



Products in support of improved situational awareness

VAAC Best Practice Meeting
Buenos Aires 25-27 April 2016

- Currently based on VA concentration values
- Only VAAC London and VAAC Toulouse produce these.....referenced in European VA contingency plan
- Contentious because IVATF (2010-2012) concluded that science was not mature enough to produce forecasts using ash concentration within acceptable levels of uncertainty
- Accurate measurement of ash concentration only possible using research aircraft e.g. MOCCA, SAFIRE.
- So, issuing VAACs not able to verify products in real time.



In Europe....

- For EUR region a single line denoting ash/no ash boundary is not viable.
- Recognised that a SRA approach using more than one contamination level is necessary



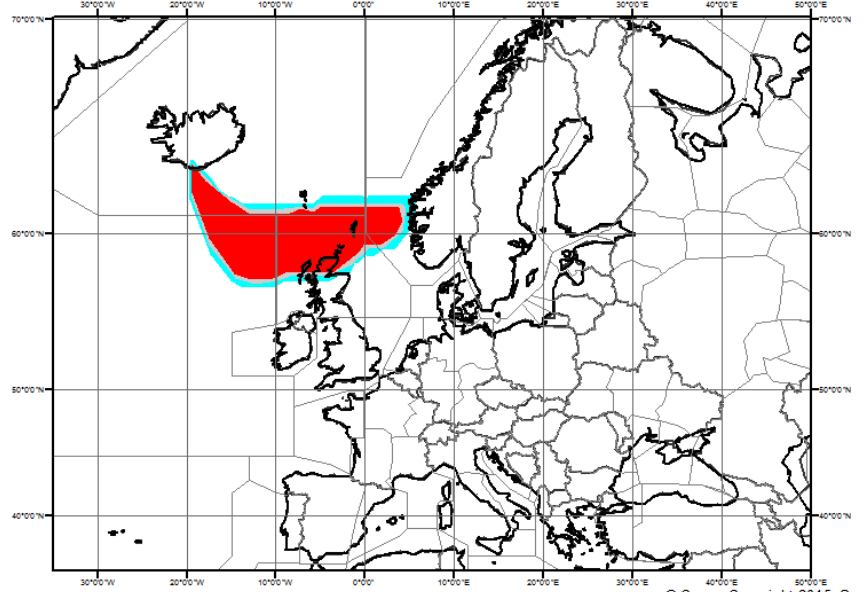
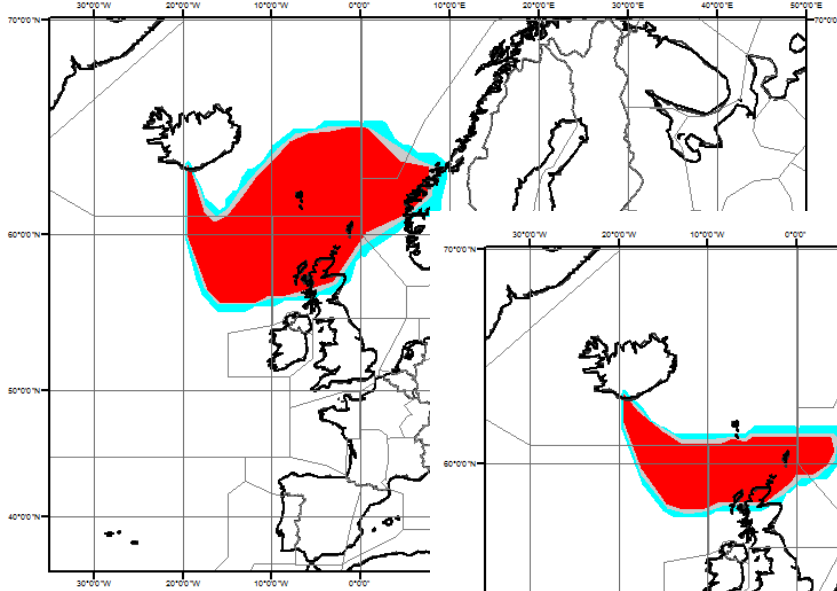
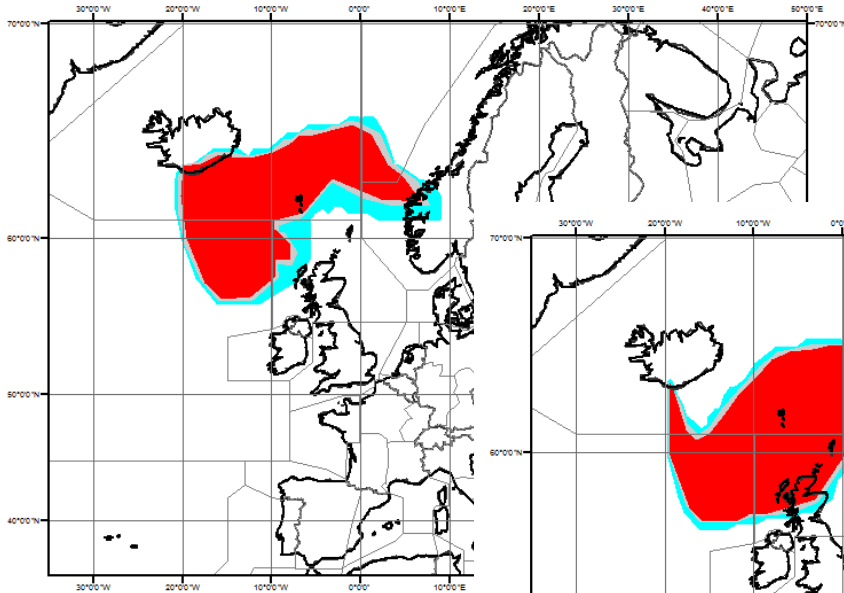
Proposal

