

Weather Study – Attachment 1

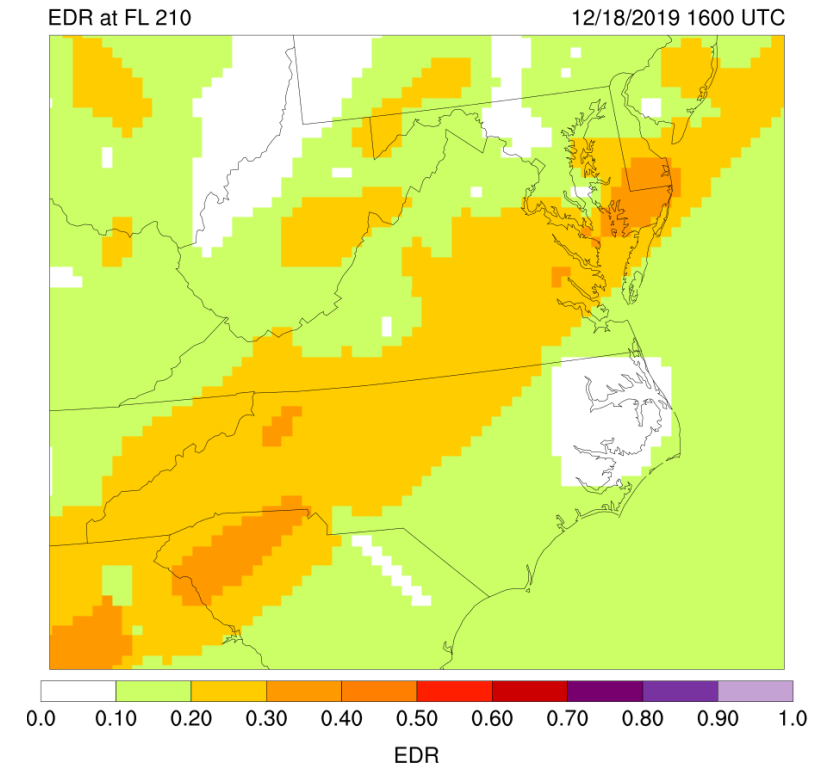
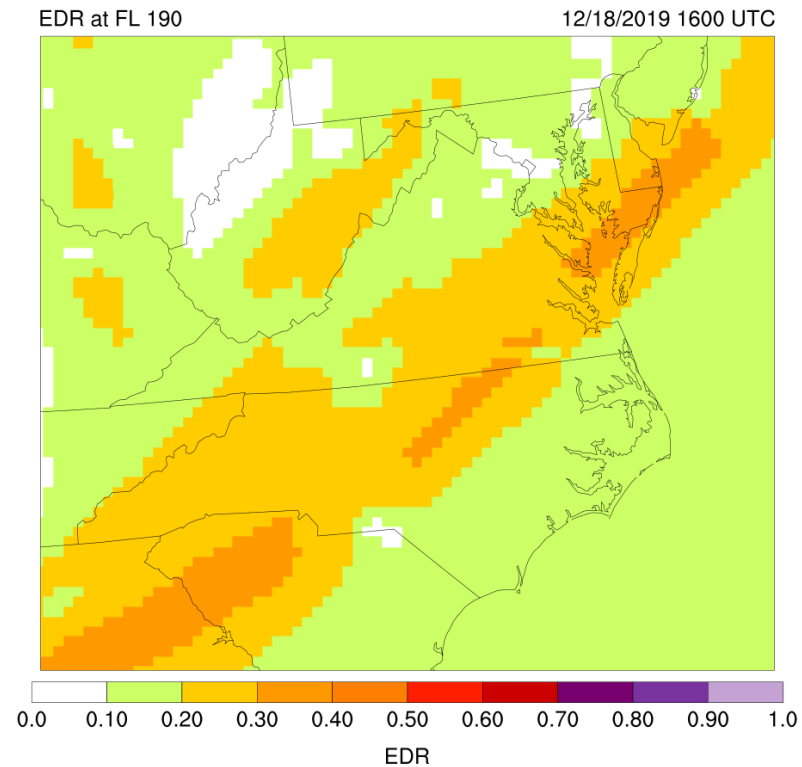
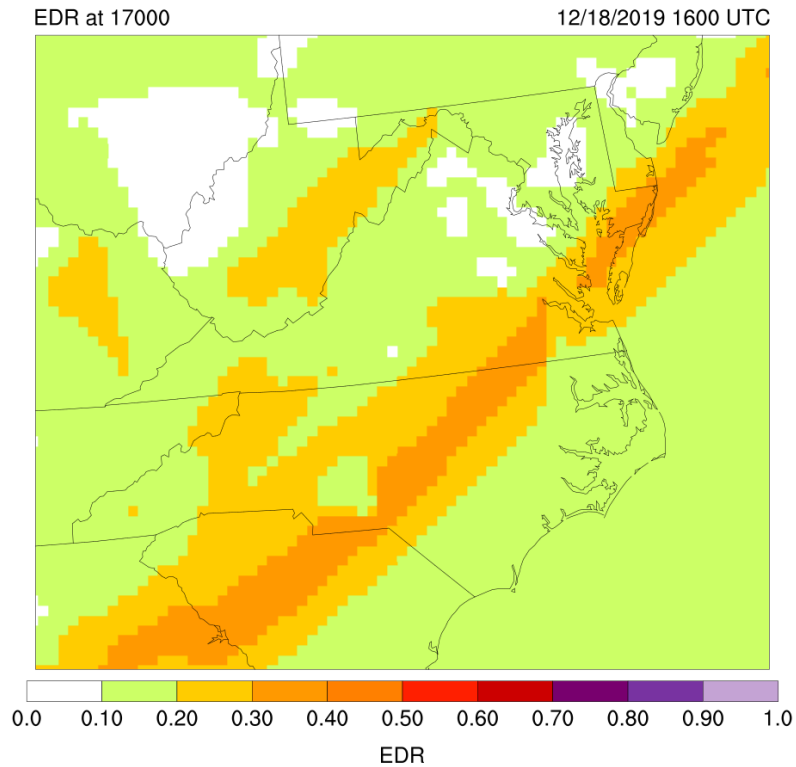
Graphical Turbulence Guidance Nowcast data applicable to the accident site.

