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 : 1558 UTC Date : 21 Apr 2020

<< TEST_EVENT TEST_EVENT TEST_EVENT >>

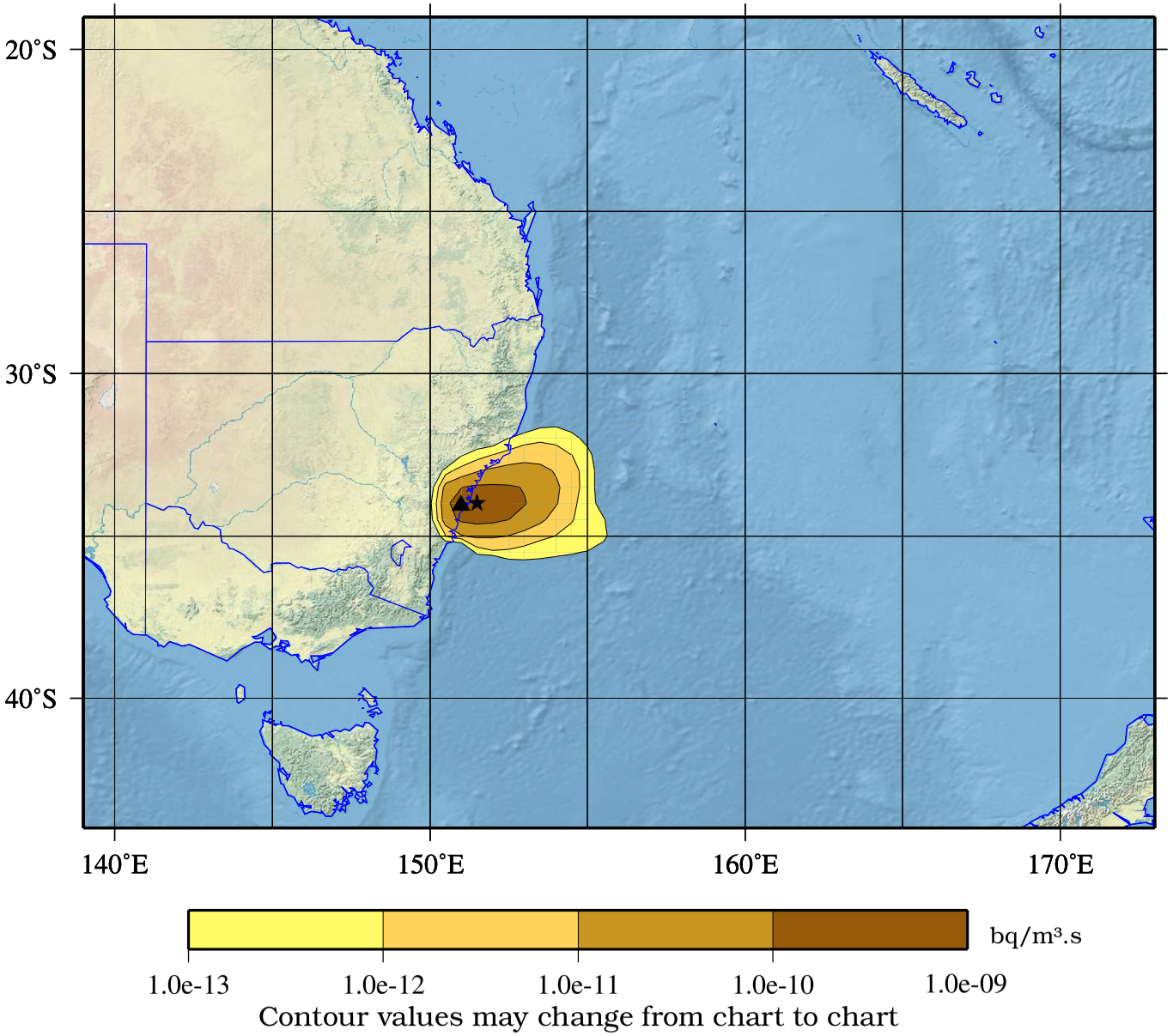
Release Time date : 11 UTC 21 Apr 2020
Release Location in decimal degrees : 34.05194S 150.98E
Location name (if known) : Lucas_Heights_20200421
Emission duration : 80h00
Emission (per hour) : 0.0021 bq
Substance released : I-131
Vertical distribution : Uniform 1 - 500 m (AGL)
Meteorological Model : 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

