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 : 1312 UTC Date : 17 Dec 2019

<< TEST_EVENT TEST_EVENT TEST_EVENT >>

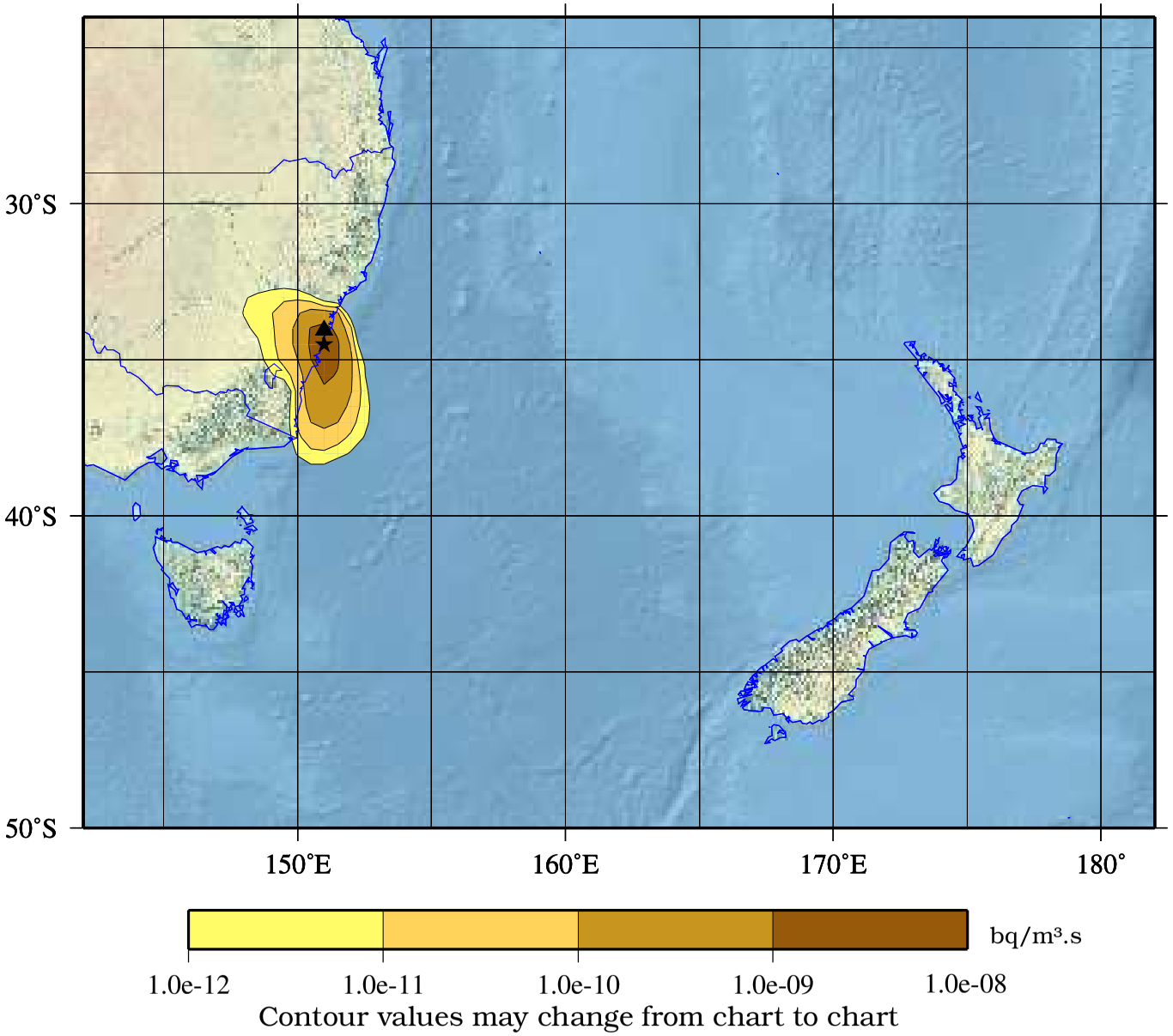
Release Time date : 11 UTC 17 Dec 2019
Release Location in decimal degrees : 34.05194S 150.98E
Location name (if known) : LUCAS_HEIGHTS
Emission duration : 08h00
Emission (per hour) : 0.1250 bq
Substance released : I-131
Vertical distribution : Uniform 1 - 500 m (AGL)
Meteorological Model : ECMWF
Dispersion 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 Exercise 17/12/2019

