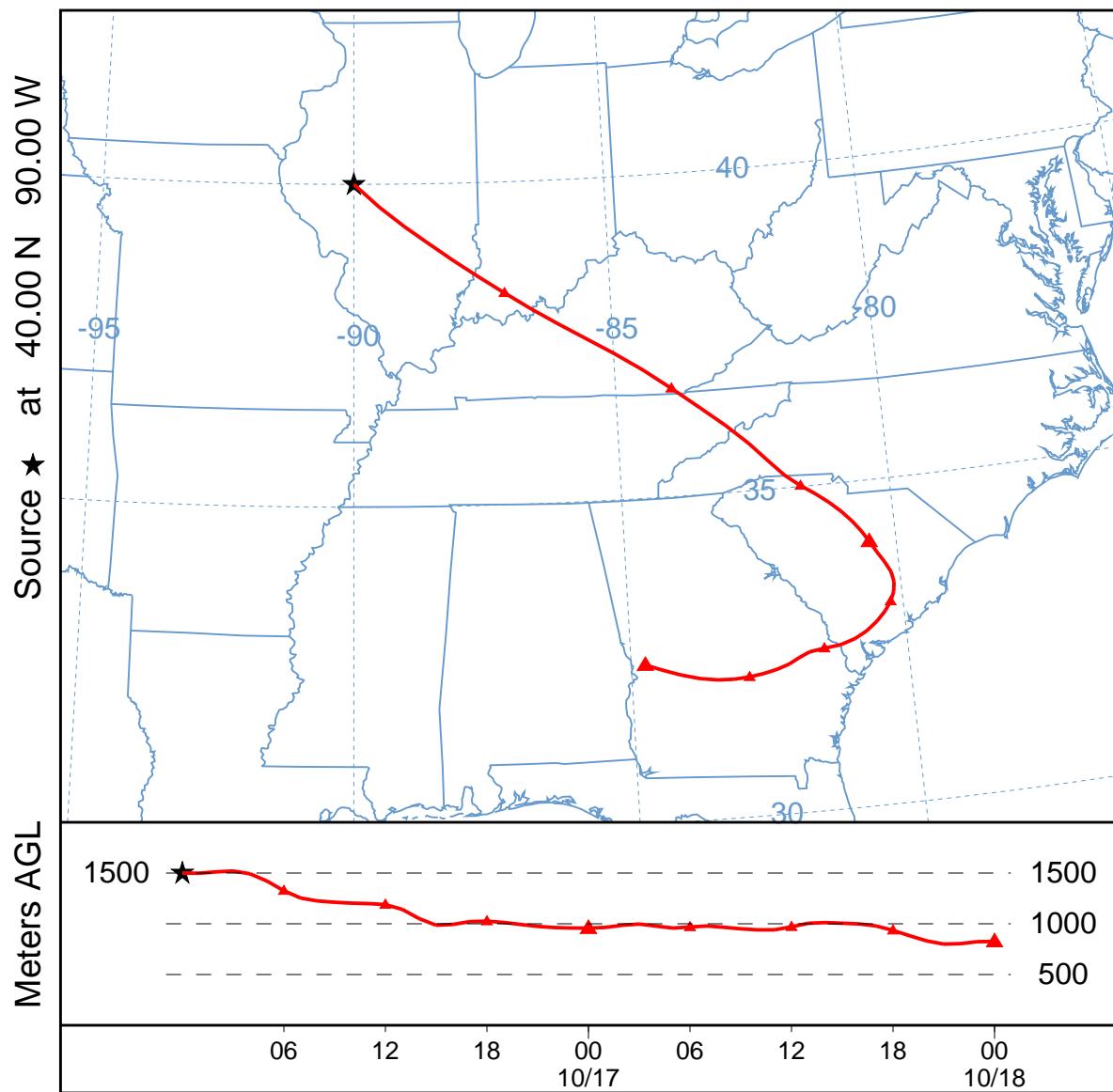


# HYSPLIT TEST RESULTS

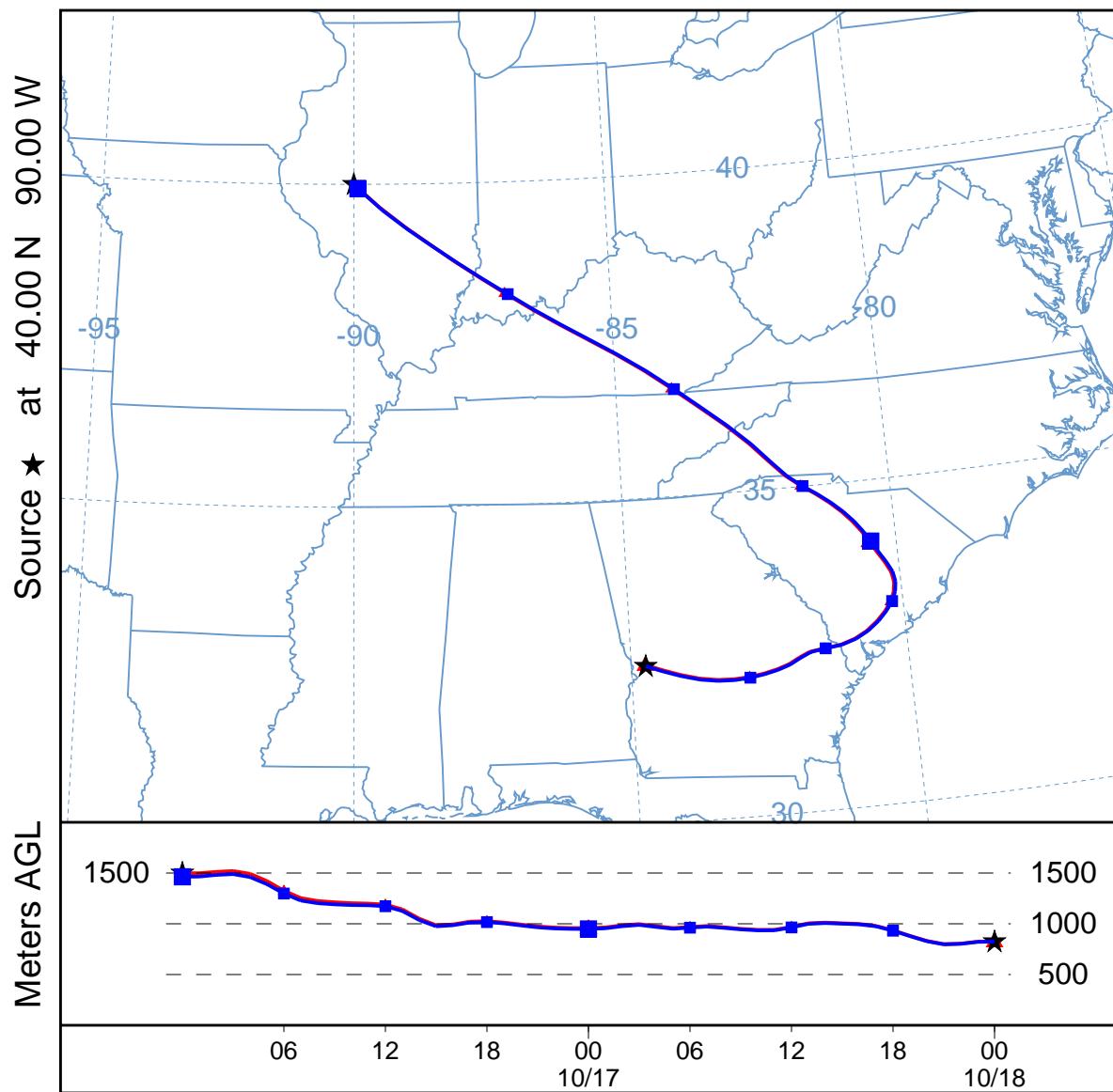
May 2021

Version 5.1.0

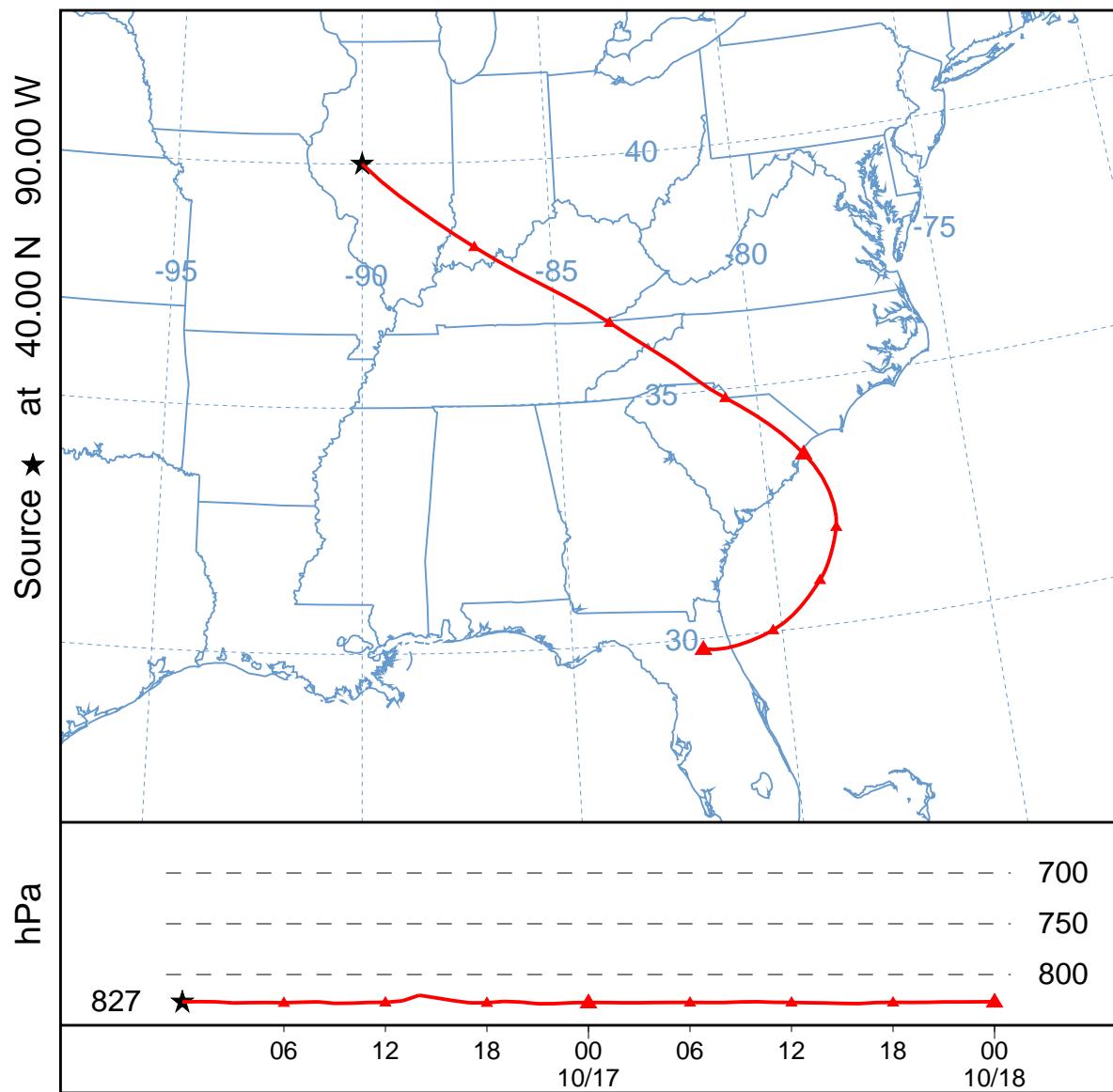
Forward Trajectory (001)  
Forward trajectory starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



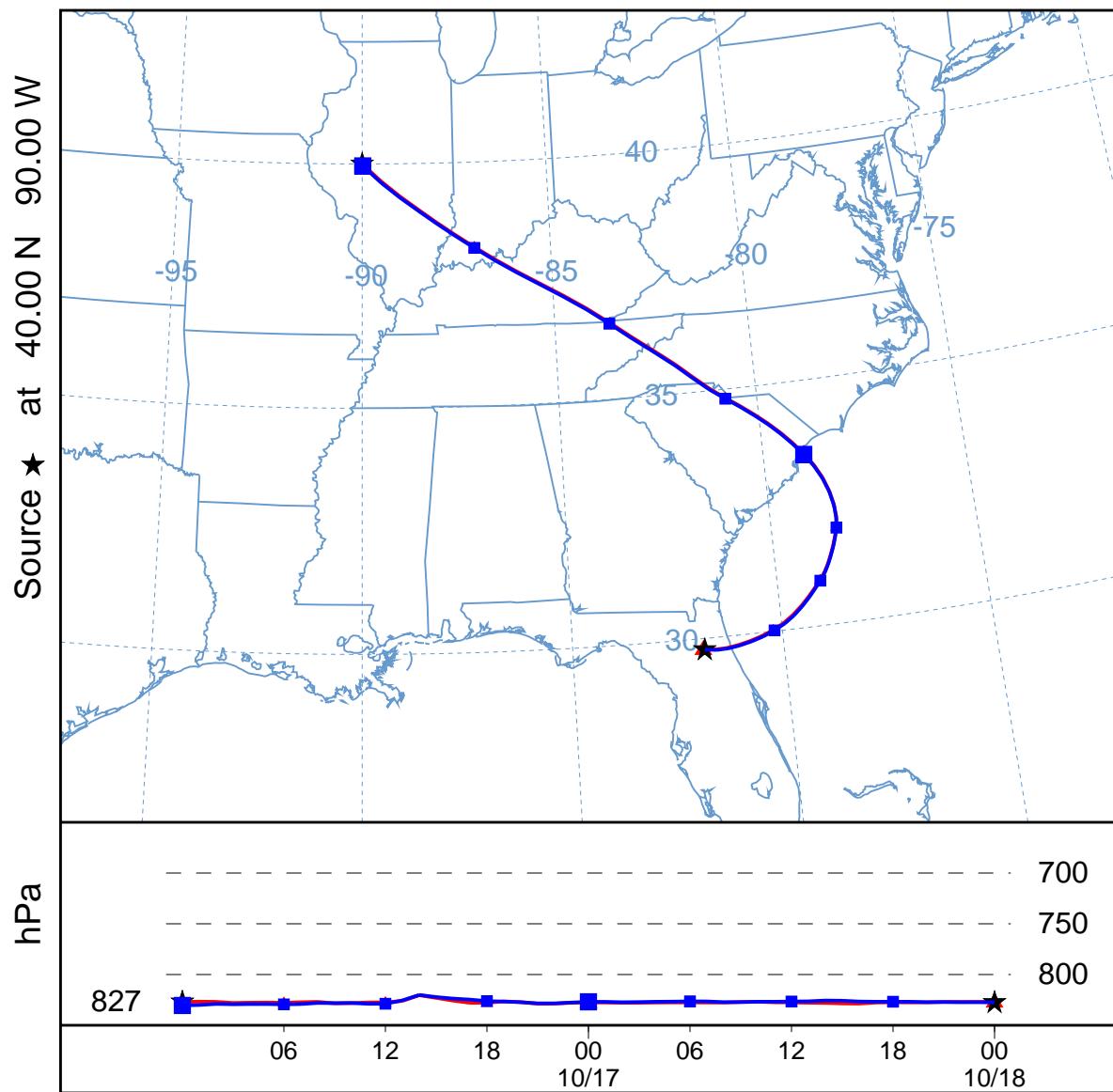
Add Backward Trajectory (002)  
Forward trajectory starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



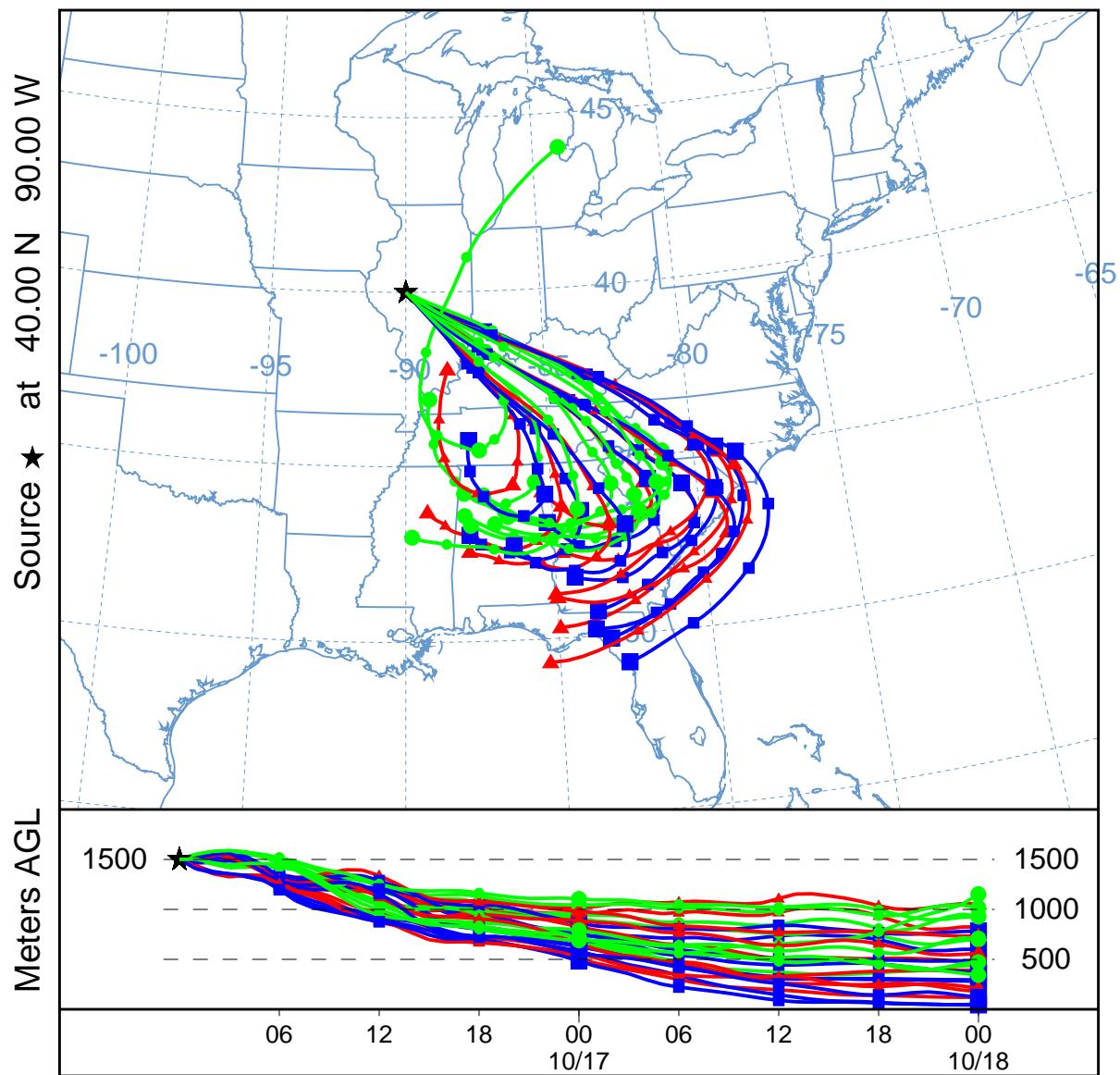
Forward Isobaric Trajectory (003)  
Forward trajectory starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



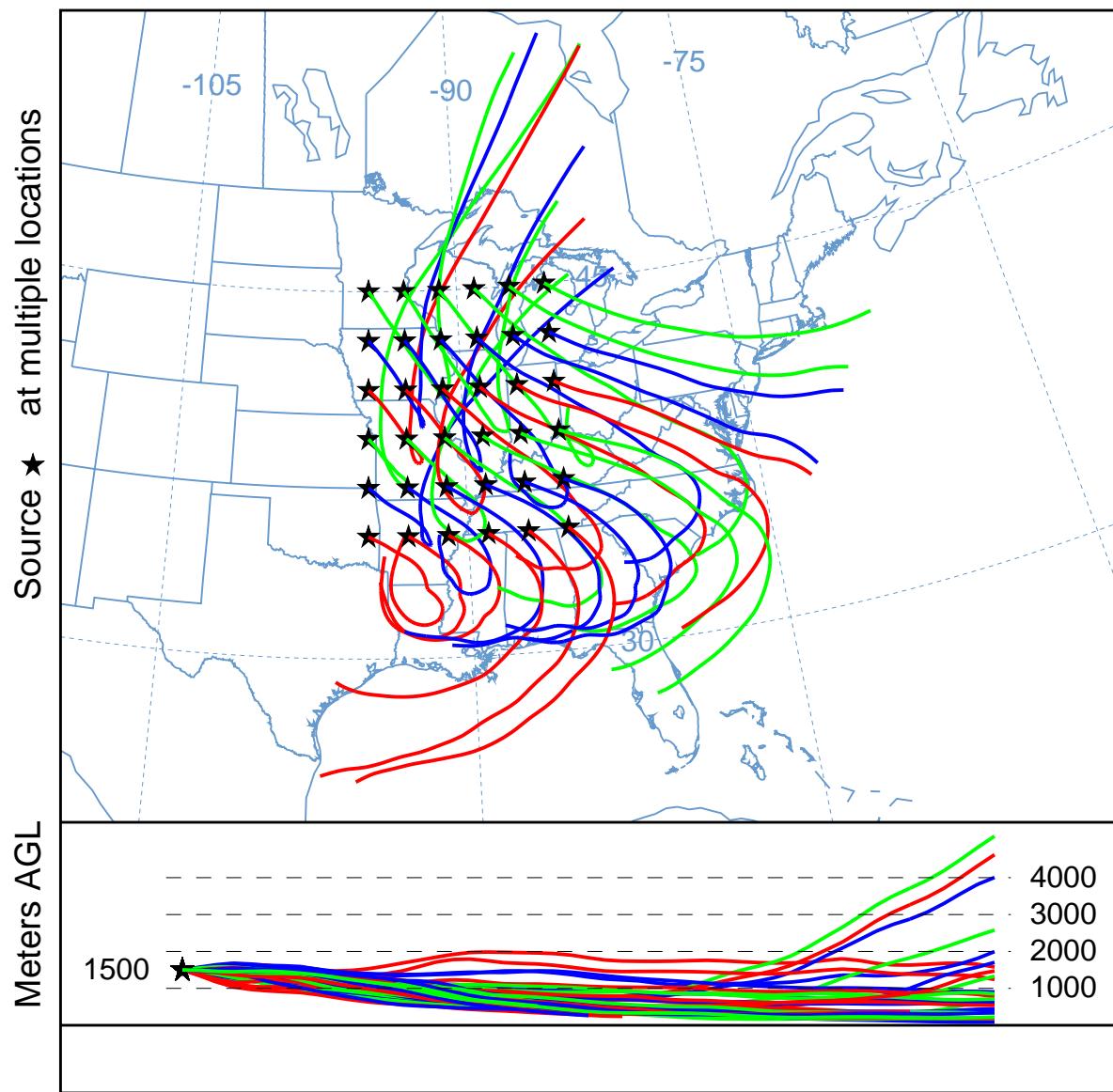
Add Backward Isobaric Trajectory (004)  
Forward trajectory starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



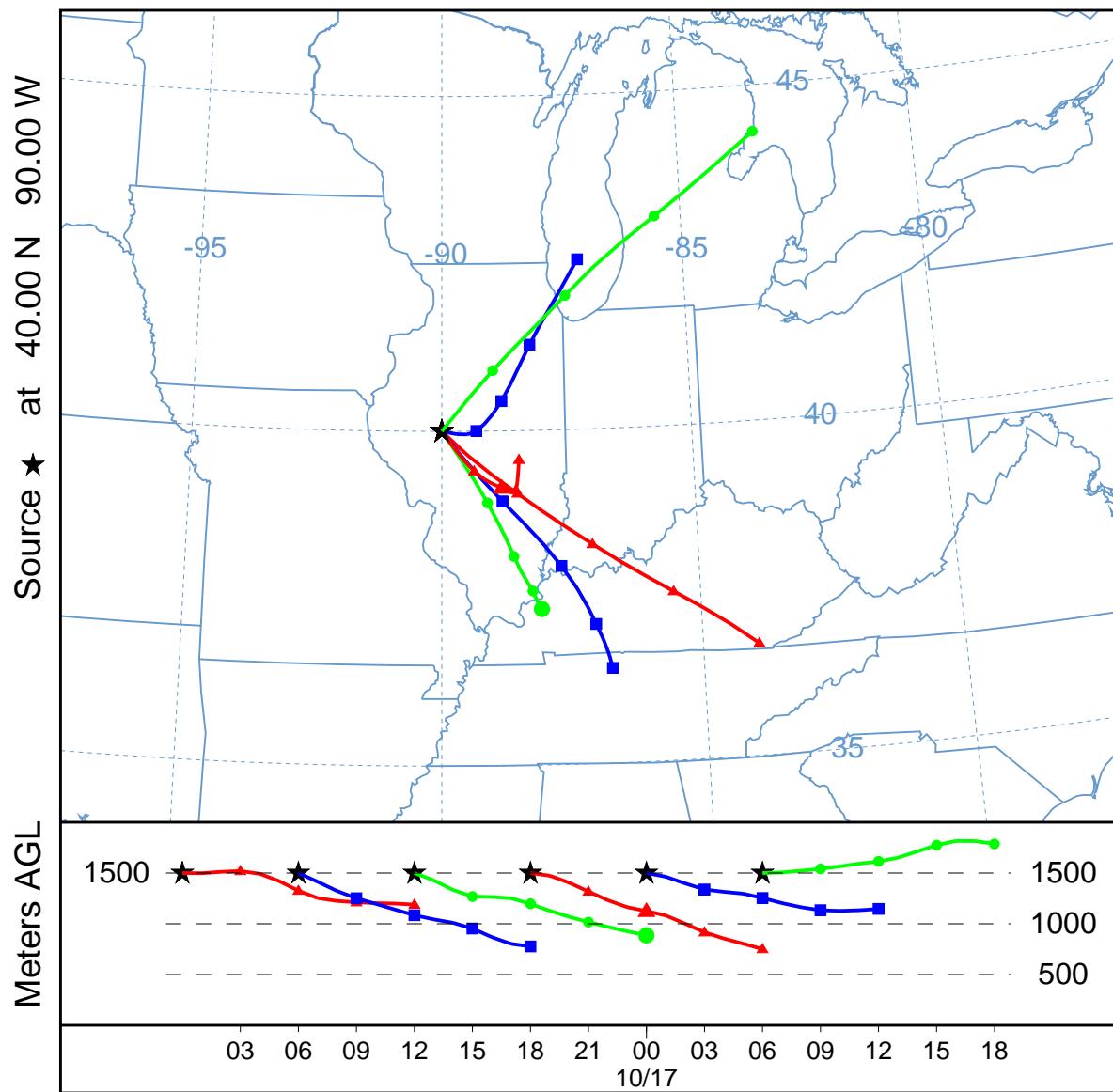
Trajectory Ensemble (005)  
Forward trajectories starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



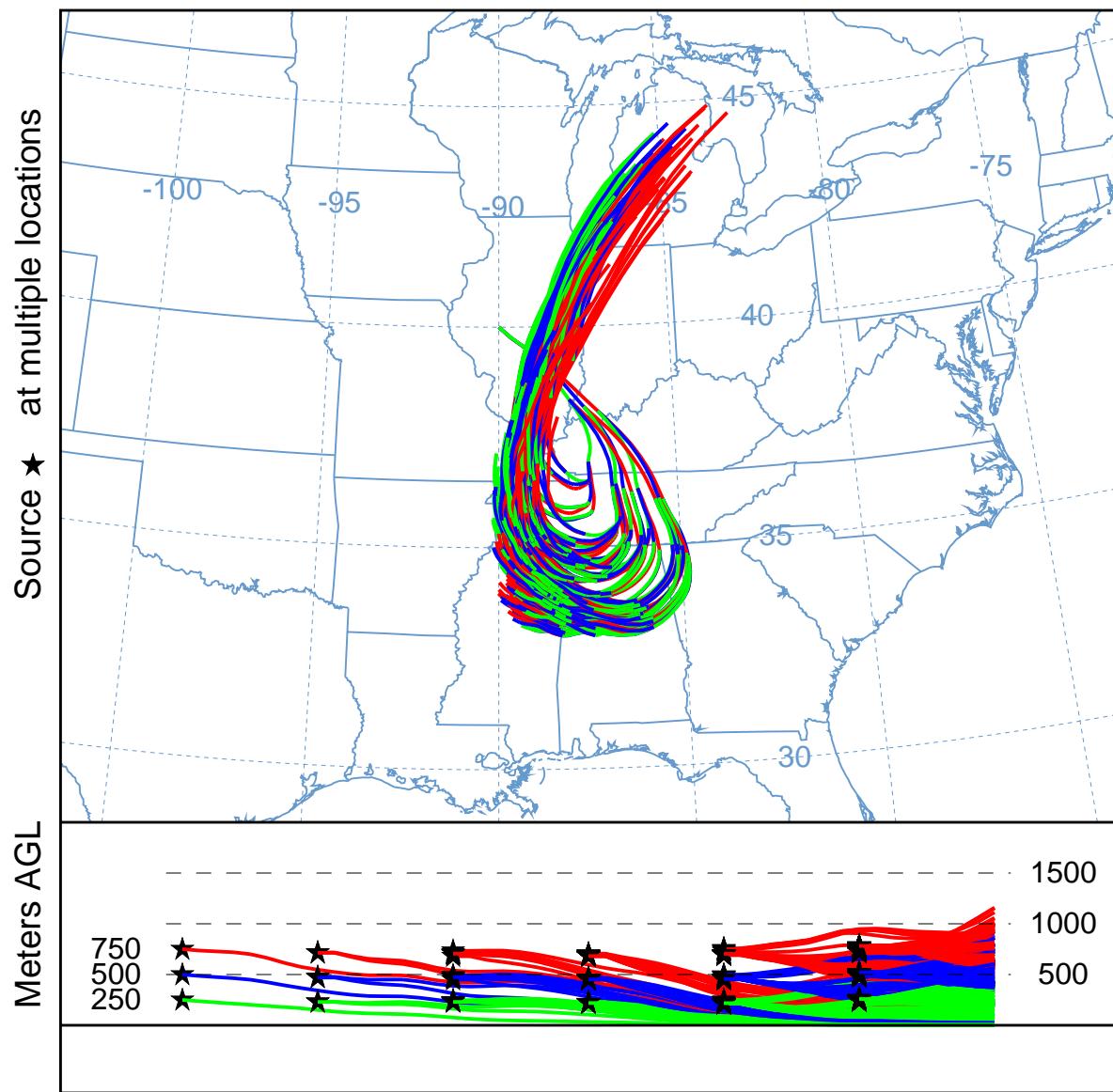
Trajectory Matrix (006)  
Forward trajectories starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



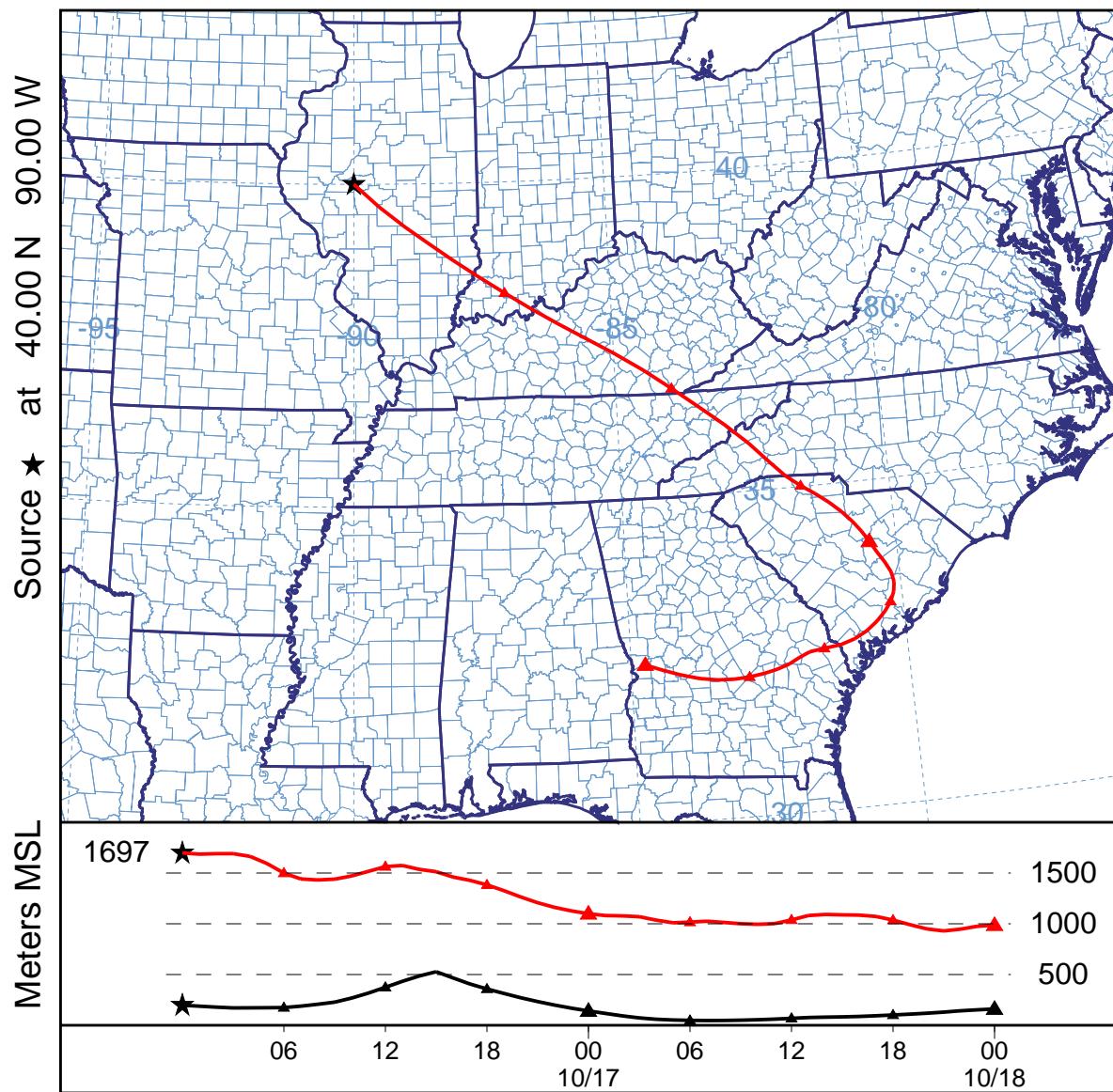
Multiple-in-Time Trajectory (007)  
Forward trajectories starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



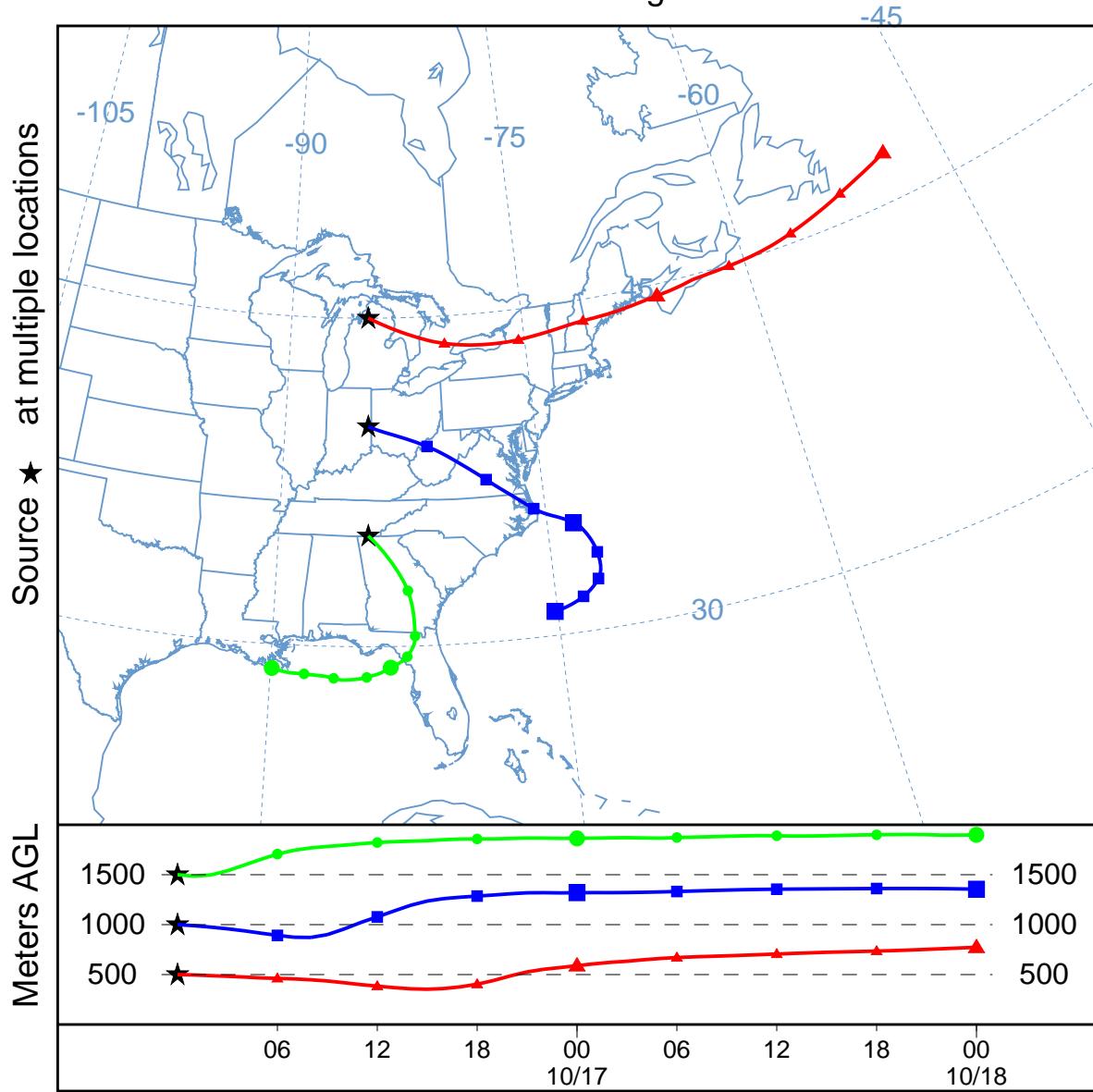
Splitting-in-Time Trajectory (008)  
Forward trajectories starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



Terrain below Trajectory (009)  
Forward trajectory starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



Multiple Meteorology Trajectory (109)  
Forward trajectories starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data

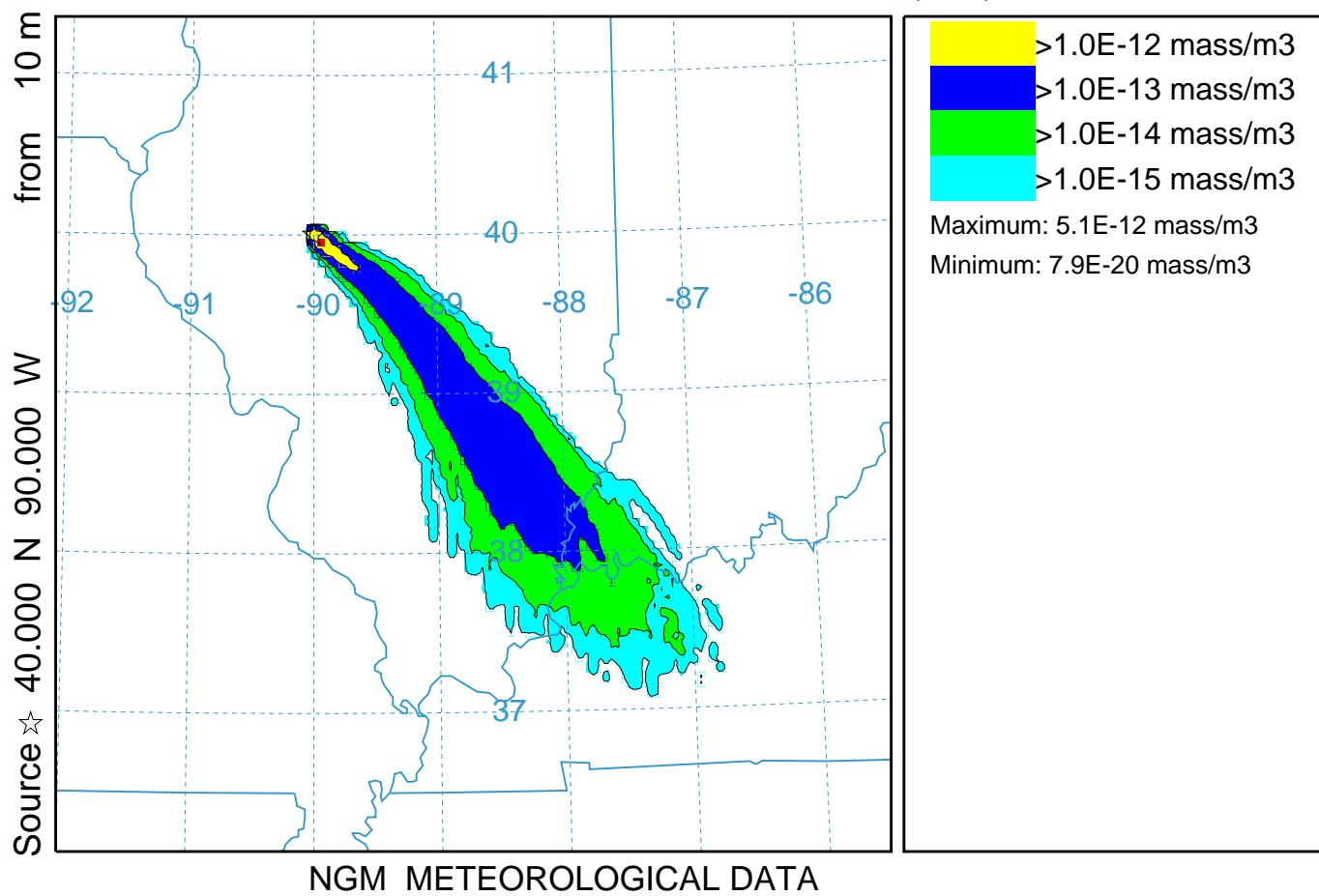


## Standard Dispersion Simulation (010)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

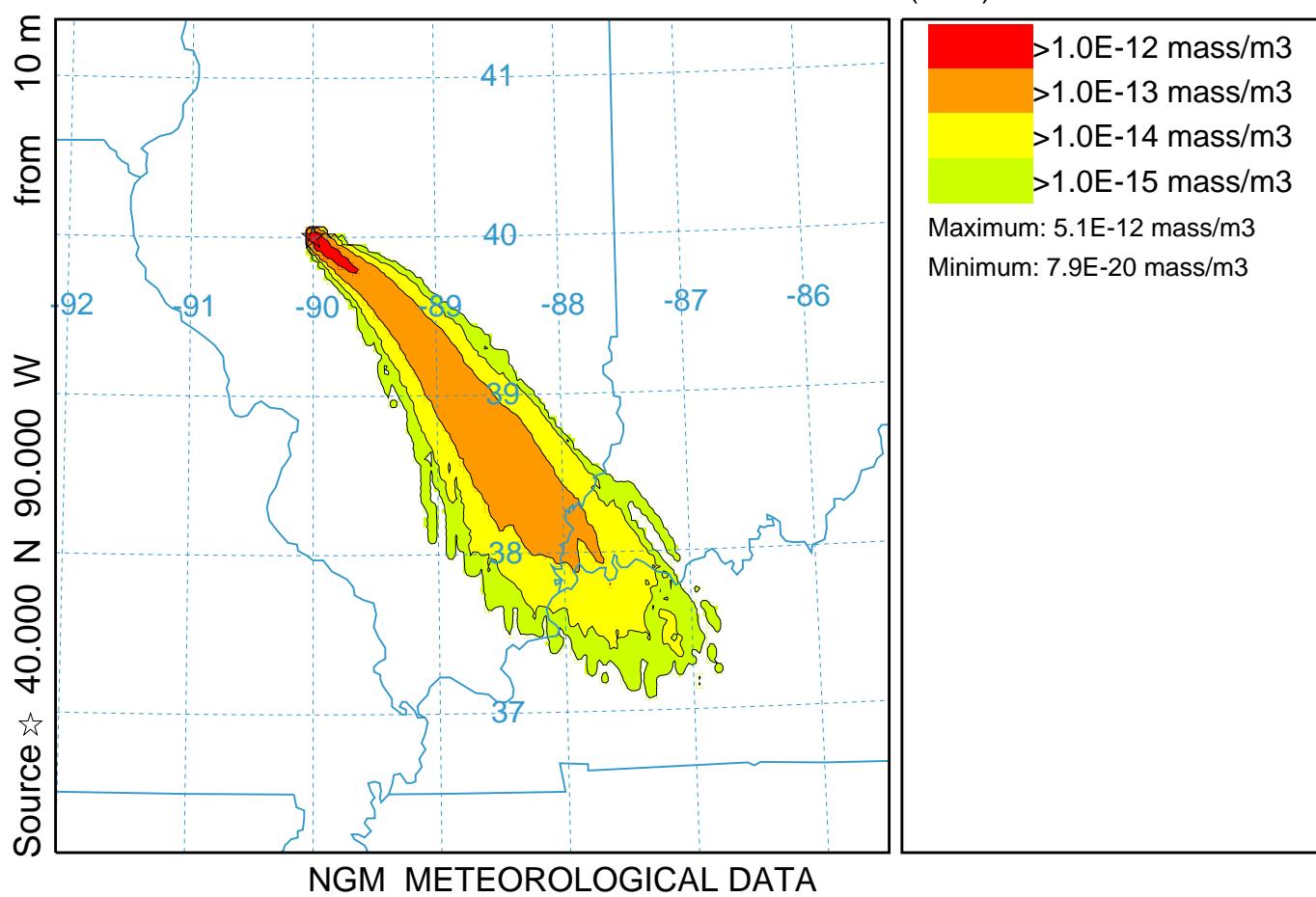


## Standard Dispersion With 4 User Set Contours (110)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

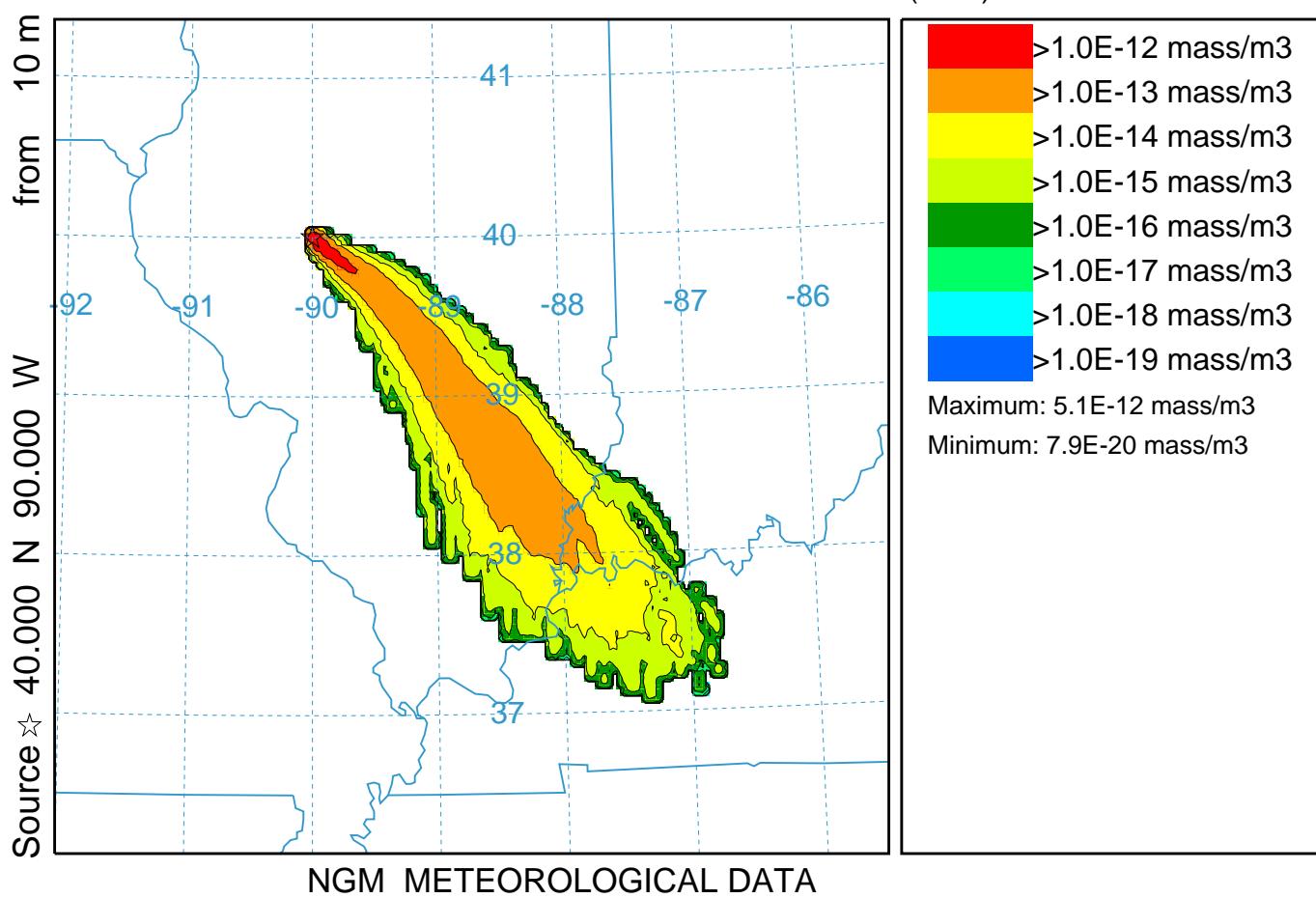


## NOAA HYSPLIT MODEL

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

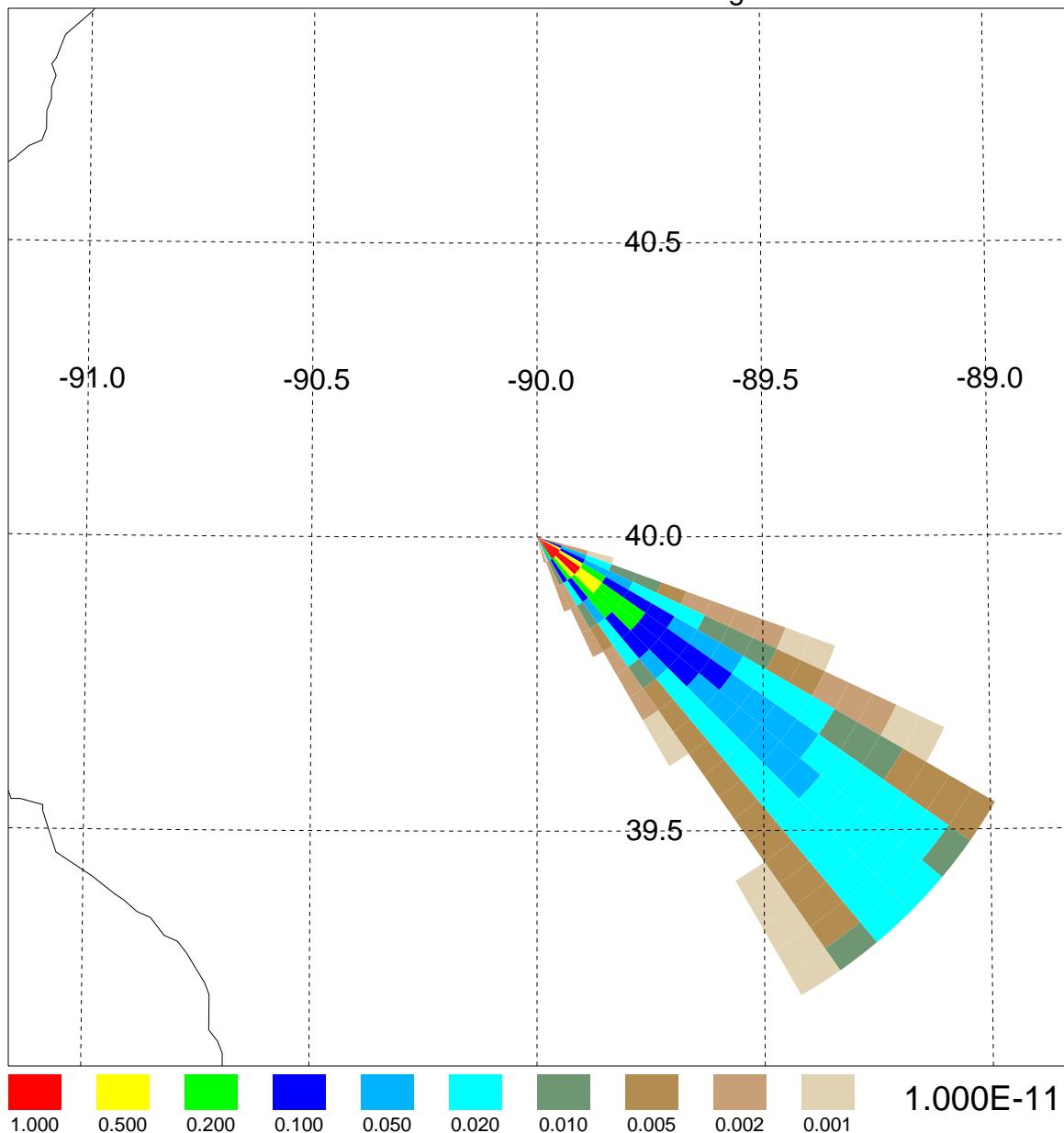
Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)



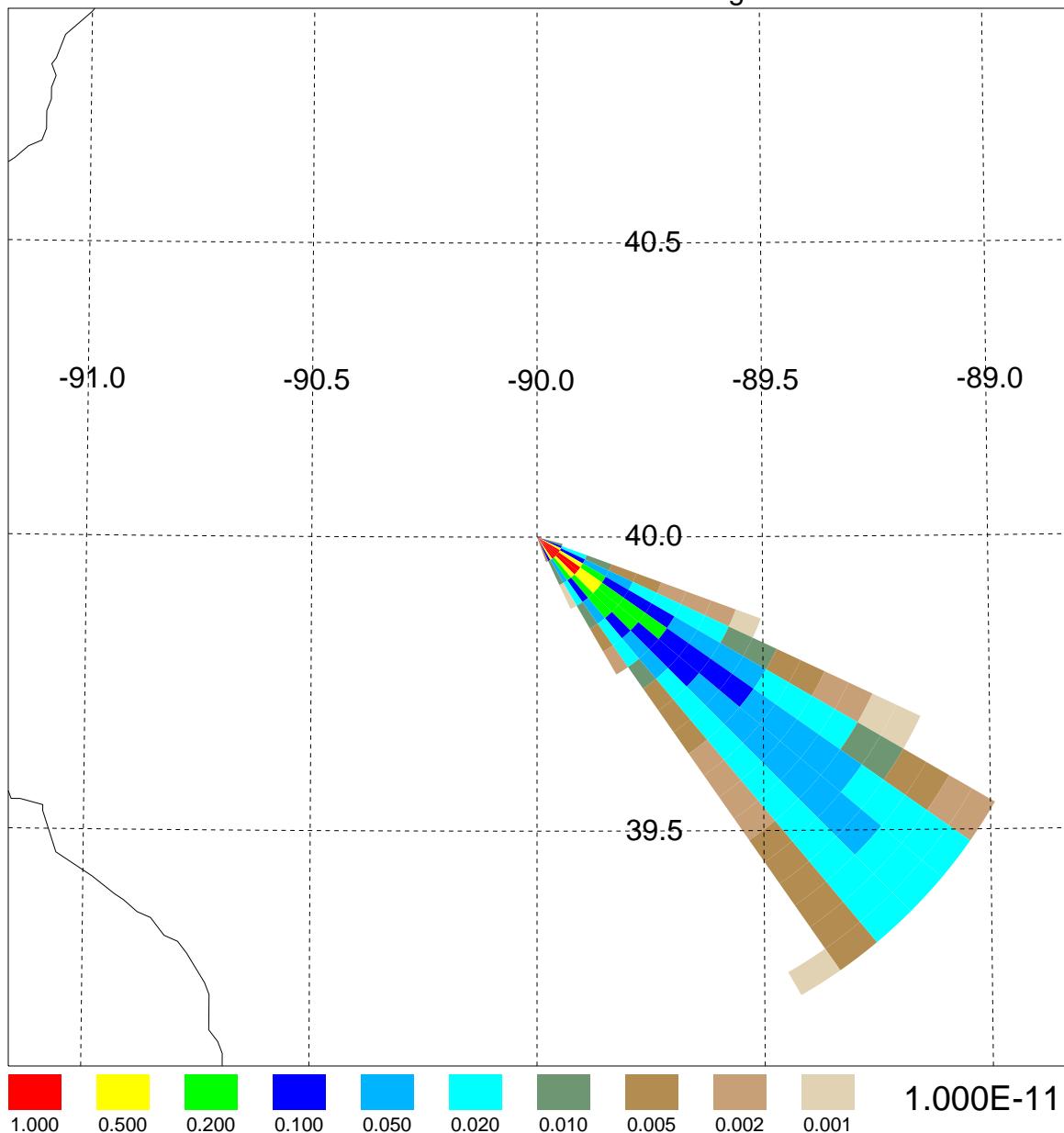
1995 10 16 00 00

Pollutant: TEST Height: 100



1995 10 16 00 00

Pollutant: TEST Height: 100

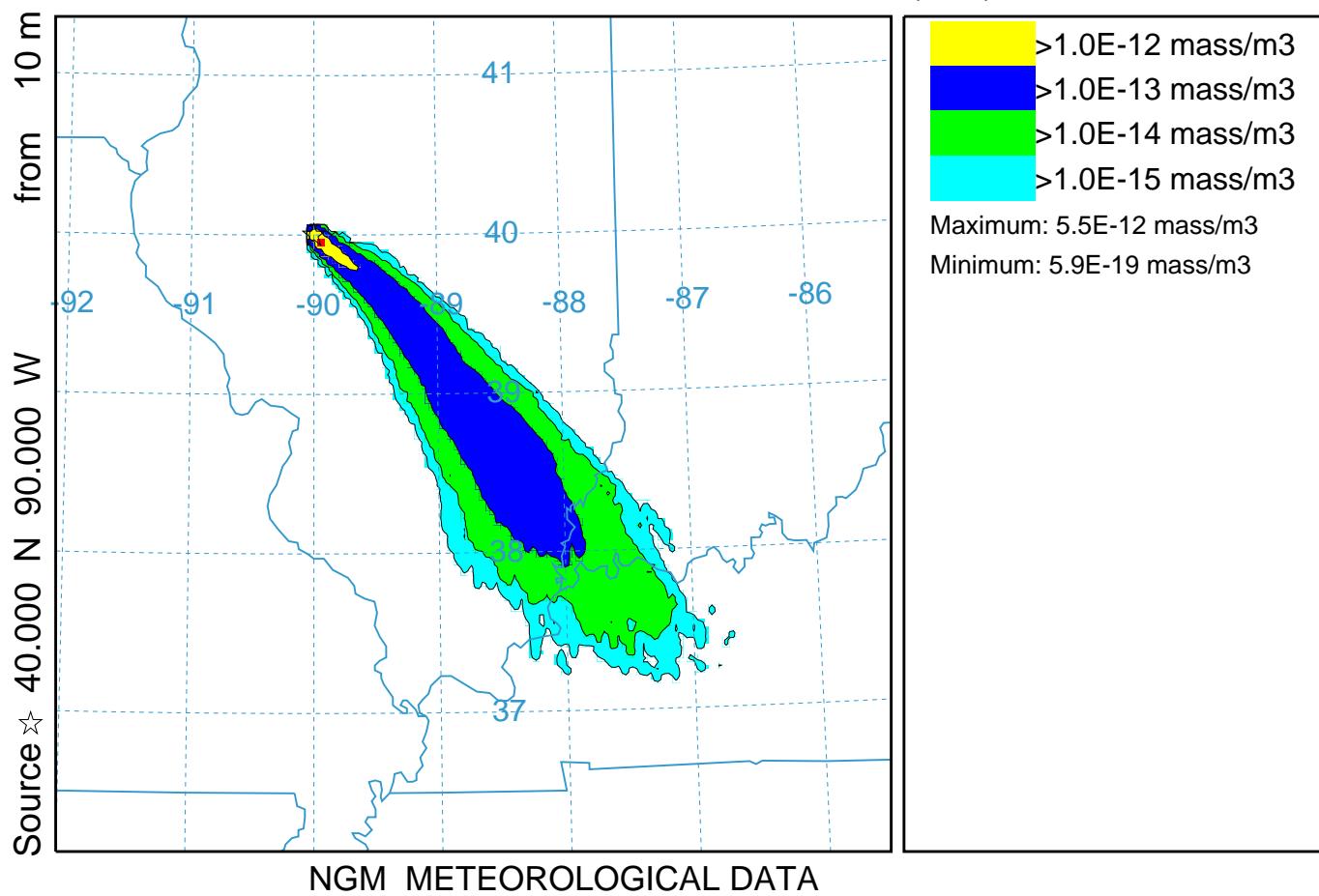


### Polar+Rectangular Grid (510)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

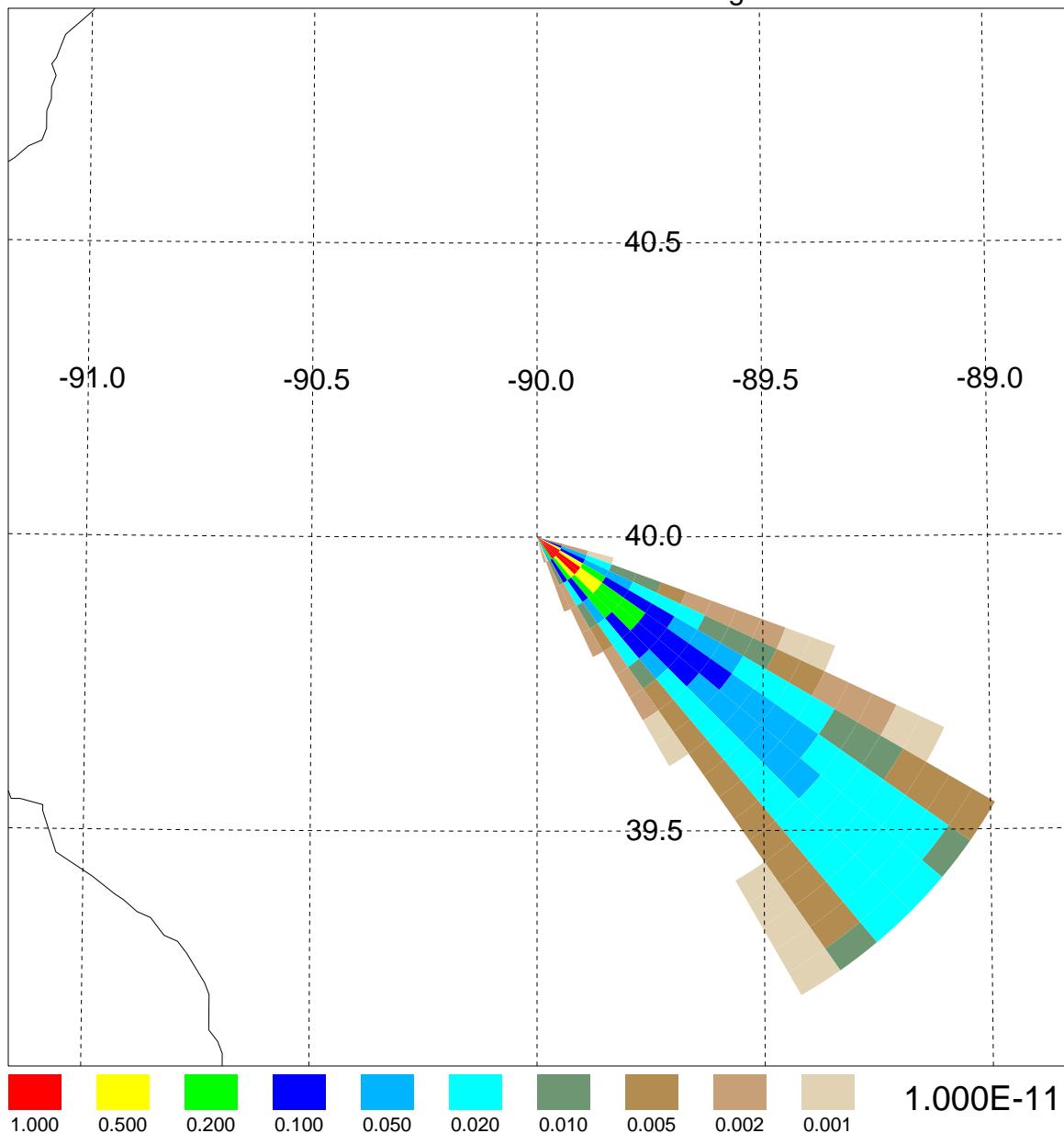
Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)



