X-749 Cleanup

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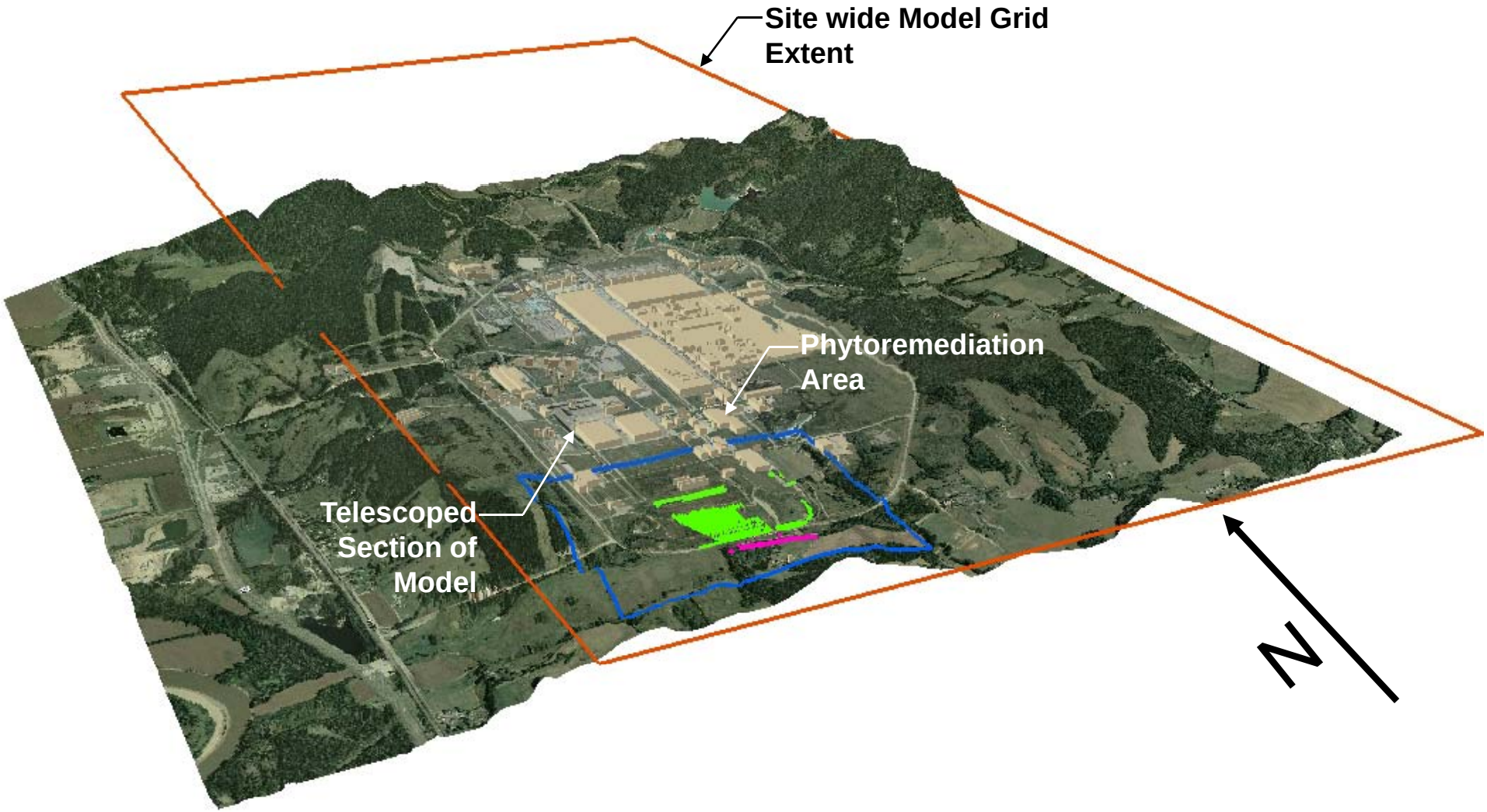
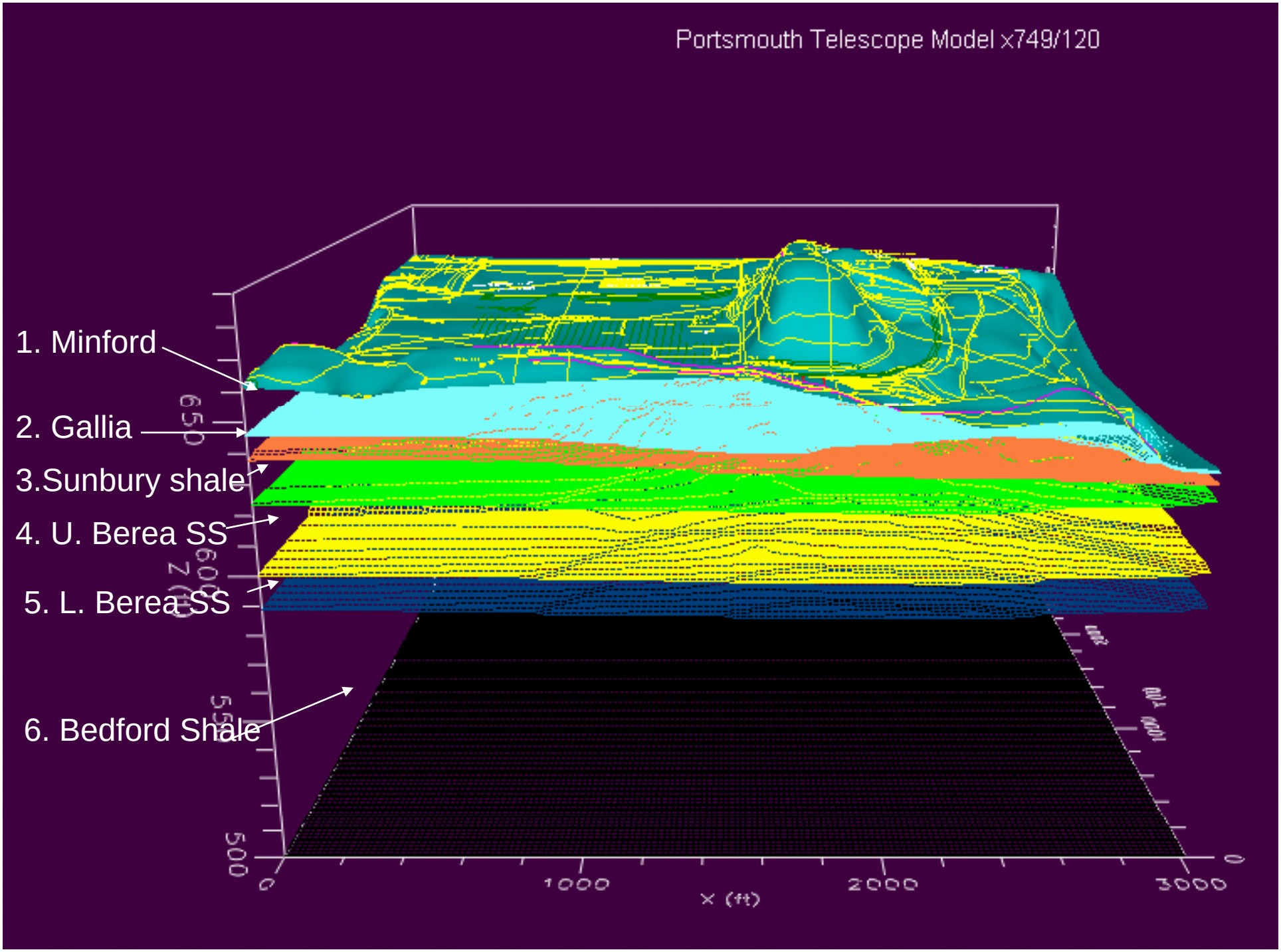
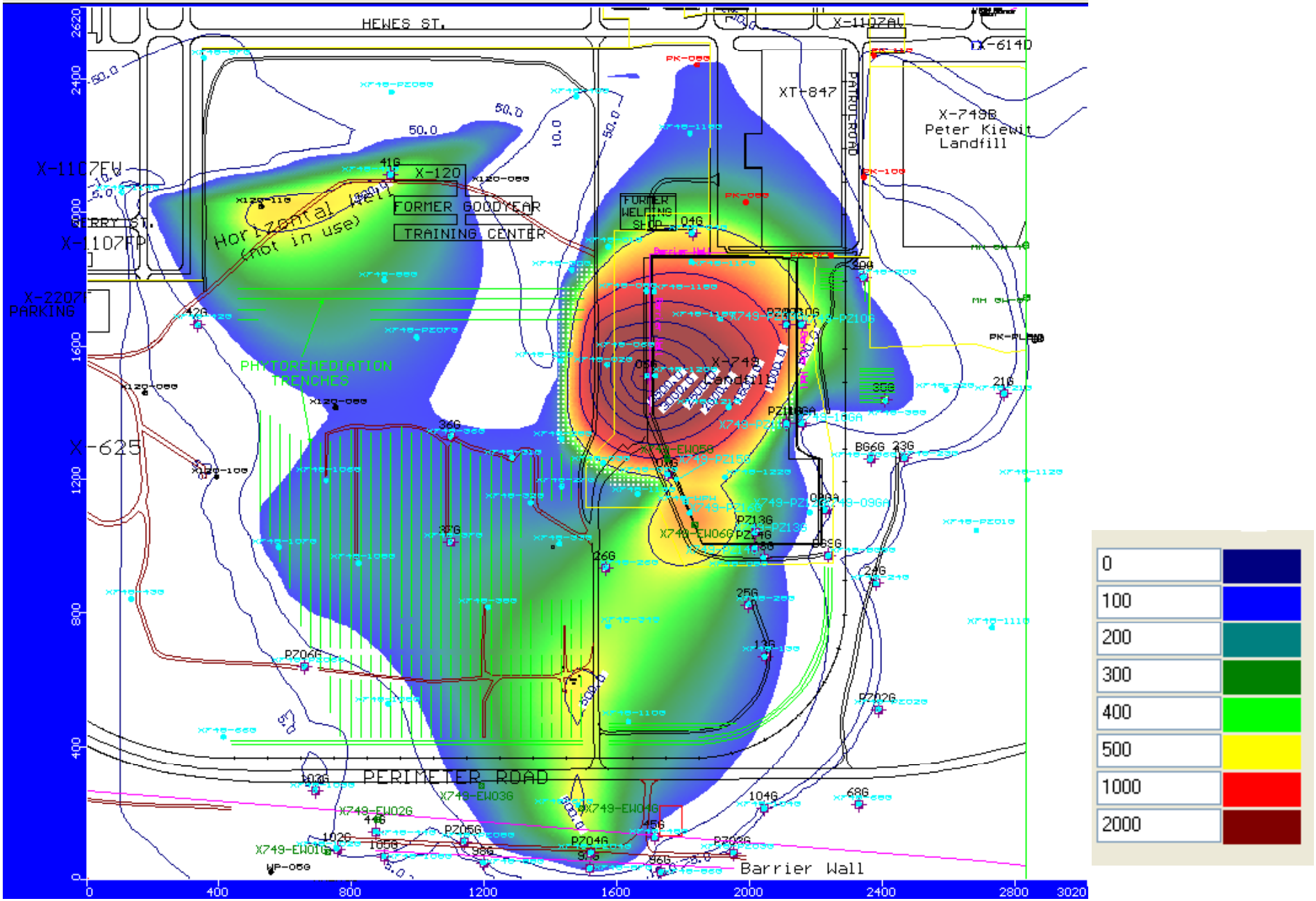
Portsmouth Gaseous Diffusion Facility