METEOROLOGY

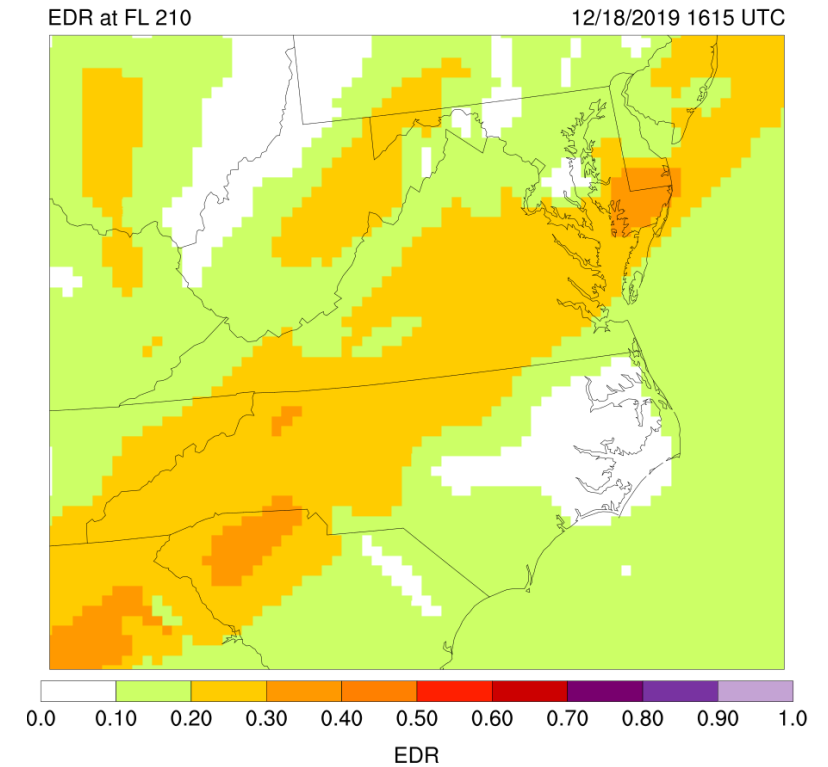
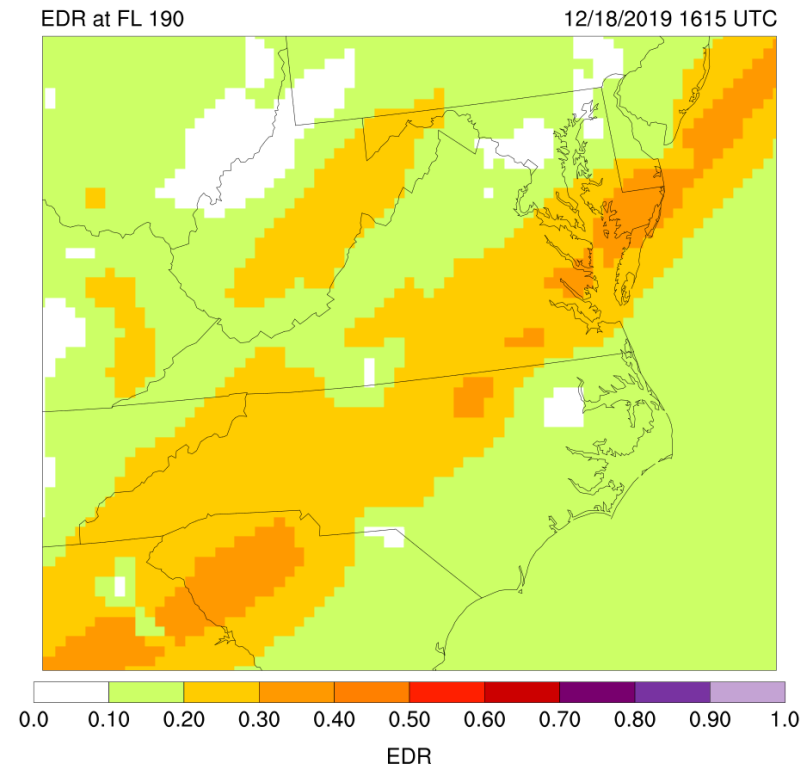
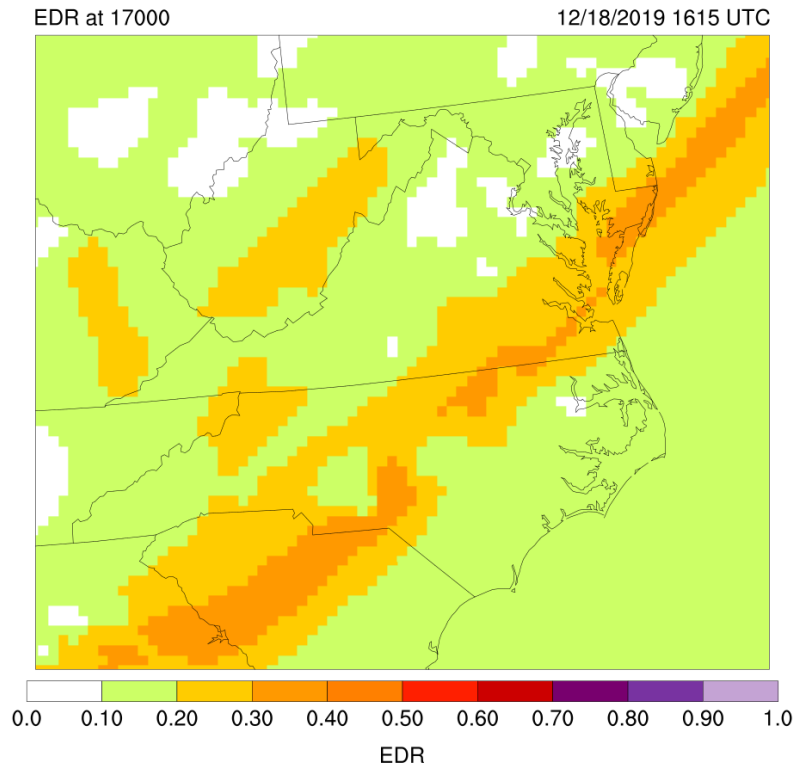
DCA20CA043