1995 10 16 00 00

Pollutant: TEST Height: 100

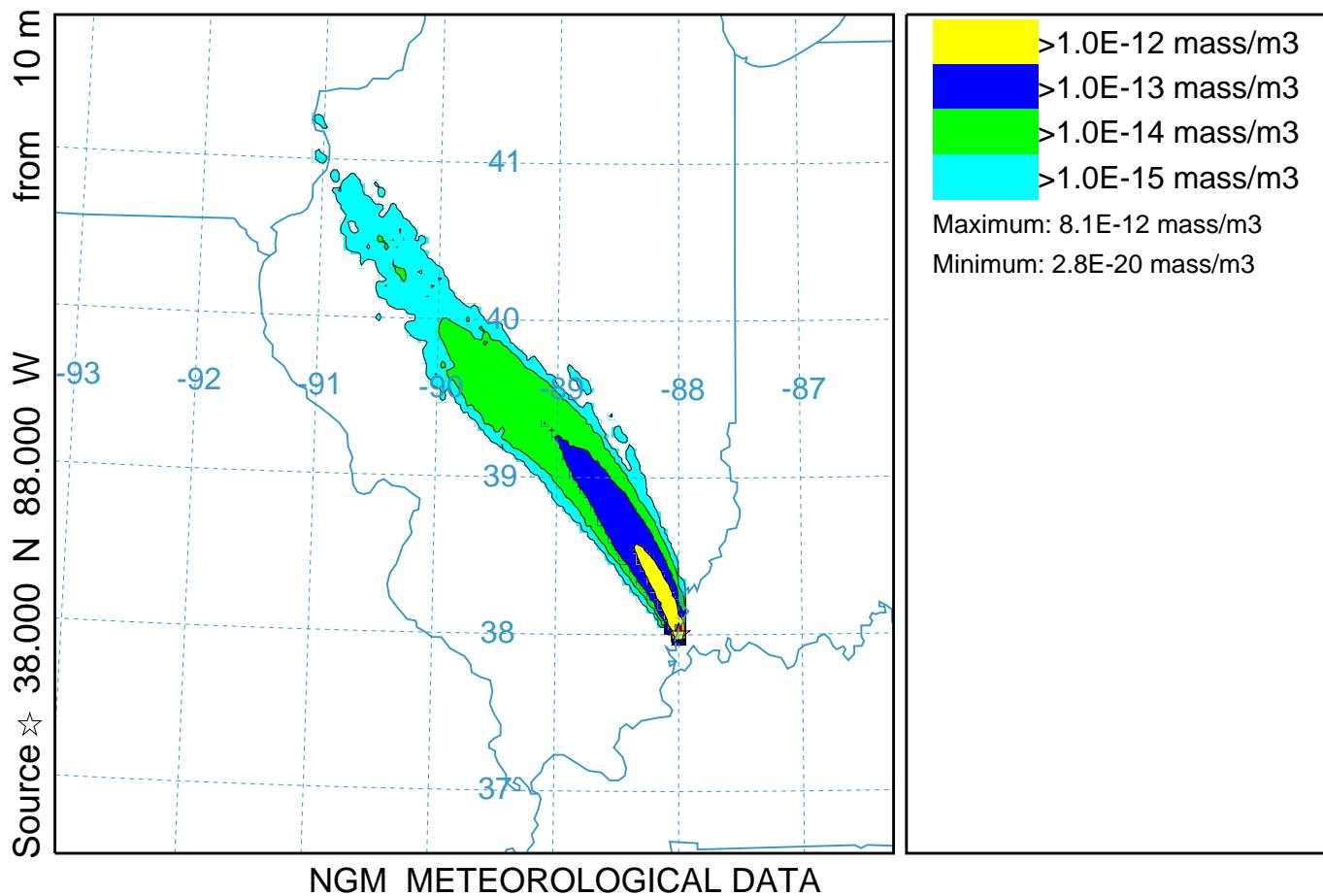


## Backward Dispersion for Attribution (011)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1200 16 Oct to 0000 16 Oct 95 (UTC) [backward]

TEST Calculation started at 1200 16 Oct 95 (UTC)

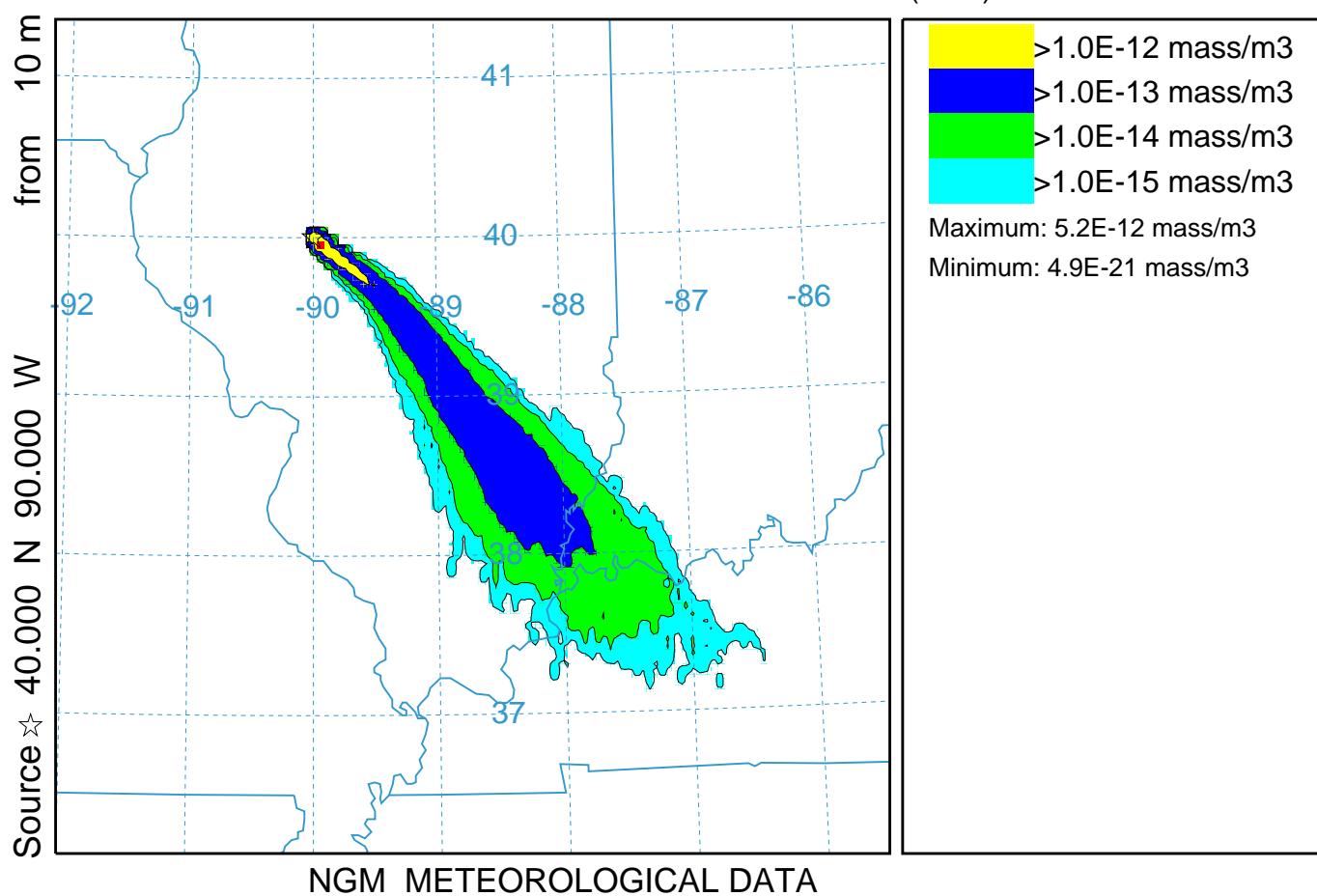


## Dispersion using Deformation (012)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

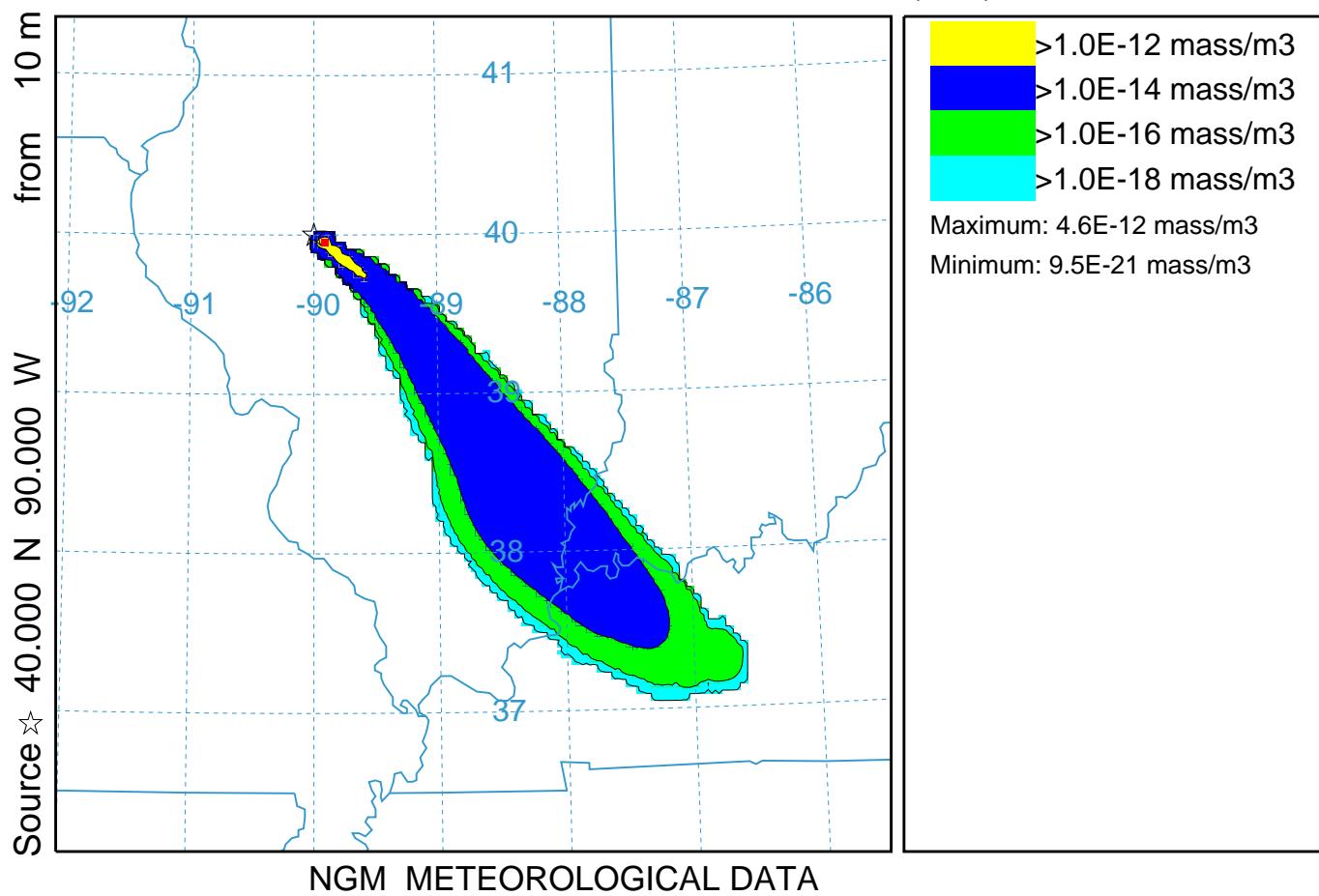


### Top-Hat Linear Puff Dispersion (013)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

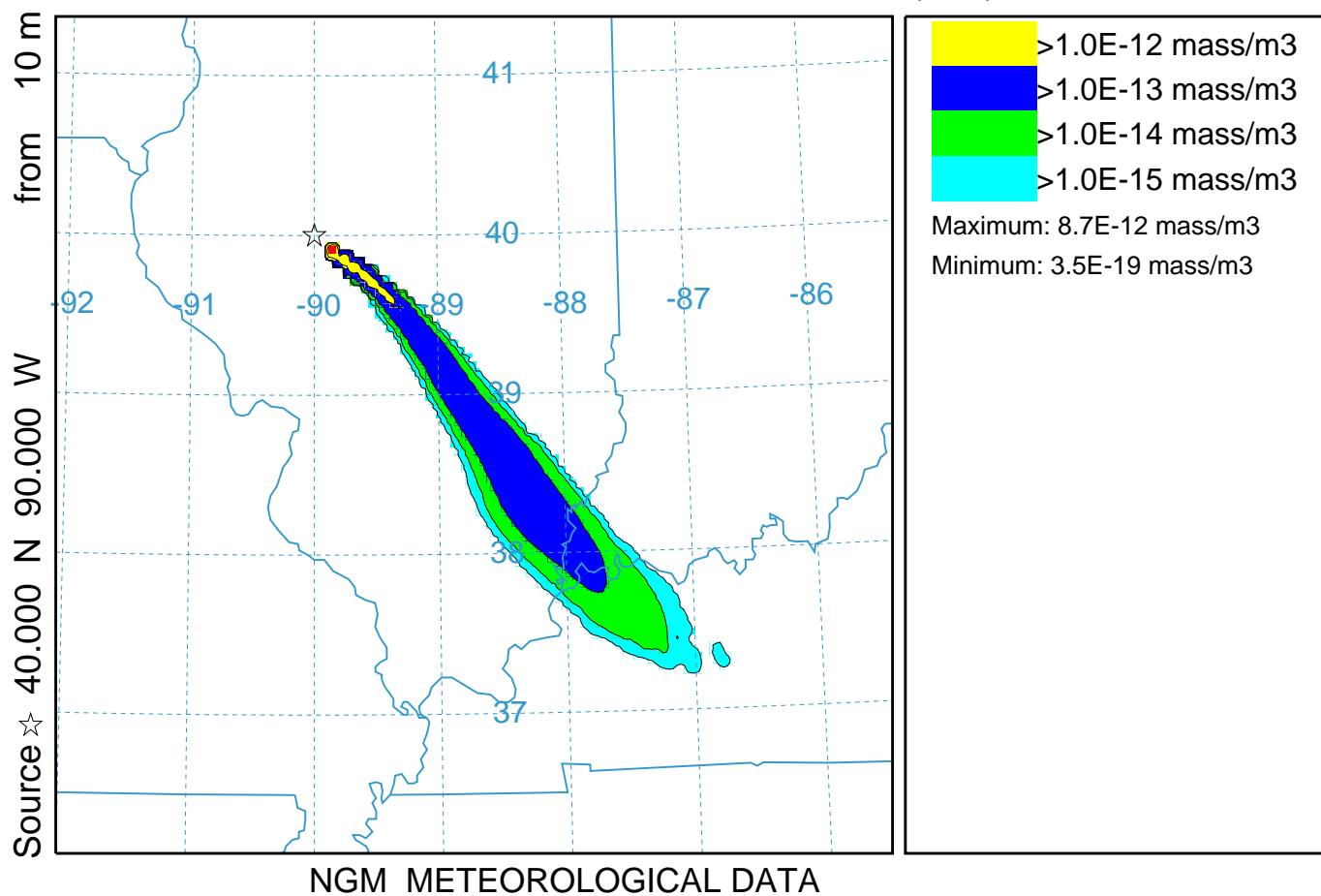


## Top-Hat Empirical Puff Dispersion (014)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

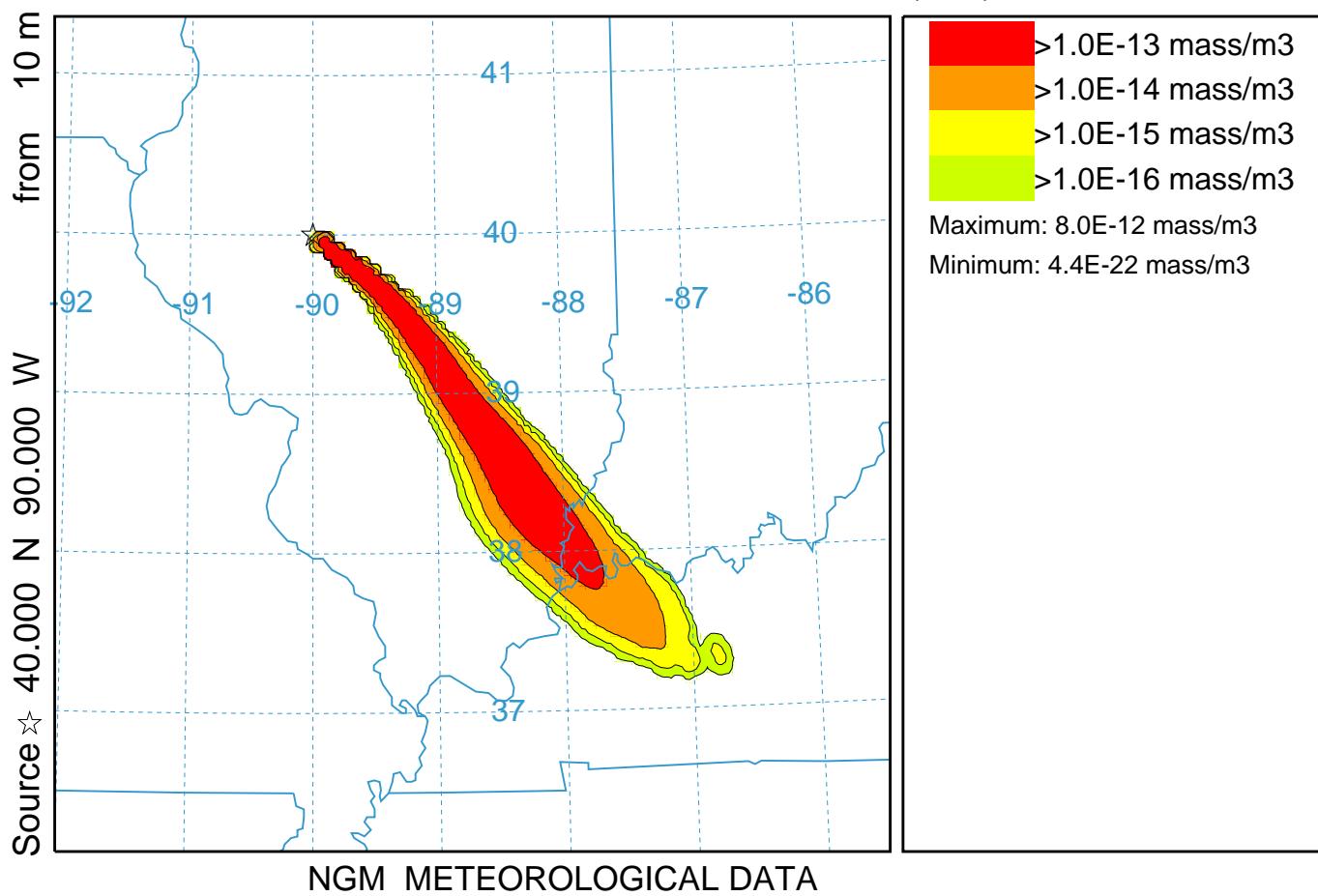


### Gaussian Empirical Puff Dispersion (015)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

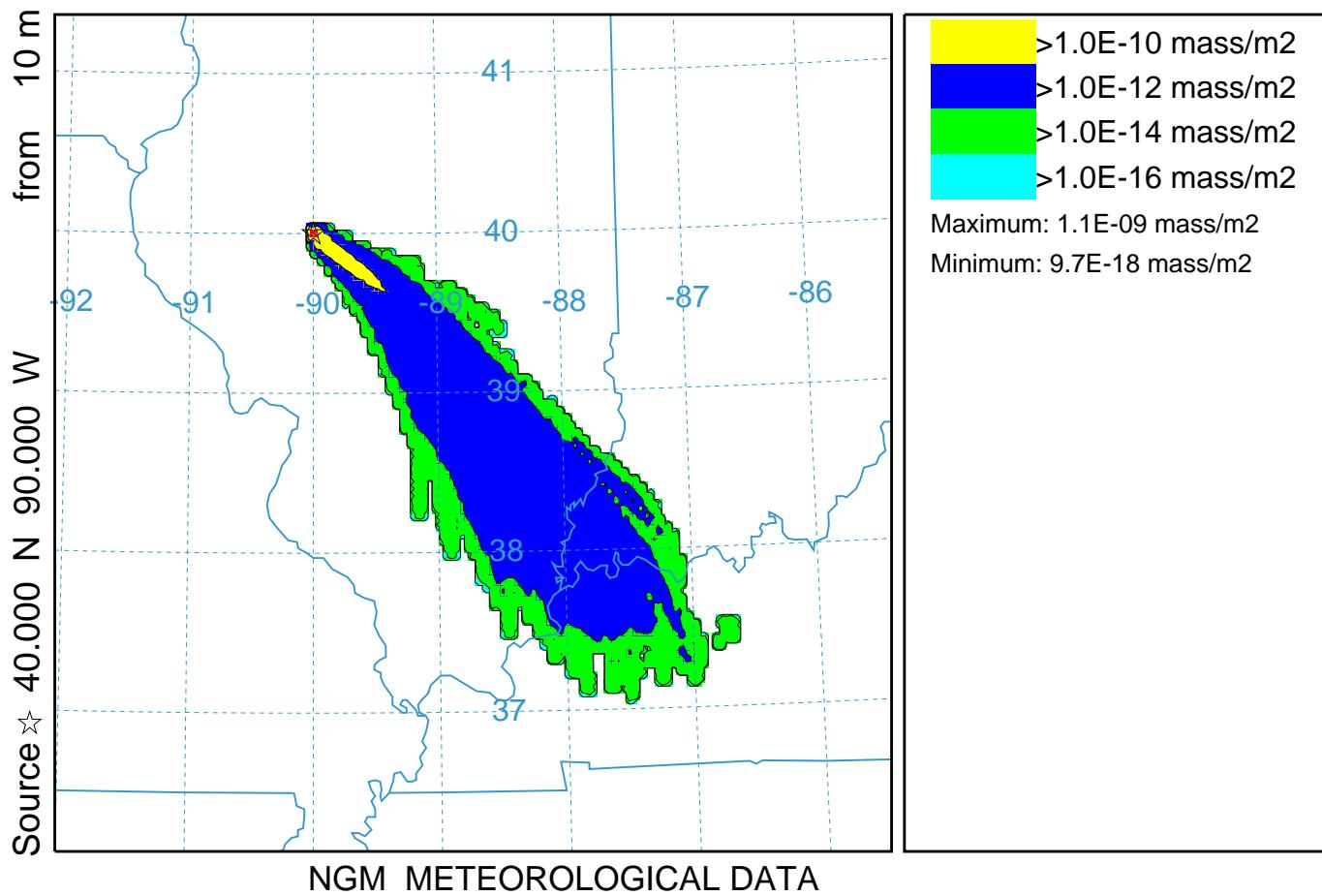


## Deposition using Size and Density (016)

Deposition (mass/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

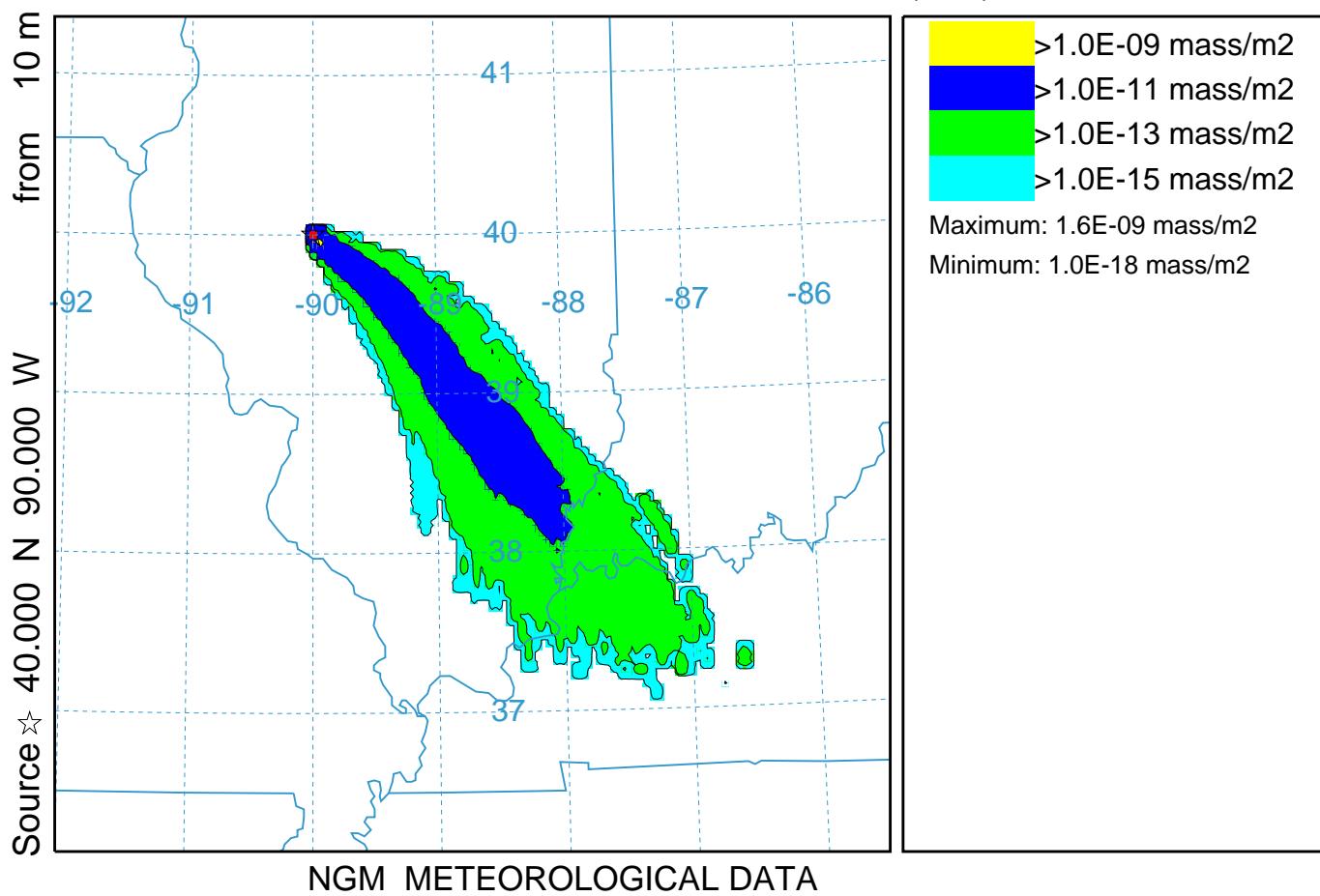


## Deposition using Multiple Size Bins (116)

Deposition (mass/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

SUM Release started at 0000 16 Oct 95 (UTC)

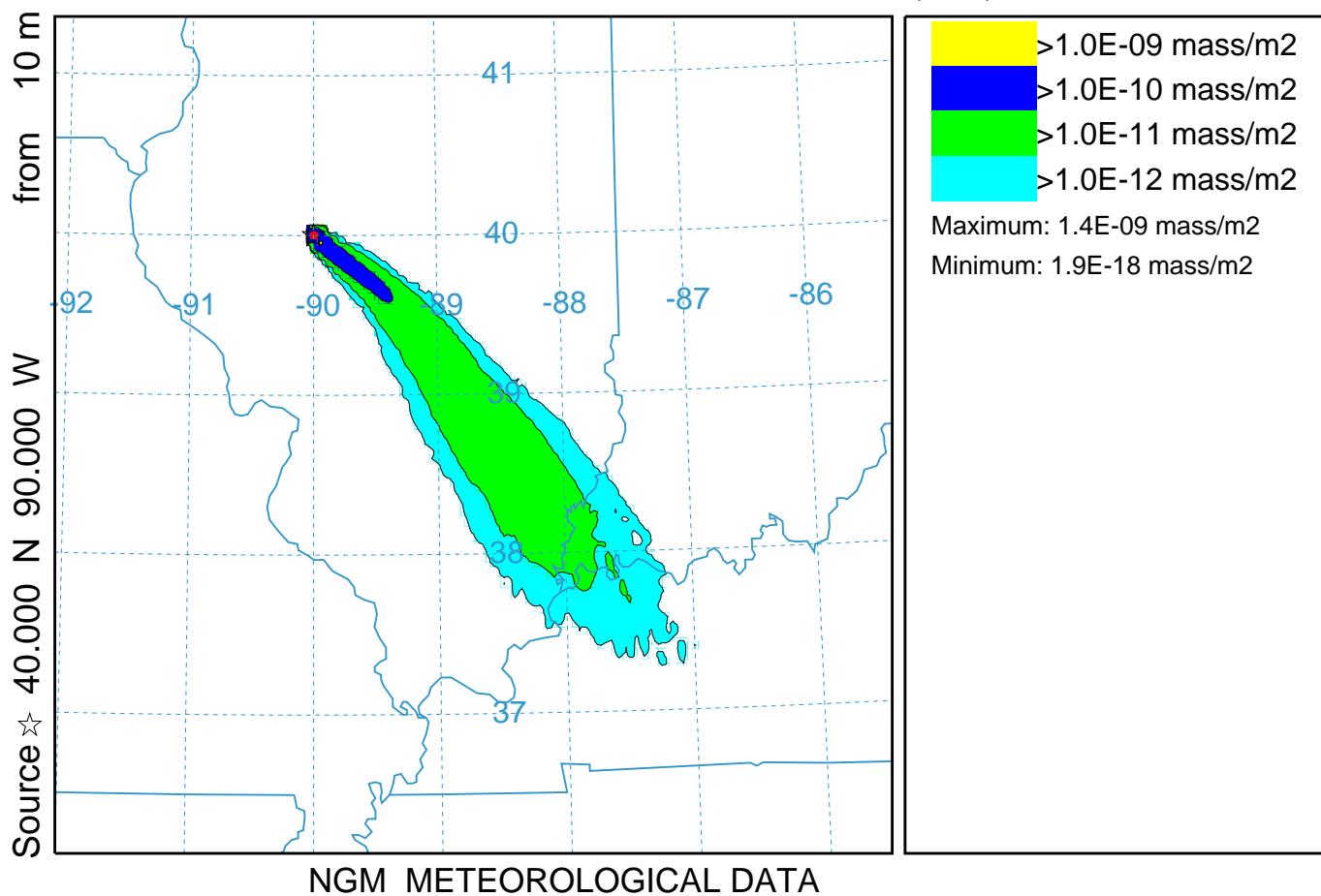


## Deposition using specified velocity (017)

Deposition (mass/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

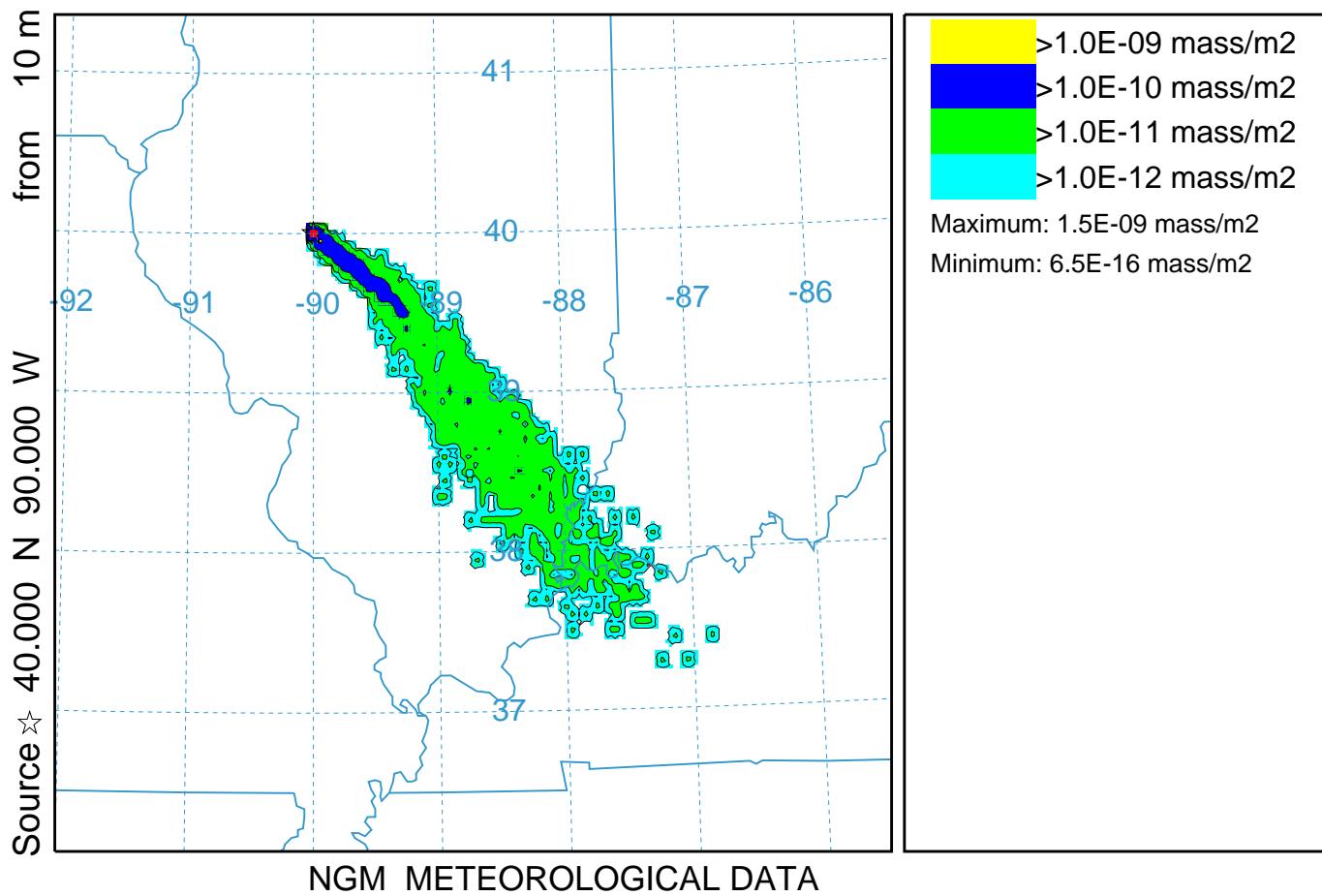


## Probability Deposition using 1000 particles (018)

Deposition (mass/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

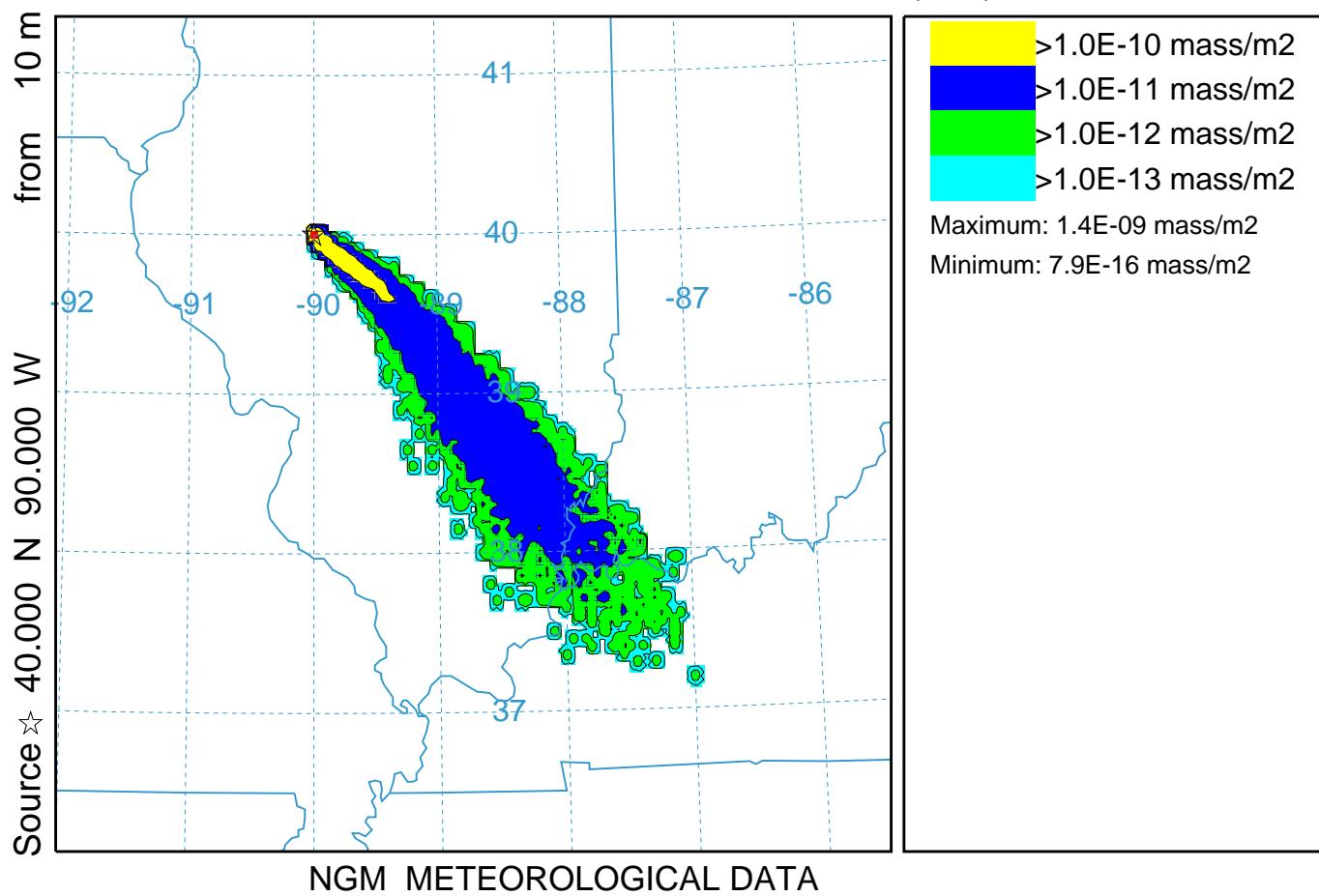


## Probability Deposition using 10000 particles (019)

Deposition (mass/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

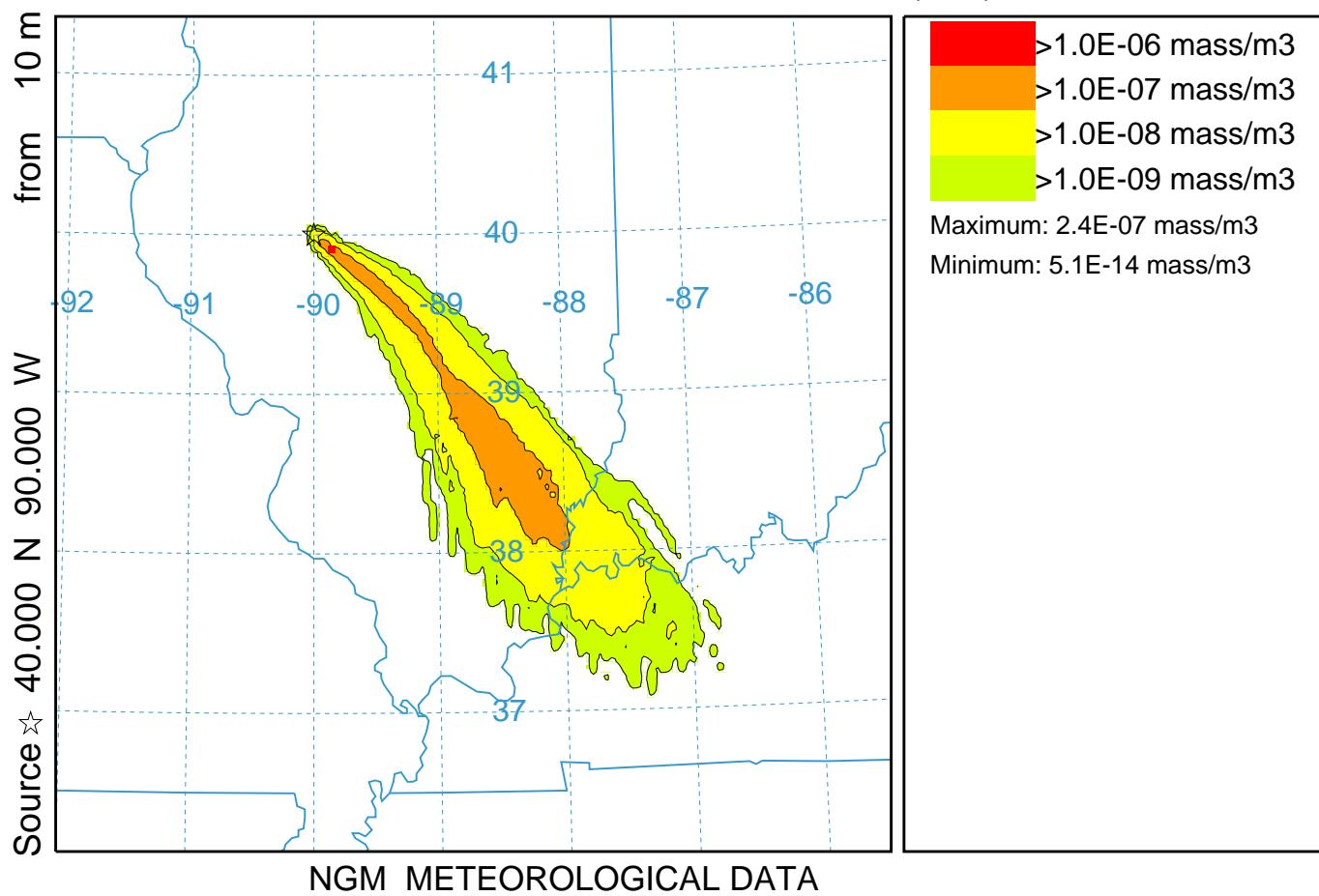


Species conversion at 10% per hour (020)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

POL2 Release started at 0000 16 Oct 95 (UTC)

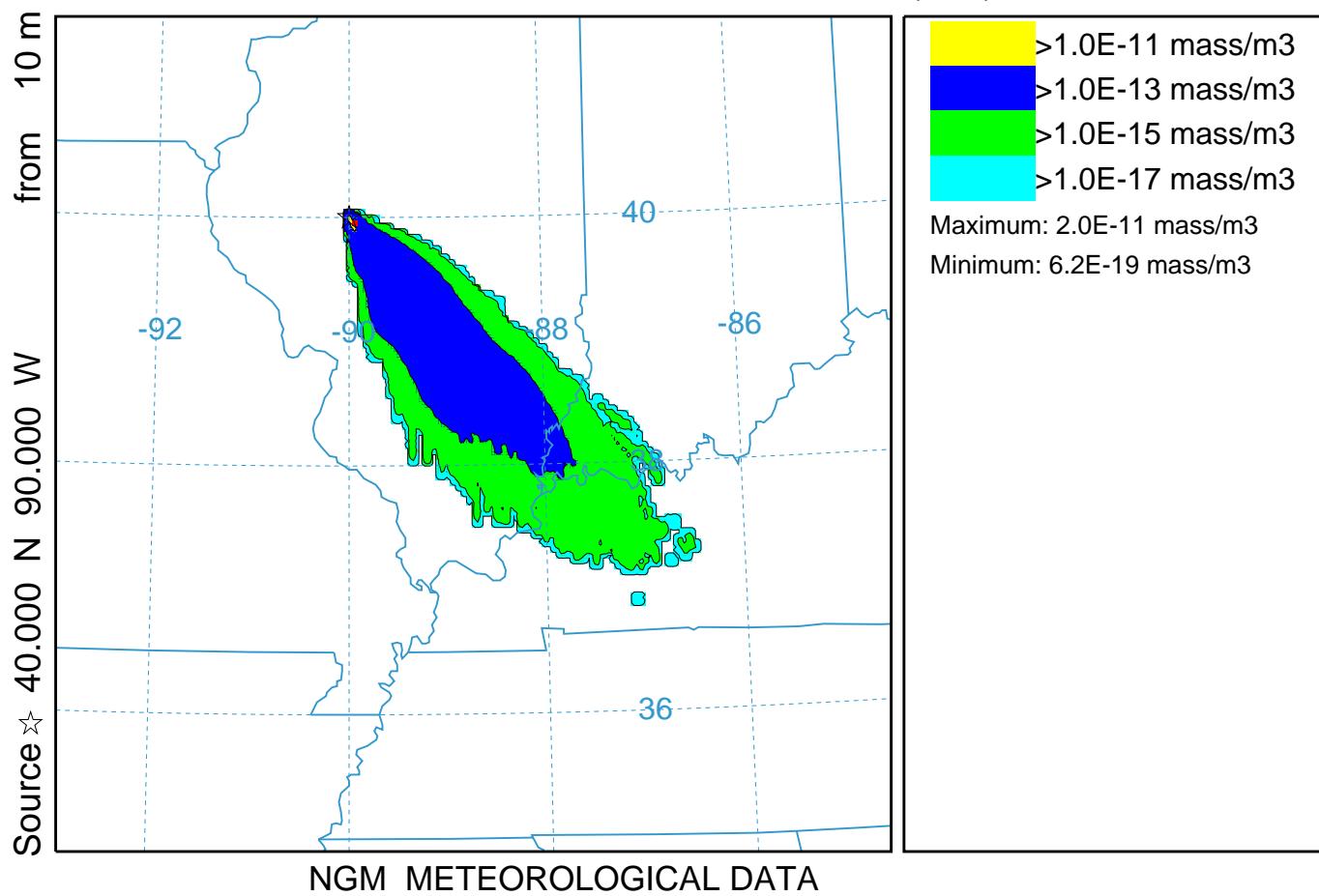


### Cycle Short Emissions Every 3 hrs (021)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

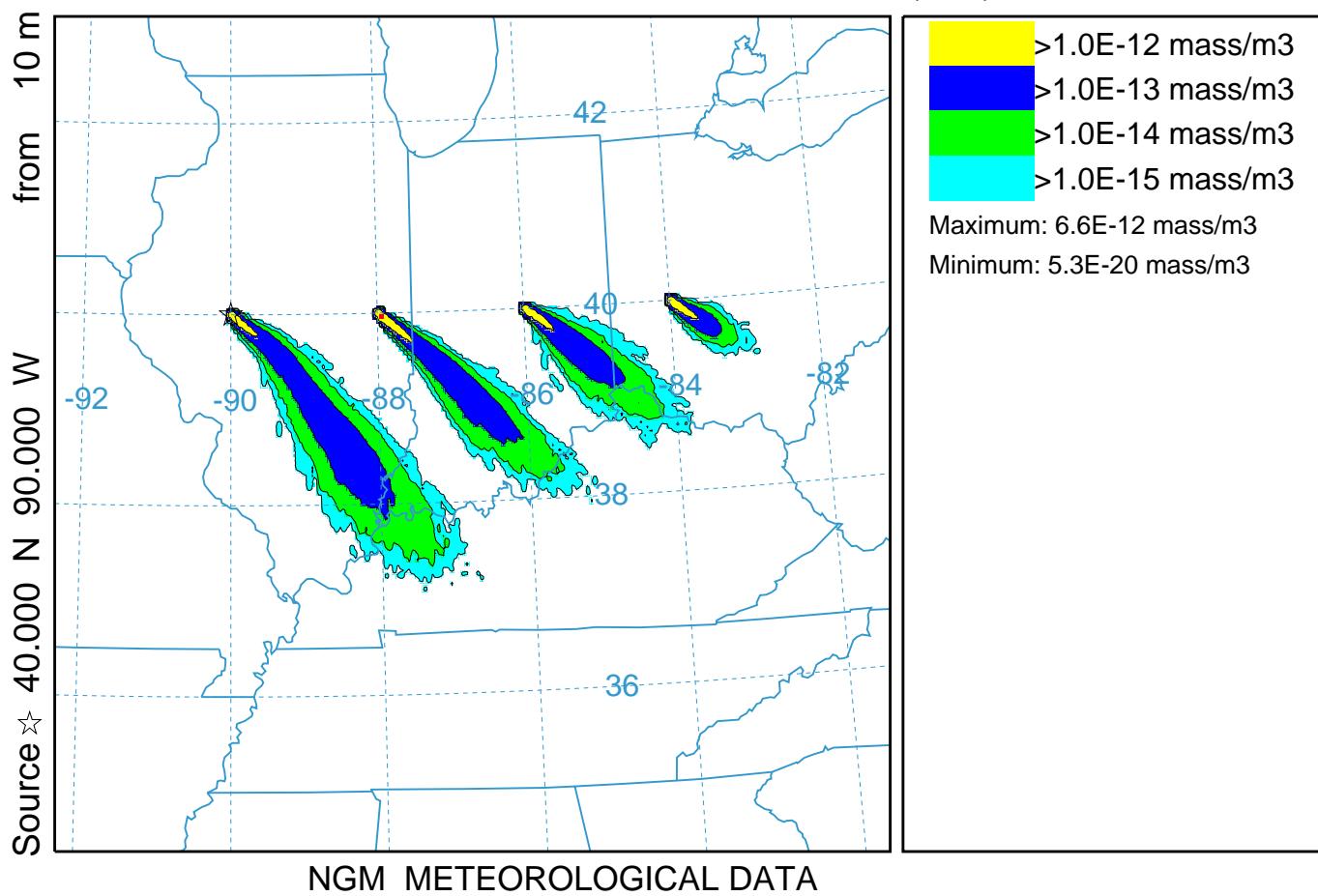


### Simple 4-point Moving Line Source (022)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

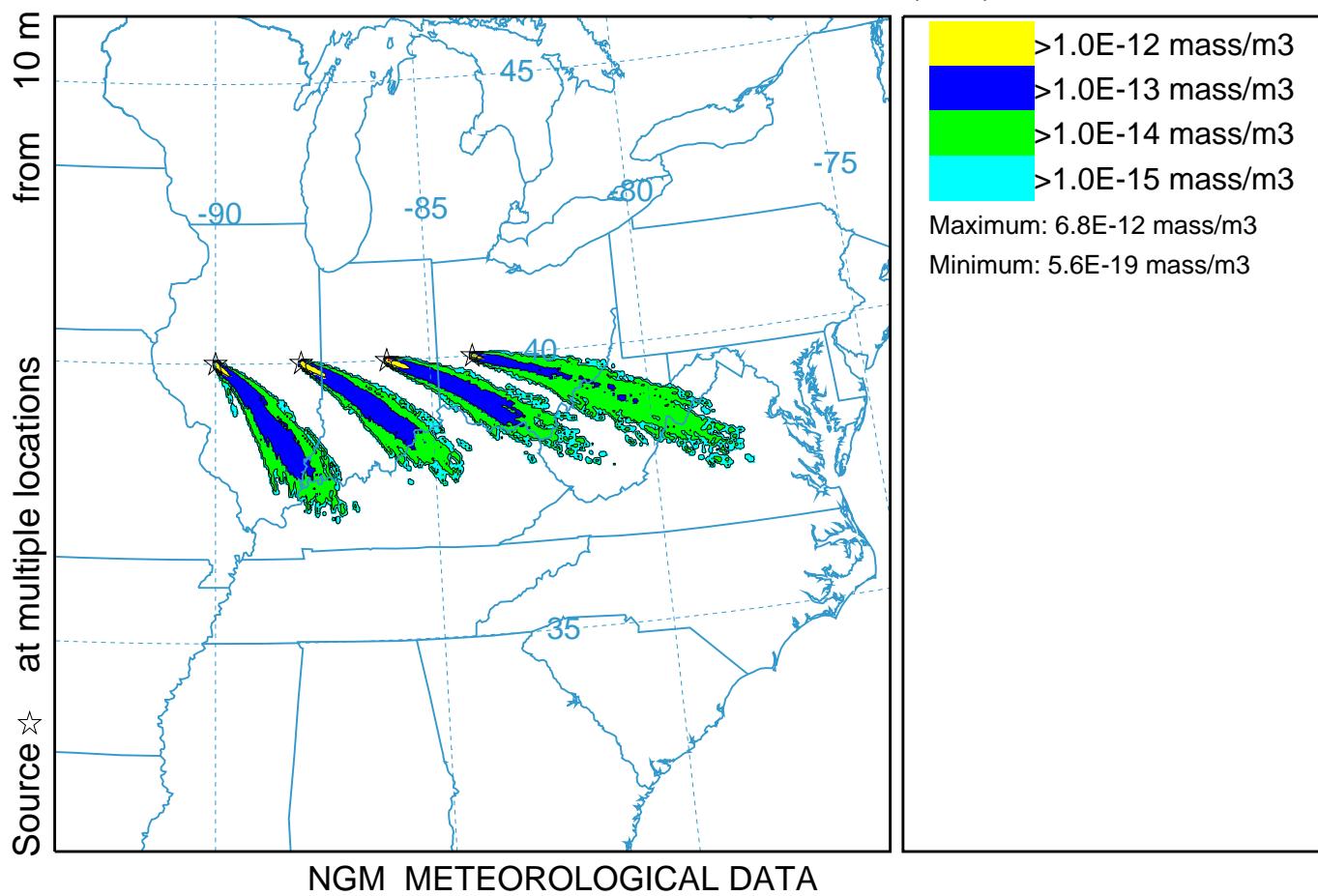


## Simultaneous Multiple Sources in Space (023)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

TEST Release started at 0000 16 Oct 95 (UTC)

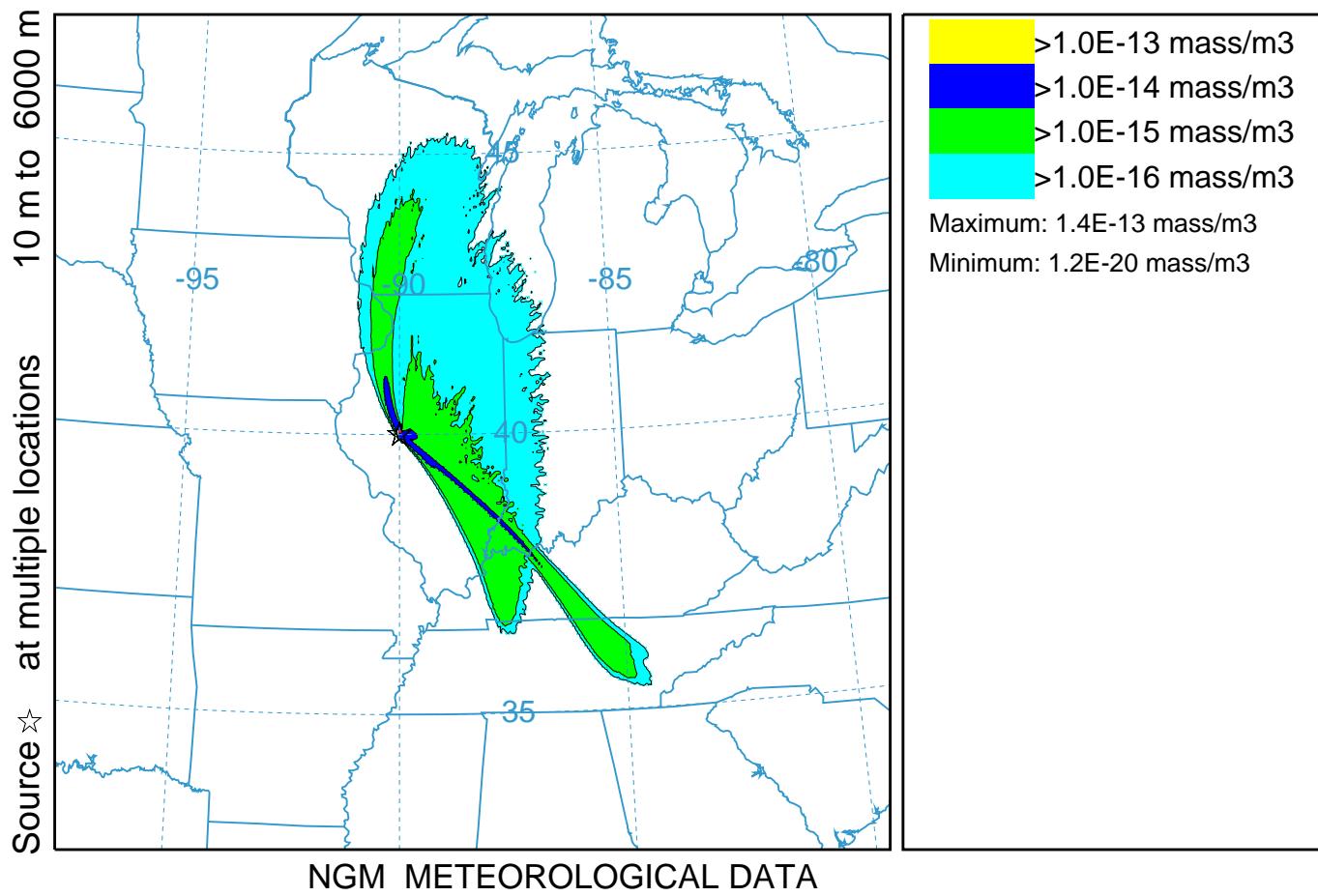


## Simultaneous Multiple Sources in Height (024)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 10000 m

Integrated from 0000 17 Oct to 1200 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

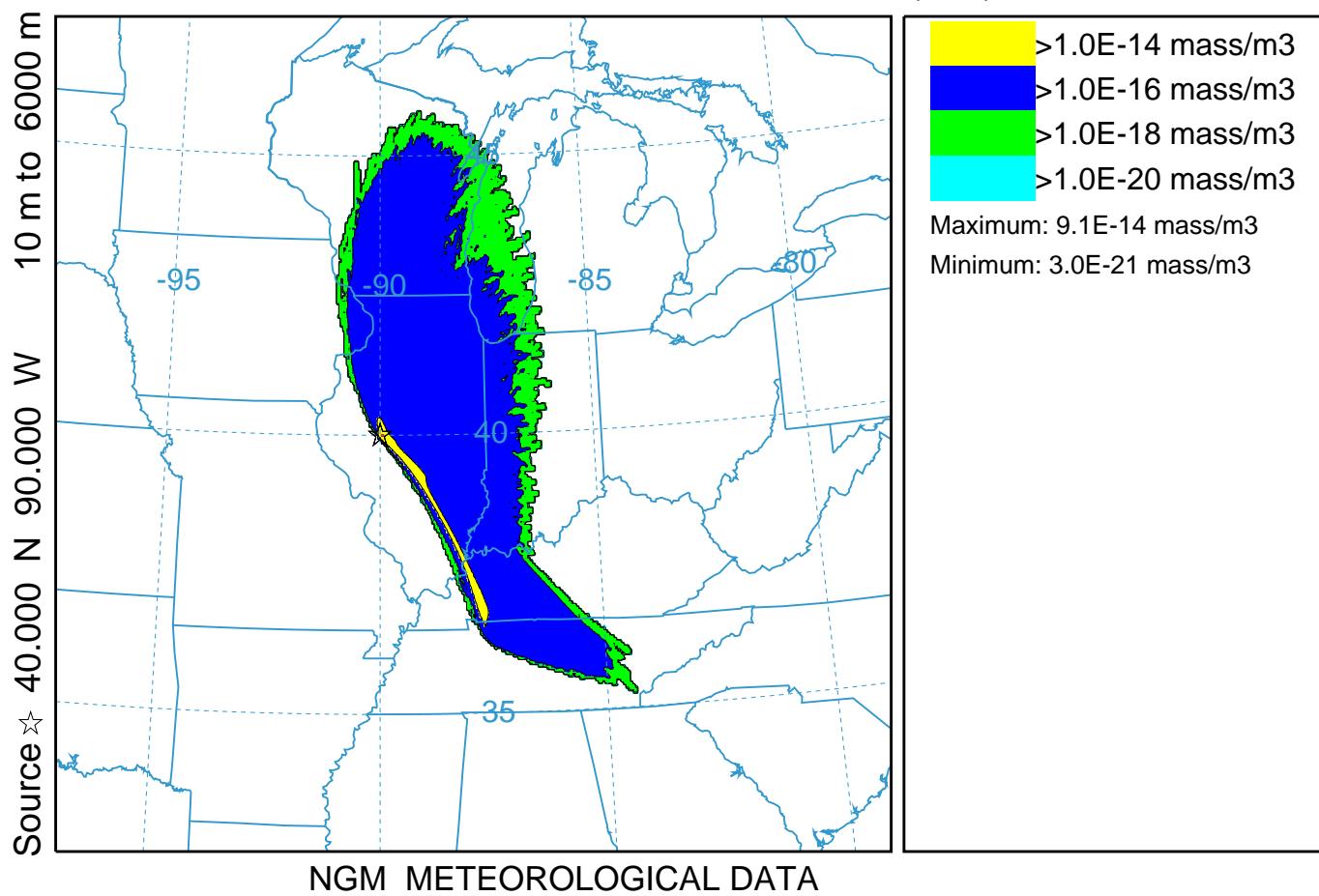


### Vertical Line Source (025)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 10000 m

Integrated from 0000 17 Oct to 1200 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

