METEO FRANCE
Toujours un temps d'avance

METEO-FRANCE TOULOUSE, FRANCE

RSMC for Environmental Emergency Response

FAX : +33 5 61 07 80 44

Telephone : +33 5 61 07 80 42

Time : 1310 UTC Date : 13 Oct 2016

<< TEST_EVENT TEST_EVENT TEST_EVENT >>

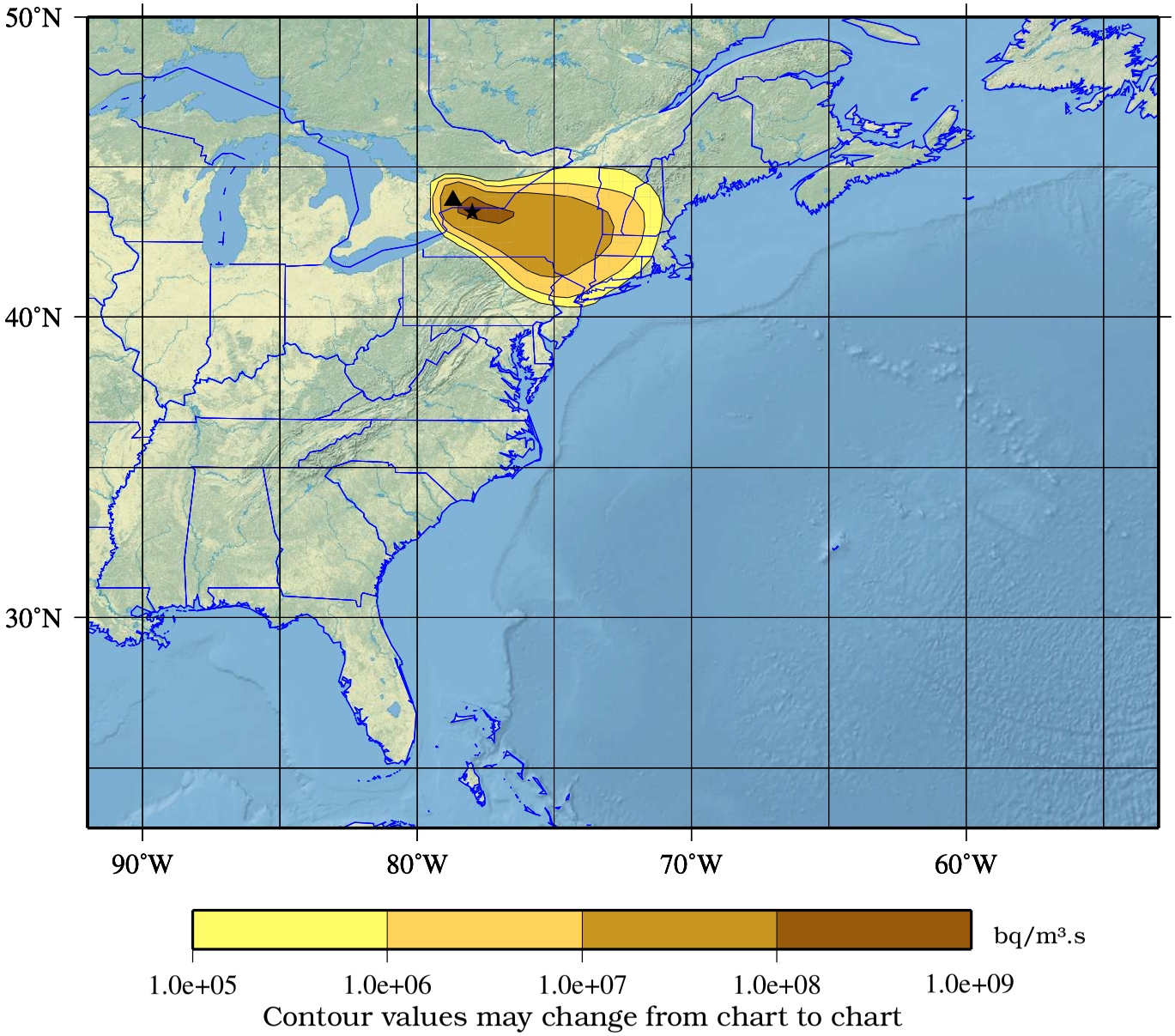
Release Time date : 10 UTC 13 Oct 2016
Release Location in decimal degrees : 43.88N 78.7W
Location name (if known) : DARLINGTON_NPP
Emission duration : 06h00
Emission (per hour) : 2000001600.0000 bq
Substance released : Cs-137
Vertical distribution : Uniform 0 - 500 m (AGL)
Meteorological Model : ECMWF
Dispersion Model : Mocage