*Submitted by: Mike Richards
NTSB, AS-30*

GTGN valid 1600Z. 17,000ft, FL190, FL210

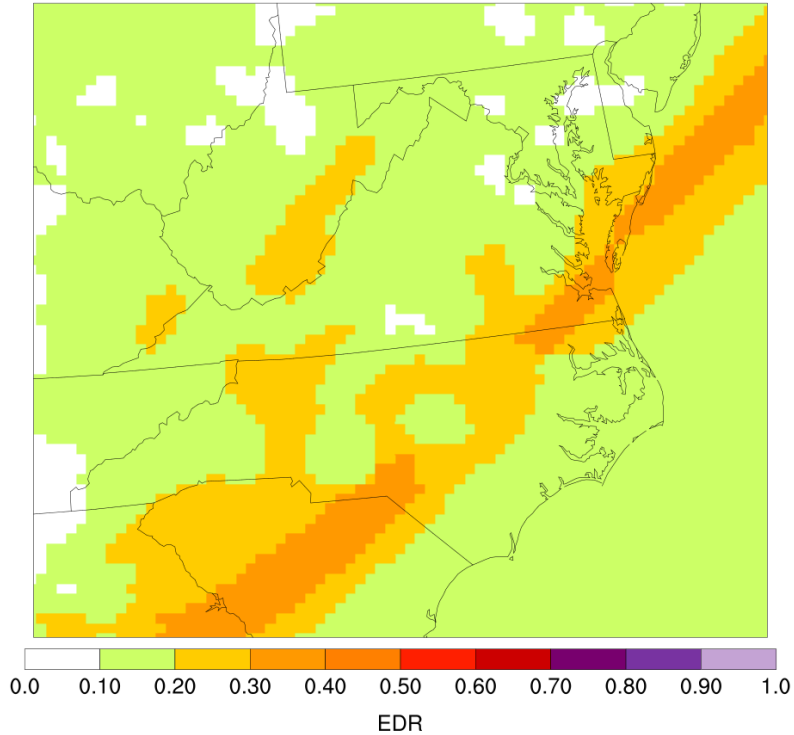


GTGN valid 1615Z. 17,000ft, FL190, FL210

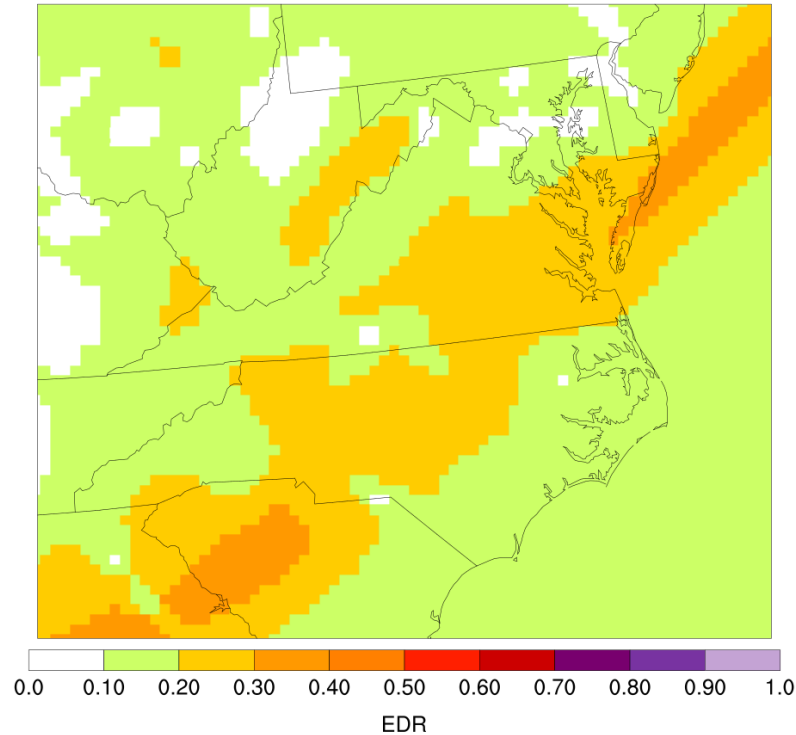


GTGN valid 1630Z. 17,000ft, FL190, FL210

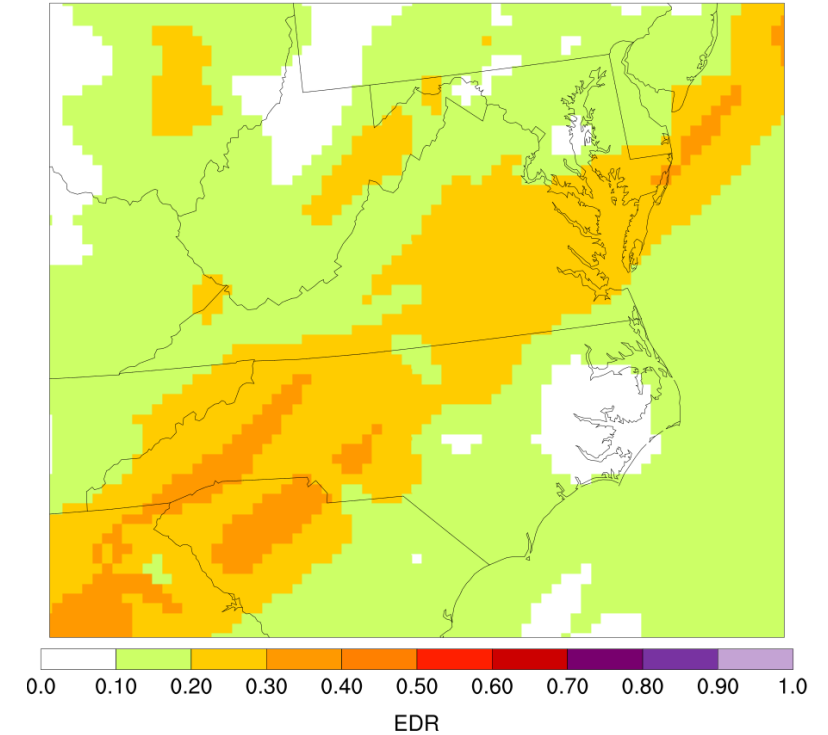
EDR at 17000 12/18/2019 1630 UTC



EDR at FL 190 12/18/2019 1630 UTC