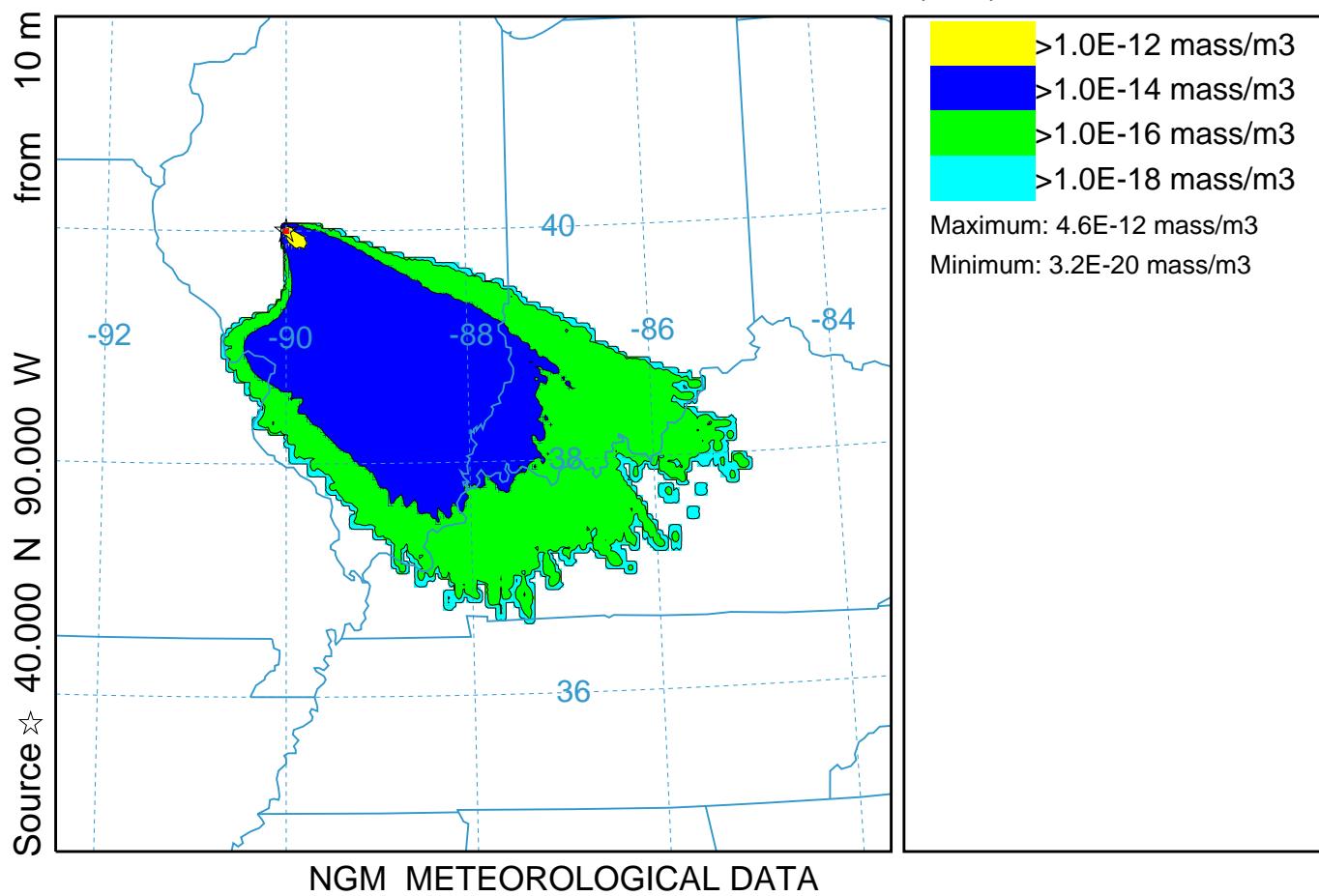


### 9-Member Meteorological Ensemble Means (026)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

MEAN Release started at 0000 16 Oct 95 (UTC)

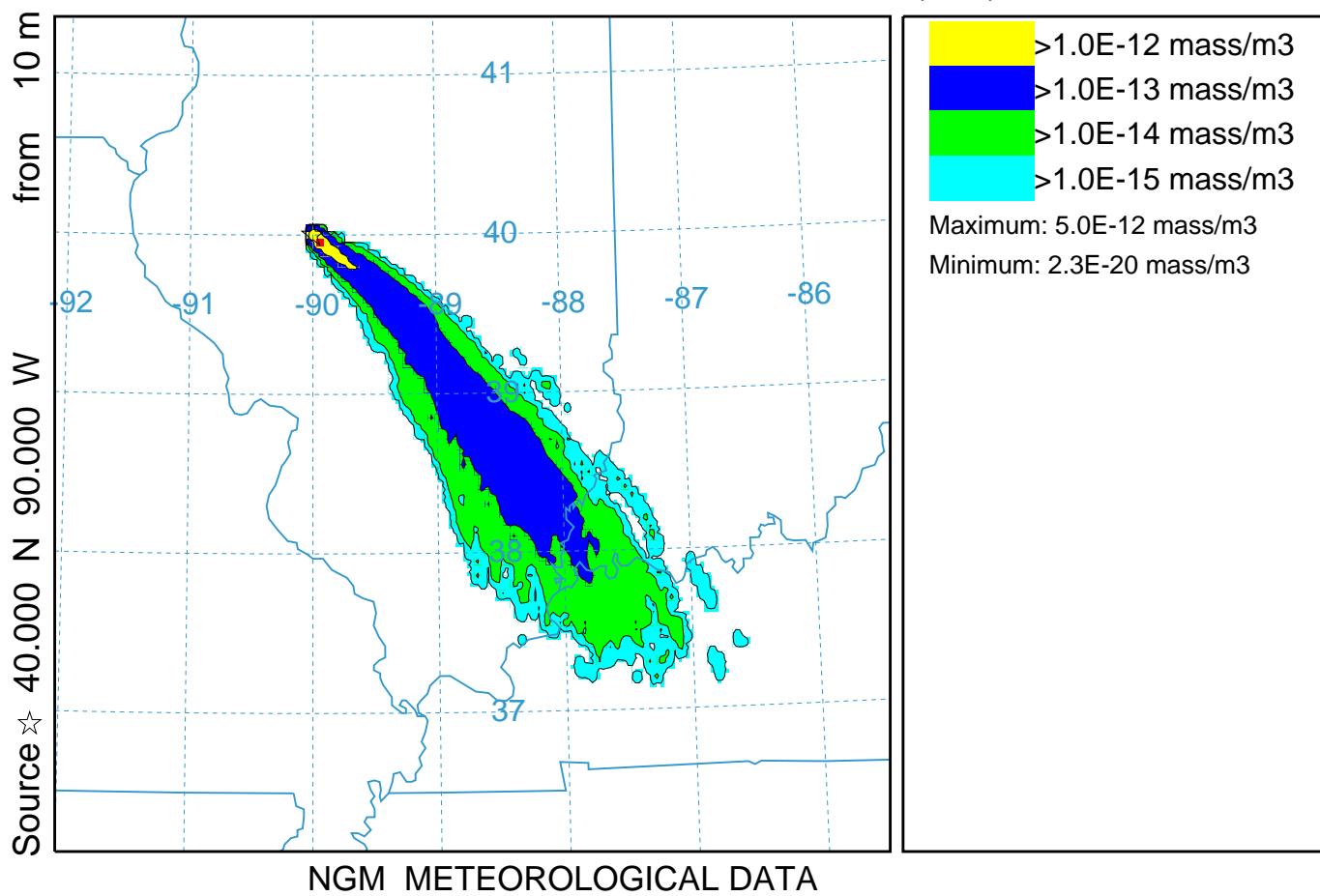


### 9-Member Variance Ensemble Means (027)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

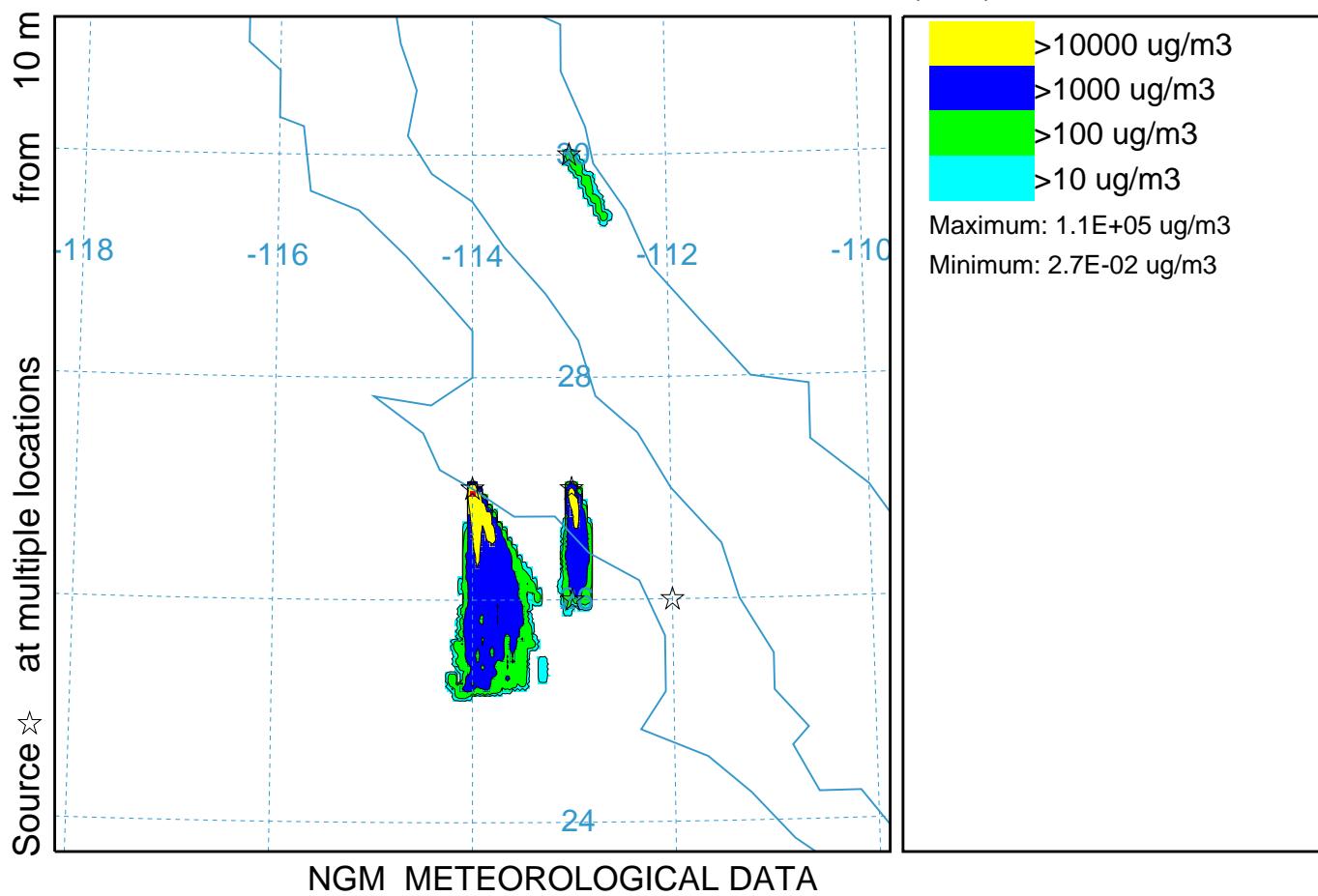
Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

MEAN Release started at 0000 16 Oct 95 (UTC)



## Dust Storm Emission Algorithm (028)

Concentration ( $\mu\text{g}/\text{m}^3$ ) averaged between 0 m and 100 m  
Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)  
PM10 Release started at 0000 16 Oct 95 (UTC)

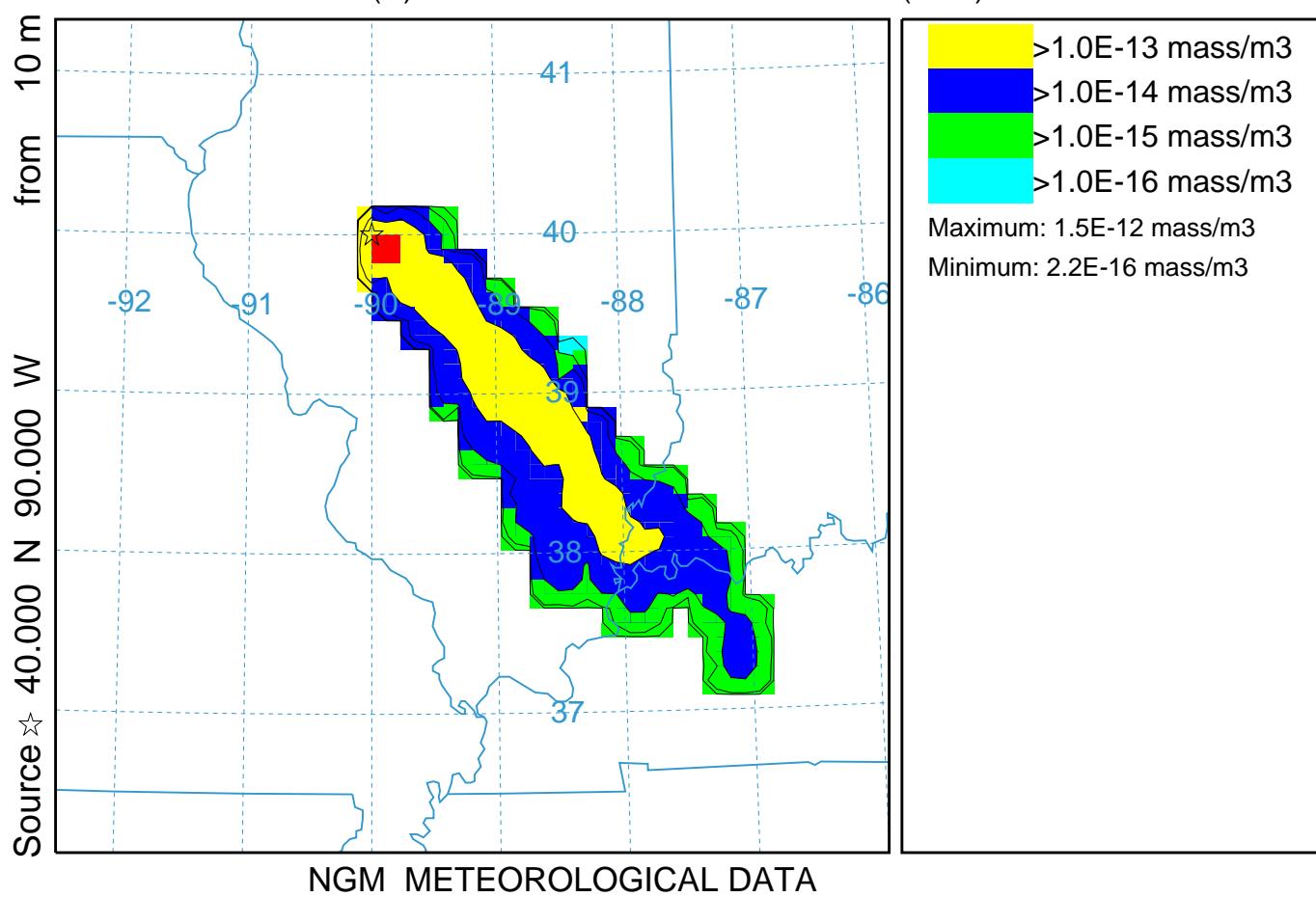


## Matrix - Downwind Receptors (029)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

C(R) Release started at 0000 16 Oct 95 (UTC)

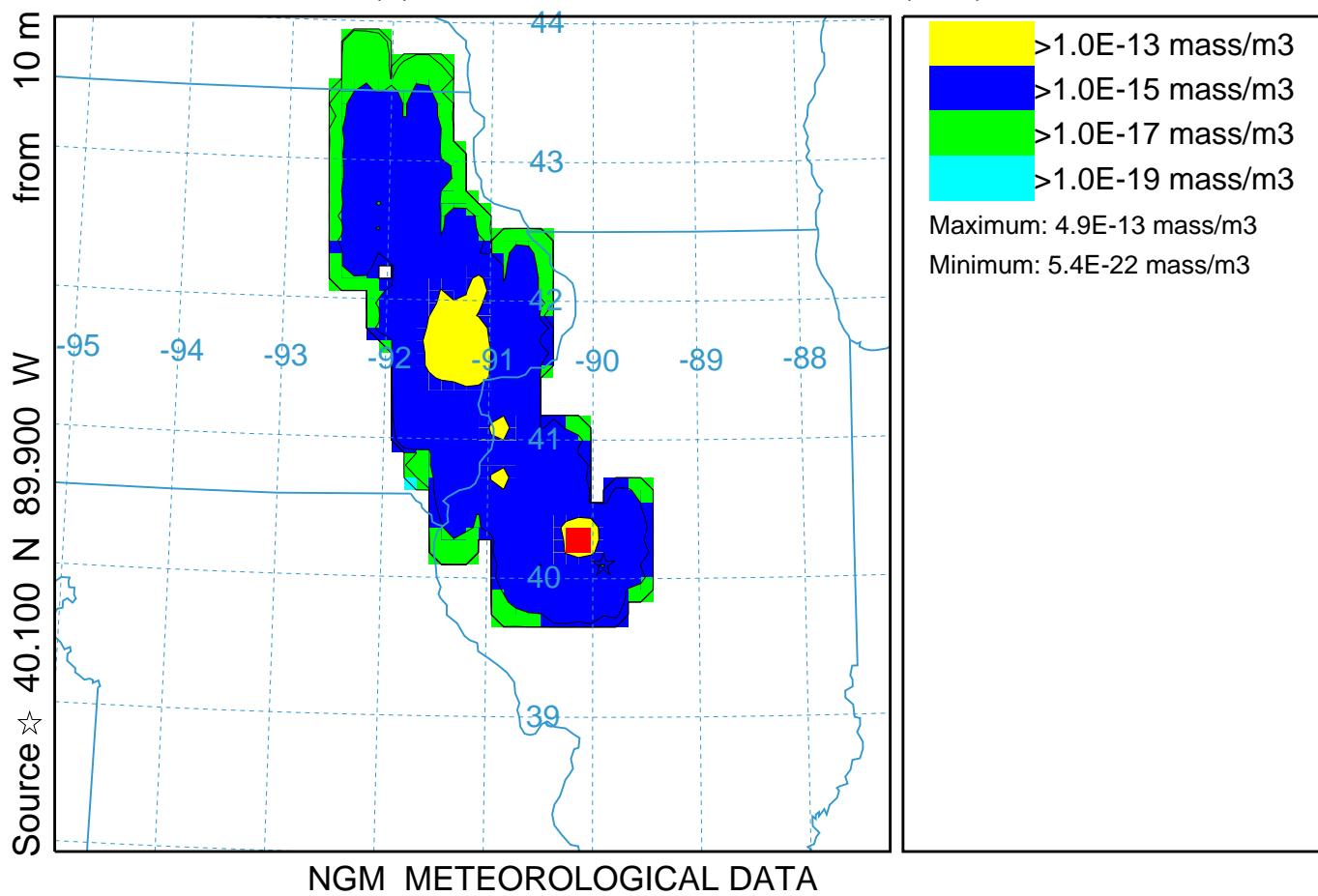


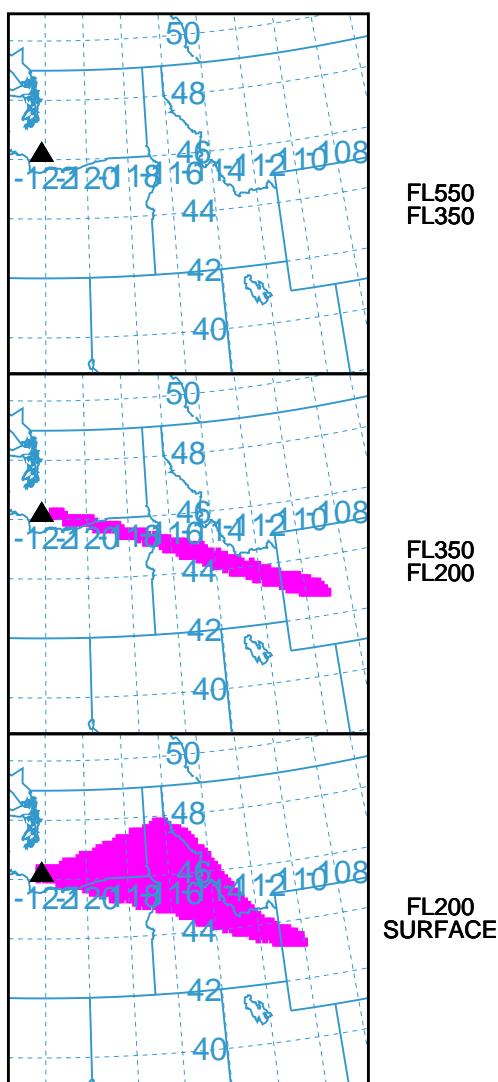
### Matrix - Upwind Sources (030)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

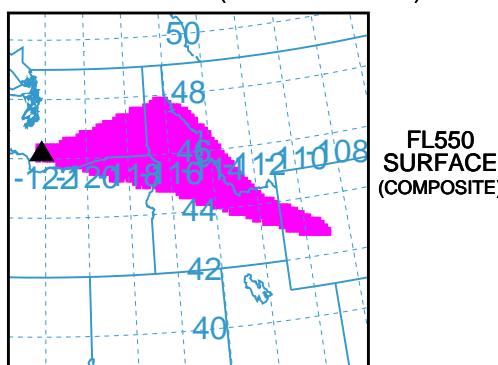
Integrated from 0000 16 Oct to 1200 16 Oct 95 (UTC)

C(S) Release started at 0000 16 Oct 95 (UTC)





VALID 1200Z 17 OCT 95 (ERUPTION+012H00M)



#### NOAA HYSPLIT GUIDANCE

▲ TEST-131 N4612W12211

SUMMIT 8363 FT

ERUPTION 0000Z 17 OCT 95

DURATION 1 HR

ASH COLUMN FL200

Z-time information (use lower-case):

[WWW.SRH.NOAA.GOV/JETSTREAM/SYNOPTIC/TIME.HTM](http://WWW.SRH.NOAA.GOV/JETSTREAM/SYNOPTIC/TIME.HTM)

■ ASH CLOUD

\*\*\*\*\*

ALERT UPDATE

\*\*\*\*\*

\*\*\*\*\*

Created: 1556 GMT 20210513

NGM CYCLE

12Z 17 OCT 95

SEE VOLCANIC ASH  
SIGMETS AND  
ADVISORIES

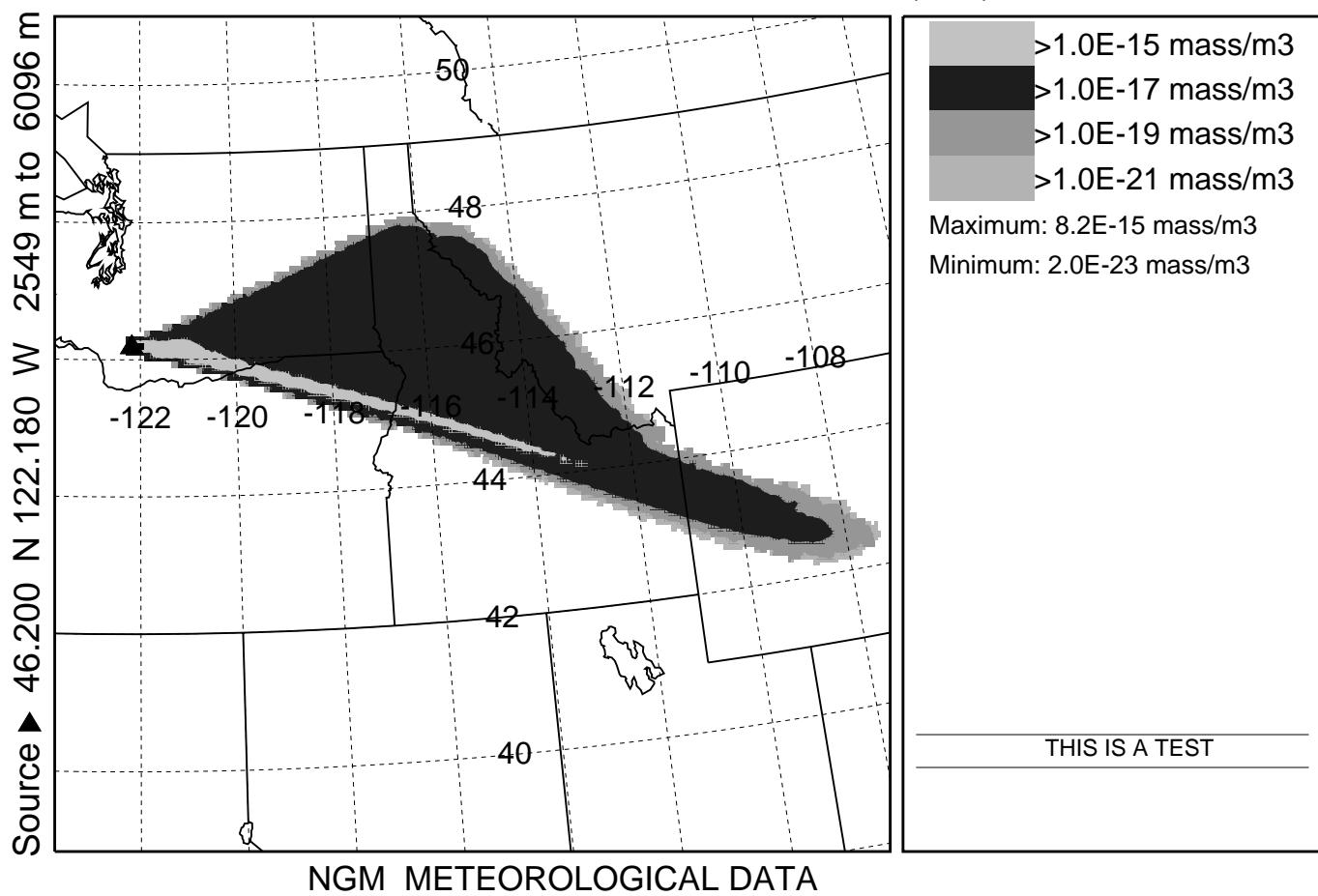
Wet deposition: Yes

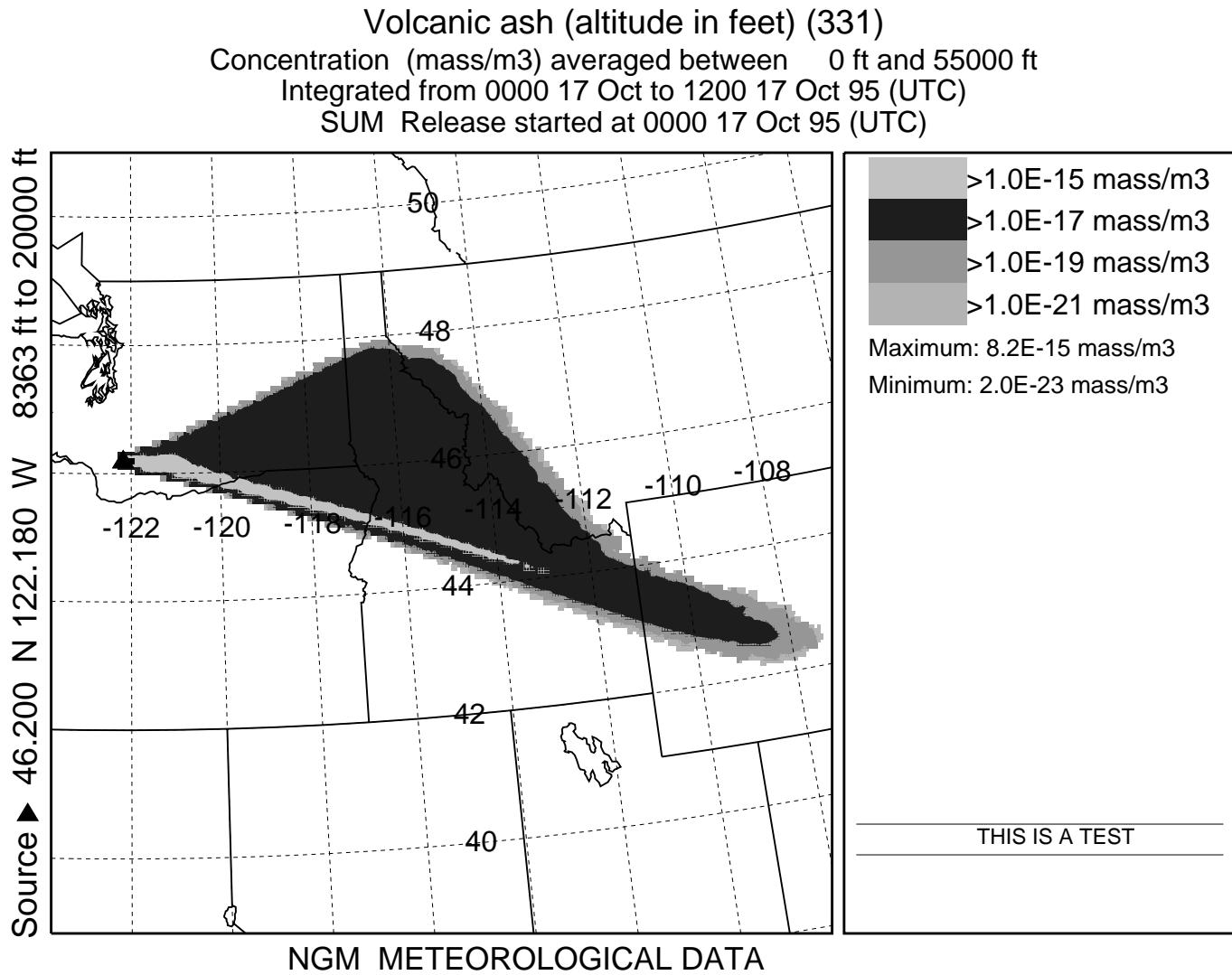
## Volcanic ash (231)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 16764 m

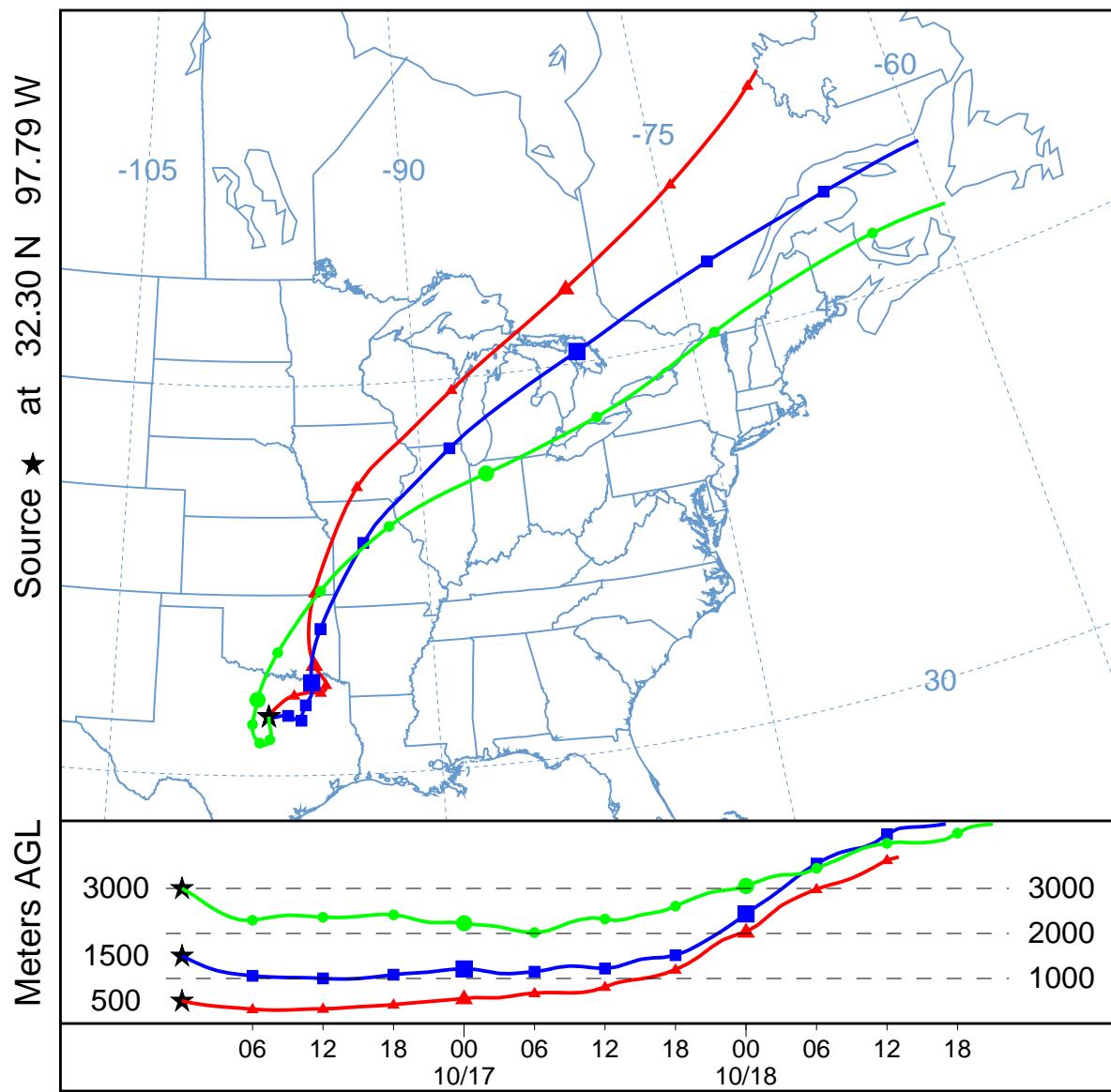
Integrated from 0000 17 Oct to 1200 17 Oct 95 (UTC)

SUM Release started at 0000 17 Oct 95 (UTC)



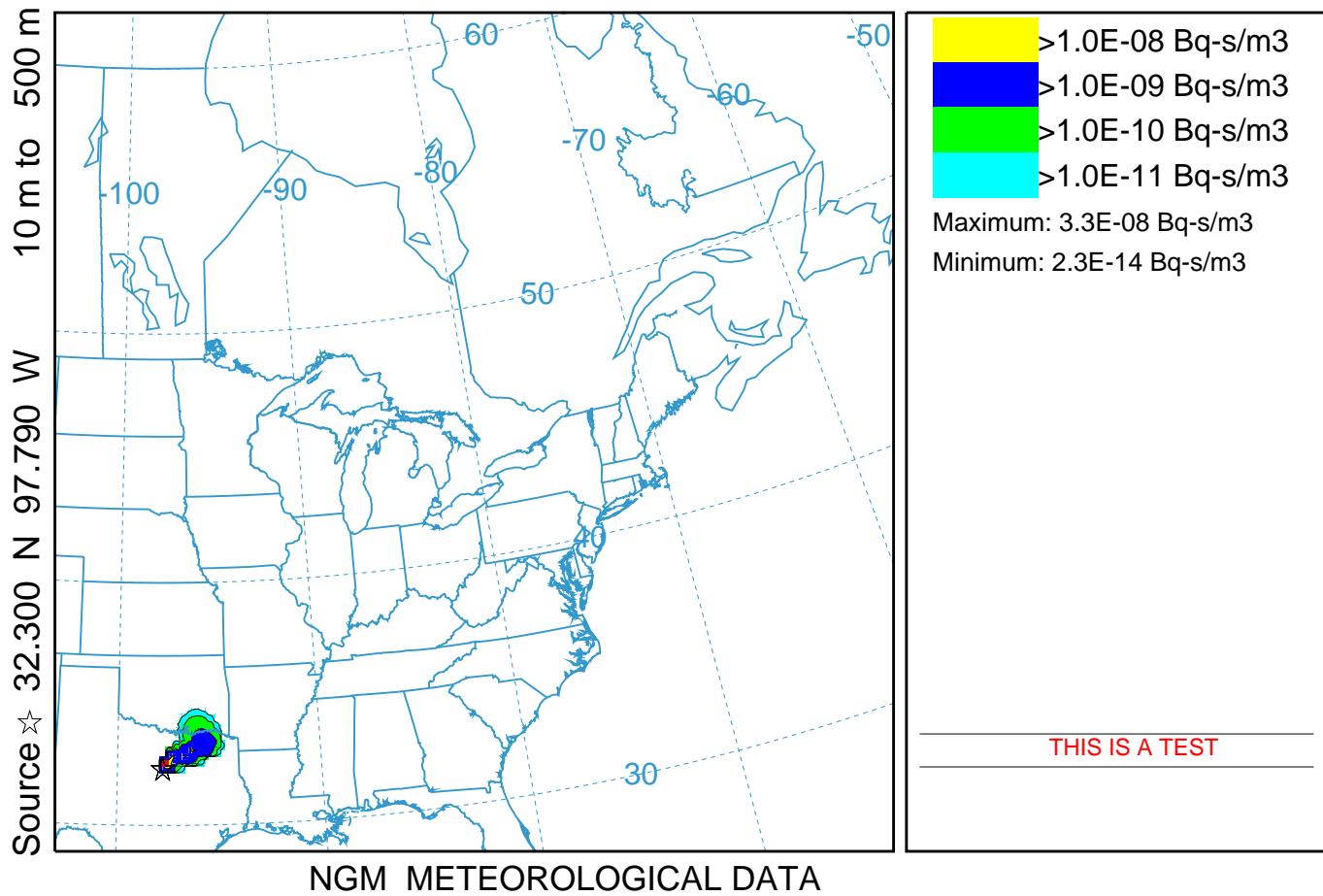


RSMC Trajectory (032)  
Forward trajectories starting at 0000 UTC 16 Oct 95  
NGM Meteorological Data



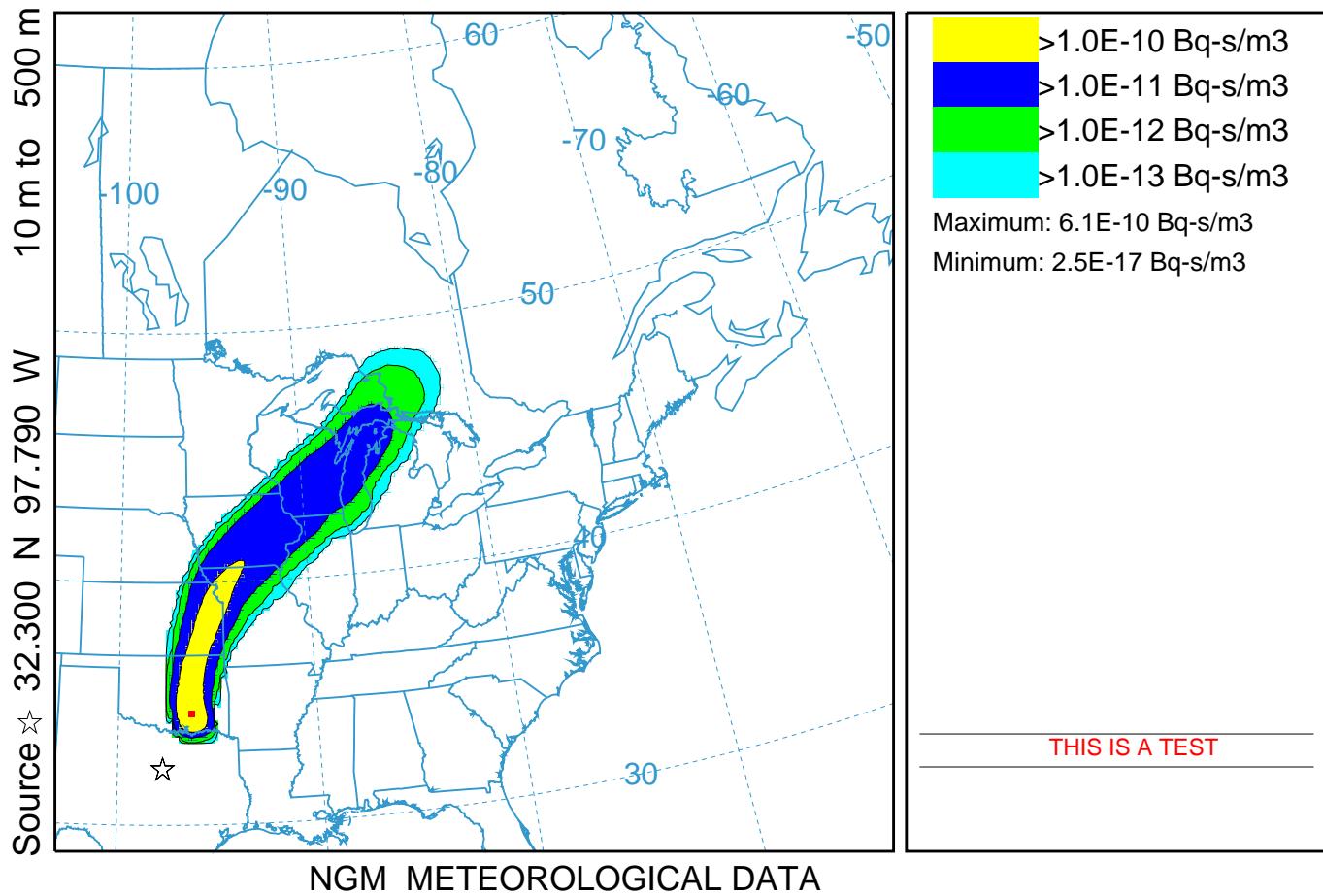
## RSMC Dispersion (033)

Exposure (Bq-s/m<sup>3</sup>) averaged between 0 m and 500 m  
Integrated from 0000 16 Oct to 0000 17 Oct 95 (UTC)  
C137 Release started at 0000 16 Oct 95 (UTC)



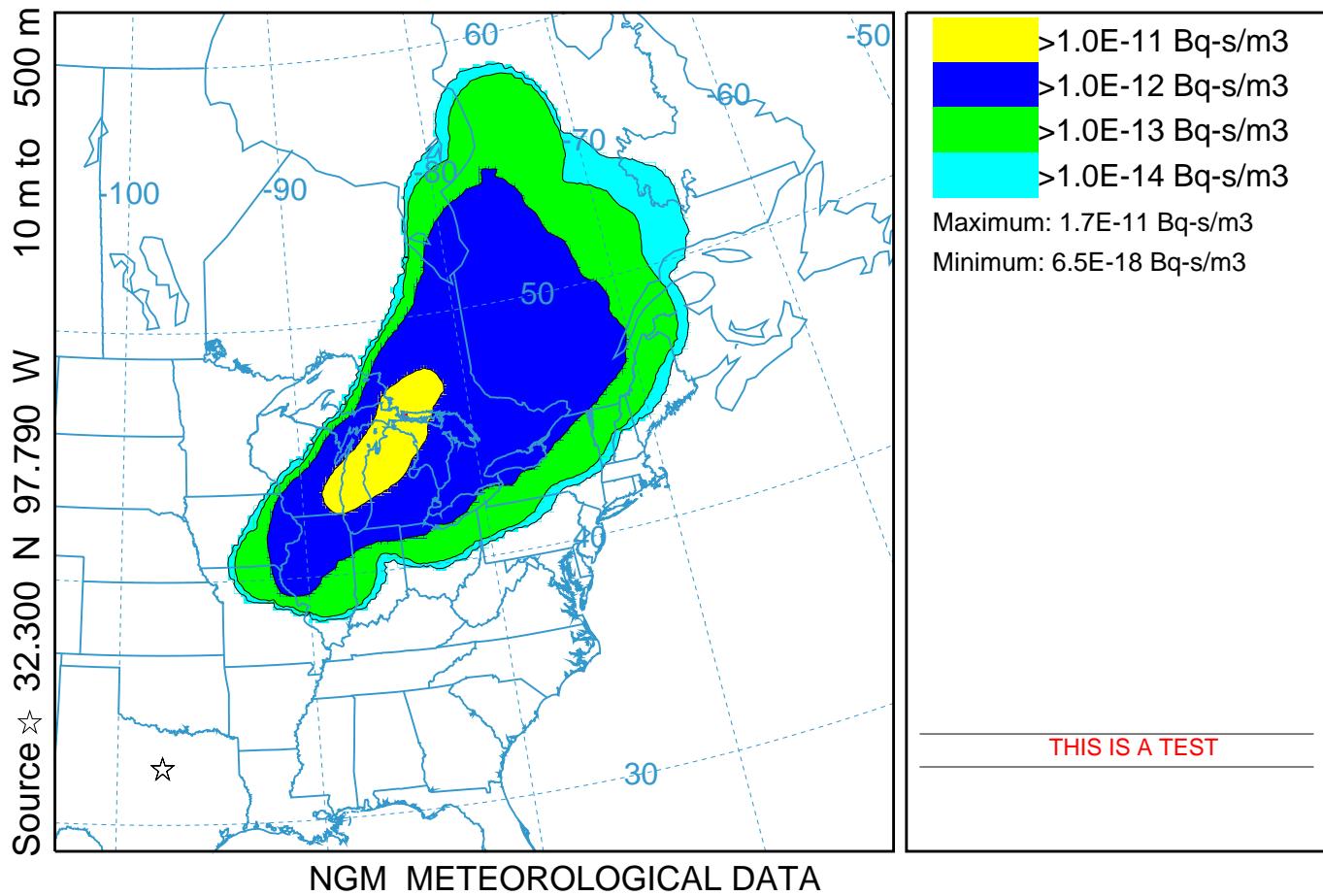
## RSMC Dispersion (033)

Exposure (Bq-s/m<sup>3</sup>) averaged between 0 m and 500 m  
Integrated from 0000 17 Oct to 0000 18 Oct 95 (UTC)  
C137 Release started at 0000 16 Oct 95 (UTC)



## RSMC Dispersion (033)

Exposure (Bq-s/m<sup>3</sup>) averaged between 0 m and 500 m  
Integrated from 0000 18 Oct to 0000 19 Oct 95 (UTC)  
C137 Release started at 0000 16 Oct 95 (UTC)

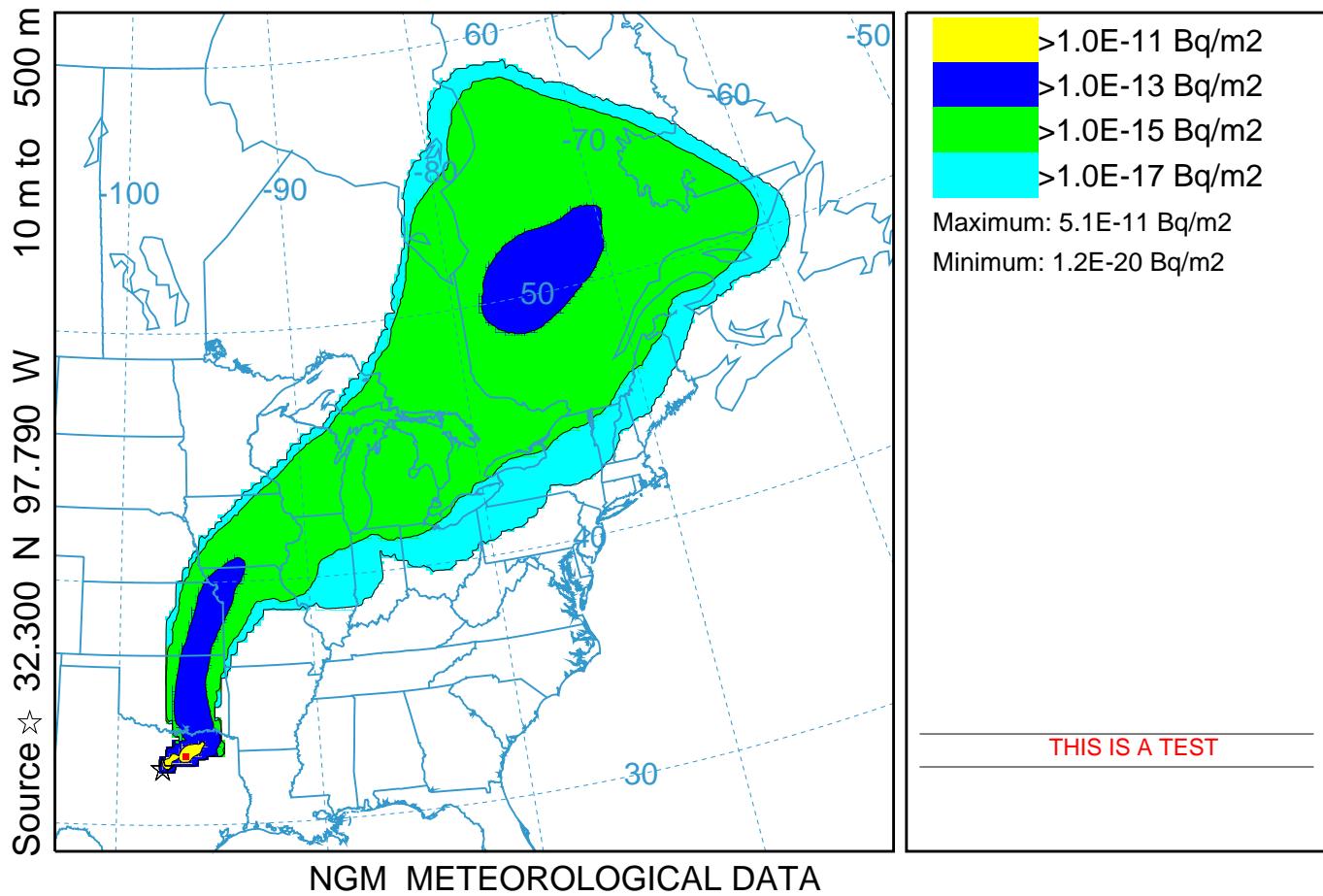


## RSMC Dispersion (033)

Deposition (Bq/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 0000 19 Oct 95 (UTC)

C137 Release started at 0000 16 Oct 95 (UTC)

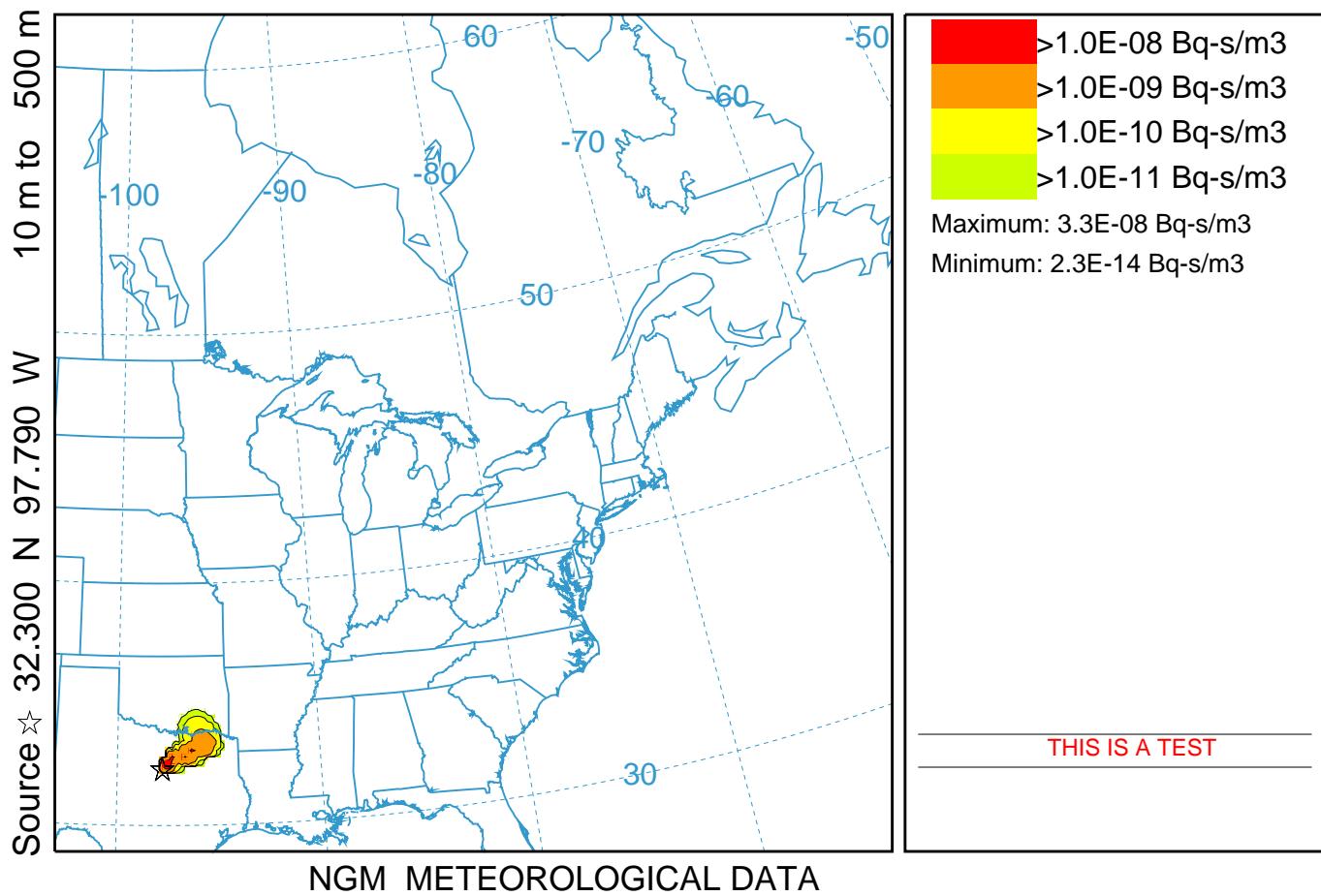


## RSMC Dispersion With Dynamic Colors (133)

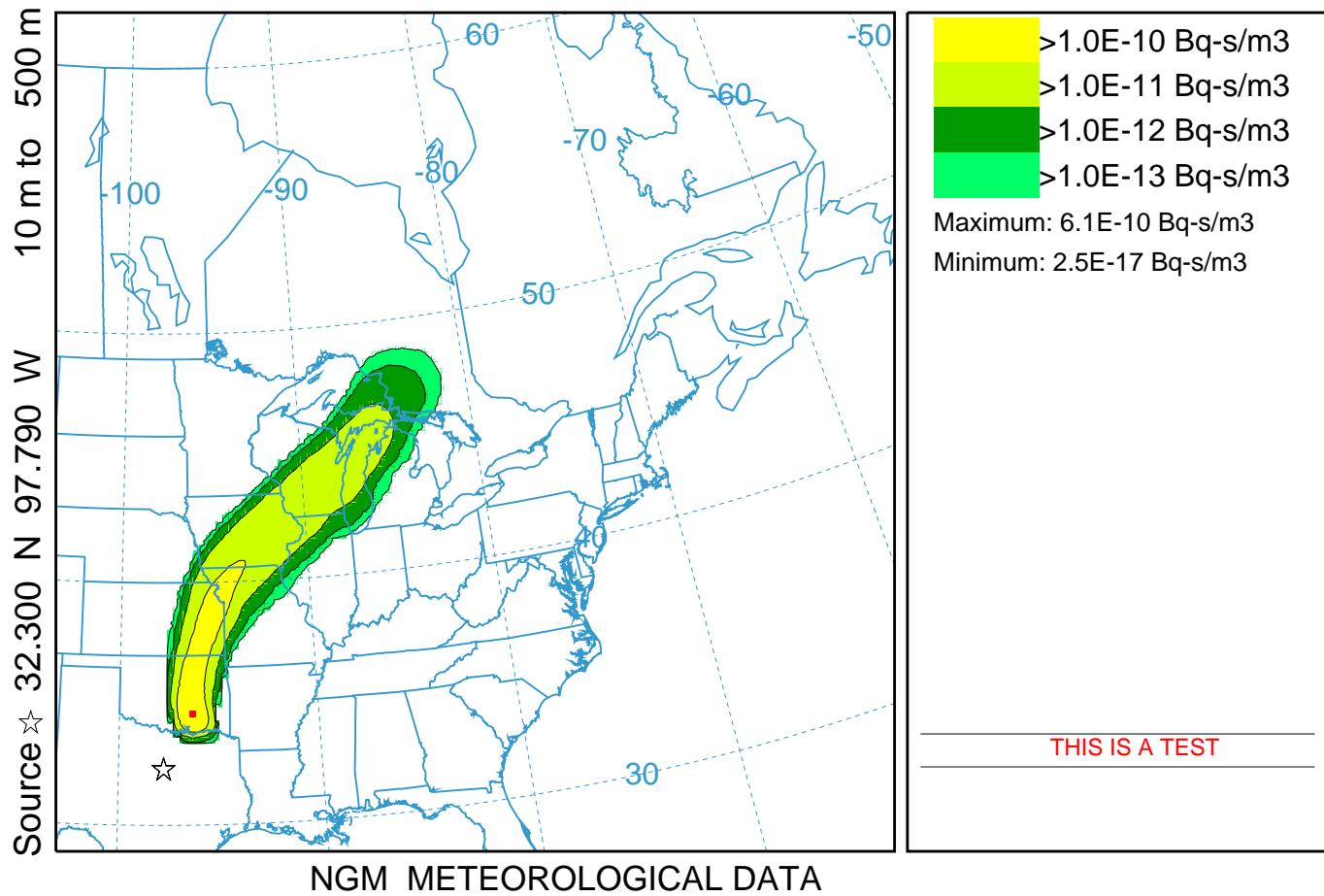
Exposure (Bq-s/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0000 16 Oct to 0000 17 Oct 95 (UTC)

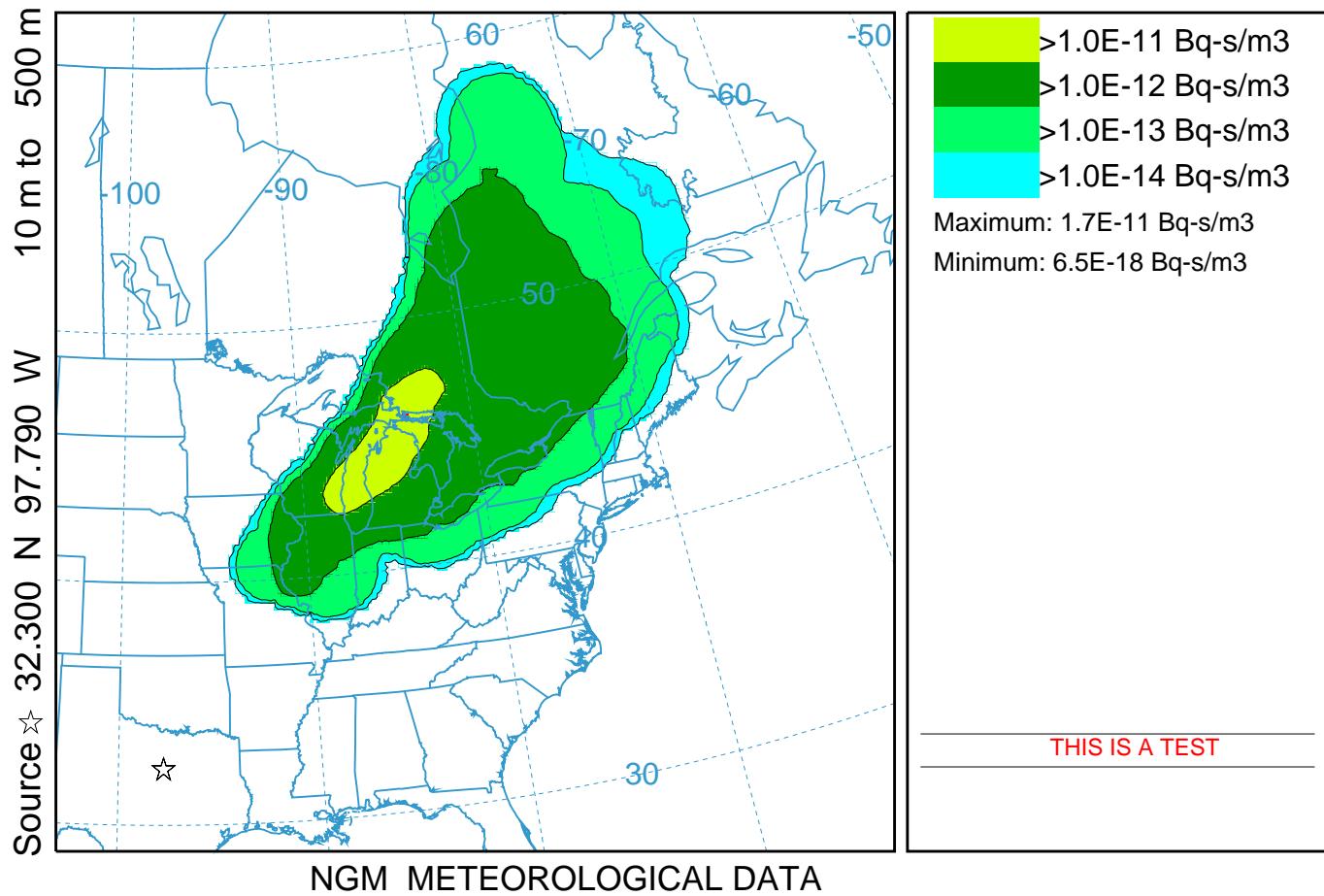
C137 Release started at 0000 16 Oct 95 (UTC)



RSMC Dispersion With Dynamic Colors (133)  
Exposure (Bq-s/m<sup>3</sup>) averaged between 0 m and 500 m  
Integrated from 0000 17 Oct to 0000 18 Oct 95 (UTC)  
C137 Release started at 0000 16 Oct 95 (UTC)



RSMC Dispersion With Dynamic Colors (133)  
Exposure (Bq-s/m<sup>3</sup>) averaged between 0 m and 500 m  
Integrated from 0000 18 Oct to 0000 19 Oct 95 (UTC)  
C137 Release started at 0000 16 Oct 95 (UTC)

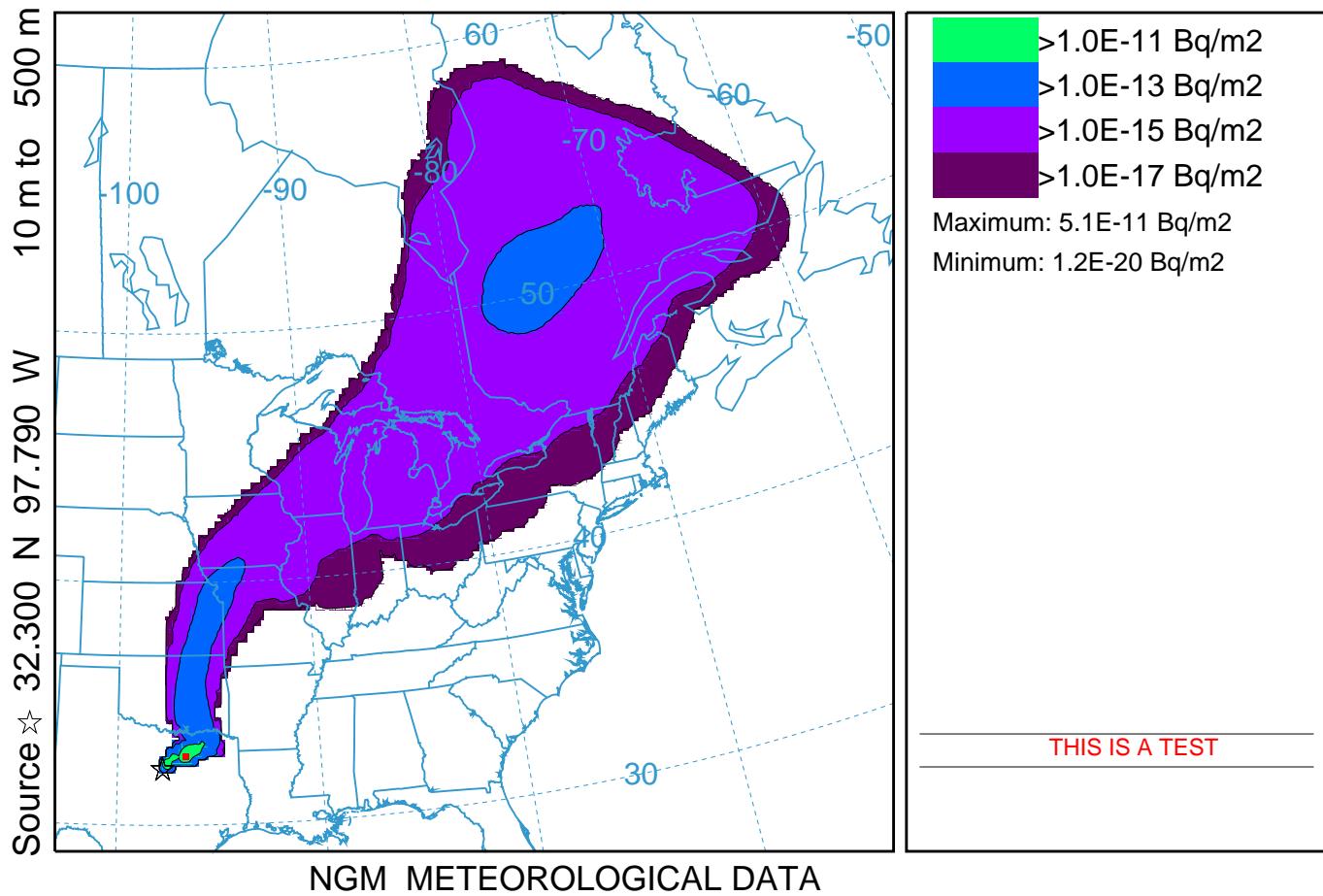


## RSMC Dispersion With Dynamic Colors (133)

Deposition (Bq/m<sup>2</sup>) at ground-level

Integrated from 0000 16 Oct to 0000 19 Oct 95 (UTC)