- Replace current VA concentration charts with VA contamination charts using a **total ash-column** based approach



Current VA SRA products

T+18 VA concentration charts for FL000-FL200, FL200-FL350 and FL350-FL550





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Proposed VA SRA product

VA contamination chart for T+18



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Modelled Mass Column Loading

Valid 20/11/2015/0600 UTC

This is a guidance product, supplemental to the official VAAC London Volcanic Ash Advisory and Volcanic Ash Graphic products

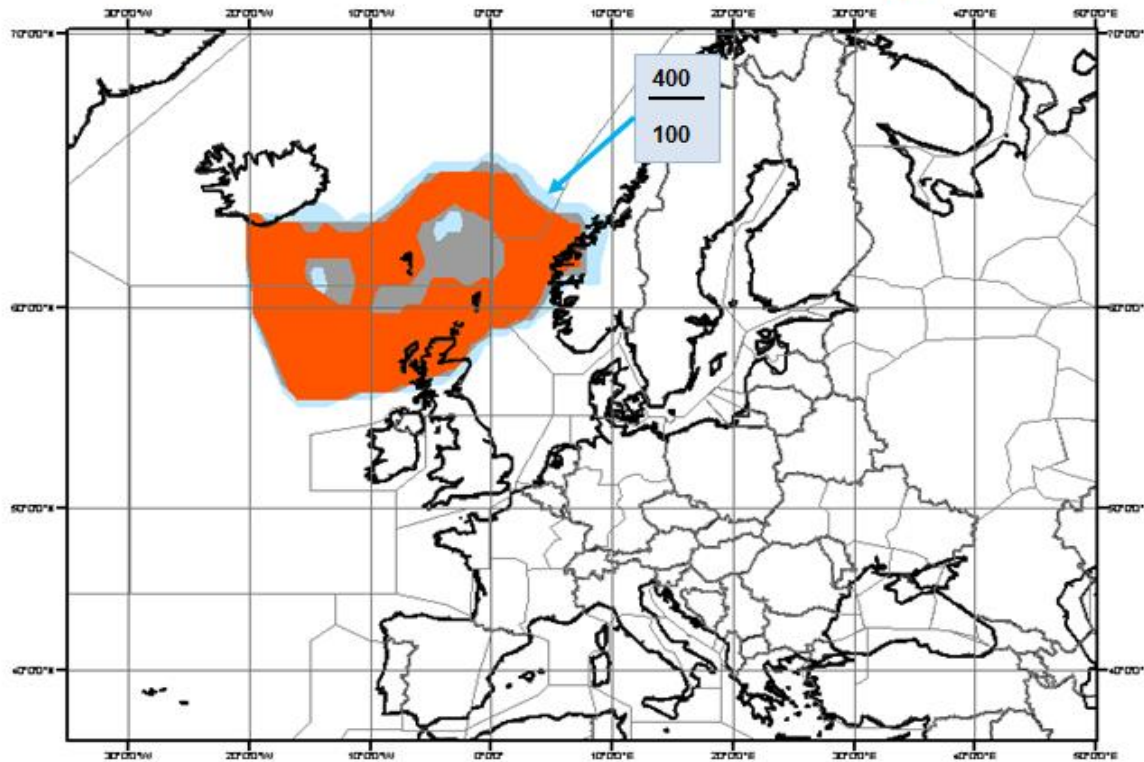
