

MetaMorph® 7 – Linescan and Kymograph

OVERVIEW

The Linescan and Kymograph functions in MetaMorph 7 contains two bugs, one which affects logging of Linescan measurements, and the other which affects the Linescan and Kymograph measurement values under certain conditions. This technical note explains the two issues and their solution.

NOTES:

- These issues do not apply to Linescan or Kymograph in versions earlier than MetaMorph 7.0
- These issues are corrected in the Linescan and Kymograph version 7.1.2 and later.
- Users with MetaMorph 7.0, 7.0r1, 7.0r2, 7.0r3, 7.0r4, 7.1, and 7.1.1 are affected by these issues.

ARTICLE #
T20062

PRODUCTS
MetaMorph 7.0 through
MetaMorph 7.1.1

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11-Apr-2007

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12-Apr-2007

LINESCAN PROBLEM LOGGING DATA

MetaMorph 7.0 introduced a problem with the Linescan function where logged data does not match data displayed on the Linescan measurement graphs.

Figure 1 illustrates an example. In this example, the line is 110 pixels in length. However, the data logged to Excel only has the first 84 data points (rows 2 through 85, row 1 contains the headers). The data logged matches the data graphed, however the log does not contain all of the data that is graphed.

LINESCAN AND KYMOGRAPH PROBLEM MEASURING

MetaMorph 7.0 introduced a problem with the Linescan and Kymograph functions where the Linescan and Kymograph will measure incorrectly under the following conditions:

- The *Line Width* is greater than 1, and
- The *Direction* of the line drawn is from Lower Right to Upper Left

Figure 2 illustrates an example for Linescan. In this example, lines are drawn in different orientations. The lines have a width of 10. The line drawn from Lower Right to Upper Left measures incorrectly.

Figure 3 illustrates an example for Kymograph. In this example, the line drawn from Lower Right to Upper Left generates an incorrect Kymograph in MM 7.1.1 but a correct Kymograph in MM 7.1.2.

