

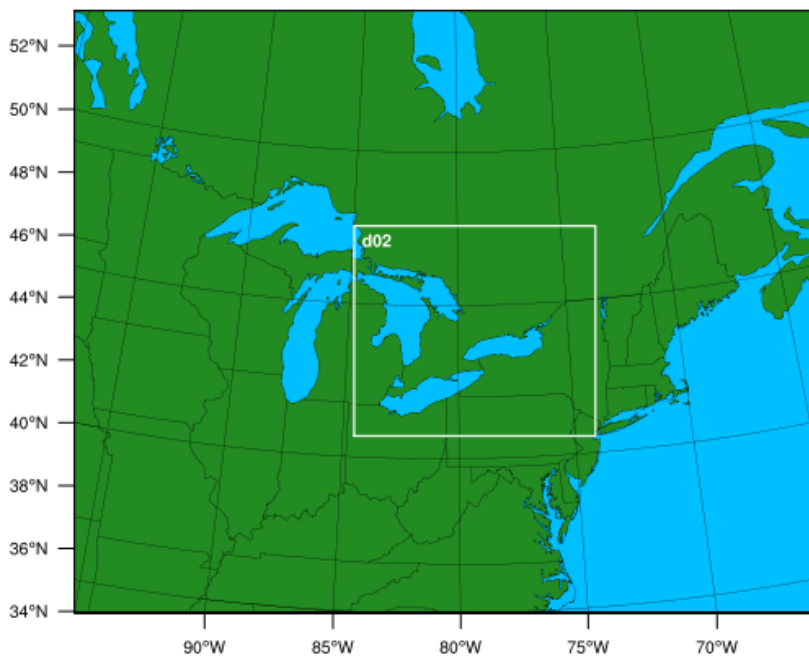
Project LEE: Modeling

Thomas White



WRF Domain

WPS Domain Configuration



Domain 1:

- 288 grid boxes east to west
- 236 grid boxes north to south
- 9km spatial resolution

Domain 2:

- 283 grid boxes east to west
- 247 grid boxes north to south
- 3km spatial resolution

WRF Schemes

Microphysics: NSSL 2 moment

Cumulus: Grell-Freitas (Except Inner Domain)