Issue Time : 1350 UTC 25 NOV 2015

TEST

0.2 to 2.0 g/m² FL100 to FL400

2.0 to 4.0 g/m² FL100 to FL400

> 4.0 g/m² FL100 to FL400





Exercise scenario using the new MCL format charts



Modelled Mass Column Loading
Valid 20151119/1200z

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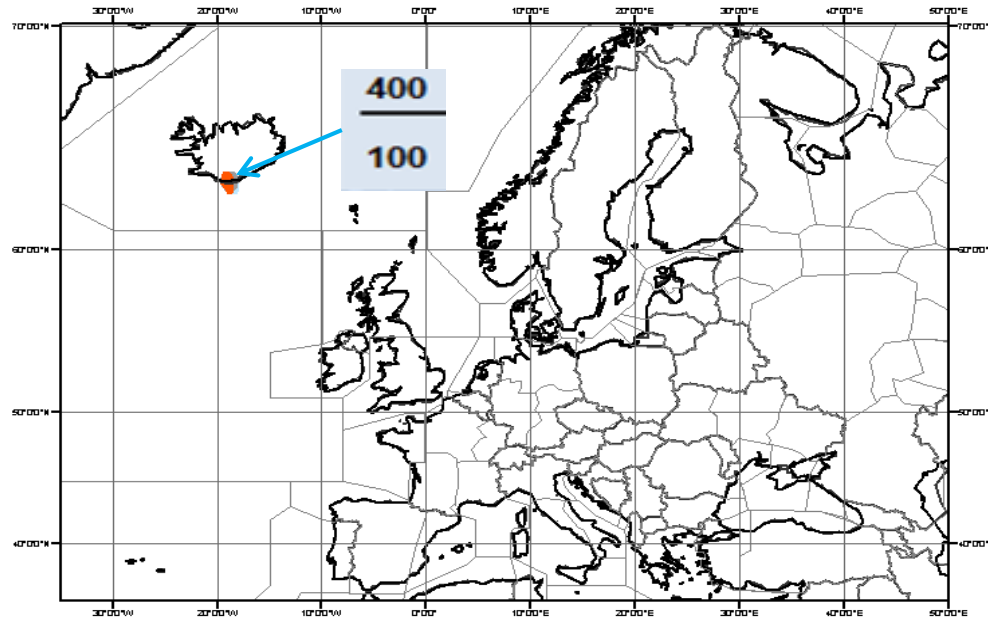
Approved by forecaster:

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Modelled Mass Column Loading

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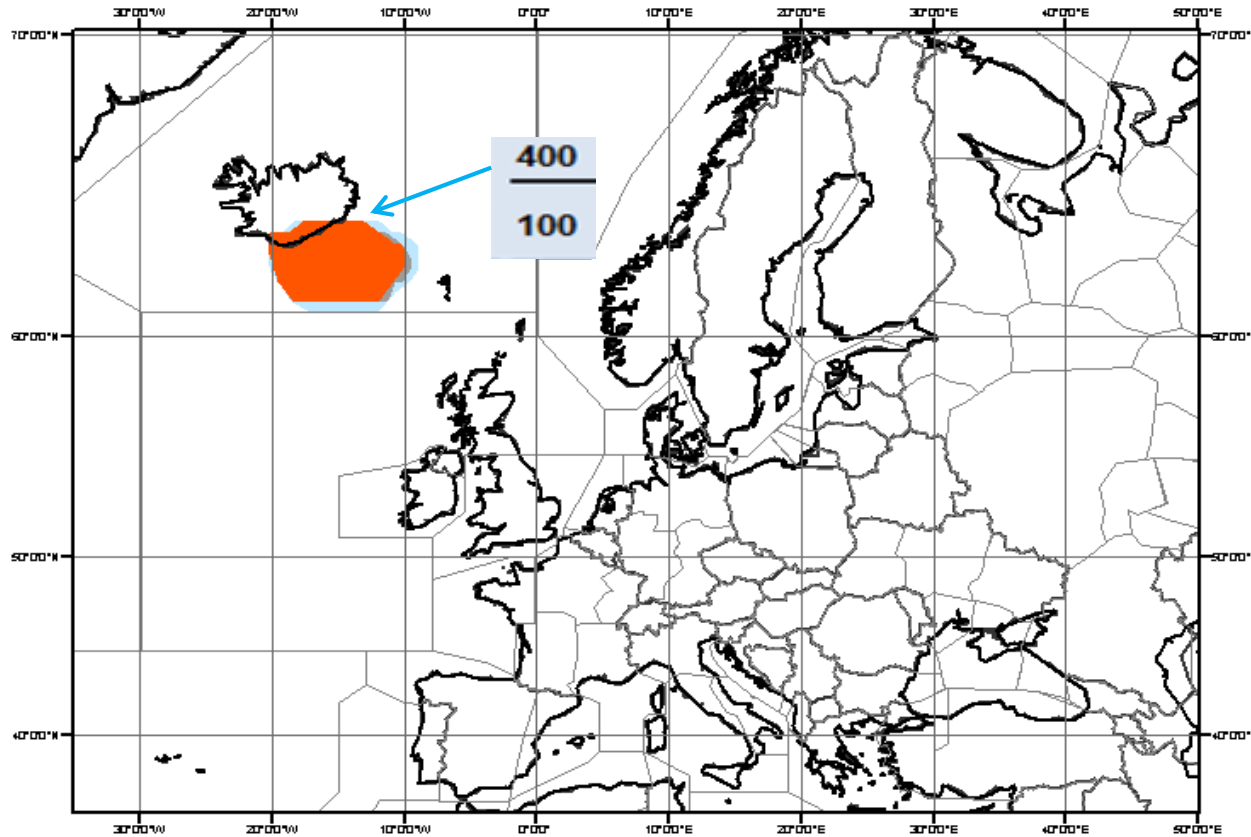
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20151120/0000z

