METEO FRANCE
Toujours un temps d'avance

METEO-FRANCE TOULOUSE, FRANCE

RSMC for Environmental Emergency Response

FAX : +33 5 61 07 80 44

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Time : 1334 UTC Date : 17 Mar 2020

<< TEST_EVENT TEST_EVENT TEST_EVENT >>

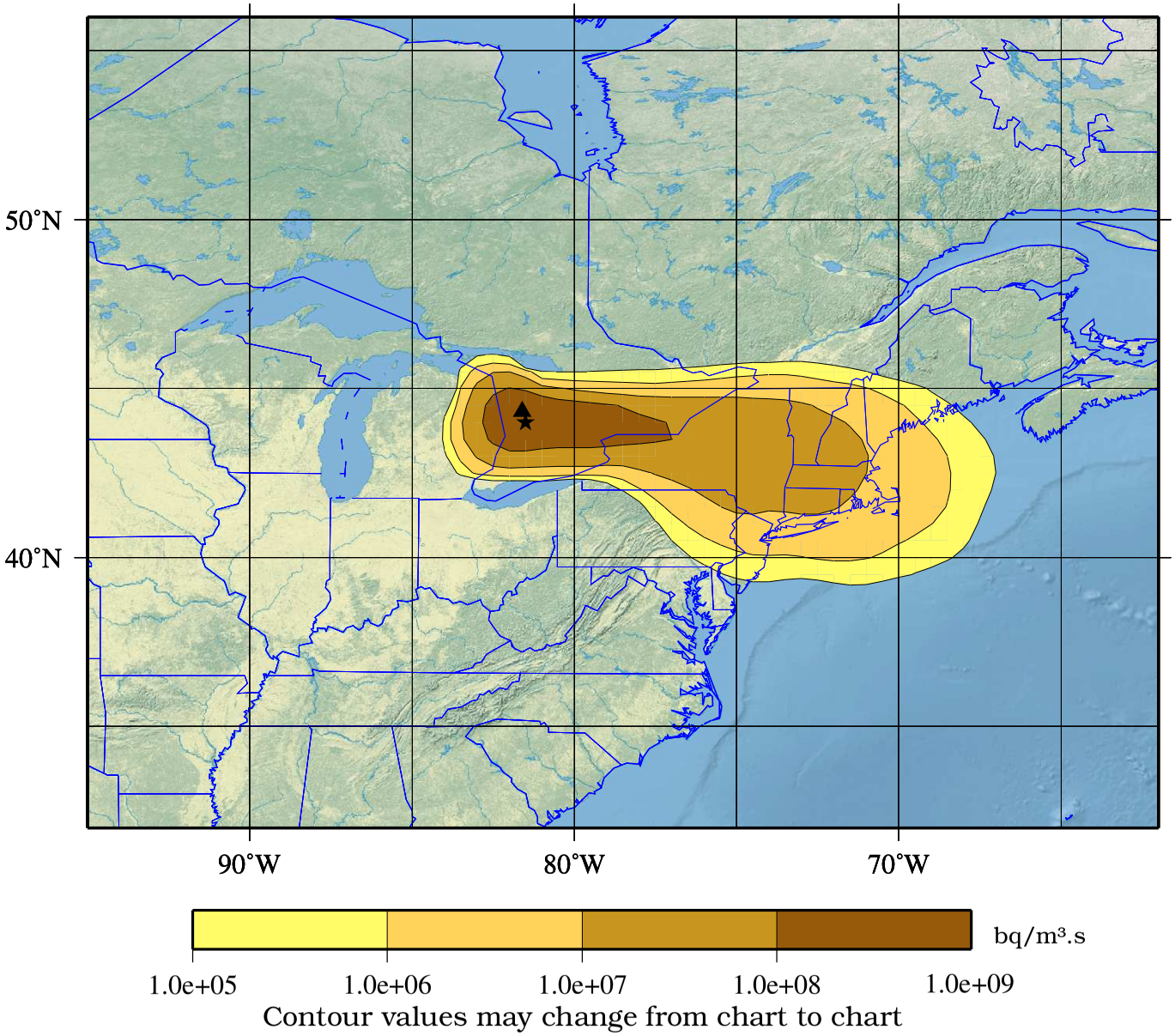
Release Time date : 12 UTC 17 Mar 2020
Release Location in decimal degrees : 44.31852N 81.60353W
Location name (if known) : BRUCE_NPP_20200317
Emission duration : 24h00
Emission (per hour) : 2083334400.0000 bq
Substance released : Xe-133
Vertical distribution : Uniform 10 - 500 m (AGL)
Meteorological 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

