Imaging

The Imaging block allows the user to choose or change the HU (Hounsfield Unit) to RSP (Relative Stopping Power) curve to use during the planning process. The user may also choose density overrides for existing structures at this point.

CT Curve

🔧 Fix Me!

Density Overrides

From within the Imaging block users may specify density overrides for existing structures.

The materials allowed for density overrides are pre-defined within the site configuration. Refer to the Site Configuration Setup for adding and managing the density override material list.

Density Override Order

Density overrides are applied in order from the first override in the list to the last override. Any subsequent density overrides applied after existing overrides may change previously overriden densities.

Example of Correct Density Override Order

For example, consider figure 2. The structures HI POLYSTYRENE and PROSTATE both have a density override applied.
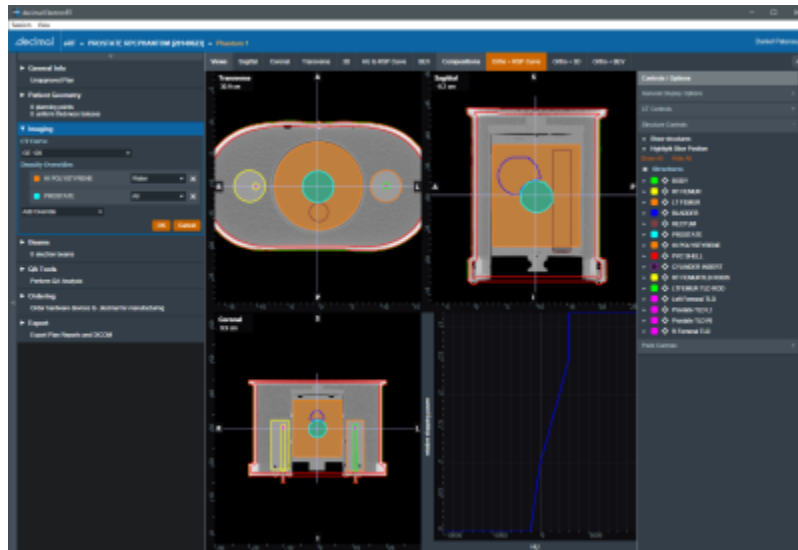
Fig. 2: Override Order

The HI POLYSTYRENE density override will be applied first and all pixels within this structure will be set to the density of 'Water'. Then the PROSTATE structure density override will be applied and all pixels within this structure will be set to the density of 'Air'. The resulting overrides can be seen in figure 3.

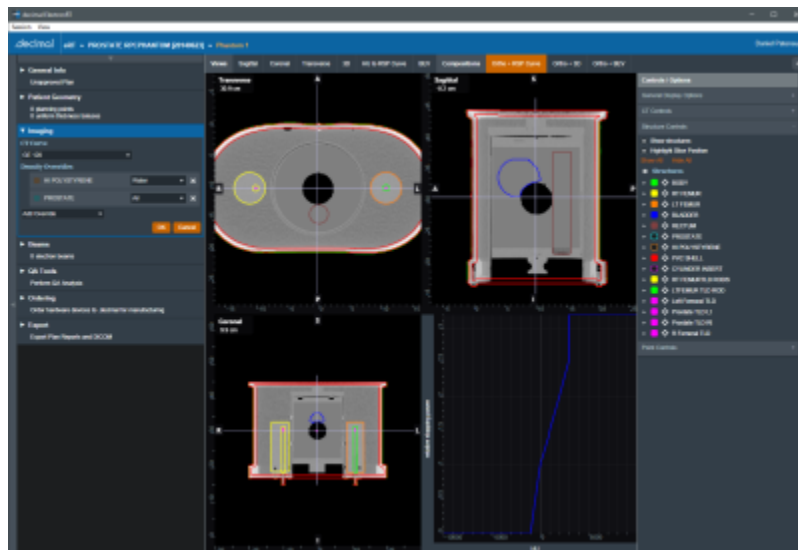Fig. 3: Override Order

Example of Incorrect Density Override Order

For example, consider figure 4. The structures HI POLYSTYRENE and PROSTATE both have a density override applied.

The PROSTATE density override will be applied first and all pixels within this structure will be set to the density of 'Air'. Then the HI POLYSTYRENE structure density override will be applied and all pixels within this structure will be set to the density of 'Air'. The resulting overrides can be seen in figure 4. Because the larger structure's density overrides were applied last, the smaller contained structure's density overrides were lost.
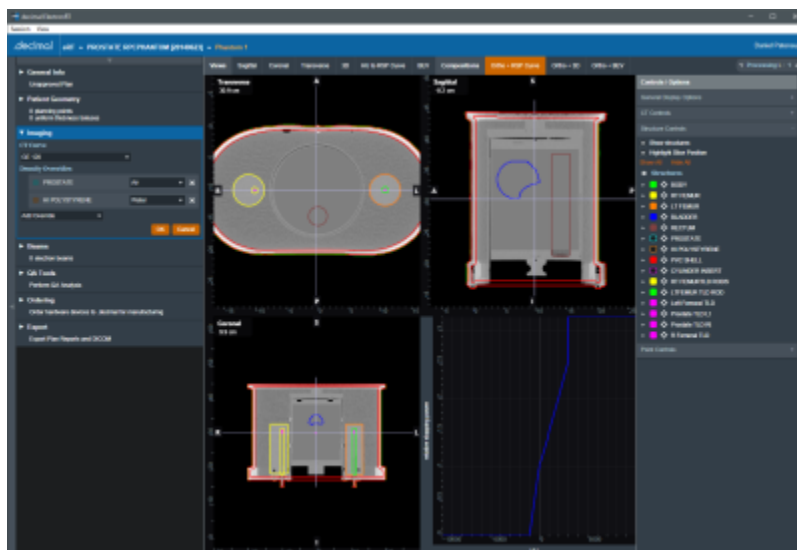
Fig. 4: Incorrect Override Order