High Resolution Elevation QA Review Report

Project: Iowa_SE_01-15_SEF_01-03_Lidar_2010   **Contract ID:**

Liaison: Bob Lernen   **Partner(s):**   **Contractor:** Sanborn Map Co. Inc

Data Delivery Date: 02/10/2009, 03/11   **Date Data Reviewed:** 01/14/2011 - 01

Reviewer: Rusty Grout / Eric Jaramill   **Total Square Miles Reviewed:** 5660 sq. miles

Elevation Type: LIDAR   **Format:** xyz   **Grid Spacing:** 1 meter   **Tile size:** 1000 x 1000

Projection: UTM   **Zone:** 15   **Datum:** NAD83   **Units:** Meters

Licensing: Public Domain   **Metadata:** Project Level   **Acquisition Date:** 04/07/2007 thru

Materials Received:

Bare earth ASCII .xyz files
Las point cloud .xyz files
Metadata
Shape files

Vertical Accuracy Test Performed: Yes   **Test Point Source:** Contractor   **RMSE:** 0.323 and 0.18

Vertical Accuracy Test Notes:

A vertical check was performed on Iowa SE 01-15 and SEF 01-03 bare earth data. See the Iowa Statewide Lidar Project Vertical Accuracy Report sent with the final .img data.

QA Review Summary:

All of Iowa SE 01-15, SEF 01-03 one meter Lidar data was reviewed. This data was brought into Global Mapper as .xyz point files. Las point files were created from the .xyz files then gridded to 1 meter data for QA/QC. Errors found throughtout this project and fixed in Global Mapper are (bridges not taken out, areas need to be leveled, bldgs need to be removed, (errors found on this project and fixed by the contractor is elevation errors, missing data and a offset see examples below) .
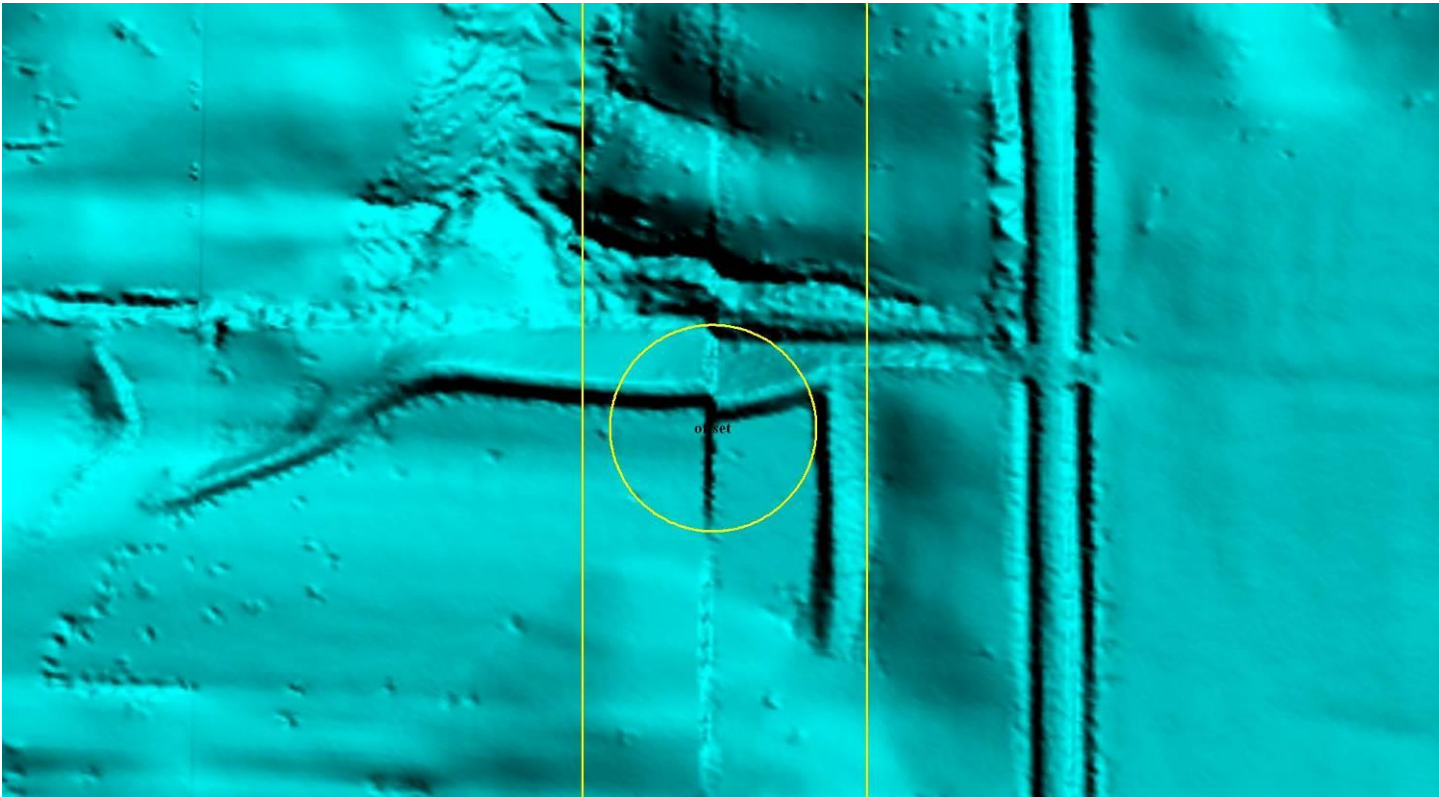
See error JEPG examples and documents attached below.

