BOIN
scientific software

WAFERMAP for Windows

APPLICATION NOTE 3: Editing Wafer Maps from Metrology Tools

There are many cases, where „bad points" or measurement errors occur at any type of metrology equipment. The reasons can be particle problems (e.g. during RTO), surface damages (e.g. slips, scratches, laser marks), problems during measurement (e.g. thicker oxide films when using a four point probe), non-uniform preprocessing (e.g. implant, sputtering) etc. It can be extremely helpful to be able to edit such mappings or to delete bad points.

WAFERMAP offers an easy way to edit or to delete bad points. In WAFERMAP for Windows select „Edit" → „Wafer Data" → „Sites, Values" → choose the specific site by either clicking on the site in the wafer on the right or by selecting it in the table on the left. Now WAFERMAP offers different possibilities:

- Deletion of this site (select „Delete Point" in the middle),

- Marking of this site to exclude it temporarily from the analysis (select „Mark Point" in the middle),

- Interpolation of a new value for this site from the neighbour values (select „Interp. Point" in the middle), or

- Entering any specific value for this site into the table on the left.

Example:

An oxidized 200 mm wafer displays a particle problem in the lower, left edge area (Fig. 1). This is also found in the statistical analysis given by the histogram (Fig. 2). The according site was deleted as described above and the contour plot was displayed again (Fig. 3). Additionally, the new statistical analysis is presented as histogram (Fig. 4).
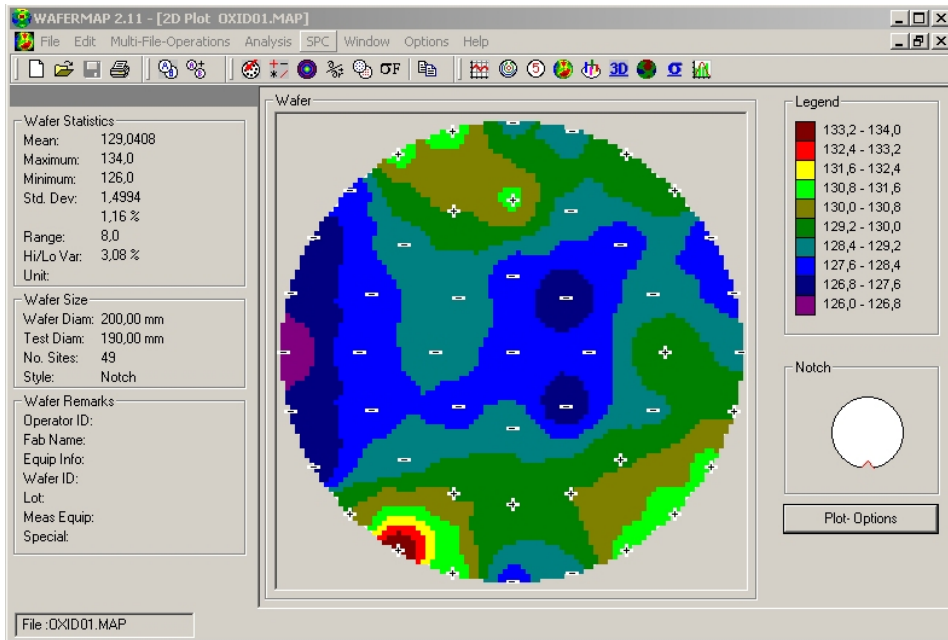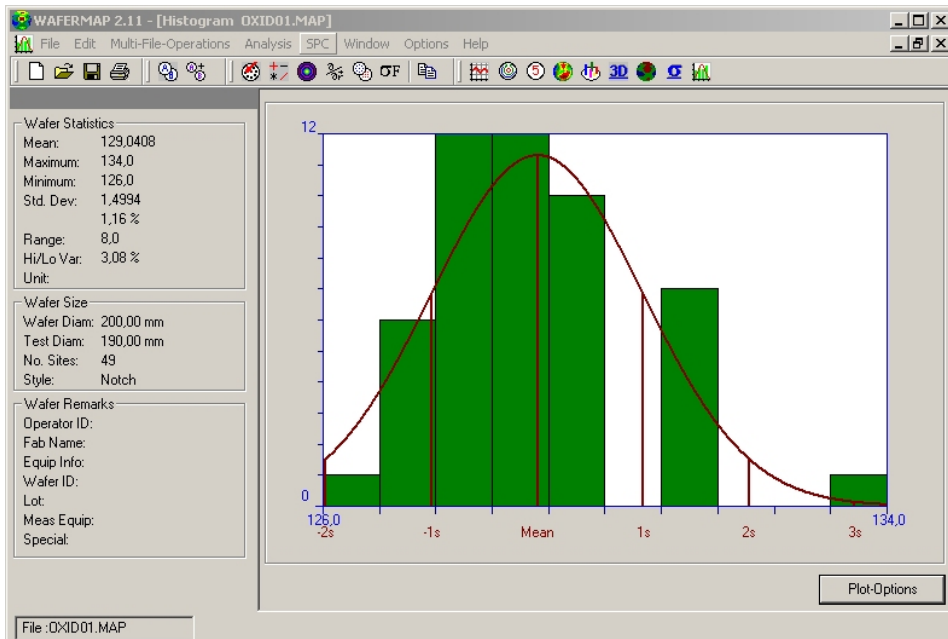
Figures:

Fig. 1: 2D Plot of Oxide map with measurement error

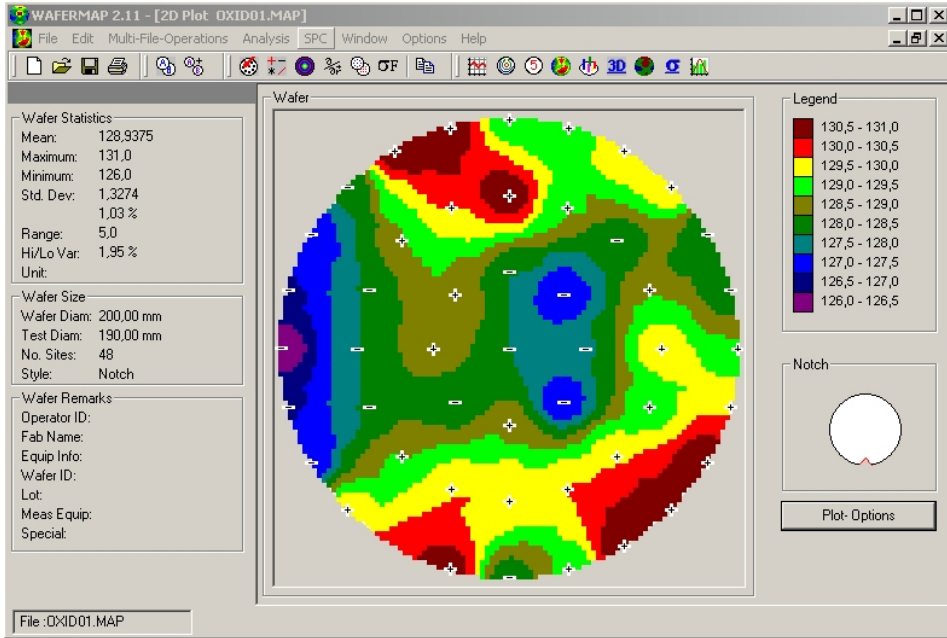Fig. 2: Histogram of Oxide map with measurement error
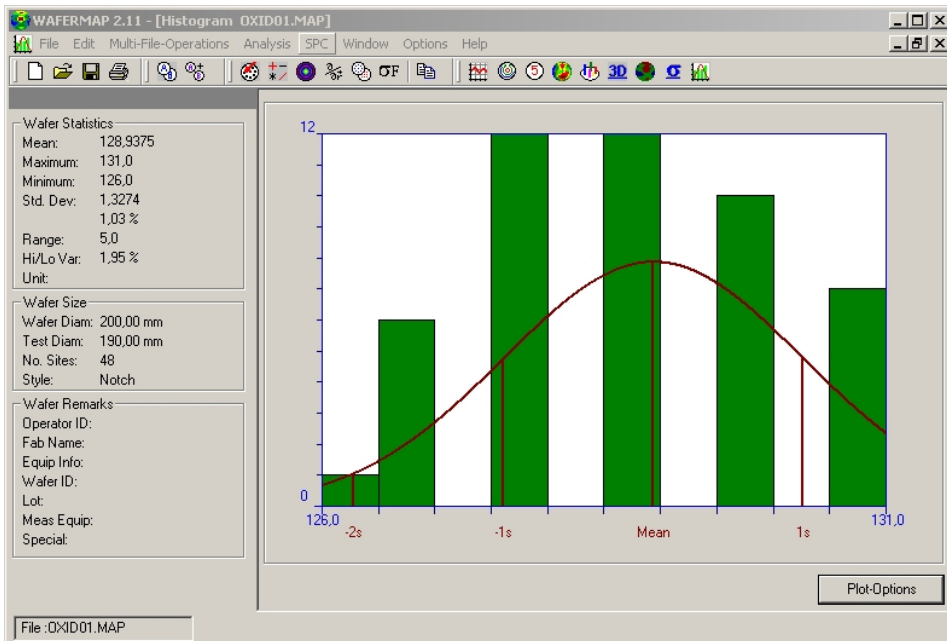
Fig. 3: 2D Plot of Oxide map after deleting the „bad" site

Fig. 4: Histogram of Oxide map after deleting the „bad" site