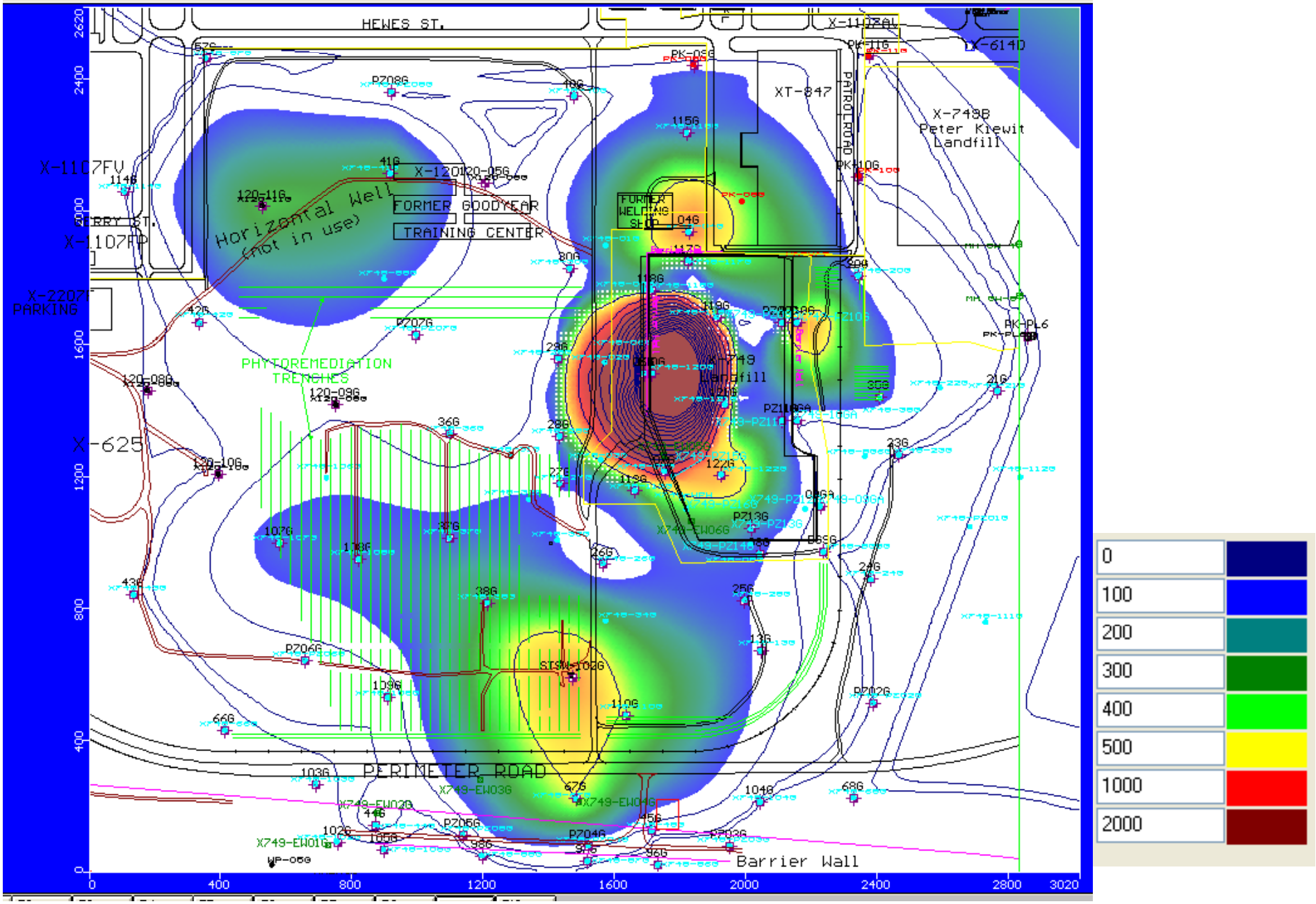
Telescoped Section of Model


Portsmouth Telescope Model x749/120
1. Minford
2. Gallia
3.Sunbury shale
4. U. Berea SS
5. L. Berea SS
6. Bedford Shale
650
600
550