Lucas Heights 20200421 Exercise 21/04/2020

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 13 hours
valid 22/04/2020 00h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

-
-

RELEASE DATA
Site : Lucas Heights 20200421
Emission start : 21/04/2020 11h00 UTC
Release duration : 8h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 2.1e-02 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
21/04/2020 00UTC

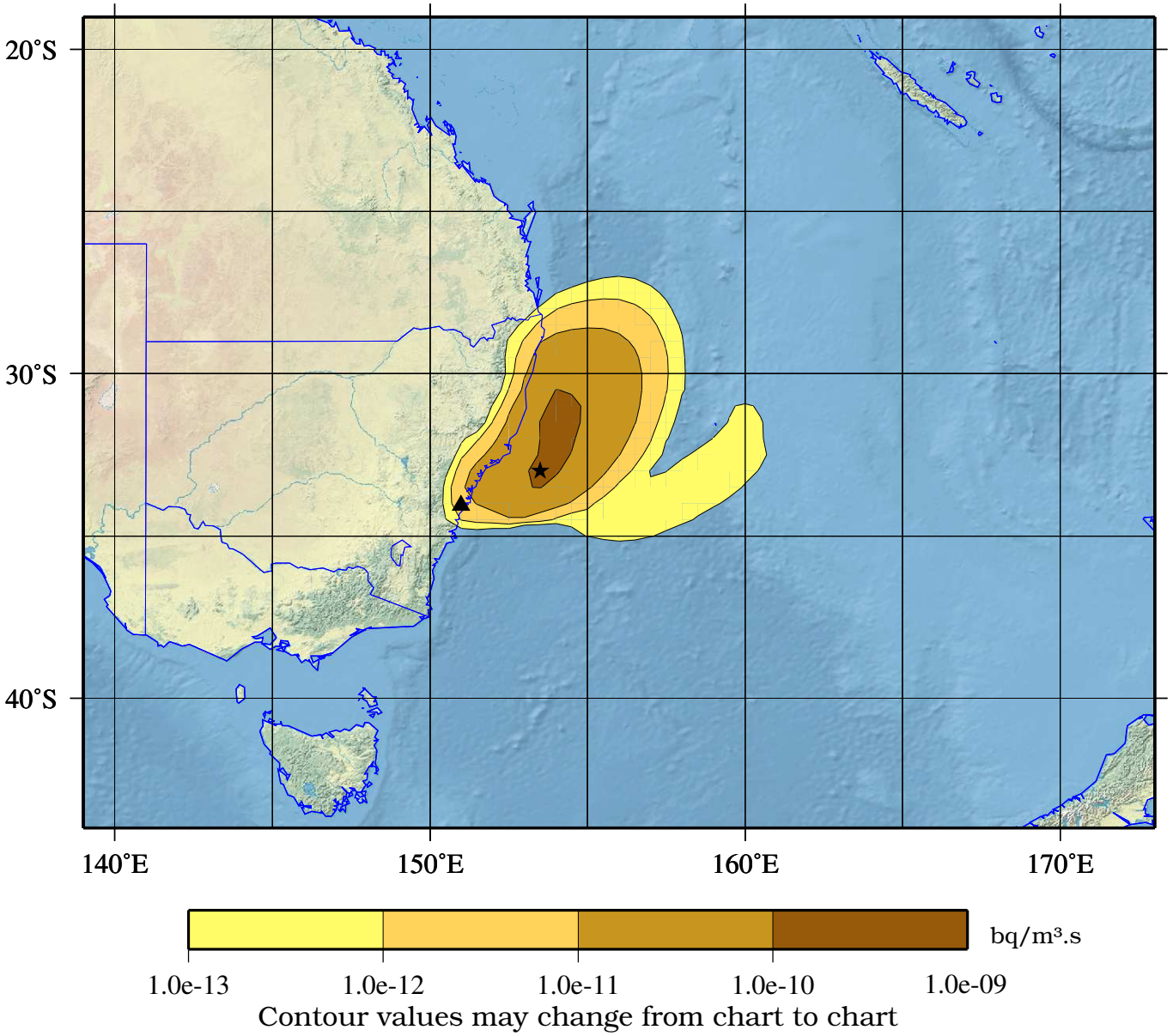
Max value for current step :
3.12608e-10 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 21/04/2020 13:08:38 UTC

Lucas Heights 20200421 Exercise 21/04/2020

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 23/04/2020 00h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