BRUCE NPP 20200317 Exercise 17/03/2020

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 18/03/2020 12h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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RELEASE DATA
Site : BRUCE NPP 20200317
Emission start : 17/03/2020 12h00 UTC
Release duration : 24h
Lat : 44.31852 N ; 44º19'6" N
Lon : 81.6035 W ; 81º36'12" W
Emission rate : 2.1e+16 bq/h
Base : 10m
Top : 500m
Released pollutant : Xe-133

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/03/2020 00UTC

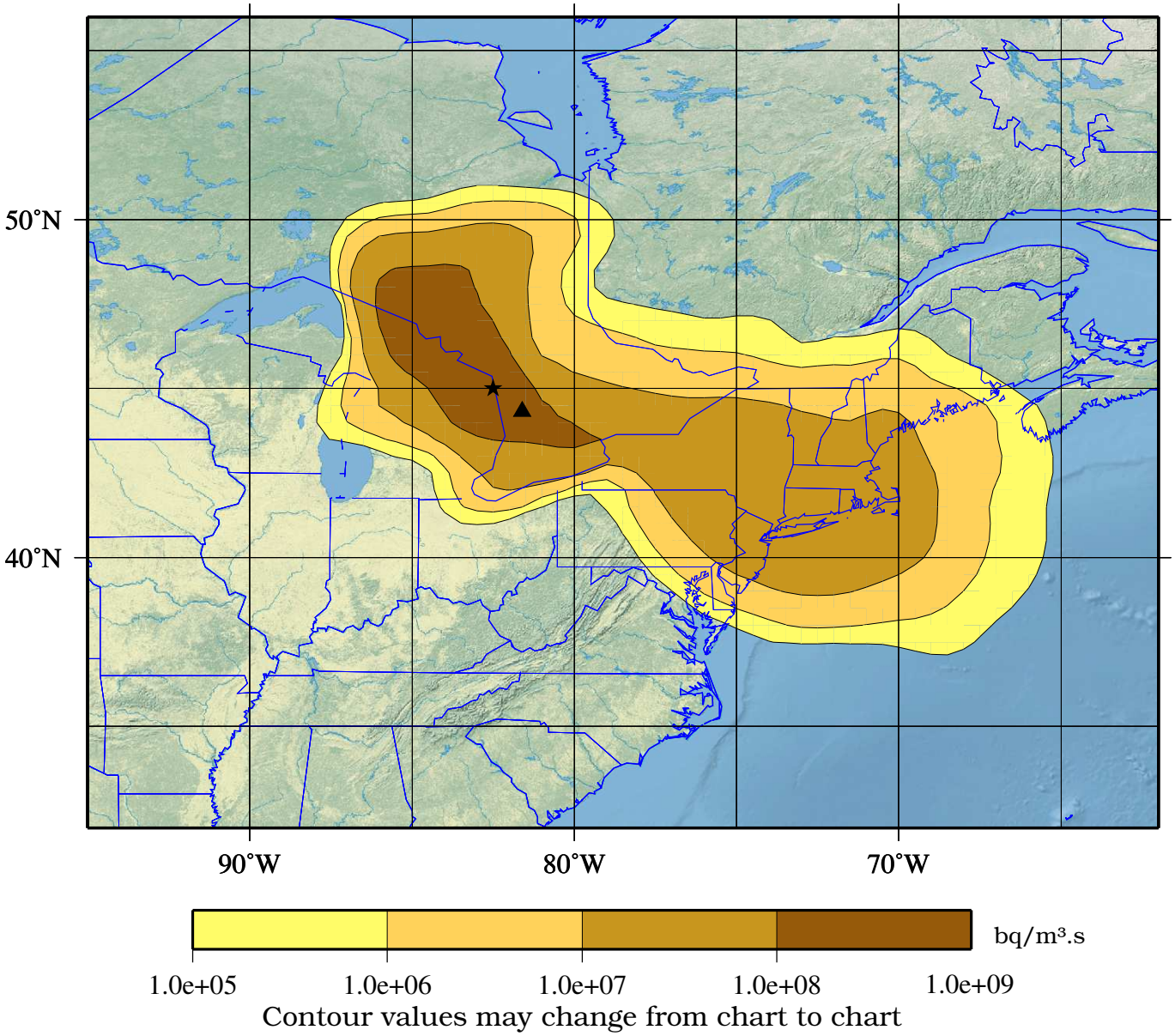
Max value for current step :
986279000 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/03/2020 13:21:21 UTC