Ra_lw_physics: RRTMG

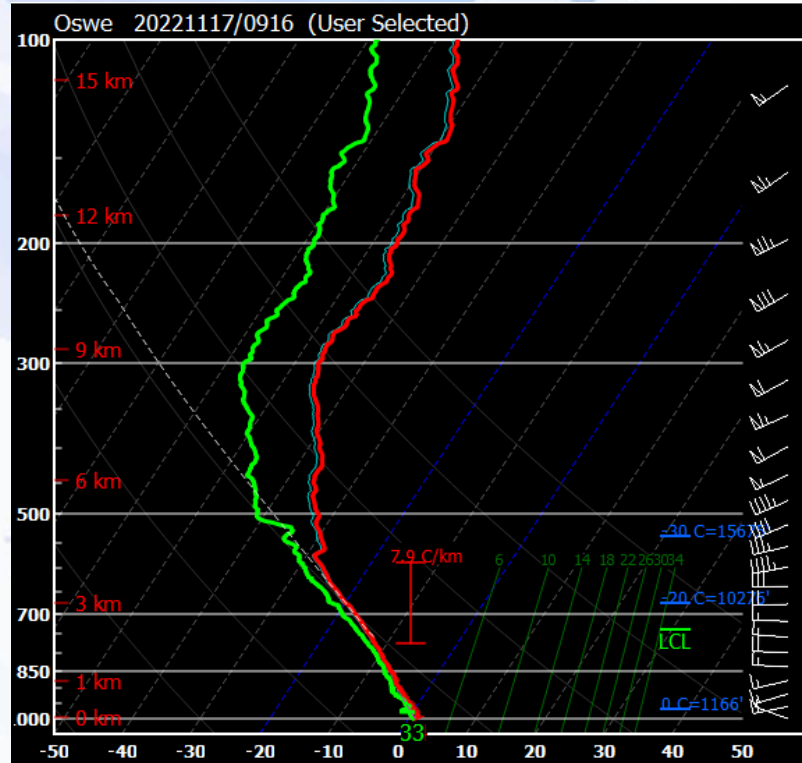
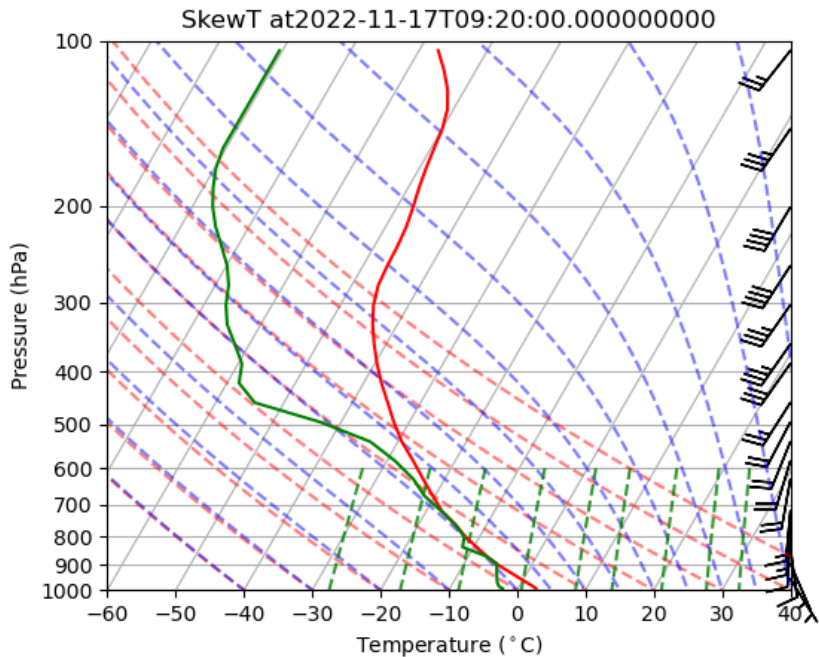
Ra_sw_physics: RRTMG

Bl_pbl_physics: YSU

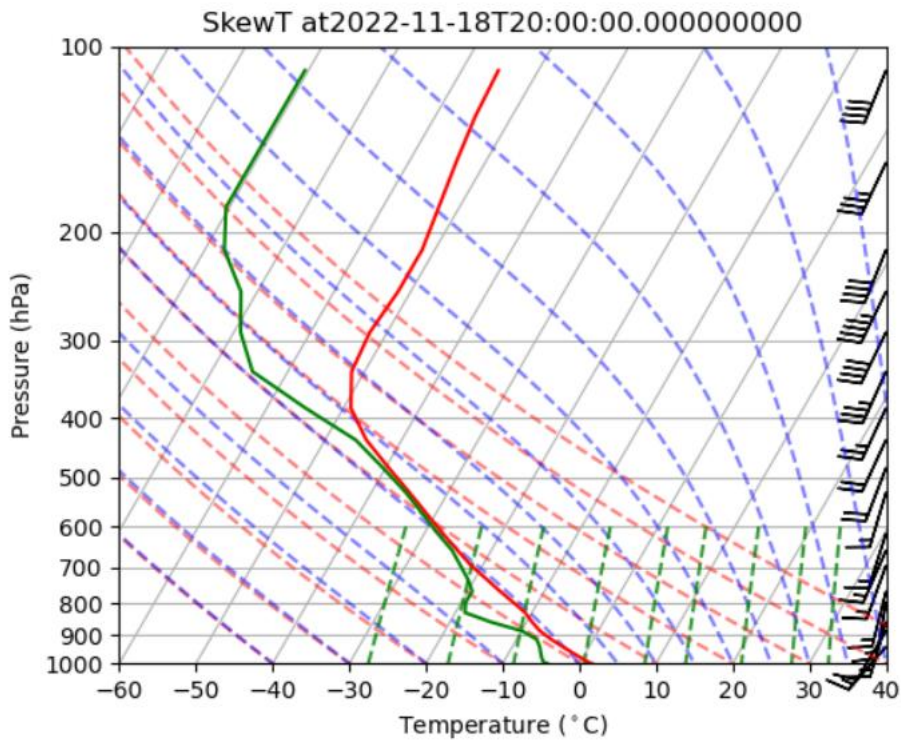
*Lightning option: 3, Predicts Lightning Potential based on *Yair et al.*