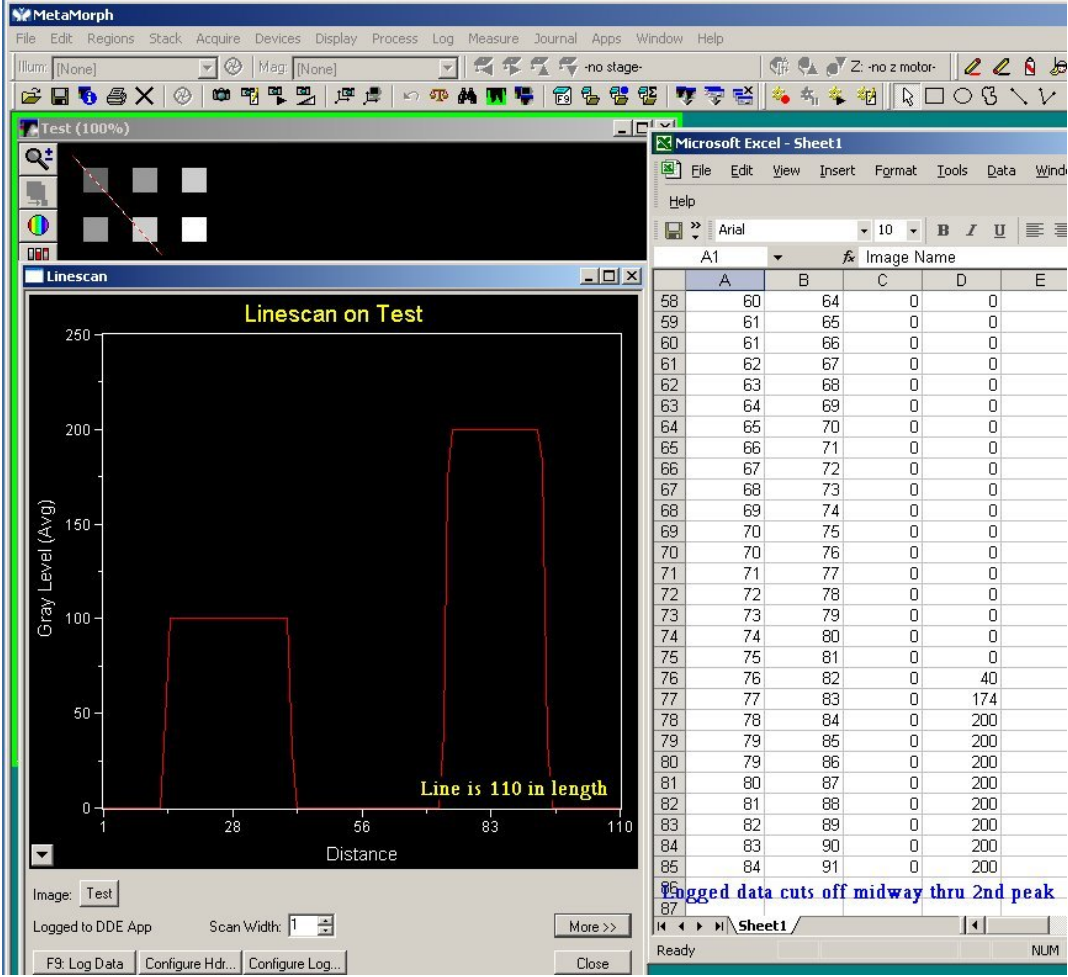
SOLUTIONS TO THE LINESCAN AND KYMOGRAPH PROBLEMS

The problems described in this technical note are corrected in the MetaMorph 7.1.2 update. If you are running any version of MetaMorph 7 that is earlier than 7.1.2, please visit our website at <http://www.meta.moleculardevices.com/updates/> to obtain the 7.1.2 update. If you encounter any problems retrieving the update, please contact our office for MetaMorph Technical Support:

- By Phone at 1-610-873-5610
- By Email at support.dtn@moldev.com

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FIGURE 1
LINESCAN LOG FILE DOES NOT MATCH DATA GRAPHED

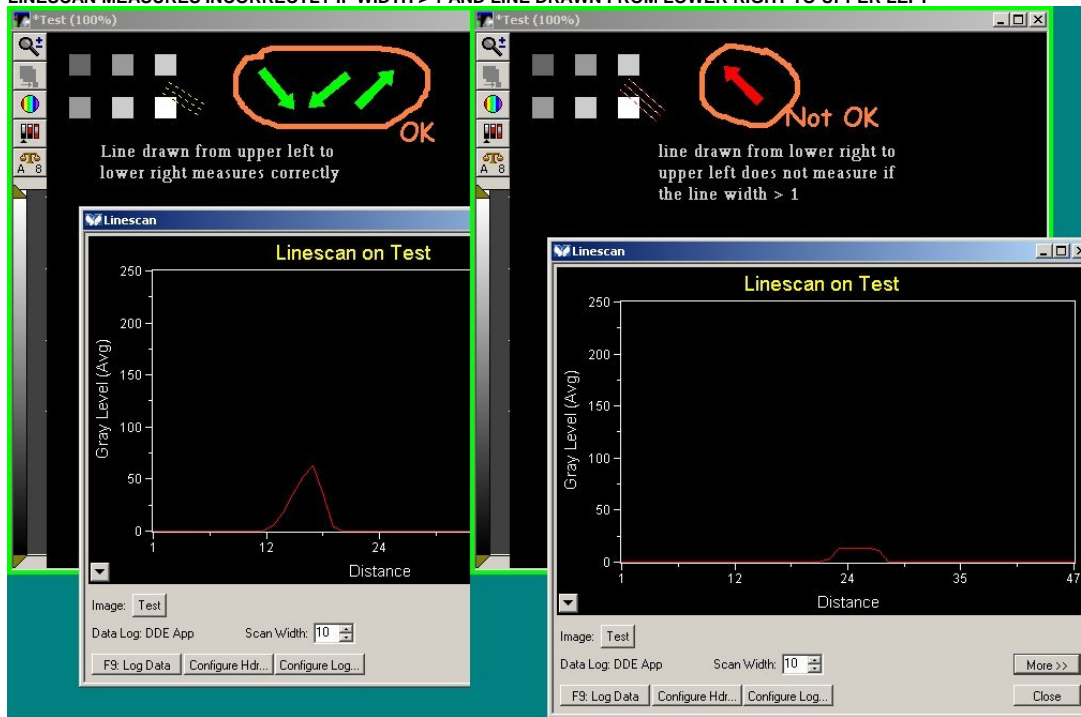


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FIGURE 2
LINESCAN MEASURES INCORRECTLY IF WIDTH > 1 AND LINE DRAWN FROM LOWER RIGHT TO UPPER LEFT



