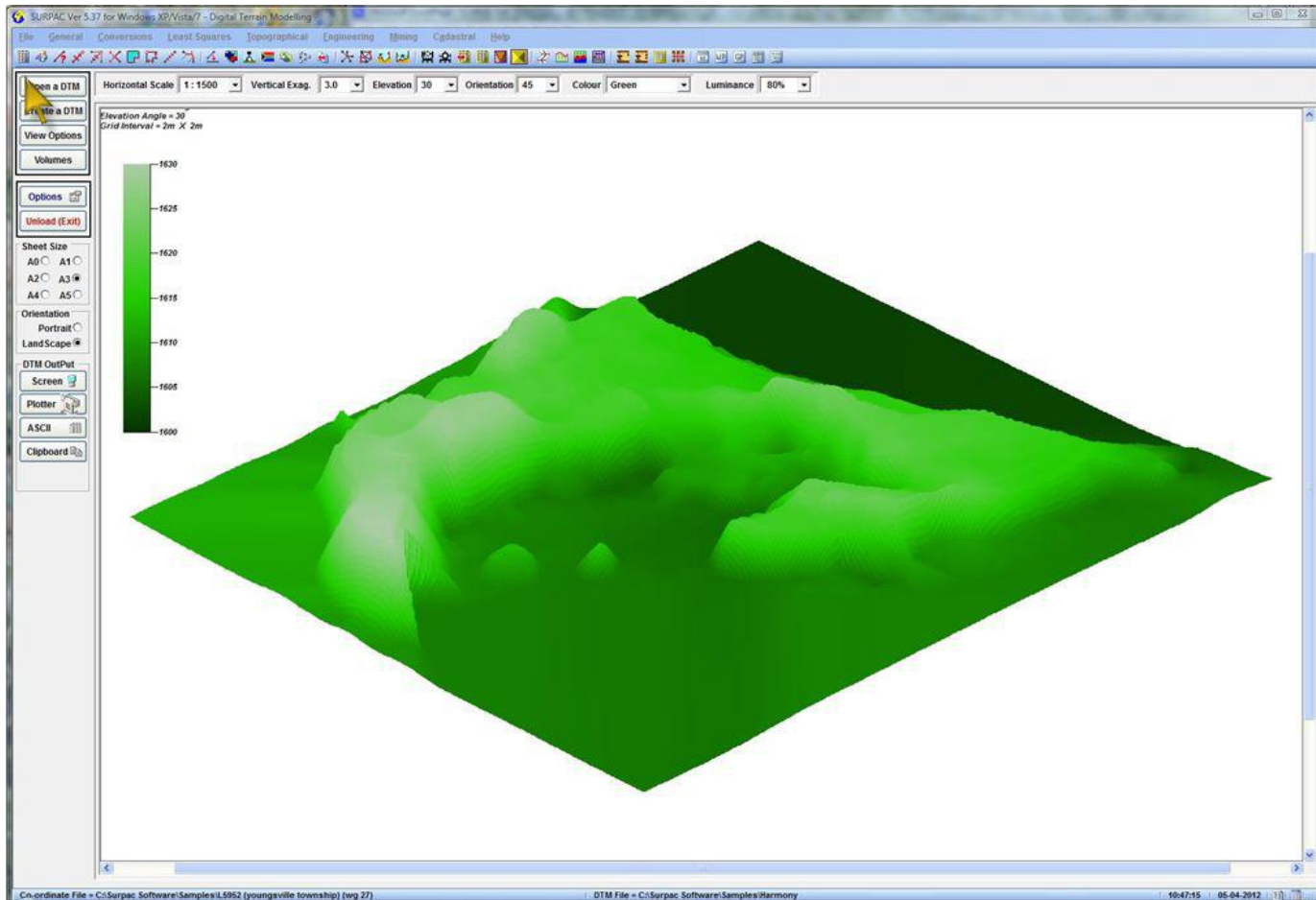**A DTM display using Solid Modelling and showing both surface and Base DTMs**

A DTM monochrome display showing multiple dump sites

Digital Terrain Modelling

This application has the following functions :-

Creating a Surface DTM and/or a Base DTM, using either :-

Contour Triangulation, or

Point data plus BreakLine data.

Displaying/Plotting a DTM using various options, such as :-

Showing either the Surface or the Base DTM,

Showing the DTM as either a solid model, or as a "wire frame" model,

Using any Viewing Direction or Tilt Angle,

Using various colour options for the display,

Setting a defined "water line" height and showing the model above and below this lir in different colour variations,

Dynamic rotation and tilting of the DTM display using the keyboard arrow keys (requires a fast PC!)

Calculating Volumes with the following options :-

- Determine the Cut and Fill Volumes between the Surface and Base models,
- Determine the Cut and Fill Volumes between the Surface model and a defined horizontal plane,
- Determine the Cut and Fill Balance Plane height for a Surface model,
- Determine the Cut and Fill Volumes between the Surface model and another, User defined, Surface model.

- General DTM application options include :-
  - Super-imposing a User defined Surface model onto the current Surface model,
  - Calculating the DTM slope Surface Area,
  - Calculating the Surface Area for a horizontal plane intersecting the Surface model,
  - Define and use a sub-area of a Surface model,
  - Display a Slope Analysis model of the current Surface model (showing slope vectors).

- DTM grid data, including BreakLine information, may be stored in an ASCII format for export to other applications.