2010

SkewT Python Script



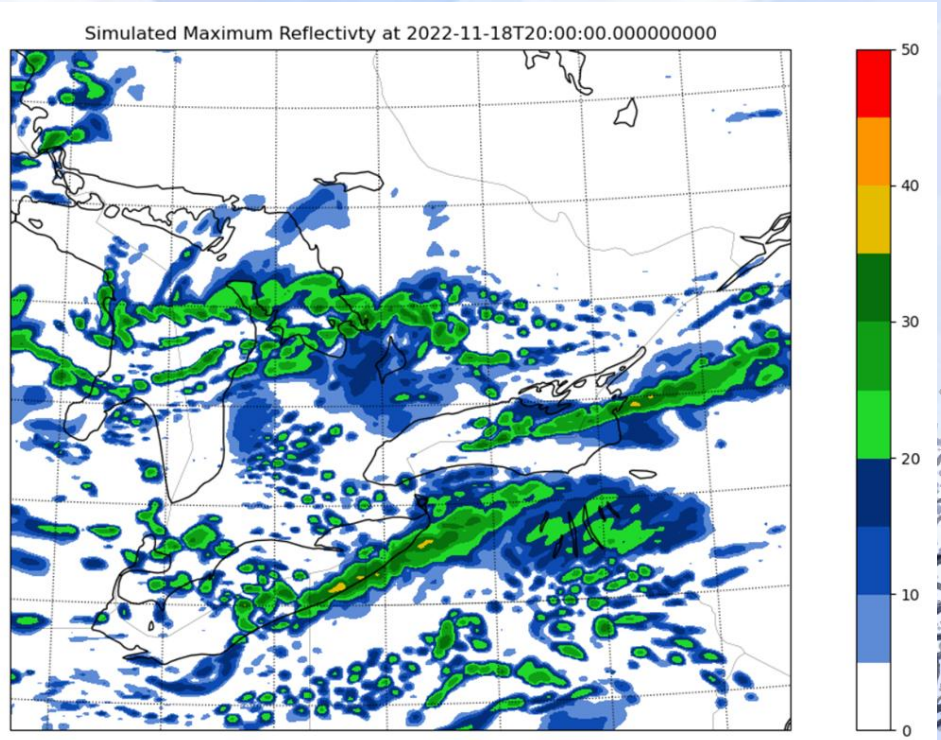
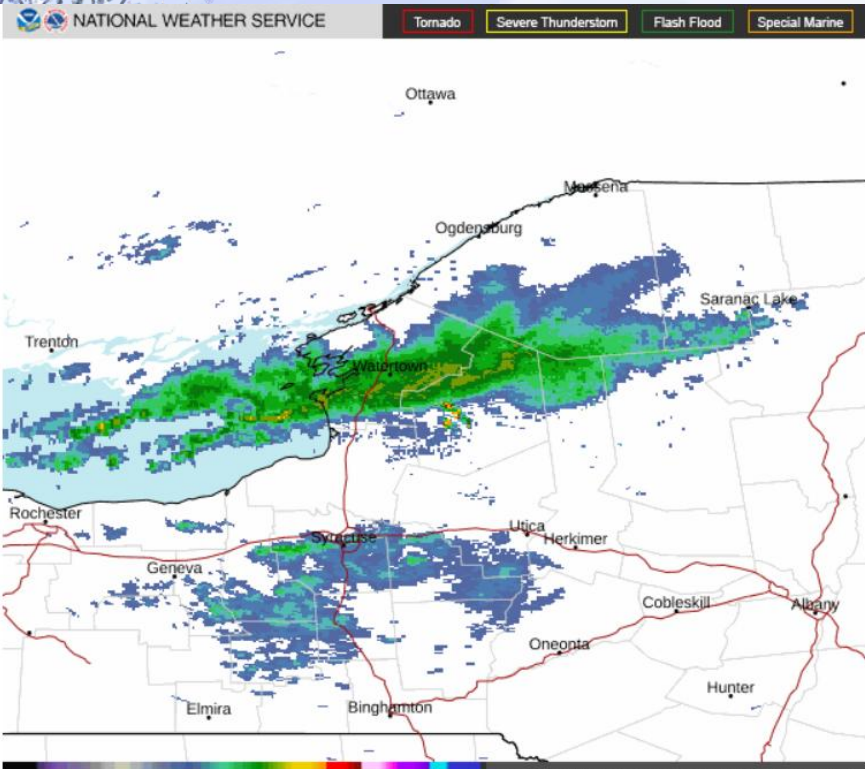
SkewT Python Script