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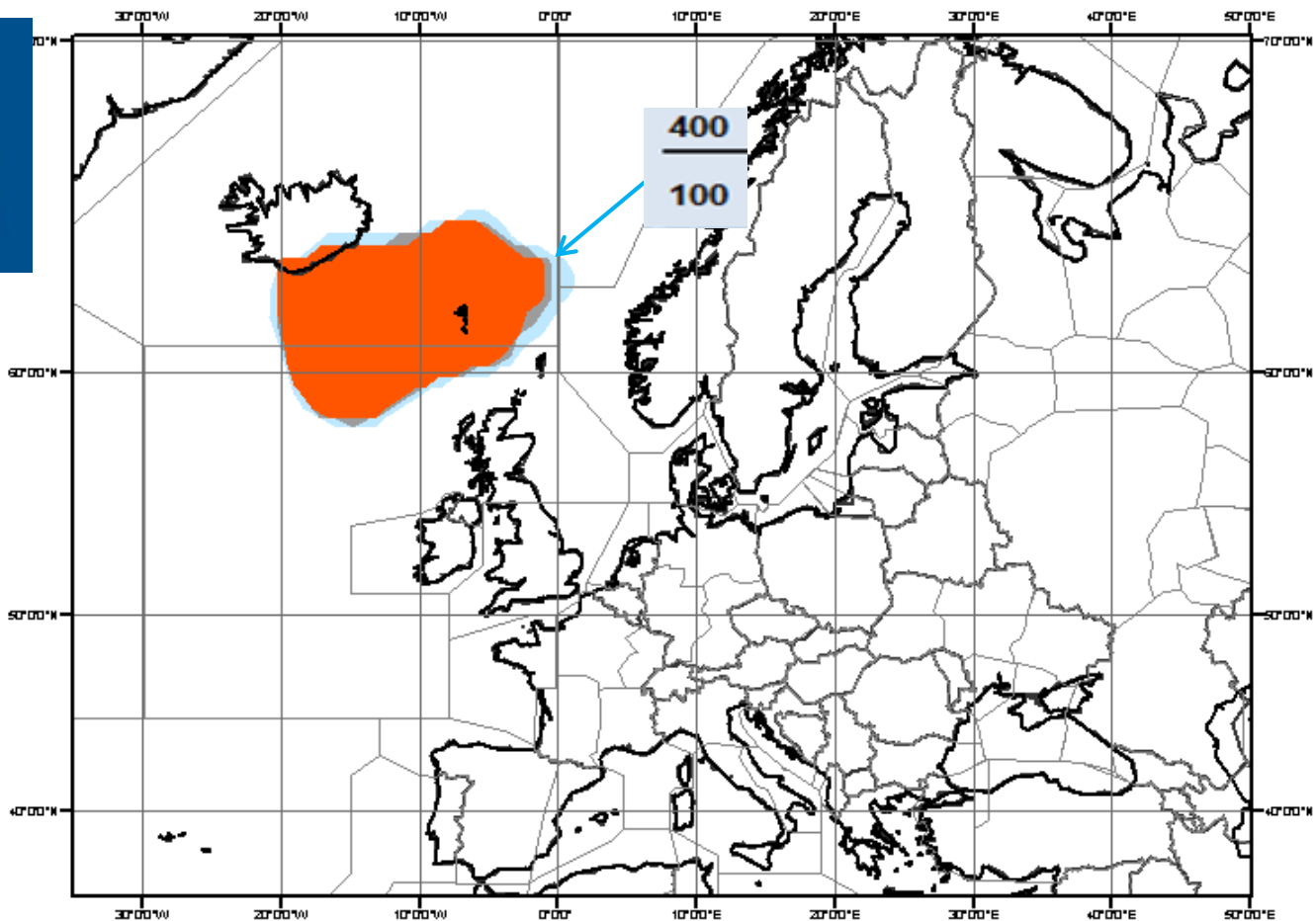
Approved by forecaster.