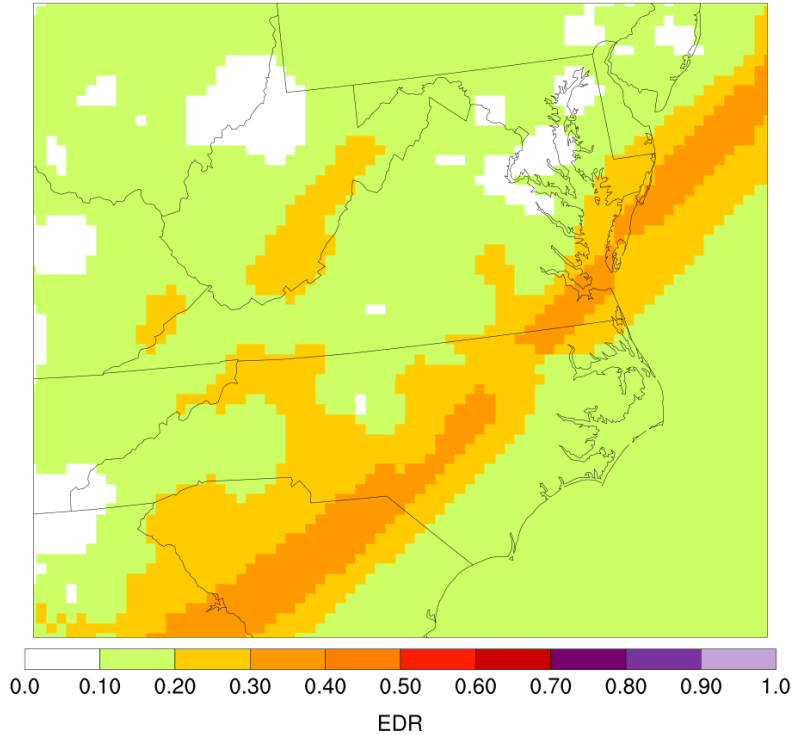


EDR at FL 210 12/18/2019 1630 UTC

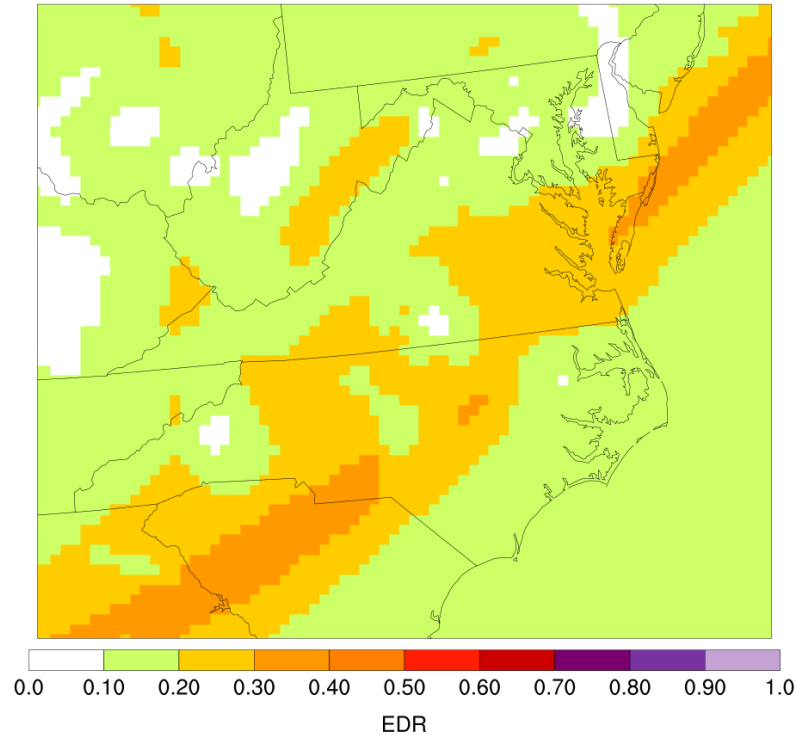


GTGN valid 1645Z. 17,000ft, FL190, FL210

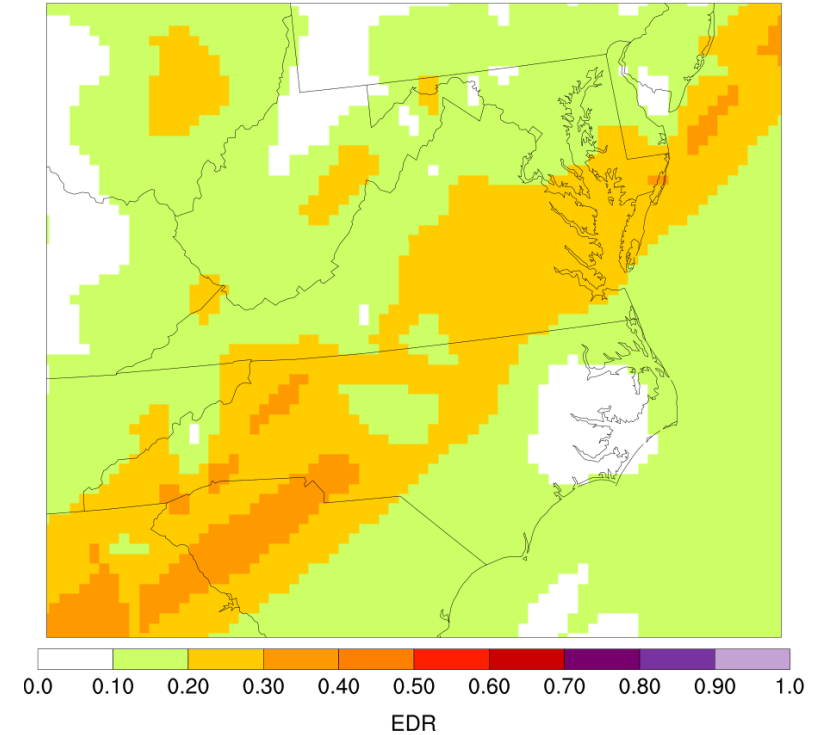
EDR at 17000 12/18/2019 1645 UTC



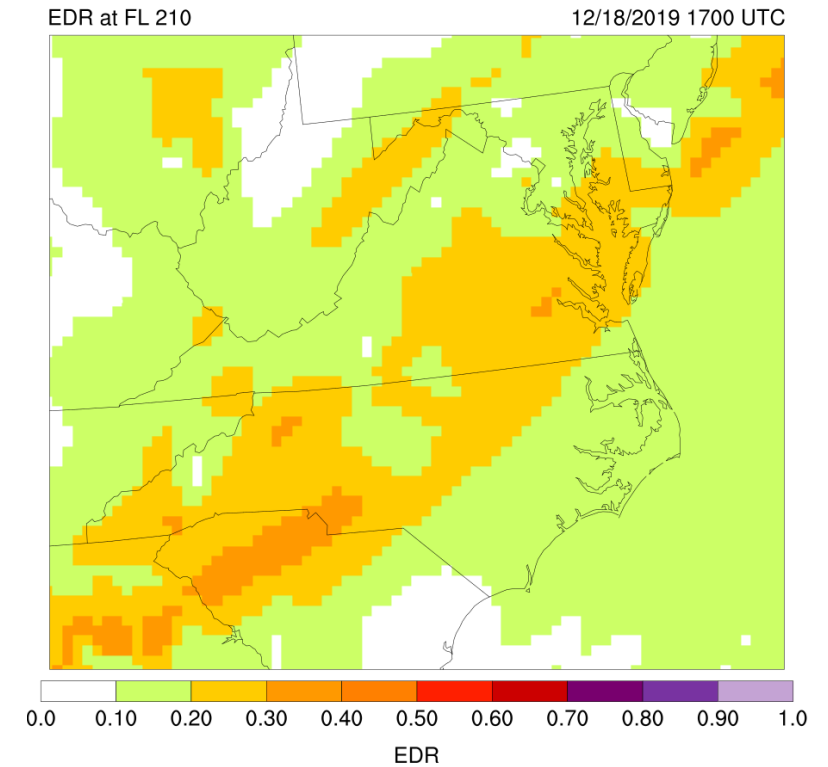
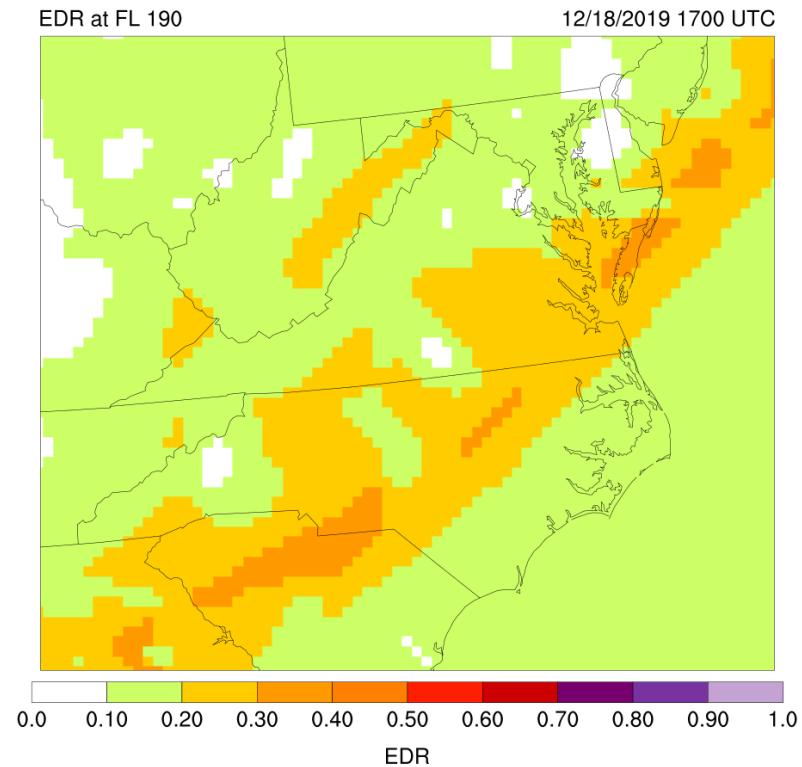
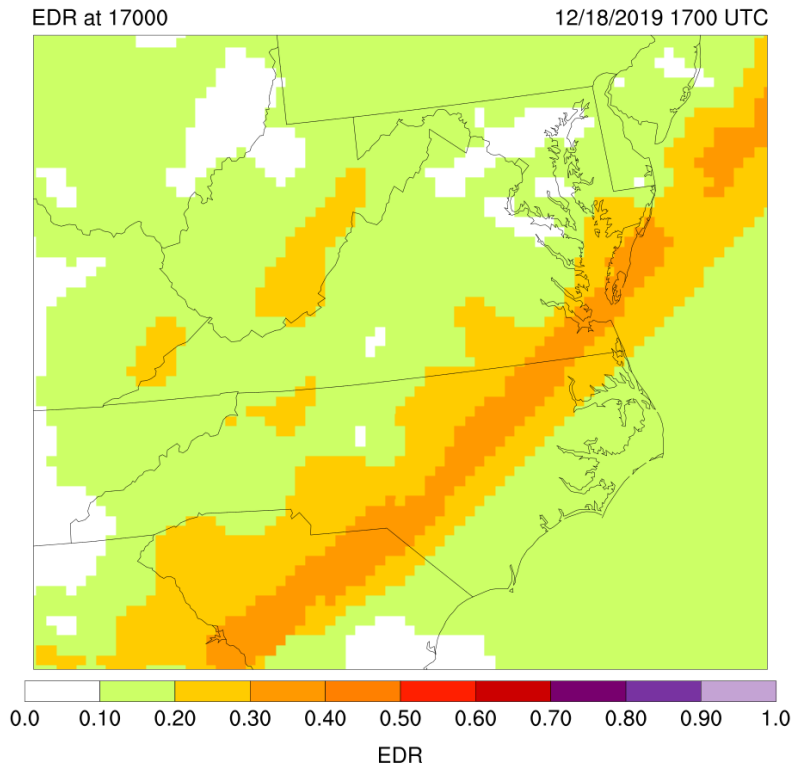
EDR at FL 190 12/18/2019 1645 UTC