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 13 hours
valid 18/12/2019 00h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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RELEASE DATA
Site : LUCAS HEIGHTS
Emission start : 17/12/2019 11h00 UTC
Release duration : 08h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.2e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/12/2019 00UTC

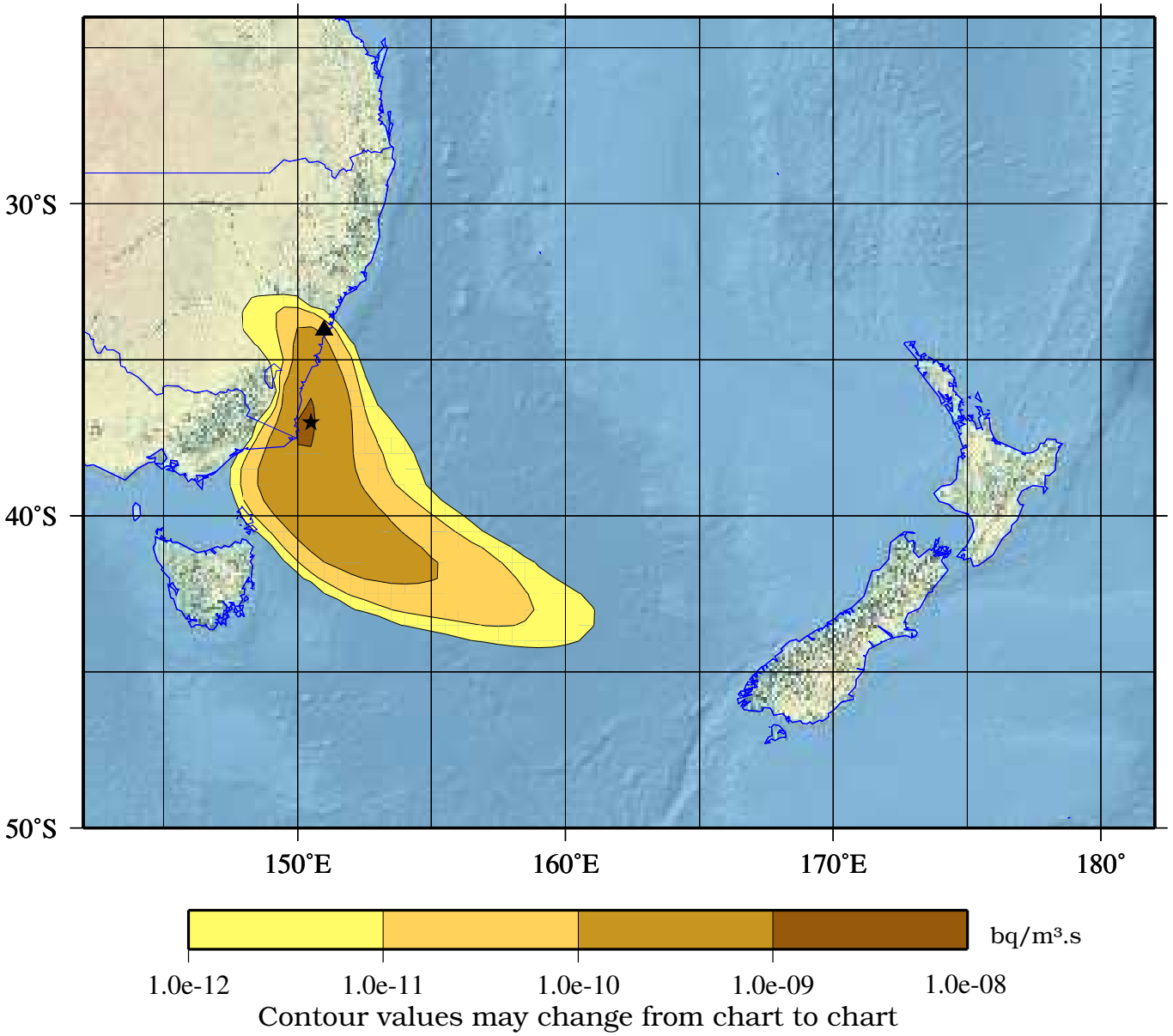
Max value for current step :
2.43781e-09 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/12/2019 13:03:21 UTC