TEST

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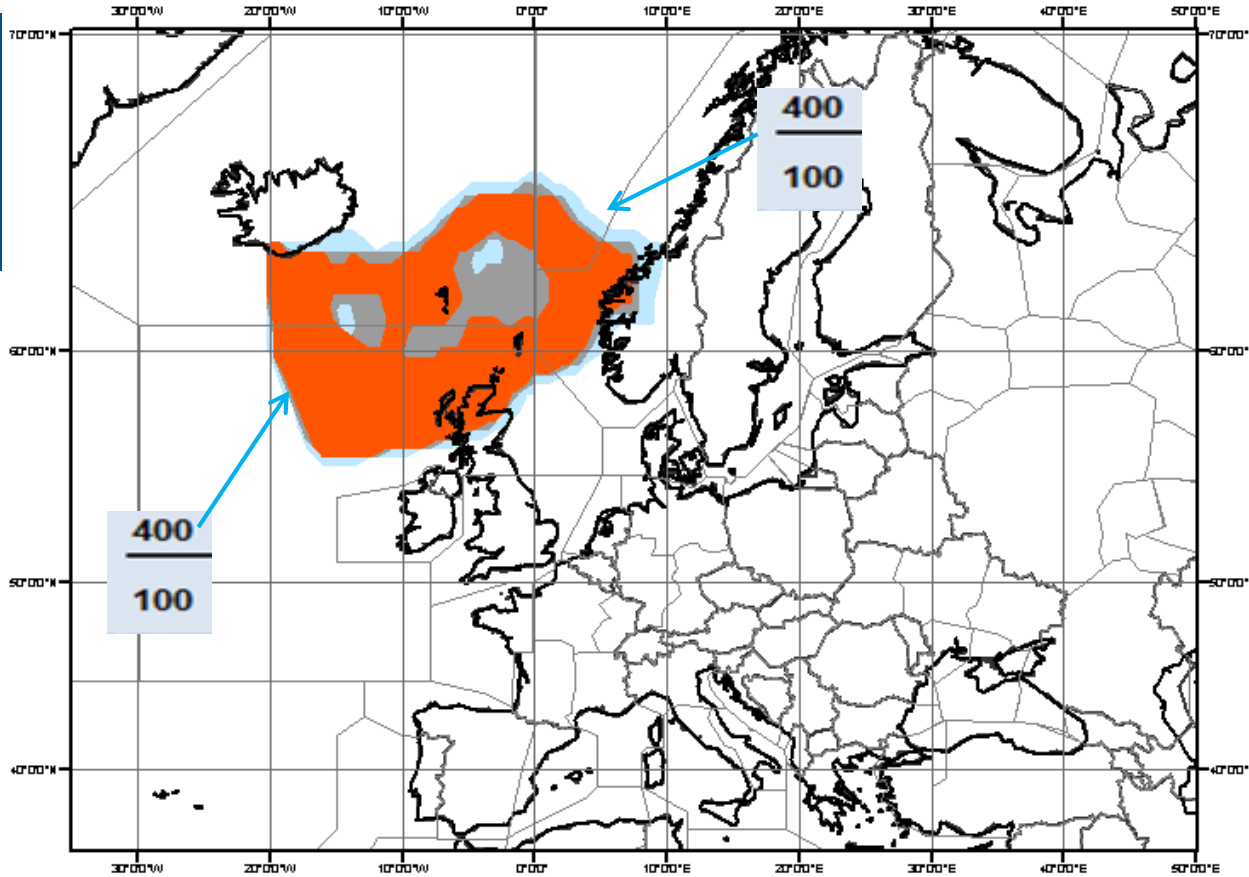
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