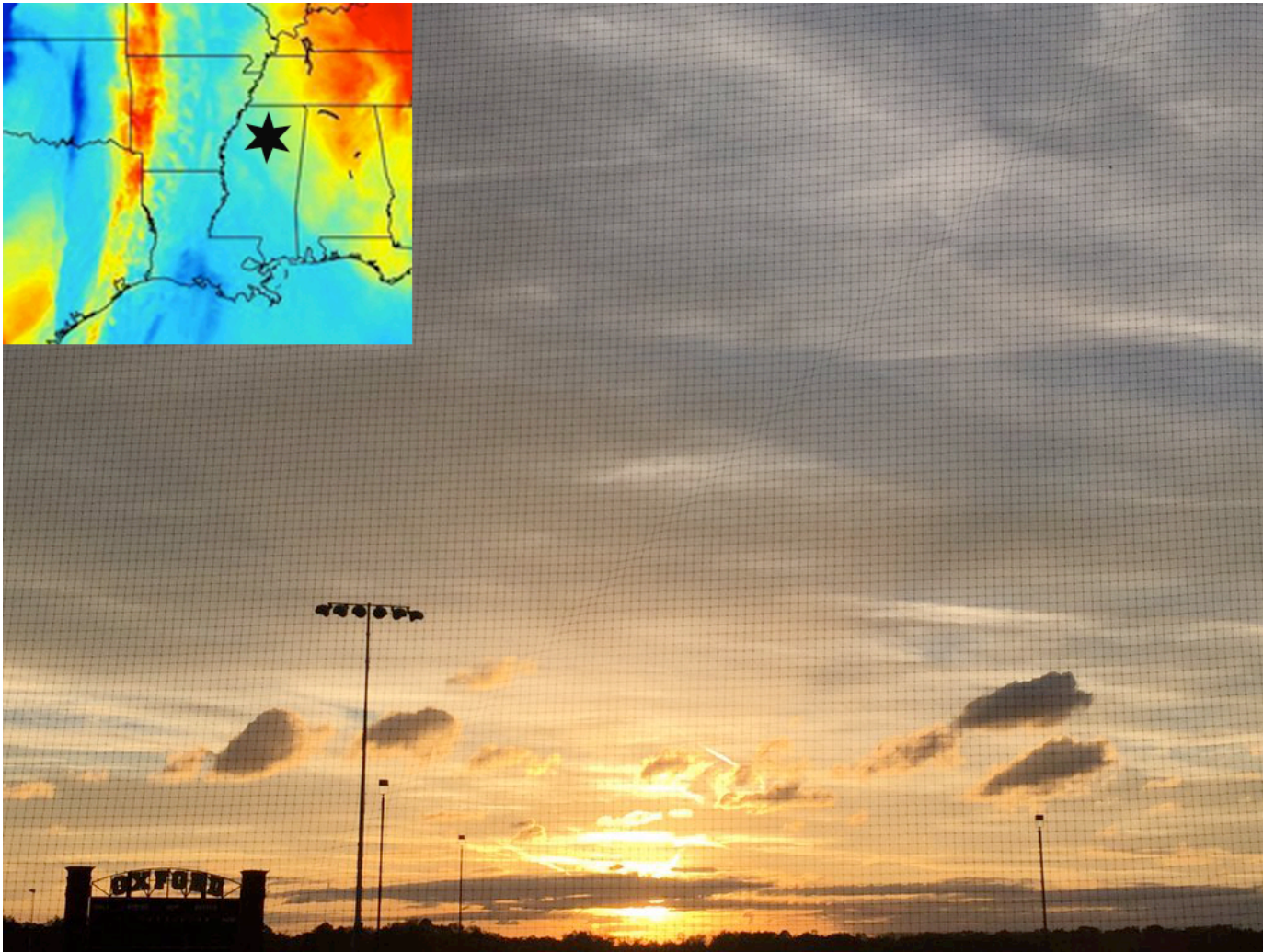
Chipley, FL – Cheryl Gainer McCall



Panama City, FL – Andrew Wardlow



Calera, AL – Ryon Smith



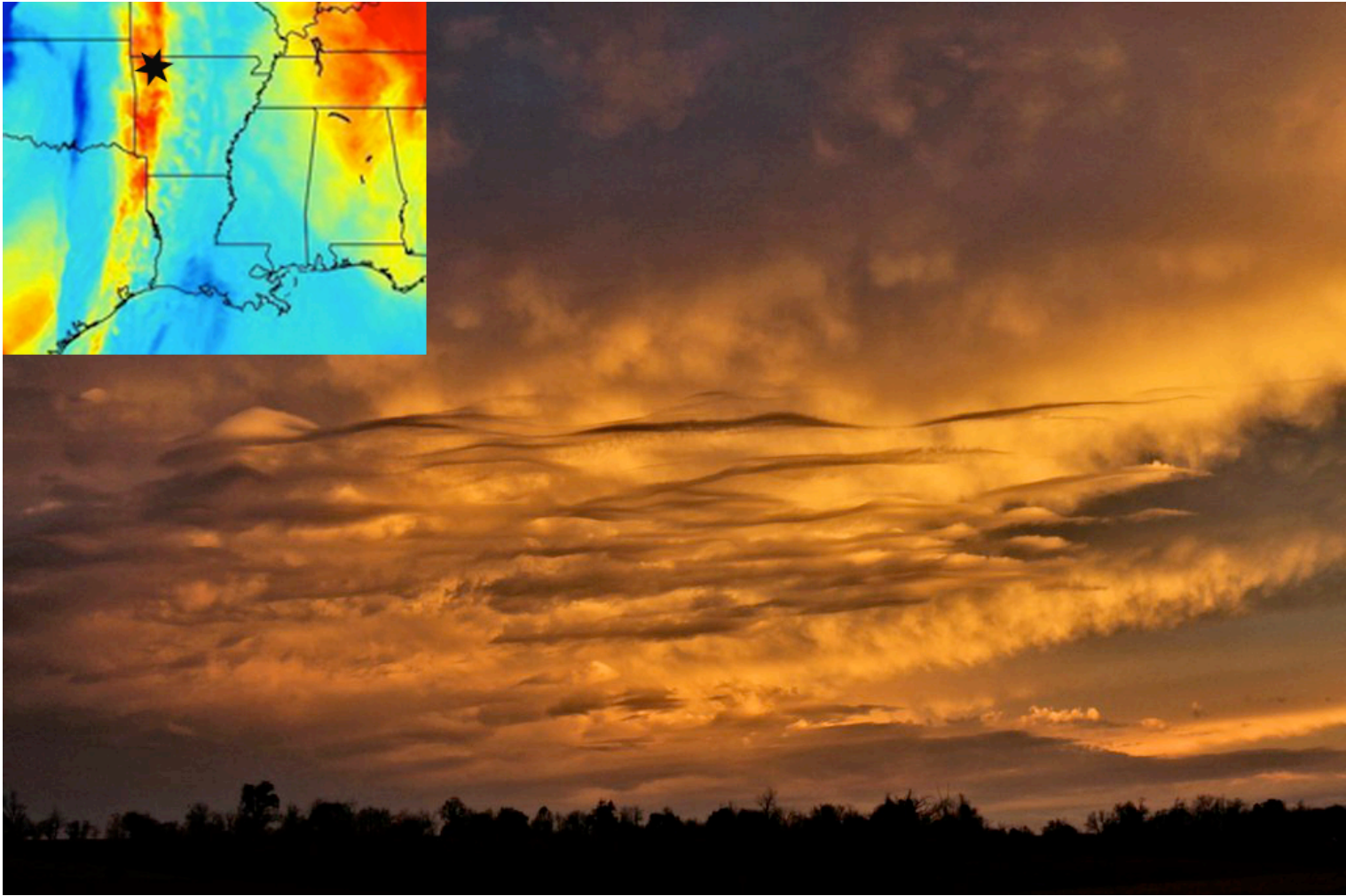
Oxford, MS – Bill Partridge



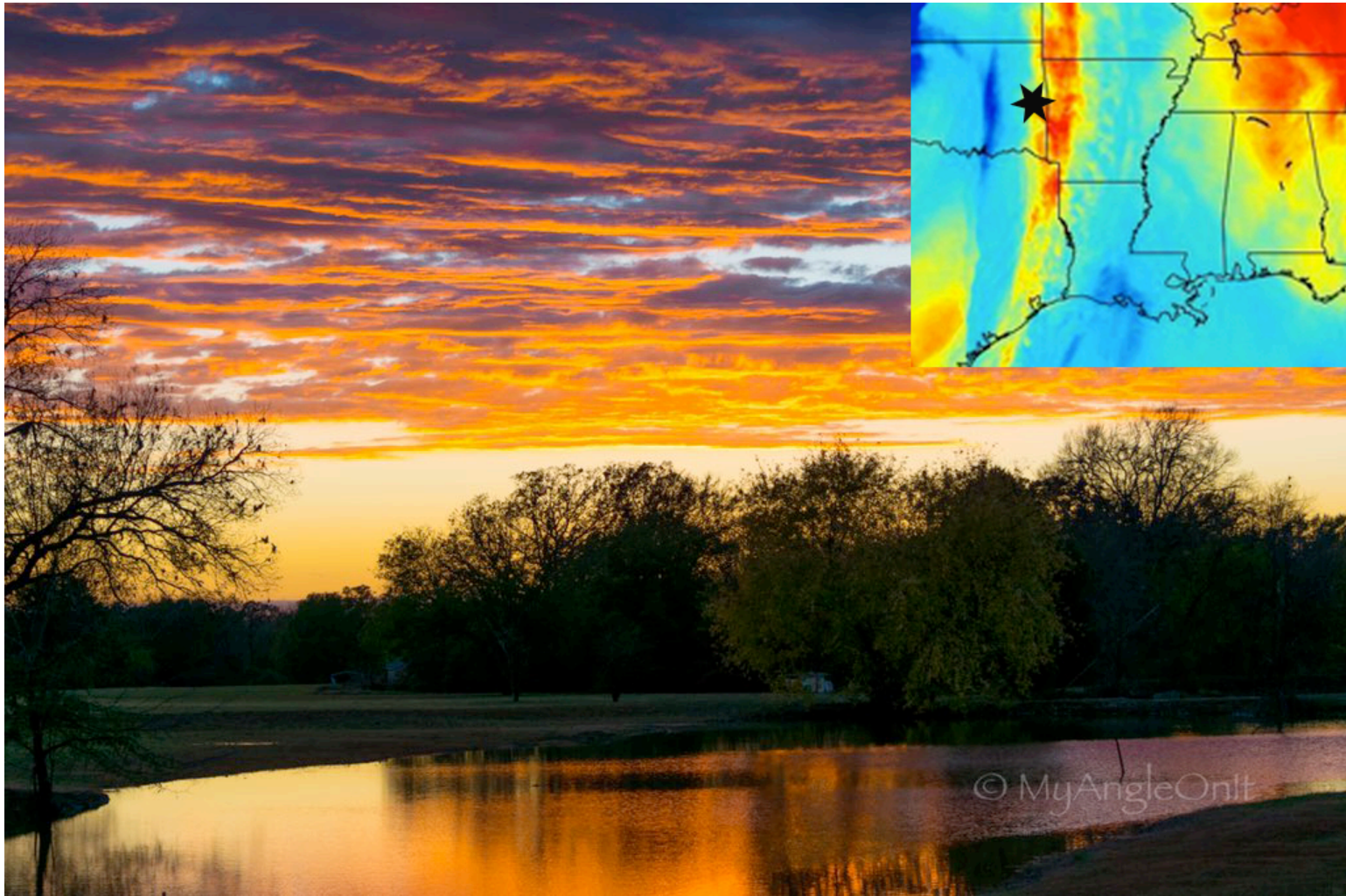
New Waverly, TX – Clifton Moore



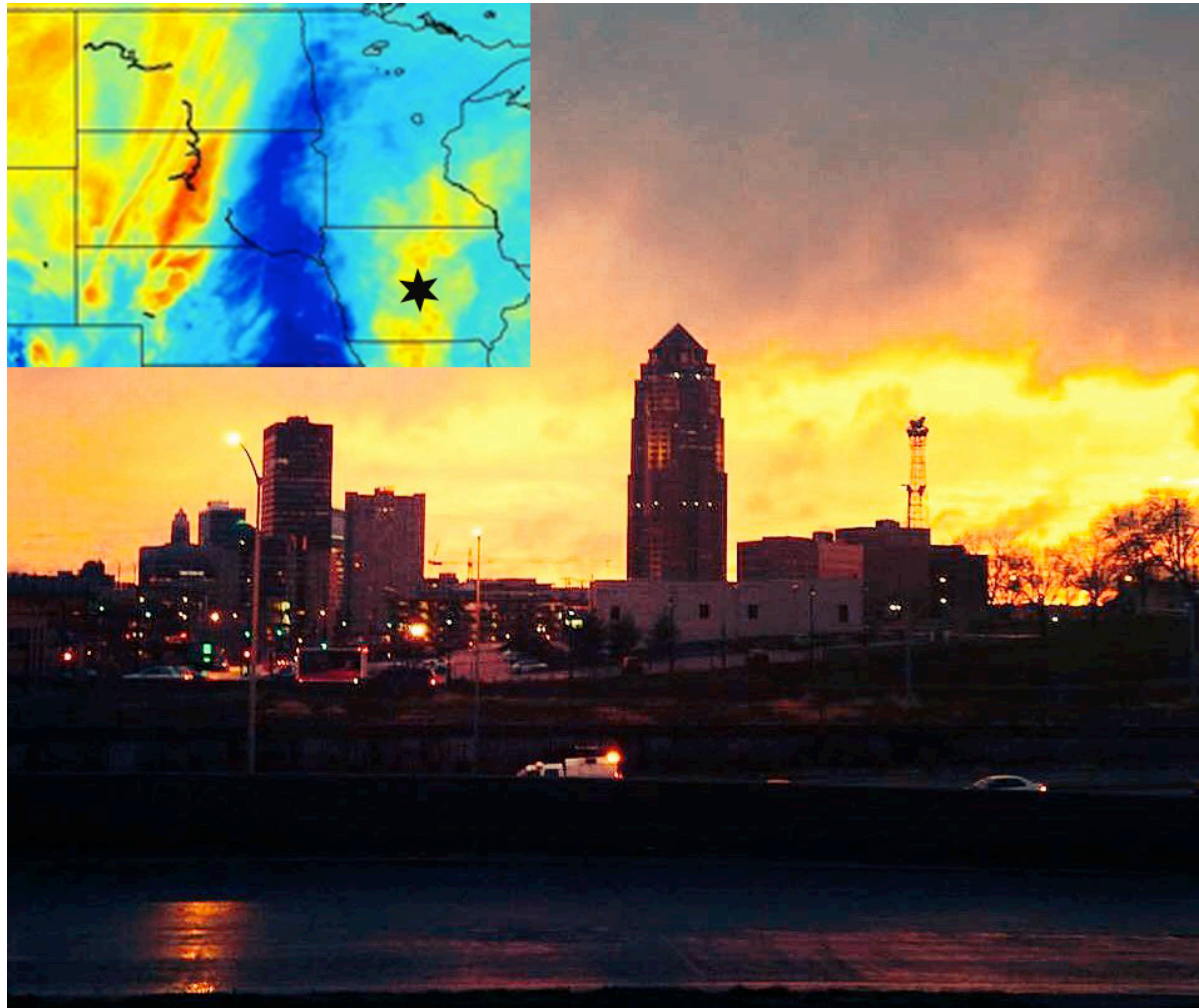
Austin, TX – Grace Evelyn



Clifty, AR – Cherie Clark



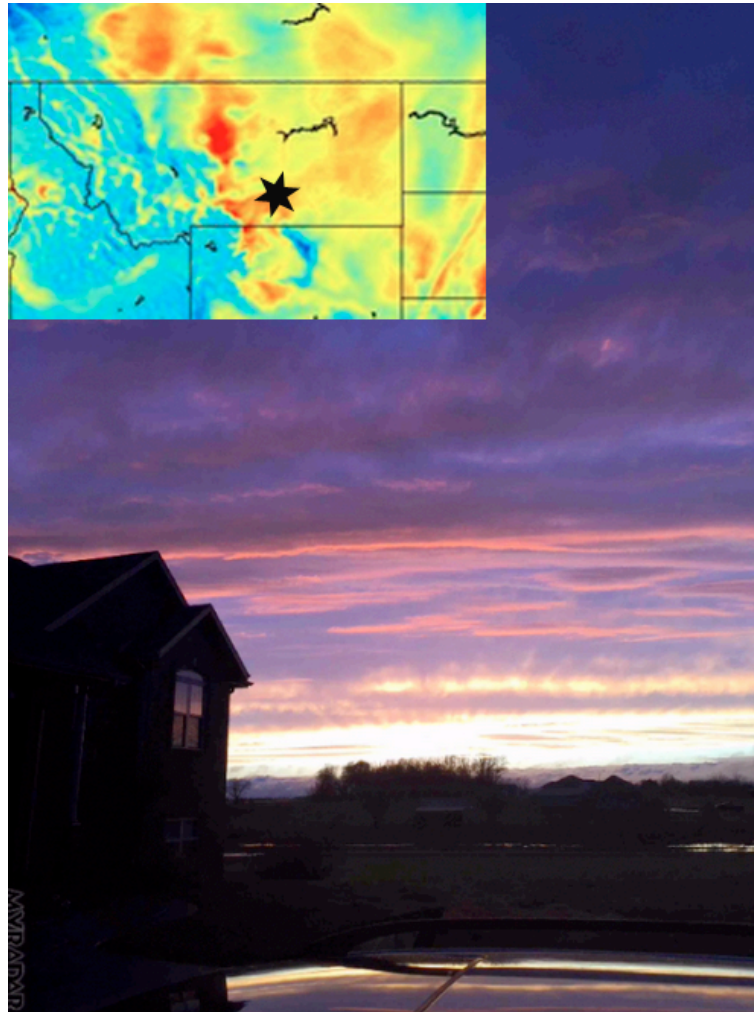
Gore, OK – Pam Wemhaner



Des Moines, IA – Aarron Weets