Conclusions: 1. 89% of artifacts removed
2. 90% of vegetation removed
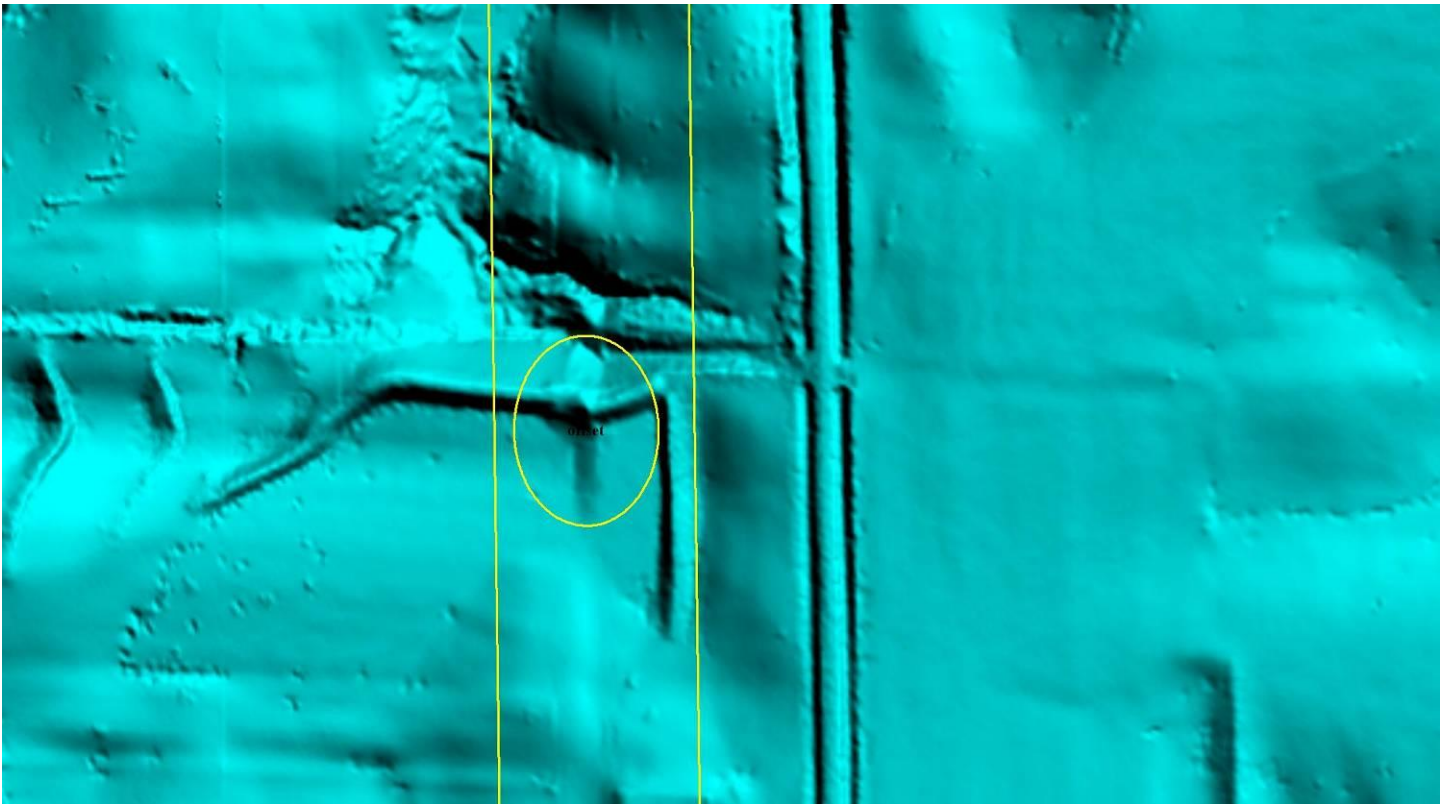3. 95% of buildings removed