C137 Release started at 0000 16 Oct 95 (UTC)

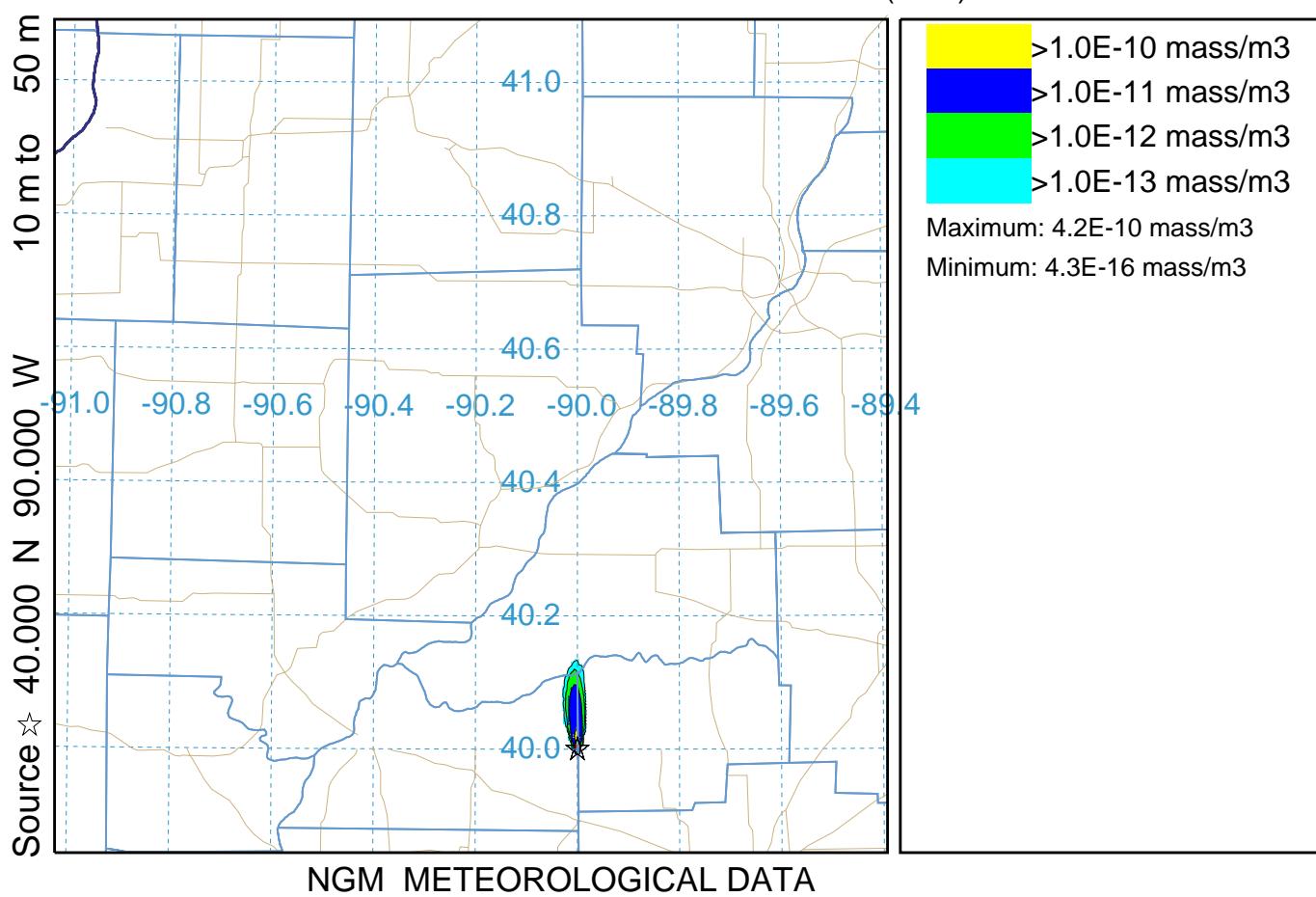


### HLS fine (134)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0000 17 Oct to 0100 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

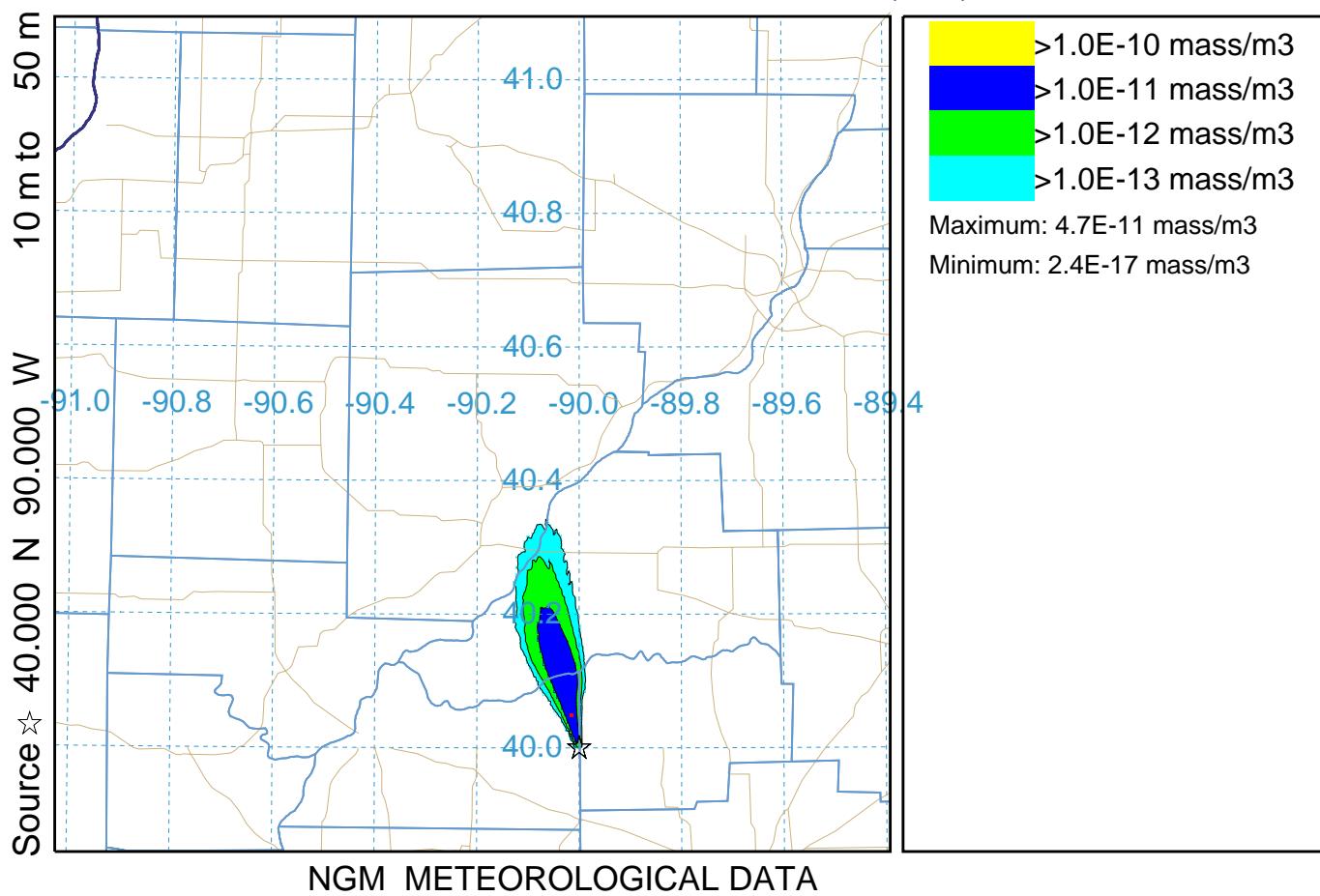


### HLS fine (134)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0100 17 Oct to 0200 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

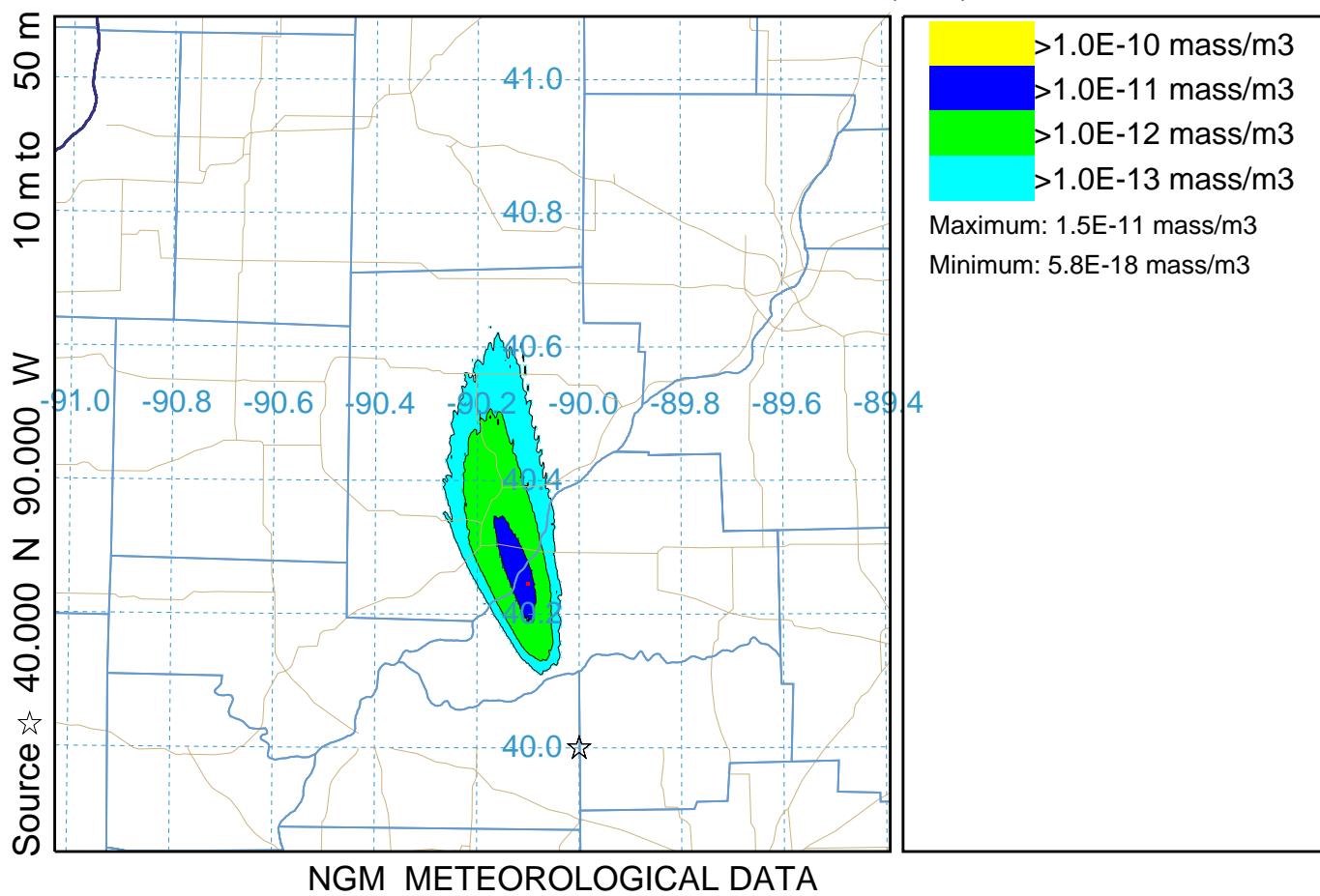


### HLS fine (134)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0200 17 Oct to 0300 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

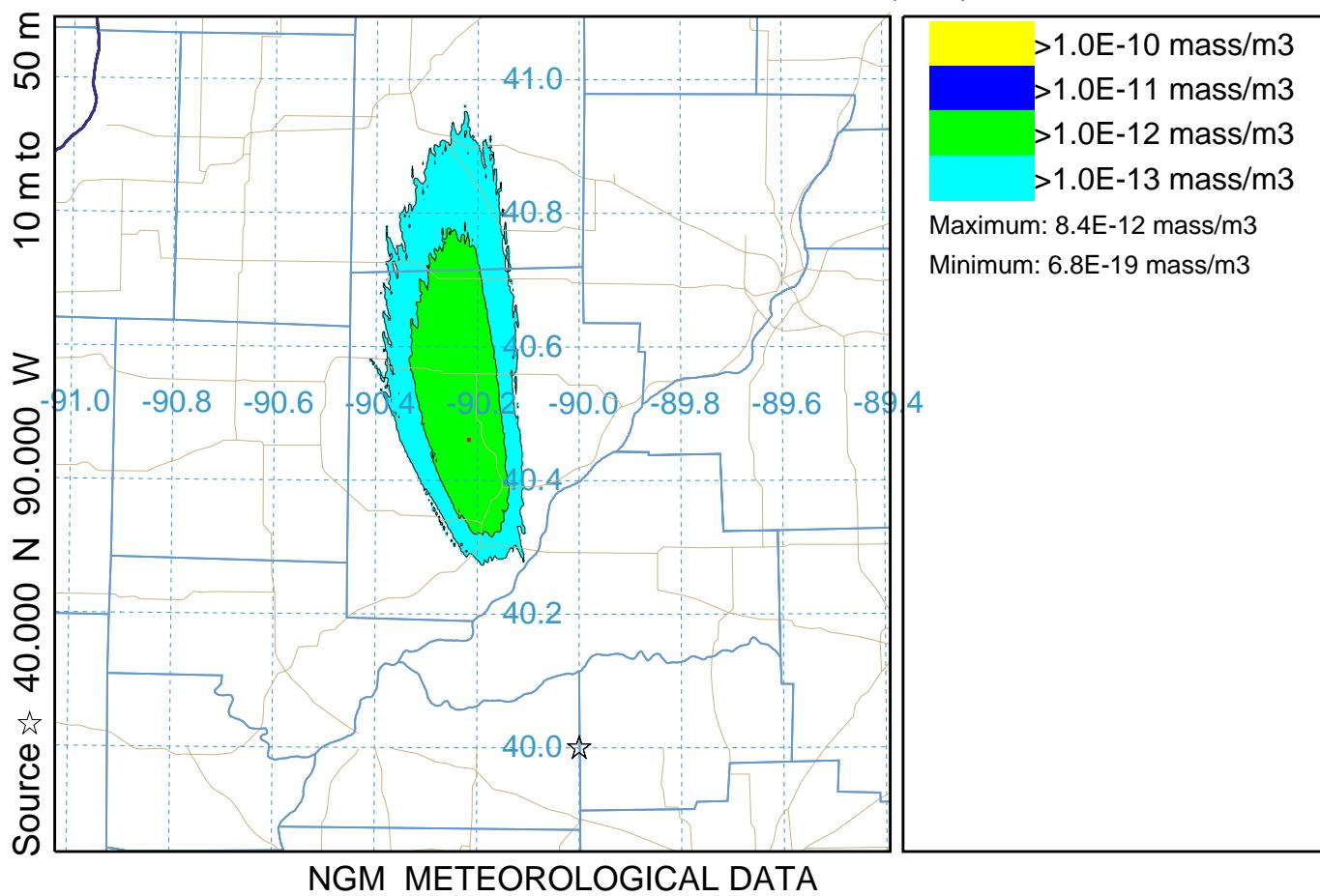


### HLS fine (134)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0300 17 Oct to 0400 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

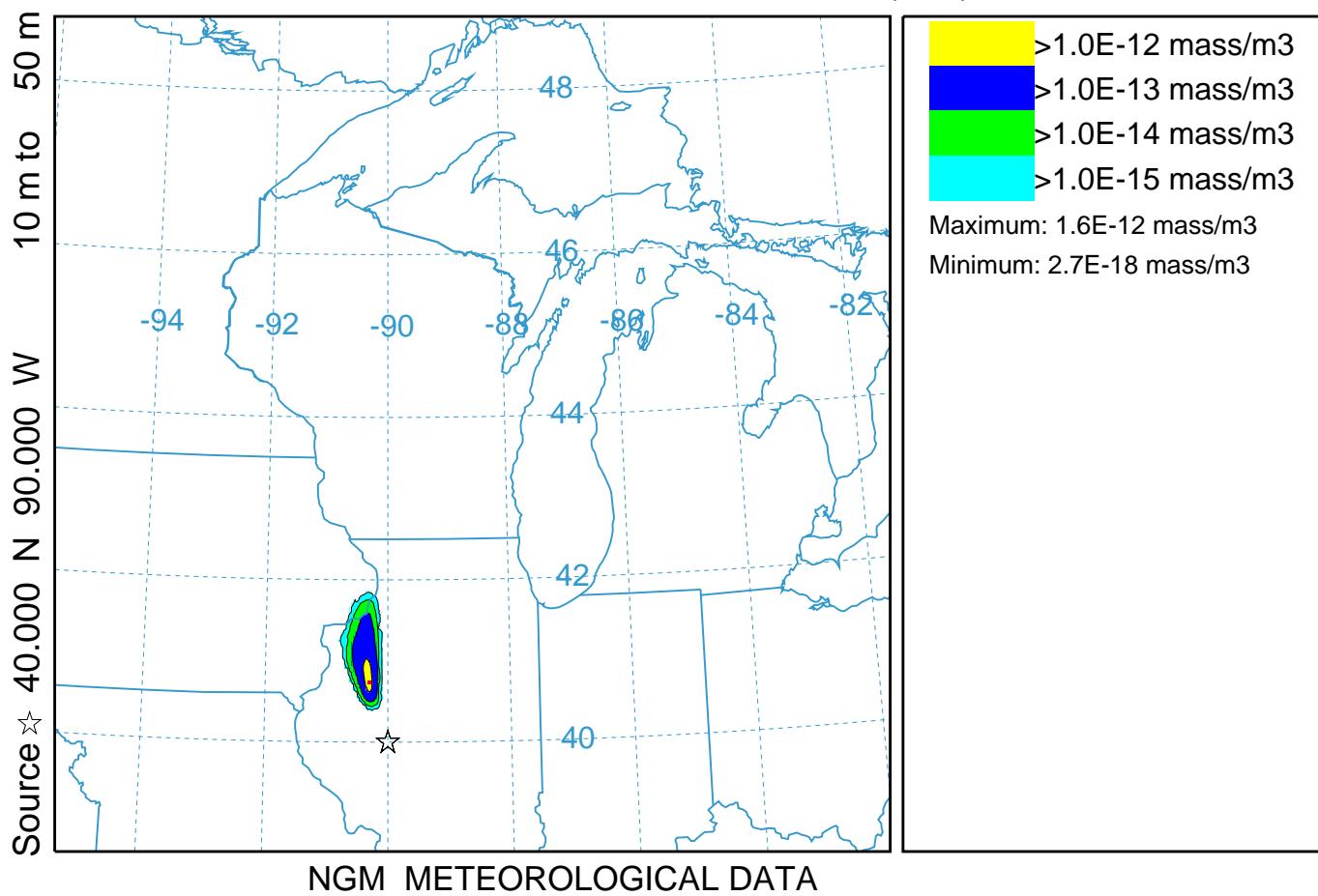


### HLS coarse (234)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0400 17 Oct to 0600 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

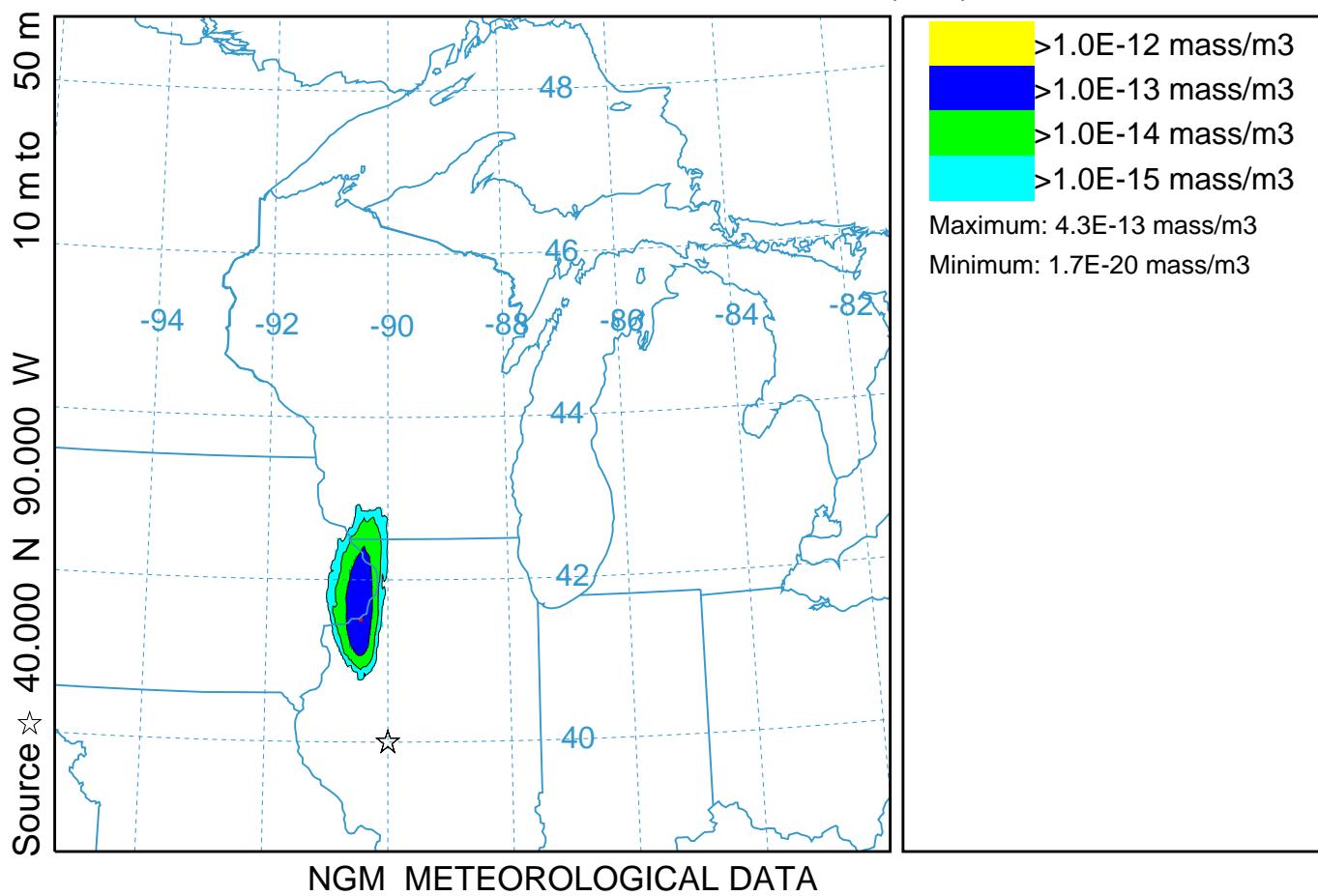


### HLS coarse (234)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0600 17 Oct to 0800 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

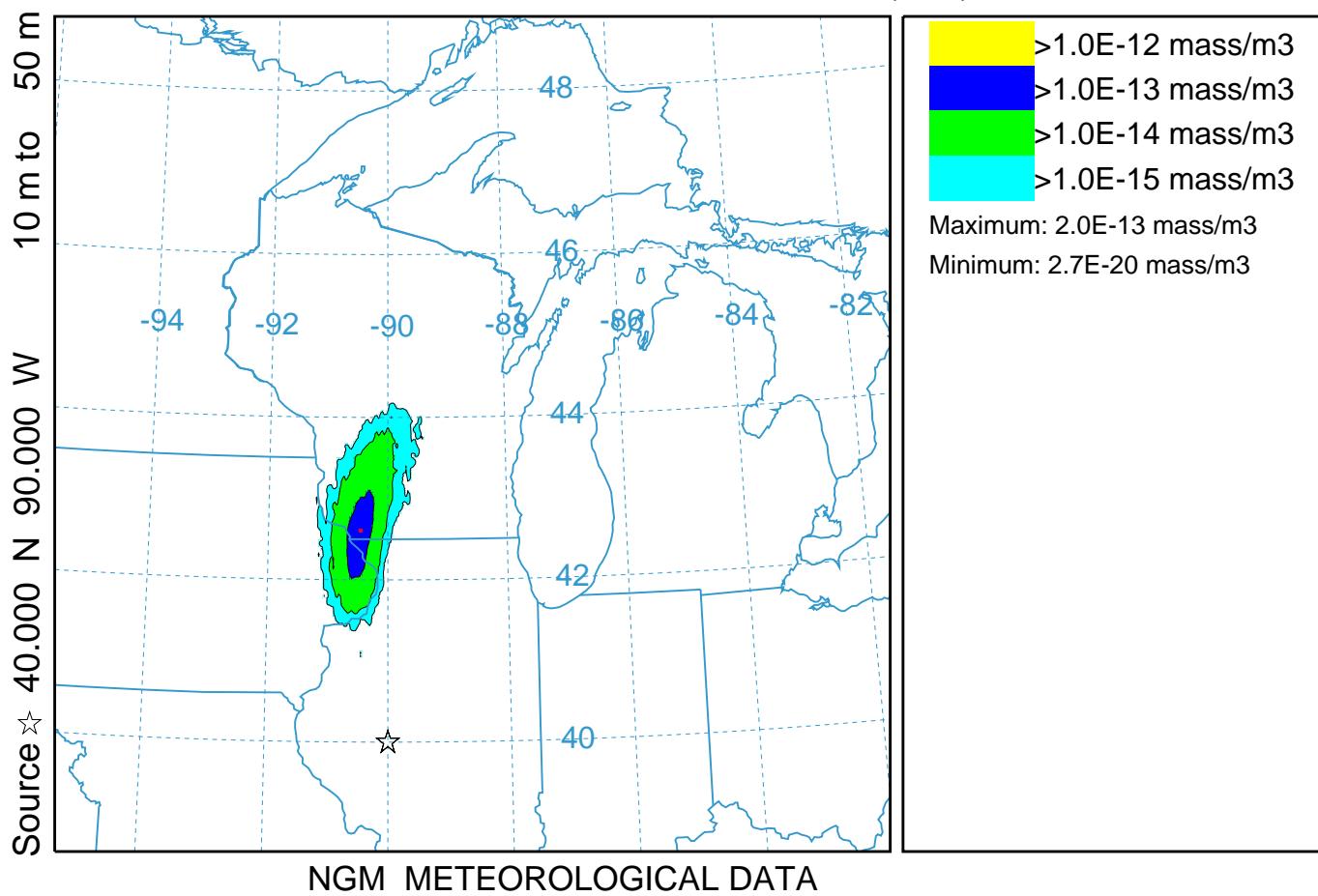


### HLS coarse (234)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 0800 17 Oct to 1000 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

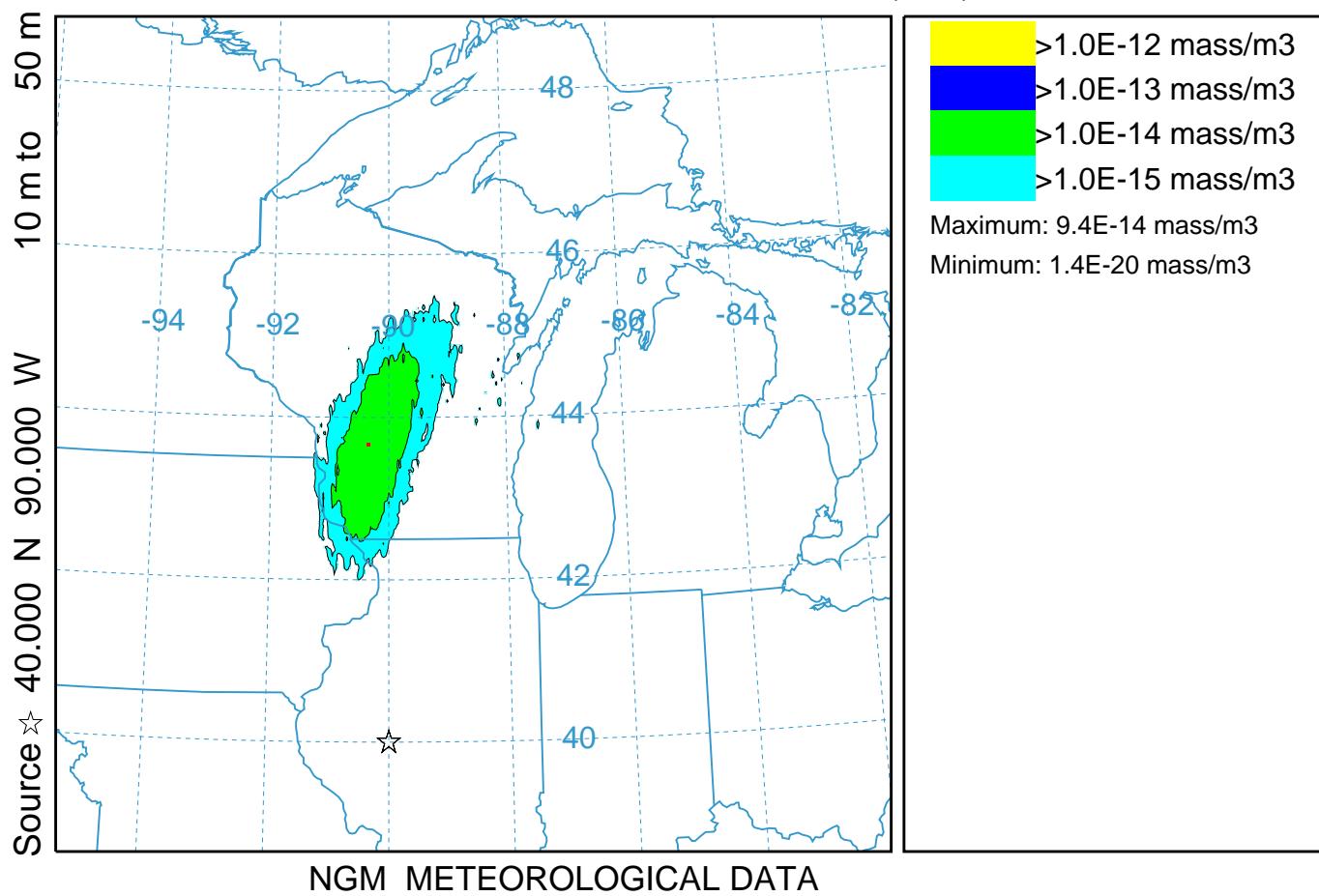


### HLS coarse (234)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 1000 17 Oct to 1200 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

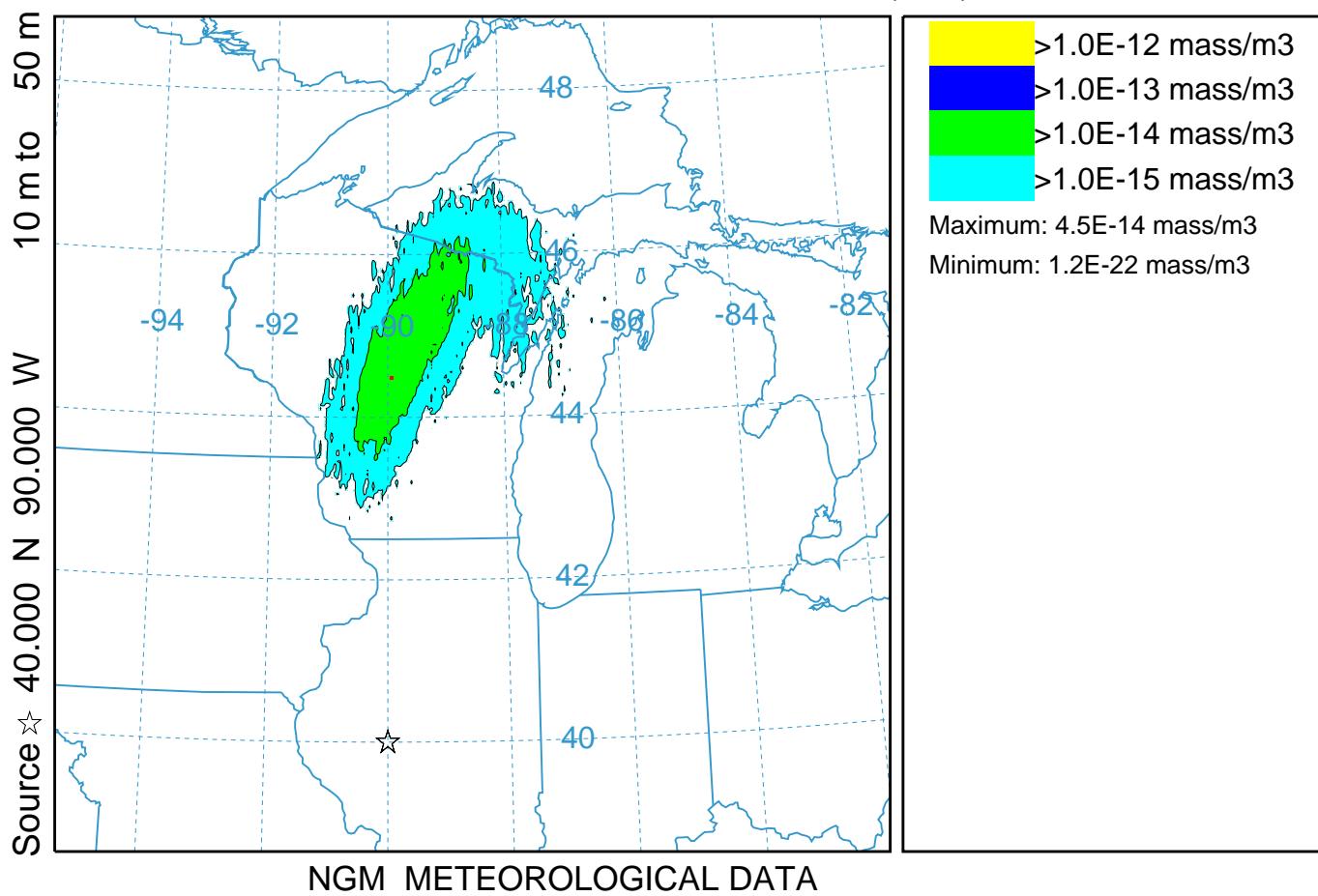


### HLS coarse (234)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 1200 17 Oct to 1400 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

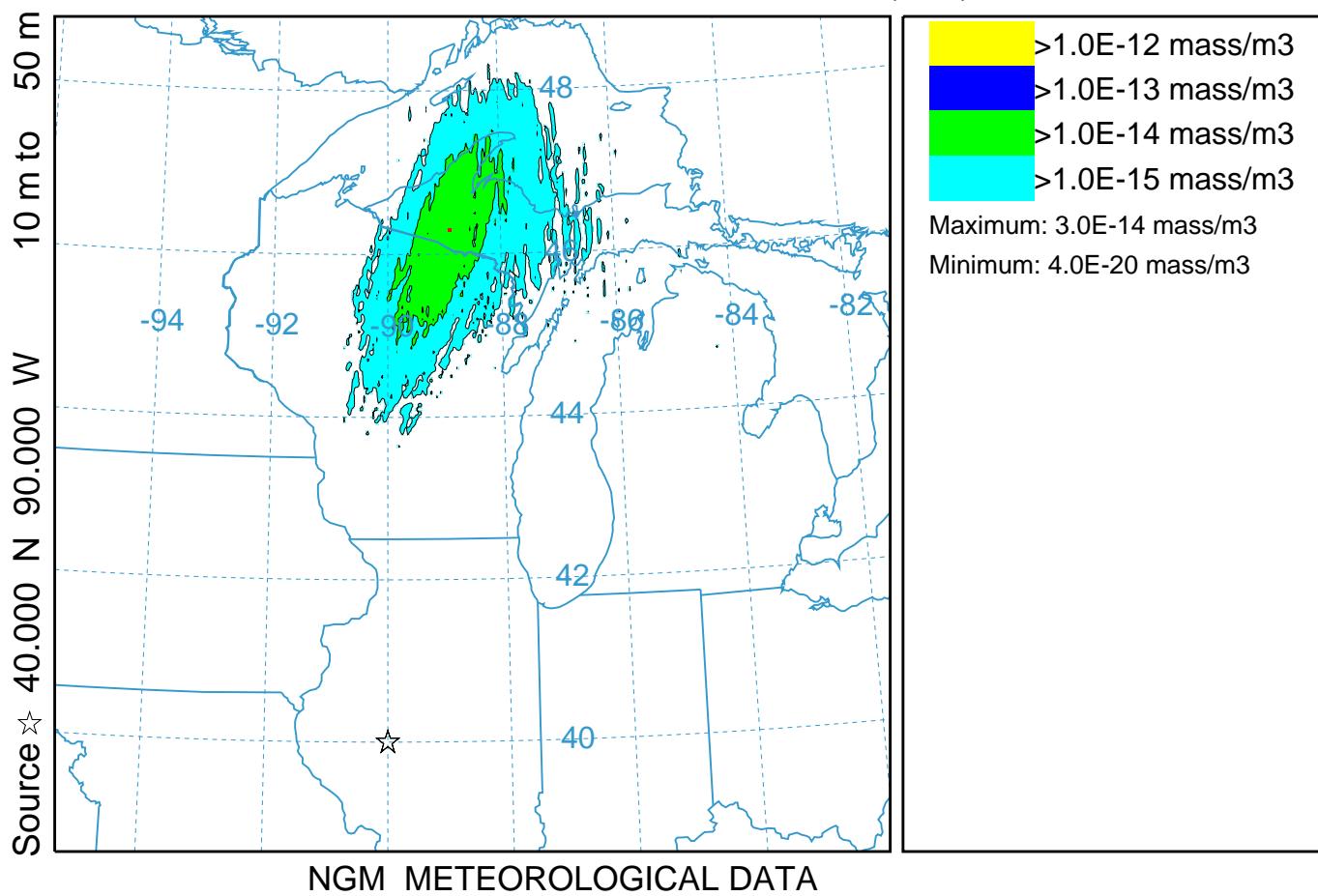


### HLS coarse (234)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 500 m

Integrated from 1400 17 Oct to 1600 17 Oct 95 (UTC)

Release started at 0000 17 Oct 95 (UTC)

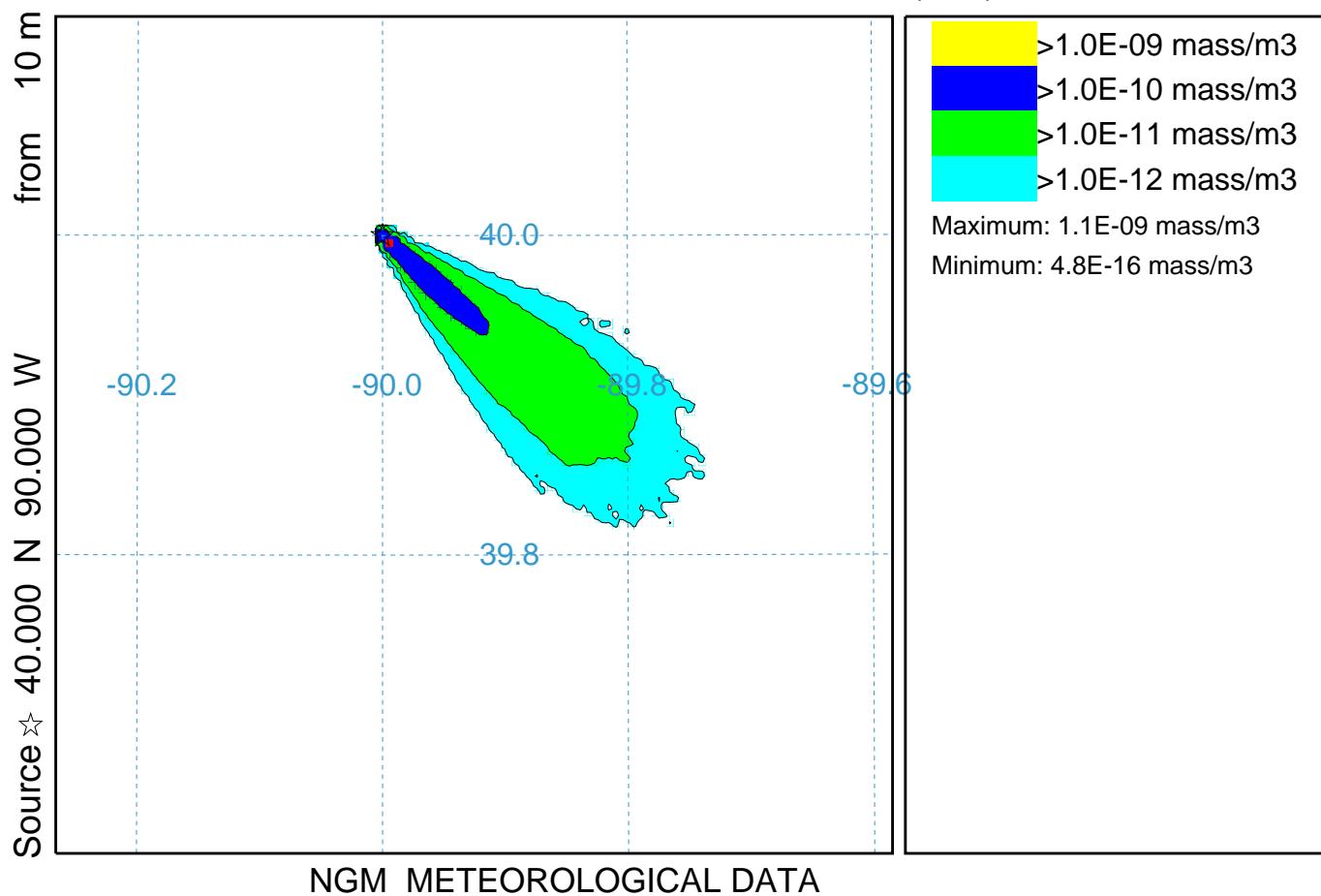


### Short-Range Dispersion Simulation (035)

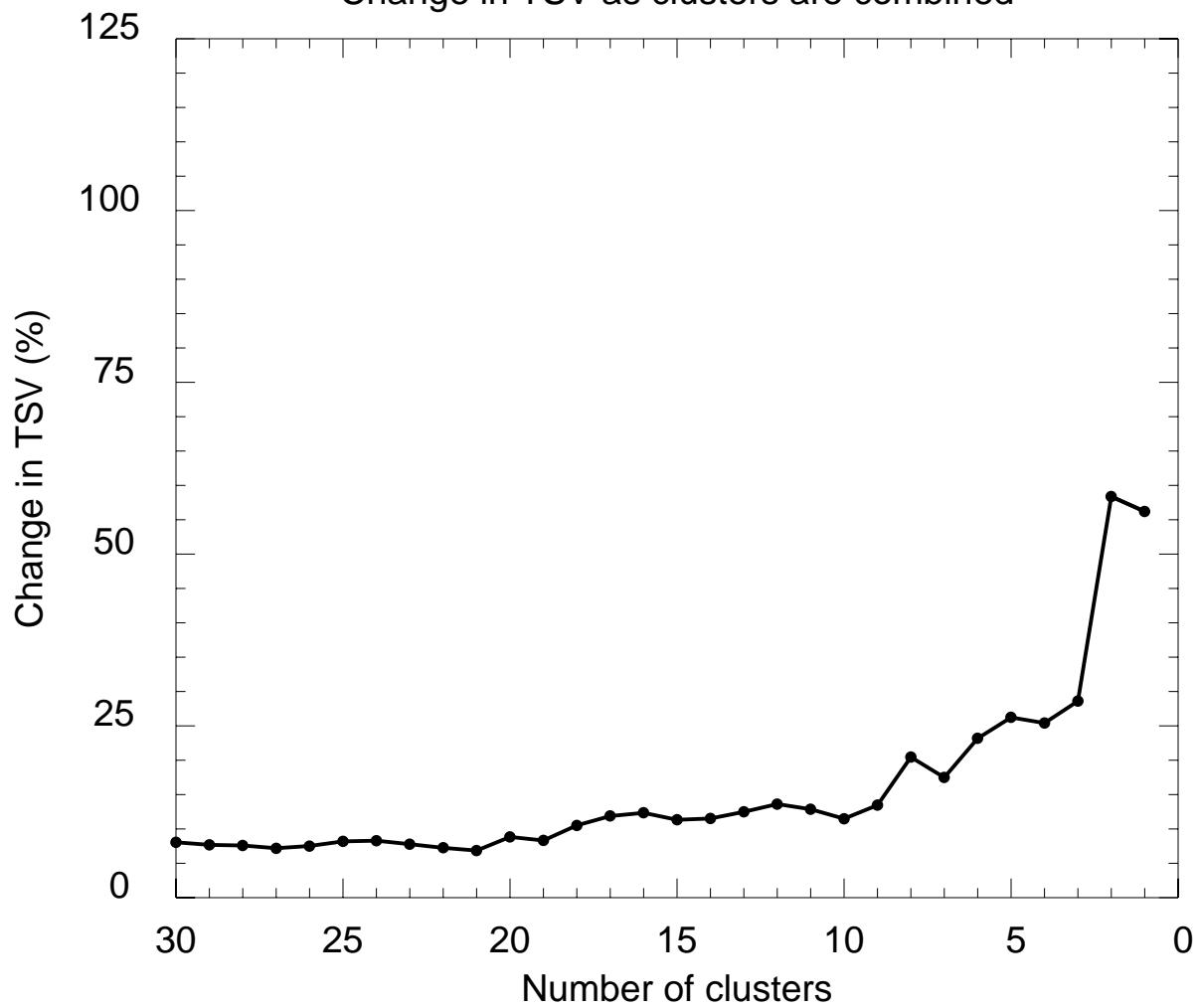
Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 0100 16 Oct 95 (UTC)

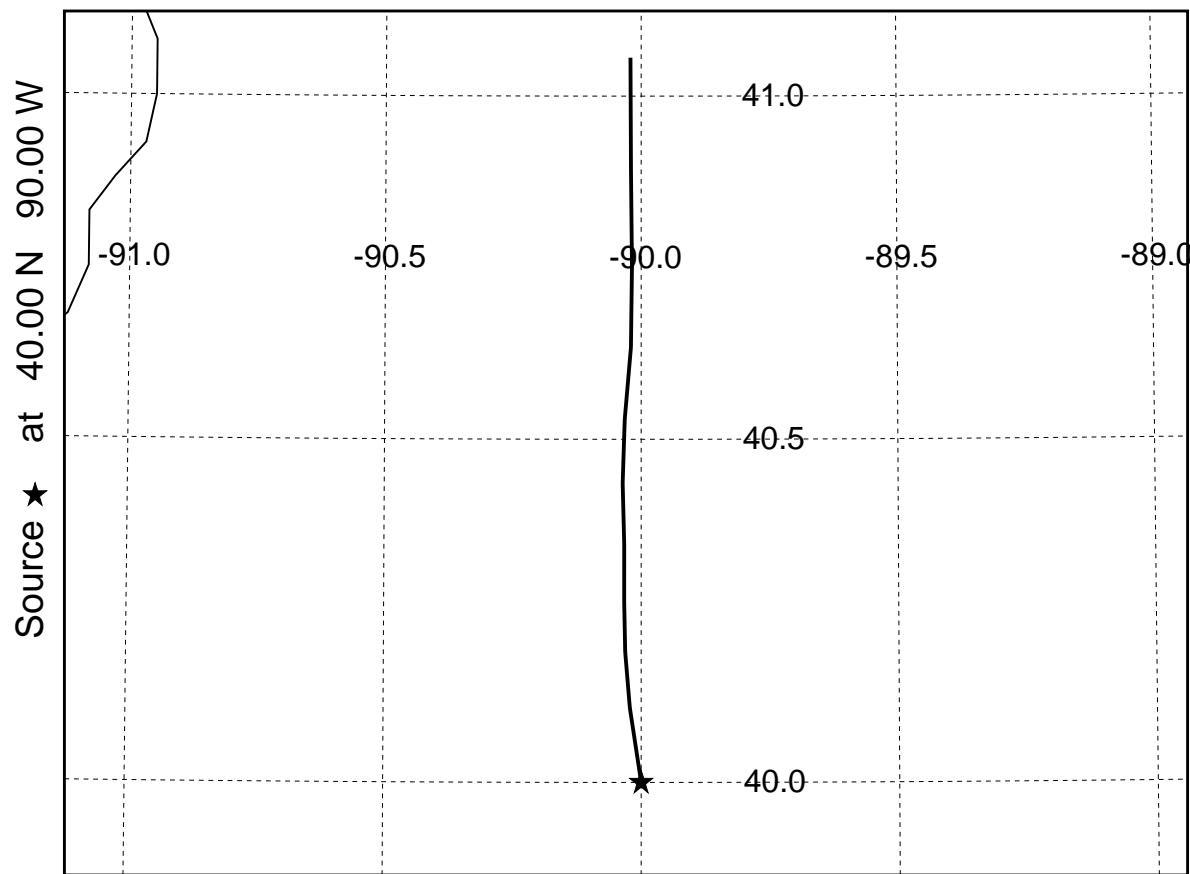
TEST Release started at 0000 16 Oct 95 (UTC)



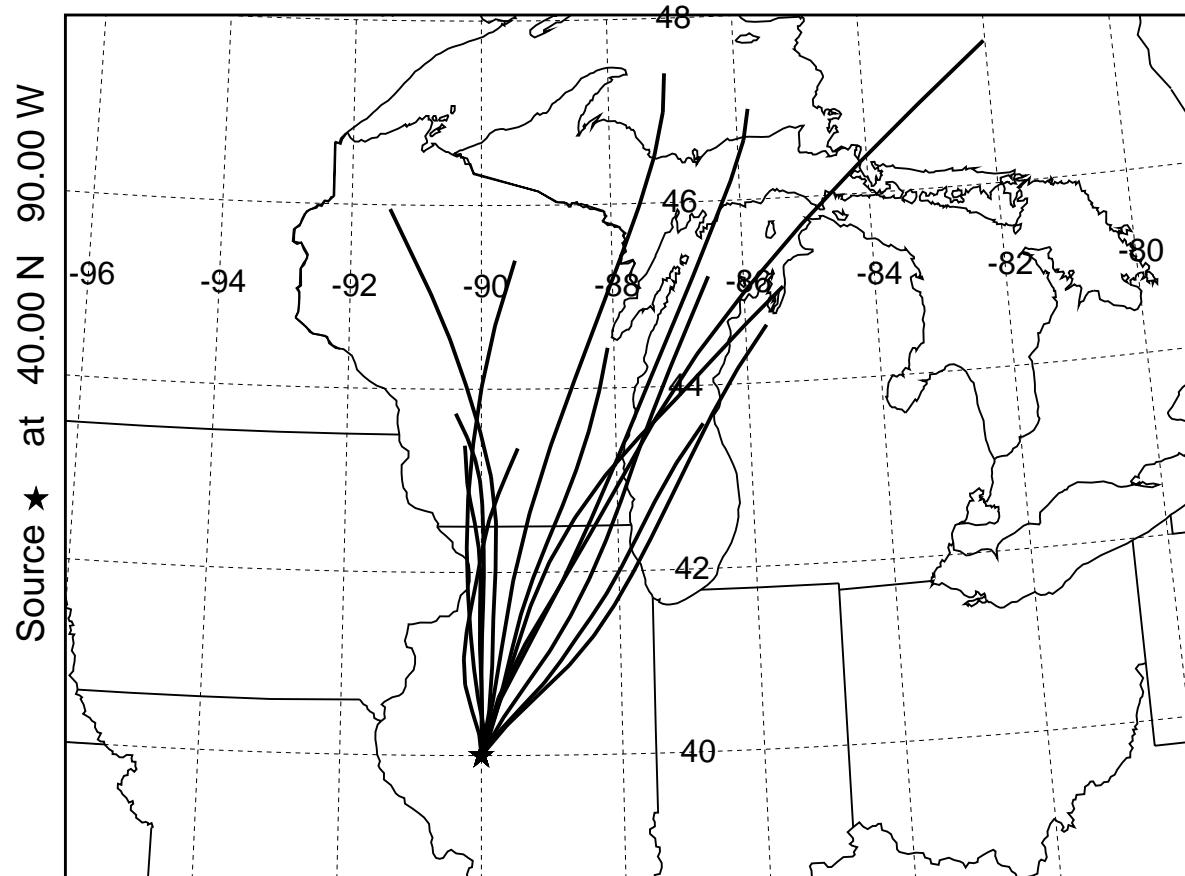
Example  
Change in TSV as clusters are combined



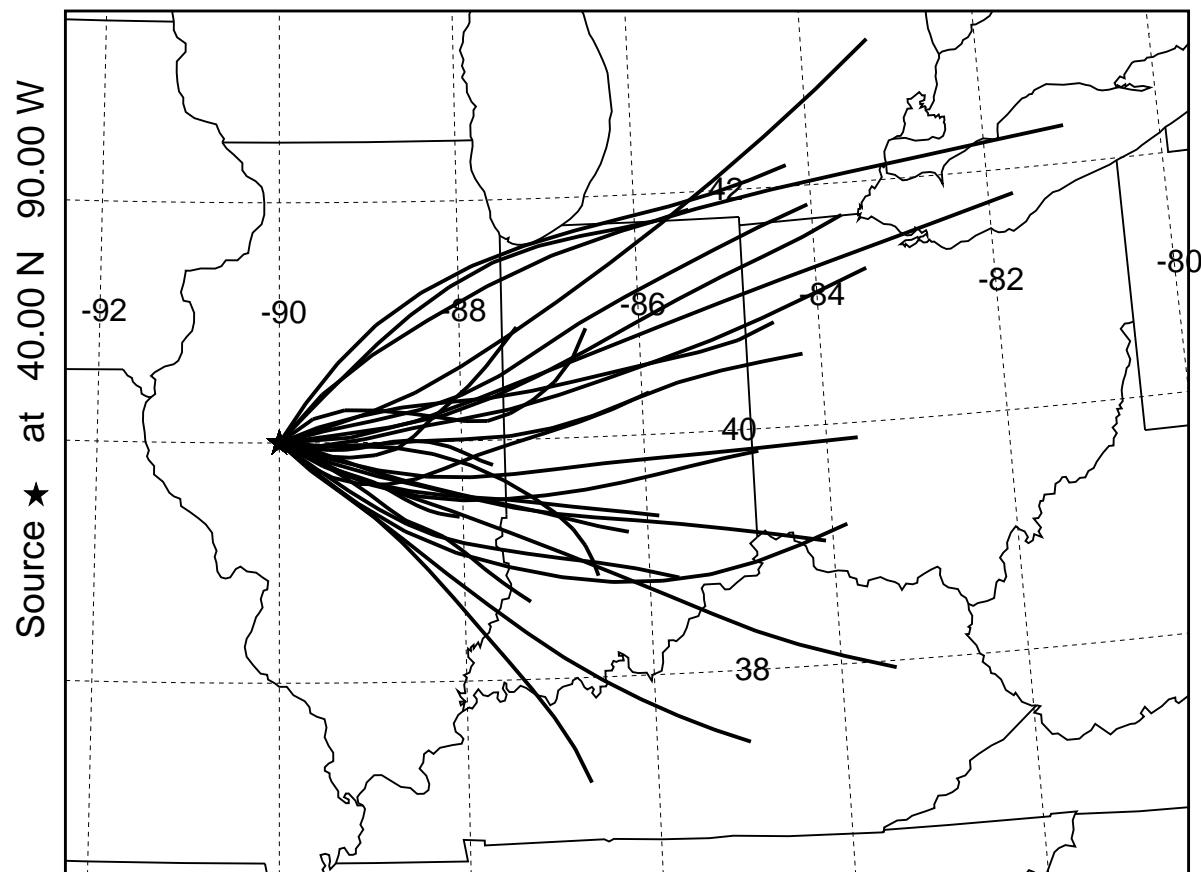
TRAJECTORIES IN CLUSTER 0 of 3 Example  
1 forward trajectories starting at various times  
NGM Meteorological Data



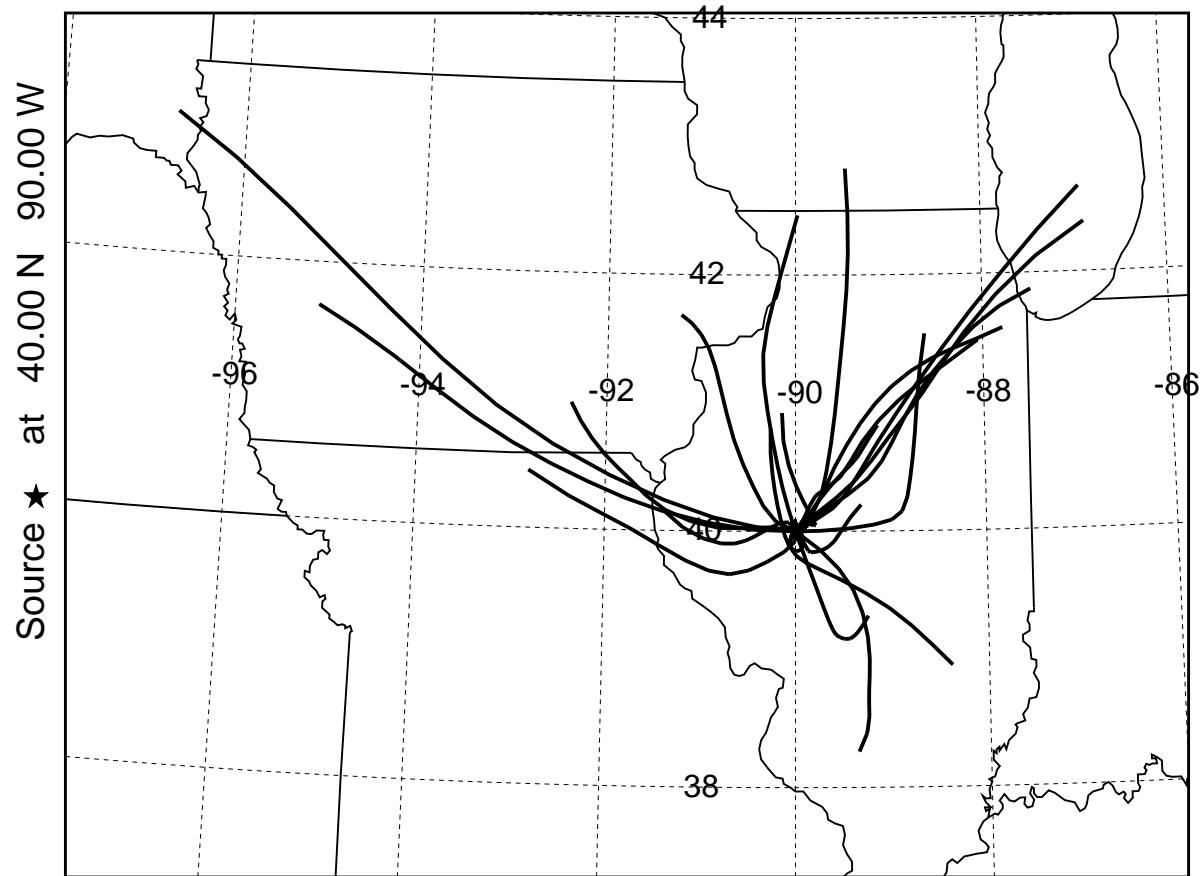
TRAJECTORIES IN CLUSTER 1 of 3 Example  
13 forward trajectories starting at various times  
NGM Meteorological Data



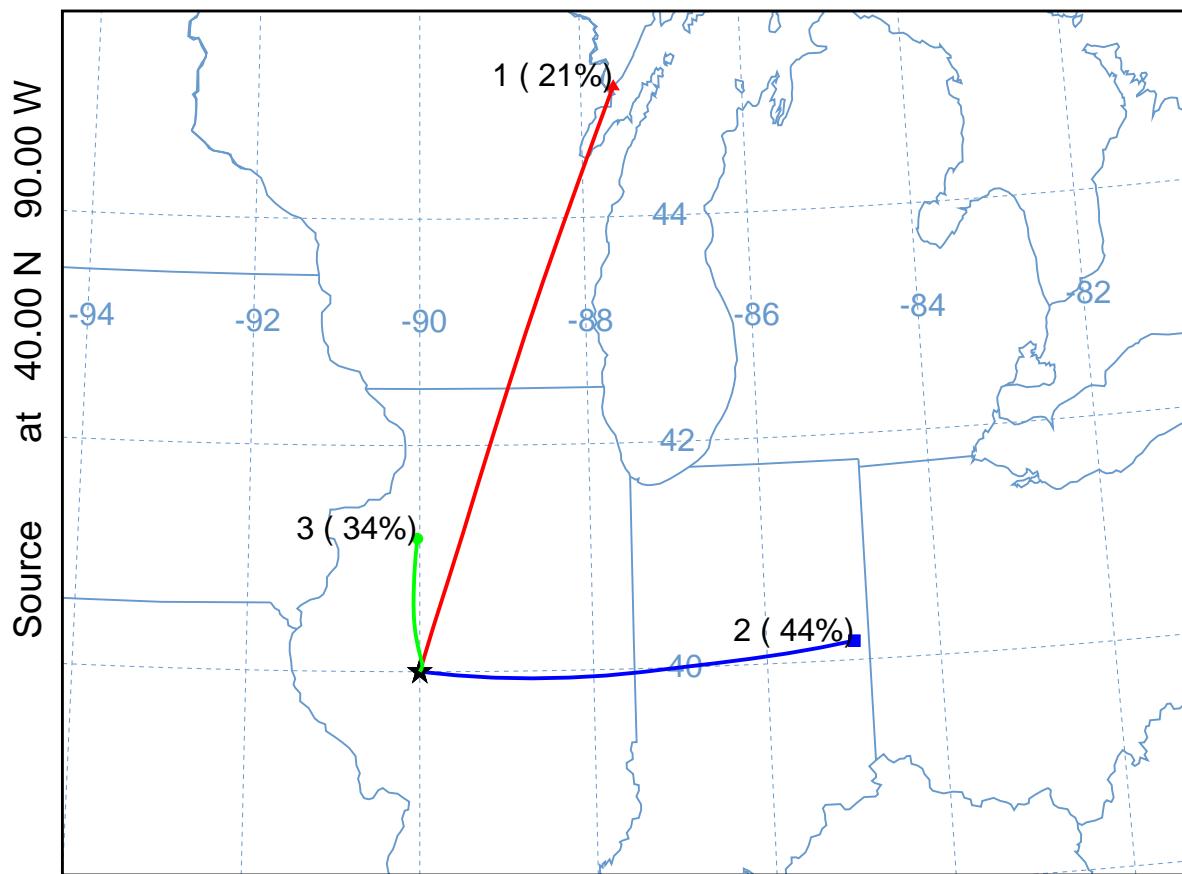
TRAJECTORIES IN CLUSTER 2 of 3 Example  
27 forward trajectories starting at various times  
NGM Meteorological Data



TRAJECTORIES IN CLUSTER 3 of 3 Example  
21 forward trajectories starting at various times  
NGM Meteorological Data

