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.