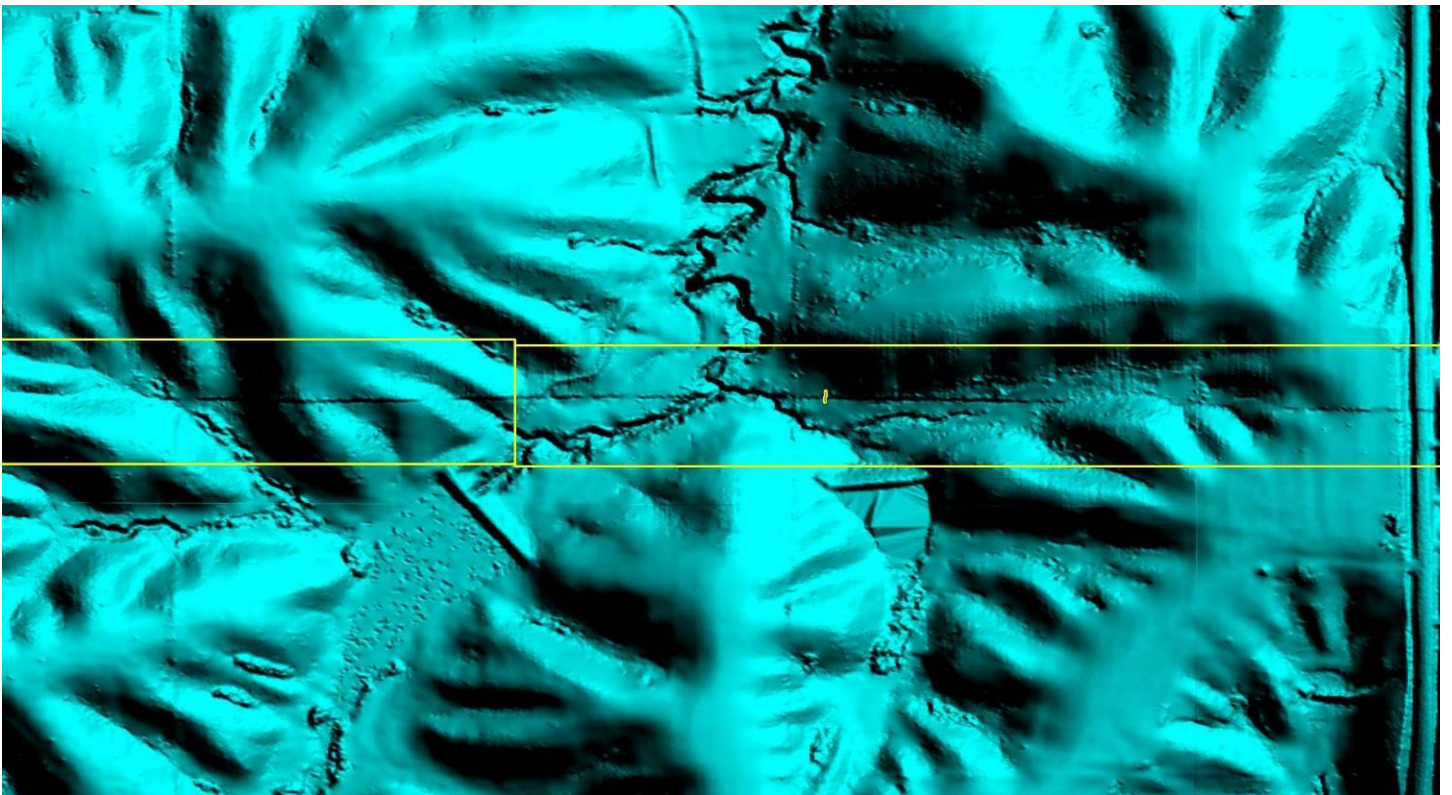# Iowa SE 01-15 SEF 01-03