BRUCE NPP 20200317 Exercise 17/03/2020

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 19/03/2020 12h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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RELEASE DATA

Site : BRUCE NPP 20200317
Emission start : 17/03/2020 12h00 UTC
Release duration : 24h
Lat : 44.31852 N ; 44º19'6" N
Lon : 81.6035 W ; 81º36'12" W
Emission rate : 2.1e+16 bq/h
Base : 10m
Top : 500m
Released pollutant : Xe-133

MODEL DATA

Grid resolution : 0.5º
Init for meteo data
17/03/2020 00UTC

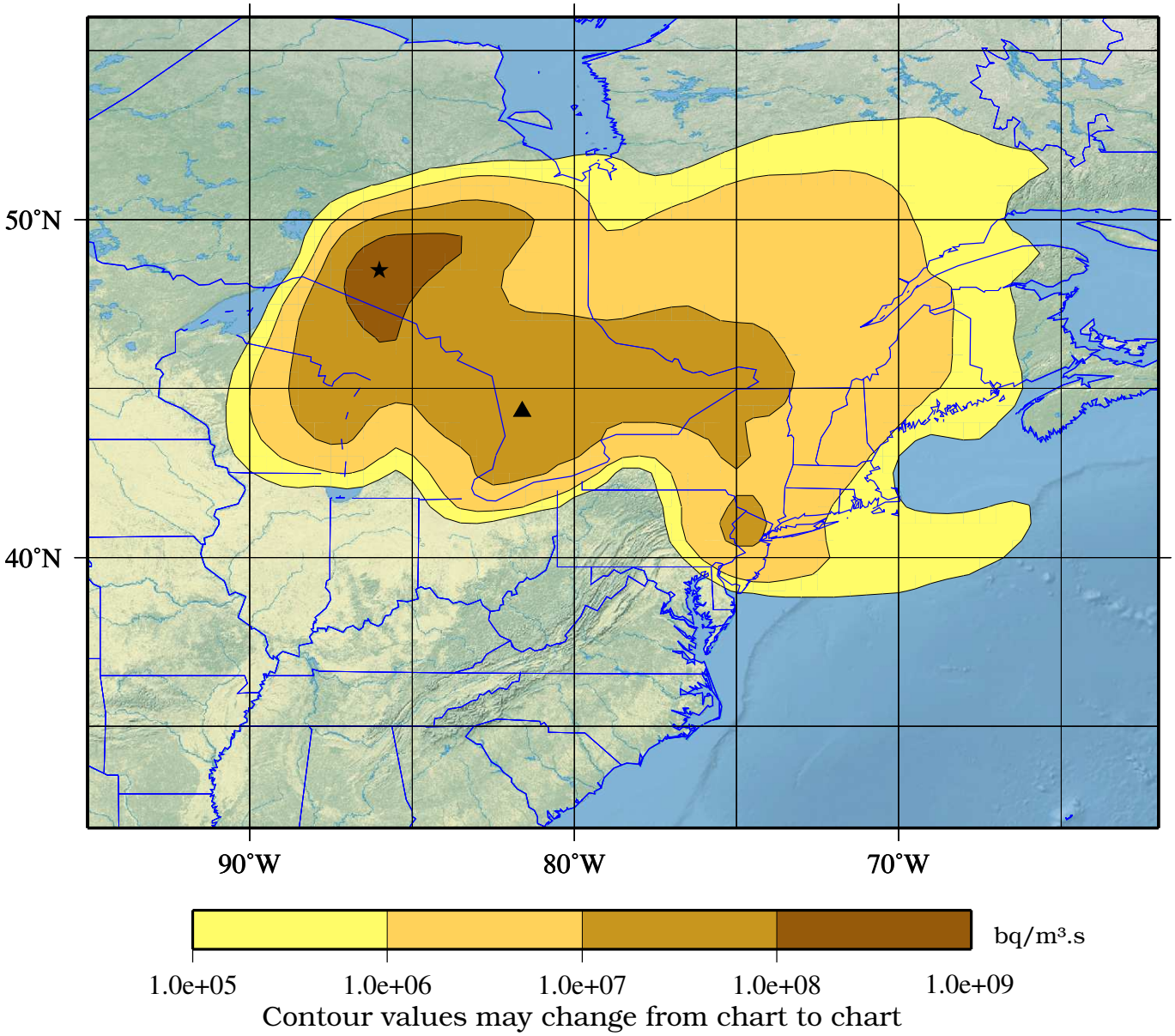
Max value for current step :
666807000 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/03/2020 13:21:21 UTC