-
-

RELEASE DATA
Site : Lucas Heights 20200421
Emission start : 21/04/2020 11h00 UTC
Release duration : 8h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 2.1e-02 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
21/04/2020 00UTC

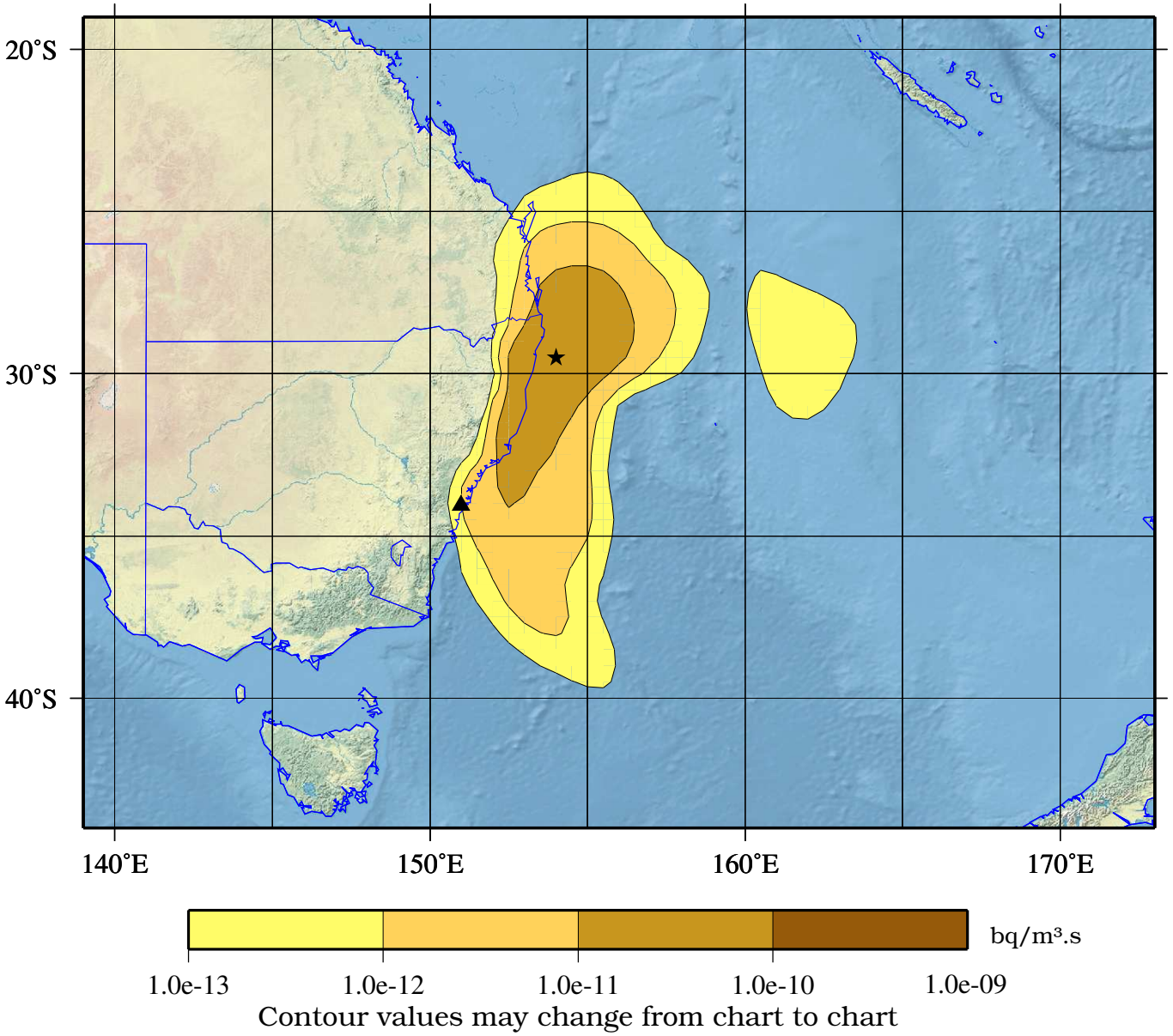
Max value for current step :
1.18577e-10 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 21/04/2020 13:08:38 UTC

Lucas Heights 20200421 Exercise 21/04/2020

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 24/04/2020 00h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

-
-

RELEASE DATA
Site : Lucas Heights 20200421
Emission start : 21/04/2020 11h00 UTC
Release duration : 8h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 2.1e-02 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
21/04/2020 00UTC

