OPERATIONAL SYSTEMS

plumair®

INDUSTRIAL ENVIRONMENTAL MANAGEMENT

CONTINUOUS MONITORING OF ATMOSPHERIC DISCHARGES

The Plum'Air® software platform allows to monitor in real-time and forecast the dispersion of gaseous plumes (odours included) around industrial facilities and sites.

Accidental mode

Quick creation of new sources induced by an accident (gas leaks, etc.) and activation of primary calculations taking them into account, with impact on "real-time" and "forecasting" short-term visualisations.

Real-time and forecasting modes

● *Live display of discharges atmospheric dispersion with a configurable refresh rate (hourly, quarter of an hour...) for the "real-time" mode.*

● *Possibility to activate the "forecasting mode" to enable warning activation or production programmes re-adjustment, and this coupled with a simple tool for the planning of the emissions of the site.*

Advanced features

● *History and statistics: possibility to view any past event and generate different statistics for reporting (daily, monthly or annual automatic reports).*

● *Alternative scenarios: possibility to launch and compare alternative emissions scenarios in forecasting (decision-making tool to limit the impact) but also on the past (analysis tool in case of dysfunction).*

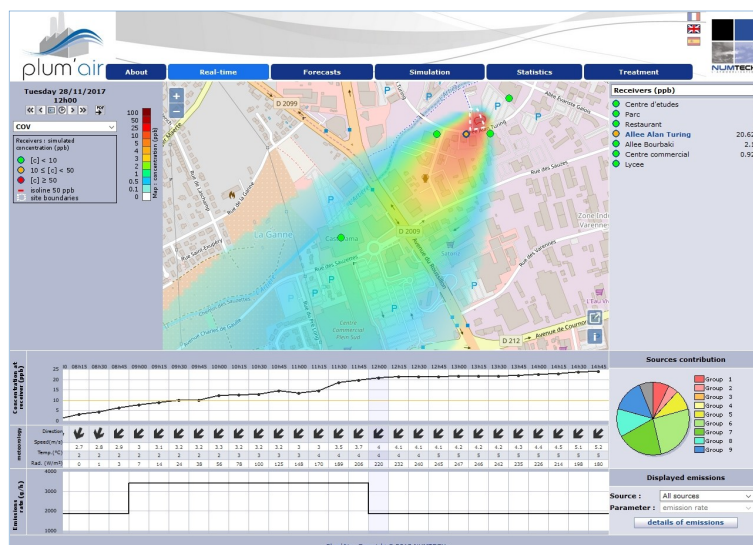## Integration of dispersion models adapted to the issue

ADMS, CALPUFF, Code_Saturne (CFD).

Software as a Service (SaaS)

Possible hosting of the system on our servers to facilitate you the informatic management.

A fully decision-support tool

● Real-time display of plume according to weather conditions.

● Concentrations of pollutants or odours on receptor points predefined (possible calculation of the deposition).

● Relative contribution of the different sources.

● Visualisation of meteorological data.

● Forecasting mode for impacts anticipation.

● Email alerts or notifications through a dedicated mobile application in case of exceedances of configurable thresholds at the level of receptor points (neighbourhood, sensitive sites, property lines, etc.) and emission sources.

● Data archiving for statistics realization on historic: threshold overrun, percentiles, daily, monthly or annual means, etc.

● Possibility of simultaneously managing several sites.

● Possibility of integrating and displaying measures at the emission (CEMS).

● Possibility of integrating and displaying measures in the environment from sensors (with comparison with simulated values).

● Possibility of developing smartphone applications.

A comprehensive dashboard for real-time monitoring.

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An ergonomic interface for an optimal display

- Dynamic mapping of atmospheric impacts with visualization of the plume temporal evolution.
- Possibility of monitoring several pollutants.
- Evolution curves of concentrations on all receptor points defined by the user.
- Risk and alerting indicators.
- Detailed weather forecast banner.
- Emissions time-course evolution curves.
- Statistics available in maps and tables.
- Several configurable levels of information according to the user's profile: operator/decision-maker or public page.
- Display on web browsers (PCs, tablets, smartphones).
- Wind and pollution roses.

Configuration requirements

The Plum'Air® system only needs an Internet connection for data exchanges and can be installed on an independent central server. The interface can be displayed on any computer having a web browser.

On-site installation

- *Emissions: combination with your continuous measurement tool (CEMS), Predictive Emission Systems (PEMS) or use of emission scenarios according to a pre-defined scheduling.*
- *Meteorology: sale of turnkey weather stations and forecasts provision.*
- *Interface customisation.*

Other services

- *Configuration and implementation of the system.*
- *5d/7 technical support.*
- *Training for the use of the system.*
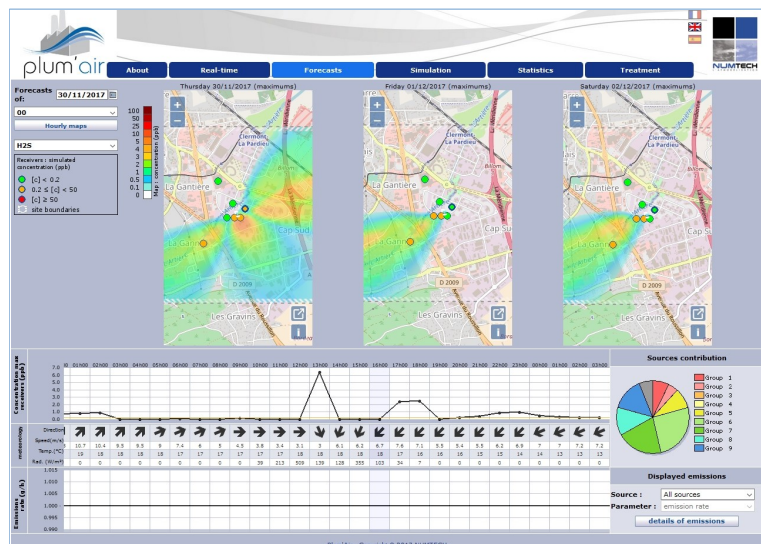
Several references

TOTAL (PICASSO system), SAUR (Olfaweb system), OCP GROUP, CHROMATOTEC GROUP, CLAUGER, ALPHA M.O.S, etc.

An odour monitoring tool

The Plum'Air® system is particularly well adapted for odour plumes monitoring in industrial facilities environment (composting, water treatment, landfill).

It can be configured to integrate odours emission data from electronic noses (if compatible with the system).

When coupled with a management system of odour observation groups, it then becomes a unique tool on the market tool for odours monitoring, by allowing to link residents' perception to odour plumes atmospheric dispersion.

Forecasts consultation over several days.

The Plum'Air® system is developed and distributed by NUMTECH (www.numtech.fr/plumair).

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