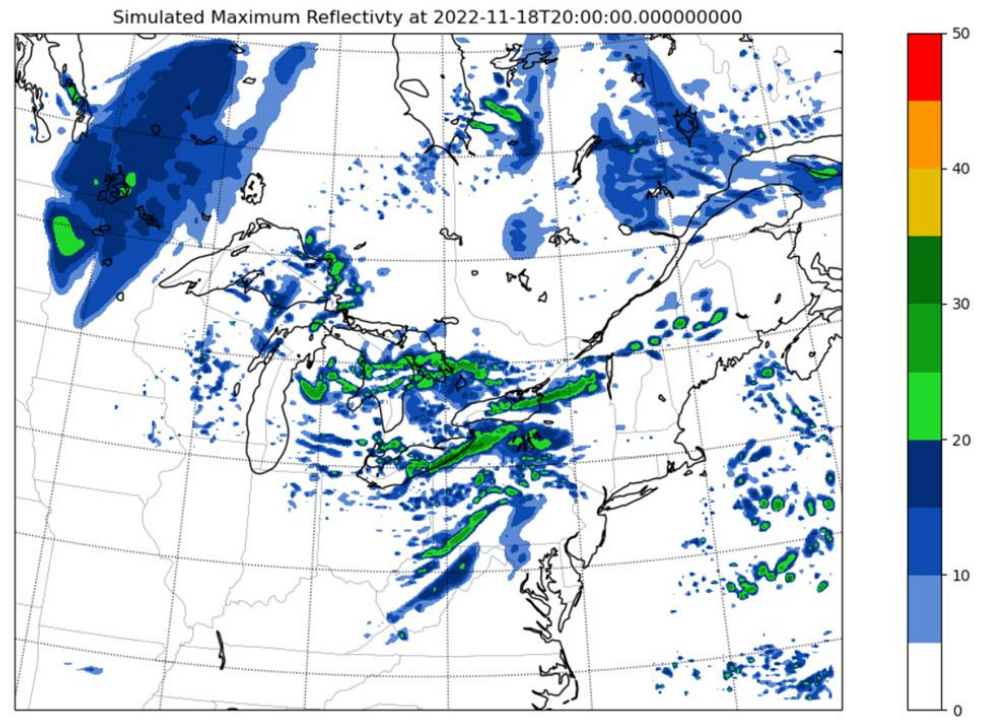
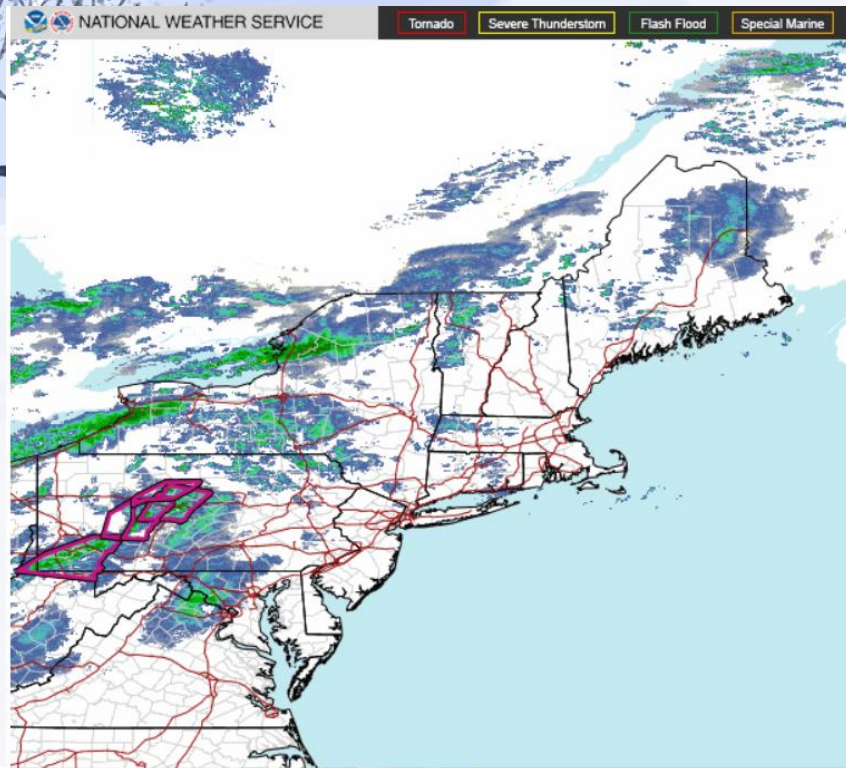
Simulated MDBZ Loop



