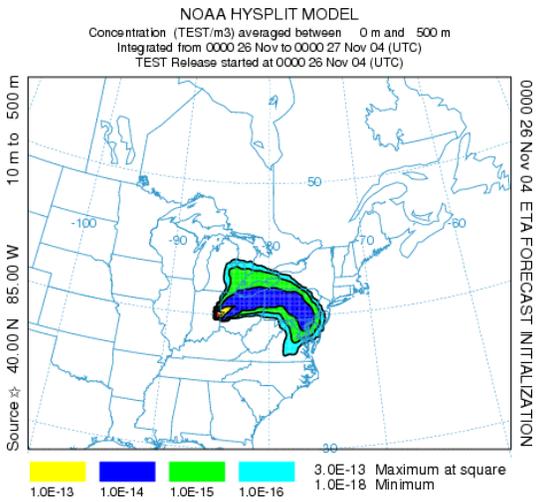


Example Dispersion Calculations for Radiological Events

Source: 1 unit per hour for 6 hours Simulation Duration: 24 hours



Typical Output (left panel):

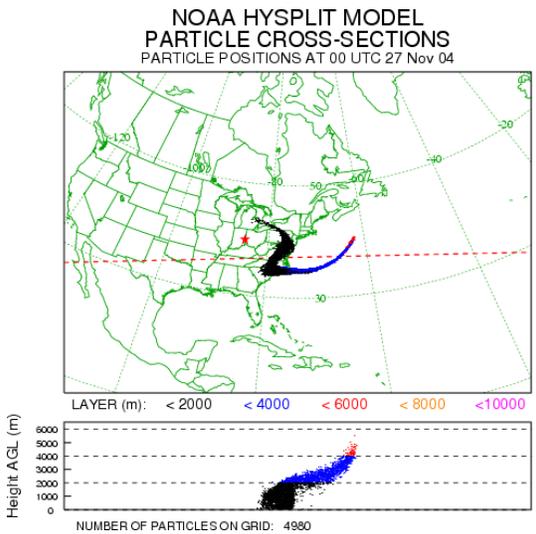
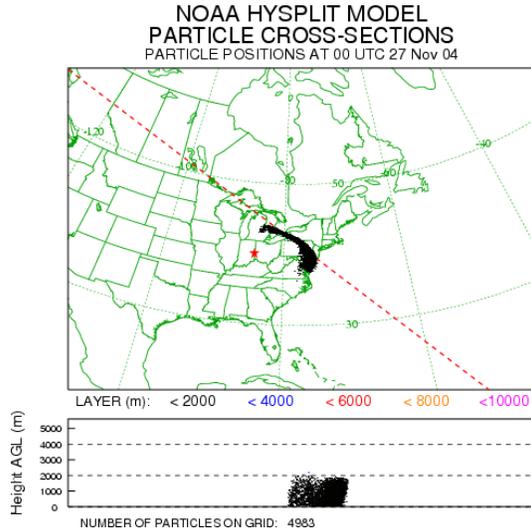
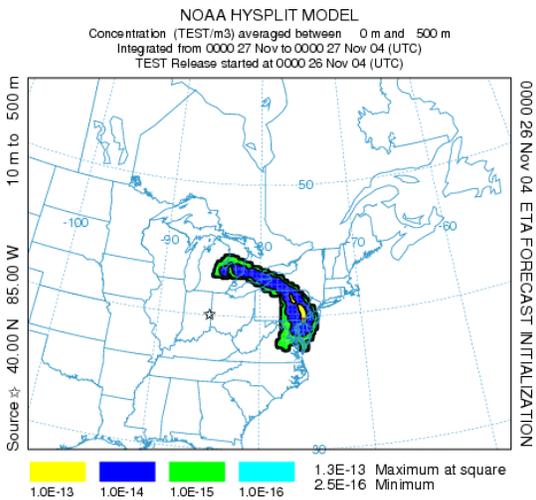
Boundary layer average: 500 m
 Temporally averaged: 24 h

Application:

Population dose

Aviation Issues (two panels below):

Instantaneous plumes narrower
 Vertical extent near ground



Volcanic Equivalent Simulation (left):

Initial distribution to 5 km
 More complex vertical structure

Unresolved Technical Issues:

- Purpose determines products!
- Health or aircraft issues?
- Aircraft:* landing, cruising, cleanup?
 - Cruising permits over-flights!
- Health:* typical permitted dose?
 - Duration aircraft in plume?
 - Aircraft shielding factors?
 - Adjust aircraft ventilation?