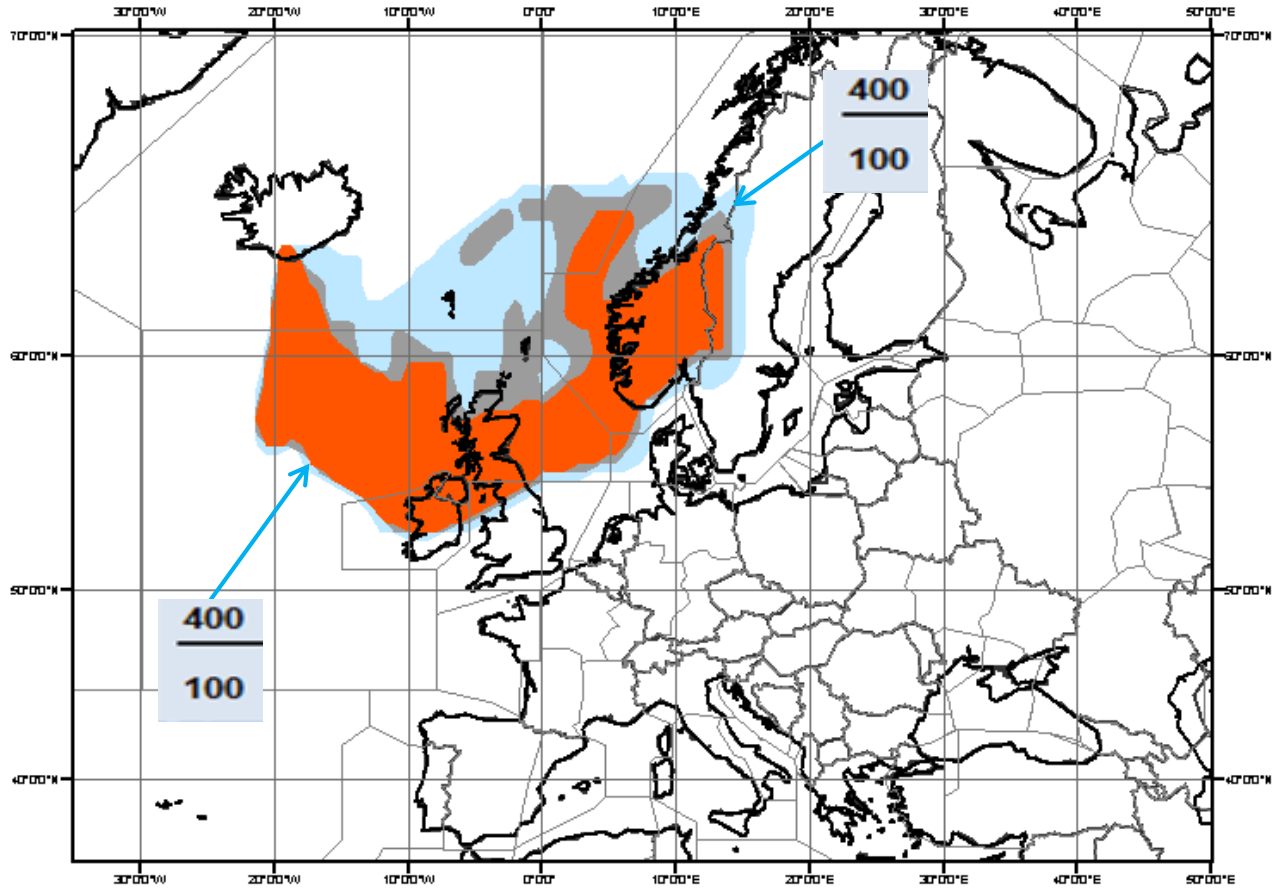
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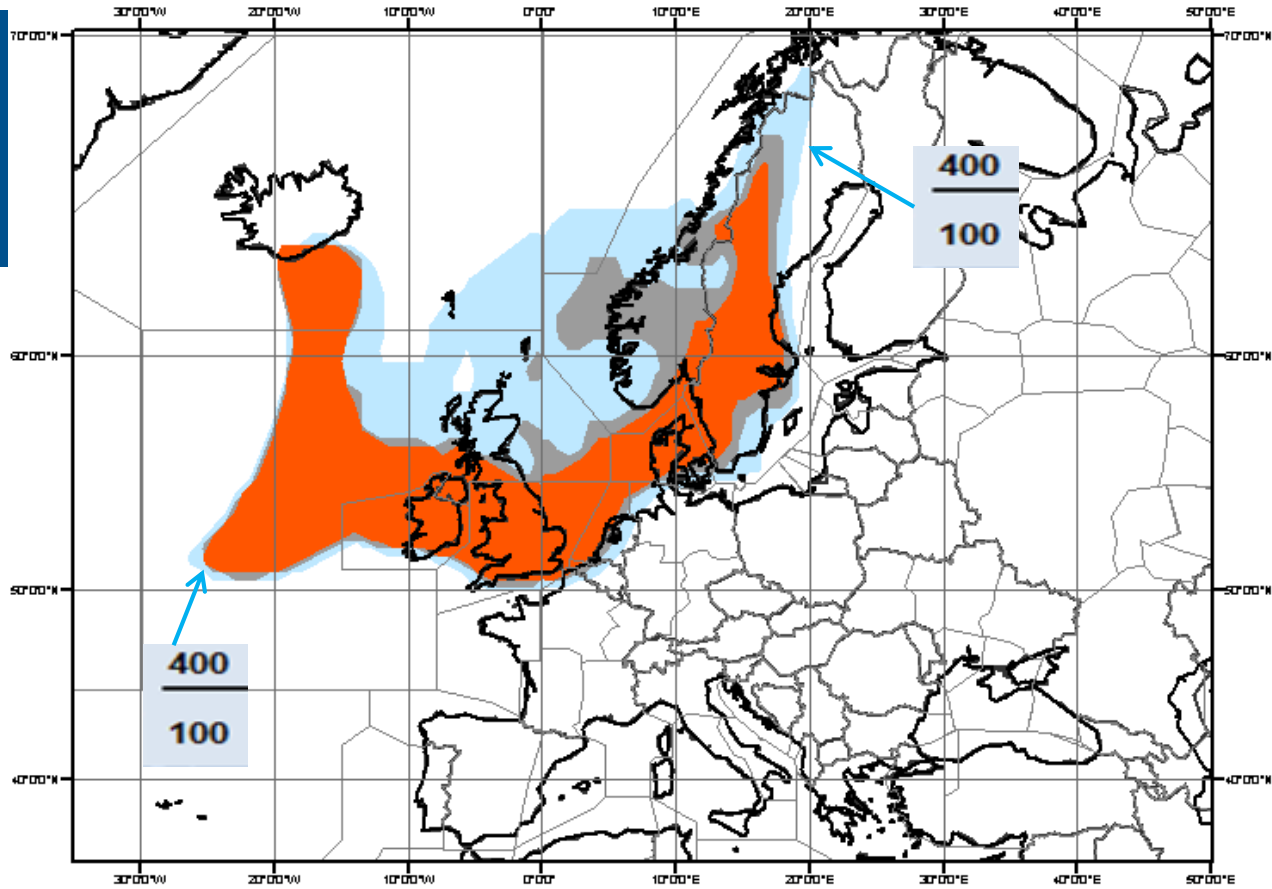