EDR at FL 210 12/18/2019 1645 UTC



GTGN valid 1700Z. 17,000ft, FL190, FL210



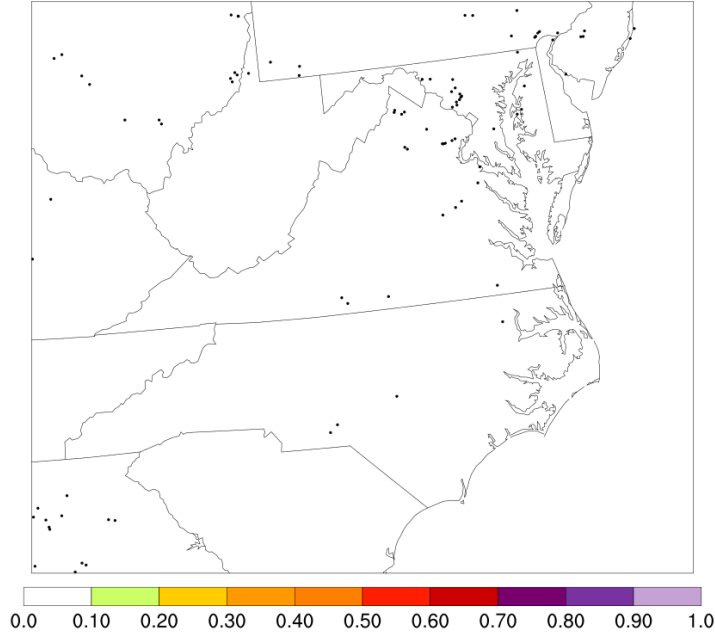
For Observations Plots

- In situ EDR reports between 0 and 0.10 are shown as a dot
- In situ EDR reports above 0.10 are shown as open circles color coded to the colors shown below.
- PIREPs are shown using standard PIREP symbols

PIREPs & in situ EDR valid 1500 - 1600Z. About 17,000ft, FL190, and FL210

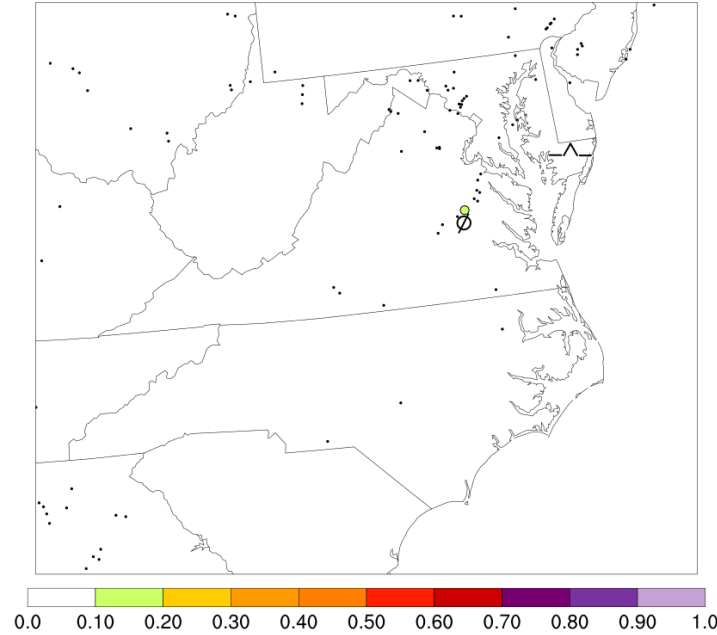
20191218
in situ data from 15990 to 18010 feet
20191218150000 to 20191218160000
EDR >= 0
PIREP data from 15990 to 18010 feet
20191218150000 to 20191218160000
PI >= 0

in situ repor
PIREPs



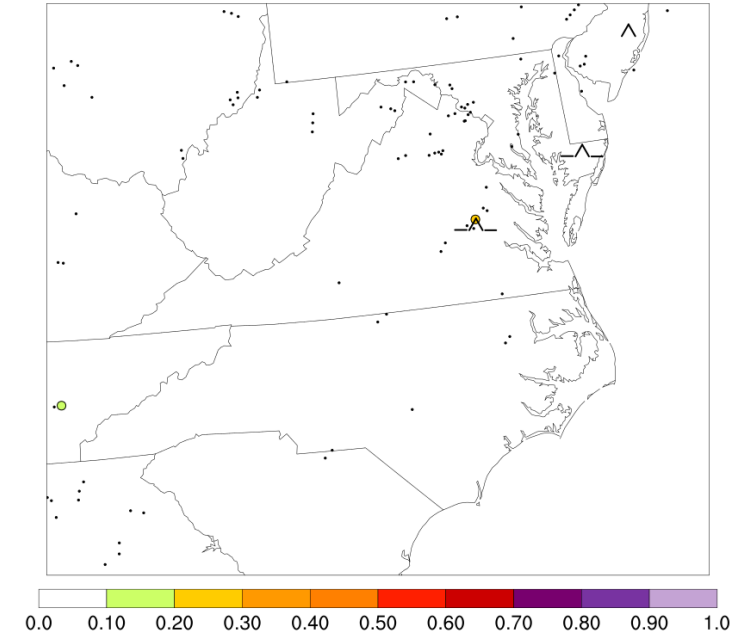
20191218
in situ data from 17990 to 20010 feet
20191218150000 to 20191218160000
EDR >= 0
PIREP data from 17990 to 20010 feet
20191218150000 to 20191218160000
PI >= 0

in situ reports
PIREPs



20191218
in situ data from 19990 to 22010 feet
20191218150000 to 20191218160000
EDR >= 0
PIREP data from 19990 to 22010 feet
20191218150000 to 20191218160000
PI >= 0