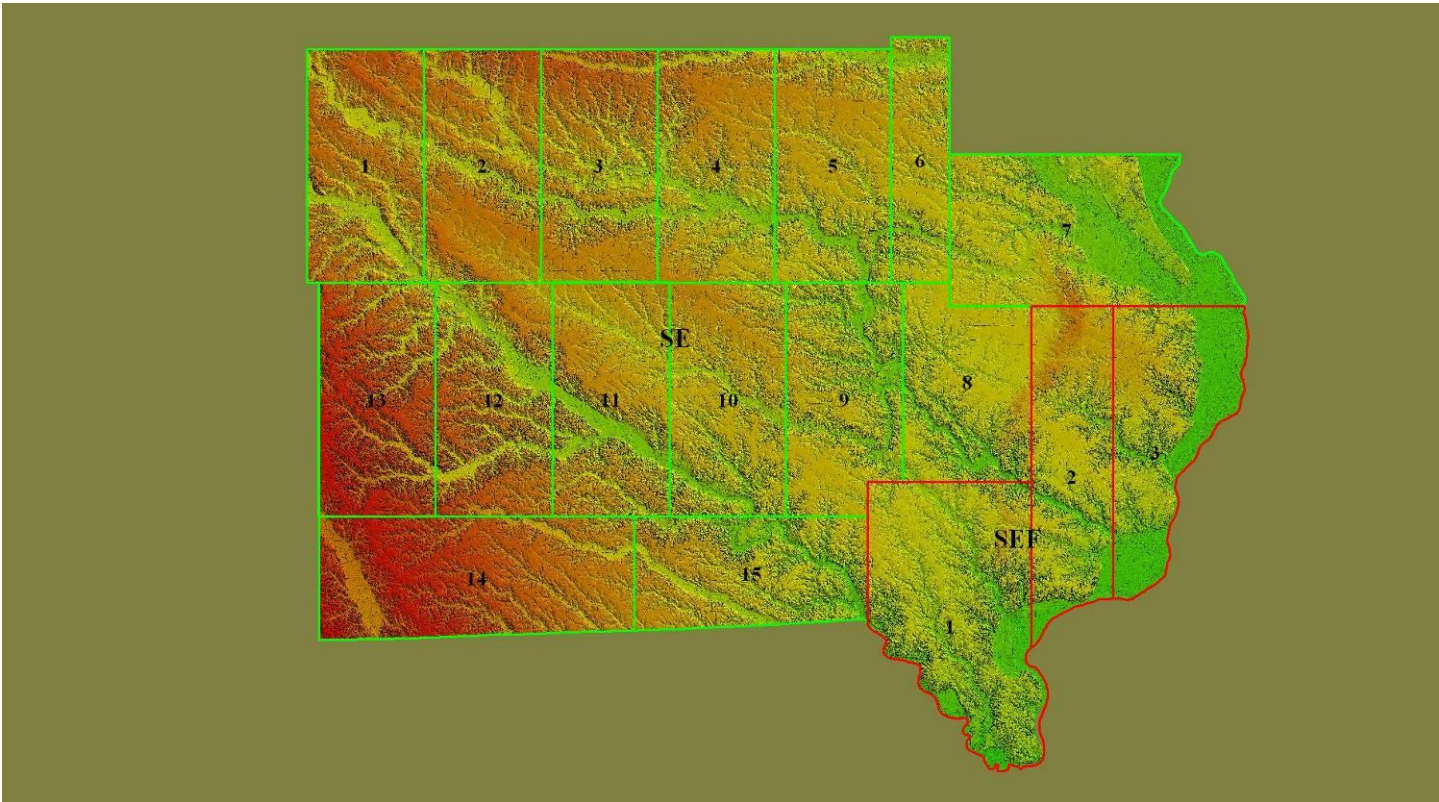
