

SBW Removal Profile — User Manual

App type: Streamlit

Common Tasks

A. View PRE or POST wafer profiles

1. Upload a PRE or POST .sbw file.
2. Select **Thickness** or **Flatness** from the dropdown menu.
3. Select **PRE** or **POST** in the segmented control.
4. Select one or more **Slots** from the multiselect dropdown menu. If multiple slots are selected, the plots are displayed in order.
5. (Optional) Check **Mask notch** in the sidebar to mask notch and filter out outlier values.
6. Click **Plot**.

B. View REMOVAL wafer profile

1. Upload **both** PRE and POST .sbw files.
2. Select **Thickness** or **Flatness** from the dropdown menu.
3. Select **REMOVAL** in the segmented control.
4. Select PRE slots and POST slots. If counts differ, the slots are paired in order.
5. (Optional) Check **Overlay line charts** in the sidebar to show PRE/POST on top of REMOVAL line charts.
6. Click **Plot**.

C. View average wafer profiles

1. Check **Average Profile**.
2. In PRE/POST profile mode: plots the average radial profile for the selected profile mode.
3. In REMOVAL profile mode: plots the average removal profile.

User Interface

Top controls

- Upload PRE .sbw | Upload POST .sbw: load .sbw files.
- **Thickness** | **Flatness** dropdown menu: select graph mode.
- **PRE** | **POST** | **REMOVAL** segmented control: select profile mode.
- **Average Profile** checkbox: switch to average profile mode.

Sidebar — Display controls



- **Color clip low (%)** : slide to set the lowest percentile used for color range to prevent notch (outlier values) from skewing colors (default 0.5).
- **Color clip high (%)** : slide to set the highest percentile used for color range (default 100).
- **Mask notch** : replaces notch (outlier values) (beyond $k \times MAD$, default $k = 4$) with NaN to prevent notch from skewing colors.
- (**REMOVAL** only) **Overlay line charts** : overlays PRE/POST lines on removal line plots.

Angle selection

- **Angle** slider: slide to select an angle for a single-angle line chart.

The angle and direction at which the wafer has been line-scanned is indicated by the arrow shown on the icon of a wafer on top right of the chart.

Controls and interactions

- **Hover**: shows x/y/z values.
- **Pan/Zoom**: use mouse to drag/scroll in plots.
- **Turnable rotation**: use mouse to drag and turn the surfaces.
- (**REMOVAL** only) / **button**: to switch between 2D and 3D plots for PRE and POST.