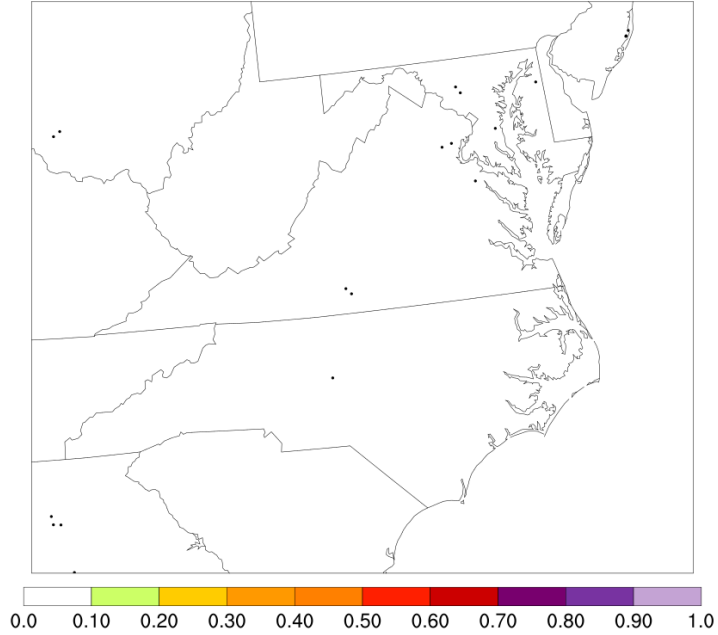
in situ reports
PIREPs



PIREPs & in situ EDR valid 1600 - 1615Z. About 17,000ft, FL190, and FL210

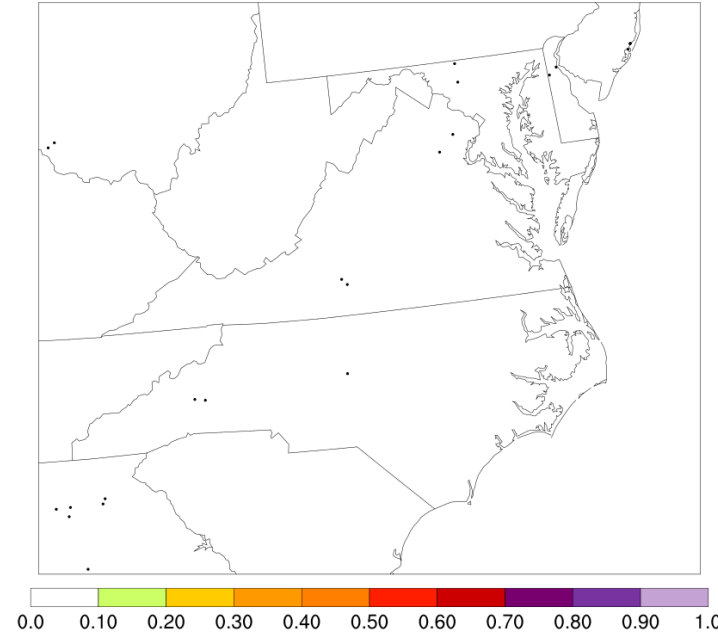
20191218
in situ data from 15990 to 18010 feet
20191218160000 to 20191218161500
EDR >= 0
PIREP data from 15990 to 18010 feet
20191218160000 to 20191218161500
PI >= 0

in situ repor
PIREPs



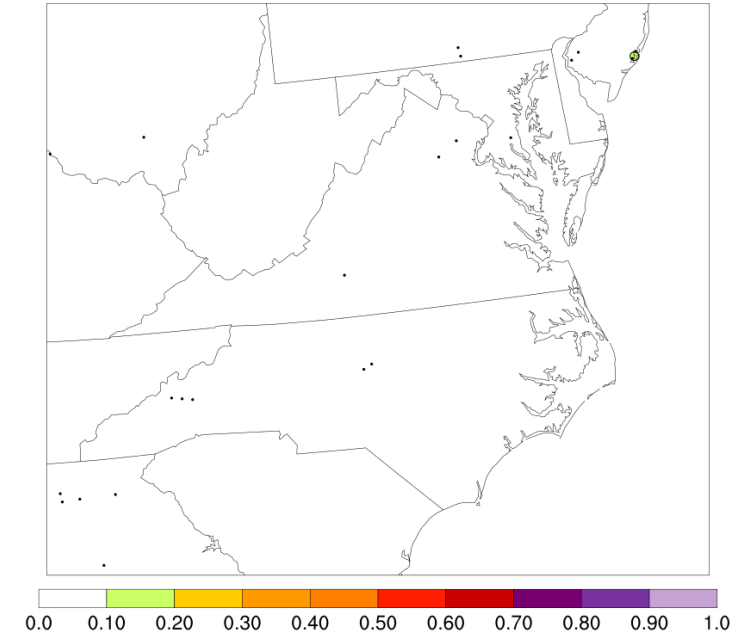
20191218
in situ data from 17990 to 20010 feet
20191218160000 to 20191218161500
EDR >= 0
PIREP data from 17990 to 20010 feet
20191218160000 to 20191218161500
PI >= 0

in situ reports
PIREPs



20191218
in situ data from 19990 to 22010 feet
20191218160000 to 20191218161500
EDR >= 0
PIREP data from 19990 to 22010 feet
20191218160000 to 20191218161500
PI >= 0

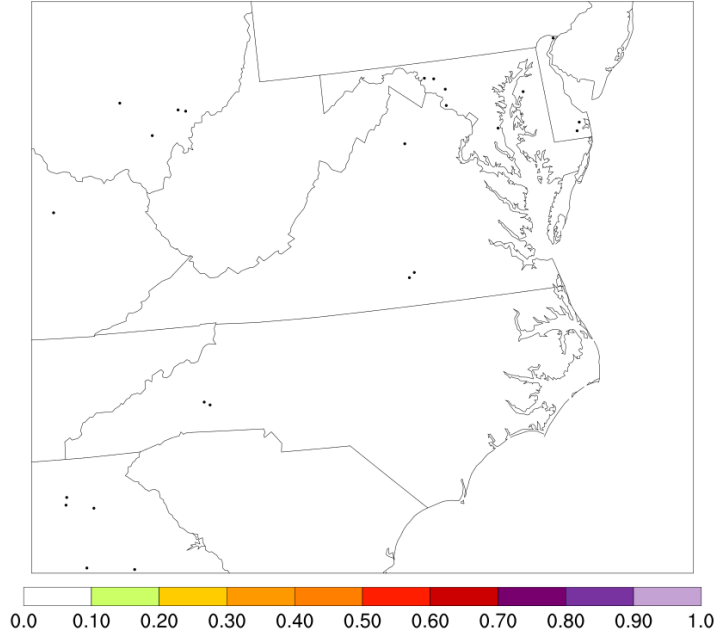
in situ reports
PIREPs



PIREPs & in situ EDR valid 1615 - 1630Z. About 17,000ft, FL190, and FL210

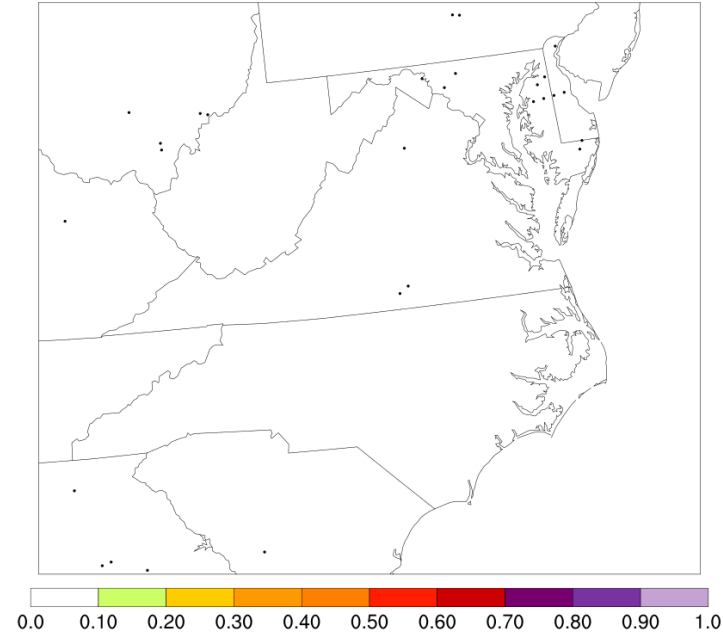
20191218
in situ data from 15990 to 18010 feet
20191218161500 to 20191218163000
EDR >= 0
PIREP data from 15990 to 18010 feet
20191218161500 to 20191218163000
PI >= 0

in situ repor
PIREPs



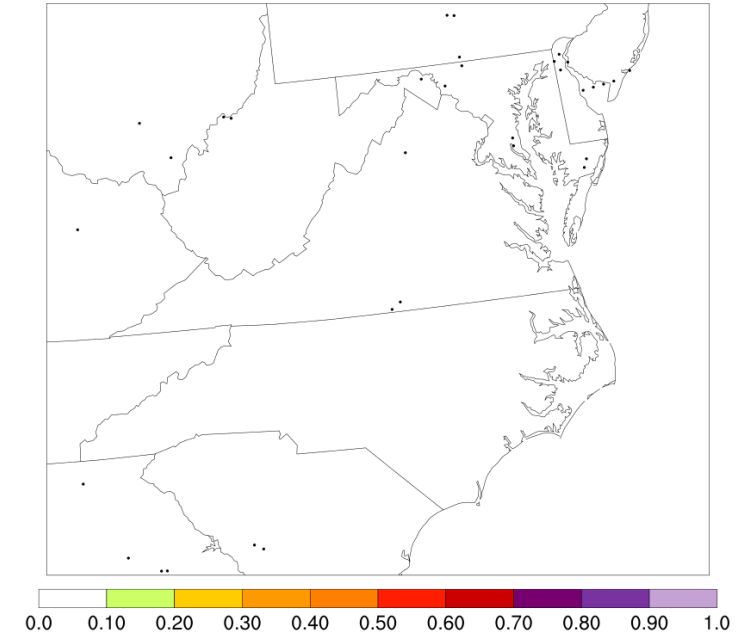
20191218
in situ data from 17990 to 20010 feet
20191218161500 to 20191218163000
EDR >= 0
PIREP data from 17990 to 20010 feet
20191218161500 to 20191218163000
PI >= 0

in situ reports
PIREPs



20191218
in situ data from 19990 to 22010 feet
20191218161500 to 20191218163000
EDR >= 0
PIREP data from 19990 to 22010 feet
20191218161500 to 20191218163000
PI >= 0