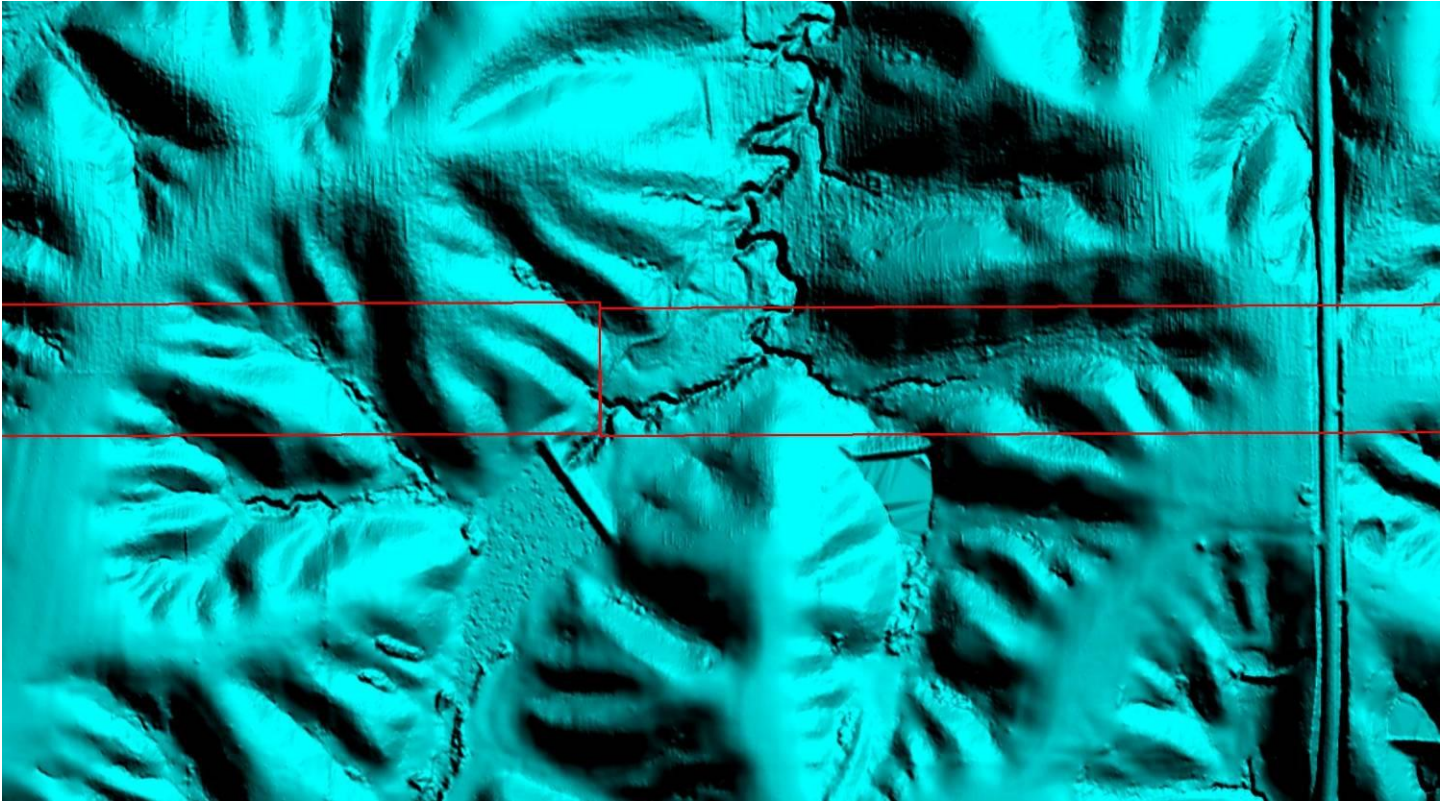# Elevation error and offset

