

Offline EBSD Bug Report

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The Top & Left values of EBSD map Region of Interest (ROI) must be minimum ONE pixel. If one or both values are smaller than 0.500 pixel, the program would assume this value as 0 pixel. Then the followed EBSD offline TSL indexing would be in trouble (even though there is no trouble for online EBSD data collection), i.e. in such case, TSL could not determine the ROI location and scale bar etc., which resulted "no solution" during EBSD indexing.

As shown in the below test (a) at SEM 800X, where ROI width as 50 micron (268 pixels), the left origin was at 0.100 micron which could be calculated to represent by 0.540 pixel and the program adopted as 1 pixel which resulted this ROI selection is **valid**. While in (b), the left was 0.010 micron which could be calculated to represent by 0.054 pixel and the program adopted as 0 pixel which resulted this ROI selection is **invalid**.

Clearly, the validness of selected Top & Left is depended on the SEM magnification and the program resolution setting for Electron Image, e.g. in the below (c) at SEM 2000X where ROI width as 25 micron (560 pixels), the top origin was 0.030 micron which could be calculated to represent by 0.670 pixel and the program adopted as 1 pixel which still resulted this ROI selection is **valid**.

The corresponding test data are saved at, <http://folk.ntnu.no/yingday/IG/OfflineEBSD>