500
Z (ft)
0
1000
2000
3000
X (ft)

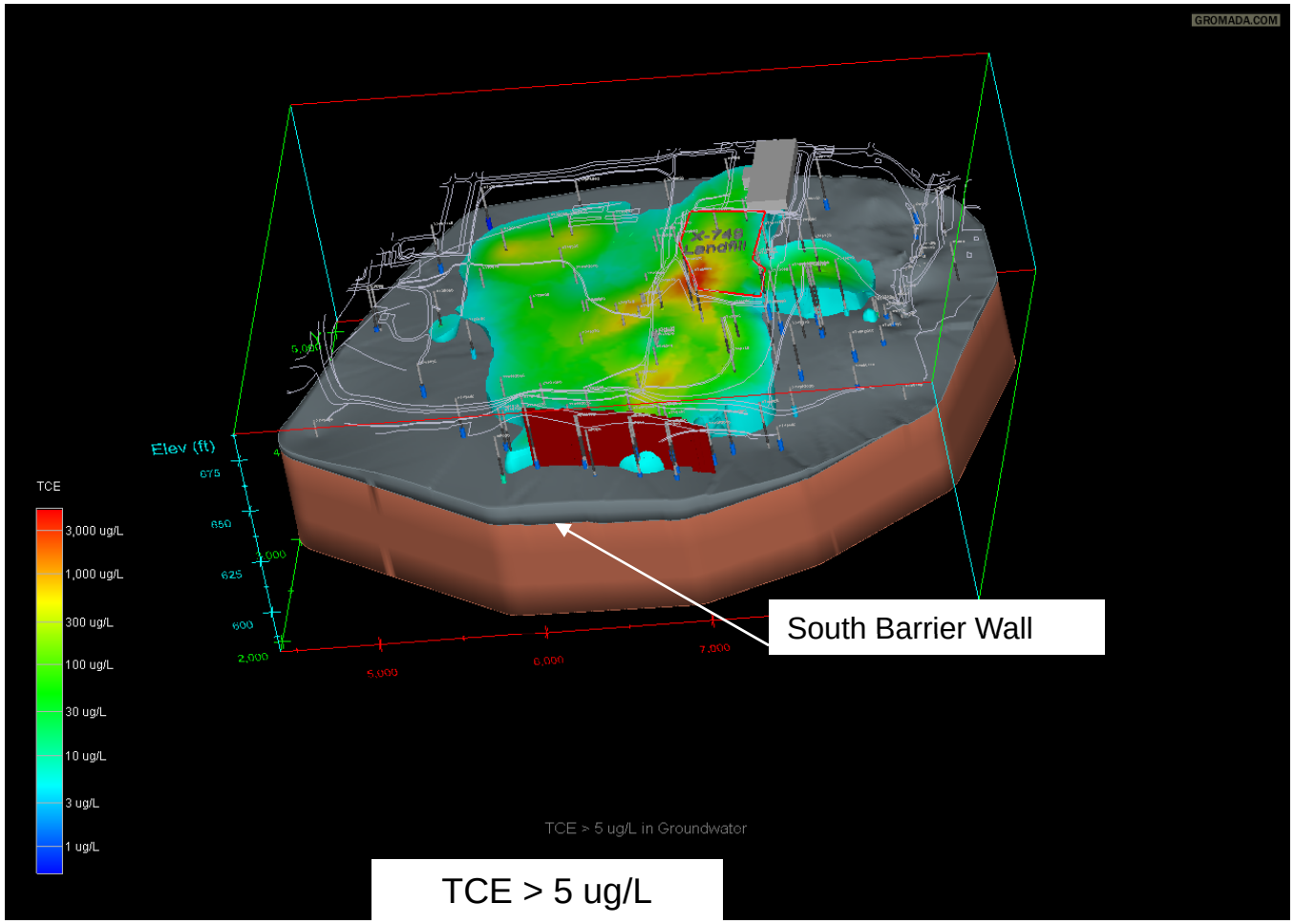
2006 TCE Plume



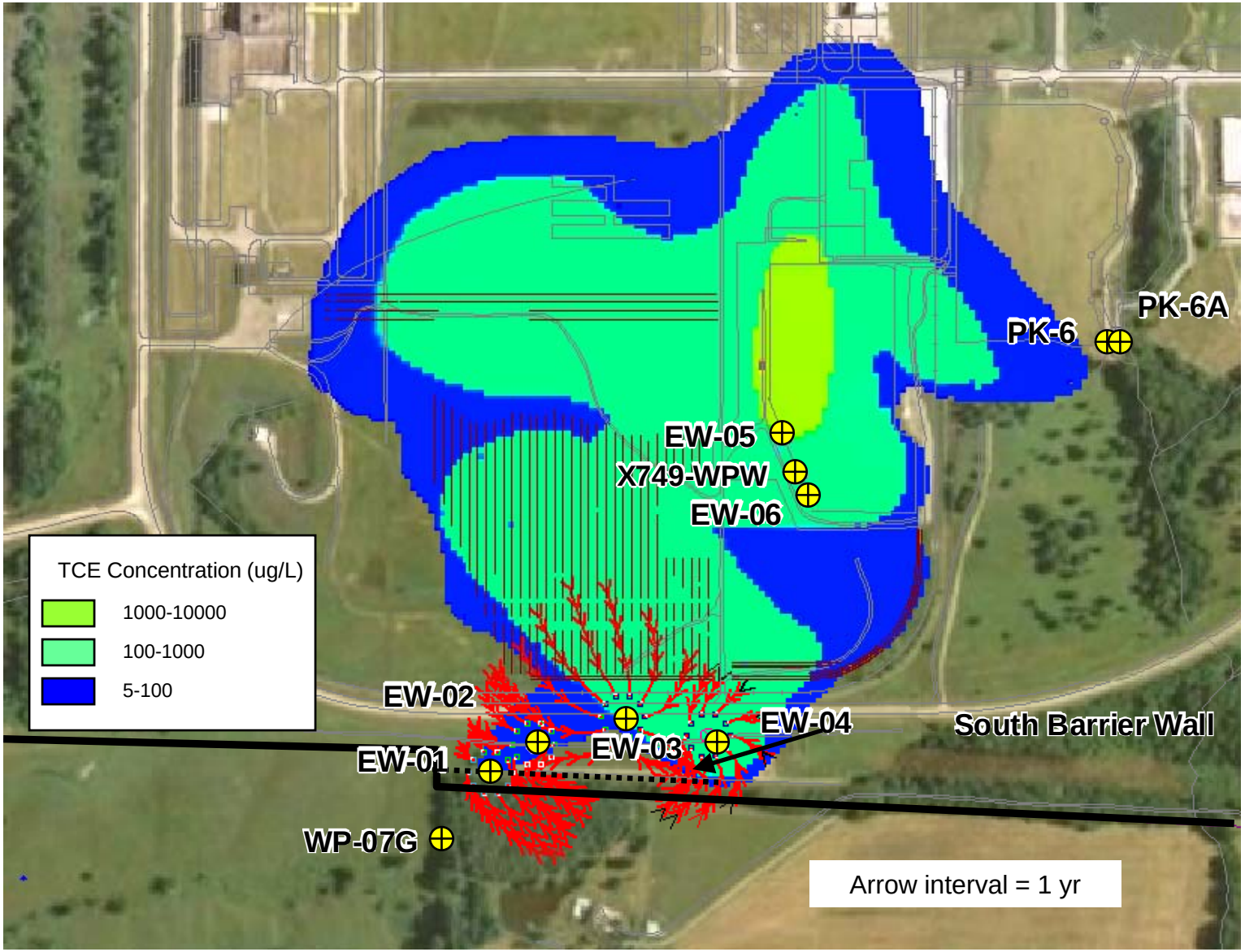
2008 TCE Plume



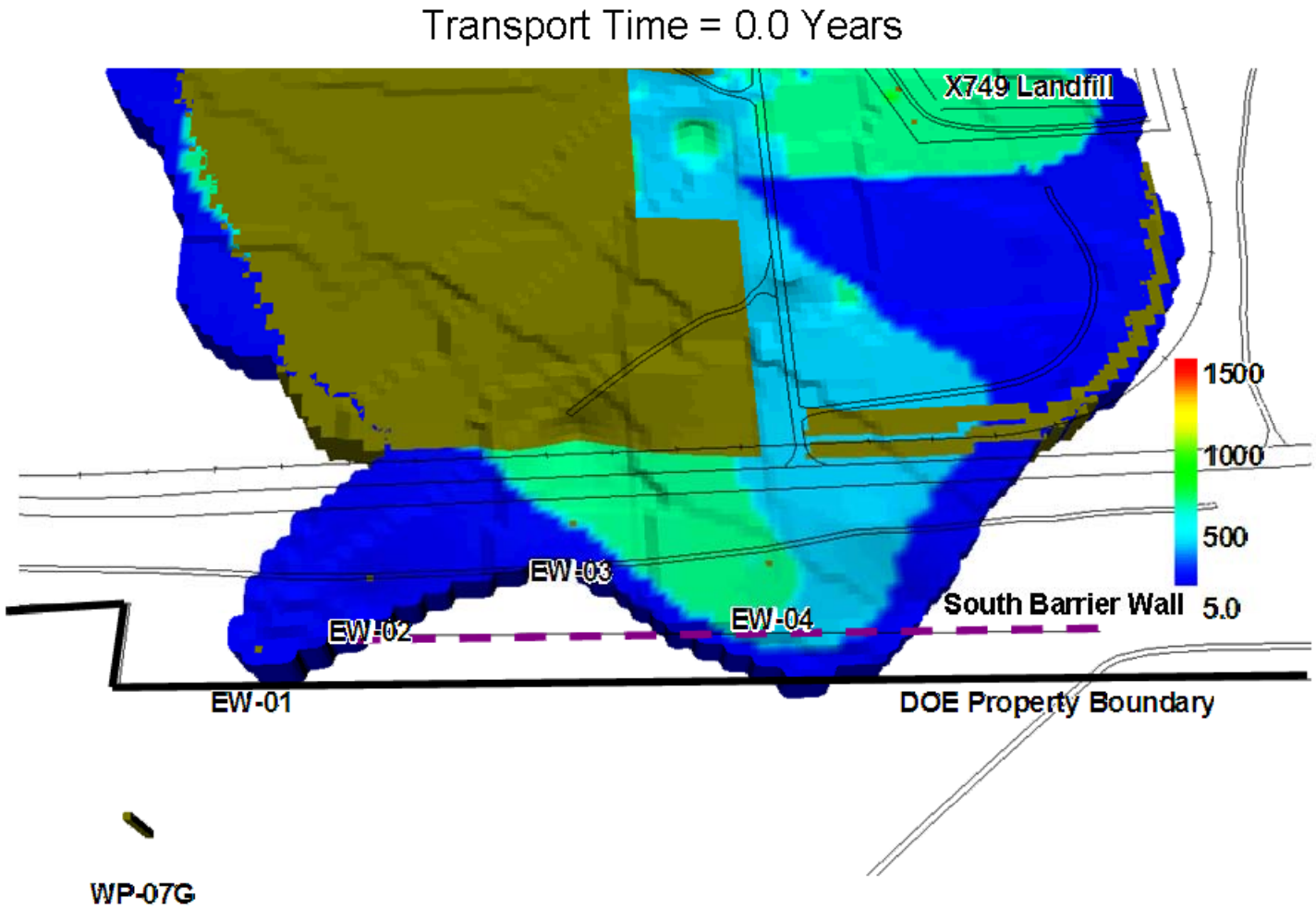
3D Visualization to Estimate Contaminant Mass and Focus Remedial Strategies



Five Year Capture Zone at South Barrier Wall



Estimated Plume Movement
Start Time = Summer 2007



Groundwater Model Refinement

- Objectives:
  - Evaluate Recharge and effect of Phyto planting
  - Develop water balance for recharge
- Approach:
  - Create a water balance based on site measured data
    - (i.e., precipitation, runoff, tree evapotranspiration, water levels)
  - Incorporate information into site groundwater model
- Plume Management Strategy
  - Use refined model to manage plume cleanup
  - Simulate different remedial options to determine most cost effective cleanup

Summary

- Existing systems providing hydraulic capture of plume
- Plume size has decreased since 2006
- Groundwater modeling tool is being refined
- Groundwater model will be used to manage and optimize the groundwater cleanup