Elevation error and offset (Fixed)
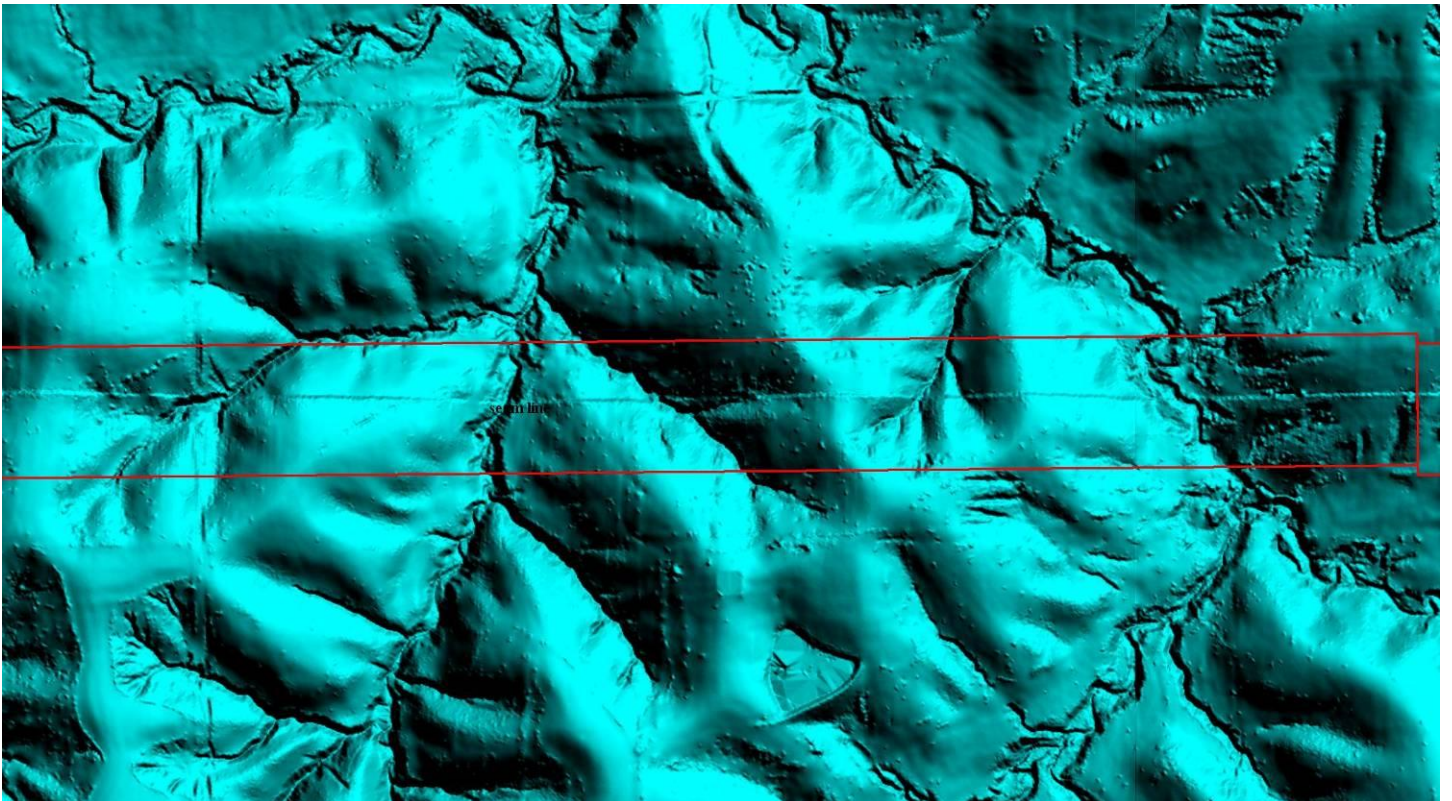