BRUCE NPP 20200317 Exercise 17/03/2020

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 20/03/2020 12h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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RELEASE DATA

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Release duration : 24h
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Lon : 81.6035 W ; 81º36'12" W
Emission rate : 2.1e+16 bq/h
Base : 10m
Top : 500m
Released pollutant : Xe-133

MODEL DATA

Grid resolution : 0.5º
Init for meteo data
17/03/2020 00UTC

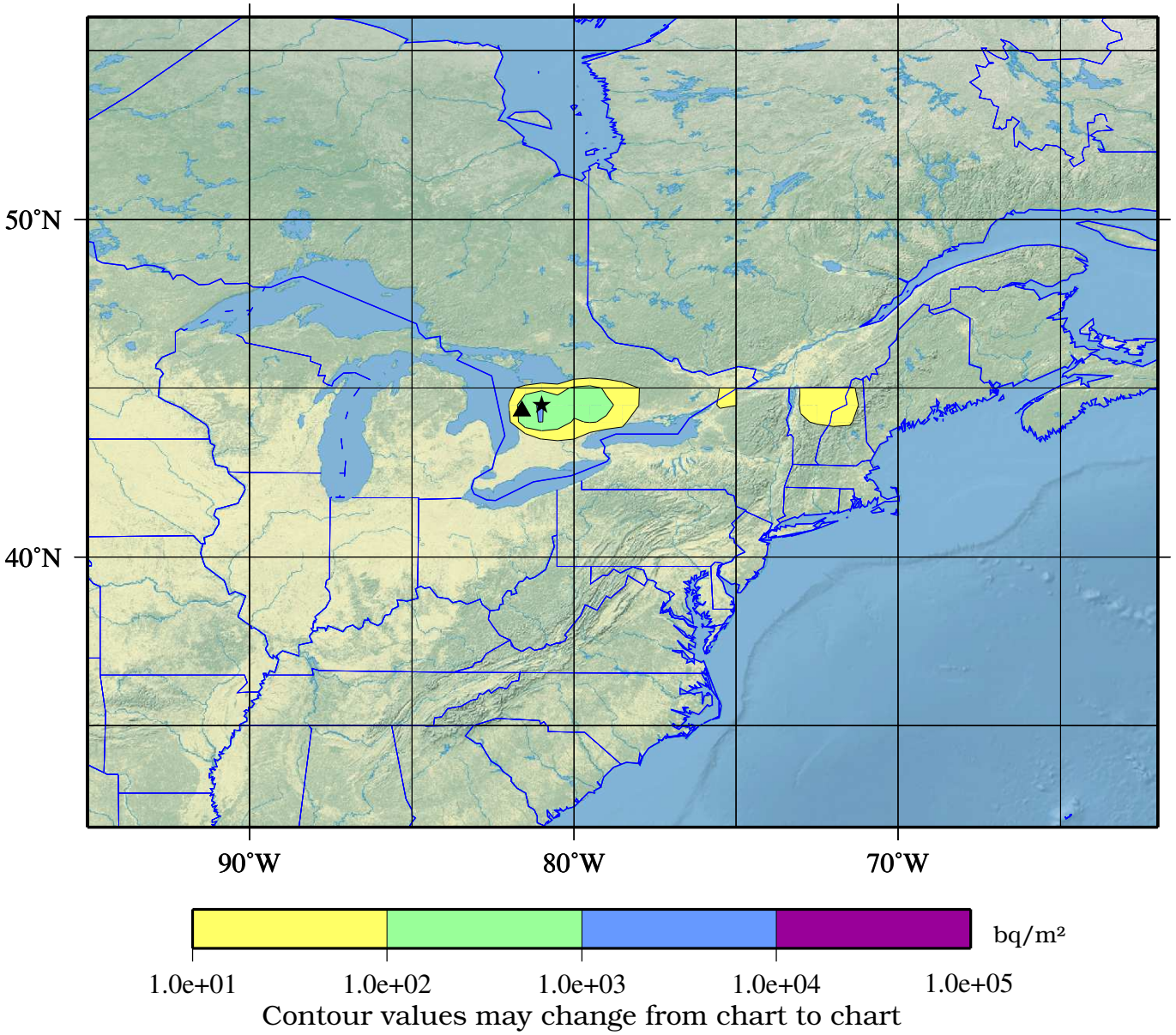
Max value for current step :
273527000 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/03/2020 13:21:21 UTC

BRUCE NPP 20200317 Exercise 17/03/2020

Total deposition (bq/m²)
from release start
valid 18/03/2020 12h00 UTC



Dispersion model : MOCAGE Accident

Meteo model : ECMWF

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RELEASE DATA

Site : BRUCE NPP 20200317
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Release duration : 24h
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Lon : 81.6035 W ; 81º36'12" W
Emission rate : 2.1e+16 bq/h
Base : 10m
Top : 500m
Released pollutant : Xe-133