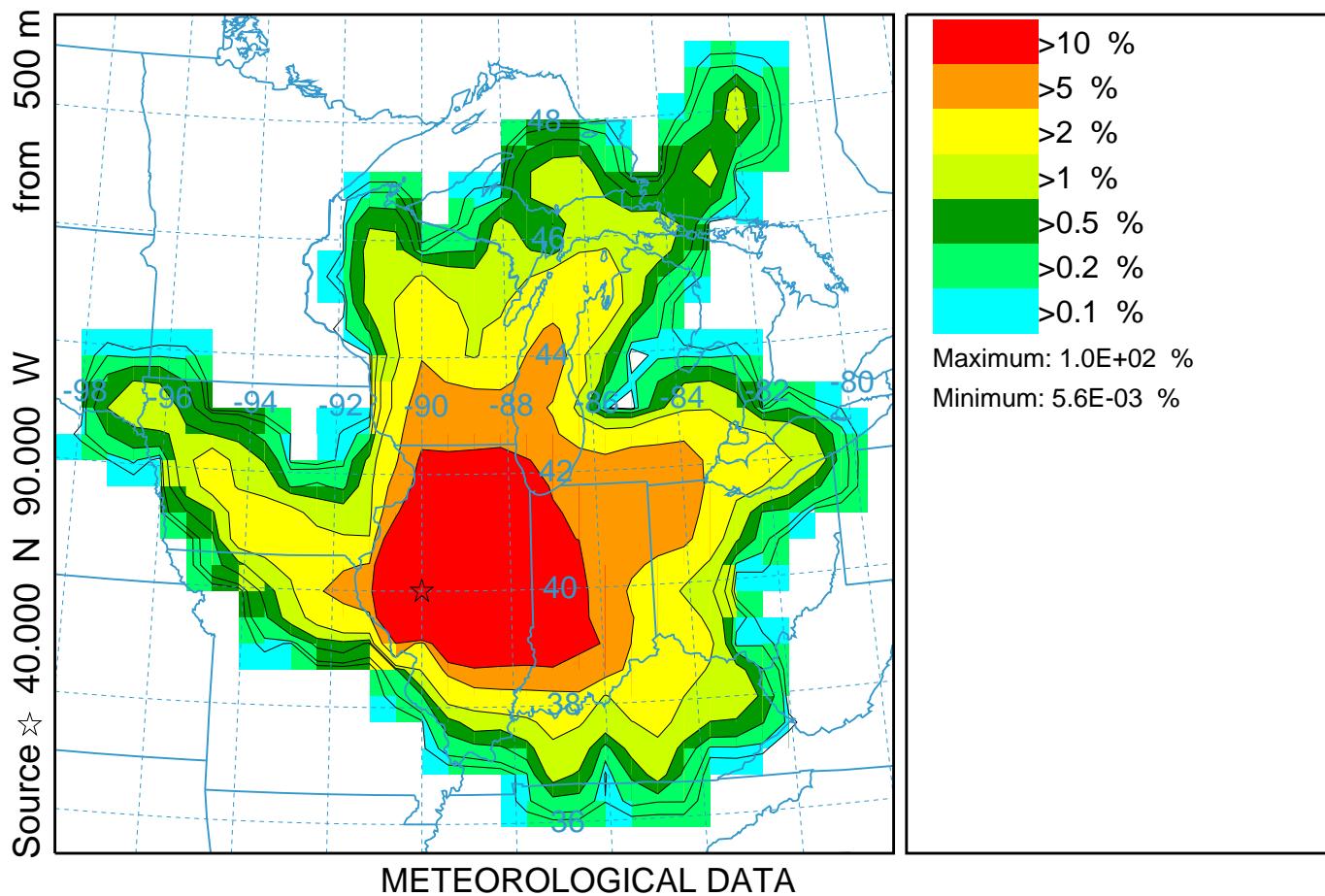


CLUSTER MEAN TRAJECTORIES Example  
61 forward trajectories  
NGM Meteorological Data



## Trajectory Frequency Plot

Values ( % ) averaged between 0 m and 99999 m  
Integrated from 0000 01 Oct to 0000 31 Oct 95 (UTC)  
Freq Release started at 0000 00 00 (UTC)

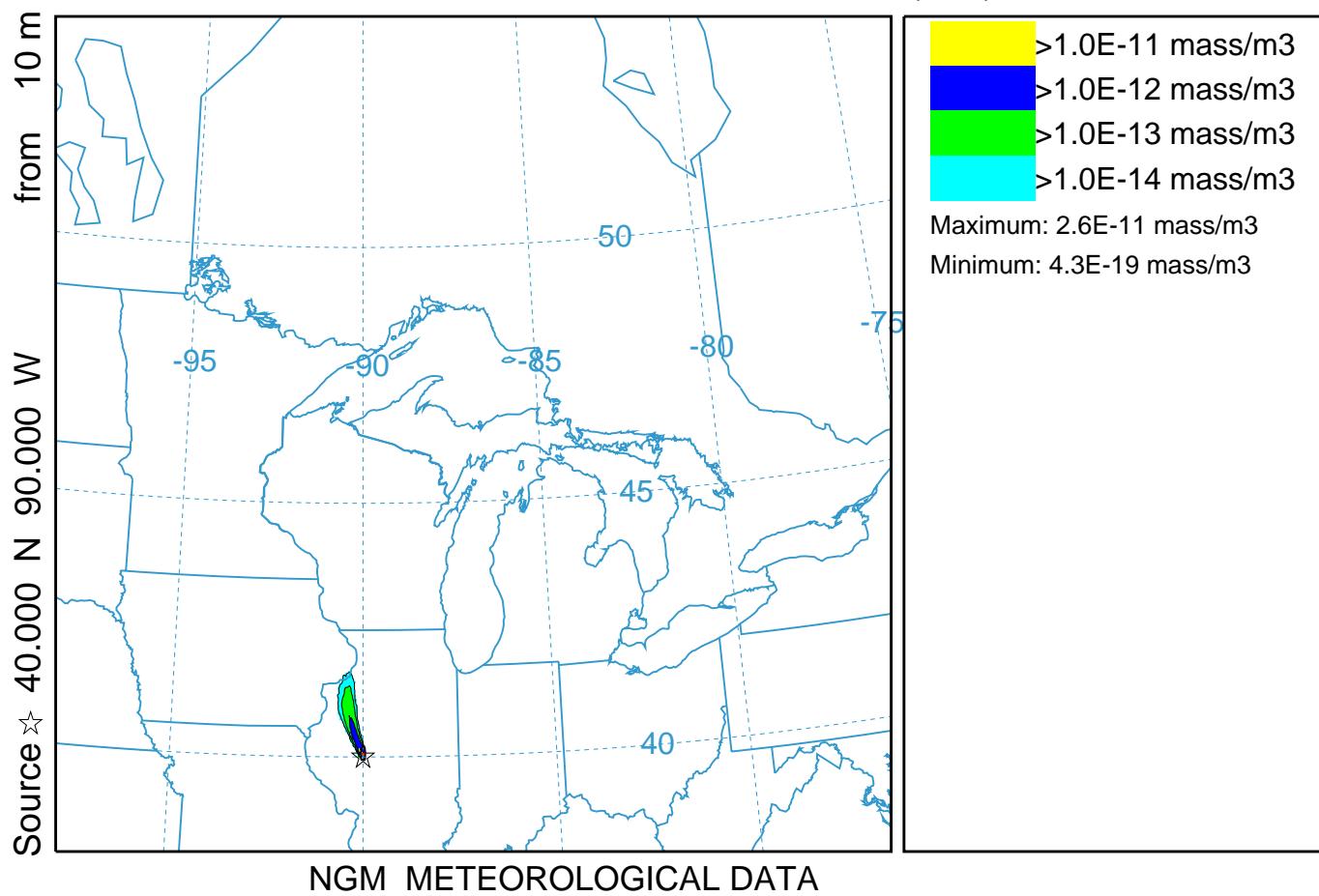


### Transport to 24 hours (036)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 17 Oct to 0600 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

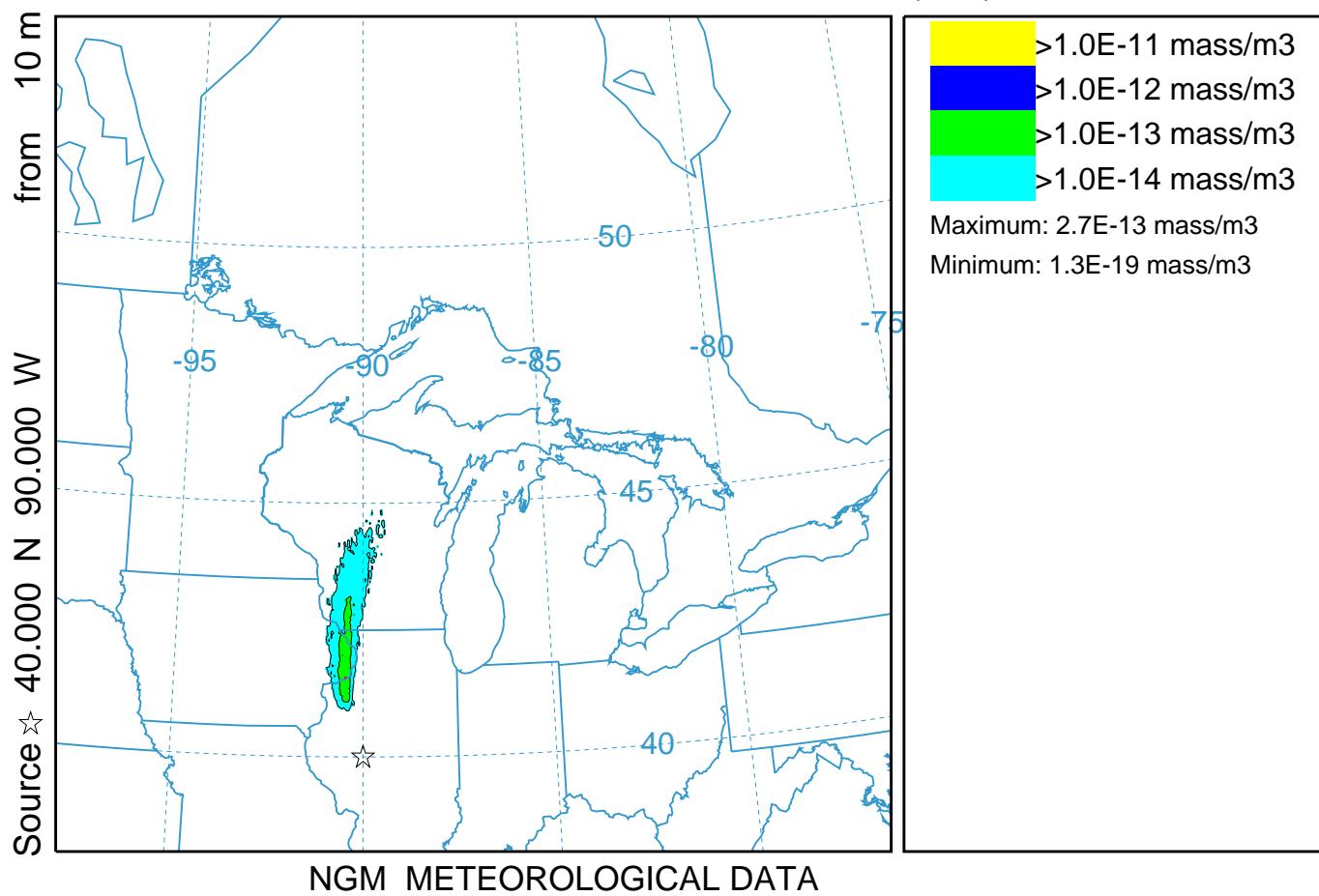


### Transport to 24 hours (036)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0600 17 Oct to 1200 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

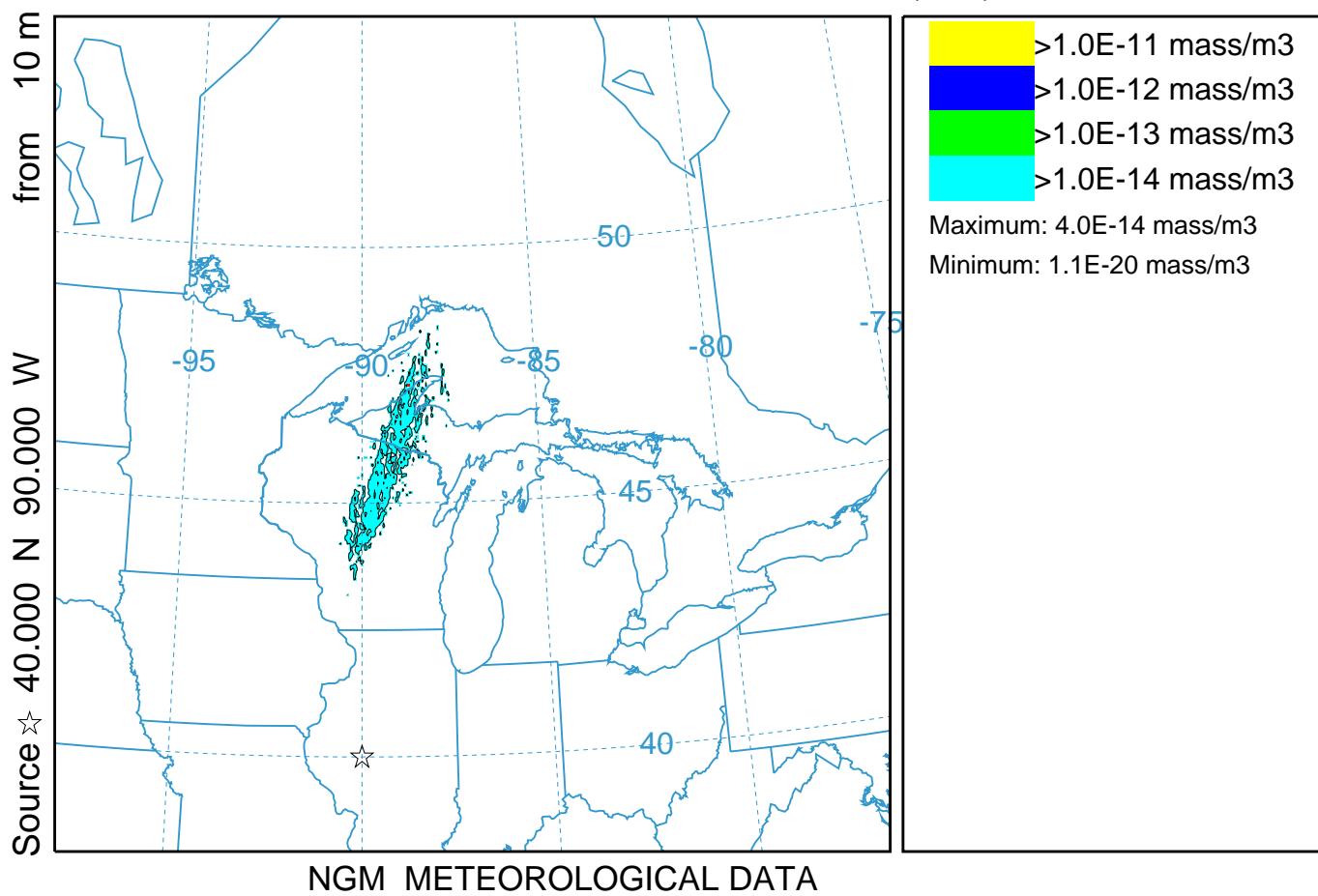


### Transport to 24 hours (036)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1200 17 Oct to 1800 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

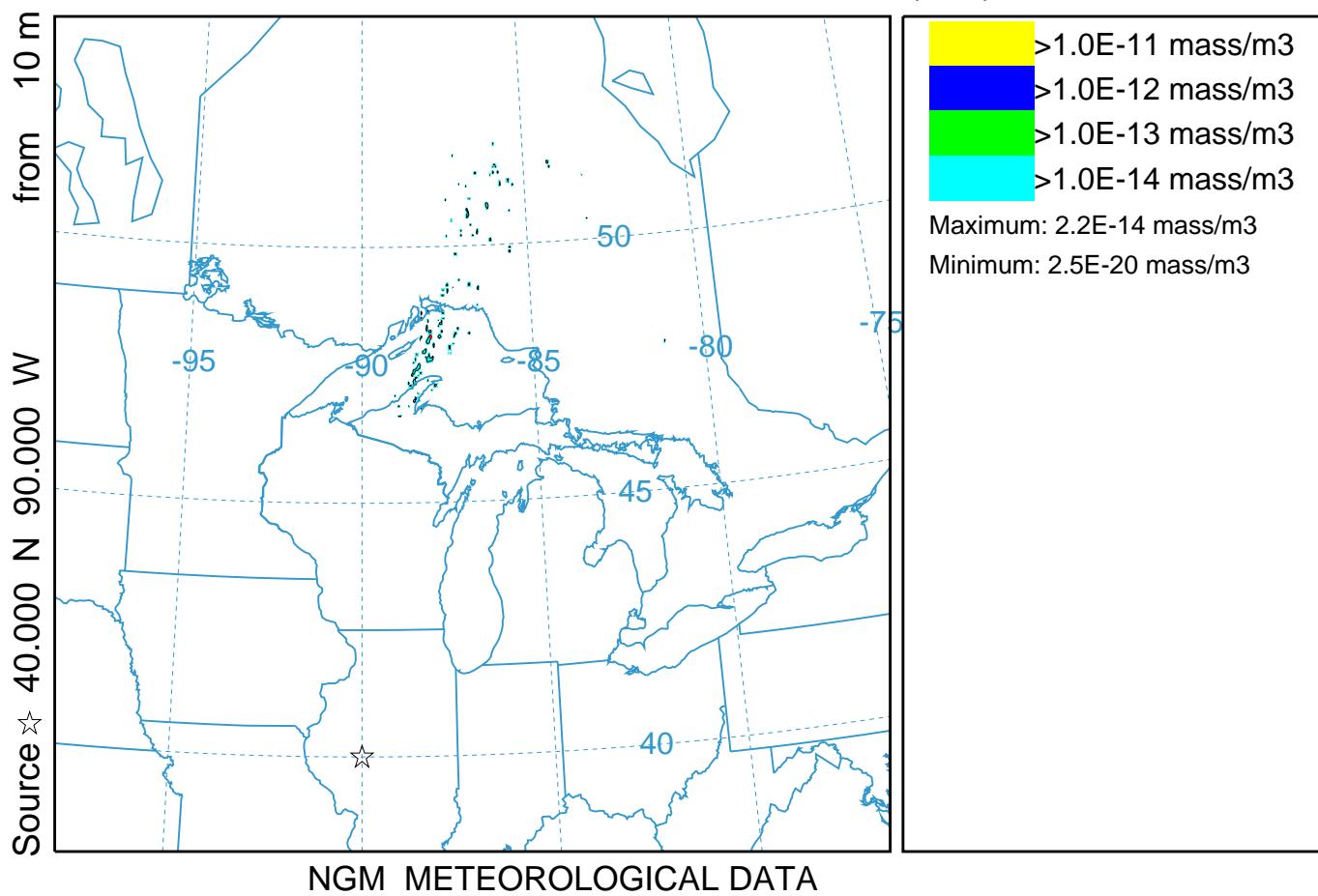


### Transport to 24 hours (036)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1800 17 Oct to 0000 18 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

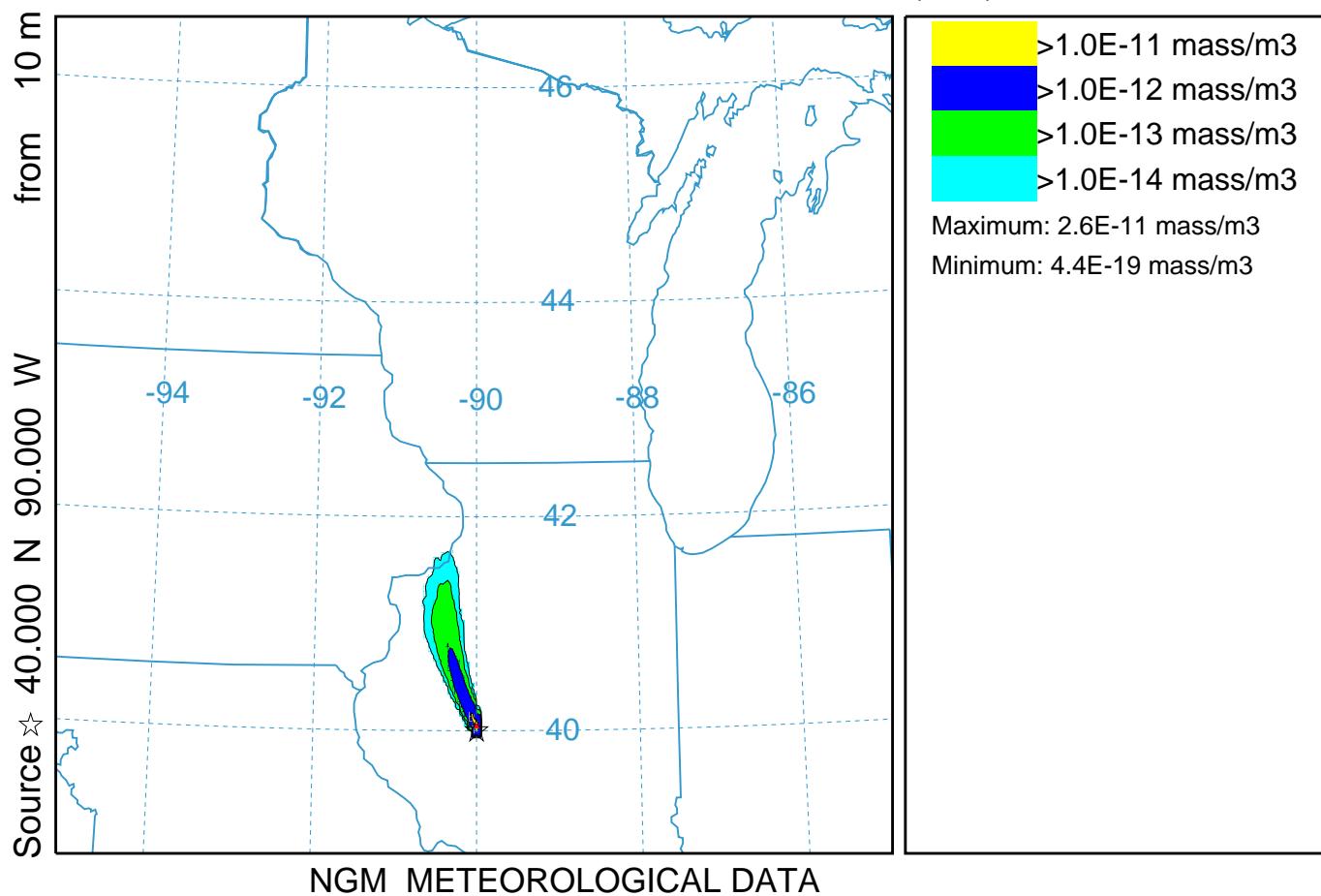


## GEM@12h - Lagrangian grid (037)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0000 17 Oct to 0600 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

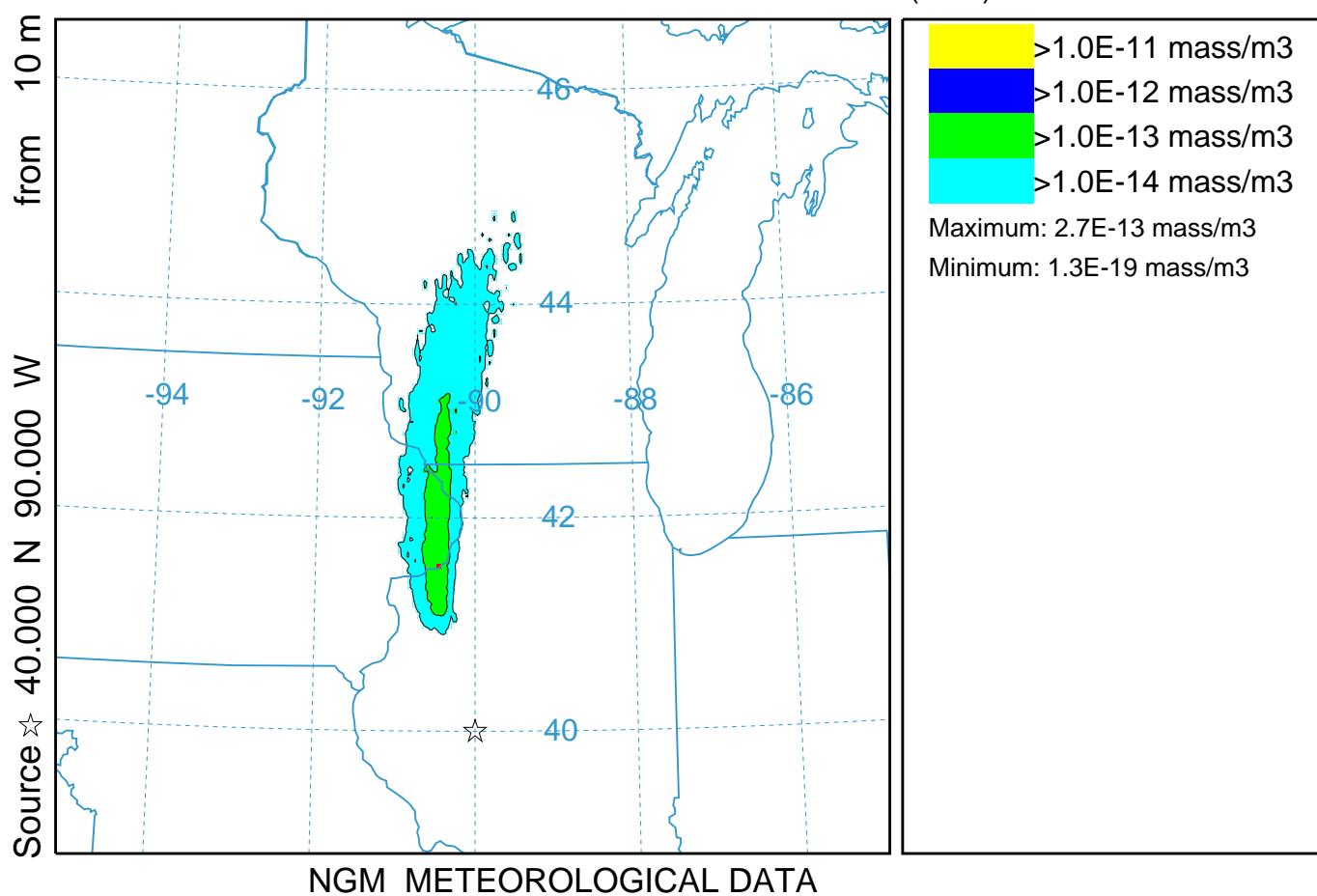


### GEM@12h - Lagrangian grid (037)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0600 17 Oct to 1200 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

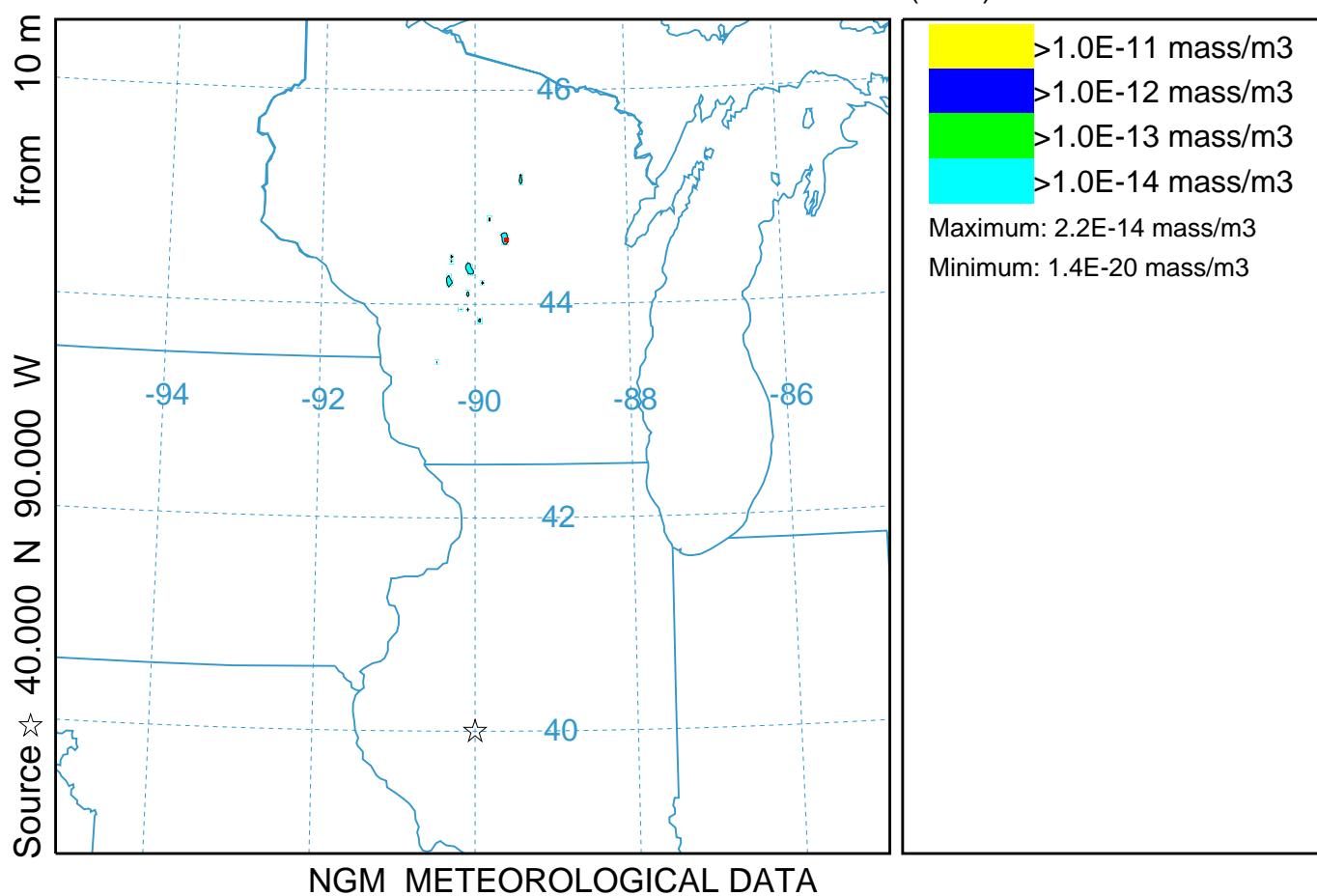


### GEM@12h - Lagrangian grid (037)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1200 17 Oct to 1800 17 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)

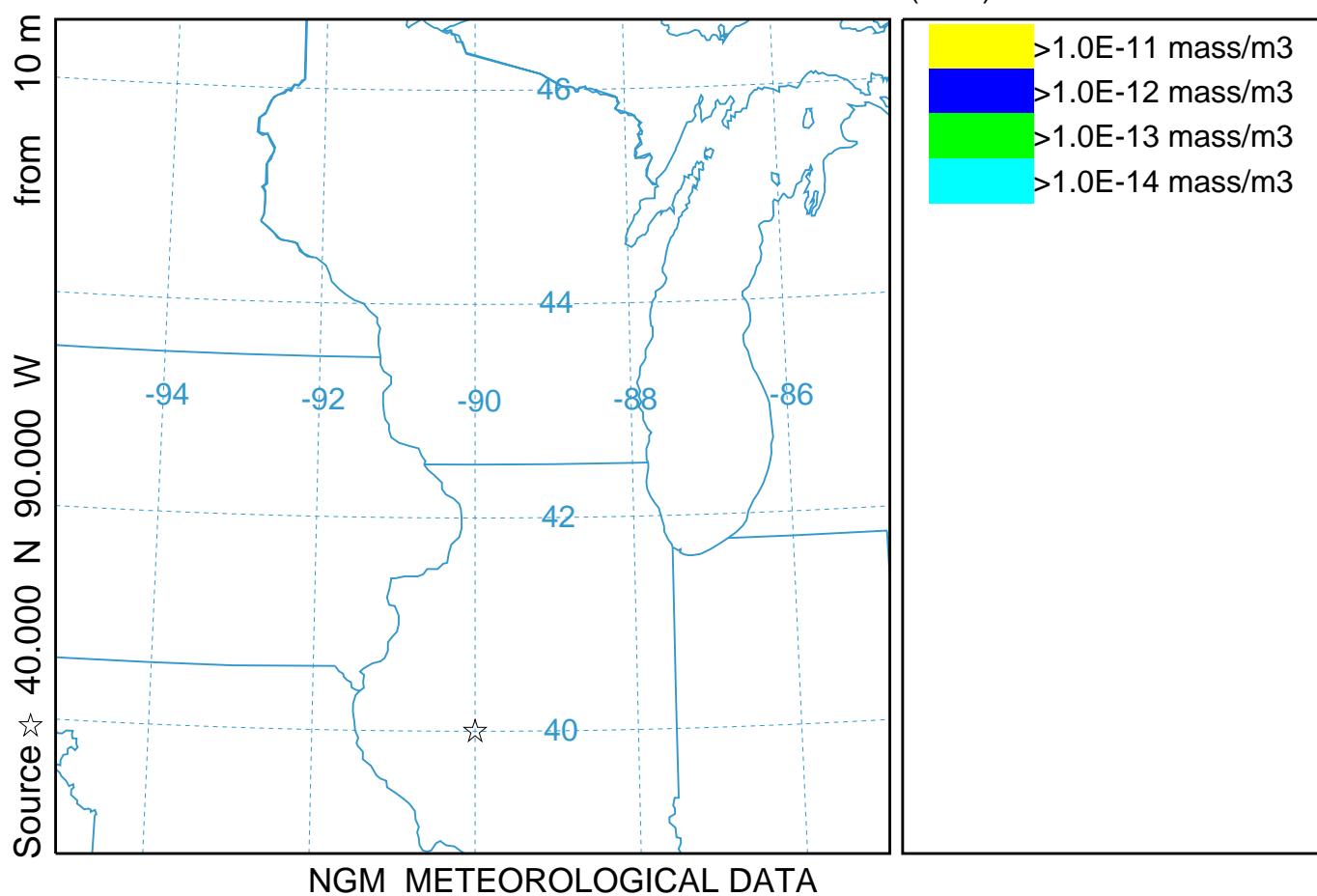


### GEM@12h - Lagrangian grid (037)

Concentration (mass/m<sup>3</sup>) averaged between 0 m and 100 m

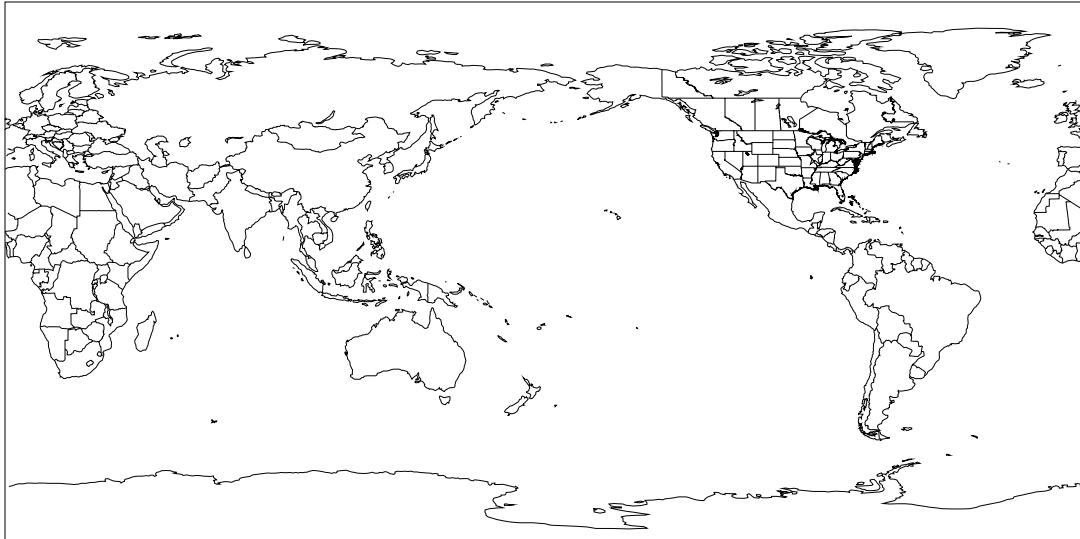
Integrated from 1800 17 Oct to 0000 18 Oct 95 (UTC)

TEST Release started at 0000 17 Oct 95 (UTC)



GEM@12h - Eulerian grid (137)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 0600 17 Oct to 0600 17 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)

Source ★ 40.000 N 90.000 W from 10 m

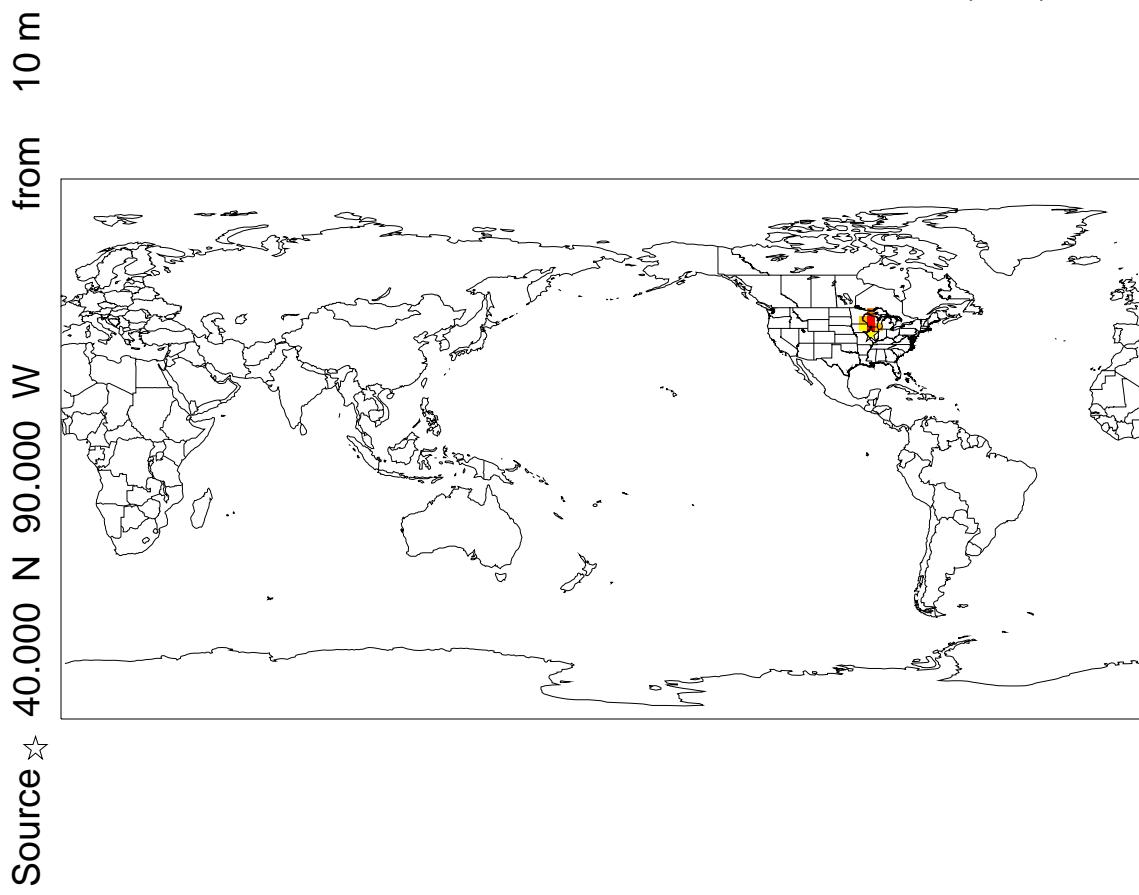


**LEGEND**

- >1.0E-17 /m<sup>3</sup>
- >1.0E-18 /m<sup>3</sup>
- >1.0E-19 /m<sup>3</sup>
- >1.0E-20 /m<sup>3</sup>
- >1.0E-21 /m<sup>3</sup>
- >1.0E-22 /m<sup>3</sup>
- >1.0E-23 /m<sup>3</sup>
- >1.0E-24 /m<sup>3</sup>
- >1.0E-25 /m<sup>3</sup>
- >1.0E-26 /m<sup>3</sup>
- >1.0E-27 /m<sup>3</sup>
- >1.0E-28 /m<sup>3</sup>

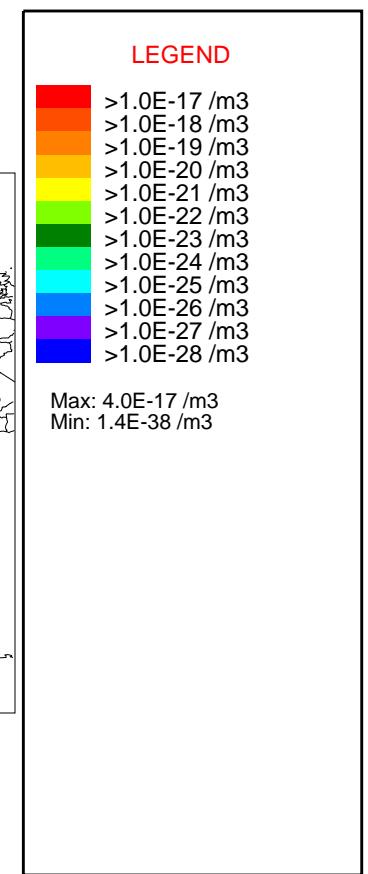
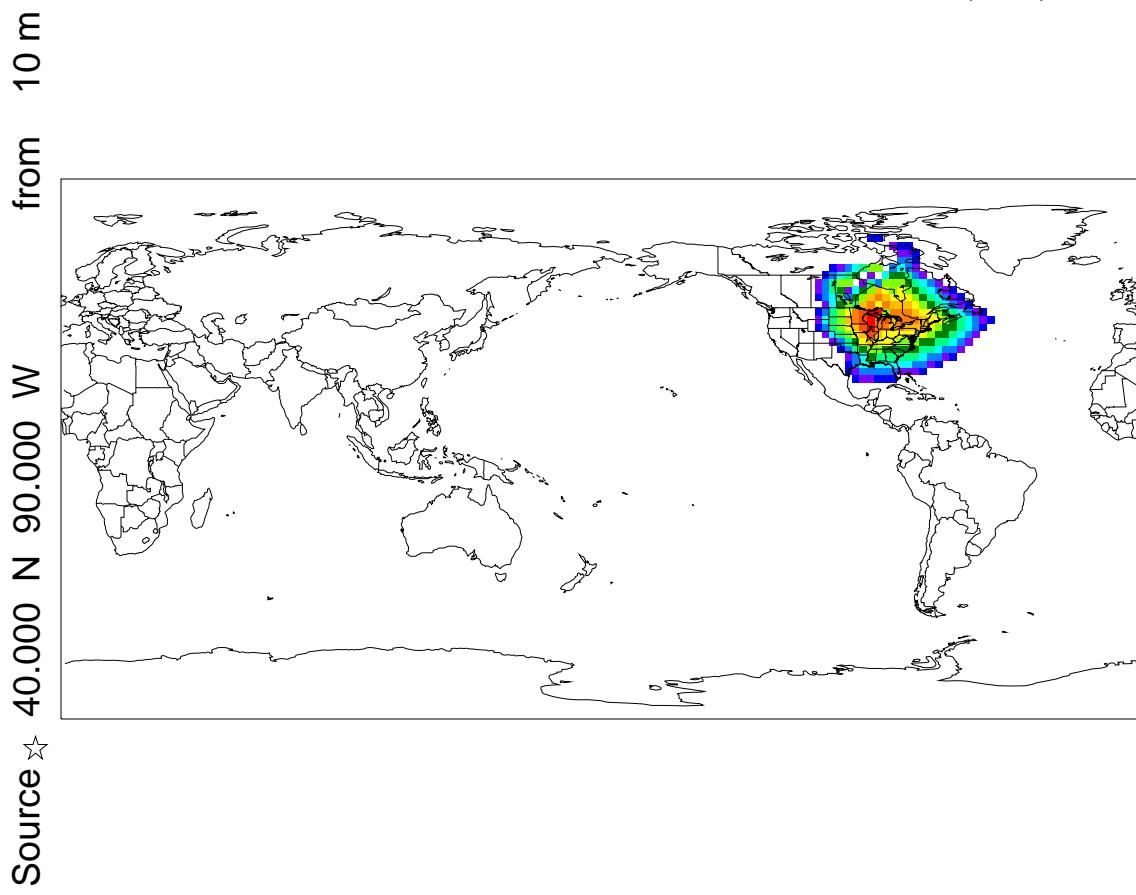
GEMx METEOROLOGICAL DATA

GEM@12h - Eulerian grid (137)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 1200 17 Oct to 1200 17 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



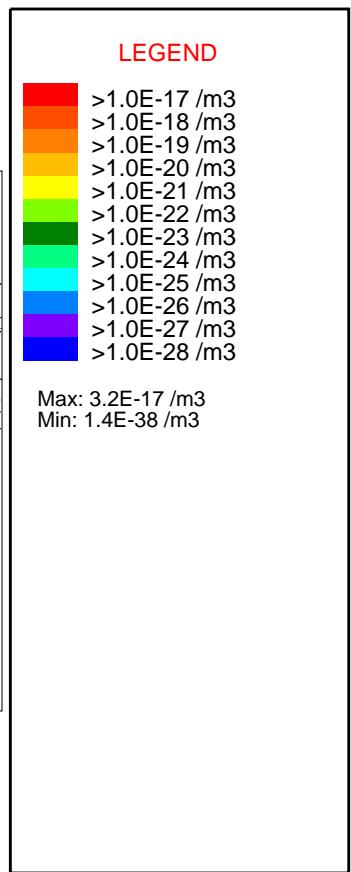
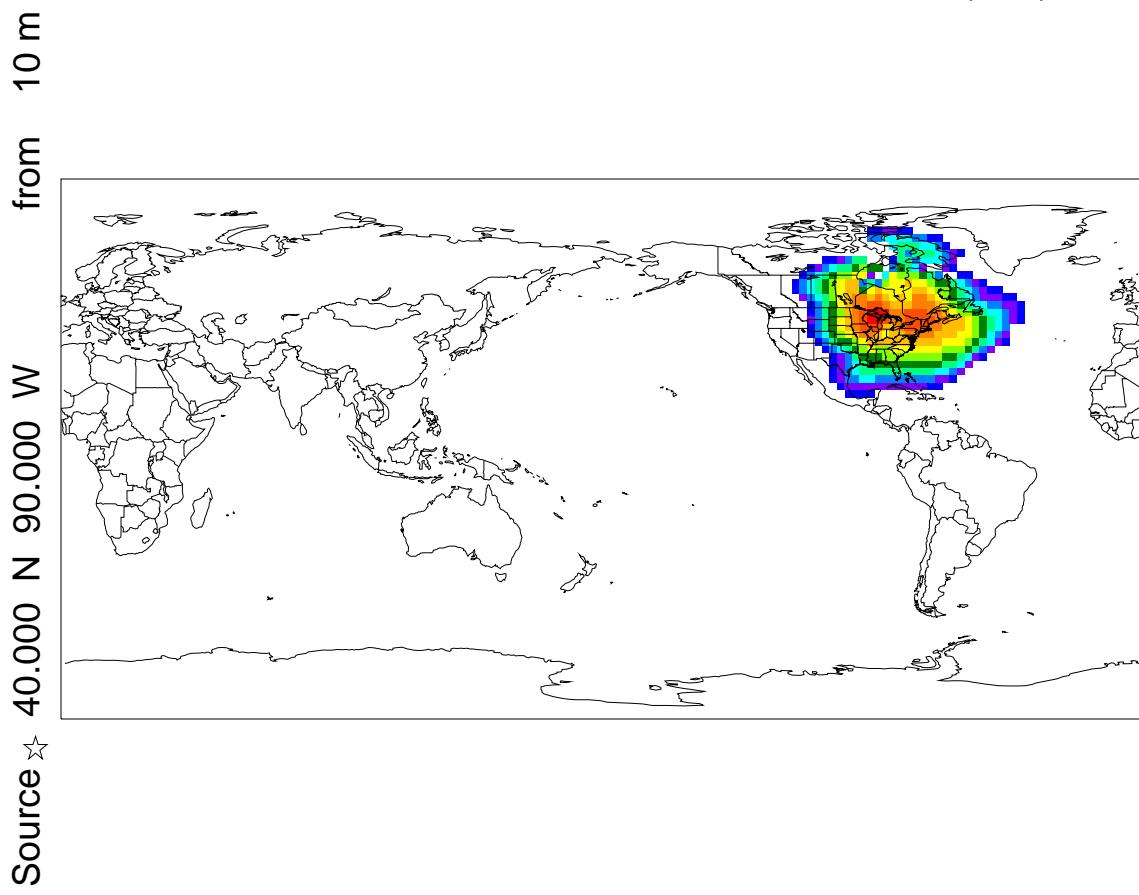
GEMx METEOROLOGICAL DATA

GEM@12h - Eulerian grid (137)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 1800 17 Oct to 1800 17 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



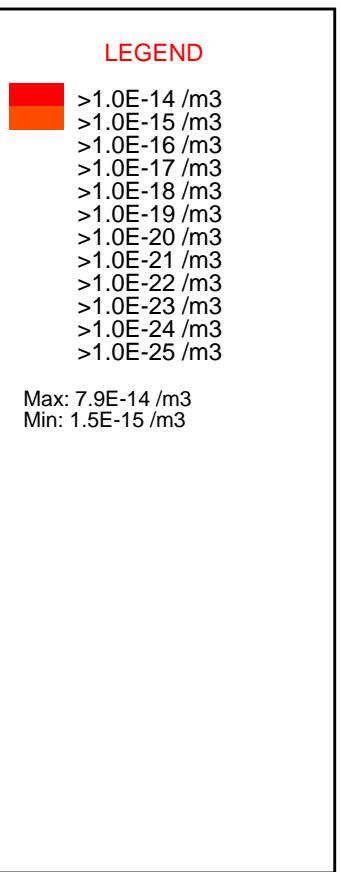
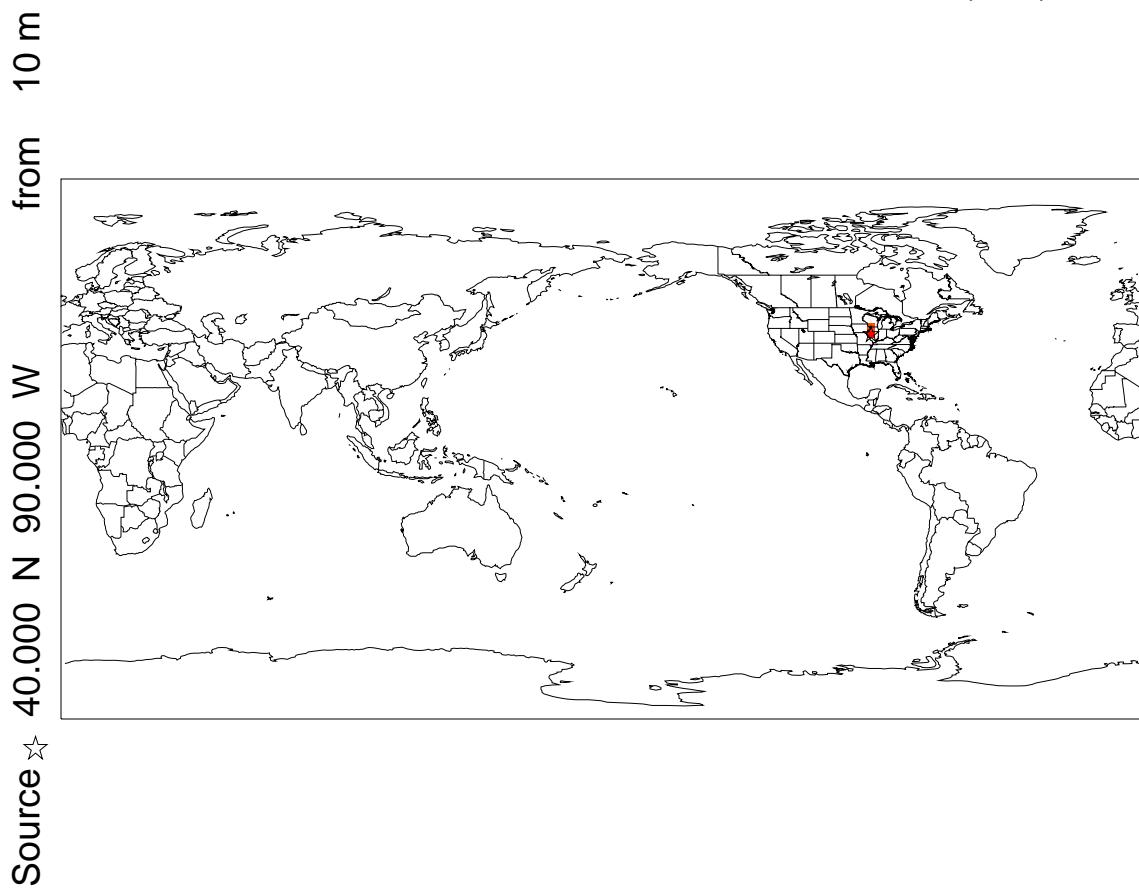
GEMx METEOROLOGICAL DATA

GEM@12h - Eulerian grid (137)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 0000 18 Oct to 0000 18 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



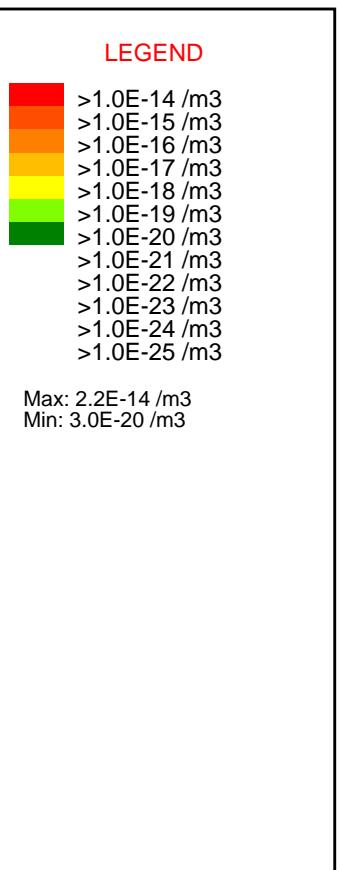
GEMx METEOROLOGICAL DATA

GEM@12h - Lagrangian + Eulerian (237)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 0600 17 Oct to 0600 17 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



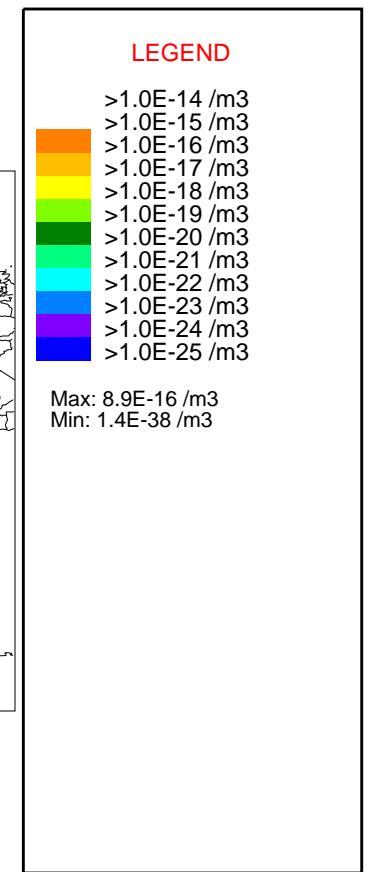
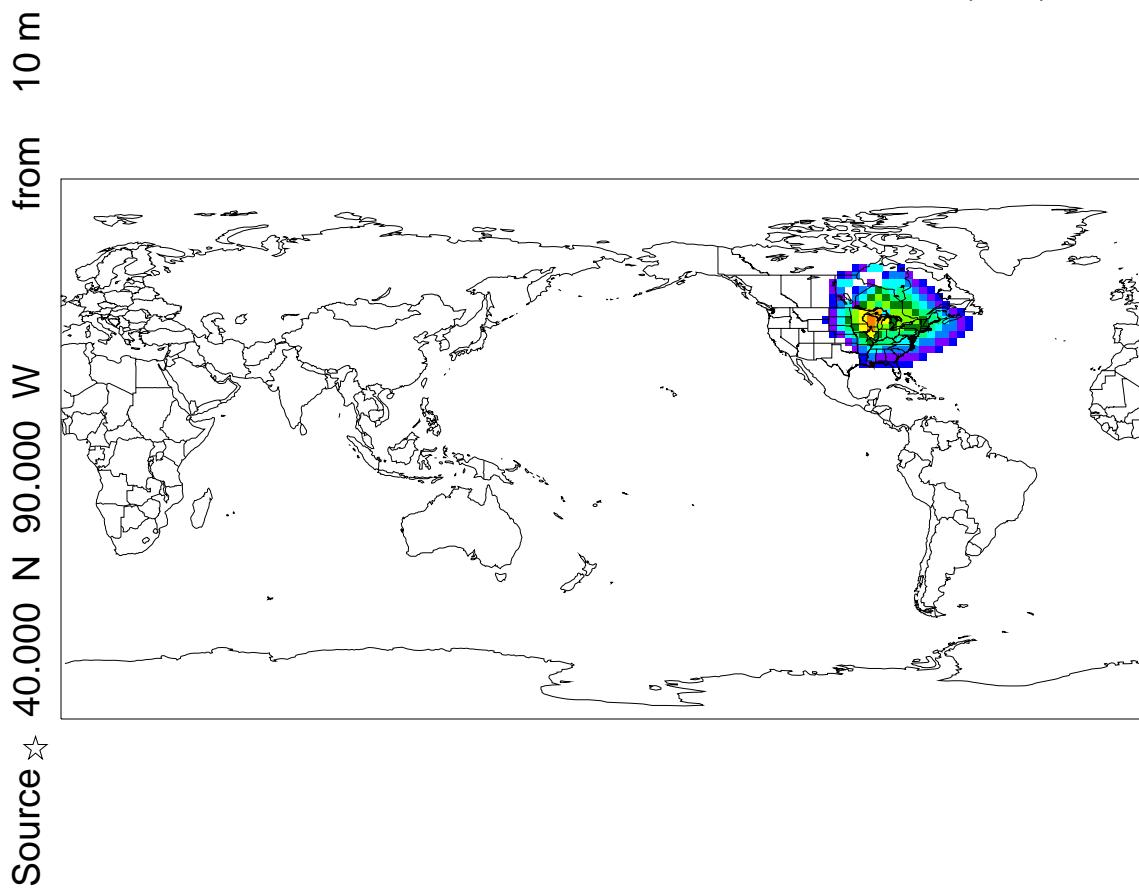
GEMx METEOROLOGICAL DATA

GEM@12h - Lagrangian + Eulerian (237)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 1200 17 Oct to 1200 17 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



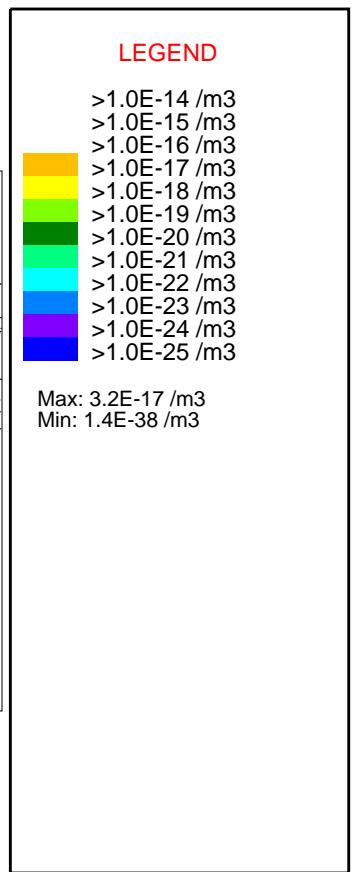
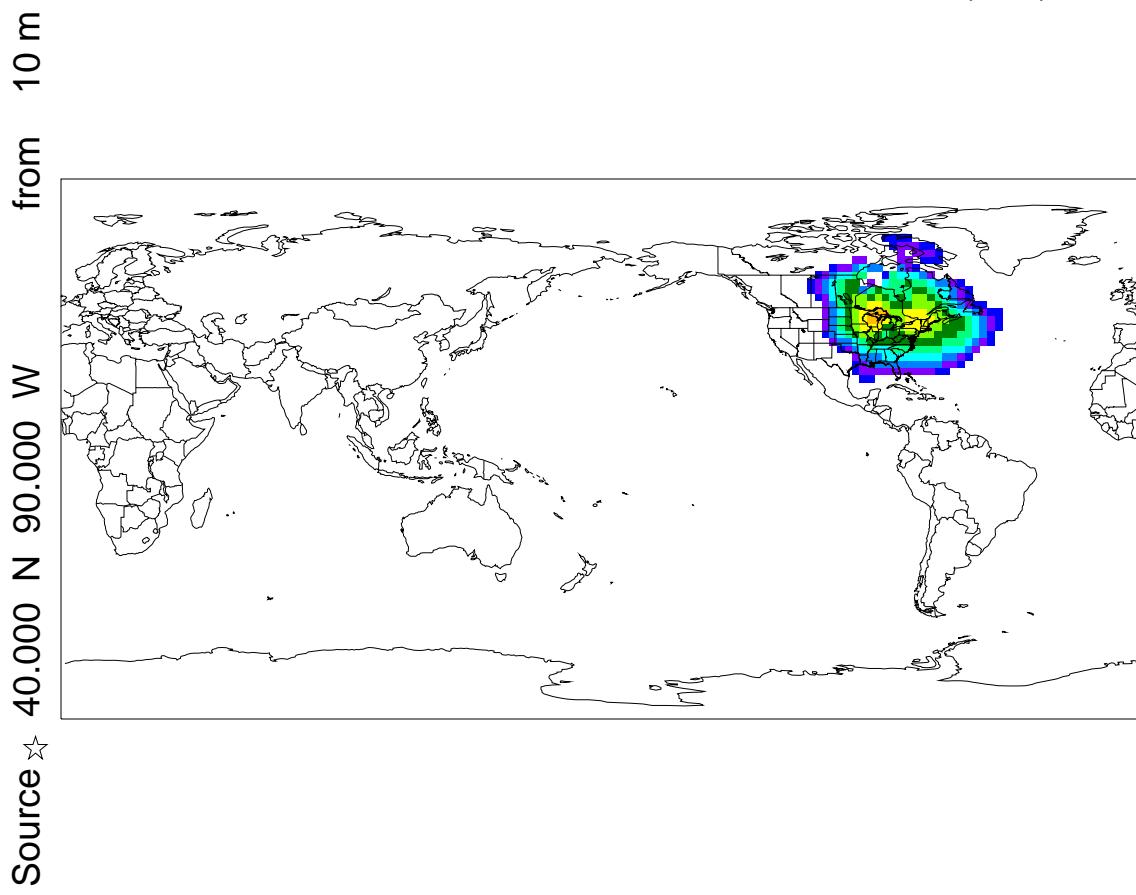
GEMx METEOROLOGICAL DATA

GEM@12h - Lagrangian + Eulerian (237)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 1800 17 Oct to 1800 17 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