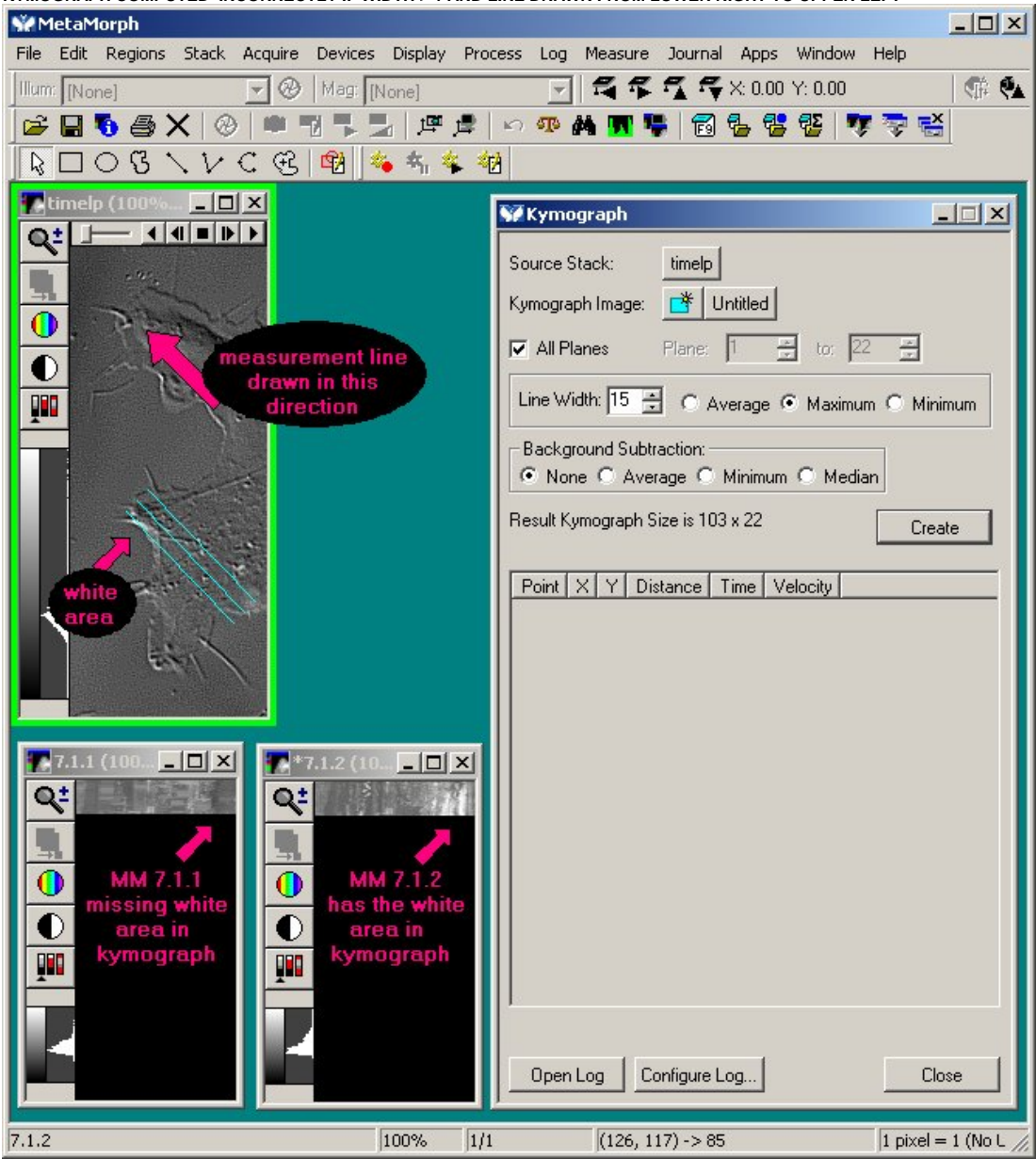
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FIGURE 3
KYMOGRAPH COMPUTED INCORRECTLY IF WIDTH > 1 AND LINE DRAWN FROM LOWER RIGHT TO UPPER LEFT



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