Attached are 7 charts consisting of :
(1) **Trajectories of air particles** starting at 500, 1500 and 3000 metres above the ground. The plan view indicates the horizontal spread, while the side view indicates the vertical motion of the trajectories.
(2-4) Charts for three successive time intervals of the **time-integrated pollution concentration (or exposure)** averaged over the layer between the surface and 500m in units of Becquerel.seconds per cubic metre (Bq.s/m3).
(5-7) A chart of the **total surface deposition** (wet + dry) from the release time to the end of the third time period in units of Bequerel per square metre (Bq/m2)
For charts 2-7, a legend indicates the values associated with particular shadings.

Number of pages (including cover sheet) = 8

DARLINGTON NPP Exercise 13/10/2016

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 14 hours
valid 14/10/2016 00h00 UTC



Contour values may change from chart to chart

Dispersion model : MOCAGE Accident
Meteo model : ECMWF

Results based on default initial values

RELEASE DATA

Site : DARLINGTON NPP
Emission start : 13/10/2016 10h00 UTC
Release duration : 06h00
Lat : 43.88 N ; 43º52'48" N
Lon : 78.7 W ; 78º42'0" W
Emission rate : 2.0e+16 bq/h
Base : 0m
Top : 500m
Released pollutant : Cs-137

MODEL DATA

Grid resolution : 0.5º
Init for meteo data
13/10/2016 00UTC

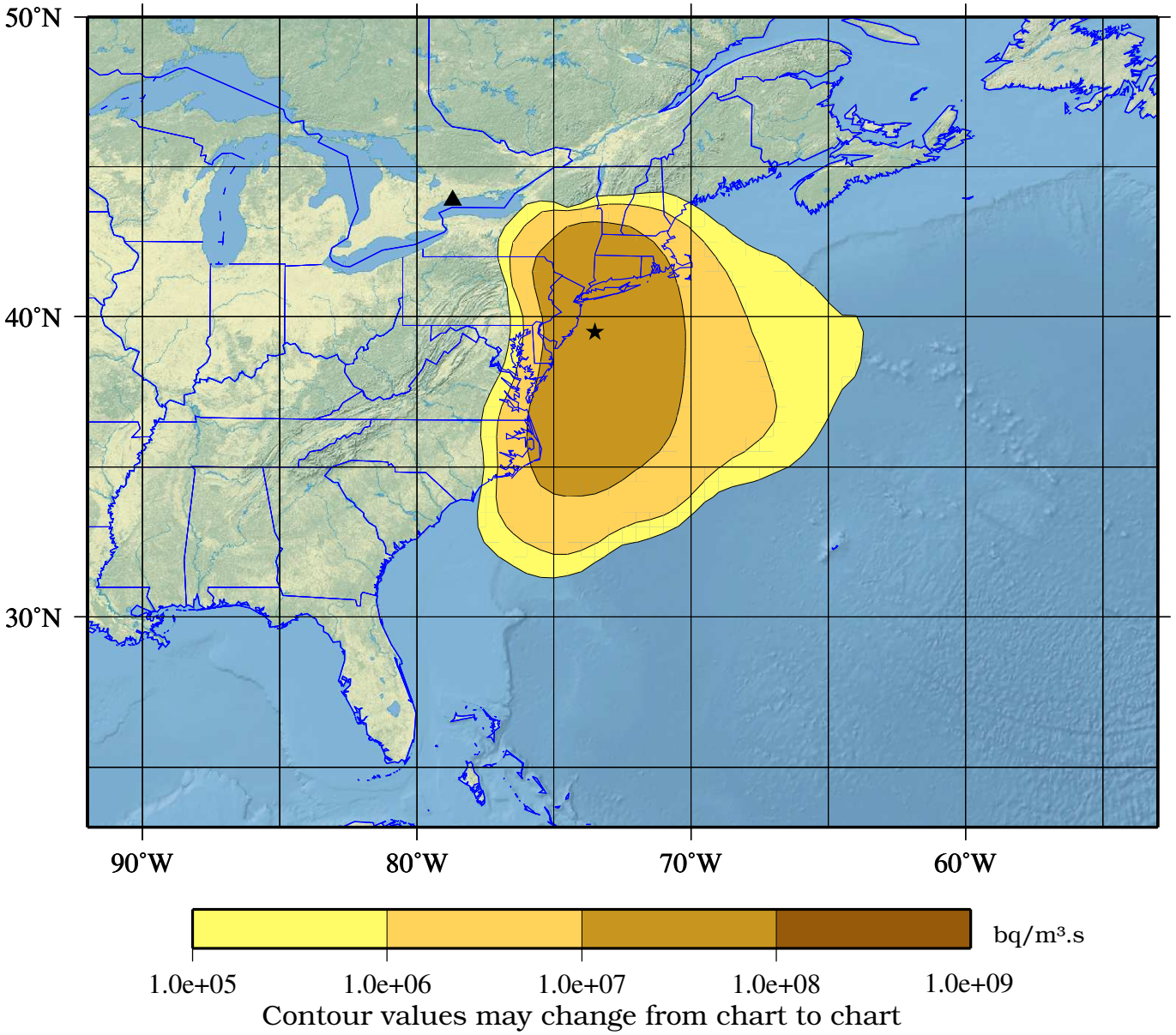
Max value for current step :
148936000 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 13/10/2016 12:45:05 UTC