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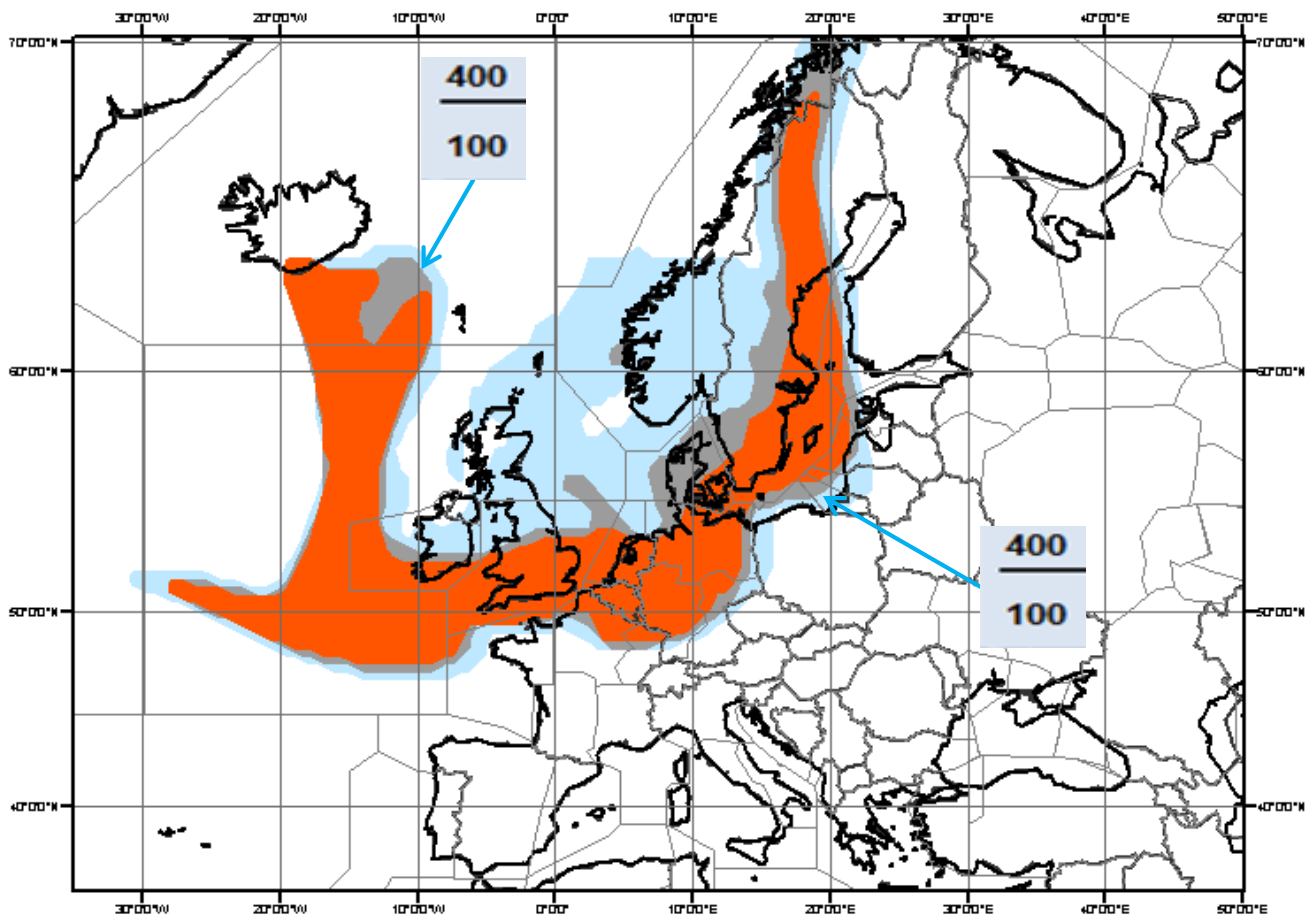
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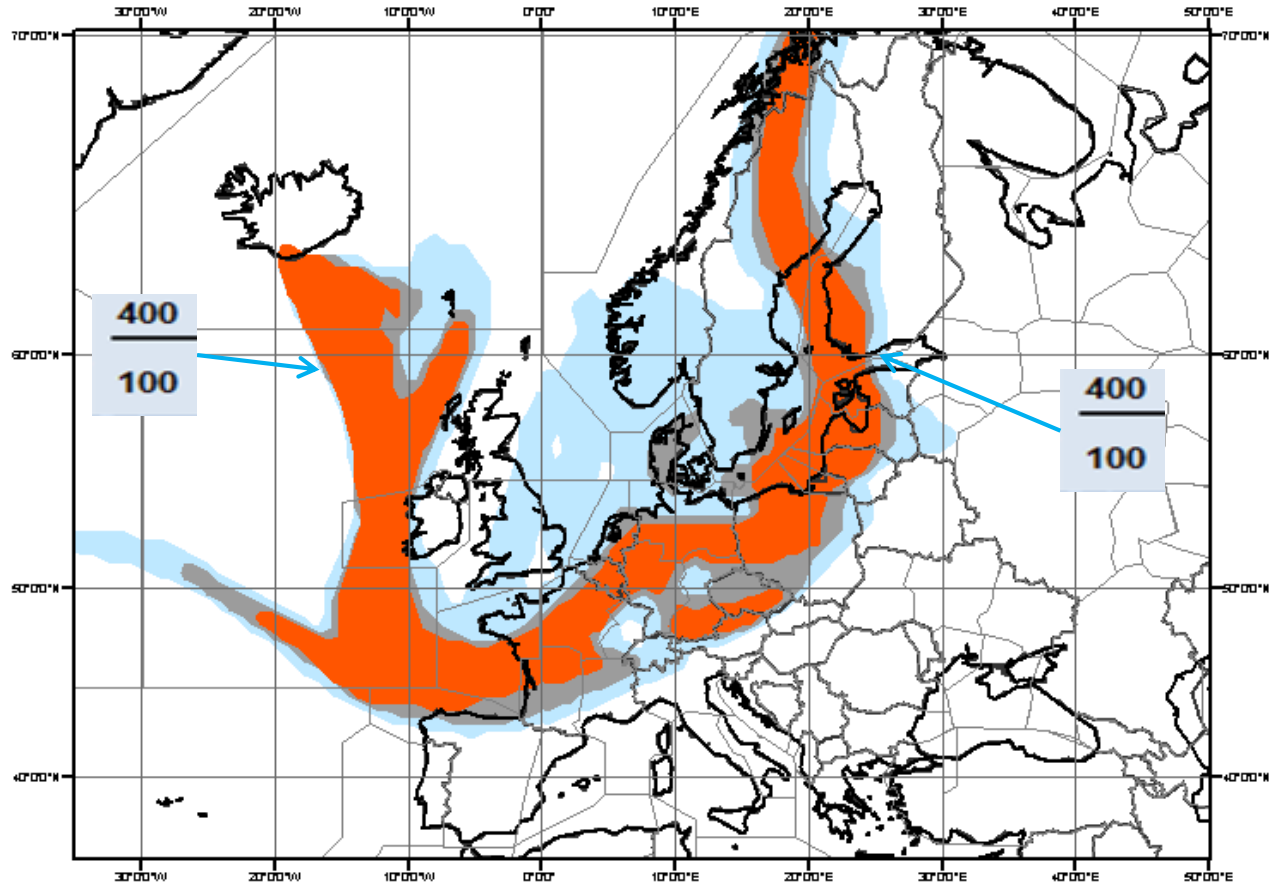