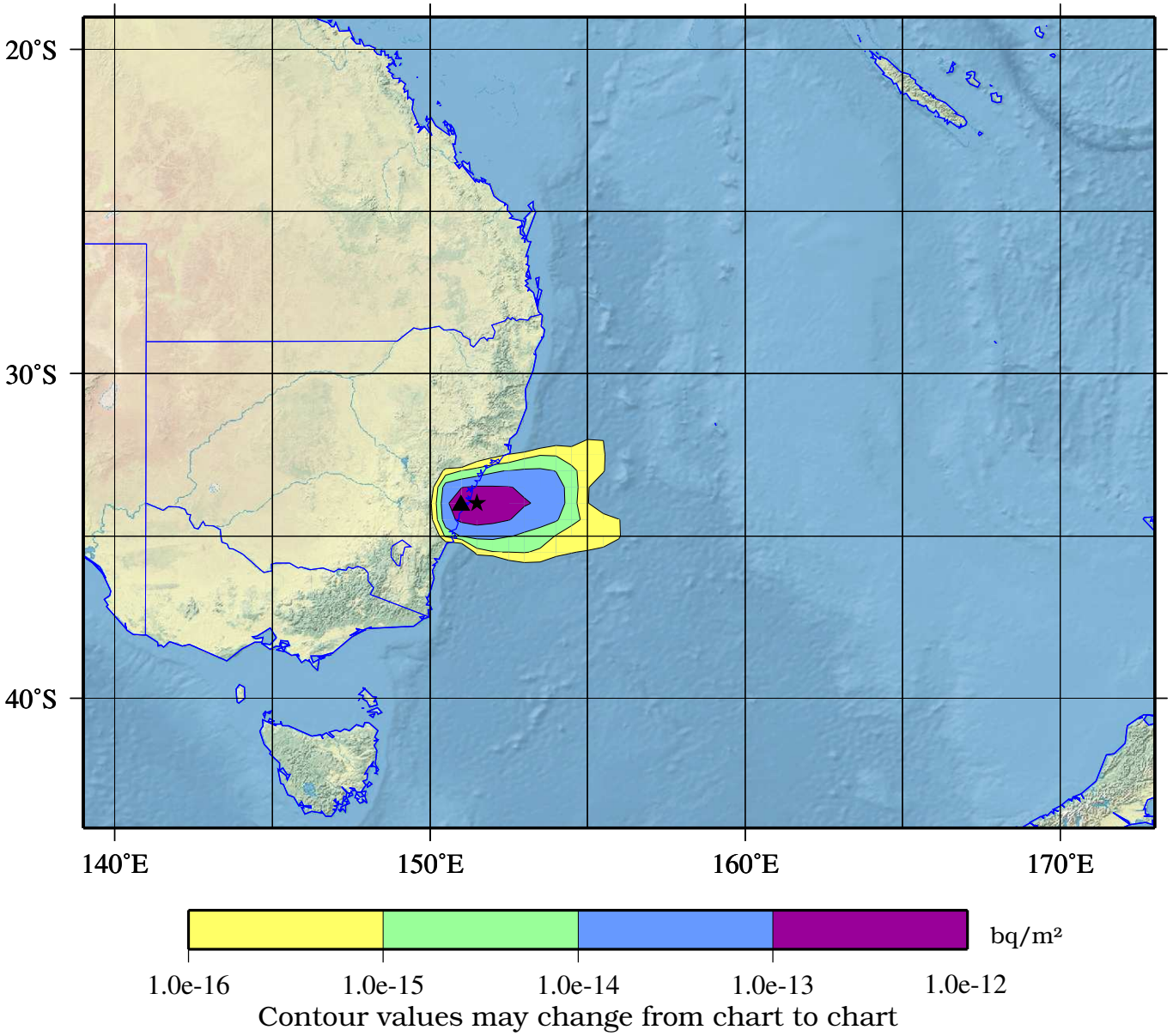
Max value for current step :
9.33254e-11 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 21/04/2020 13:08:38 UTC

Lucas Heights 20200421 Exercise 21/04/2020

Total deposition (bq/m²)
from release start
valid 22/04/2020 00h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

-
-

RELEASE DATA
Site : Lucas Heights 20200421
Emission start : 21/04/2020 11h00 UTC
Release duration : 8h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 2.1e-02 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
21/04/2020 00UTC