DARLINGTON NPP Exercise 13/10/2016

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 15/10/2016 00h00 UTC



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Meteo model : ECMWF

Results based on default initial values

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Lon : 78.7 W ; 78º42'0" W
Emission rate : 2.0e+16 bq/h
Base : 0m
Top : 500m
Released pollutant : Cs-137

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
13/10/2016 00UTC

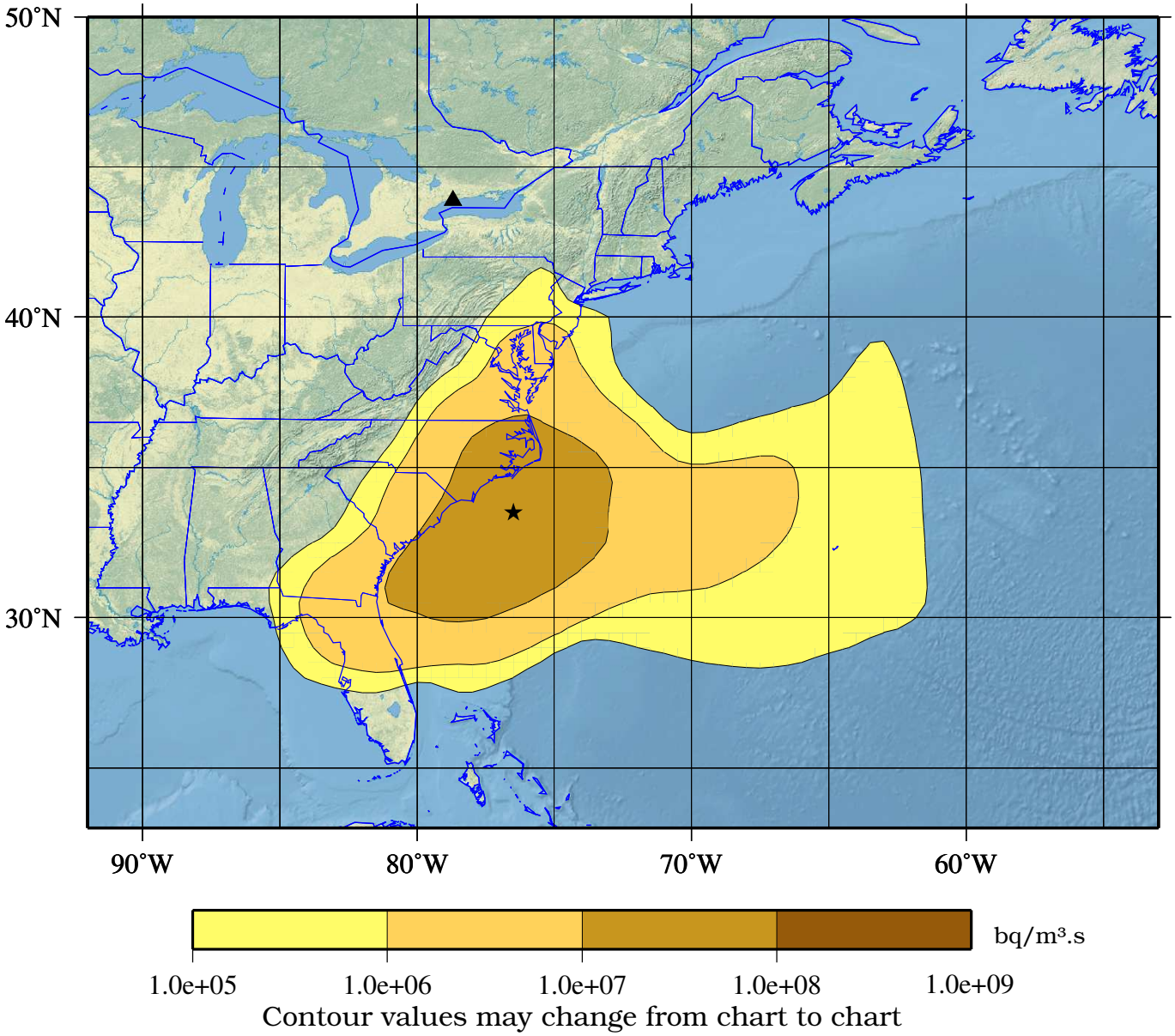
Max value for current step :
49773700 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 13/10/2016 12:45:05 UTC

