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 : 1346 UTC  Date : 19 Mar 2019**

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**<< TEST_EVENT  TEST_EVENT  TEST_EVENT >>**

**Release Time date :** 10 UTC 19 Mar 2019
**Release Location in decimal degrees :** 34.05194S 150.98E
**Location name (if known) :** Lucas
**Emission duration :** 08h00
**Emission (per hour) :** 0.1667 bq
**Substance released :** I-131
**Vertical distribution :** Uniform 1 - 500 m (AGL)
**Meteorological Model :** ECMWF
**Dispersion Model :** Mocage

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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.

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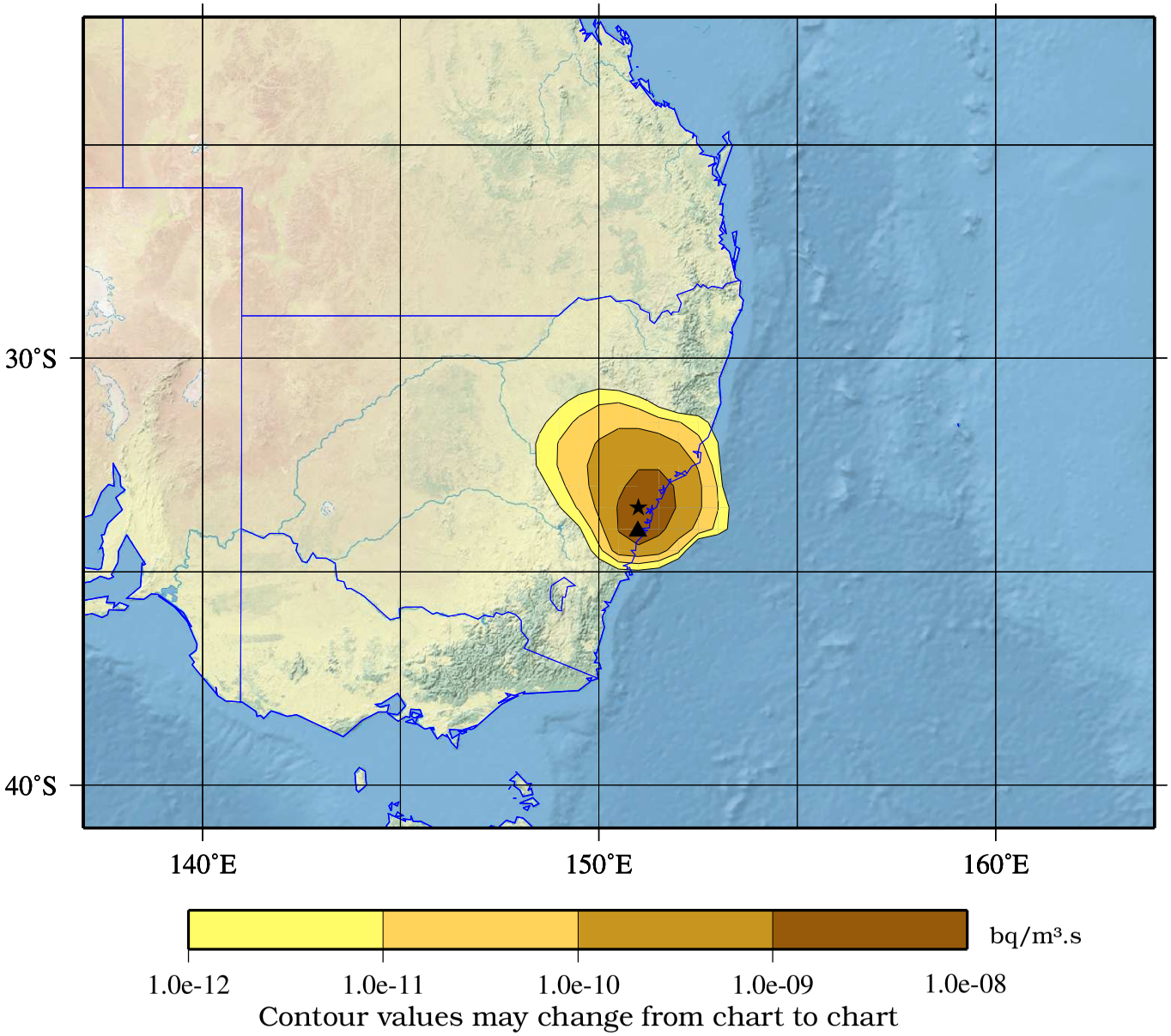
**Number of pages (including cover sheet) = 8**

