Example 2: Reducing Wasteful Retests

Finding the Issue

The Optimal+ solution's portal shows that while online retest rate is high for a product, the yield reclaimed by retesting the dice was very small. This looked like an opportunity to increase throughput or to pay less retest costs by eliminating wasteful retests (i.e. retest of dice with a low probability of becoming "good".)

Performing the Analysis

The engineer uses the wafer map viewing capabilities of the solution's portal to display a stacked composite wafer map containing the final results after all retests. The small yellow triangles highlight dice which were retested. As is clear from the picture, very few of the dice were reclaimed and 98% of the retest did not result in any bin recovery/bin switching. The retest policy is changed to retest only those bins with significant recovery rates.

Preventing Future Recurrences

Retest recovery rate rules are defined in the rules interface and are triggered whenever low retest recovery rates are achieved, enabling the user to fix the issue quickly and increase throughput.