DARLINGTON NPP Exercise 13/10/2016

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 16/10/2016 00h00 UTC



Dispersion model : MOCAGE Accident
Meteo model : ECMWF

Results based on default initial values

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Base : 0m
Top : 500m
Released pollutant : Cs-137

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
13/10/2016 00UTC

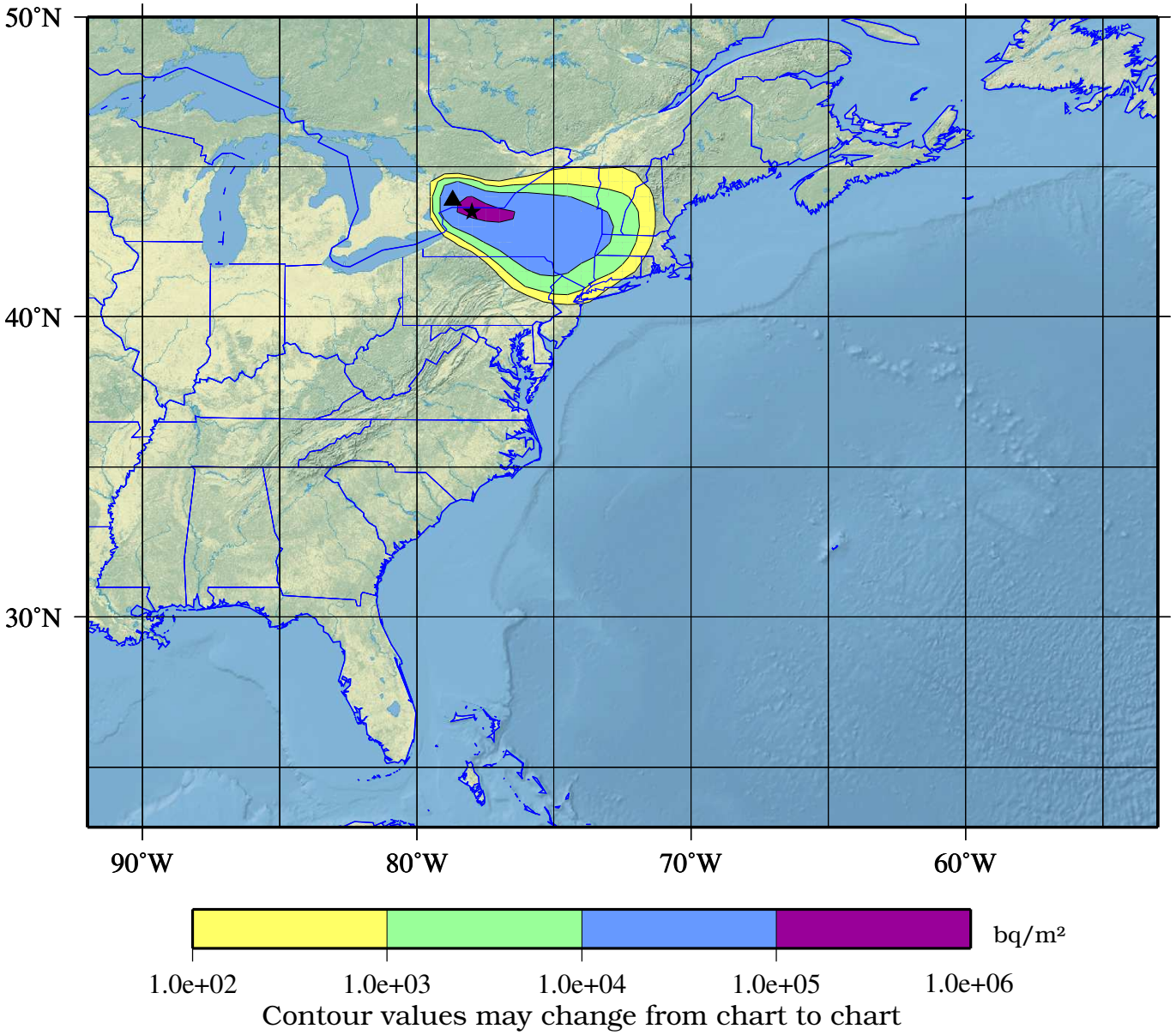
Max value for current step :
32434000 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 13/10/2016 12:45:05 UTC