MODEL DATA

Grid resolution : 0.5º
Init for meteo data
17/03/2020 00UTC

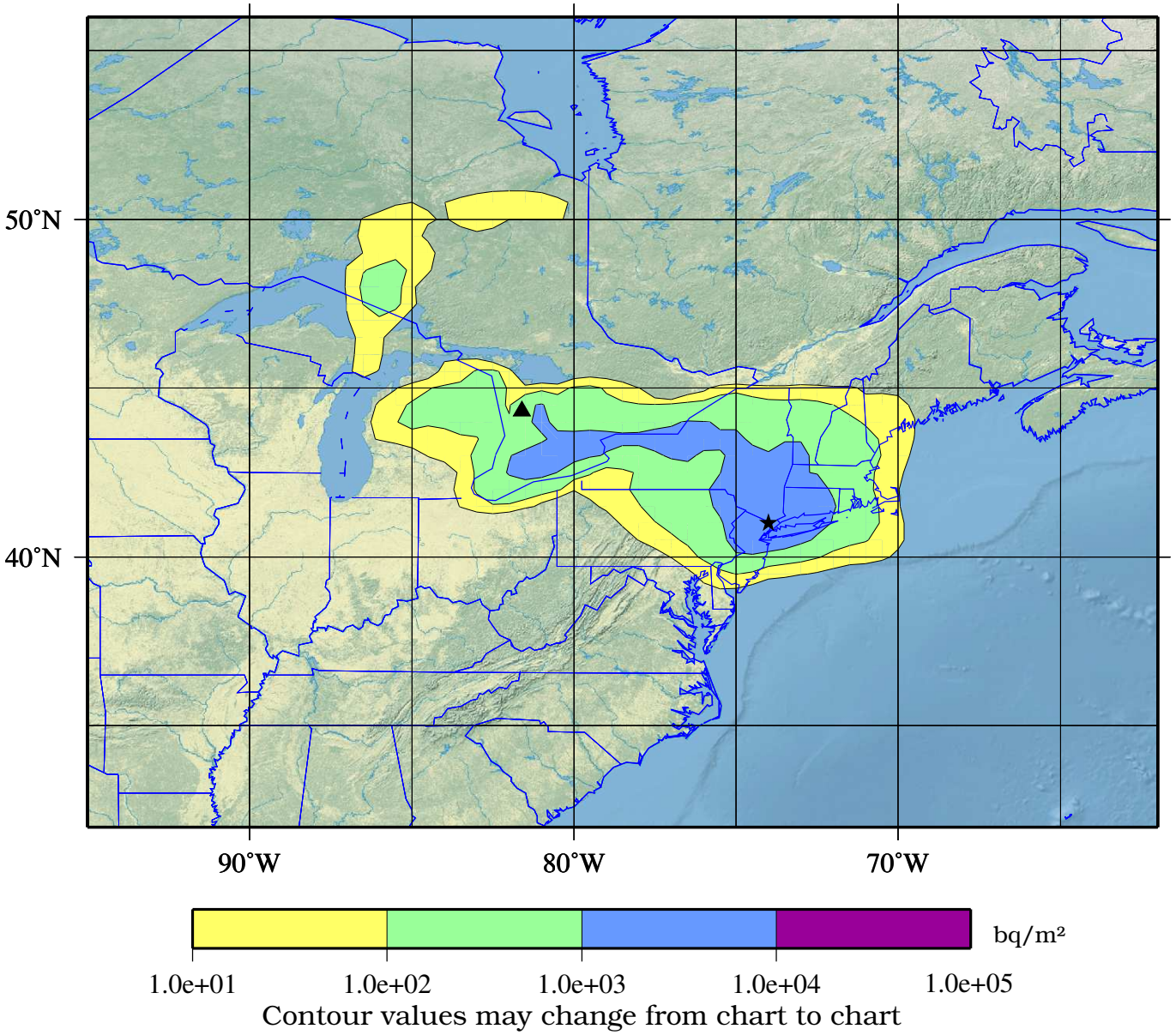
Max value for current step :
1129.8 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/03/2020 13:21:21 UTC

BRUCE NPP 20200317 Exercise 17/03/2020

Total deposition (bq/m²)
from release start
valid 19/03/2020 12h00 UTC



Dispersion model : MOCAGE Accident
Meteo model : ECMWF

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RELEASE DATA
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Lon : 81.6035 W ; 81º36'12" W
Emission rate : 2.1e+16 bq/h
Base : 10m
Top : 500m
Released pollutant : Xe-133