LUCAS HEIGHTS Exercise 17/12/2019

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 19/12/2019 00h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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Release duration : 08h
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.2e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/12/2019 00UTC

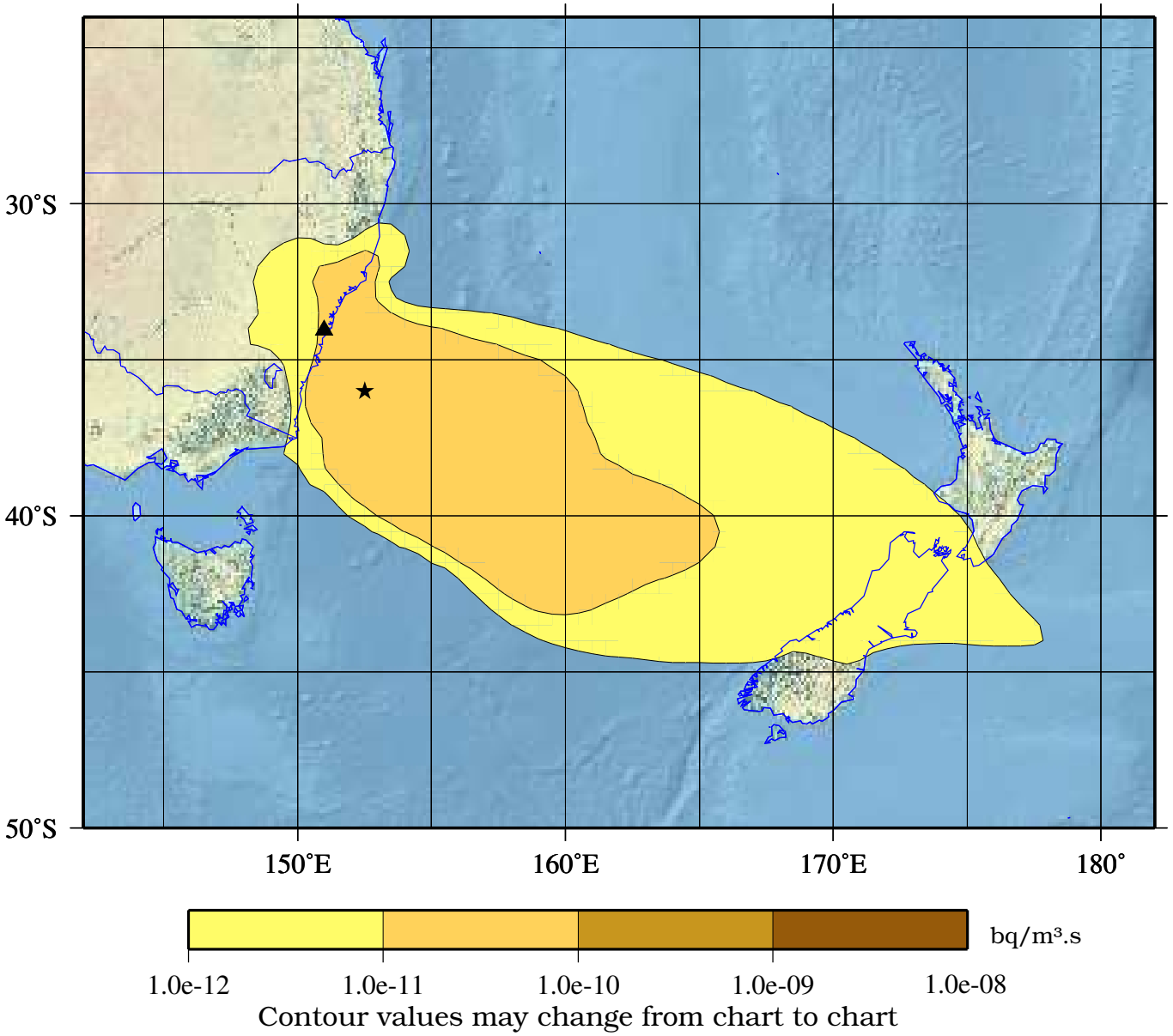
Max value for current step :
1.11686e-09 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/12/2019 13:03:21 UTC

LUCAS HEIGHTS Exercise 17/12/2019

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 20/12/2019 00h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/12/2019 00UTC