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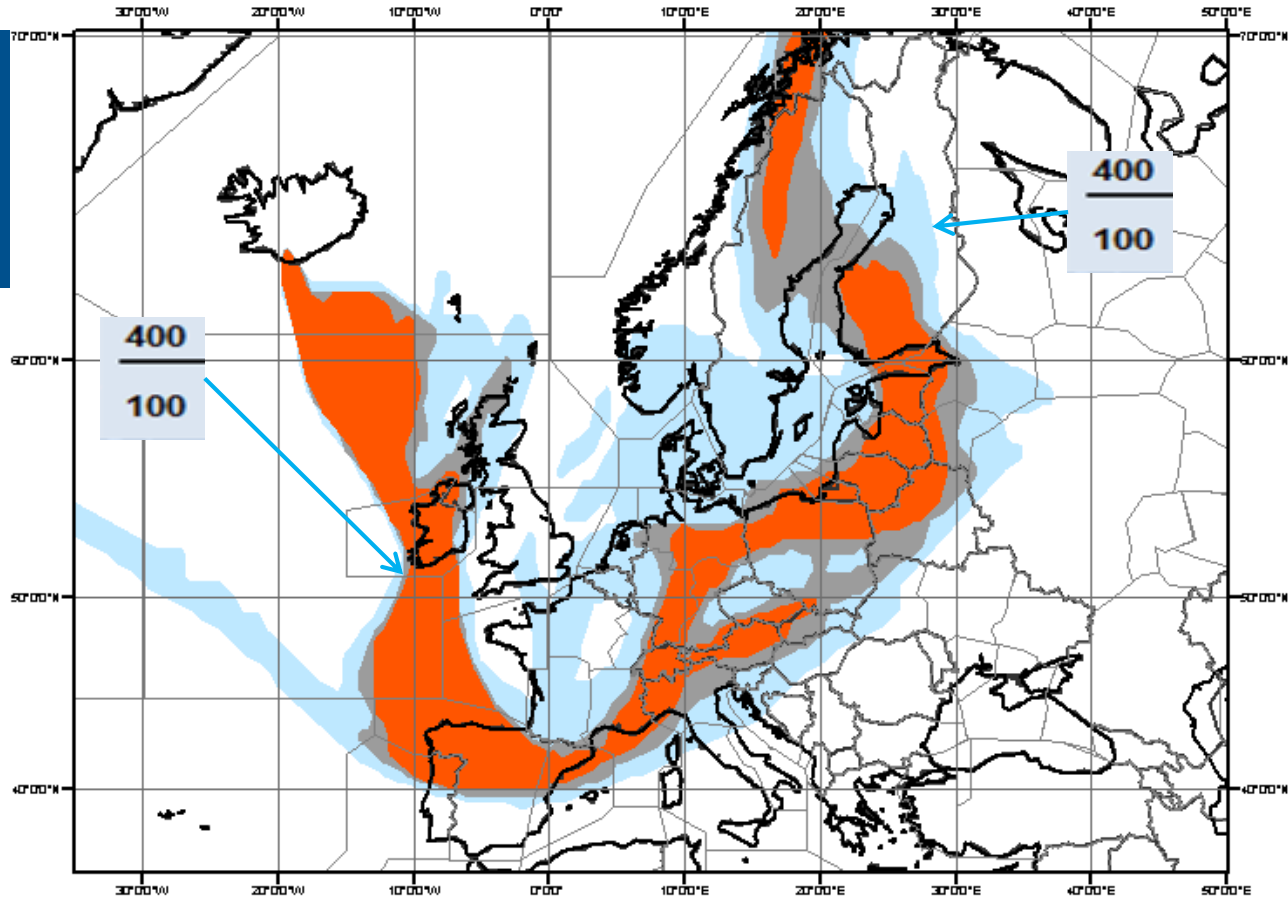
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