# Lucas Heights Exercise 19/03/2019

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 14 hours
valid 20/03/2019 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 : 19/03/2019 10h00 UTC
Release duration : 08h00
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.6e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

**MODEL DATA**

Grid resolution : 0.5º
Init for meteo data
19/03/2019 00UTC

Max value for current step :
2.85759e-09 bq/m³.s

Max position ★
Source position ▲

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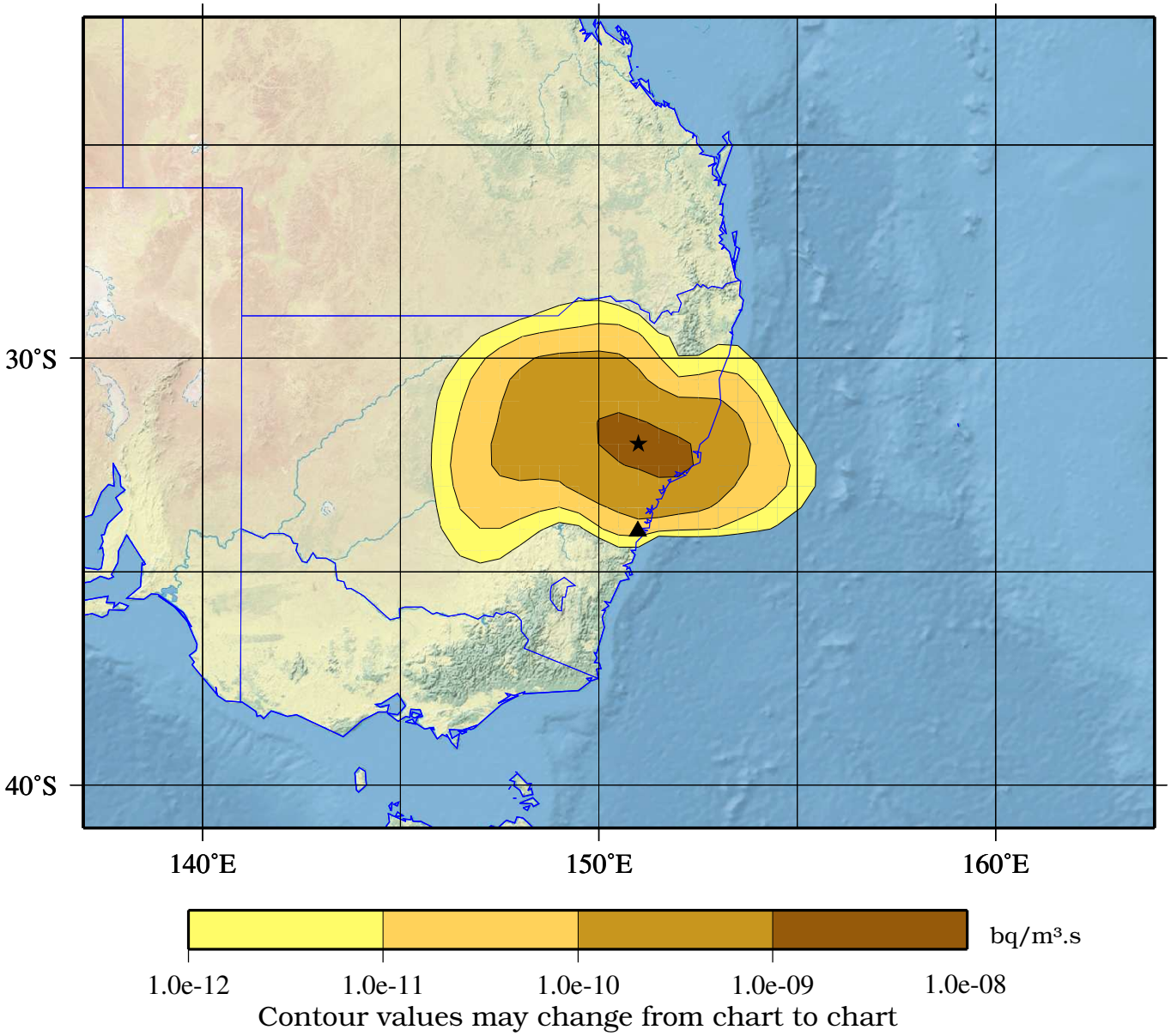
TOULOUSE RSMC
Issued 19/03/2019 13:41:25 UTC