Crystal Springs, ND – Ellen Schafer



Billings, MT – mpetty



Tucumcari, NM – Brain Gnow-Fox Inoru



Woodland, CA – Steve Beckley



Visalia, CA – Keri Anderson



Scottsdale, AZ – I Love Scottsdale



Las Vegas, NV – Carolyn Ronning

LOCATIONS FOR IMPROVEMENT

Regions where the resulting sunset was forecasted to be “Vivid” by our model and ended up “Poor.” And regions where the resulting sunset was forecasted to be “Poor” by our model and ended up “Vivid.”



Palm Beach, FL - Bradley



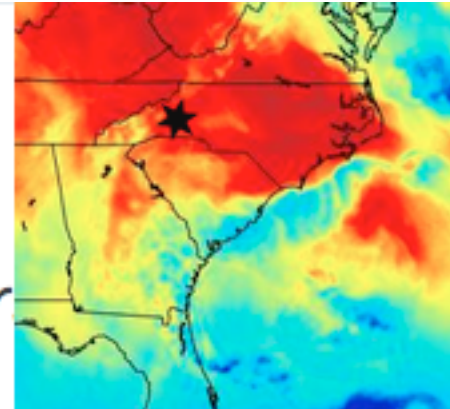
Steven Lesley

@TeachLesley

@WxDeFritch pretty weak. No color

4:14 AM - 18 Nov 2015

📍 North Carolina, USA



Hickory, NC – Steven Lesley

SUMMARY

Looking at the overall verification of the inaugural running of the sunset model, in general we think it worked out well. Remembering that we are defining a great sunset as one with adequate clouds to reflect red/orange color, the above examples show that in most areas where a vivid sunset was projected, we had ground truth of it. One major exception was the western parts of the Carolinas, as well as portions of Virginia and Kentucky. It is our immediate thought that the issue may be overcast sky cover thanks to high clouds, a complication that needs to be dealt with in our algorithm. Another area in need of improvement is Florida; despite our model outputting a “Poor” sunset for portions of southern Florida, the result turned out to be fairly vivid.

Something that we are particularly proud of is the model’s ability to recognize the post-frontal areas across the plains and Midwest, where adequate low level drying, along with high clouds was expected to allow for a nice sunset in the thin corridor from the central Dakotas, down to western Louisiana.

Although there are areas for improvement in the future, for the model’s inaugural run, we are pleased with the results.

Jacob DeFlitch (@WxDeFlitch)

Ben Reppert (@WxReppert)

Steve Hallett (@hallettwx)