

The SMEDIS Protocol: A scientific model evaluation tool for dense gas dispersion models.

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This presentation describes some work carried out at the interface between model developers and model users. It describes SMEDIS (Scientific Model Evaluation of Dense Gas Dispersion models) - a European-funded project with the objective of developing and testing a scientifically-based model evaluation tool for application to predictive models for dense gas dispersion applied in situations where complex terrain, obstacles and strong density effects are significant influences on the behaviour of the release.

The presentation considers the three elements of the evaluation process:

- a Scientific assessment;
- b model verification;
- c model validation

describing how each was approached, the difficulties encountered and the main results obtained. A total of 28 models were used to test the procedure, split according to model type: screening tool, integral, shallow layer or complex CFD-3D and the results are considered in terms of these model classes. Finally the products of the project are described and some comments made on undertaking such a model evaluation.