# Lucas Heights Exercise 19/03/2019

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 21/03/2019 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 : 19/03/2019 10h00 UTC
Release duration : 08h00
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.6e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

**MODEL DATA**

Grid resolution : 0.5º
Init for meteo data
19/03/2019 00UTC

Max value for current step :
1.47911e-09 bq/m³.s

Max position ★
Source position ▲

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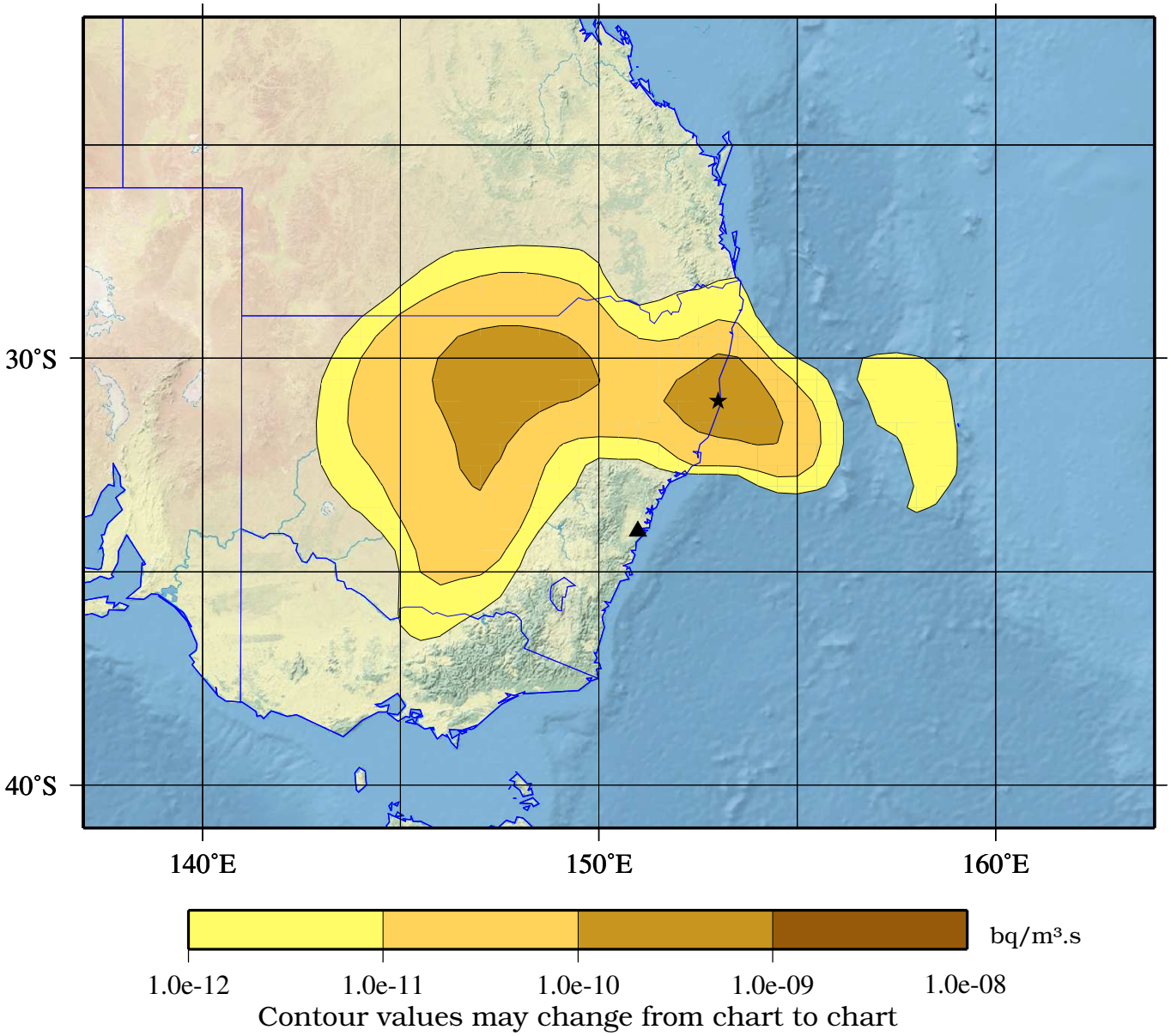
Issued 19/03/2019 13:41:25 UTC

