

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

The user can select the HU to RSP CT curve from a list of curves that exist within the site configuration. Refer to the [Site Configuration Setup](#) for managing the list of curves. If only one CT curve exists in the site configuration, it will be automatically selected when the plan is created. The selected HU to RSP curve will be displayed in the bottom right section of the display UI.



Fig. 1: CT Curve

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 overridden densities.

Example of Correct Density Override Order

For example, consider [figure 2](#). The structures HI POLYSTYRENE and PROSTATE both have a density override applied.

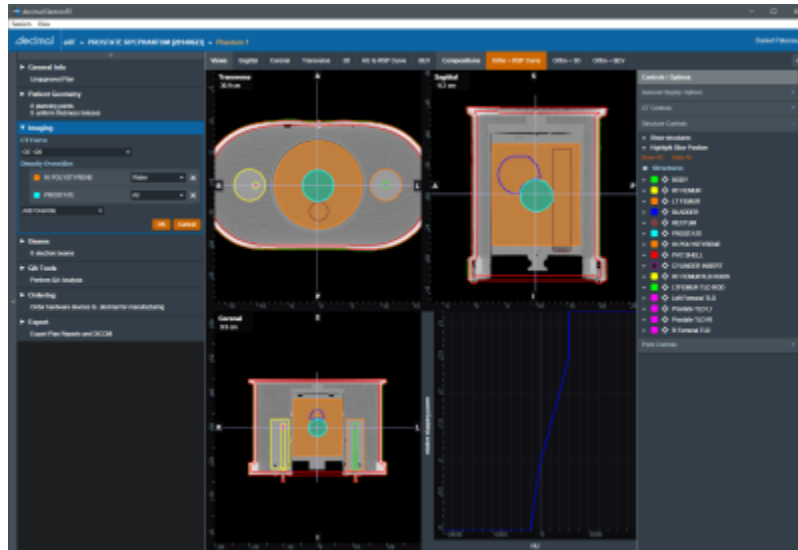


Fig. 2: Override Order

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](#).

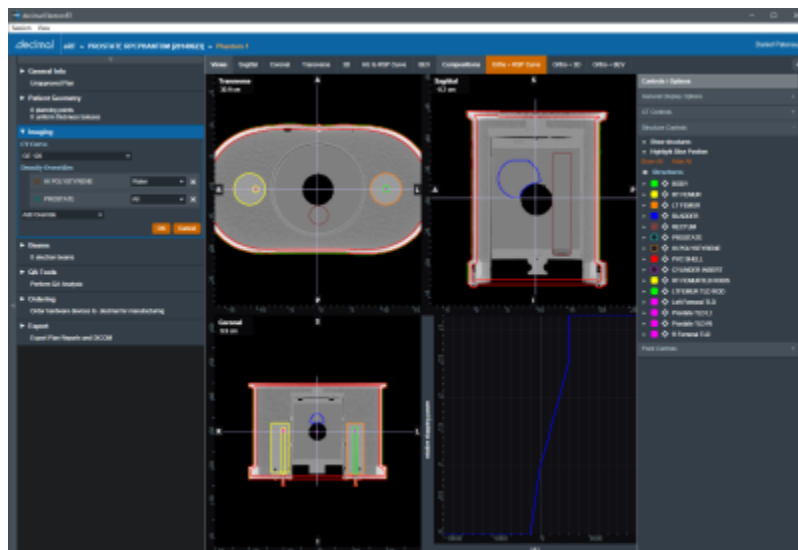


Fig. 3: Override Order

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.

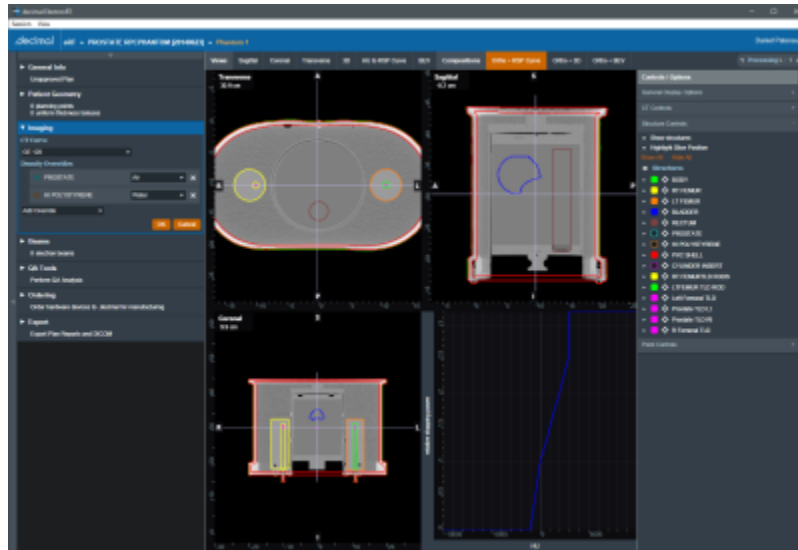


Fig. 4: Incorrect Override Order

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