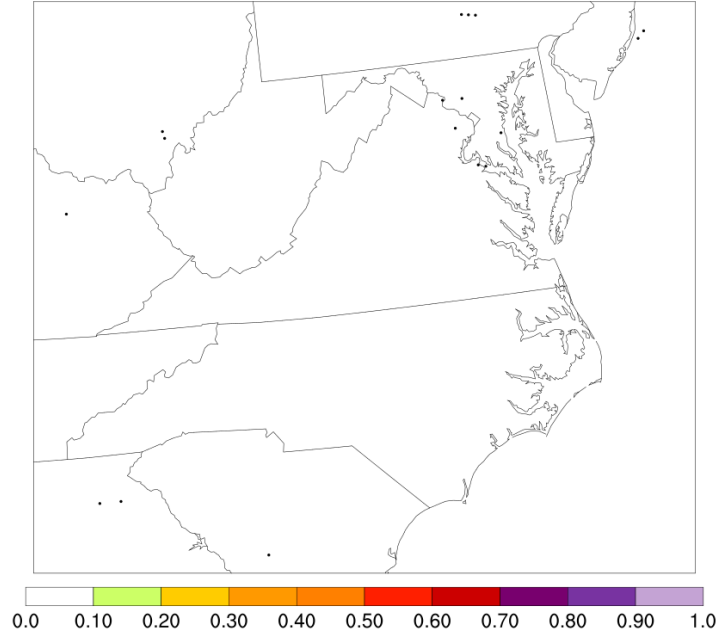
in situ reports
PIREPs



PIREPs & in situ EDR valid 1630 - 1645Z. About 17,000ft, FL190, and FL210

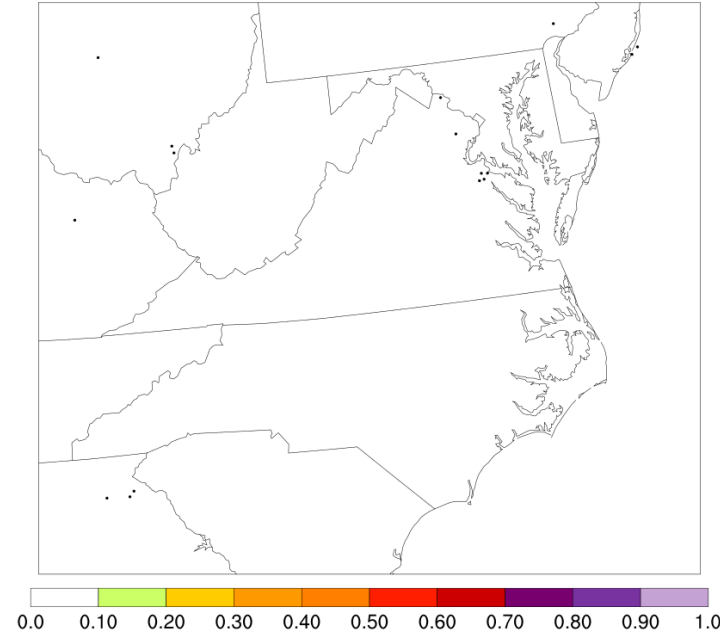
20191218
in situ data from 15990 to 18010 feet
20191218163000 to 20191218164500
EDR >= 0
PIREP data from 15990 to 18010 feet
20191218163000 to 20191218164500
PI >= 0

in situ repor
PIREPs



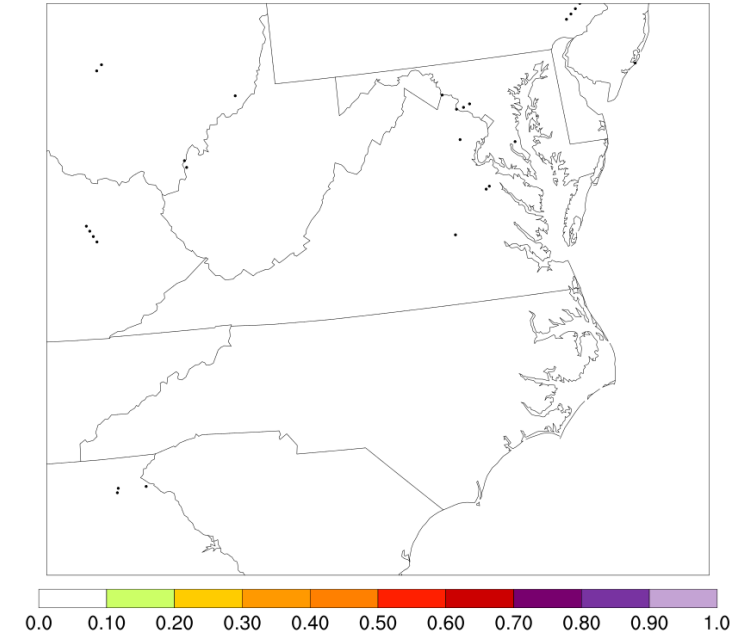
20191218
in situ data from 17990 to 20010 feet
20191218163000 to 20191218164500
EDR >= 0
PIREP data from 17990 to 20010 feet
20191218163000 to 20191218164500
PI >= 0

in situ reports
PIREPs



20191218
in situ data from 19990 to 22010 feet
20191218163000 to 20191218164500
EDR >= 0
PIREP data from 19990 to 22010 feet
20191218163000 to 20191218164500
PI >= 0