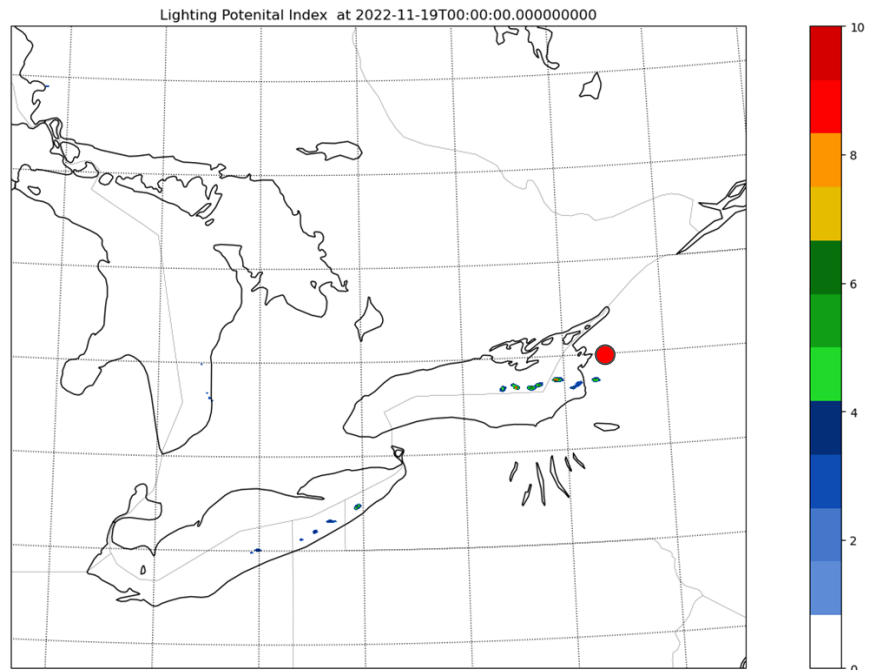
Radar vs Simulated MDBZ



Radar vs Simulated MDBZ



LPI Loop



All Python Scripts

1. 500mbwspd.py
2. ALLMDBZ.py
3. crossection.py
4. LPI.py
5. MDBZ.py
6. panelplots.py
7. PNGtoGIF.py
8. skewT.py
9. SLP.py