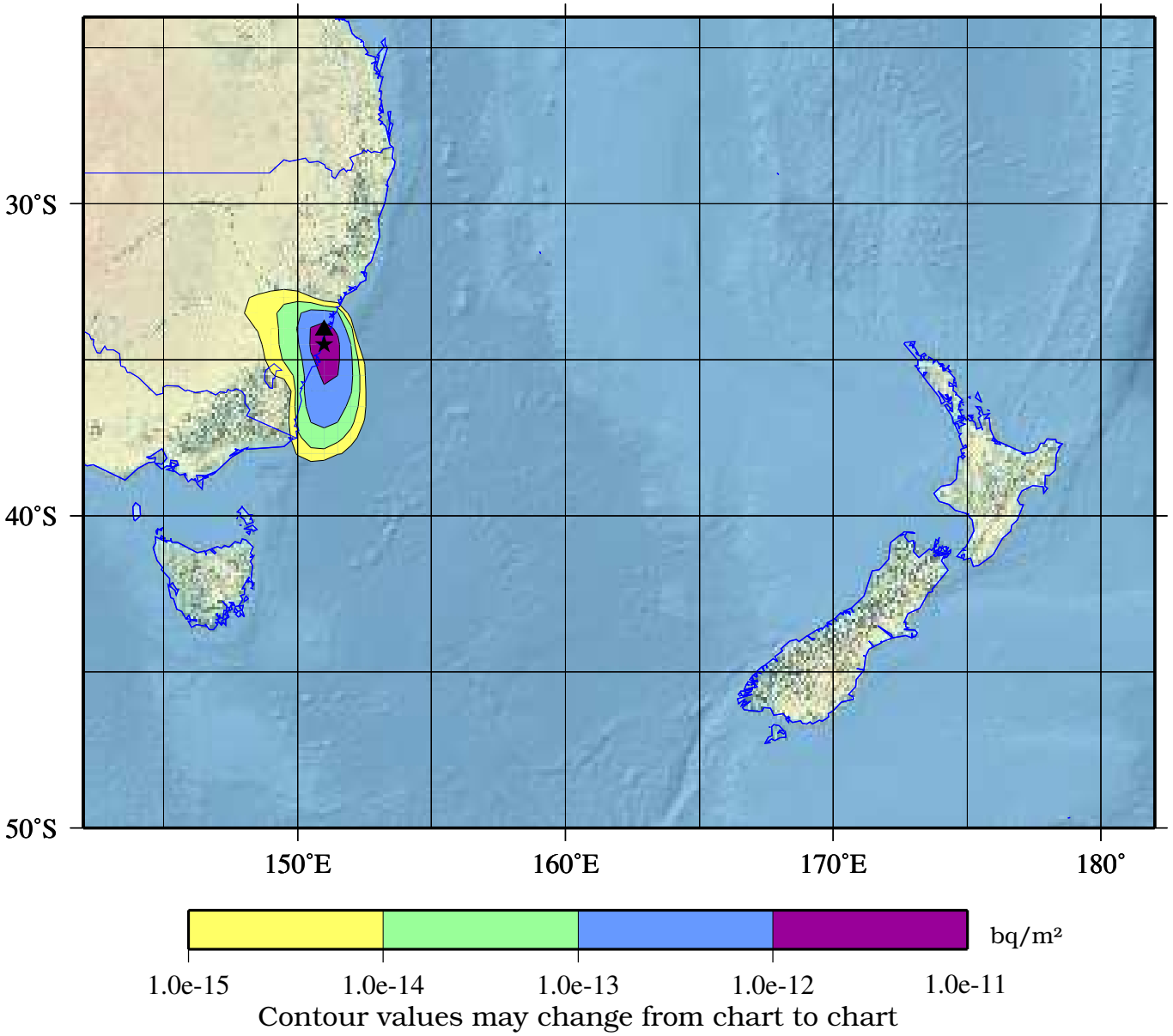
Max value for current step :
8.6896e-11 bq/m³.s

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/12/2019 13:03:21 UTC

LUCAS HEIGHTS Exercise 17/12/2019

Total deposition (bq/m²)
from release start
valid 18/12/2019 00h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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Emission rate : 1.2e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/12/2019 00UTC