GEMx METEOROLOGICAL DATA

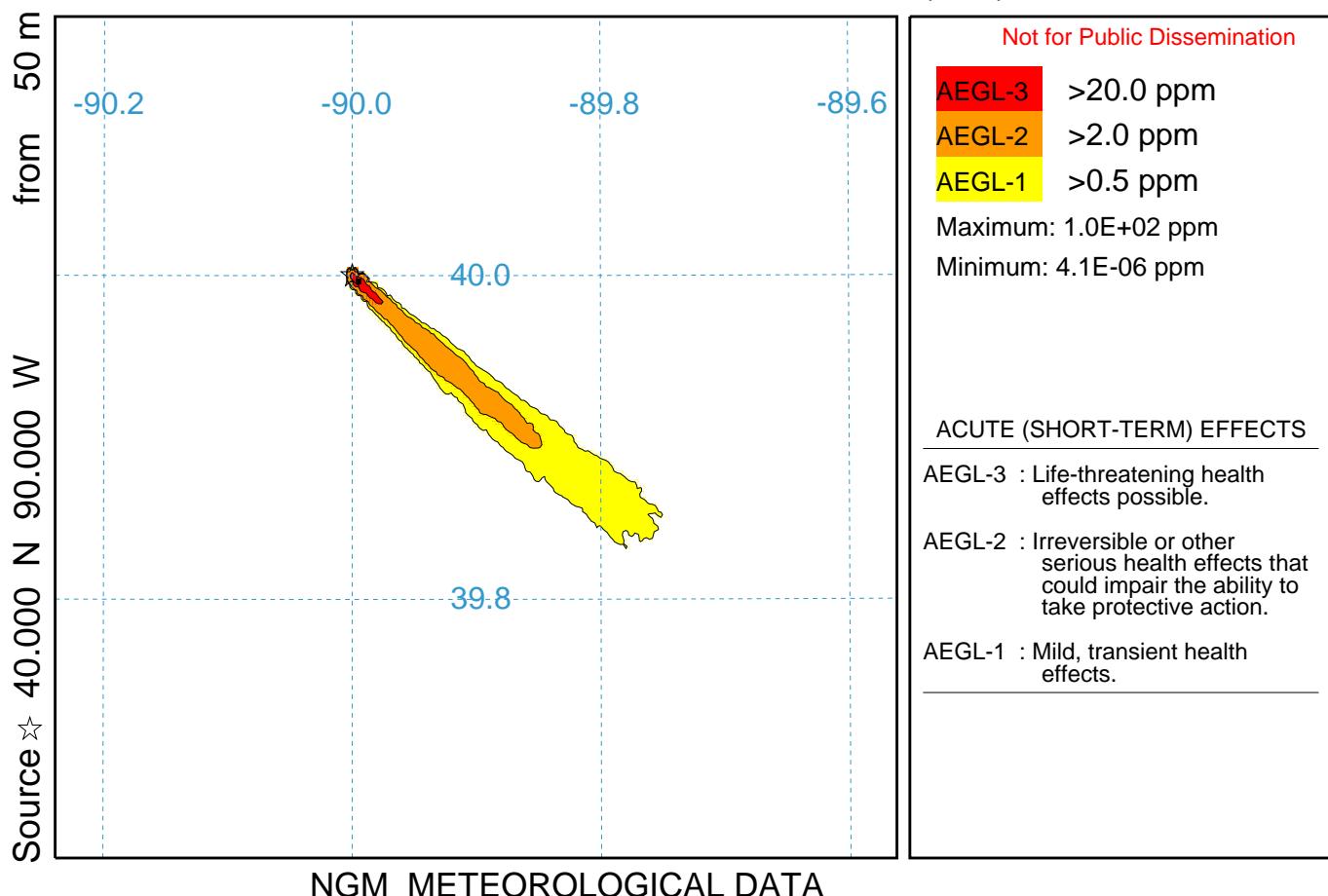
GEM@12h - Lagrangian + Eulerian (237)  
Concentration (/m<sup>3</sup>) at level 232 m  
Integrated from 0000 18 Oct to 0000 18 Oct 95 (UTC)  
P001 Release started at 0000 17 Oct 95 (UTC)



GEMx METEOROLOGICAL DATA

## Chemical Dispersion Simulation (038)

Concentration (ppm) averaged between 0 m and 100 m  
Integrated from 0000 16 Oct to 0100 16 Oct 95 (UTC)  
CHEM Release started at 0000 16 Oct 95 (UTC)

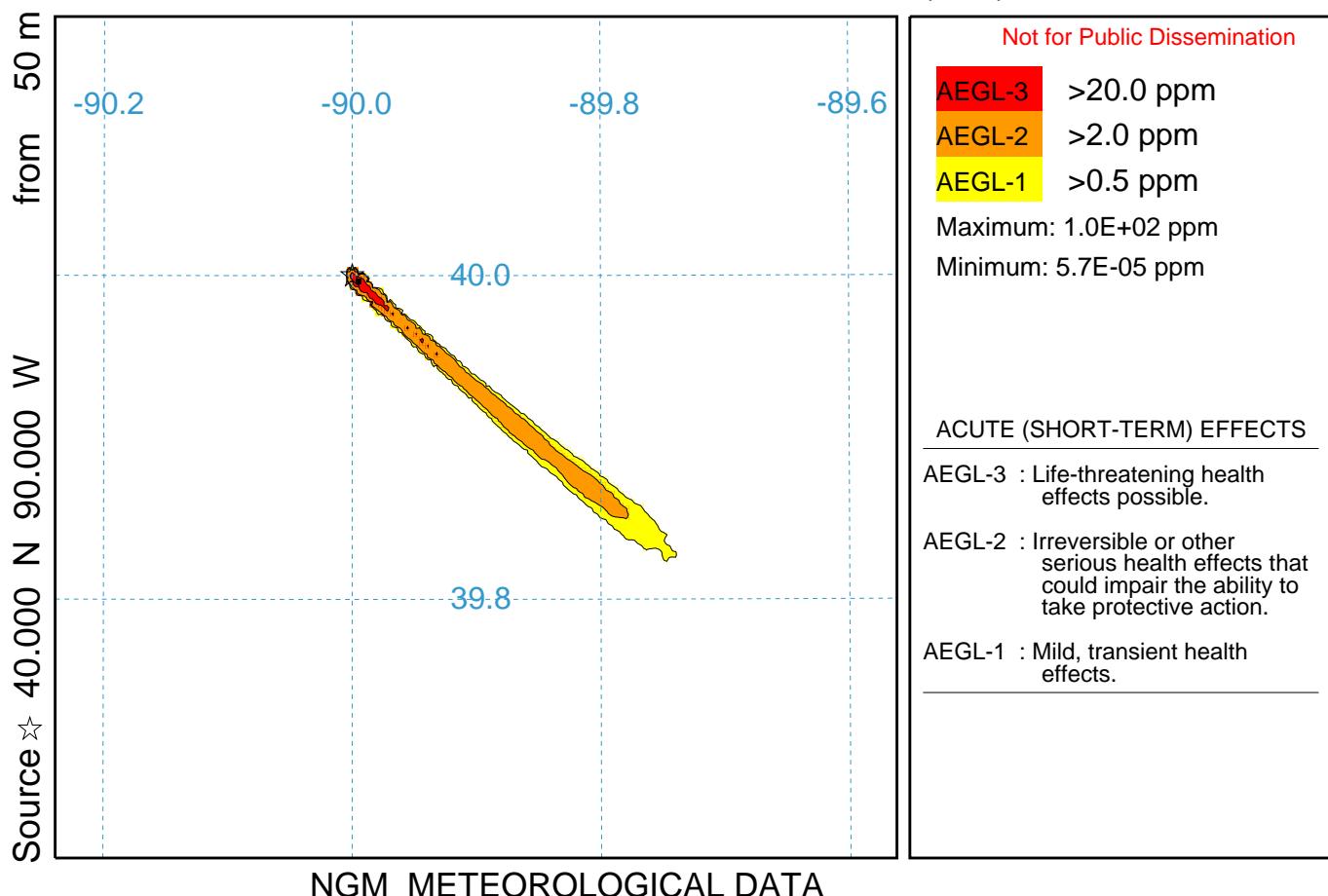


## Chemical Dispersion Simulation (138)

Concentration (ppm) averaged between 0 m and 100 m

Integrated from 0000 16 Oct to 0100 16 Oct 95 (UTC)

CHEM Release started at 0000 16 Oct 95 (UTC)

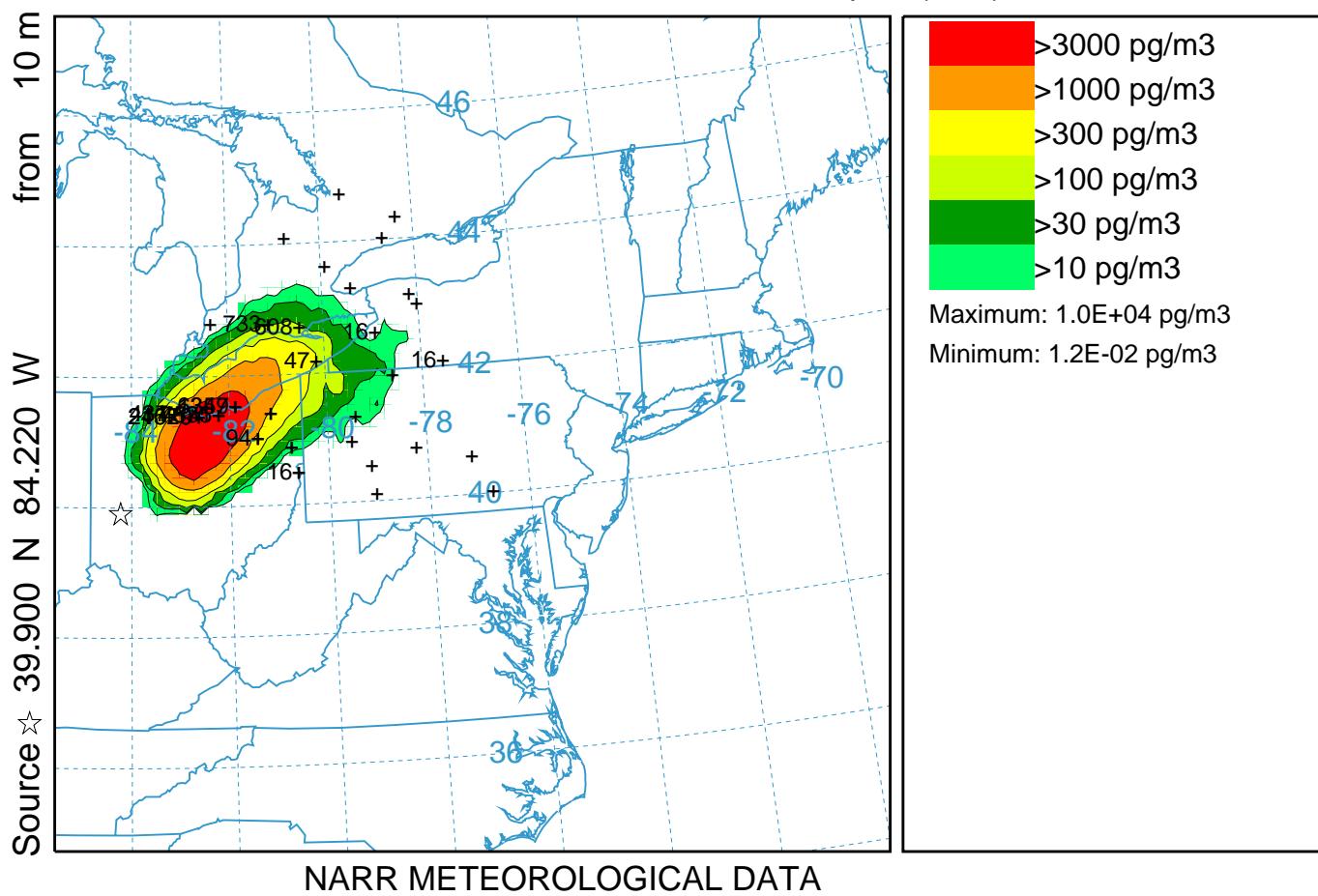


## CAPTEX Release Number Two (039)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 26 Sep to 0900 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

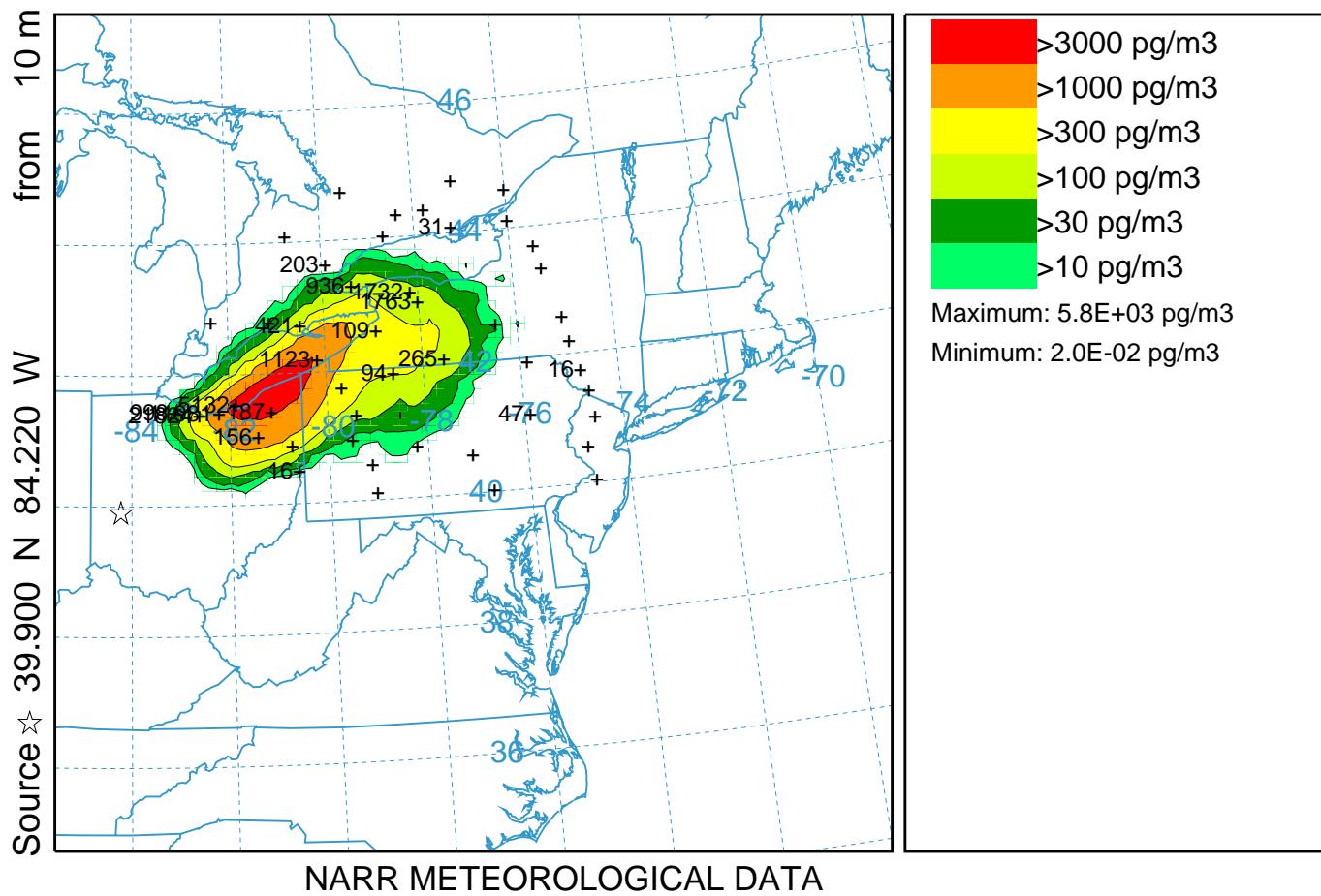


## CAPTEX Release Number Two (039)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0900 26 Sep to 1500 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

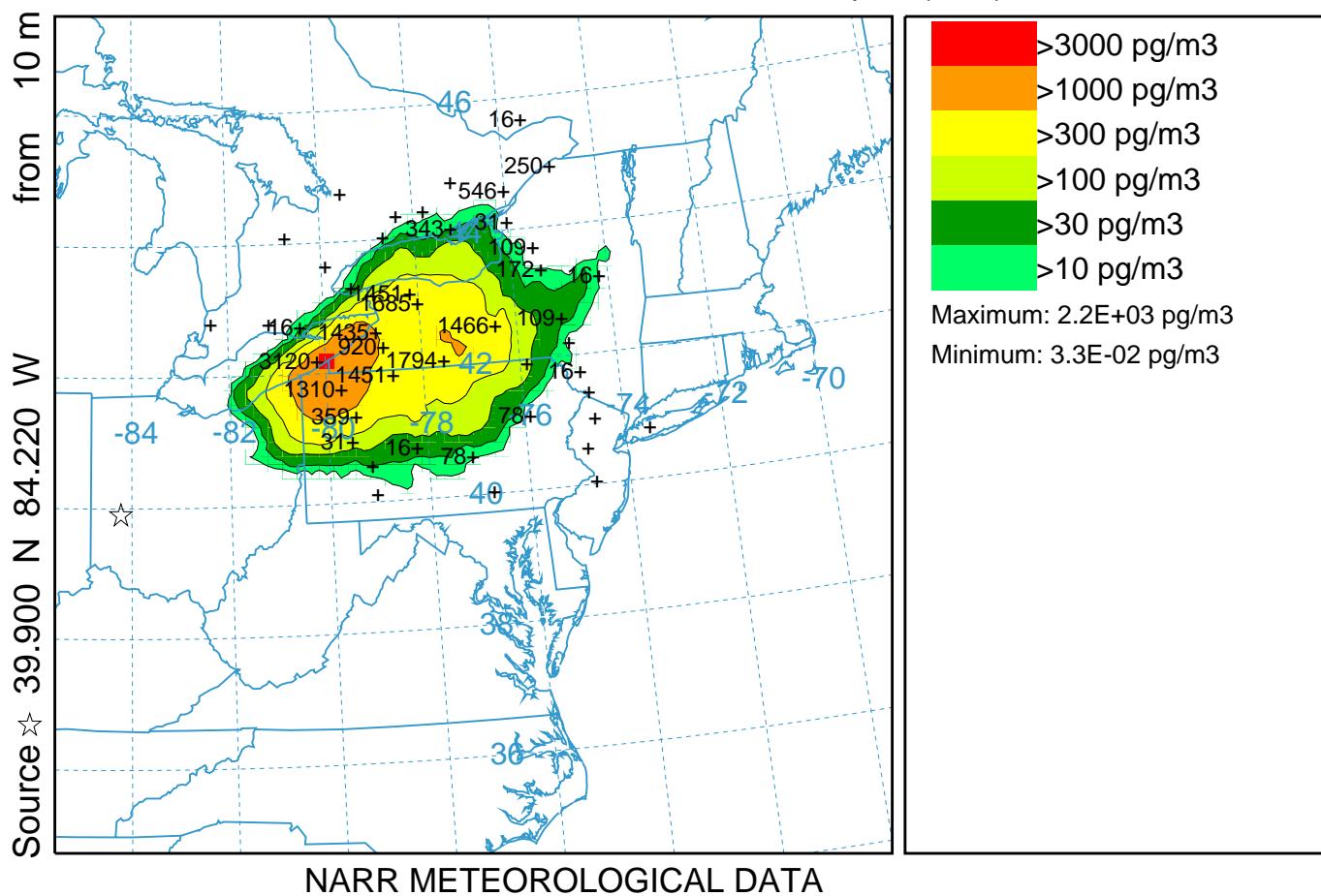


## CAPTEX Release Number Two (039)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1500 26 Sep to 2100 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

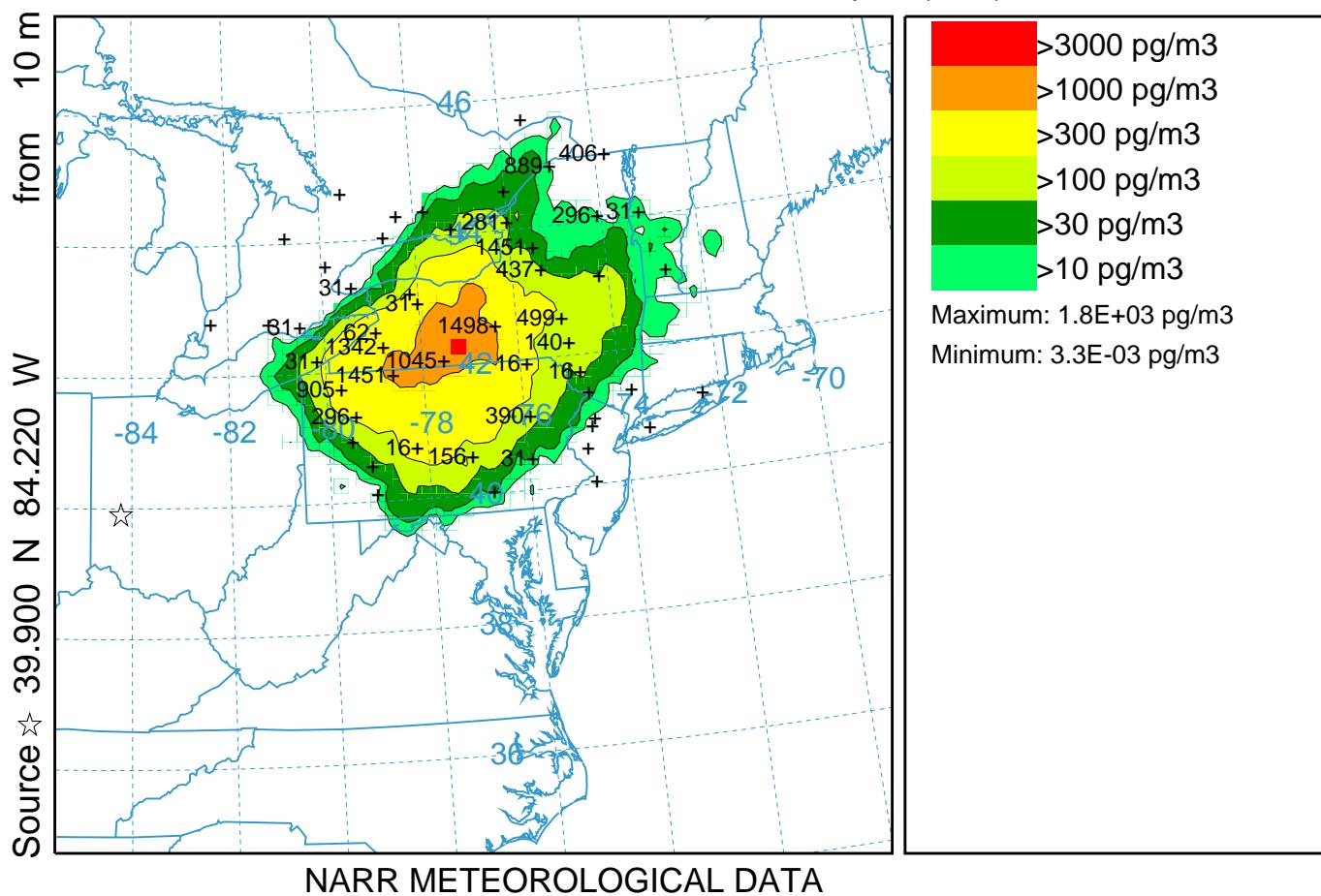


## CAPTEX Release Number Two (039)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 2100 26 Sep to 0300 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

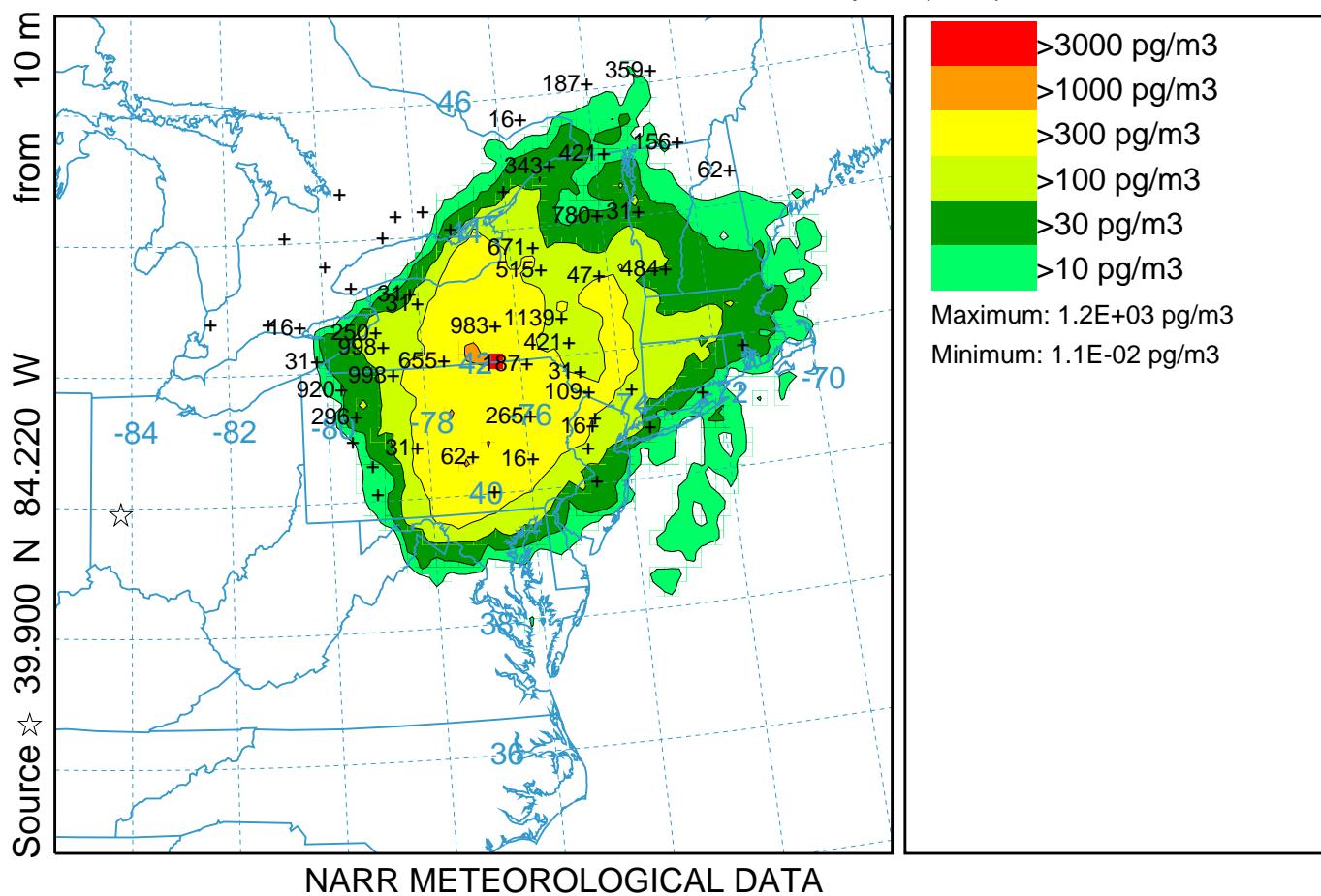


## CAPTEX Release Number Two (039)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 27 Sep to 0900 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

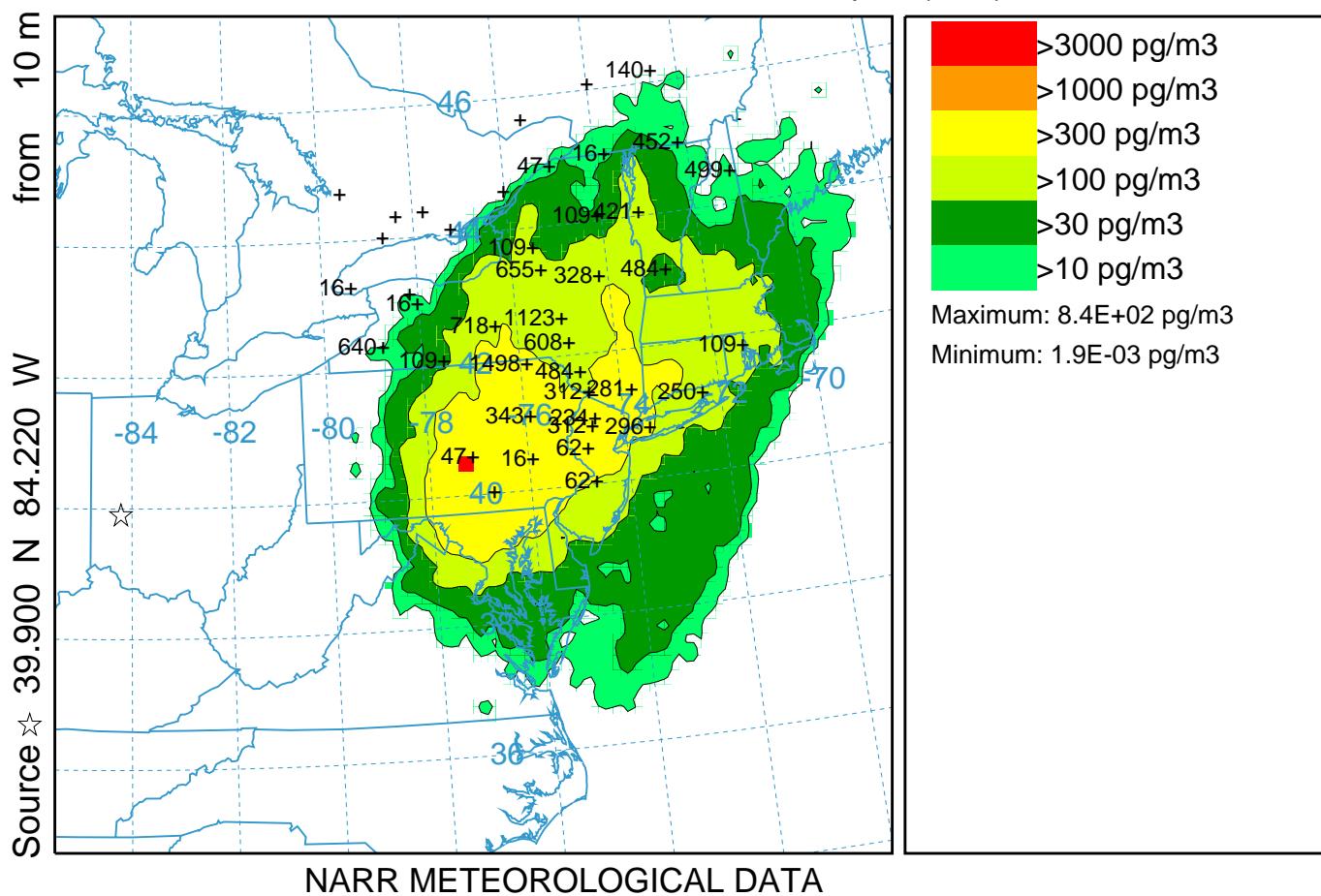


## CAPTEX Release Number Two (039)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

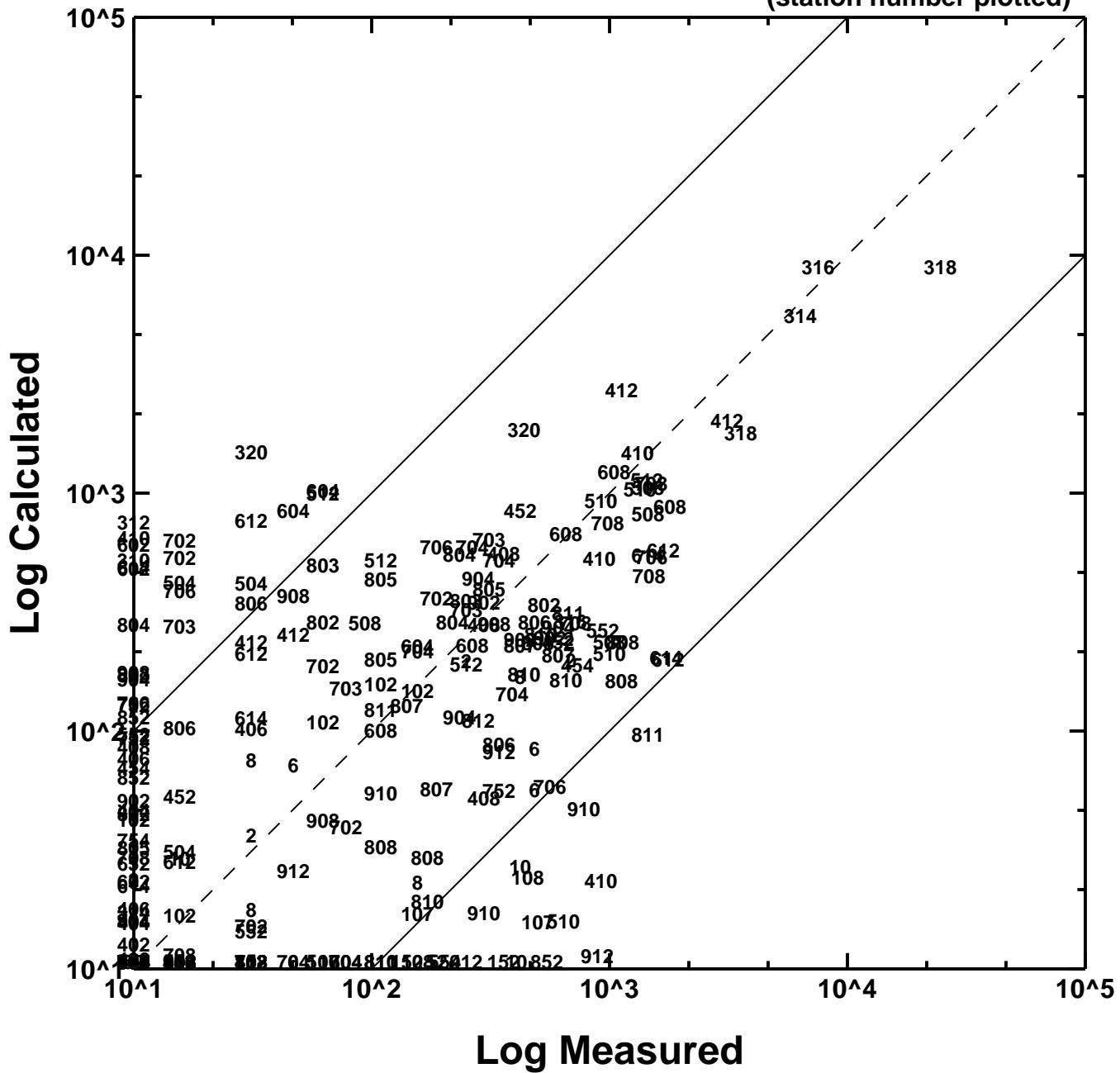
Integrated from 0900 27 Sep to 1500 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

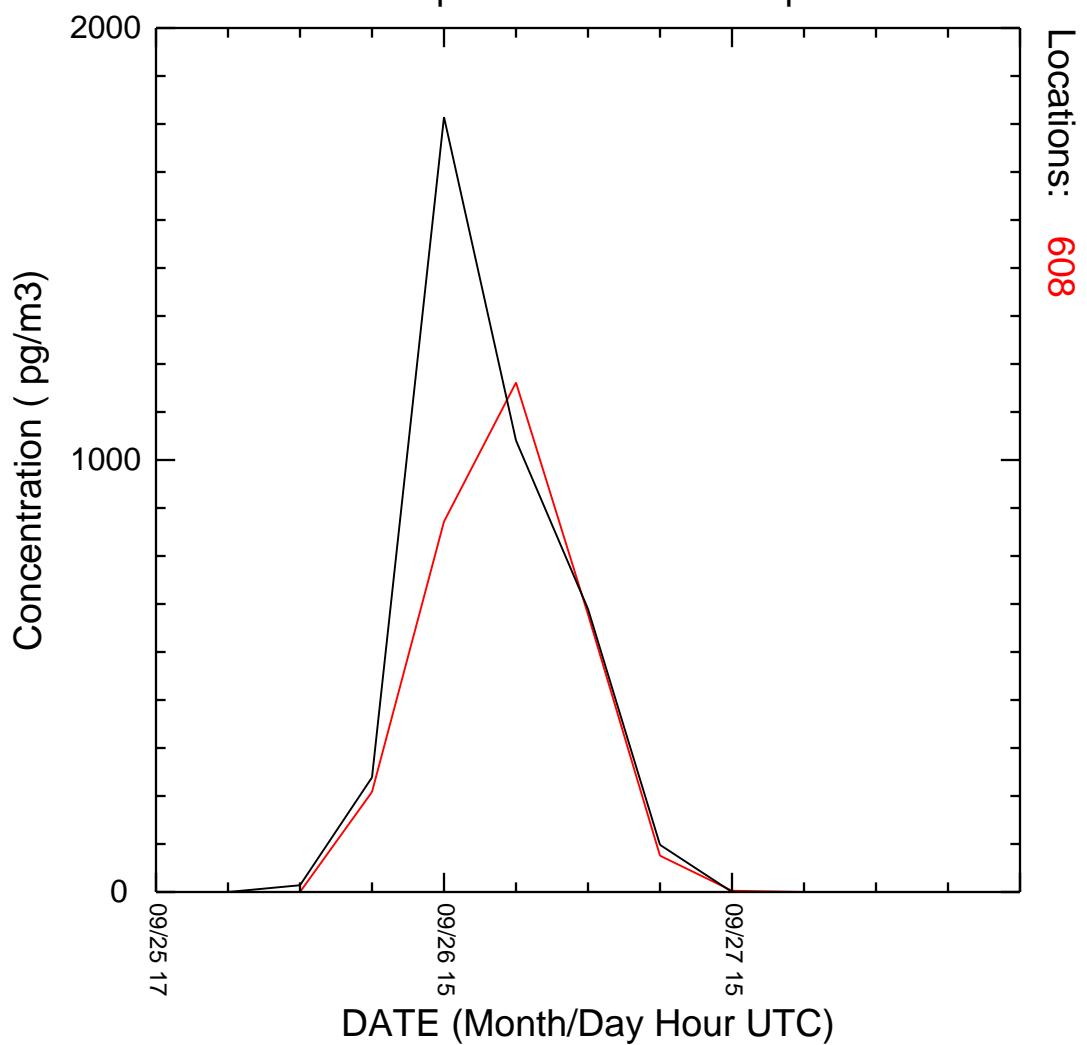


**CAPTEX**  
**Release Number Two**  
**Calculated vs Measured Concentrations**

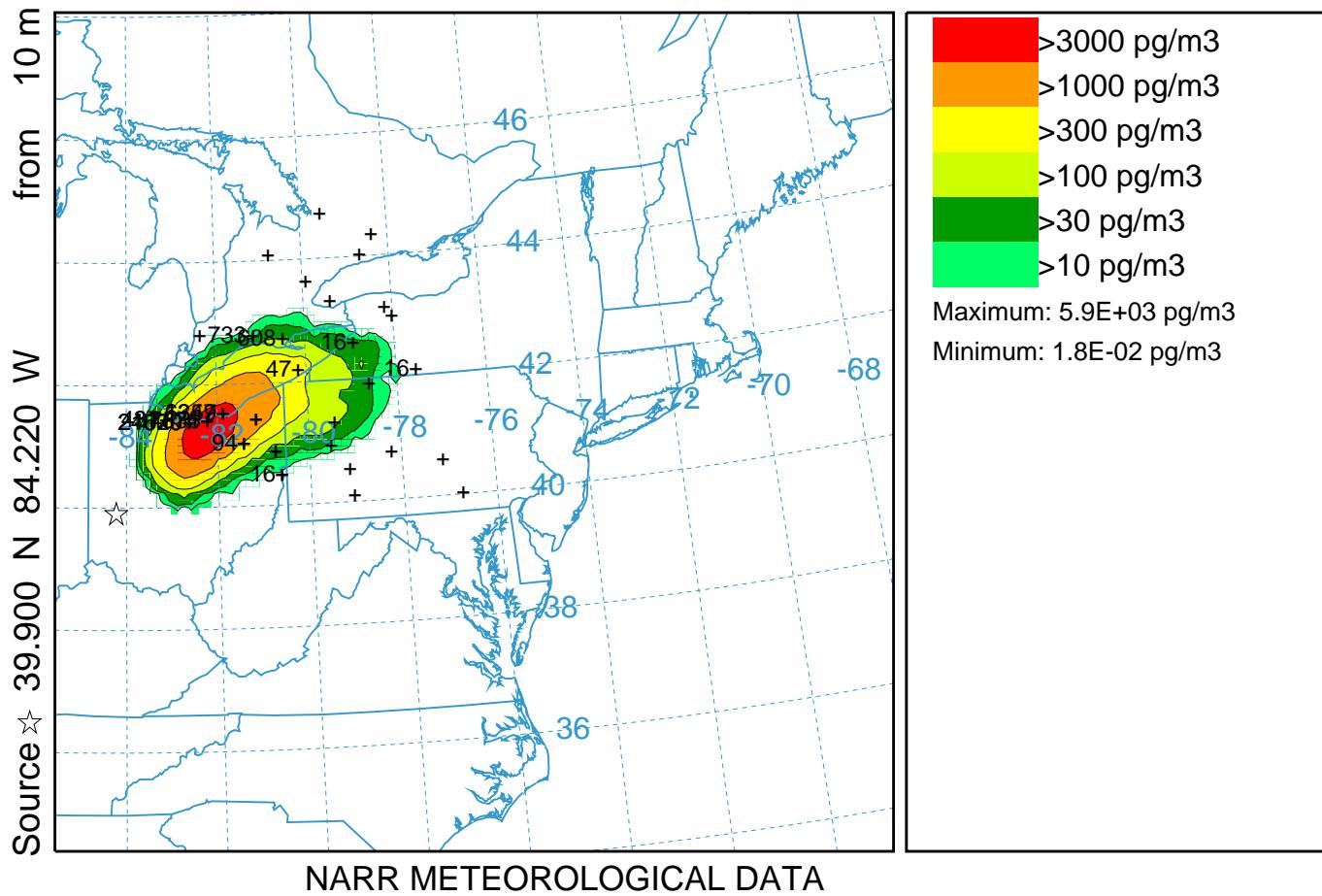
(station number plotted)



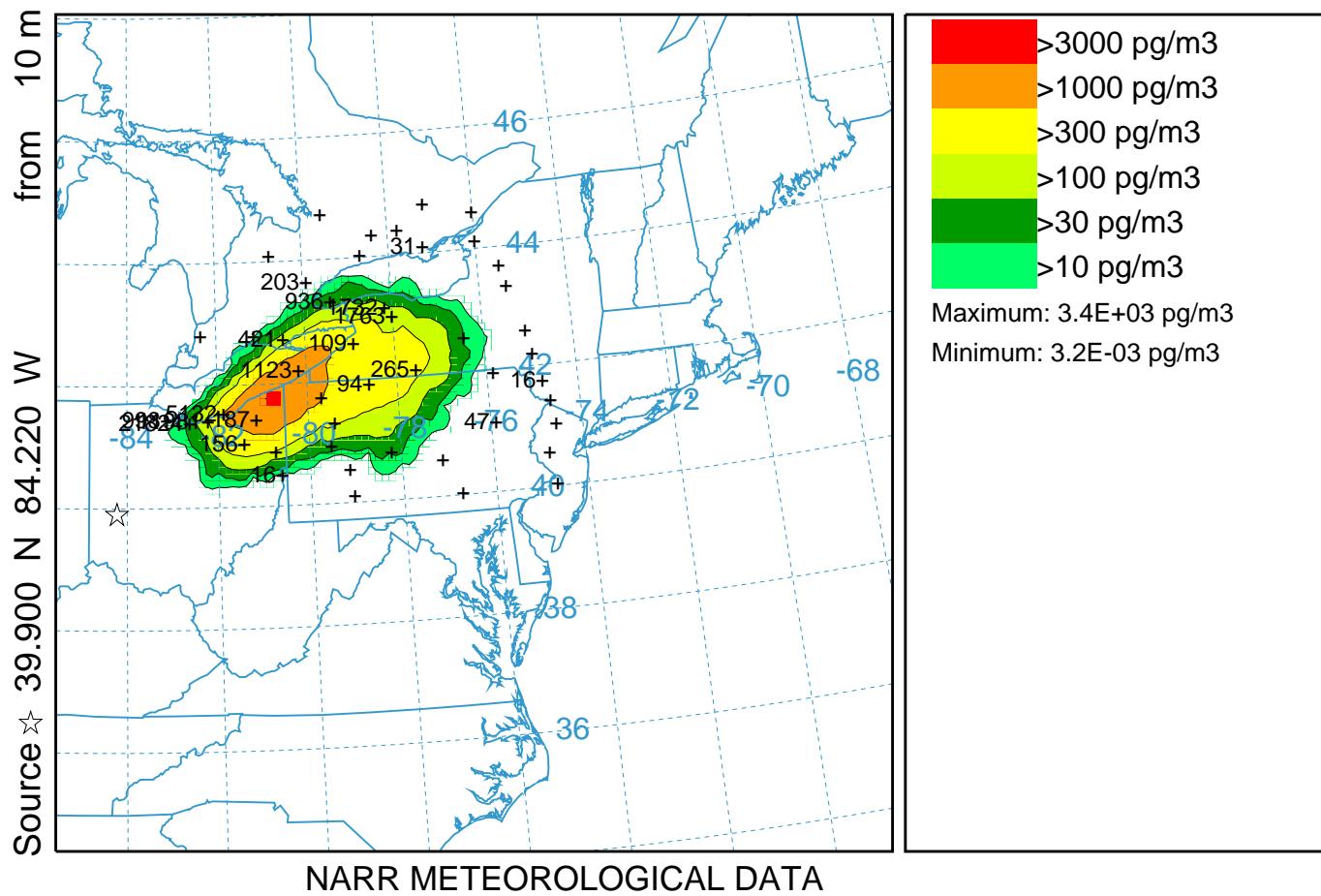
CAPTEX Time Series at Station 608  
hysp\_608.txt  
First Sample: 1700 UTC 25 Sep 1983



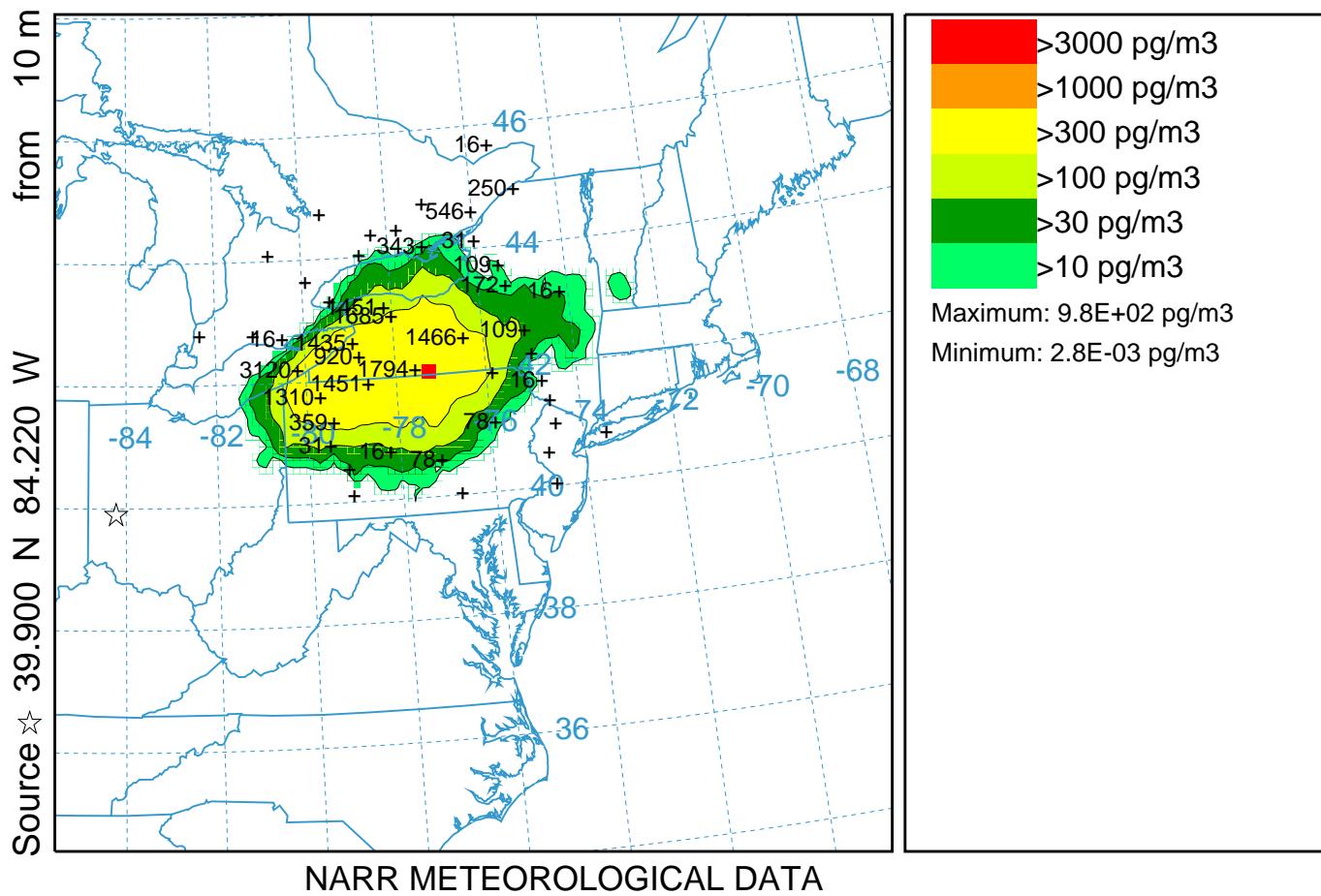
CAPTEX Release Number Two var VSCALE (040)  
Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m  
Integrated from 0300 26 Sep to 0900 26 Sep 83 (UTC)  
PMCH Release started at 1700 25 Sep 83 (UTC)



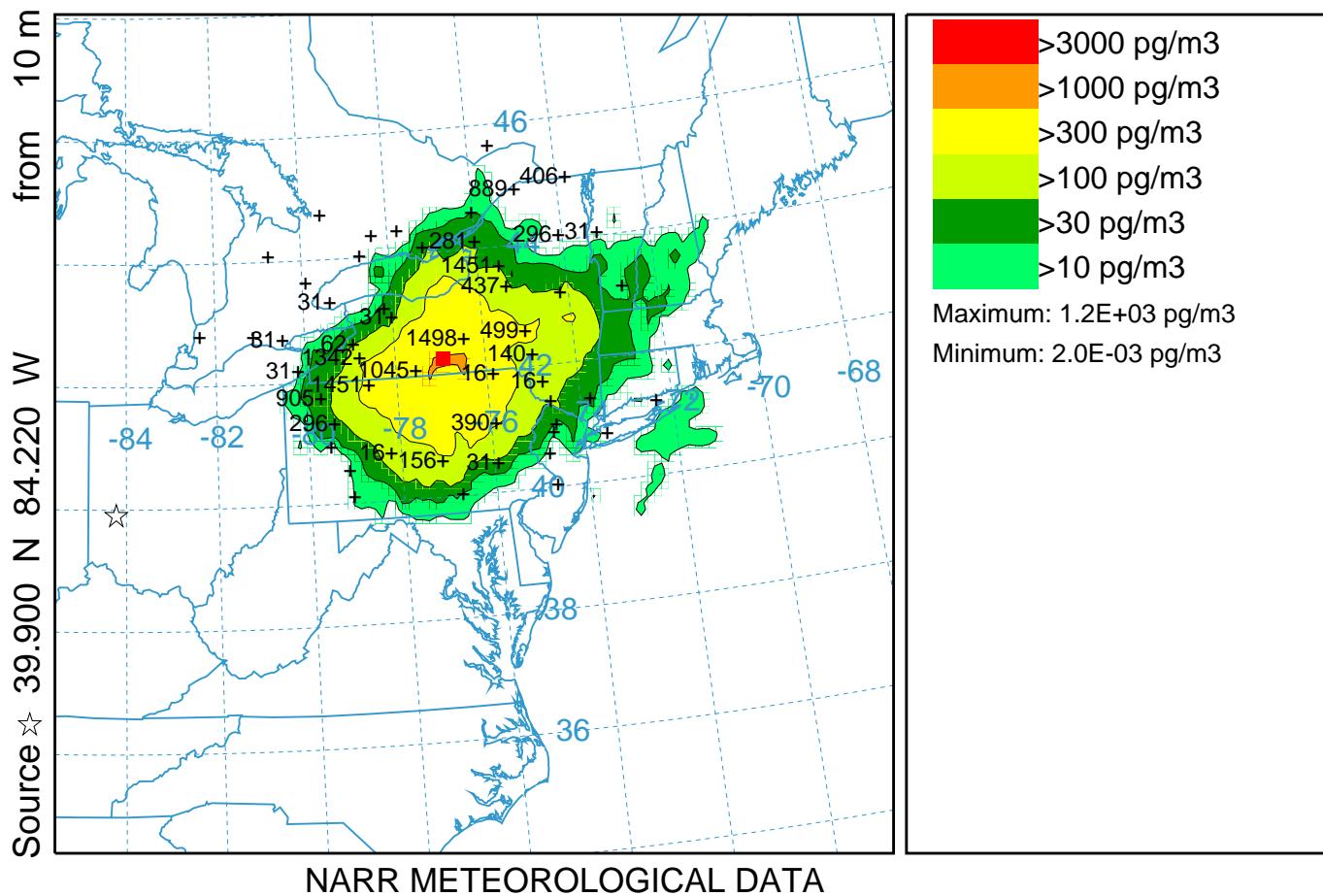
CAPTEX Release Number Two var VSCALE (040)  
Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m  
Integrated from 0900 26 Sep to 1500 26 Sep 83 (UTC)  
PMCH Release started at 1700 25 Sep 83 (UTC)



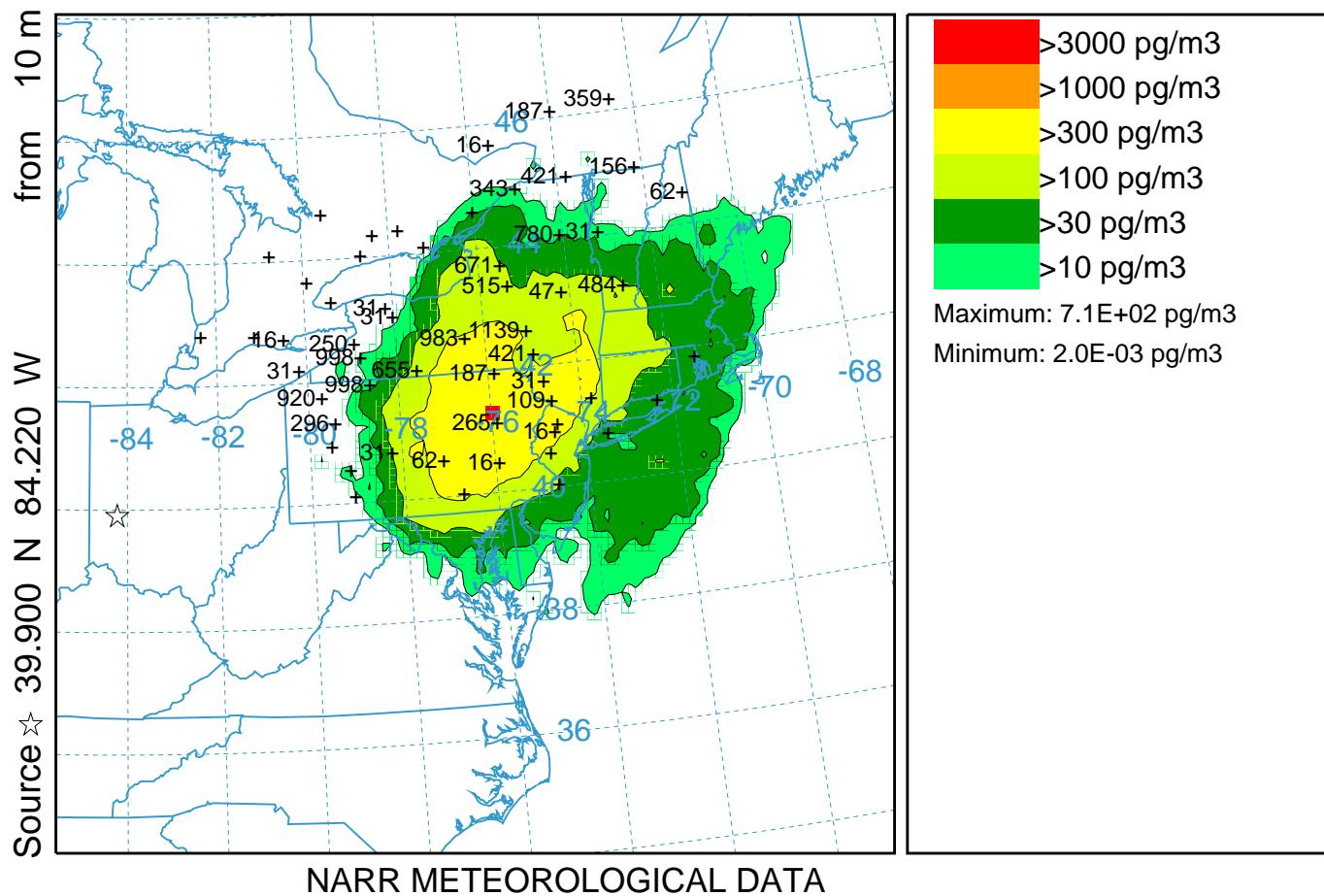
CAPTEX Release Number Two var VSCALE (040)  
Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m  
Integrated from 1500 26 Sep to 2100 26 Sep 83 (UTC)  
PMCH Release started at 1700 25 Sep 83 (UTC)



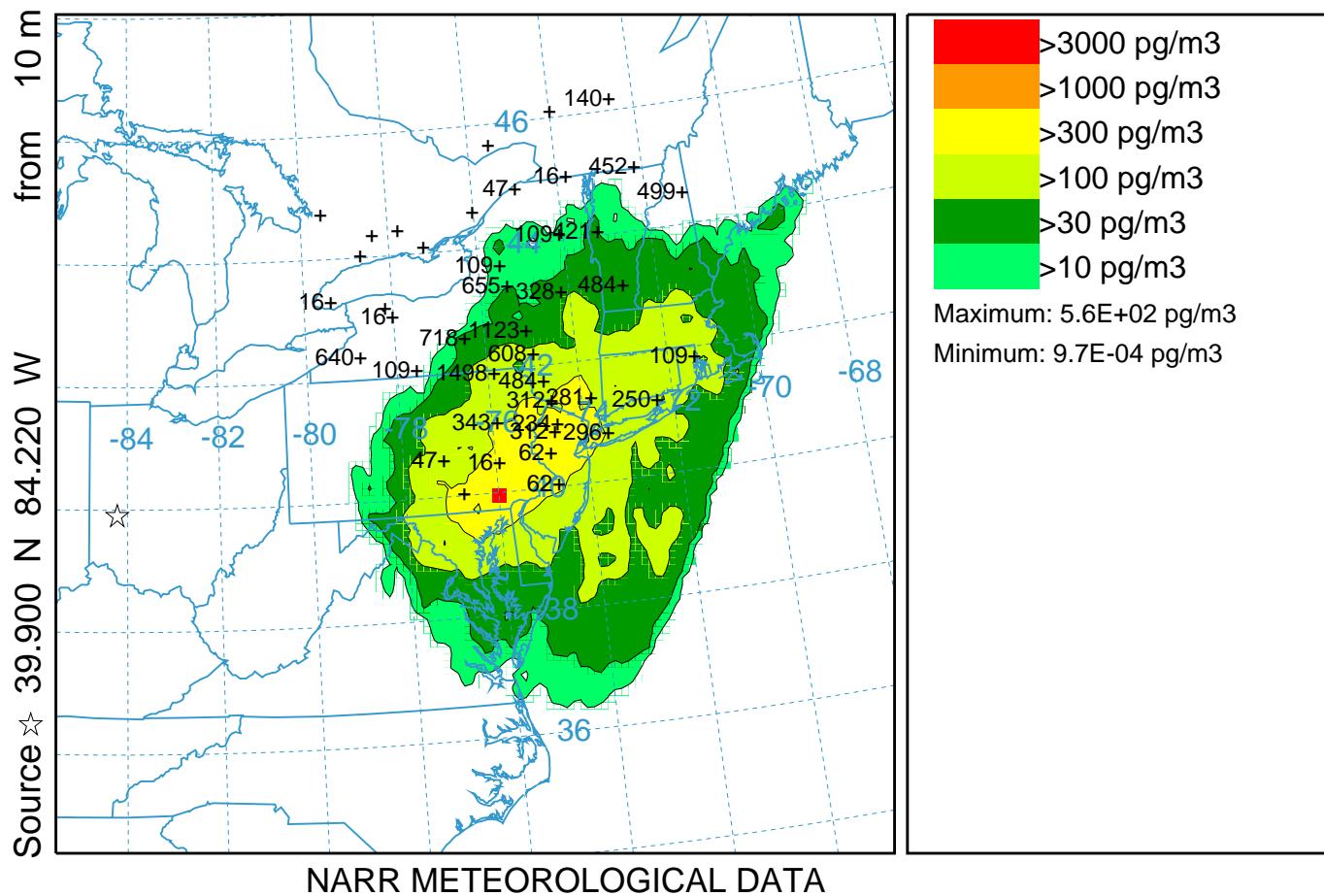
CAPTEX Release Number Two var VSCALE (040)  
Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m  
Integrated from 2100 26 Sep to 0300 27 Sep 83 (UTC)  
PMCH Release started at 1700 25 Sep 83 (UTC)



CAPTEX Release Number Two var VSCALE (040)  
 Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m  
 Integrated from 0300 27 Sep to 0900 27 Sep 83 (UTC)  
 PMCH Release started at 1700 25 Sep 83 (UTC)

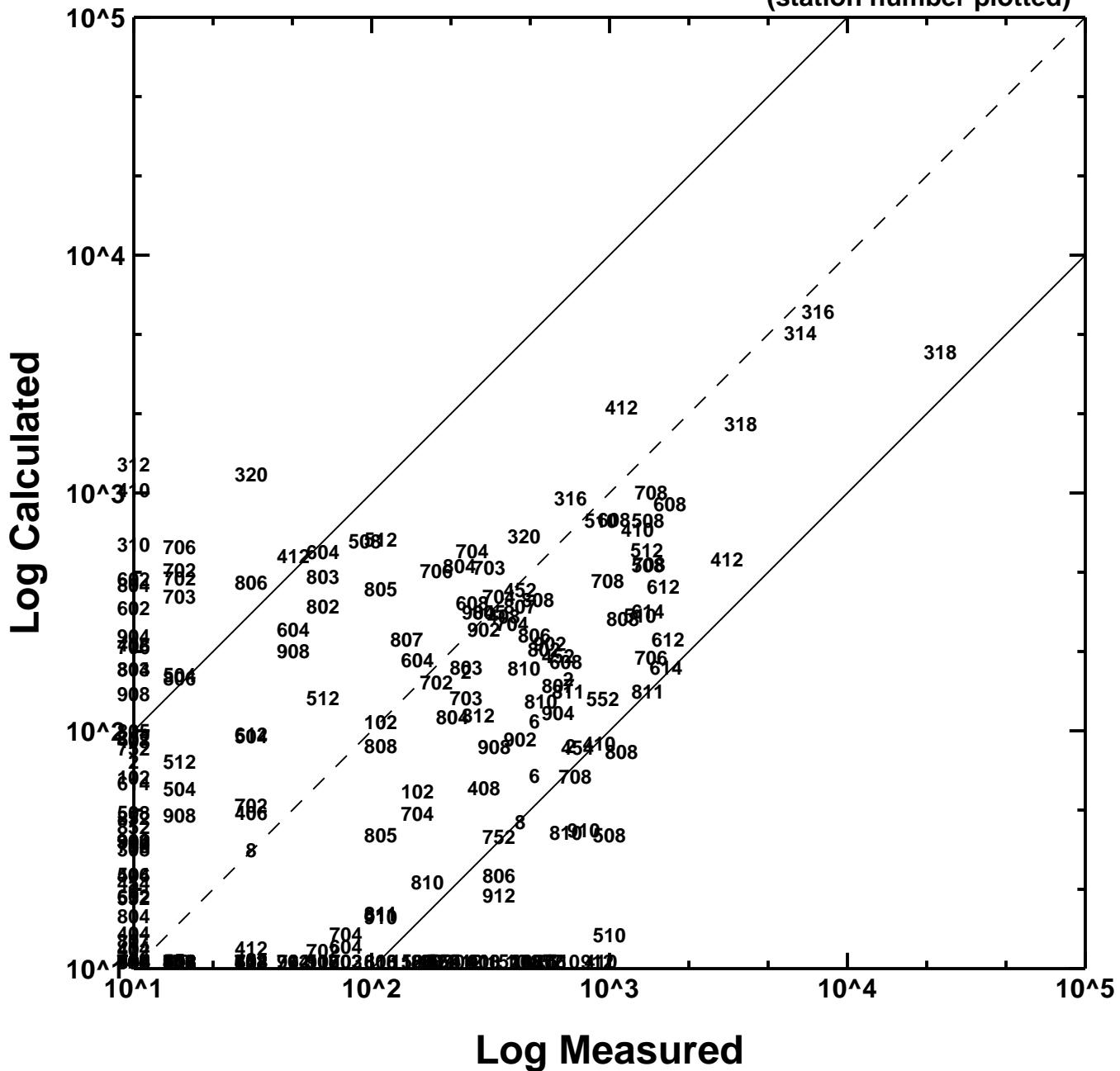


CAPTEX Release Number Two var VSCALE (040)  
 Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m  
 Integrated from 0900 27 Sep to 1500 27 Sep 83 (UTC)  
 PMCH Release started at 1700 25 Sep 83 (UTC)