DARLINGTON NPP Exercise 13/10/2016

Total deposition (bq/m²)
from release start
valid 14/10/2016 00h00 UTC



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MODEL DATA

Grid resolution : 0.5º
Init for meteo data
13/10/2016 00UTC

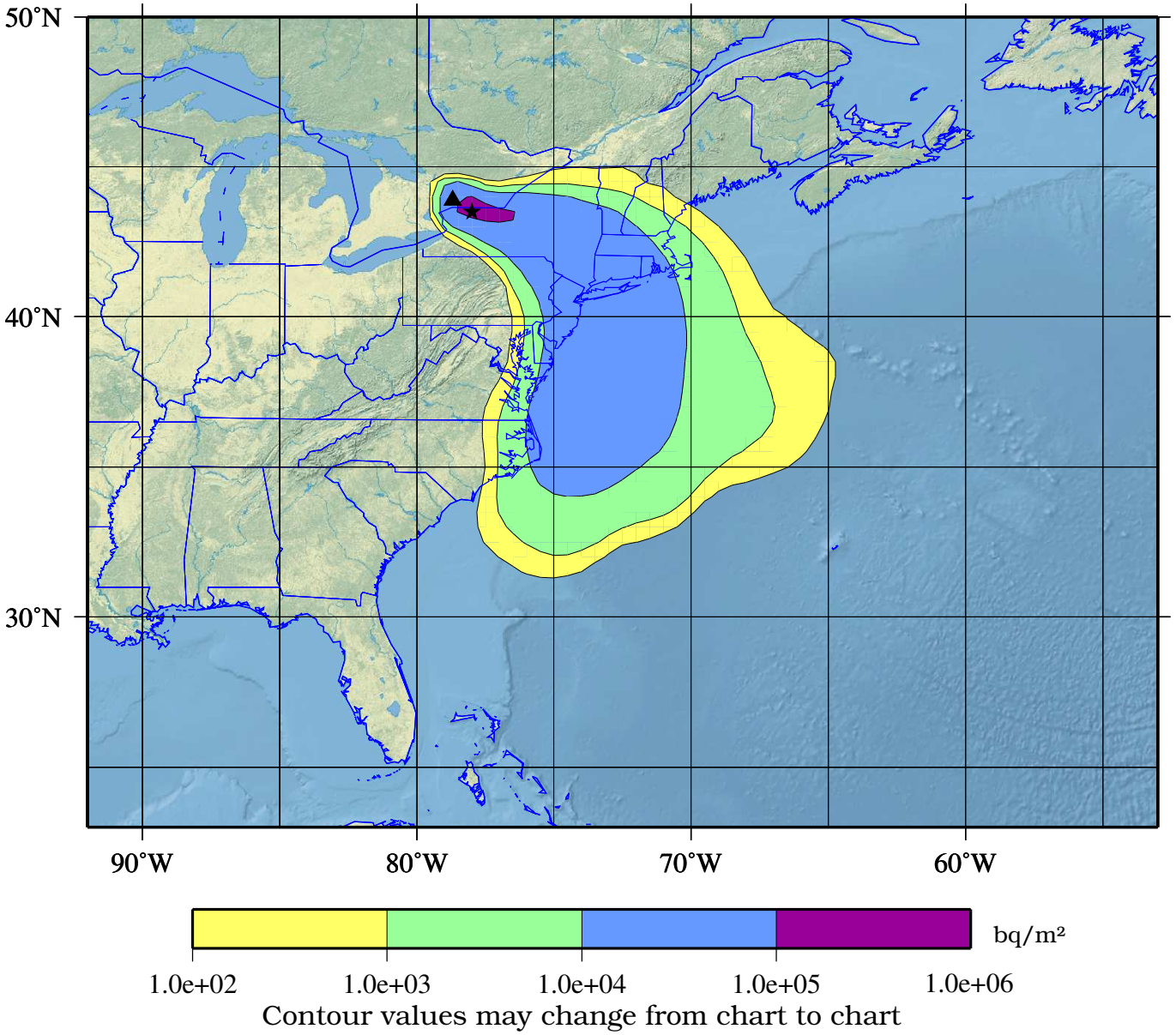
Max value for current step :
149641 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 13/10/2016 12:45:05 UTC