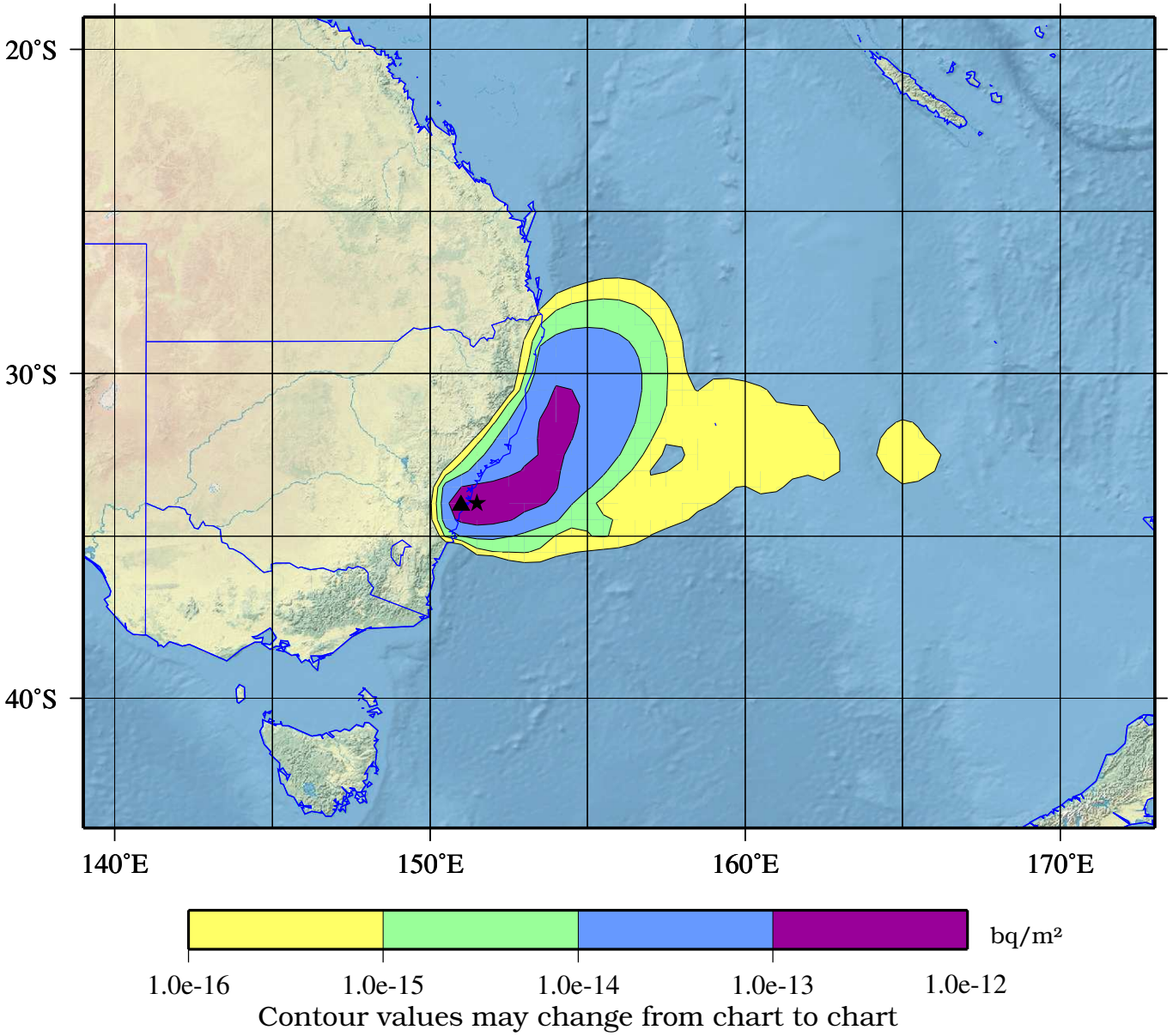
Max value for current step :
3.12608e-13 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 21/04/2020 13:08:38 UTC

Lucas Heights 20200421 Exercise 21/04/2020

Total deposition (bq/m²)
from release start
valid 23/04/2020 00h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

-
-

RELEASE DATA
Site : Lucas Heights 20200421
Emission start : 21/04/2020 11h00 UTC
Release duration : 8h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 2.1e-02 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
21/04/2020 00UTC