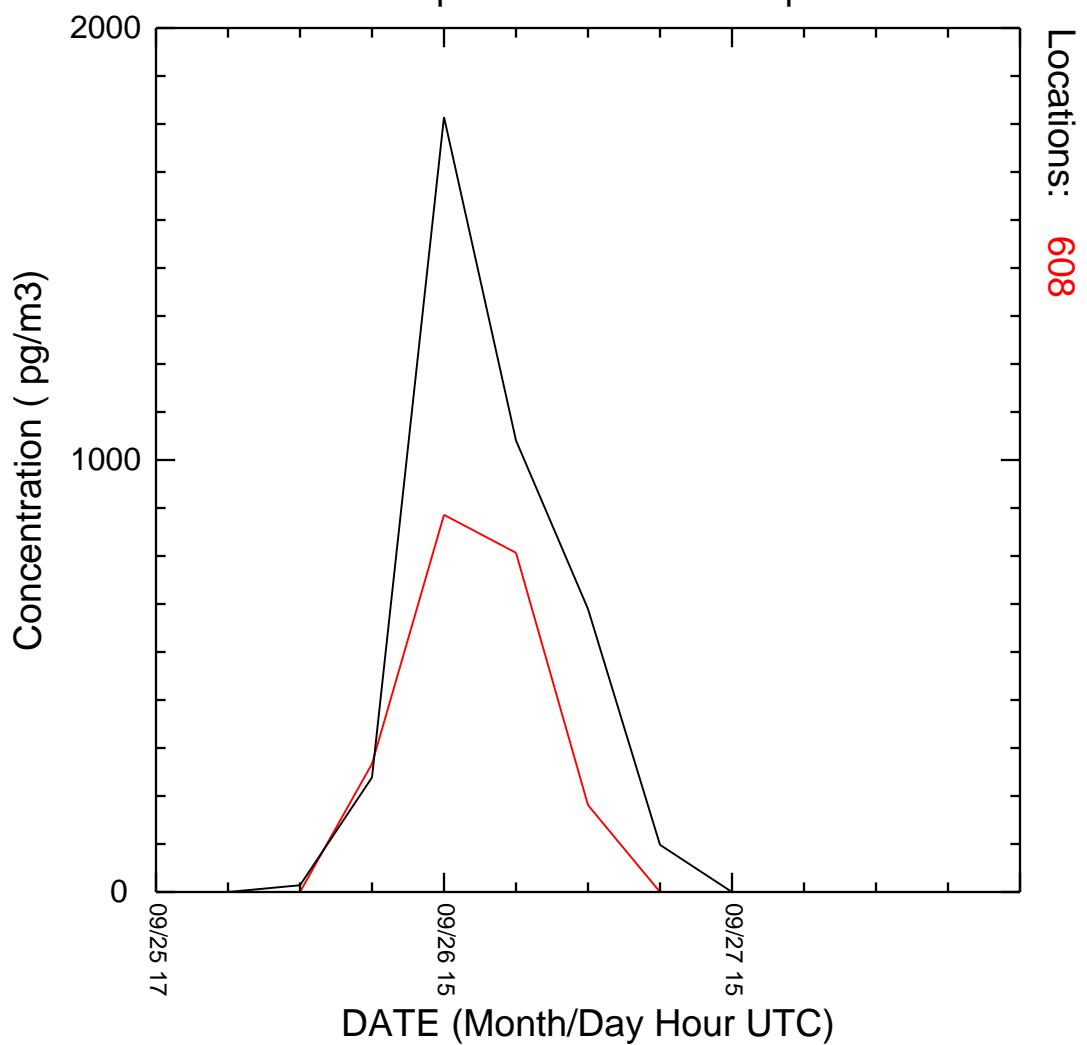


**CAPTEX**  
**Release Number Two**  
**Calculated vs Measured Concentrations**

(station number plotted)



CAPTEX Time Series at Station 608 var VSCALE  
hysp\_608.txt  
First Sample: 1700 UTC 25 Sep 1983

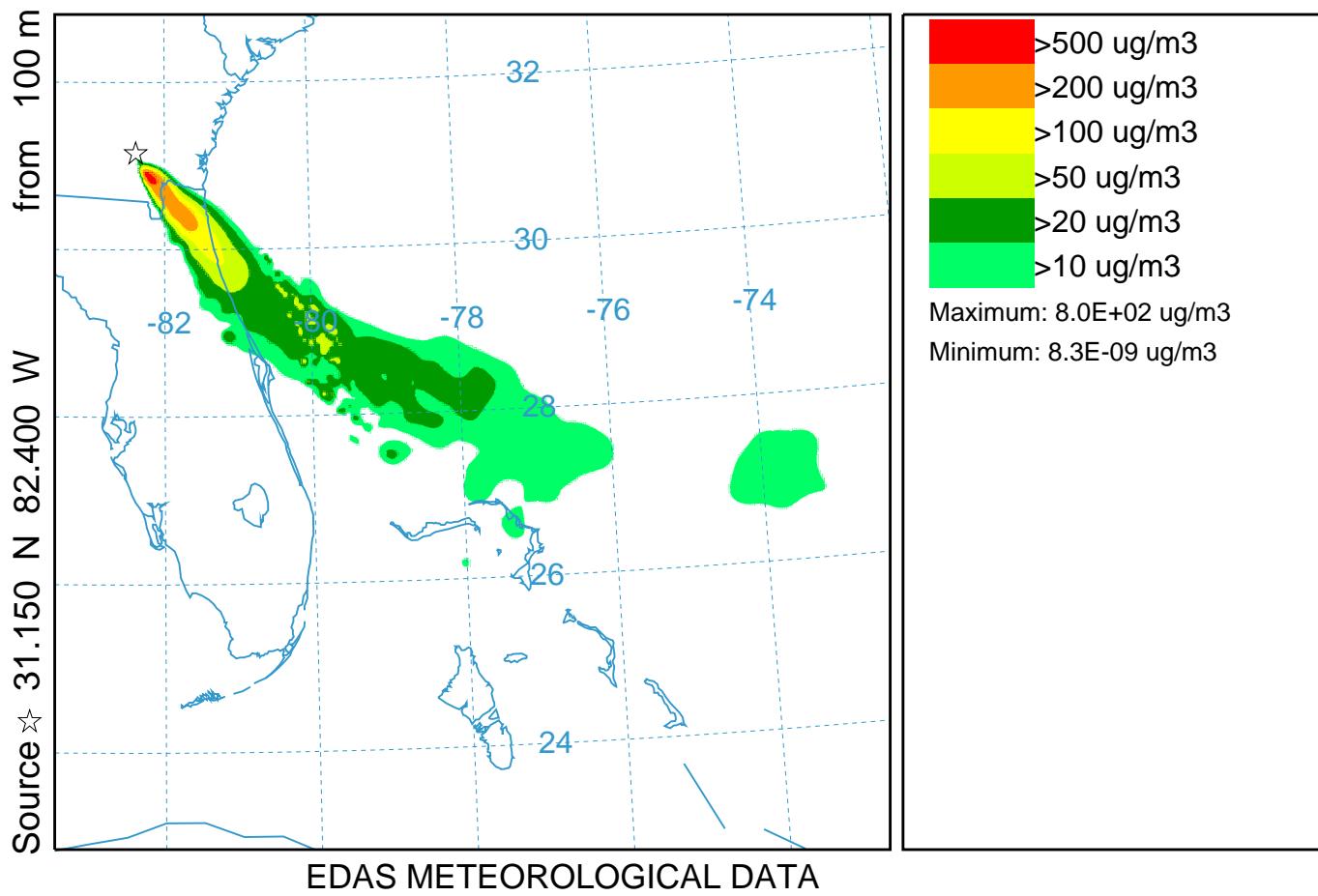


### Sweat Farm Road Smoke Simulation (041)

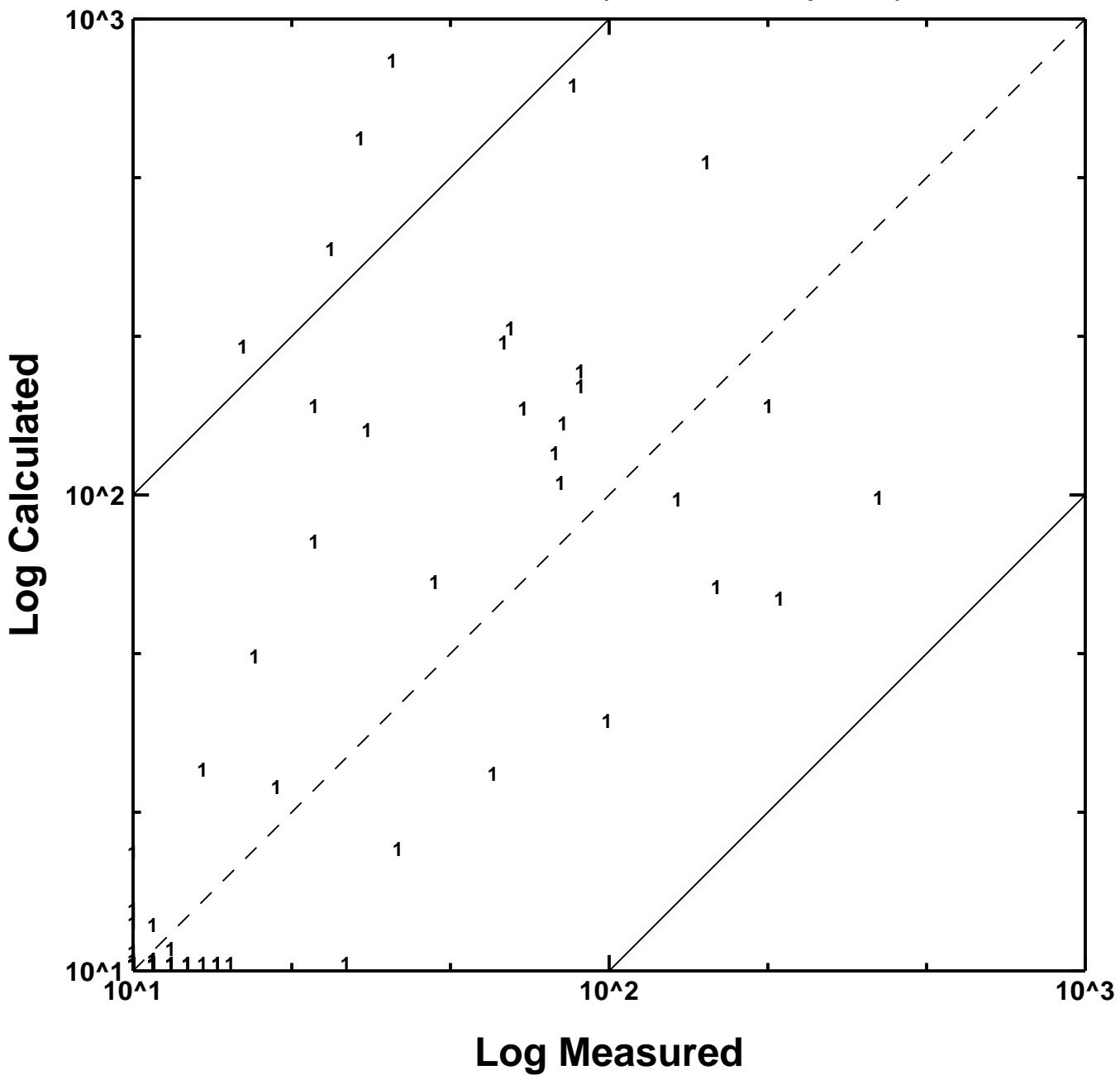
Concentration (ug/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1500 17 Apr to 1600 17 Apr 07 (UTC)

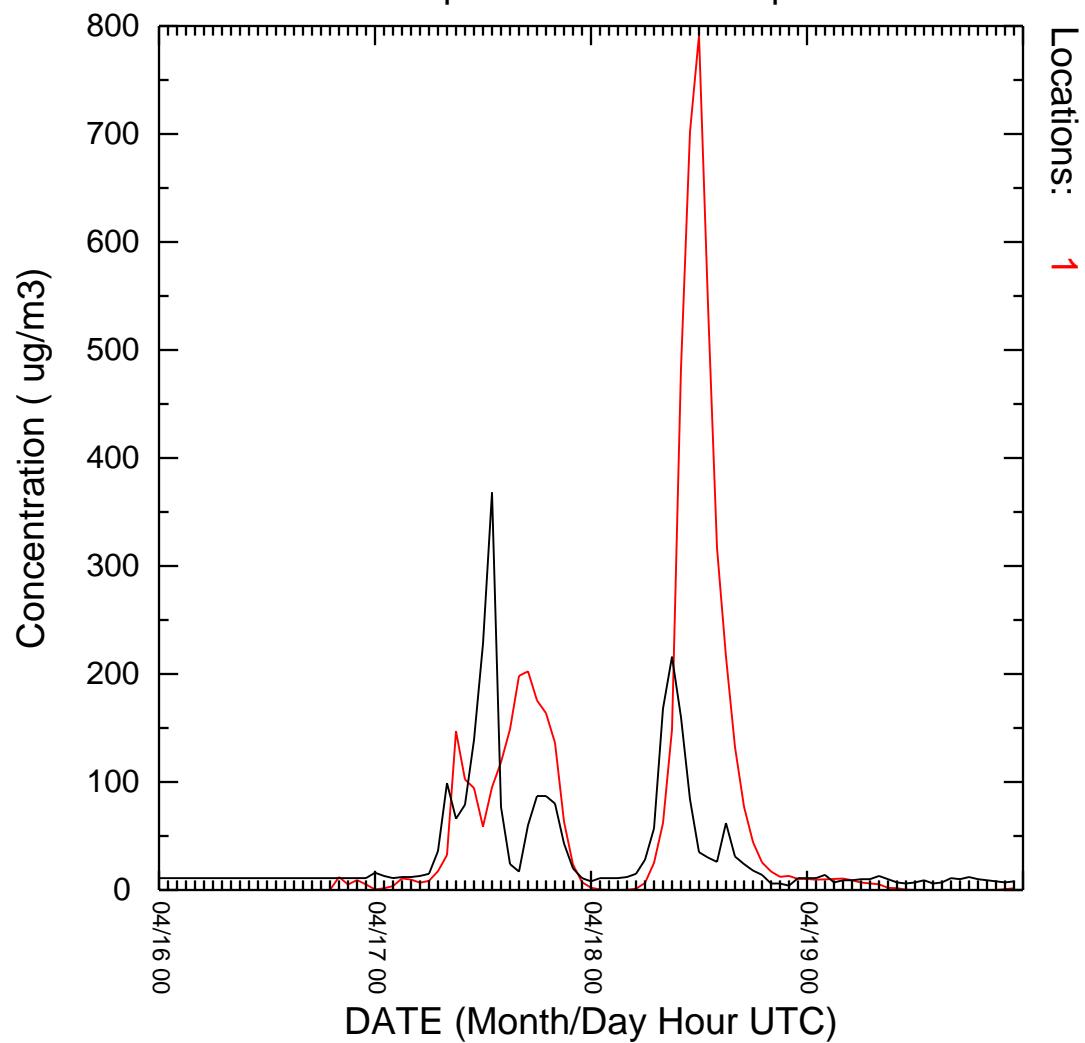
PM25 Release started at 1800 16 Apr 07 (UTC)



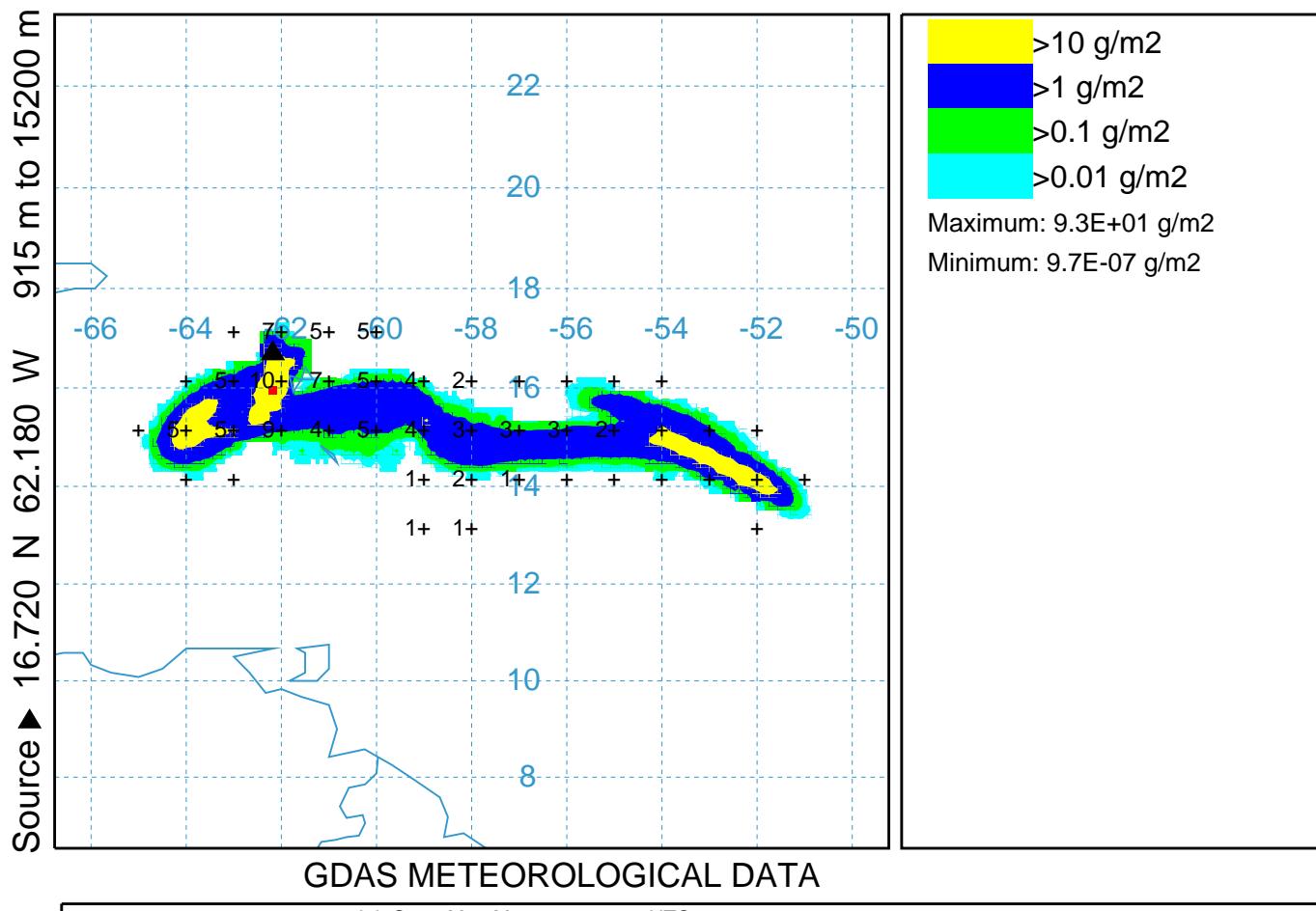
**Mayo**  
**FL Smoke Case**  
**Calculated vs Measured Concentrations**  
(station number plotted)



Time Series at Station Mayo  
hyps\_Mayo.txt  
First Sample: 0000 UTC 16 Apr 2007

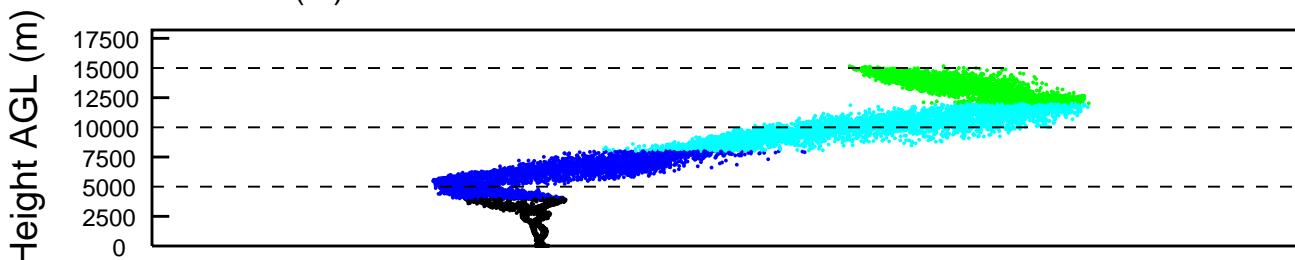
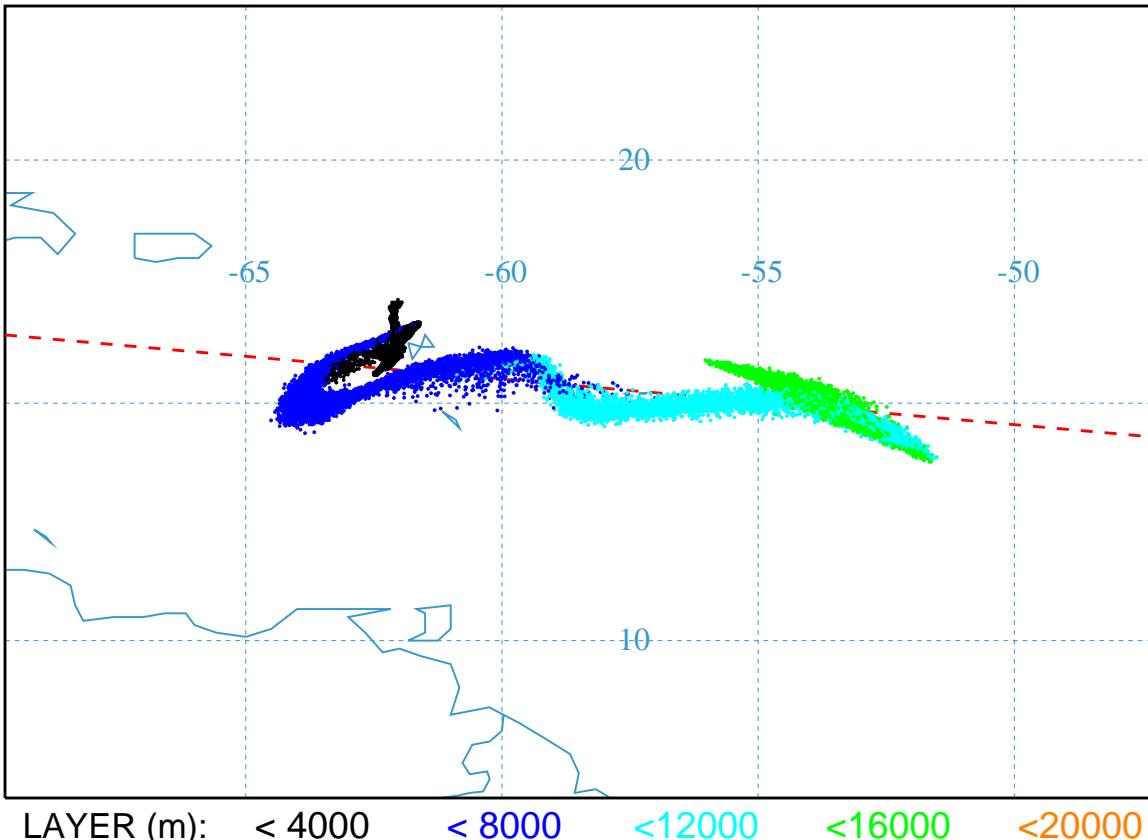


**Volcano Soufriere\_Hills Simulation (042)**  
 Mass loading (g/m<sup>2</sup>) between 0 m and 18000 m  
 Integrated from 0600 12 Feb to 0700 12 Feb 10 (UTC)  
 SUM Release started at 1635 11 Feb 10 (UTC)



Job Start: Mon Mar 10 17:48:15 UTC 2014  
 Volcano Soufrière\_Hills lat: 16.72 lon: -62.18 Source Hgt: 915 to 15200 m, msl  
 Release Quantity\*: 1.24E+9 kg Start: 10 02 11 16 35 Duration: 1 hrs, 0 min  
 Vertical distribution: uniform GSD: Default Particles: 32000  
 Pollutant Averaging/Integration Period: 1 hr  
 Wet Removal (below/in-cloud): 0.0 / 0.0 Calculated ash mass loading per  
 Meteorological Data: GDAS1 Mastin et al, doi:10.1016/  
 Observed ash mass loading from (2013) j.jvolgeores.2009.01.008  
 Pavolonis et al. doi:10.1002/jgrd.50173 m63=0.03 constant=55 exponent=4.5

**NOAA HYSPLIT MODEL  
PARTICLE CROSS-SECTIONS  
PARTICLE POSITIONS AT 06 00 12 Feb 10**



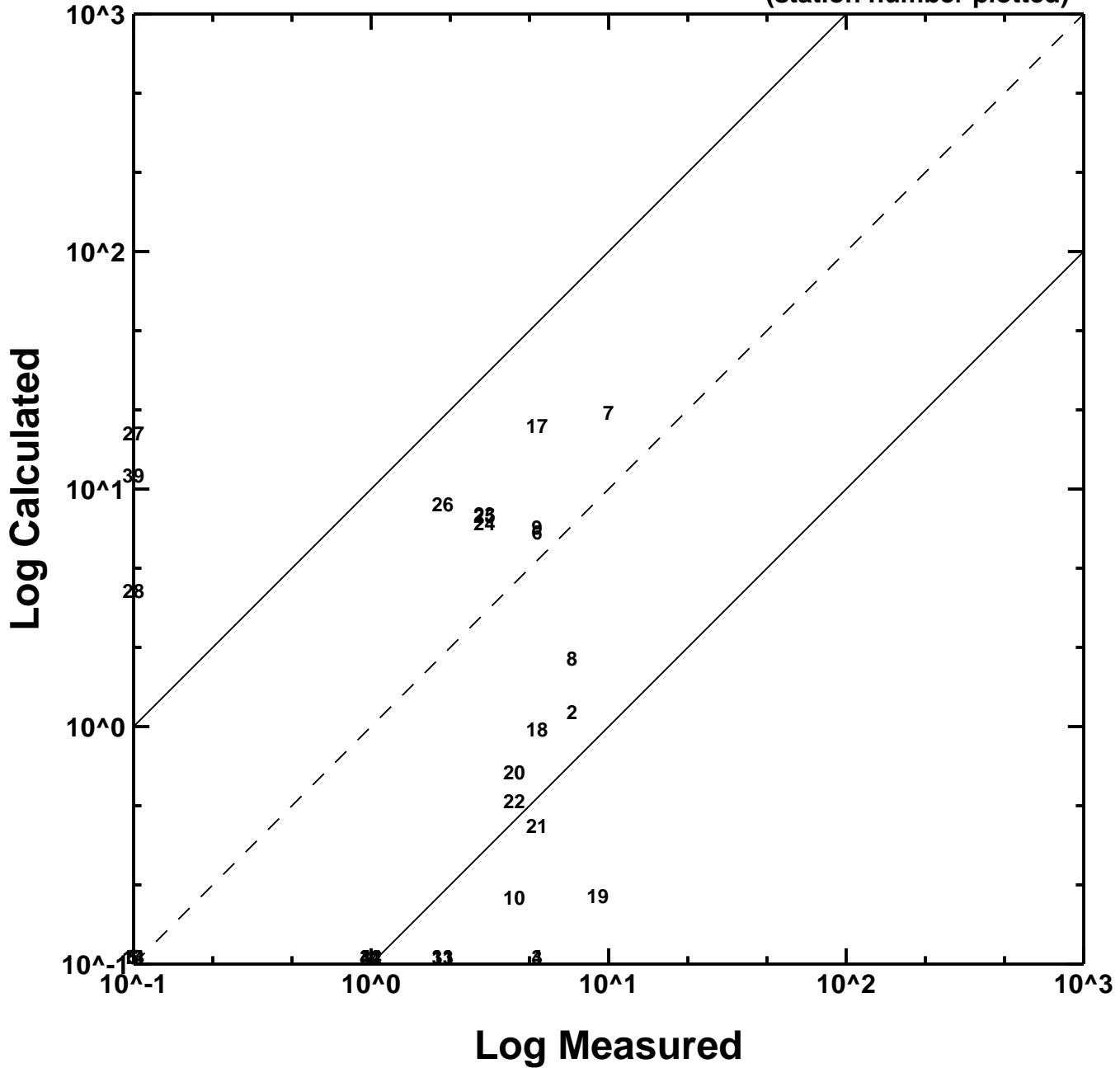
NUMBER OF PARTICLES PLOTTED: 16666 (skip interval 03)

Job Start: Mon Mar 10 17:48:15 UTC 2014  
 Volcano Soufriere\_Hills lat: 16.72 lon: -62.18 Source Hgt: 915 to 15200 m, msl  
 Release Quantity\*: 1.24E+9 kg Start: 10 02 11 16 35 Duration: 1 hrs, 0 min  
 Vertical distribution: uniform GSD: Default Particles: 32000  
 Pollutant Averaging/Integration Period: 1 hr  
 Wet Removal (below/in-cloud): 0.0 / 0.0 Calculated ash mass loading per  
 Meteorological Data: GDAS1 Mastin et al, doi:10.1016/  
 Observed ash mass loading from (2013) j.volgeores.2009.01.008  
 Pavolonis et al. doi:10.1002/jgrd.50173 m63=0.03 constant=55 exponent=4.5

# **SOUFRIERE\_HILLS**

## **Calculated vs Measured Concentrations**

(station number plotted)

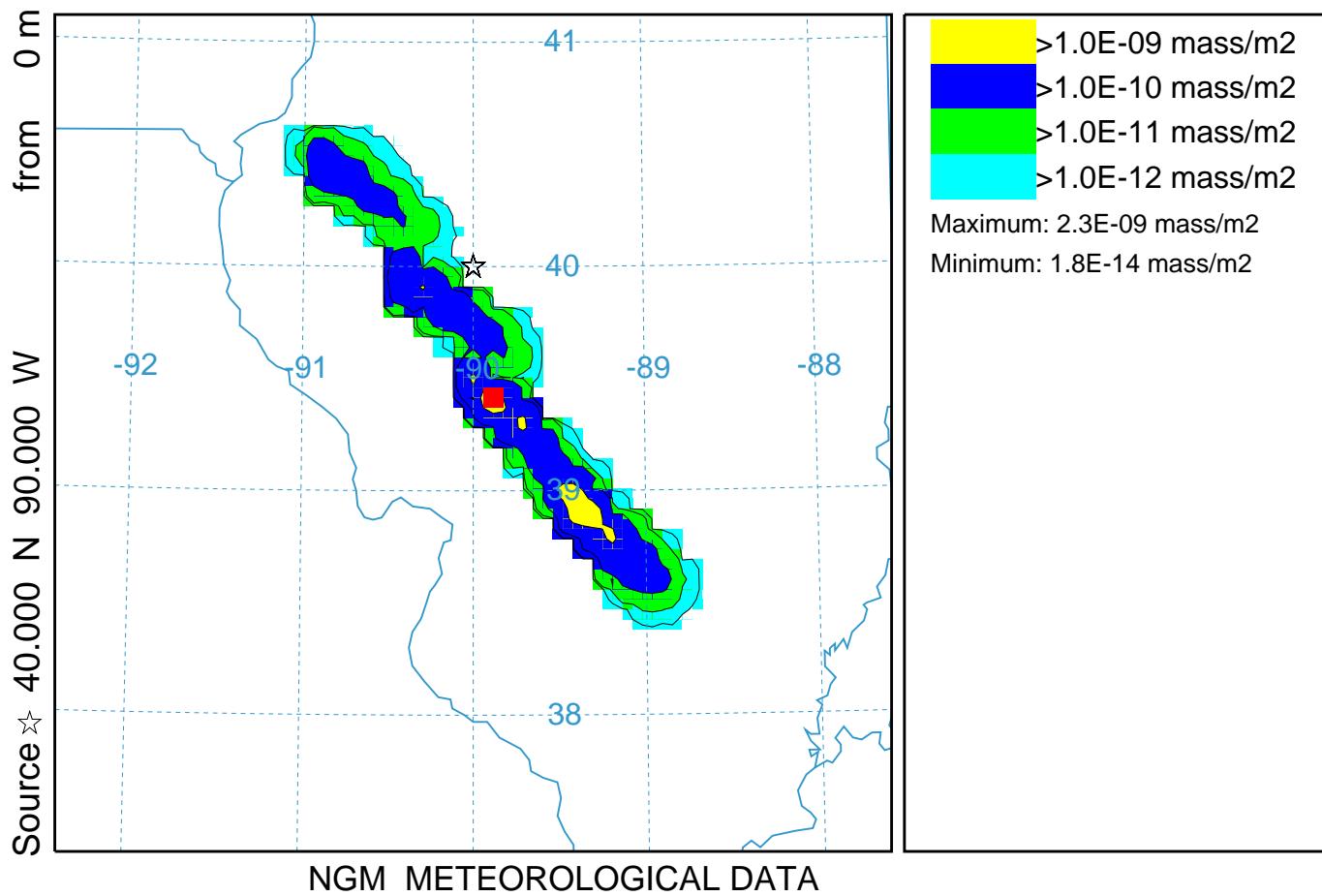


Four line sources with an EMITTIMES file (043)

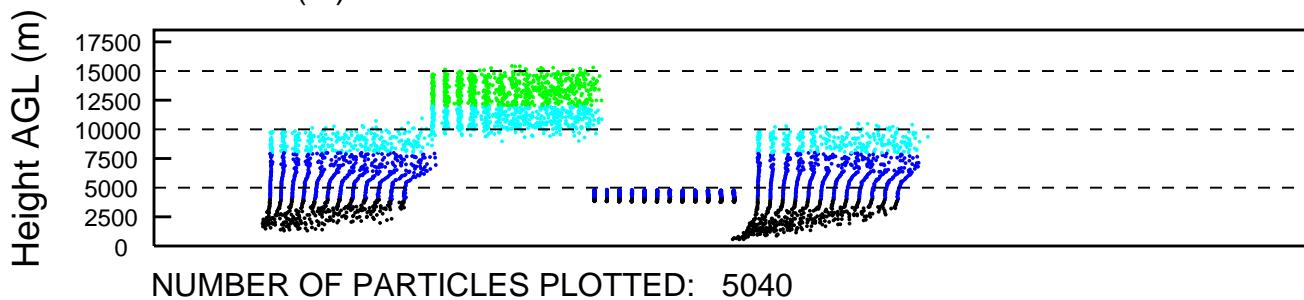
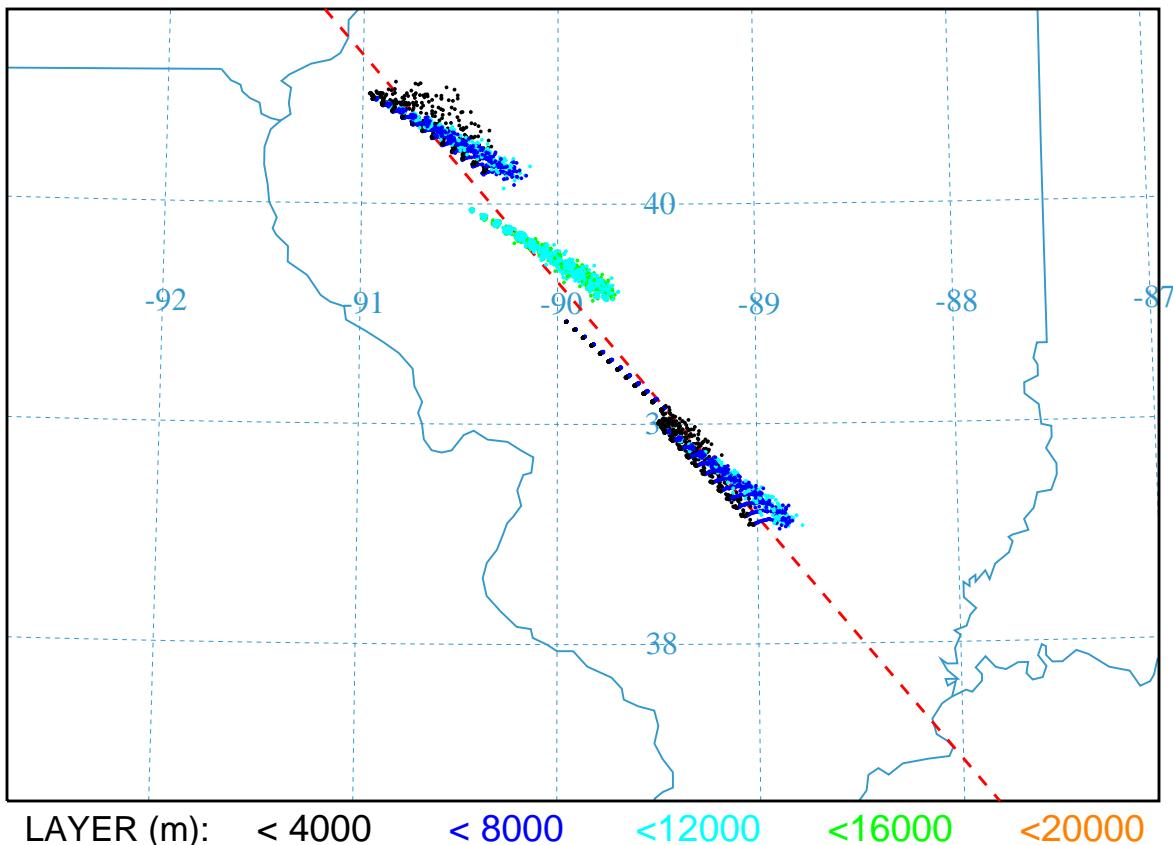
Mass loading (mass/m<sup>2</sup>) between 0 m and 20000 m

Integrated from 0000 17 Oct to 0100 17 Oct 95 (UTC)

SUM Release started at 0000 17 Oct 95 (UTC)



NOAA HYSPLIT MODEL  
PARTICLE CROSS-SECTIONS  
PARTICLE POSITIONS AT 01 00 17 Oct 95

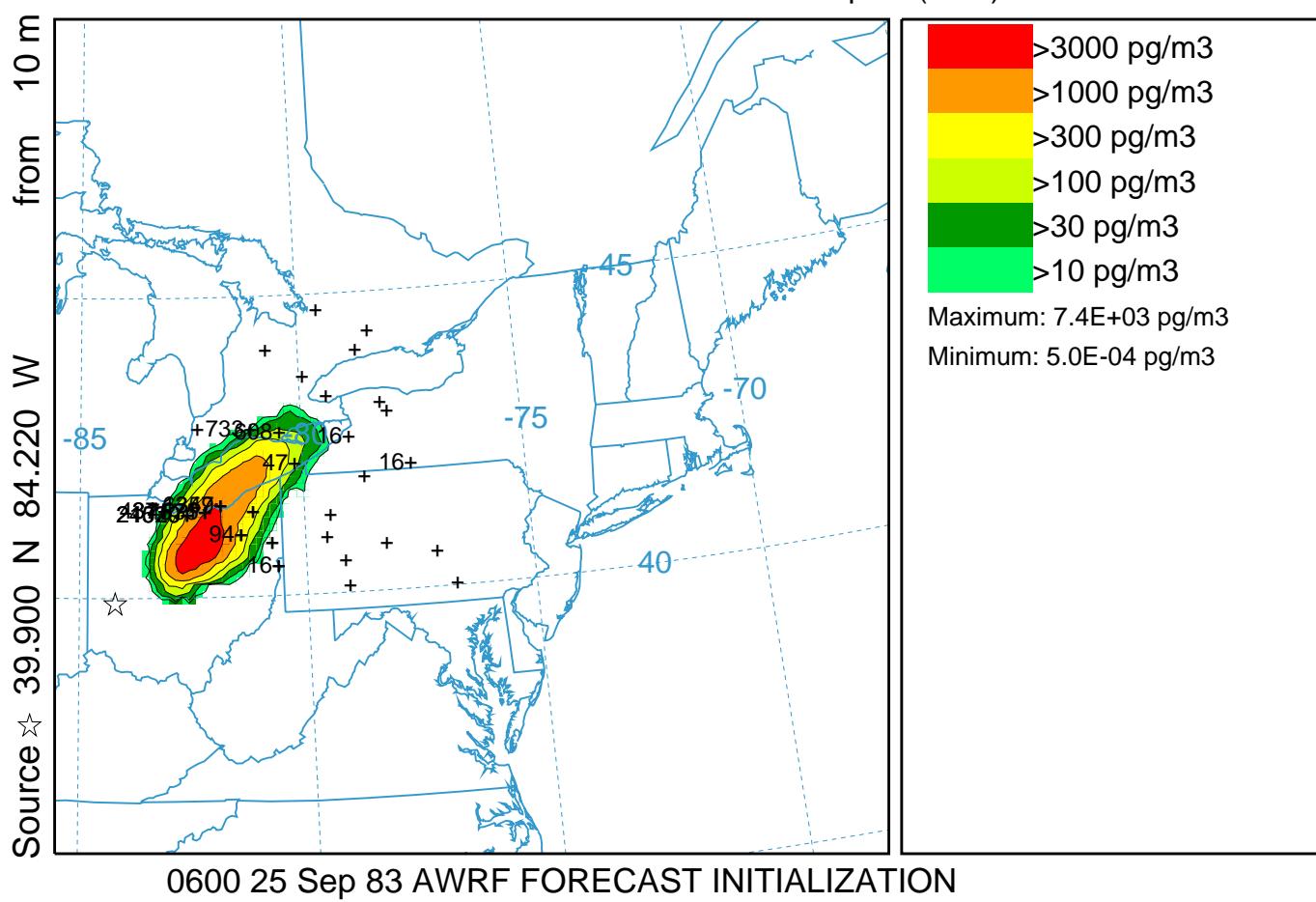


## CAPTEX Release Number Two ARW-WRF kblt=2 (050)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 26 Sep to 0900 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

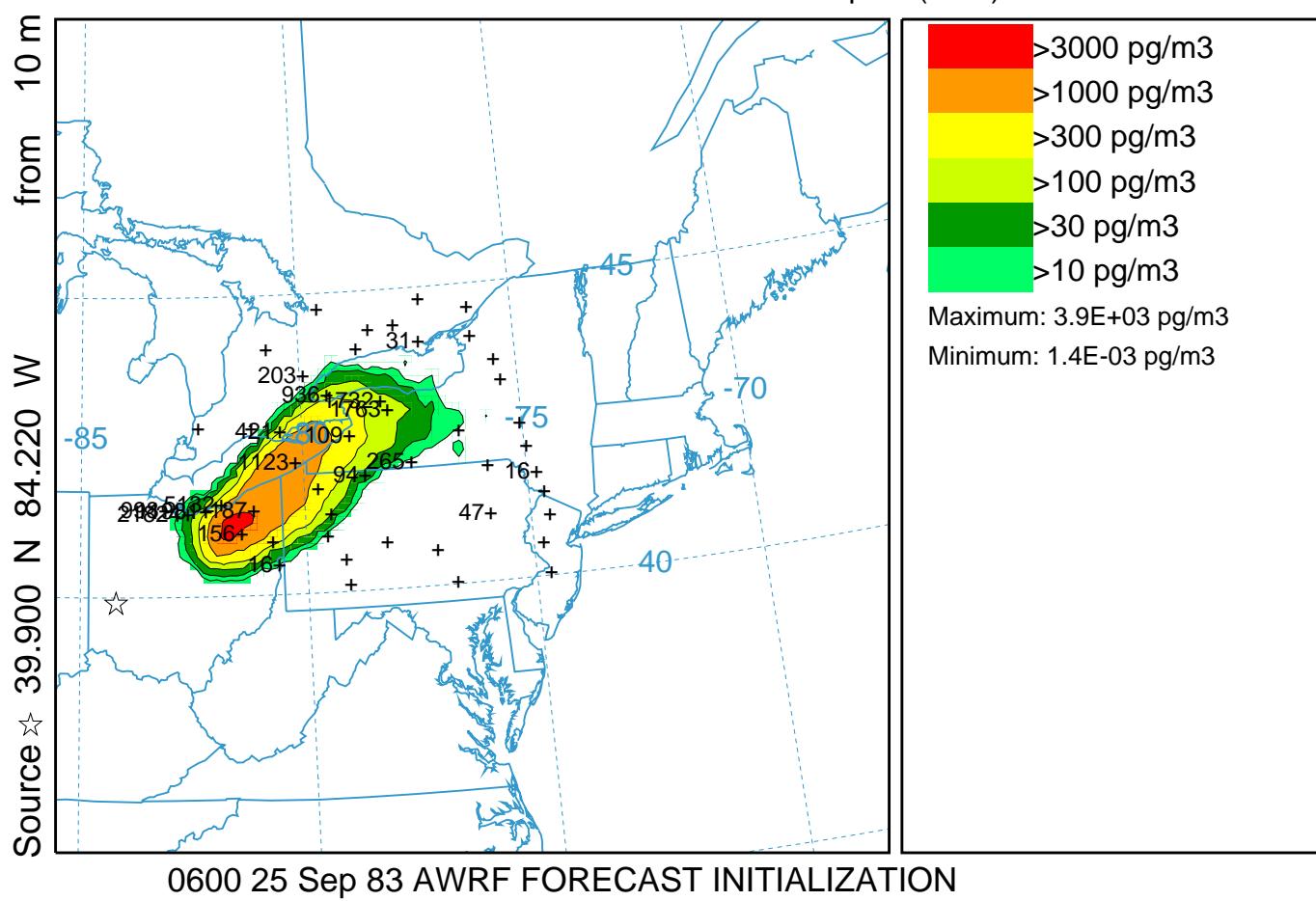


## CAPTEX Release Number Two ARW-WRF kblt=2 (050)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0900 26 Sep to 1500 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

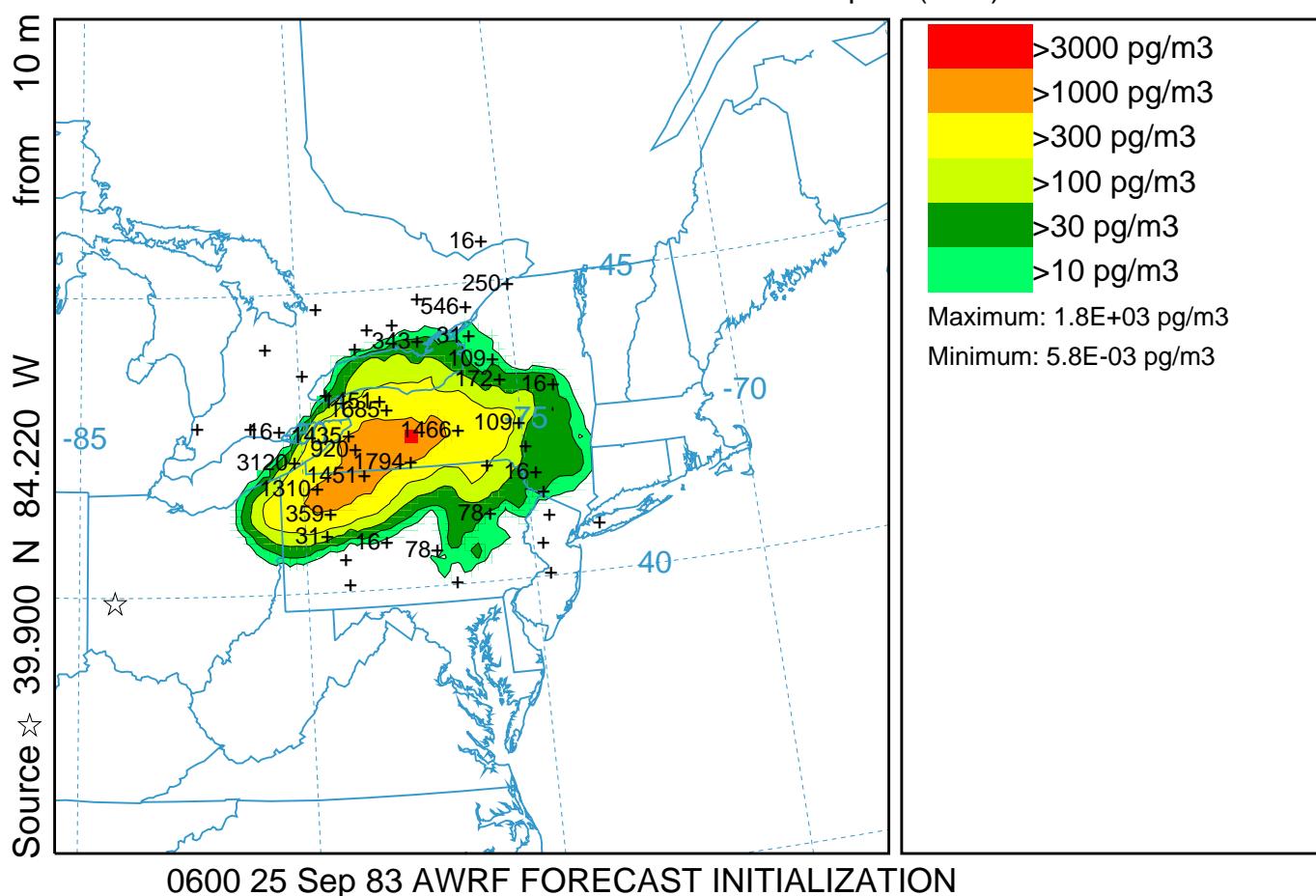


## CAPTEX Release Number Two ARW-WRF kblt=2 (050)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1500 26 Sep to 2100 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

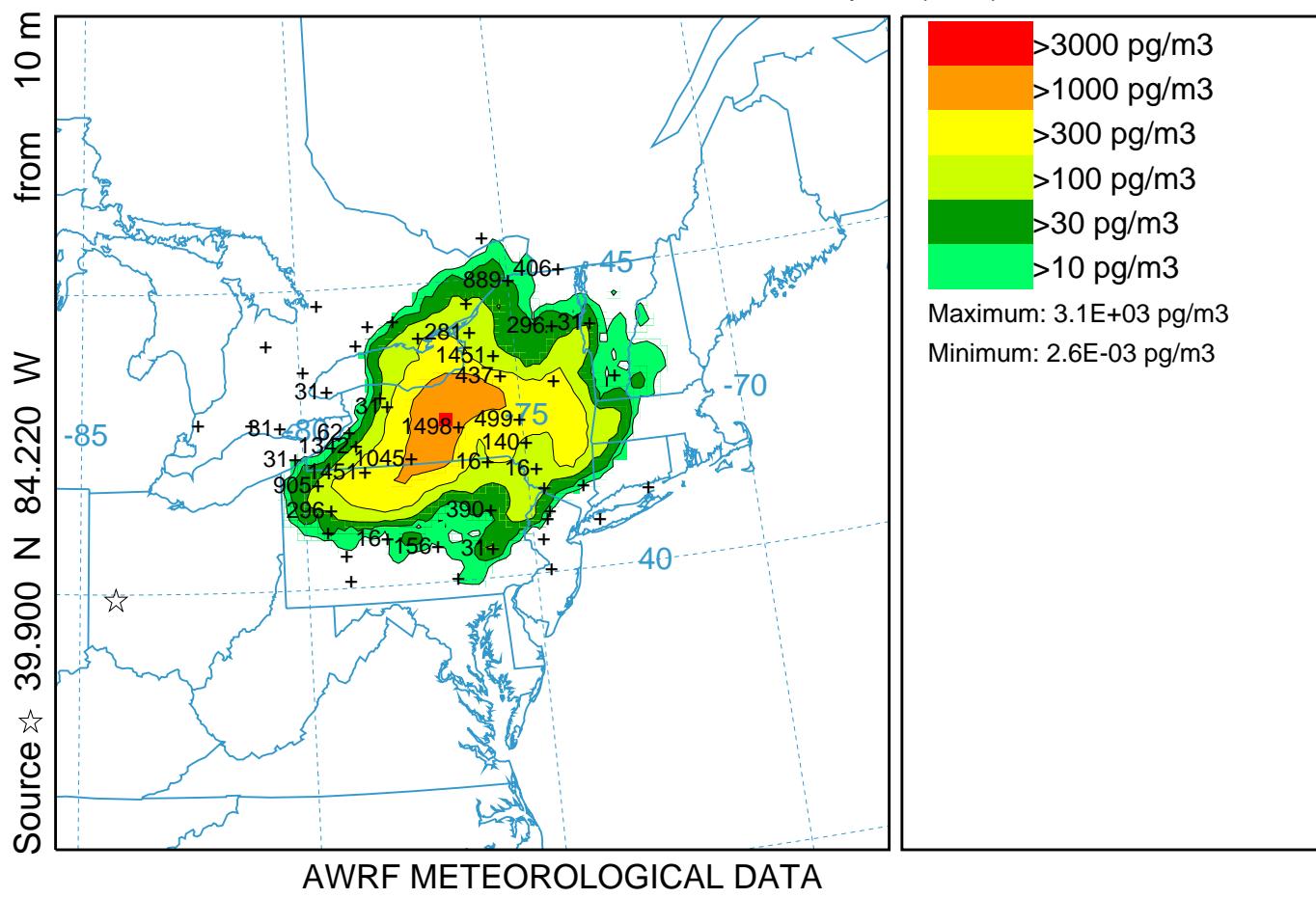


## CAPTEX Release Number Two ARW-WRF kblt=2 (050)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 2100 26 Sep to 0300 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

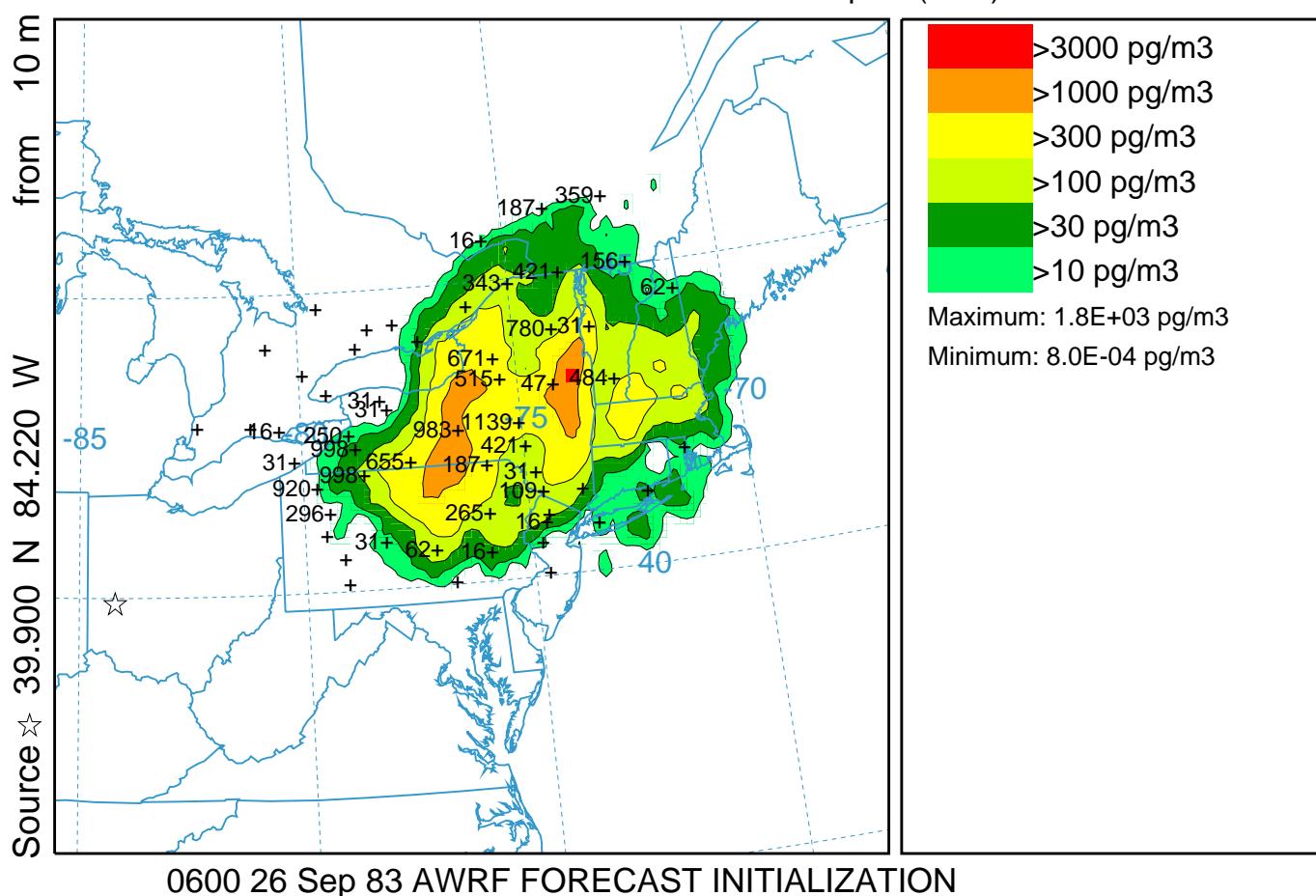


## CAPTEX Release Number Two ARW-WRF kblt=2 (050)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 27 Sep to 0900 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

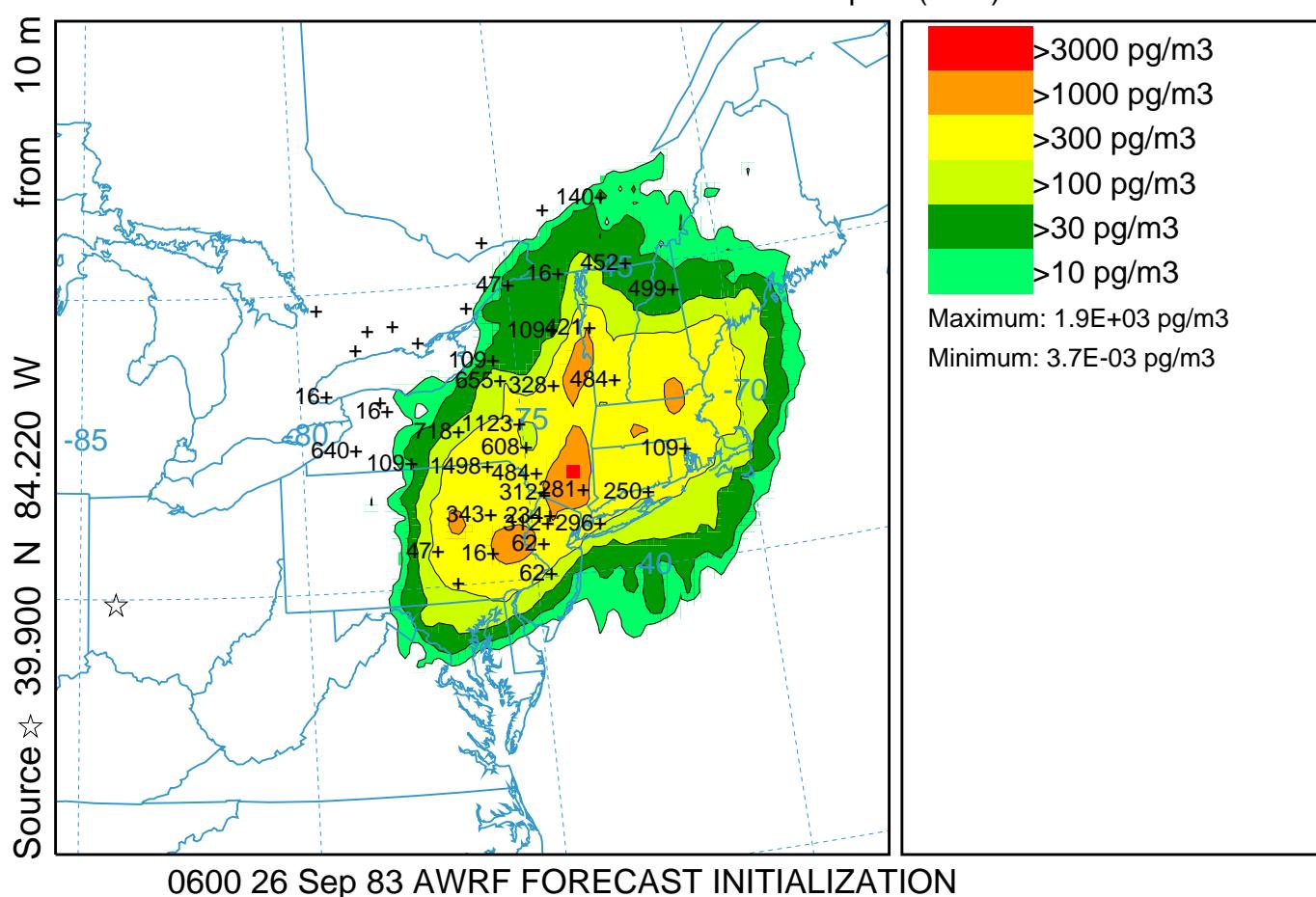


## CAPTEX Release Number Two ARW-WRF kblt=2 (050)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

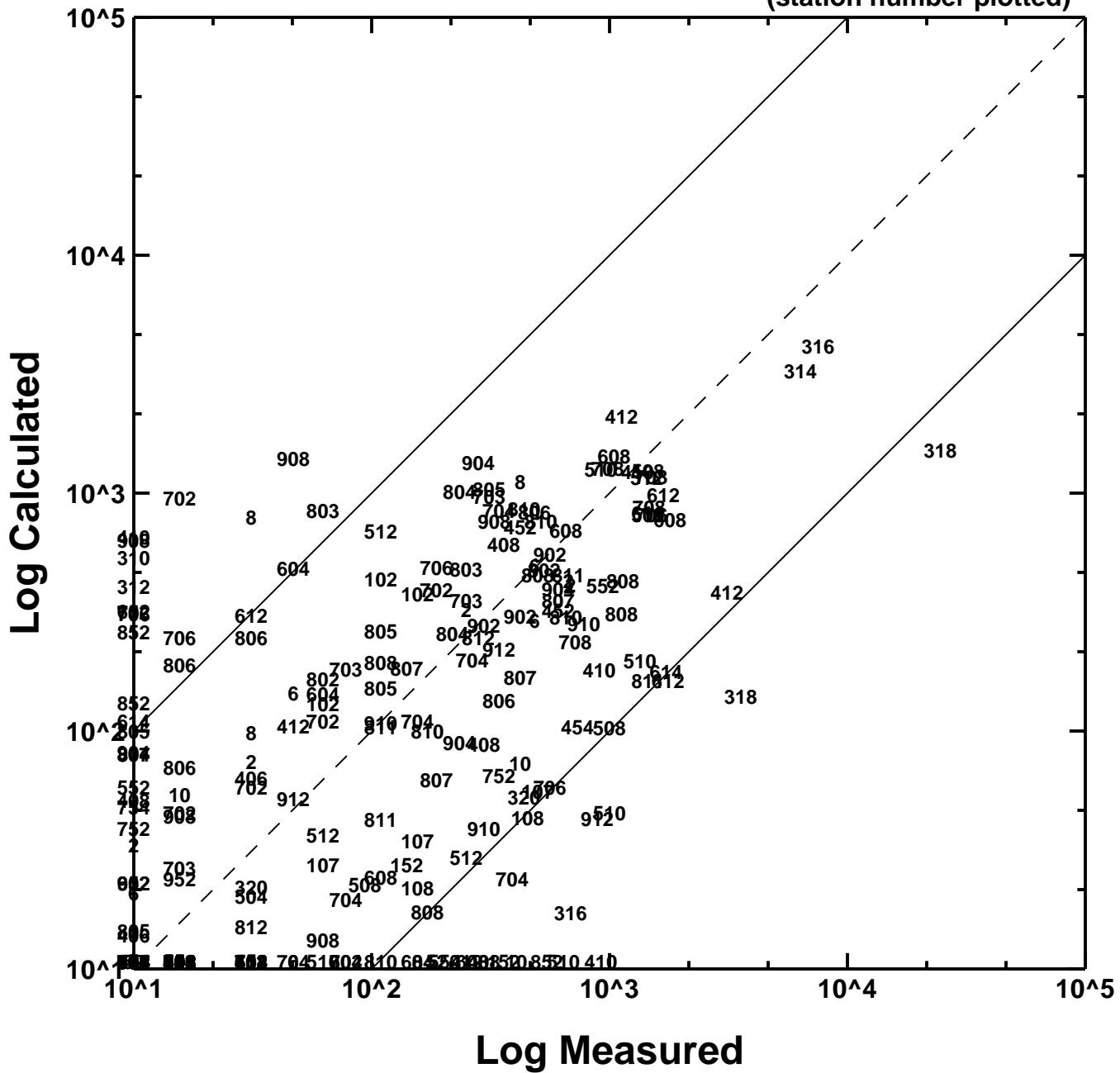
Integrated from 0900 27 Sep to 1500 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)