DARLINGTON NPP Exercise 13/10/2016

Total deposition (bq/m²)
from release start
valid 15/10/2016 00h00 UTC



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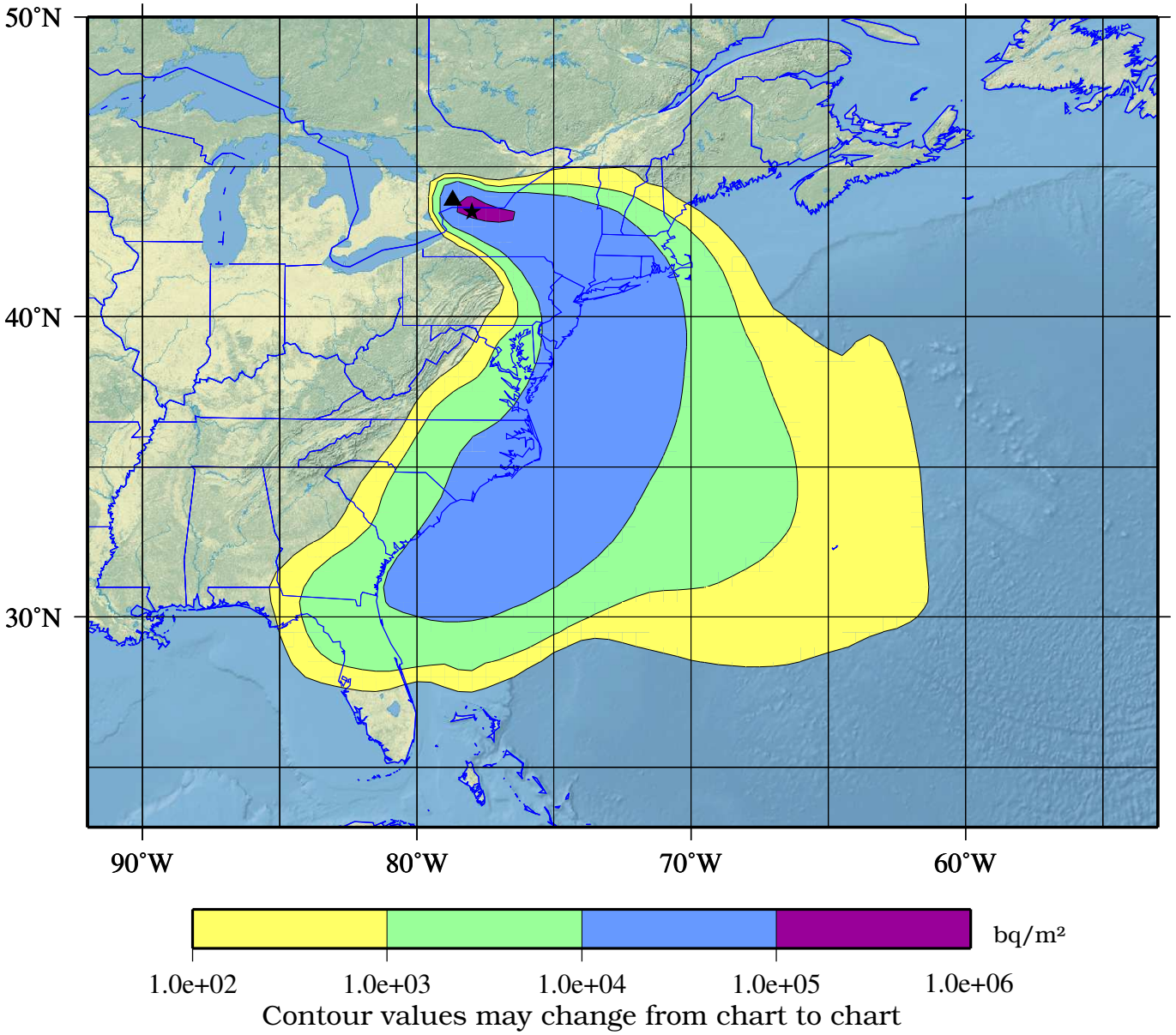

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