



NAME-on-JASMIN

A new facility for the atmospheric research community

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with contributions from the NAME-on-JASMIN community



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Historical background

- **NAME** – Numerical Atmospheric-Dispersion Modelling Environment
- Developed by Met Office in response to the Chernobyl nuclear accident in 1986
- Wide range of emergency-response applications
- Growing community of research users
 - academia
 - UK regulatory/response agencies
 - NMSs
- *Increasing effort to support users individually!*



Why run NAME on JASMIN?

- JASMIN offers a centralised resource
 - compute platform (scalable to user demand)
 - NAME software and utilities
 - UM met data for running NAME (~ 25 TB so far)
- Benefits for users:
 - provides the compute power!
 - access to the latest version of NAME
 - standard set of (tested) NAME run set-ups
- Benefits for Met Office:
 - easier to support and maintain (to install and test new versions of NAME, a single repository of met data)
 - encourages wider uptake of NAME by researchers

How does it work?

INITIAL: Sign-up for access to resources and request NAME licence

1. Log in (SSH) to NAME server

2. Copy a standard template for running NAME

3. Make local modifications to the script and/or configuration

4. Run NAME for required dates

5. Check the jobs completed

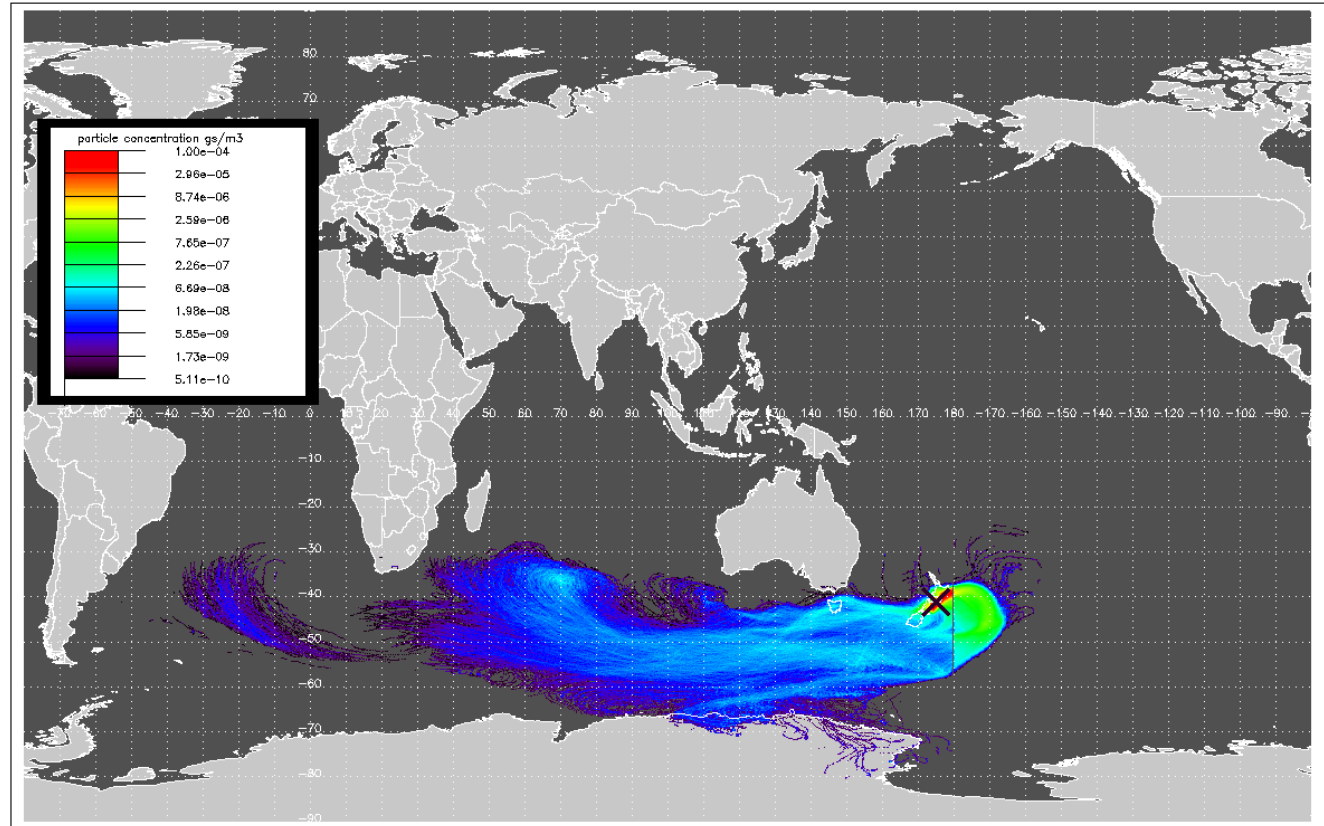
6. Get/process the outputs

Or users can copy their own configurations across.

User Story 1: Baring Head 10-day runs

- Running NAME on JASMIN
- Plotting outputs on JASMIN
- Sharing outputs with other users (work in progress).

Baring head 10 day 100–1000 m start of release: 20120401h1800



Source: Zoe Fleming, University of Leicester

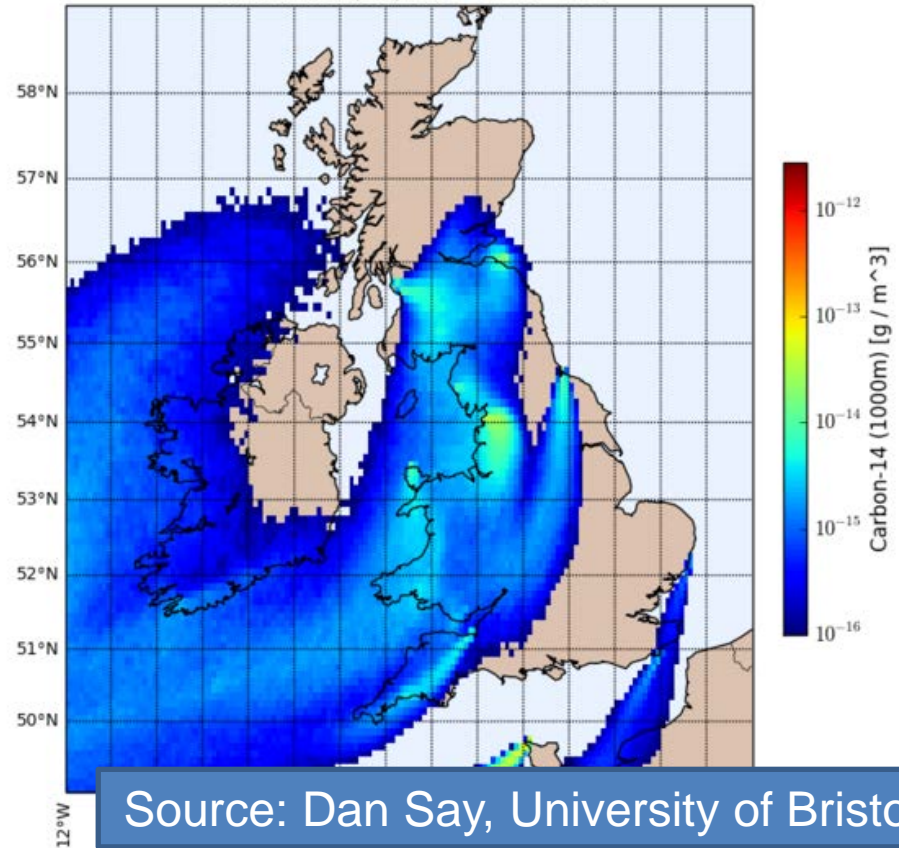
User Story 2: Project: GAUGE

NAME was used to forecast emissions of carbon-14 from nuclear facilities in the UK and Europe.

Carbon-14 emissions from power plants skew this measurement by creating an unnatural enhancement.

The 3-day forecasts allow successful aerial sampling routines to be planned and executed in order to produce precise measurements.

Run name: Forecast_GAUGE_C14CO2
Valid at: 18/06/2014 13:00 UTC



**A Carbon-14 emission forecast generated by
NAME on JASMIN.**



Questions and answers