

Model documentation requirements and links to e-reporting

FAIRMODE CT2 - 7th October 2021

Joint Research Centre

- It is expected that the revision of the AAQDs will enable an enhanced use of modelling data for assessment, source allocation, forecasting and planning purposes
- This imposes further documentation requirements on modelling applications and their QA/QC
- ... and needs to be linked to ereporting





Following the Covid-19 virus outbreak, we are working remotely. We are doing our best to be operational and carry out our work as before.

This portal contains technical details and services that facilitate the reporting of official air quality information from EU Member States and other EEA member and cooperating countries. This information is submitted according to Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council. The rules for this exchange are set out in the **Commission implementing decision 2011/850/EU**. The portal is maintained by the European Environment Agency (EEA).

Officially published air quality information is available through the **website of the EEA**. Comments and suggestions on this website should be addressed to the AQ IPR helpdesk.

https://aqportal.discomap.eea.europa.eu/



• E-reporting data on Air Quality Models – Data flows D1b and E1b

			Linked table	s 👻 Share Download CSV	[all]	
				Â	Year	
Country	B-G Namespace	Year	AQ Model Id	Model Process Id	2019 (603)	
pain	ES.BDCA.AQD	2019	OBE_ES_SEASALT_NS_PM10_H_LV_daysAbove_2019	OBP_ES_SEASALT_NS_PM10_H_LV_c	AQ Model Id	
					Assessment Type	
					Modelling (302)	
					Objective estimation (301)	
					Air Pollutant Description	
reece	GR.MINNENV.AQ	2019	MDL-CAMx_05012	MDP-CAMx	[all]	
					Data Aggregation Process	
					[all]	
				-	Result Encoding	
owing 1	1-30 of 603			✓ ✓ ✓ 1 2 3 4 > >>	external (284)	
ionnig	50 01 005			<< < < 4 > >>	inline (319)	

https://discomap.eea.europa.eu/App/AirQualityModels/index.html#.eu/



• E-reporting data on Air Quality Models – **Data flows D1b** and E1b

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Model name <ef:name></ef:name>	225
Responsible party <ef:responsibleparty></ef:responsibleparty>	225
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Predicted environmental objectives <aqd:environmentalobjective></aqd:environmentalobjective>	
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MQI and MPC in e-reporting - Few reports

Note that EEA also estimates its own

								(data flows D1b/E1b) s reported within AQ e-Reporting			Filters Country
								Linked tables Share	Down	load CSV 🛛 🔫	[all]
	oundary onditions	Scaling	Projection (SRID)	Model Description	Time Of Result	EEA's estimation of MQI	Data Quality Description	Data Quality Report URL		Model Re Title	Year 2019 (302)
		None applicable		Roadside concentrations calculated	2020-09- 22T12:00:0		The AQD sets data quality objectives	https://uk-air.defra.gov.uk/library/reports?report_ic	d=1007	Technical report on suppleme	AQ Model Id
				using the PCM-Roads			(DQOs) for modelling			assessmer under the	Assessment Type
				Kernel Model (PCM-RKM) dispersion			uncertainty, within supplementary			Quality Directive (2008/50/	 Modelling (302) Objective estimation (301)
				modelling approach to			assessment under the			the Air Qu Framewor	Air Pollutant Description
				represent the roadside increment,			AQD. AQDD4 sets DQOs in terms of			Directive (96/62/EC Fourth	Data Aggregation Process
				calibrated with monitoring.			uncertainty, which acts as a			Daughter Directive	[all]
				The			guide for			(2004/107	Result Encoding
howii	ng 31-60 d	of 302						<< < 1 2 3	4 5		□ external (260) □ inline (42)

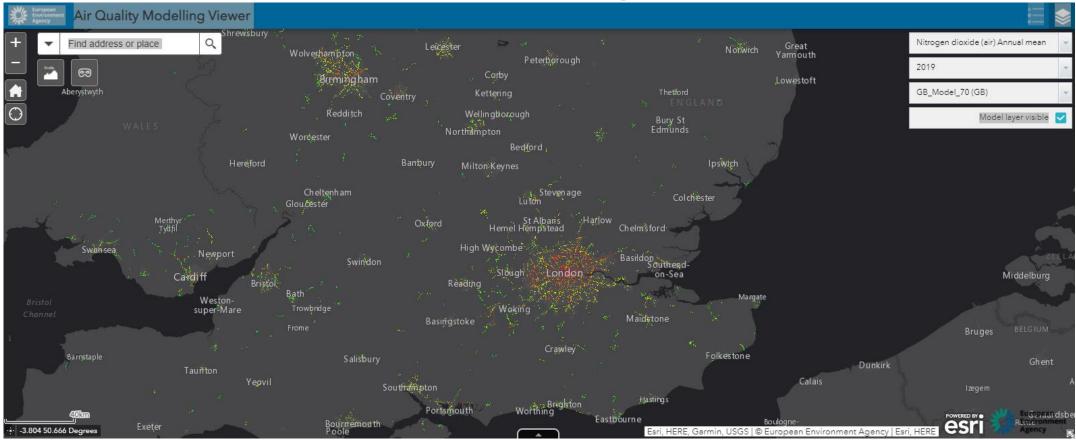
https://discomap.eea.europa.eu/App/AirQualityModels/index.html#.eu/



MQI and MPC in e-reporting needs additional information on observations

Basic information	Model name	
	Model version	
	Contact information	
	Model type	Eulerian, Gaussian
	Model documentation	Schemes, parametrizations
Coverage & Resolution	Spatial coverage	
	Temporal coverage	
	Temporal resolution	
	Spatial resolution	
	Vertical resolution	
Input data	Emissions	
	Meteorology	
	Initial & boundary conditions	
	Data assimilation / fusion	
Data Quality – MQI and MPC	Actual values	
	Methodology used	FAiRMODE – other
	Observations - measurements	Basis for MQI calculations
	Report s	





EEAs Air quality viewer has a different purpose & functionality than FAIRMODEs composite mapping platform

https://maps.eea.europa.eu/AirQualityModellingViewer/



Discussion on metadata

- Would it be useful to include MQI and MPC information in the FAIRMODE composite mapping?
- How would it inform EEAs own MQI evaluation?
- Would it be useful in the future to recommend reporting of MQI/MPC values?
- if so, what is the preferred format for reporting ? Do numbers alone make sense?



Thank-you