# Lucas Heights Exercise 19/03/2019

Time integrated concentration (bq/m³.s)
for surface to 500m layer over 24 hours
valid 22/03/2019 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 : 19/03/2019 10h00 UTC
Release duration : 08h00
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.6e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

**MODEL DATA**

Grid resolution : 0.5º
Init for meteo data
19/03/2019 00UTC

Max value for current step :
3.37287e-10 bq/m³.s

Max position ★
Source position ▲

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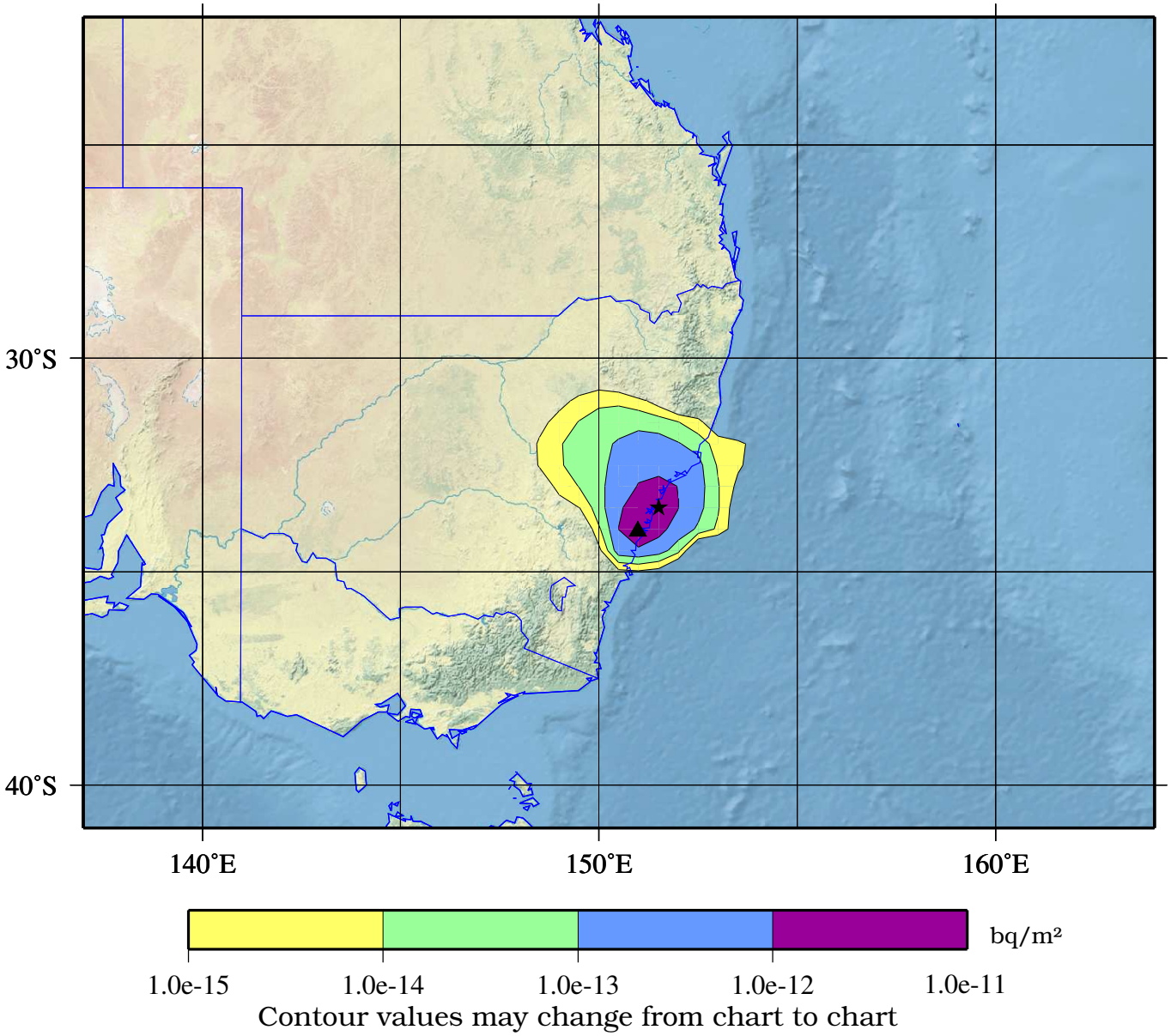
TOULOUSE RSMC
Issued 19/03/2019 13:41:25 UTC

# Lucas Heights Exercise 19/03/2019

Total deposition (bq/m²)
from release start
valid 20/03/2019 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 : 19/03/2019 10h00 UTC
Release duration : 08h00
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.6e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

