FIRE MODEL

AUTHORS

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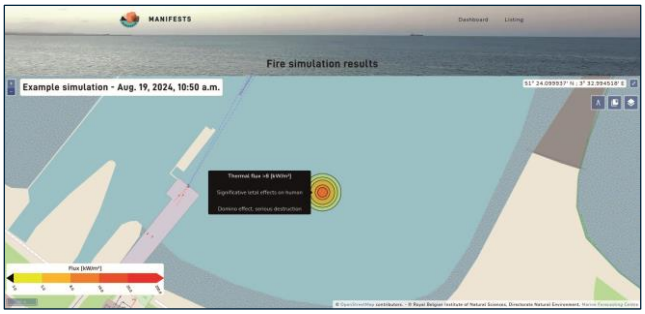
ACCESS/DOWNLOAD AT

https://odnature.naturalsciences.be/oserit/



APPLICATION AND USE

Purpose/objective of the tool

Estimate the safety distances at which responders can safely approach a burning HNS slick on the surface of seawater in an open environment.

Applications of this tool

- Contingency planning and guidance
- Operational response
- Modelling
- Risk assessment

How to use it

The user fills out an online form with simulation metadata, event location and time, environmental data, and HNS properties (can be auto-filled from the HNS database). After waiting a few seconds, the simulation results are displayed in the online web interface.

Key features and functionalities

The model estimates thermal fluxes as a function of distance from a burning slick and assesses the expected impact on humans and structures. It also estimates the burning rate and burning time.

Practical examples where this tool can be used

Simulate the potential impact of a burning oil slick to determine how close responders can safely approach it.

Results or outputs produced

The interface provides a numerical value for the burning rate, a plot of the remaining amount in the slick over time, and a map with ellipses indicating the expected impact on responders or structures within the ellipses.

Co-funded by the European Union

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TECHNICAL REQUIREMENTS

Operating system required

- Apple macOS
- Microsoft Windows
- Linux OS

Devices the tool can run on

- PC

Hardware requirements

An internet connection and a computer capable of running a recent version of a modern web browser.

TARGET AUDIENCE

Target audience

- Authorities and companies with legal responsibility of implementing contingency plans
- Port and maritime authorities
- Coastguards
- Emergency responders (Civil protection, firefighters, army, police officers, etc.)

Type of knowledge background required to use this tool

Users should have completed a training session on the tool.

ACCESS

Permissions required

This tool requires a login and is not open to the public.

Obtain permissions

https://odnature.naturalsciences.be/oserit/

USER GUIDANCE

User guides or manuals available

MANIFESTS DSS User guides: https://manifests-project.eu/documents/27/D5.3_-_MANIFESTS_DSS_-_User_guides.pdf

Support documentation

A PowerPoint presentation is provided during the training session.

FEEDBACK

Support email

marine-forecasting-officer@naturalsciences.be

Co-funded by the European Union