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 you different possibilities: You can either
- delete this site (select „Delete Point" in the middle),
- mark this site to exclude it temporarely from the analysis (select „Mark Point" in the middle),
- interpolate the value of this site from the neighbour values (select „Interp. Point" in the middle), or
- enter any specific value for this site into the table on the left

Example:

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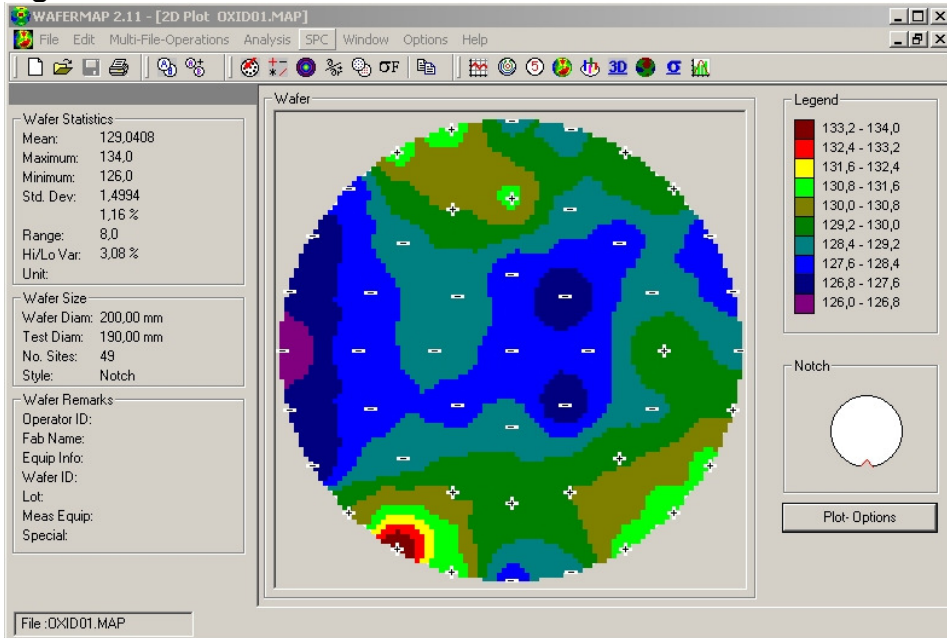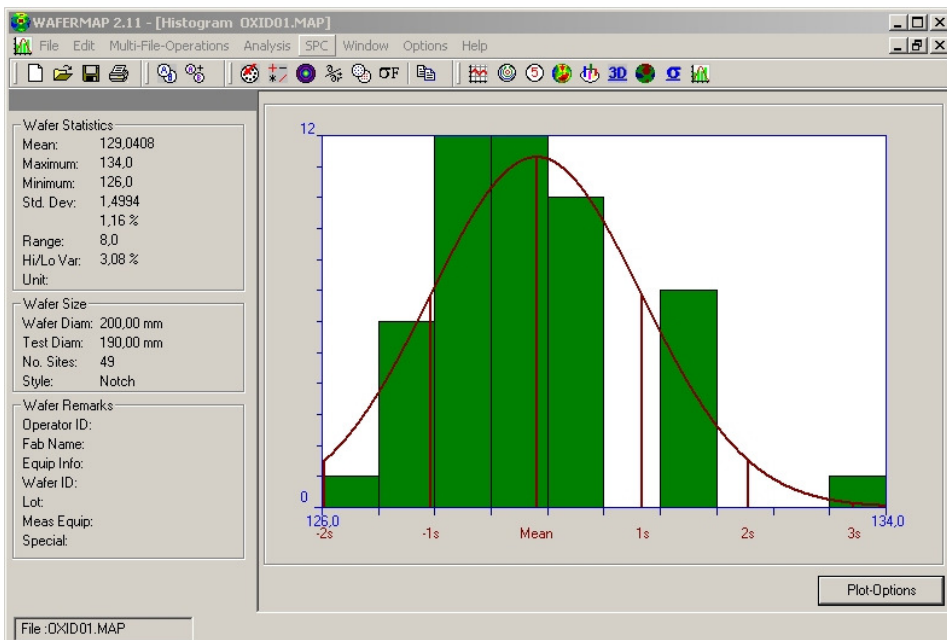
Figures:

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

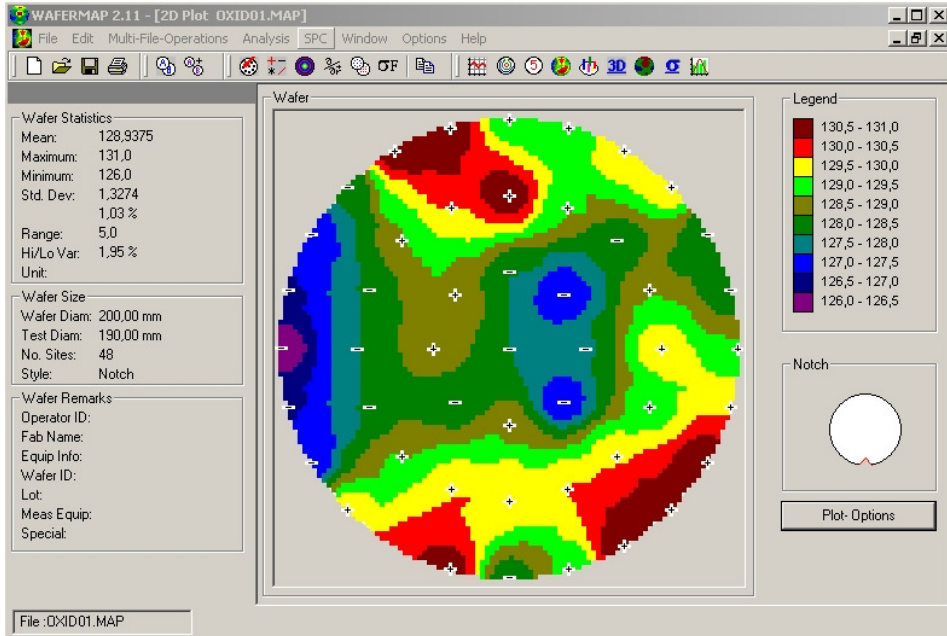Fig.2 Histogram of Oxide map with measurement error
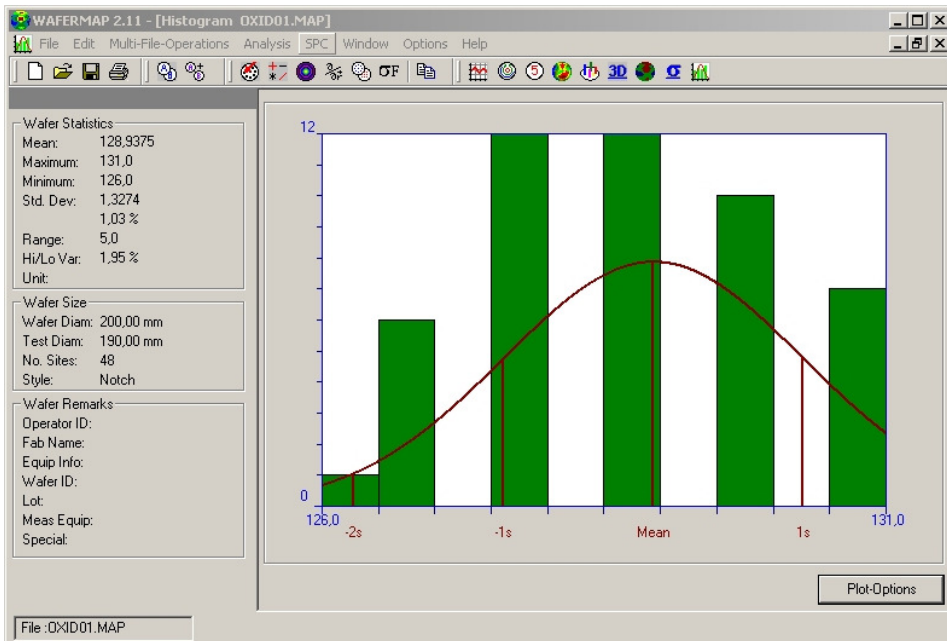
Fig.3 2D Plot of Oxide map after deleting „bad" site

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