**MODEL DATA**

Grid resolution : 0.5º
Init for meteo data
19/03/2019 00UTC

Max value for current step :
2.56152e-12 bq/m²

Max position ★
Source position ▲

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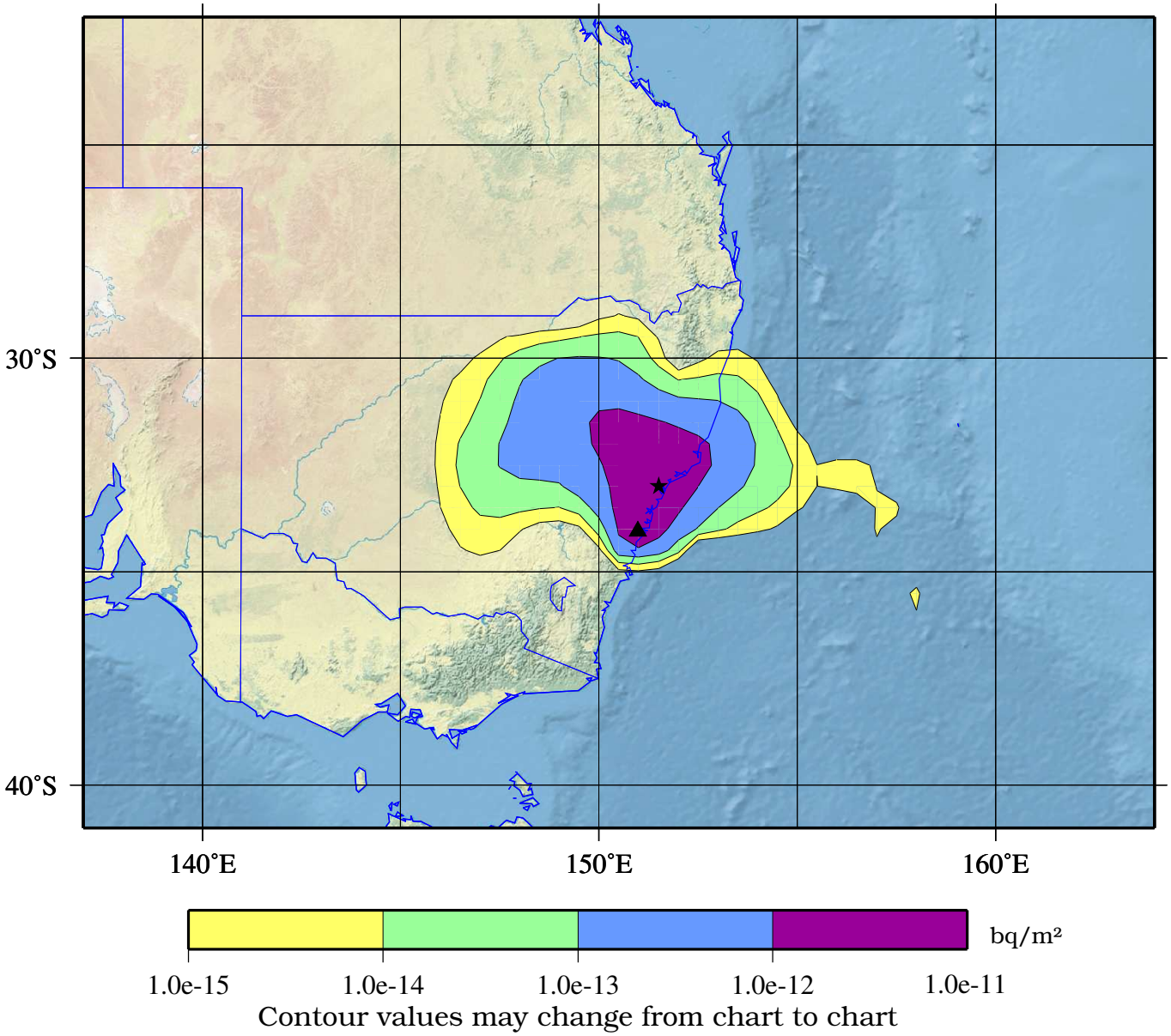
TOULOUSE RSMC
Issued 19/03/2019 13:41:25 UTC

# Lucas Heights Exercise 19/03/2019

Total deposition (bq/m²)
from release start
valid 21/03/2019 00h00 UTC




Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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**RELEASE DATA**
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Release duration : 08h00
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Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.6e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