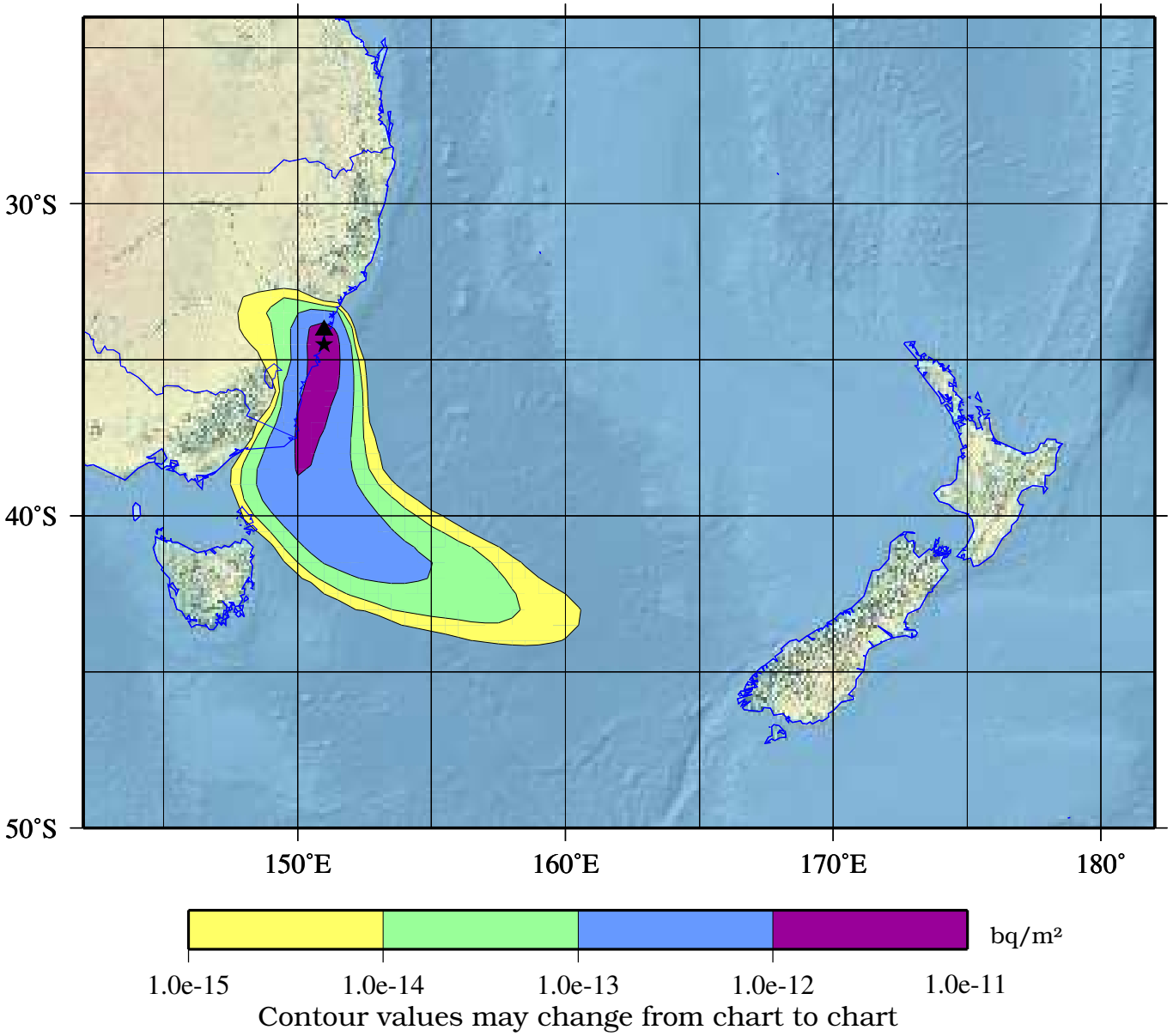
Max value for current step :
2.45471e-12 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/12/2019 13:03:21 UTC

LUCAS HEIGHTS Exercise 17/12/2019

Total deposition (bq/m²)
from release start
valid 19/12/2019 00h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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Release duration : 08h
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Emission rate : 1.2e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/12/2019 00UTC

