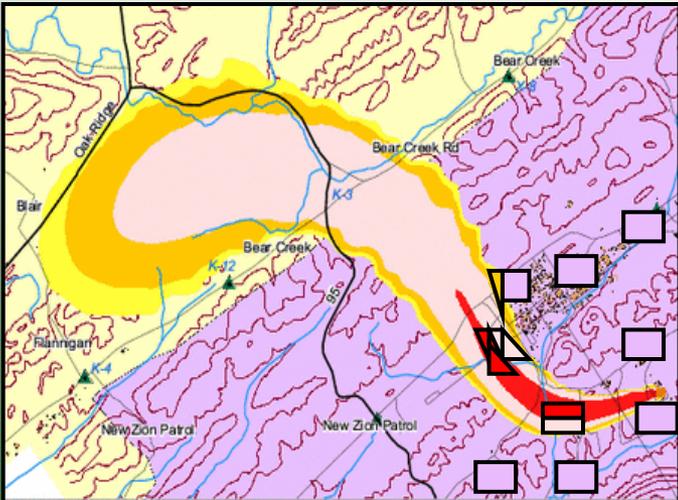
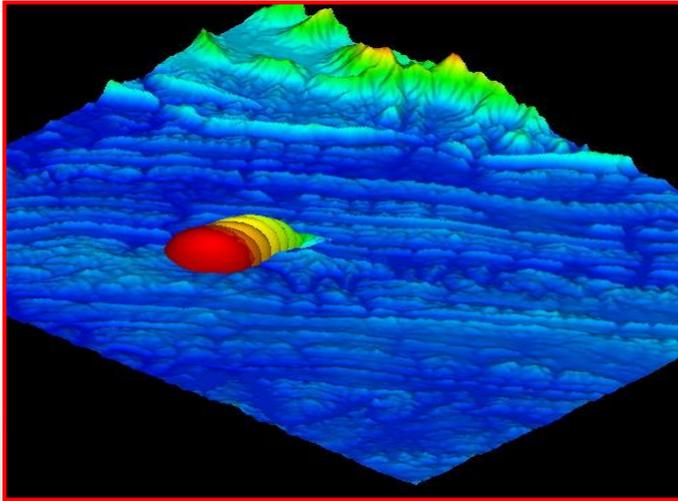


Complex Dispersion Analysis and Prediction

Modeling and Simulation Group

Computational Sciences & Engineering Division



Problem Statement:

- Accurate pollutant and plume dispersion calculations for use in emergency response and homeland security applications are hindered by uncertainties associated with complex terrain and urban landscapes.

Technical Approach:

- Dispersion analysis is re-assessed with an emphasis on physics-based three-dimensional weather analysis, high resolution terrain modeling, land surface forms, and complex terrain meteorology.

Benefit:

- More accurate prediction and forecasting of pollutant concentrations at finer (sub-km) spatial scales.

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