**MODEL DATA**
Grid resolution : 0.5º
Init for meteo data
19/03/2019 00UTC

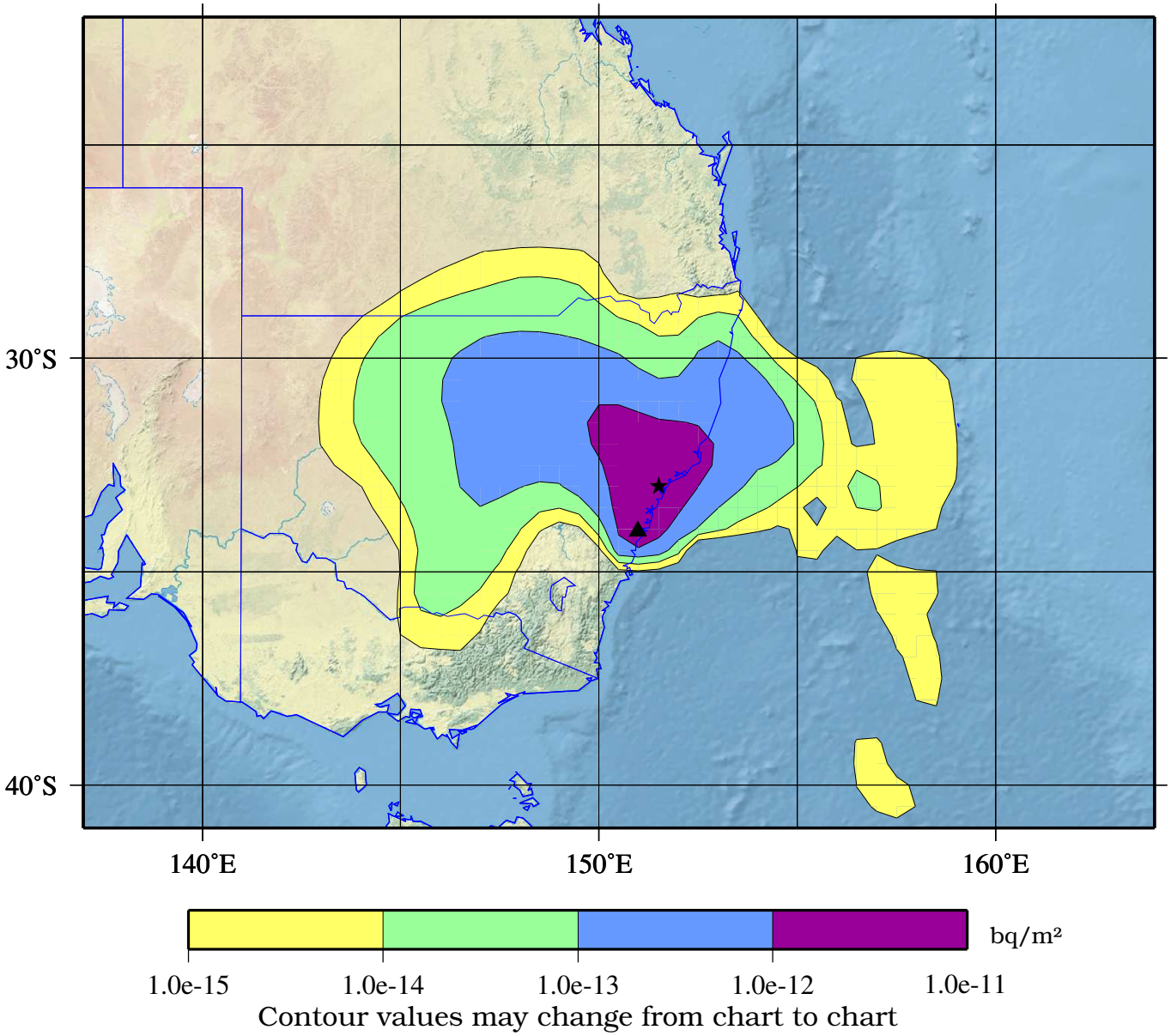
Max value for current step :
4.38545e-12 bq/m²

Max position ★
Source position ▲

METEO FRANCE
TOULOUSE RSMC
Issued 19/03/2019 13:41:25 UTC

# Lucas Heights Exercise 19/03/2019

Total deposition (bq/m²)
from release start
valid 22/03/2019 00h00 UTC




Dispersion model :
MOCAGE Accident
Meteo model : ECMWF

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**RELEASE DATA**
Site : Lucas Heights
Emission start : 19/03/2019 10h00 UTC
Release duration : 08h00
Lat : 34.0519 S ; 34º3'6" S
Lon : 150.98 E ; 150º58'47" E
Emission rate : 1.6e-01 bq/h
Base : 1m
Top : 500m
Released pollutant : I-131

**MODEL DATA**
Grid resolution : 0.5º
Init for meteo data
19/03/2019 00UTC

Max value for current step :
4.39105e-12 bq/m²

Max position ★
Source position ▲

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TOULOUSE RSMC
Issued 19/03/2019 13:41:25 UTC