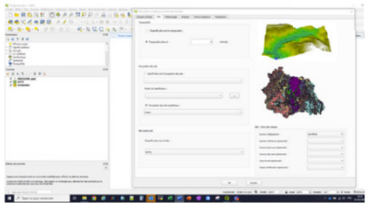
Discover
AirAdvanced® Map
SUEZ – Evolution of Aria Technologies software
Speaker : Sirine HAMDANA, product expert
suez

What is AirAdvanced® Map?

AirAdvanced® Map

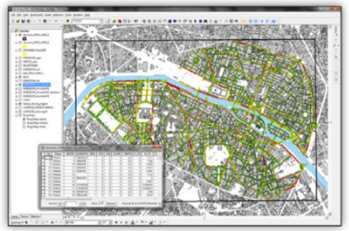
QGIS

Site



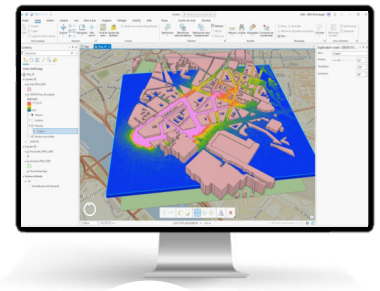
Weather

Emissions



ArcGIS Pro

2D/3D modelling and mapping of emission dispersions (pollutant and odours plumes)



Odours

GHG

Public Health

Industry

Road Traffic

Residential

General

Why a new product?

Replace **four** products in the portfolio.

Based on advent of new libraries
easy to maintain

Inspired by positive customer feedback to enhance user experience

35 years of expertise in atmospheric dispersion, **hundreds** of licenses sold, and **66 clients** under maintenance including the City of Paris; INERIS, Arcelor Mittal…

1. Software made **by modelling experts** for modeler
2. Provided international references **and** state-of-the-art models
3. Module integrated into **customer work environments**

General

An integrated extension to your GIS

Preparing data
in your GIS

QGIS ArcGIS Pro

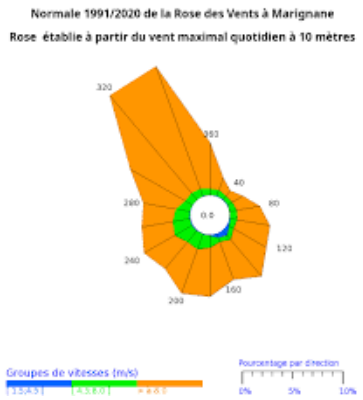
Parameter setting, calculation, export
with the AirAdvanced®Map extension for your GIS

Data post-processing
in your GIS

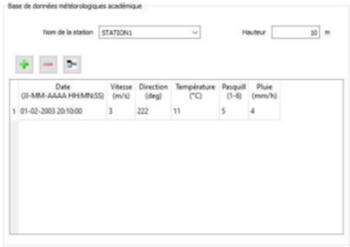
Concentrations (horizontal section)
Ground-level deposition
Concentrations in percentiles
Frequency of exceedance

A wide range of meteorological inputs

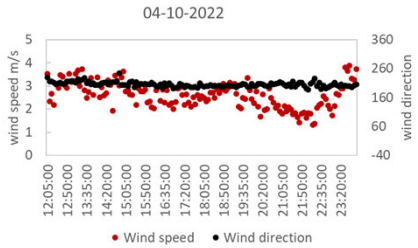
WIND ROSE
FREQUENCY
AIM



ACADEMIC
USER-DEFINED
AIM / PMSS



MET STATION TIME SERIES
SEQUENTIAL
AIM / PMSS



MESO SCALE MODEL
WRF, AROME, ...
PMSS

General

Significant progress

1 GUI

for pre- and post-processing, calculations

2 Models

dispersion in a single software package

Trefic

Integrated

The power of GIS

for symbology, background maps

Availability under QGIS and ARCGIS PRO

version tracking

Integrated 3D analysis

directly in ARCGIS PRO or with PARAVIEW

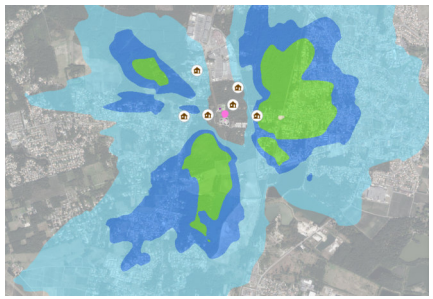
General

Case 1: ICPE regulatory study

AIM

Gaussian model

Industrial site



Bordeaux

- 2 point sources (chimneys) emitting **NOx** and **PM_{10}**
- 2 surface sources (settling tanks) emitting **odours**
- Line sources (lorry traffic) emitting **NOx** and **PM_{10}**
- Taking **topography** into account
- **Meteorological data** from one station **over 1 year** taken into account

General

Case 2: Air & Health urban development study

QGIS

PMSS

Trefic

Urban area

Paris IVe XIe

- Line sources with **Average Daily Traffic (ADT)**
- 1 point source: generator on Quai de l'Arsenal
- 1 point source: chimney on the roof of the Opéra Bastille
- Flat land assumption
- Academic weather situation: user-defined

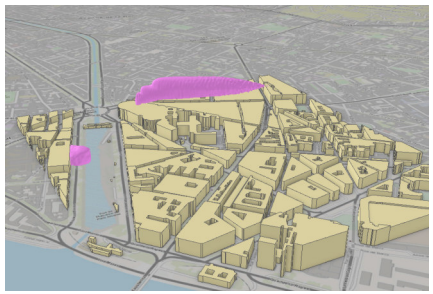
Case 3: ICPE study in an urban area - 3D visualisation

ArcGIS Pro

PMSS

ParaView

Urban area



Paris IVe XIe

- 1 point source: generator on Quai de l'Arsenal
- 1 point source: chimney on the roof of the Opéra Bastille
- Flat land assumption
- Weather data from one station
- Modelling / **3D visualisation PARAVIEW and ARCGIS PRO**

THANK YOU

Commercial offer & Technical support request

https://forms.office.com/pages/responsepage.aspx?id=Zyih9C2SnUu7hZ7niYUSoKjHgAoJa2JPoiiR1fLkxBNUMkZaVVZIQ0Q3STdZTDBTN0Y1M0NGSkU0Ry4u&route=shorturl

suez.com

General