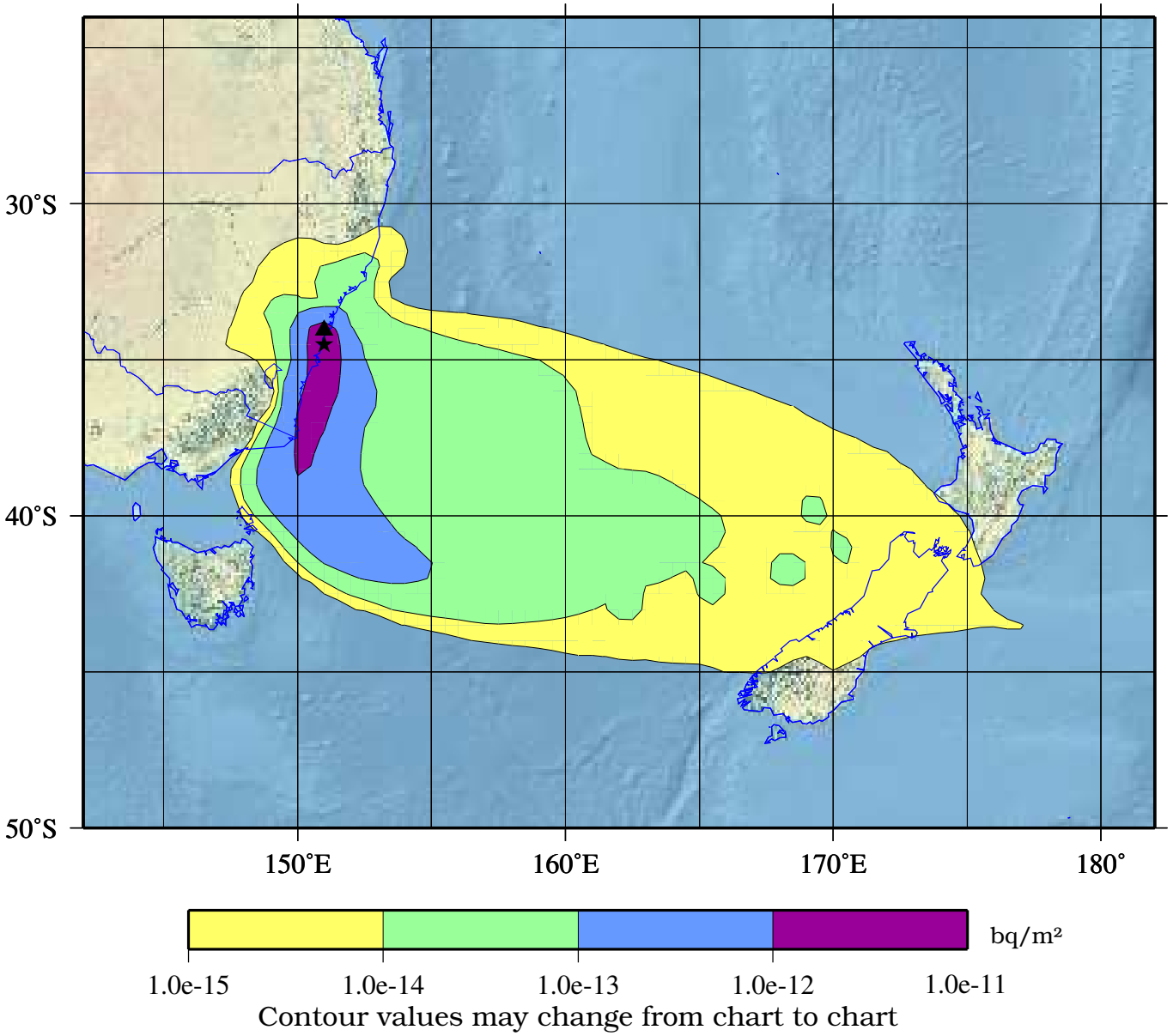
Max value for current step :
2.69154e-12 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 17/12/2019 13:03:21 UTC

LUCAS HEIGHTS Exercise 17/12/2019

Total deposition (bq/m²)
from release start
valid 20/12/2019 00h00 UTC



Contour values may change from chart to chart

Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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Base : 1m
Top : 500m
Released pollutant : I-131

MODEL DATA
Grid resolution : 0.5º
Init for meteo data
17/12/2019 00UTC

Max value for current step :
2.71644e-12 bq/m²

Max position ★
Source position ▲

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TOULOUSE RSMC
Issued 17/12/2019 13:03:21 UTC