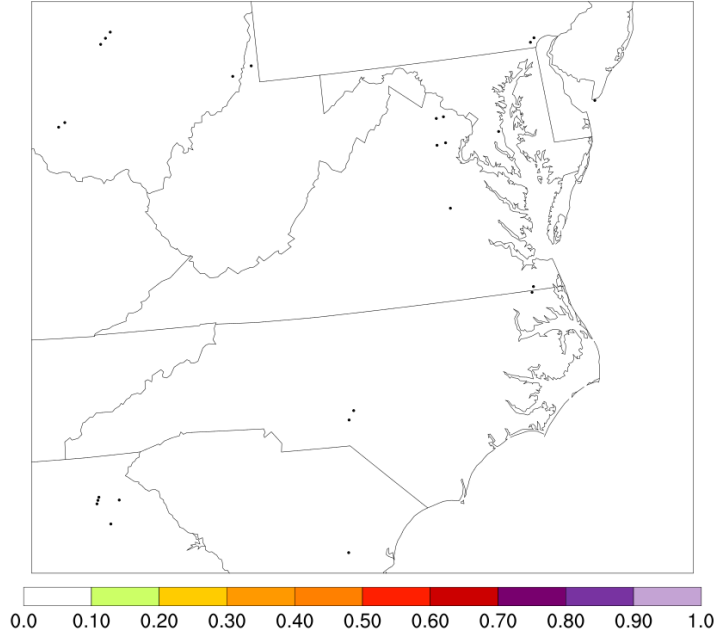
in situ reports
PIREPs



PIREPs & in situ EDR valid 1645 - 1700Z. About 17,000ft, FL190, and FL210

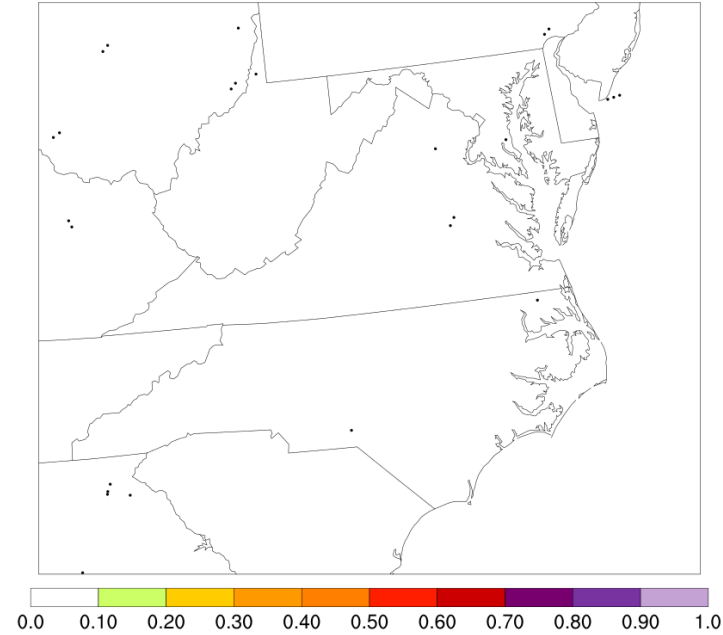
20191218
in situ data from 15990 to 18010 feet
20191218164500 to 20191218170000
EDR >= 0
PIREP data from 15990 to 18010 feet
20191218164500 to 20191218170000
PI >= 0

in situ repor
PIREPs



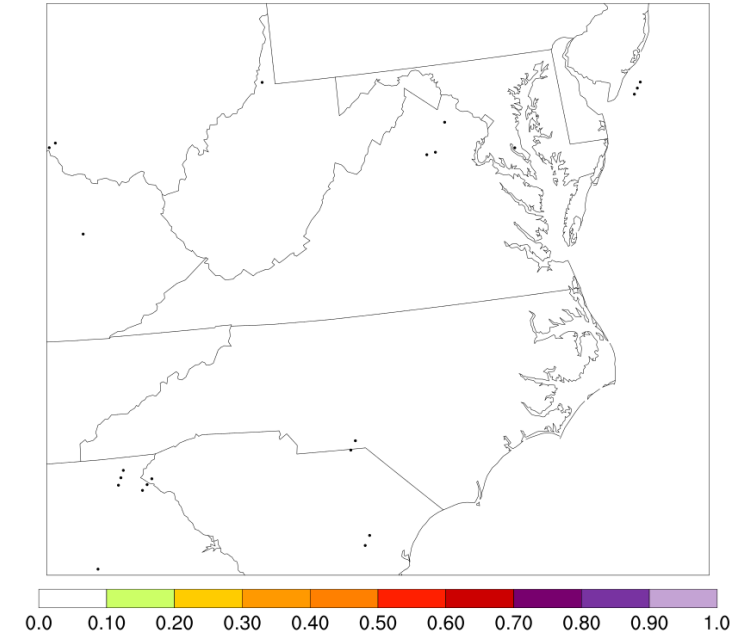
20191218
in situ data from 17990 to 20010 feet
20191218164500 to 20191218170000
EDR >= 0
PIREP data from 17990 to 20010 feet
20191218164500 to 20191218170000
PI >= 0

in situ reports
PIREPs



20191218
in situ data from 19990 to 22010 feet
20191218164500 to 20191218170000
EDR >= 0
PIREP data from 19990 to 22010 feet
20191218164500 to 20191218170000
PI >= 0

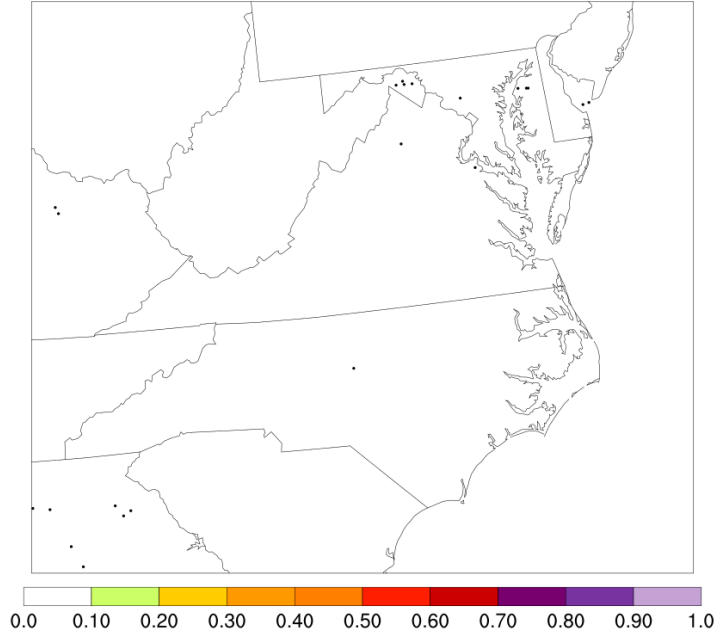
in situ reports
PIREPs



PIREPs & in situ EDR valid 1700 - 1715Z. About 17,000ft, FL190, and FL210

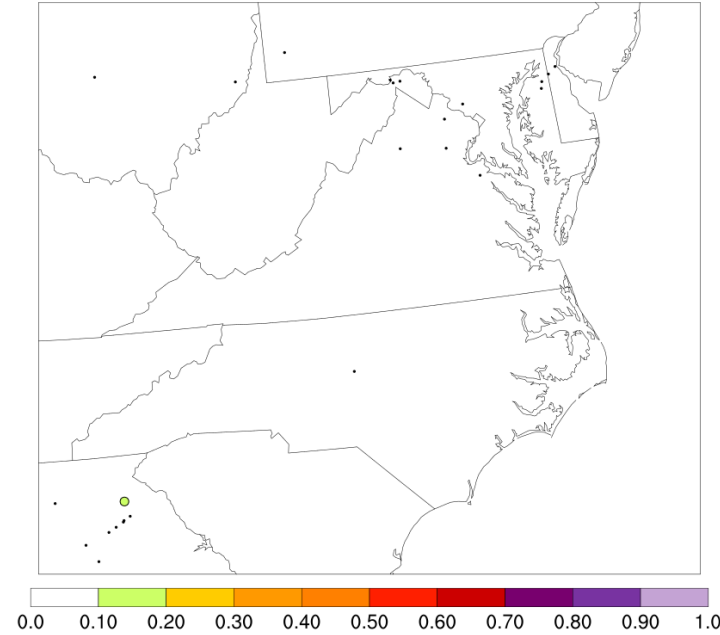
20191218
in situ data from 15990 to 18010 feet
20191218170000 to 20191218171500
EDR >= 0
PIREP data from 15990 to 18010 feet
20191218170000 to 20191218171500
PI >= 0

in situ repor
PIREPs



20191218
in situ data from 17990 to 20010 feet
20191218170000 to 20191218171500
EDR >= 0
PIREP data from 17990 to 20010 feet
20191218170000 to 20191218171500
PI >= 0

in situ reports
PIREPs



20191218
in situ data from 19990 to 22010 feet
20191218170000 to 20191218171500
EDR >= 0
PIREP data from 19990 to 22010 feet
20191218170000 to 20191218171500
PI >= 0

in situ reports
PIREPs