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/03/2020 00UTC

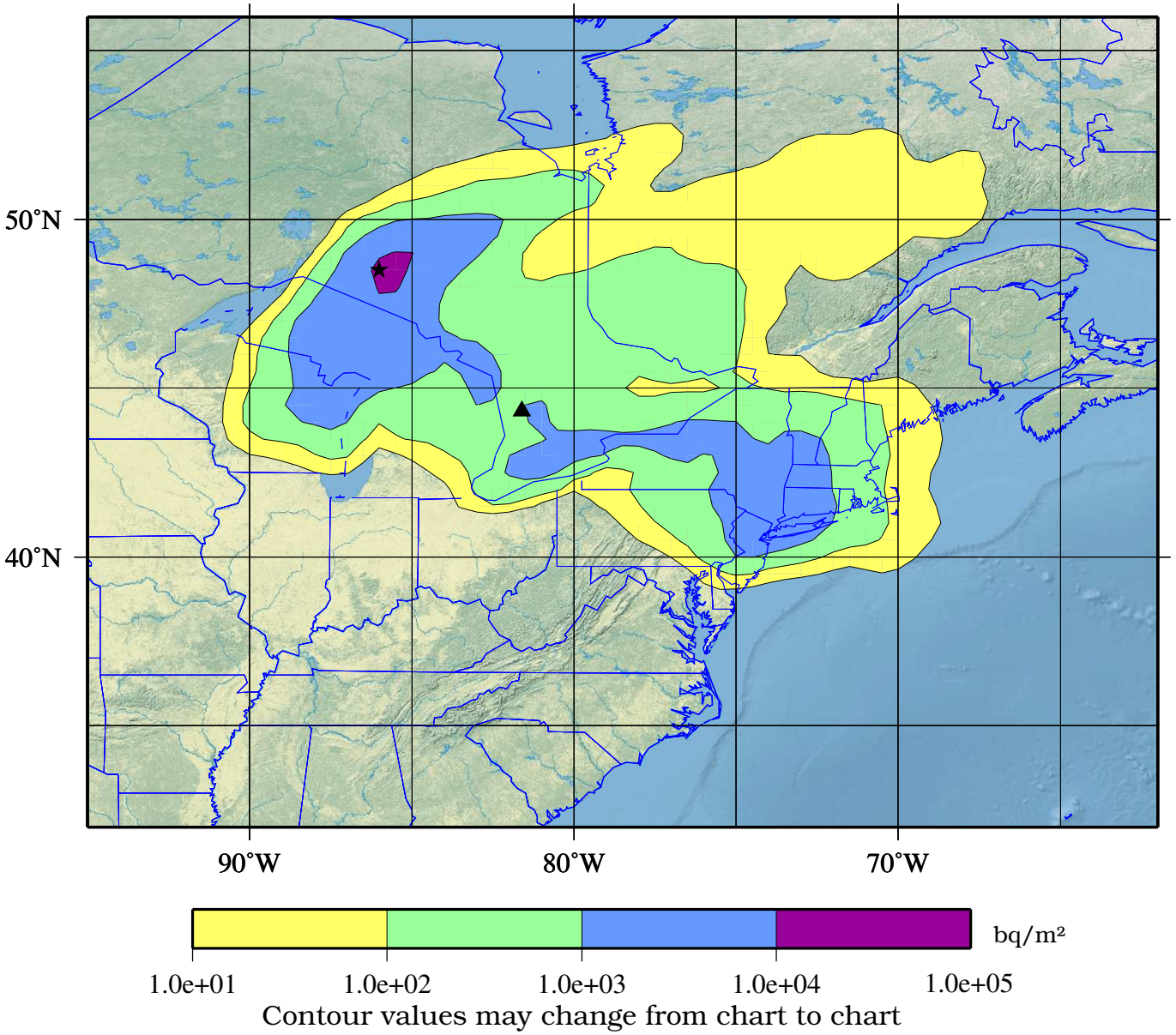
Max value for current step :
4764.31 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/03/2020 13:21:21 UTC

BRUCE NPP 20200317 Exercise 17/03/2020

Total deposition (bq/m²)
from release start
valid 20/03/2020 12h00 UTC



Contour values may change from chart to chart

Dispersion model : MOCAGE Accident

Meteo model : ECMWF

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RELEASE DATA

Site : BRUCE NPP 20200317
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Release duration : 24h
Lat : 44.31852 N ; 44º19'6" N
Lon : 81.6035 W ; 81º36'12" W
Emission rate : 2.1e+16 bq/h
Base : 10m
Top : 500m
Released pollutant : Xe-133

MODEL DATA

Grid resolution : 0.5º
Init for meteo data
17/03/2020 00UTC

Max value for current step :
13427.6 bq/m²

Max position ★
Source position ▲

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TOULOUSE RSMC
Issued 17/03/2020 13:21:21 UTC