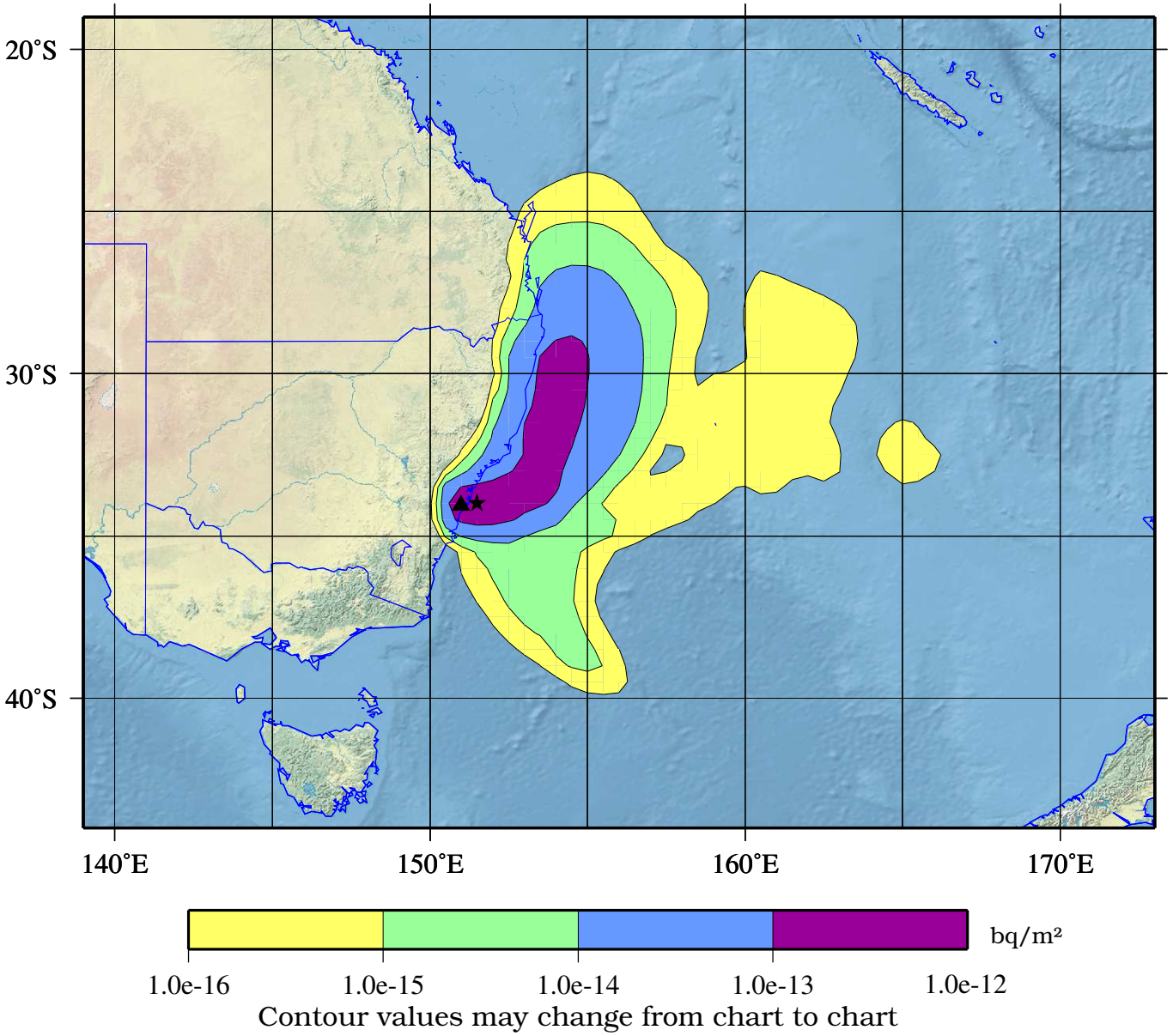
Max value for current step :
3.25837e-13 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 21/04/2020 13:08:38 UTC

Lucas Heights 20200421 Exercise 21/04/2020

Total deposition (bq/m²)
from release start
valid 24/04/2020 00h00 UTC



Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

-
-

RELEASE DATA
Site : Lucas Heights 20200421
Emission start : 21/04/2020 11h00 UTC
Release duration : 8h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 2.1e-02 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
21/04/2020 00UTC

Max value for current step :
3.28852e-13 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 21/04/2020 13:08:38 UTC