

INPUT DATA

Emission sources

Emission inventories

Supplementary information

- file type
- geometry type
- coordinate system
- units
- names of the relevant variables
- ...

Spatial inputs

Spatial distribution of the sources (if provided separately)

Supplementary inputs

Meteorological data

Time profiles

Land use

Chemical profiles

... other

EMISSION PROCESSOR - FUME

CONFIGURATION OF INPUT

DATABASE

Unified emission sources in common coordinate system and units

Chemical and time profiles

Intermediate results

CONFIGURATION OF THE CASE RUN

COMPUTATIONAL CORE OF THE EMISSION PROCESSOR

Output mesh

Creation of output polygon mesh

Time span of the model

Calculation of factors for spatial disaggregation

Calculation of factors for chemical disaggregation

Calculation of time disaggregation factors

Selection of chemical mechanisms

Transformation

Filtering

Spatial disaggregation

Masking

Other transformations

Transformations

Chemical disaggregation

Reporting

Interface

EXTERNAL MODULES

Biogenic emissions (MEGAN)

Other modules can be included

Postprocessing and preparation of outputs

Output

Aggregation for sources and categories into output polygons

Time disaggregation

CTM1

CTM2

Visualisation

...

EXTERNAL SYSTEMS / OUTPUT DATA

Air quality models

GIS

Emission maps

...