**CAPTEX**  
**Release Number Two**  
**Calculated vs Measured Concentrations**

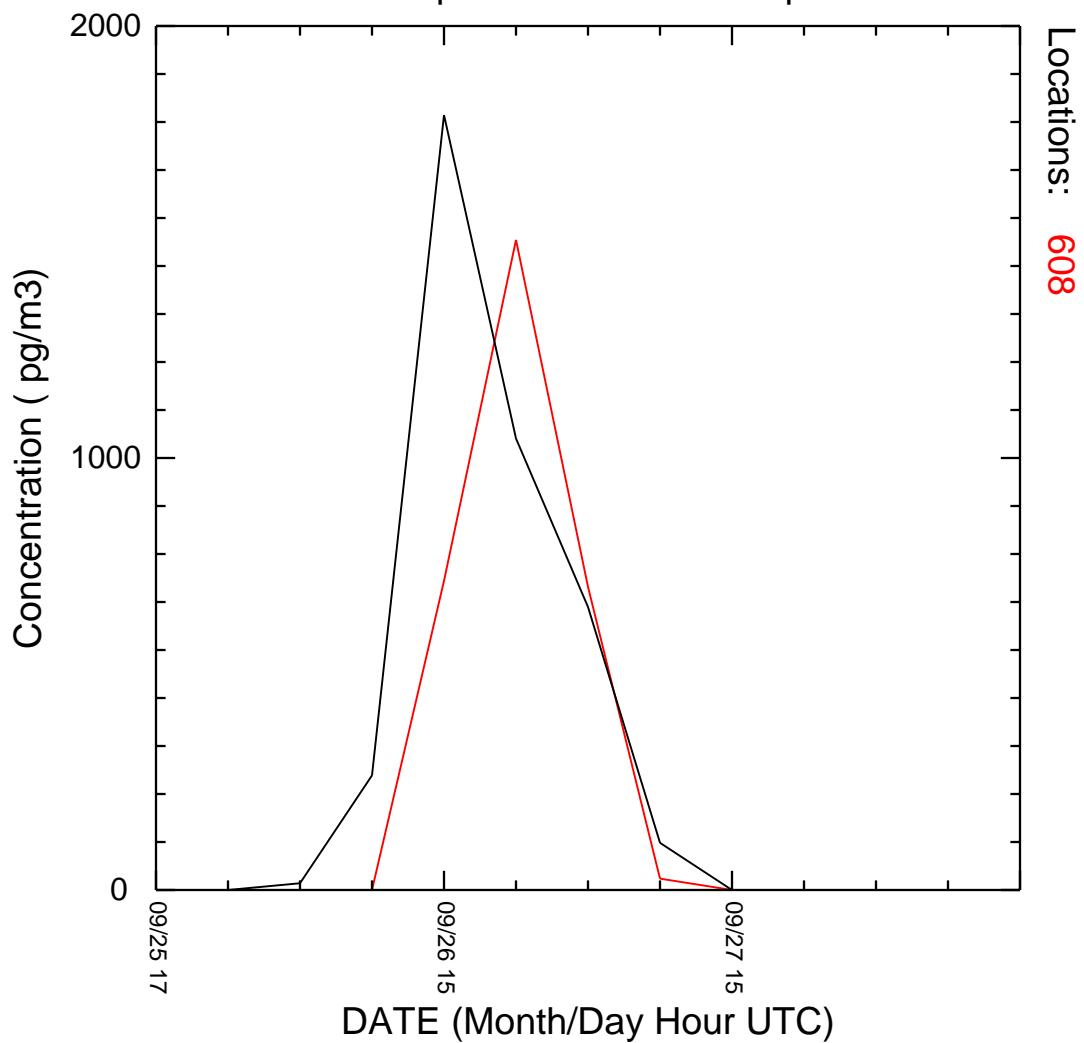
(station number plotted)



CAPTEX Time Series at Station 608 ARW-WRF kblt=2

hysp\_608.txt

First Sample: 1700 UTC 25 Sep 1983

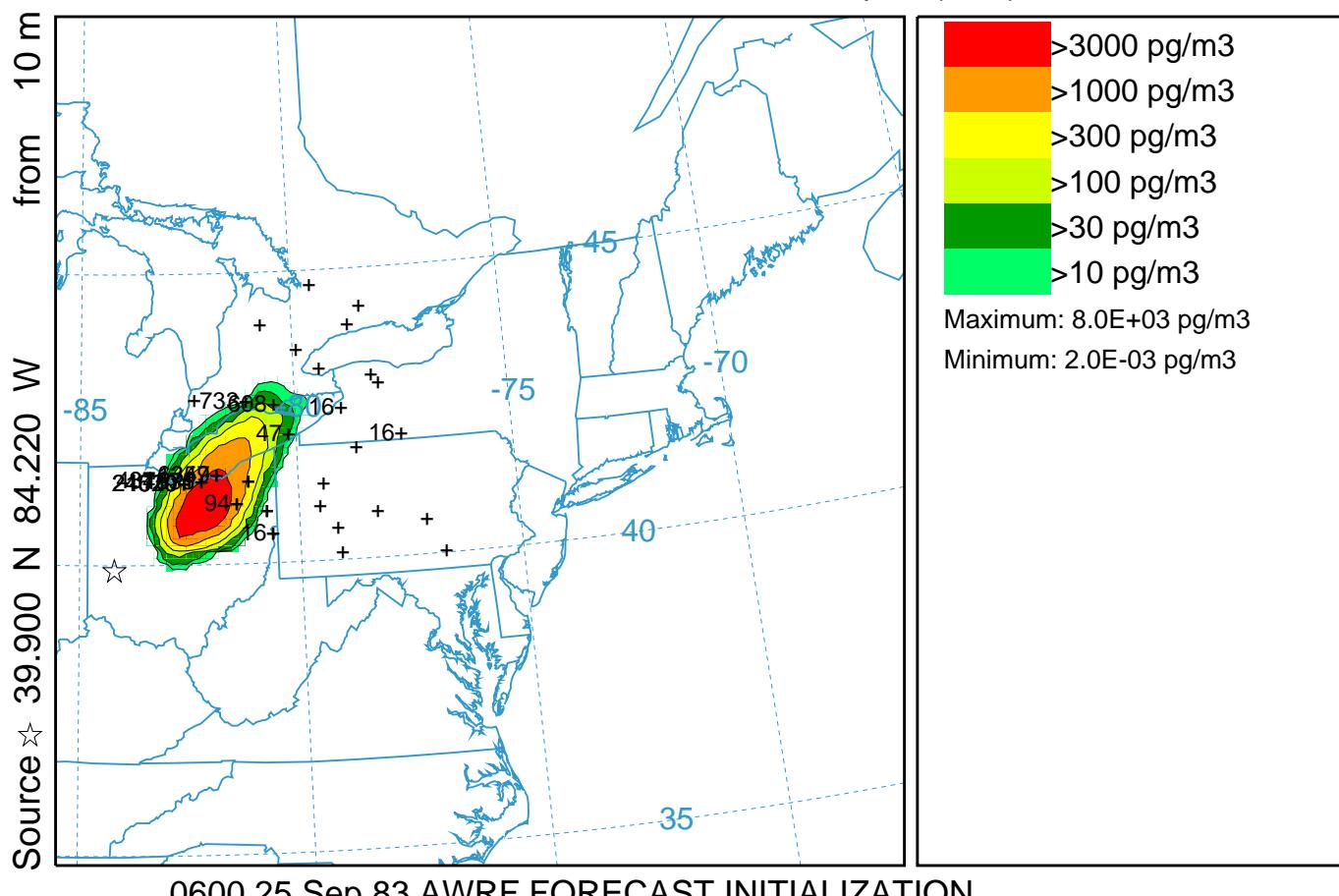


## CAPTEX Release Number Two ARW-WRF kblt=3 (051)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 26 Sep to 0900 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

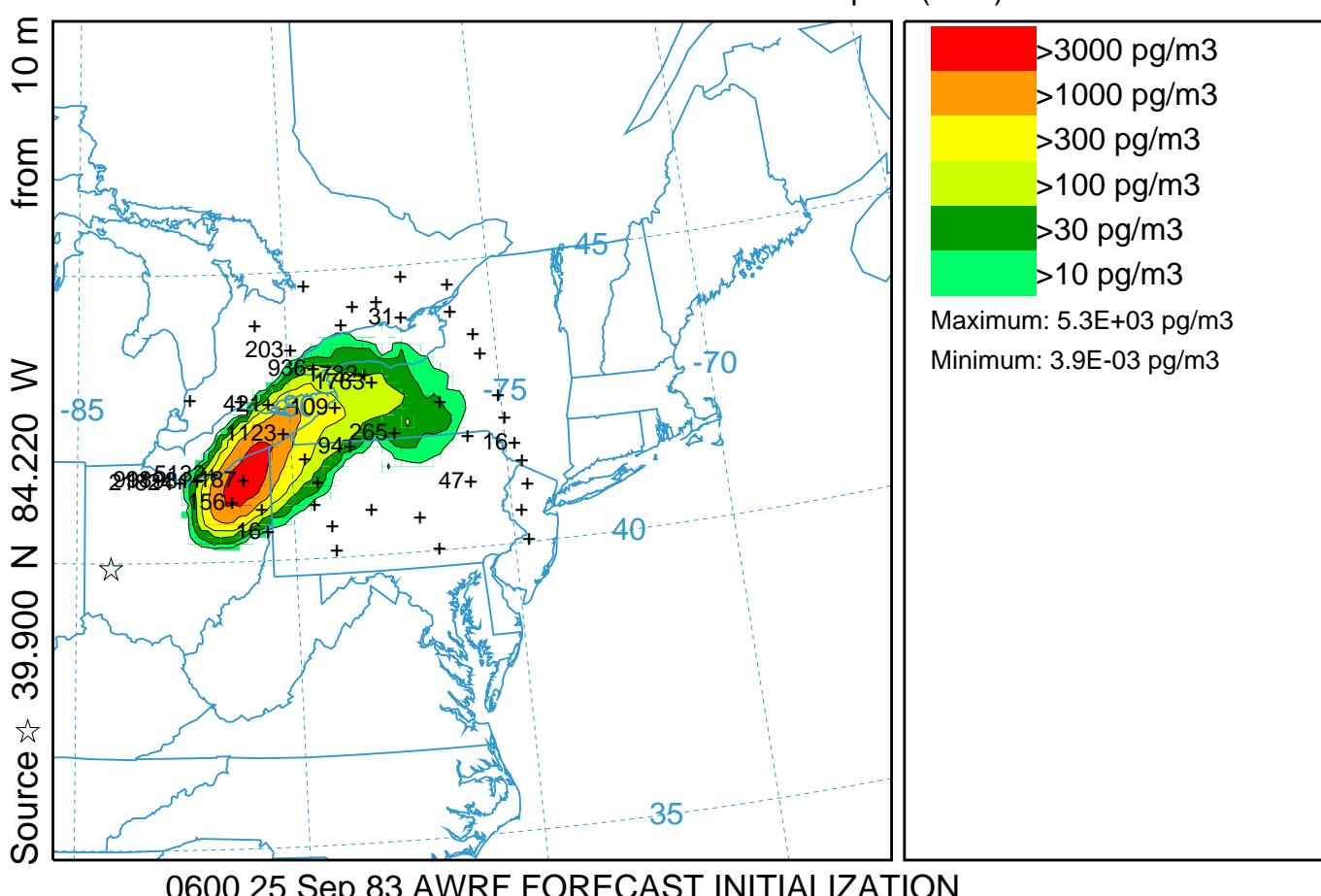


## CAPTEX Release Number Two ARW-WRF kblt=3 (051)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0900 26 Sep to 1500 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

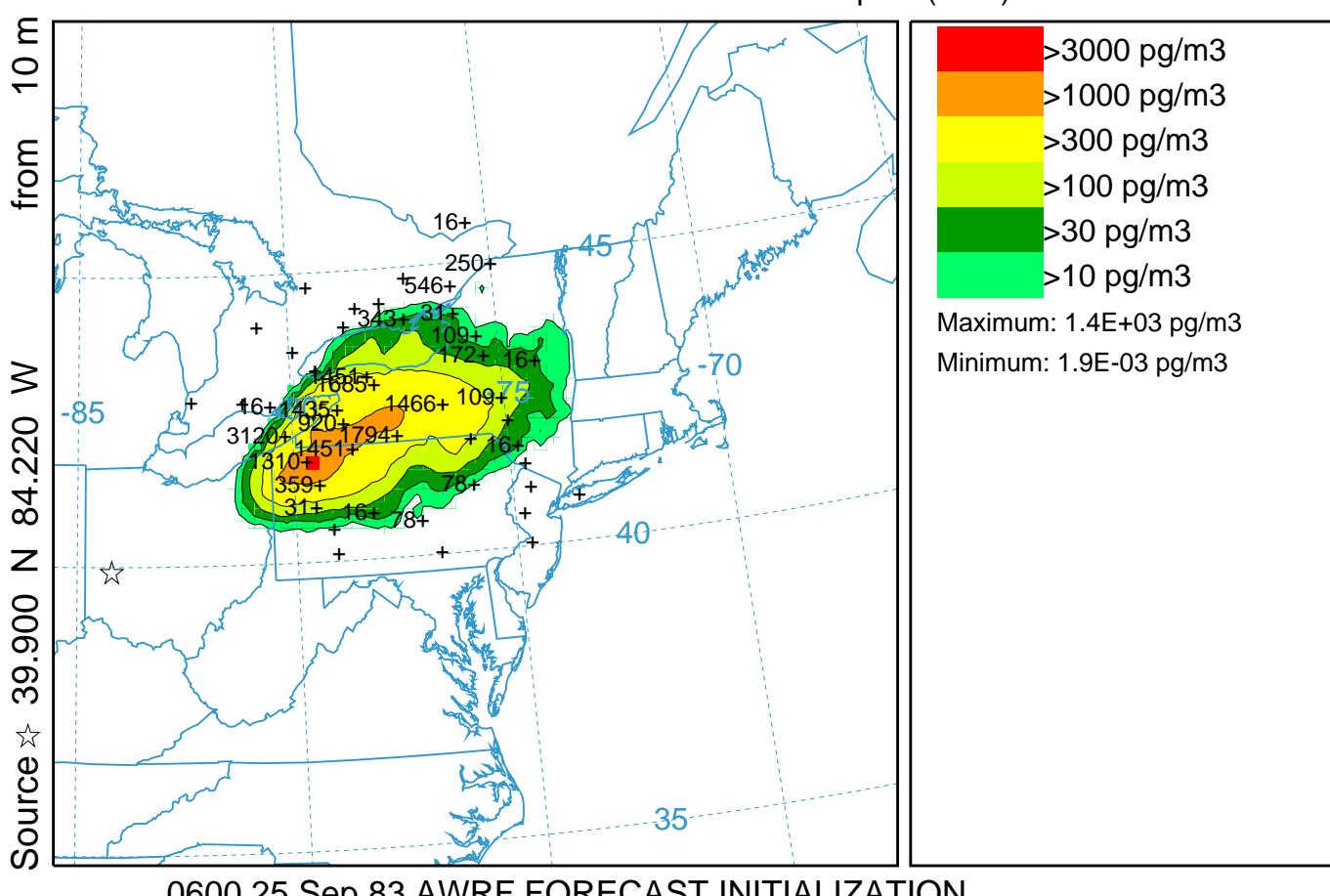


## CAPTEX Release Number Two ARW-WRF kblt=3 (051)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1500 26 Sep to 2100 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

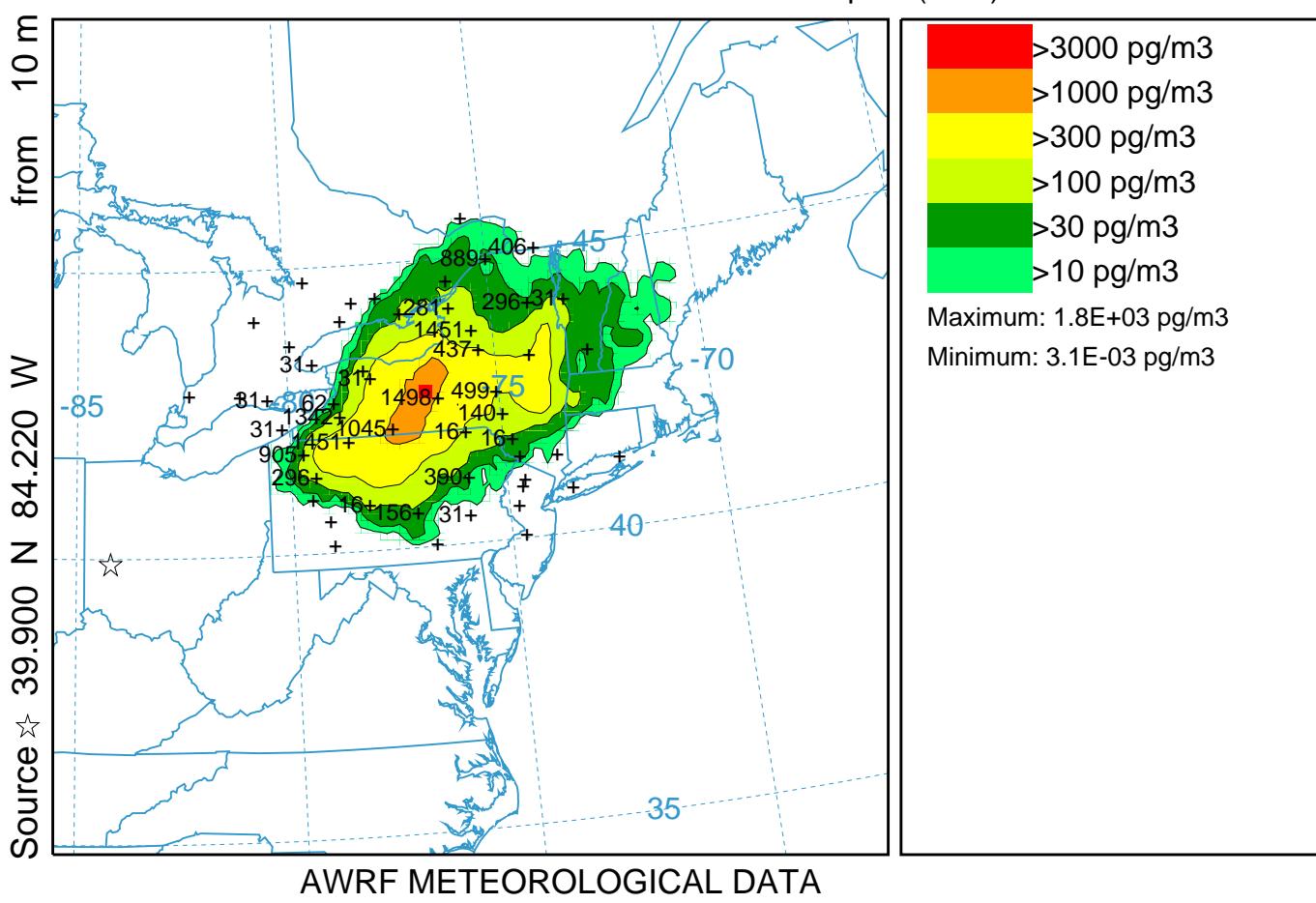


## CAPTEX Release Number Two ARW-WRF kblt=3 (051)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 2100 26 Sep to 0300 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

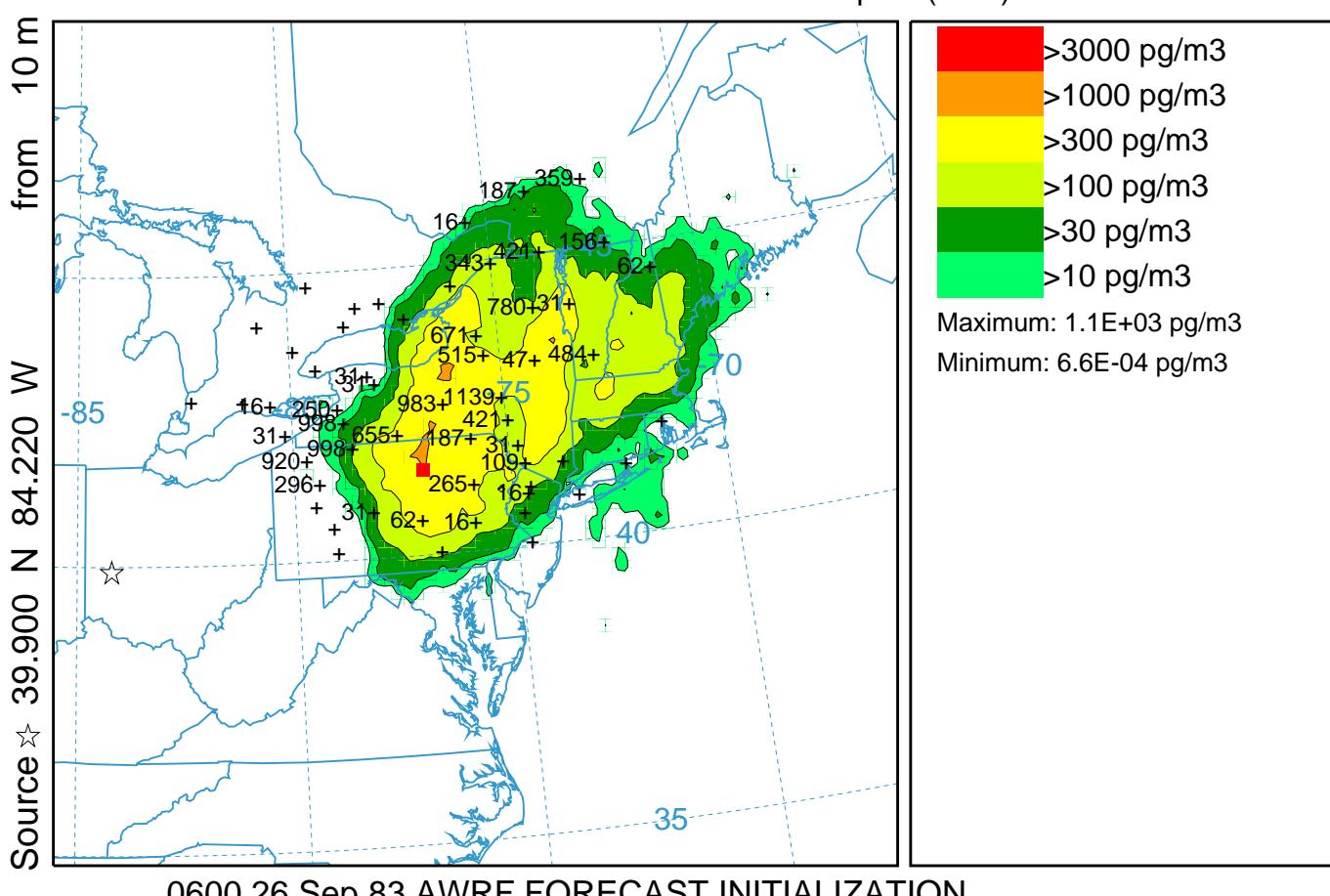


## CAPTEX Release Number Two ARW-WRF kblt=3 (051)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 27 Sep to 0900 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

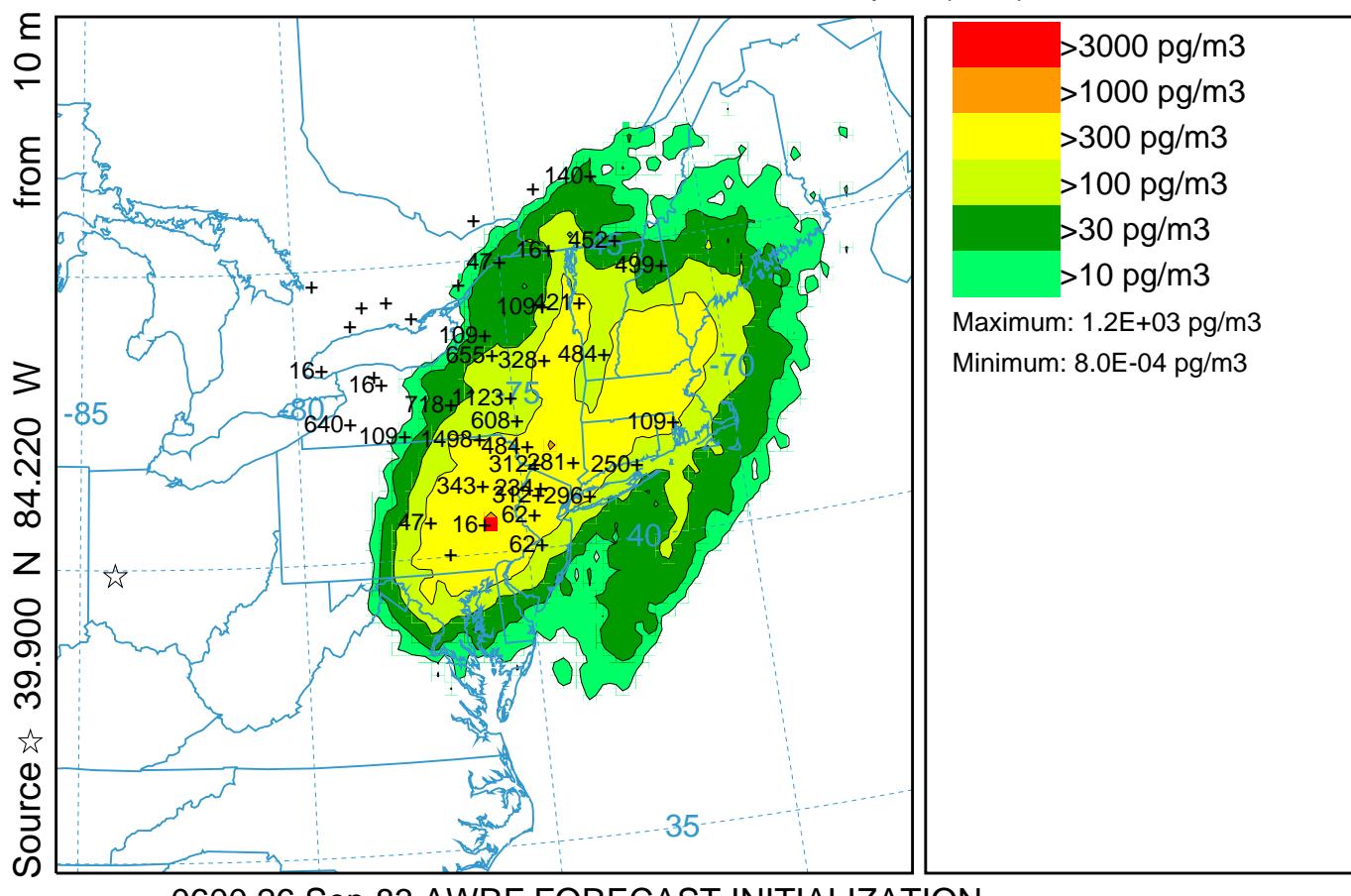


## CAPTEX Release Number Two ARW-WRF kblt=3 (051)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

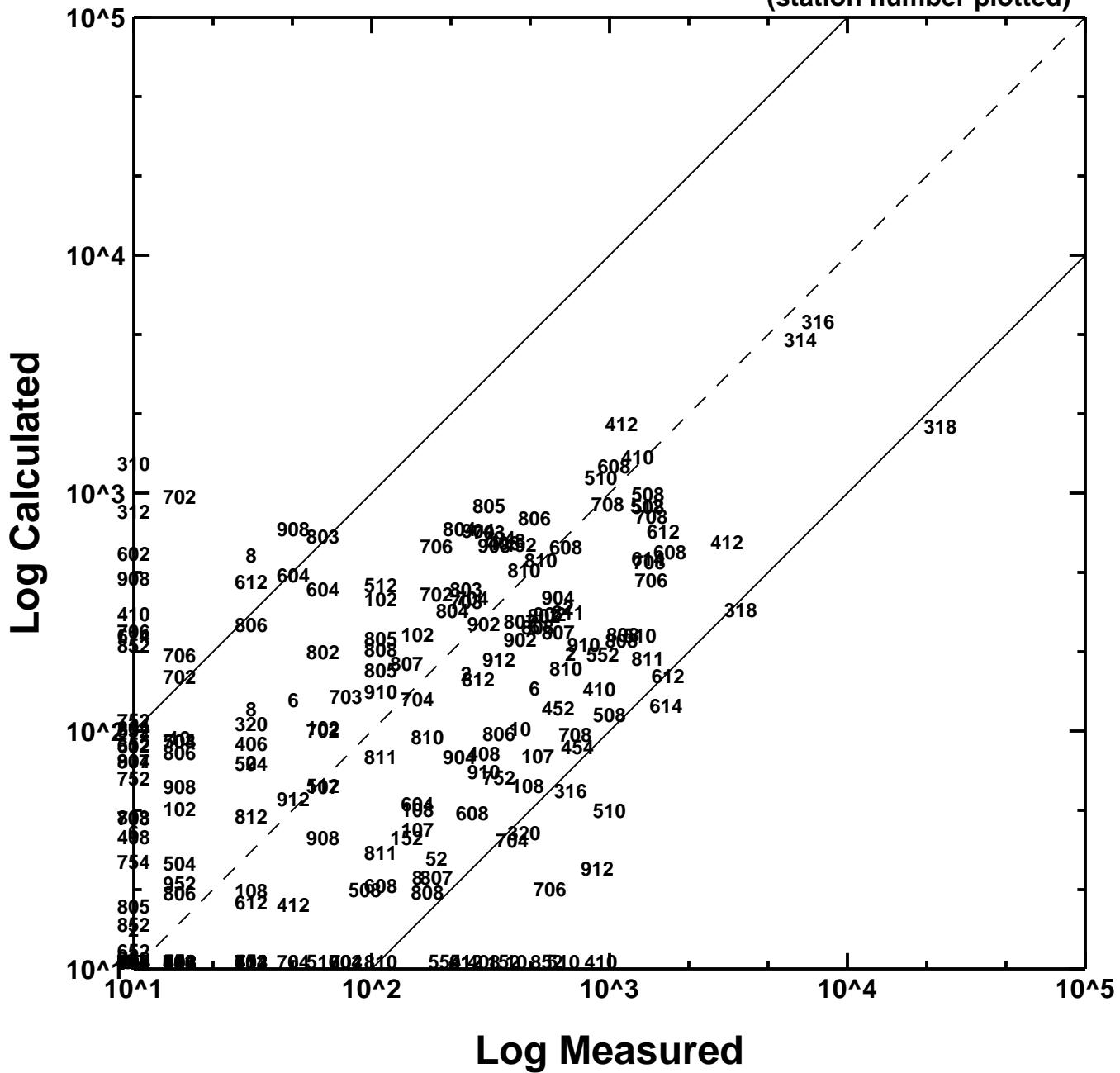
Integrated from 0900 27 Sep to 1500 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)



**CAPTEX**  
**Release Number Two**  
**Calculated vs Measured Concentrations**

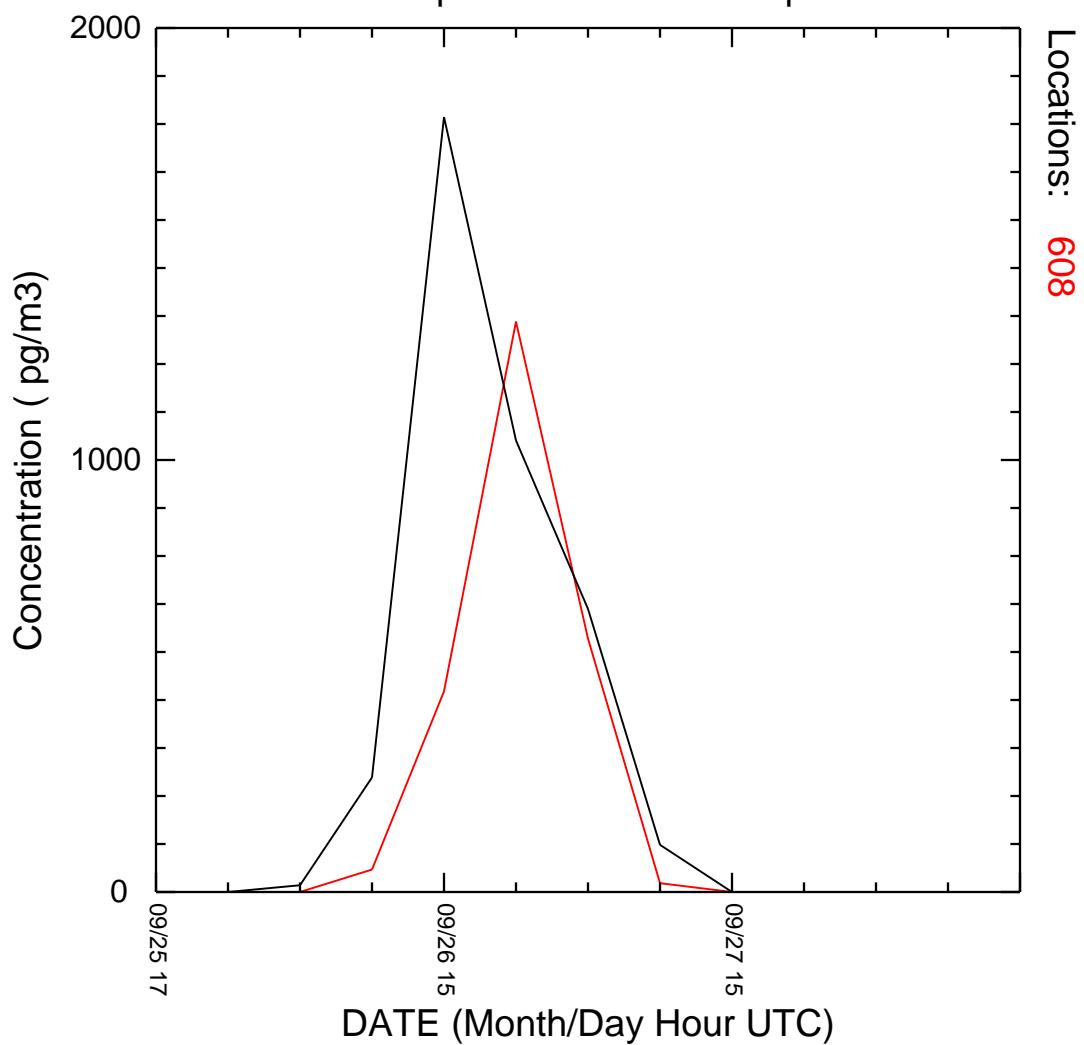
(station number plotted)



CAPTEX Time Series at Station 608 ARW-WRF kblt=3

hysp\_608.txt

First Sample: 1700 UTC 25 Sep 1983

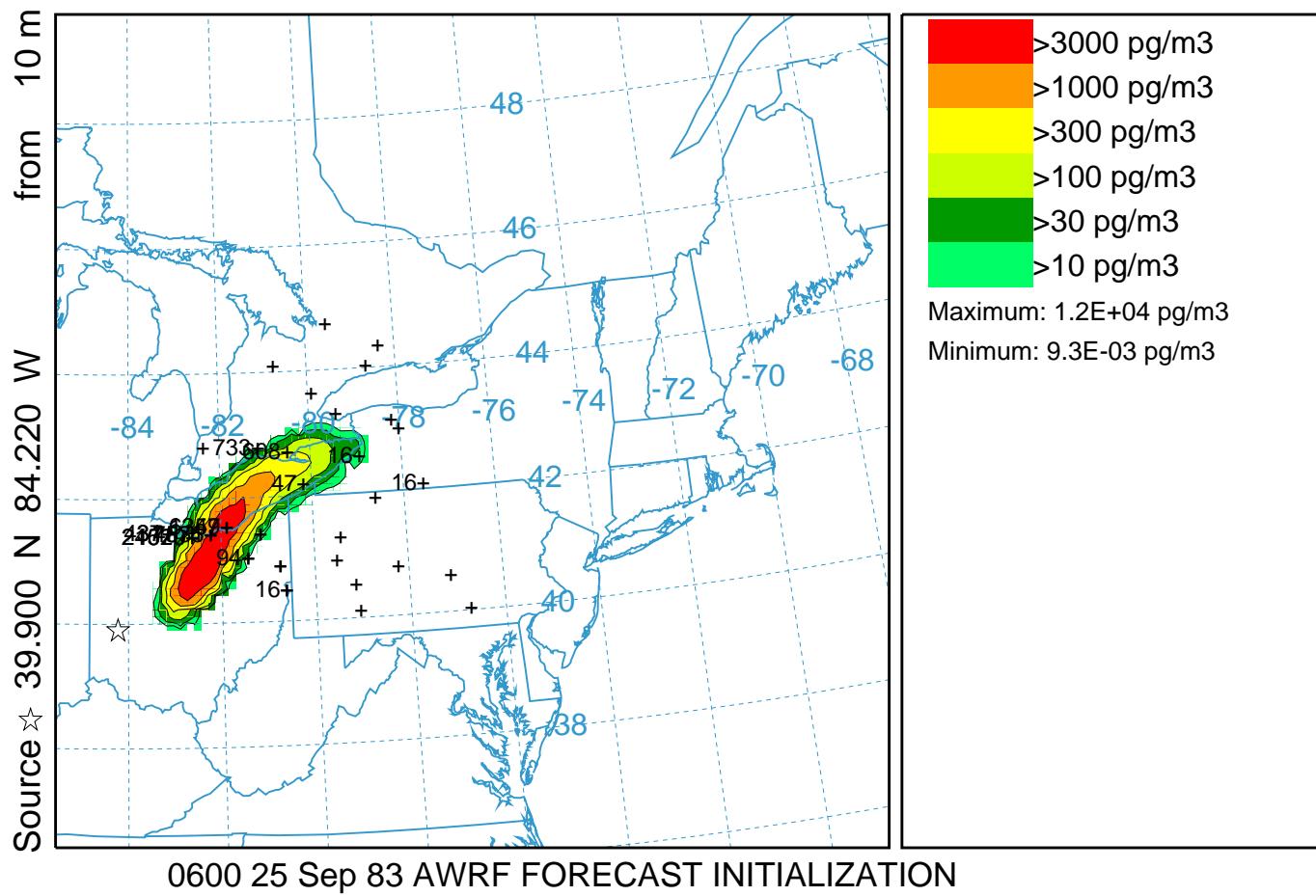


## CAPTEX Release Number Two ARW-WRF STILT Features (052)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 26 Sep to 0900 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

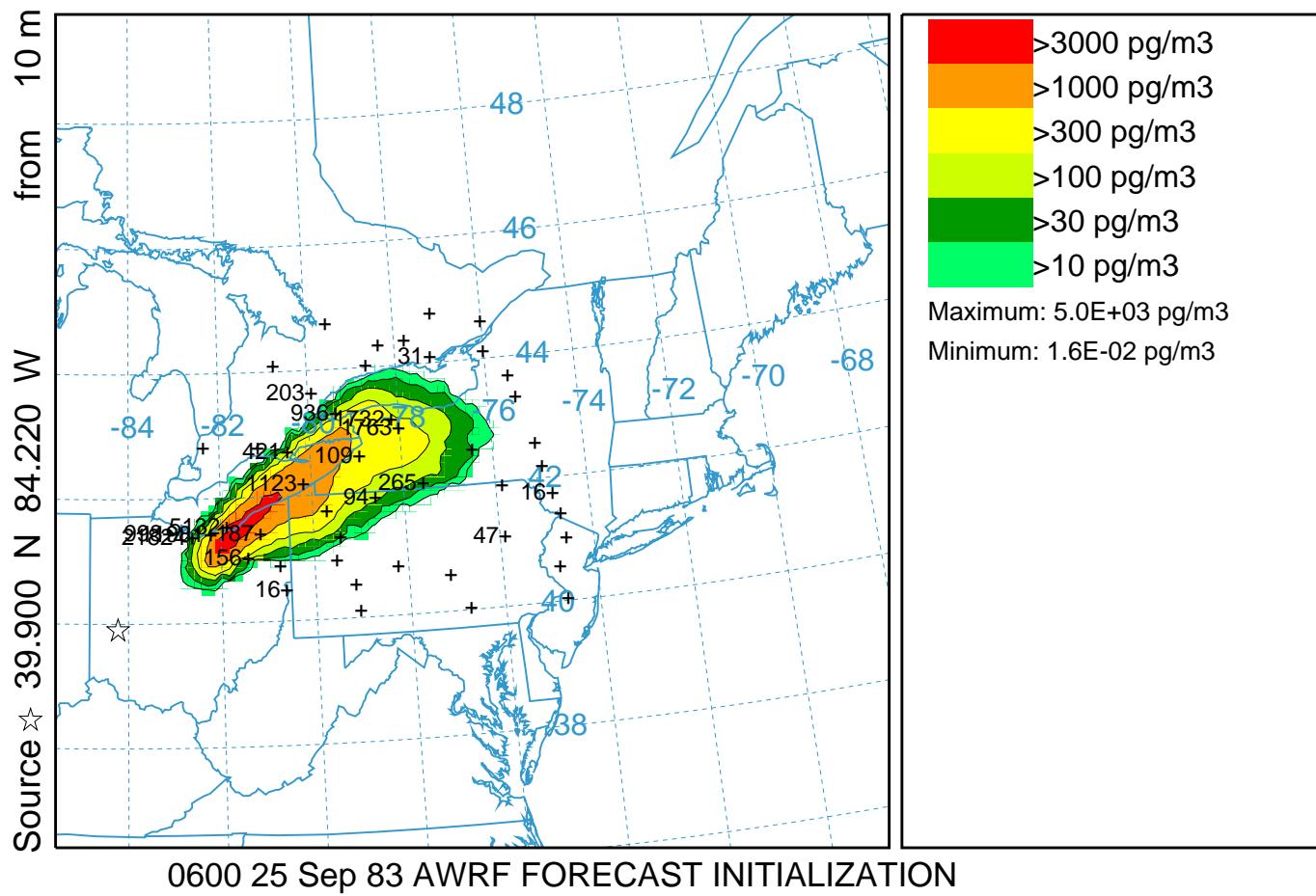


## CAPTEX Release Number Two ARW-WRF STILT Features (052)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0900 26 Sep to 1500 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

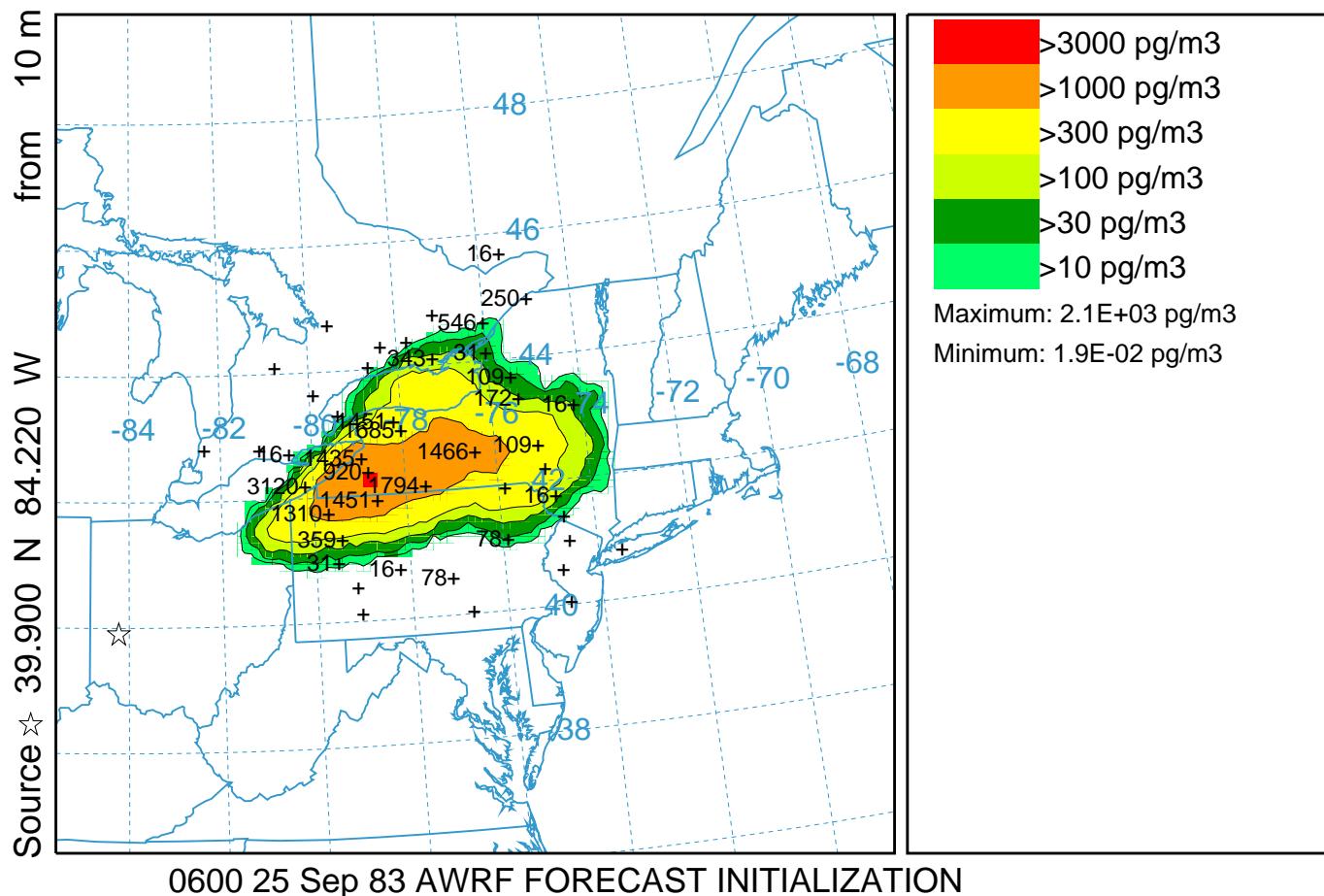


## CAPTEX Release Number Two ARW-WRF STILT Features (052)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 1500 26 Sep to 2100 26 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

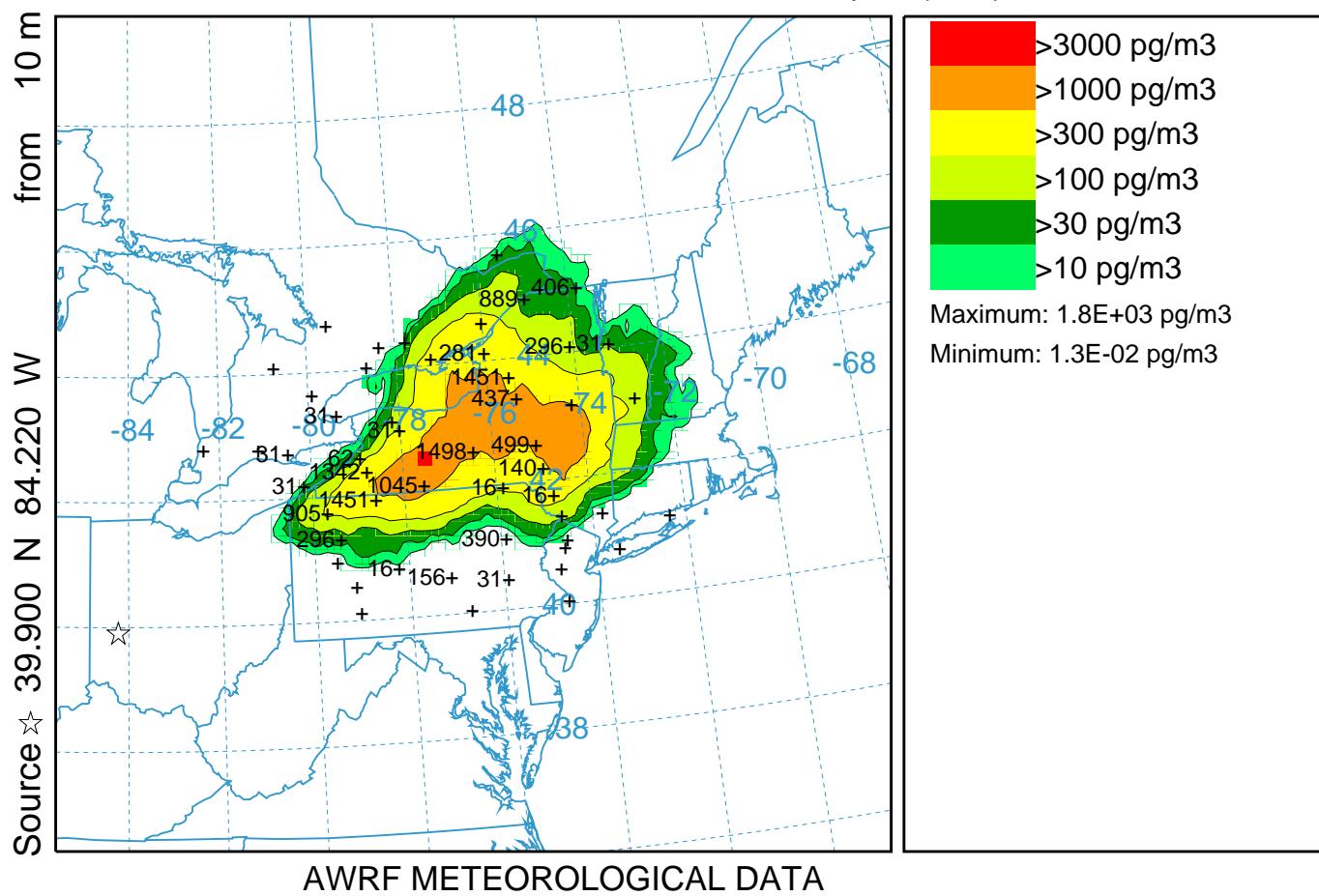


## CAPTEX Release Number Two ARW-WRF STILT Features (052)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 2100 26 Sep to 0300 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

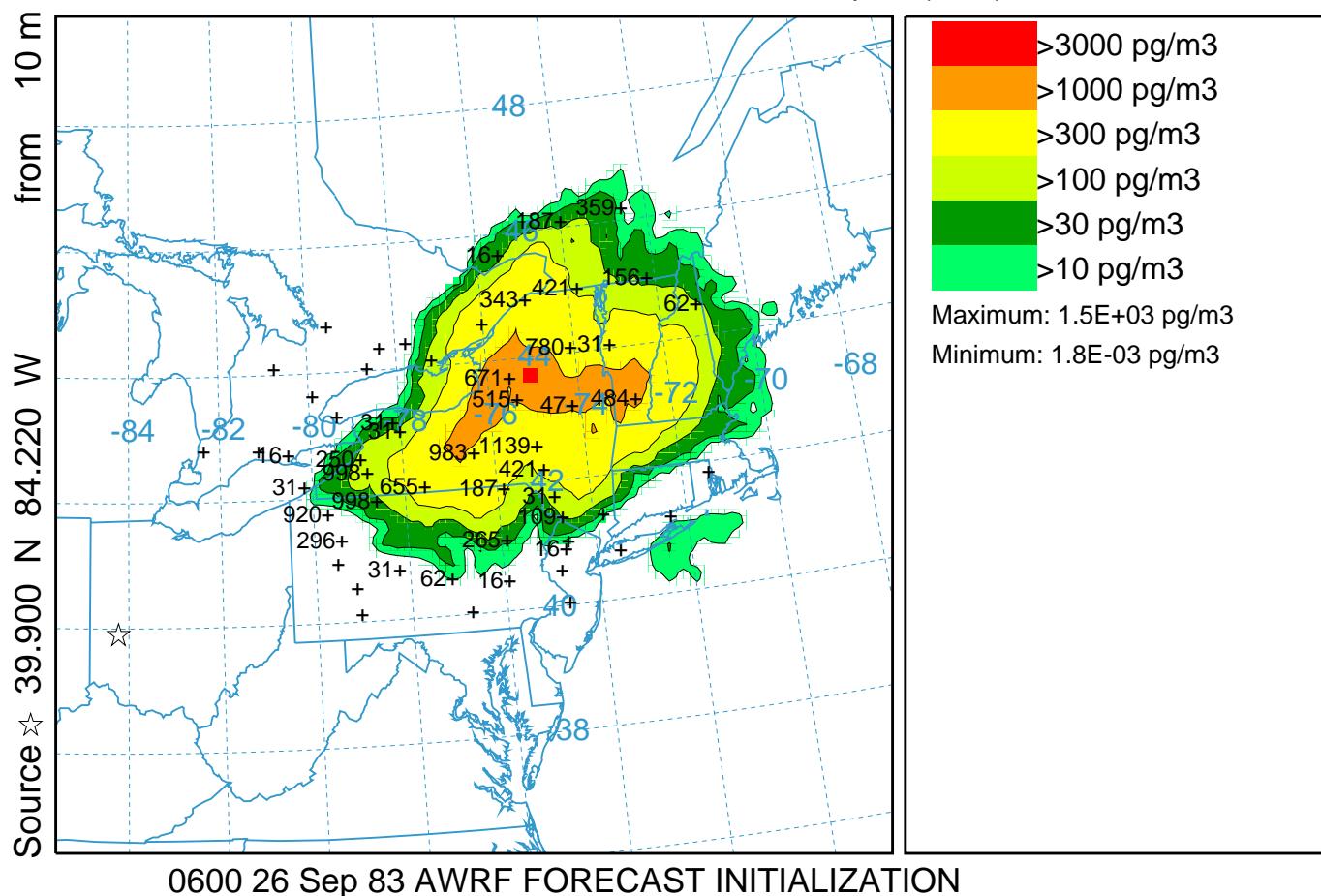


## CAPTEX Release Number Two ARW-WRF STILT Features (052)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0300 27 Sep to 0900 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

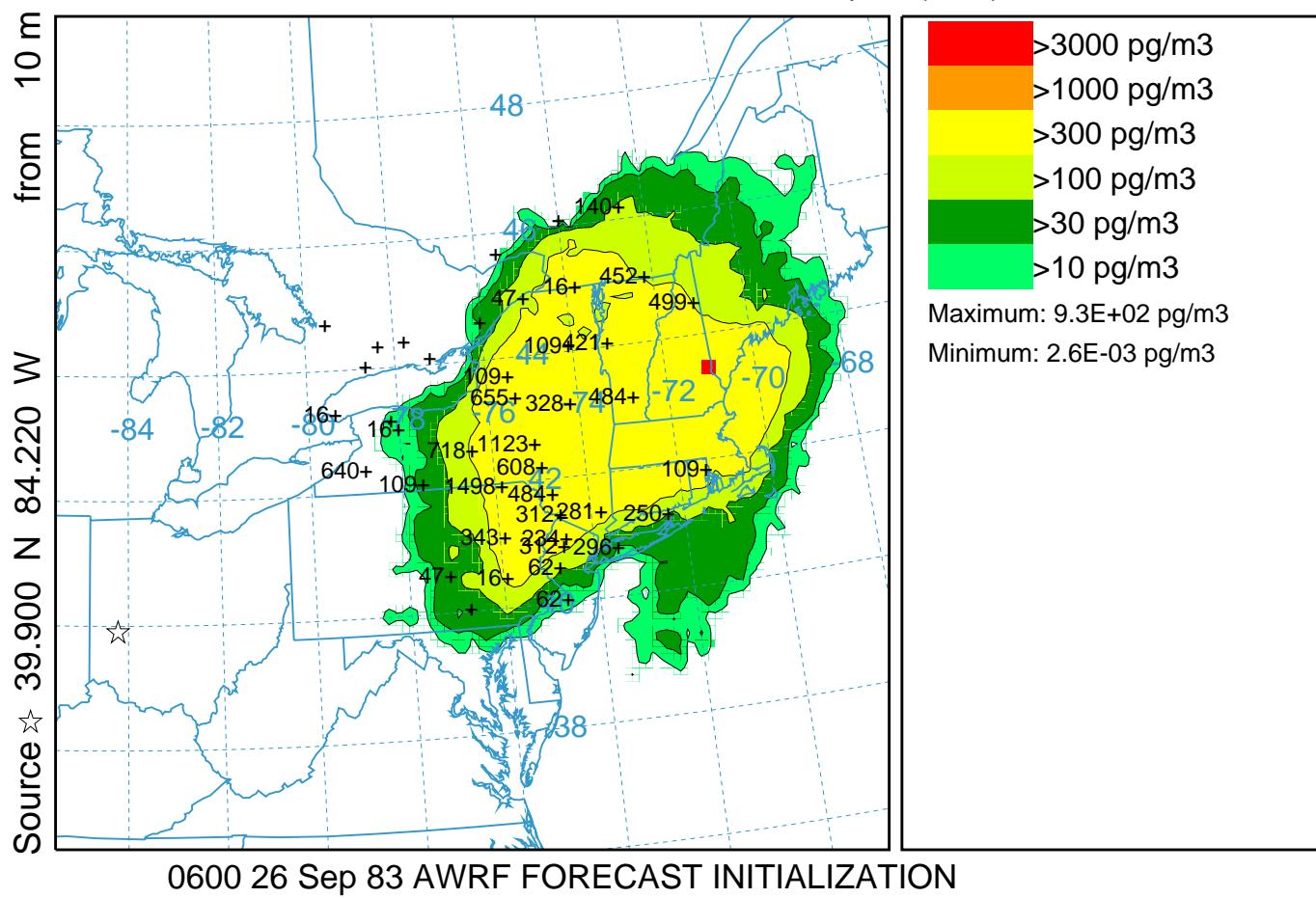


## CAPTEX Release Number Two ARW-WRF STILT Features (052)

Concentration (pg/m<sup>3</sup>) averaged between 0 m and 100 m

Integrated from 0900 27 Sep to 1500 27 Sep 83 (UTC)

PMCH Release started at 1700 25 Sep 83 (UTC)

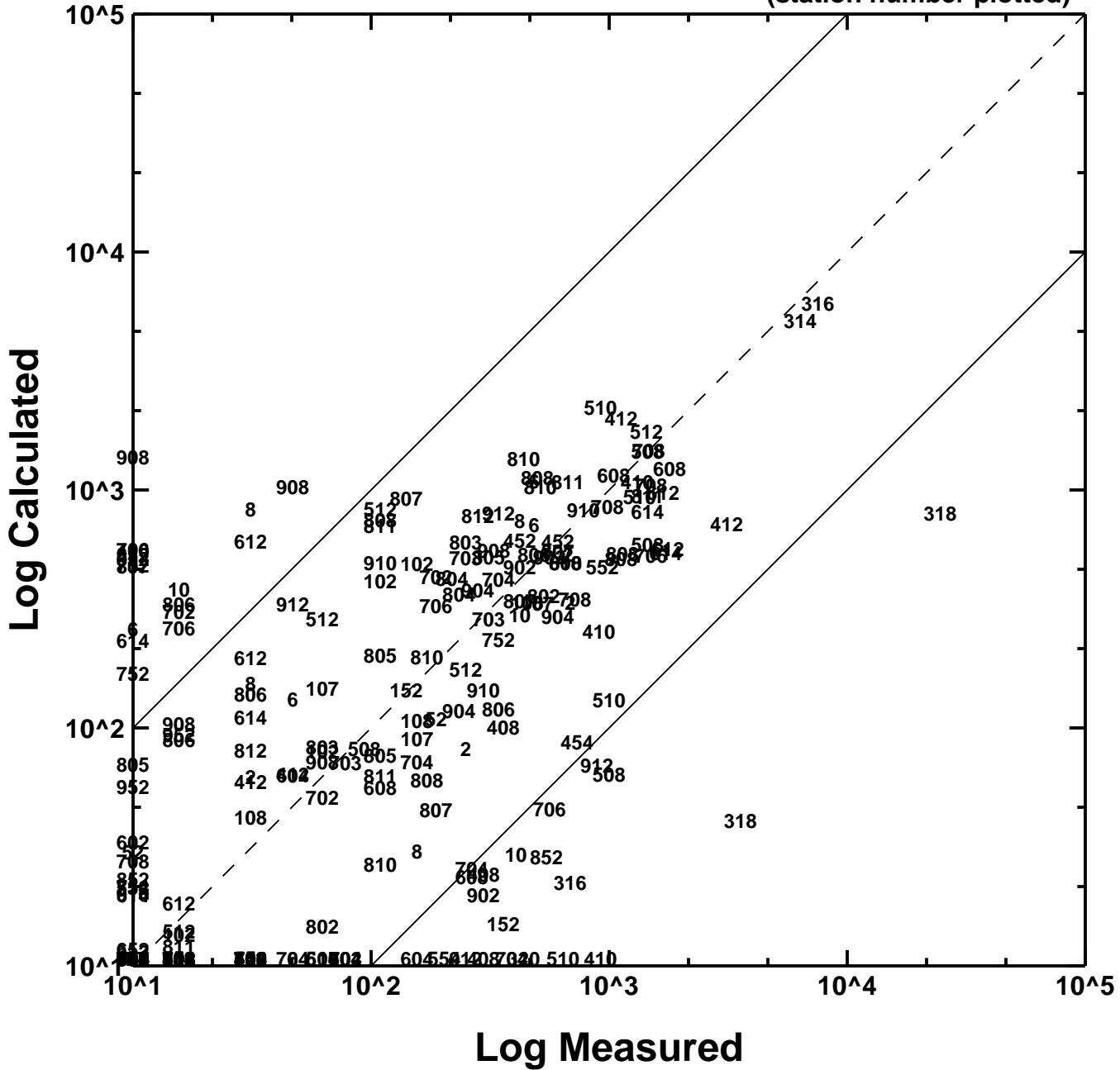


# **CAPTEX**

## **Release Number Two**

### **Calculated vs Measured Concentrations**

(station number plotted)



CAPTEX Time Series at Station 608 ARW-WRF STILT Features  
hysp\_608.txt  
First Sample: 1700 UTC 25 Sep 1983