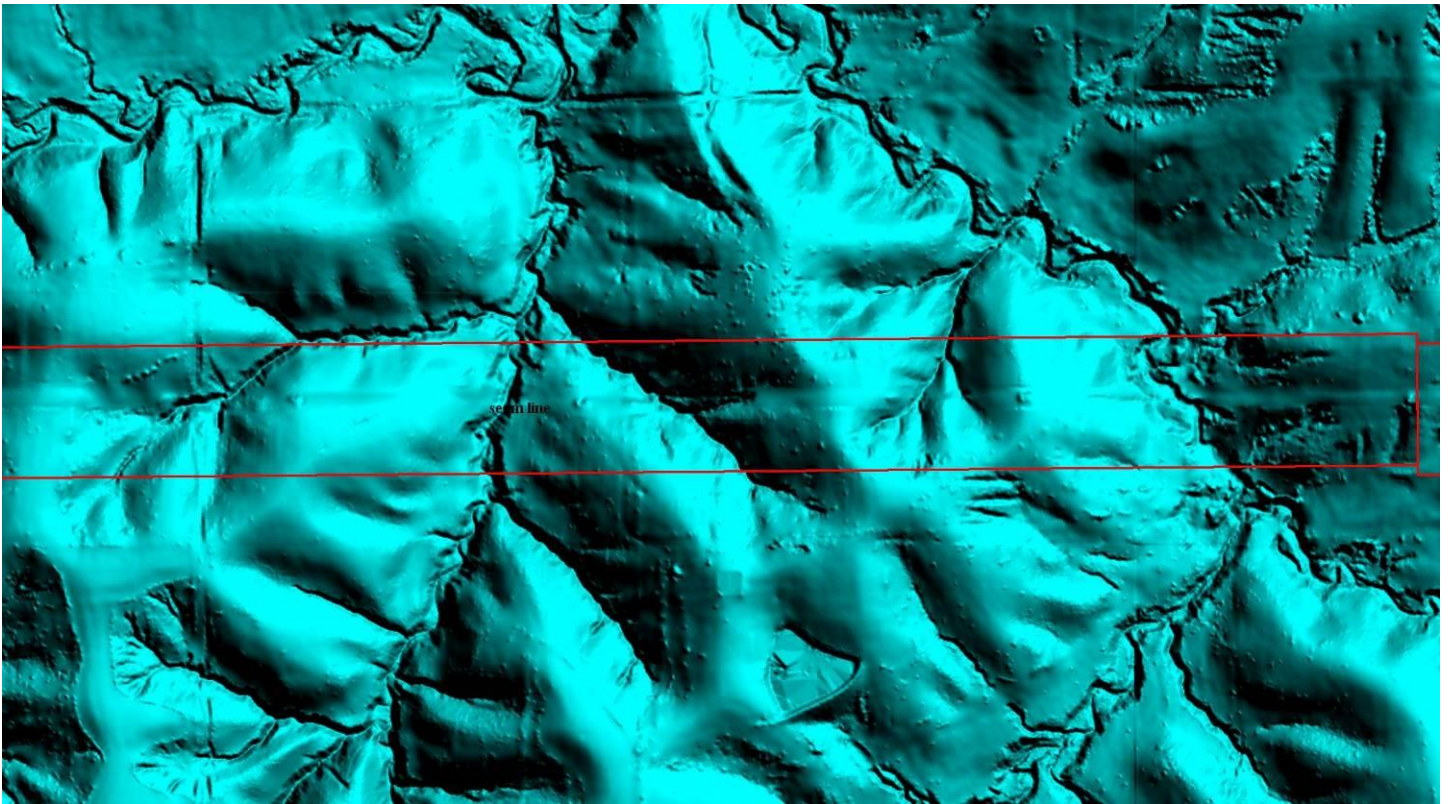

Elevation error
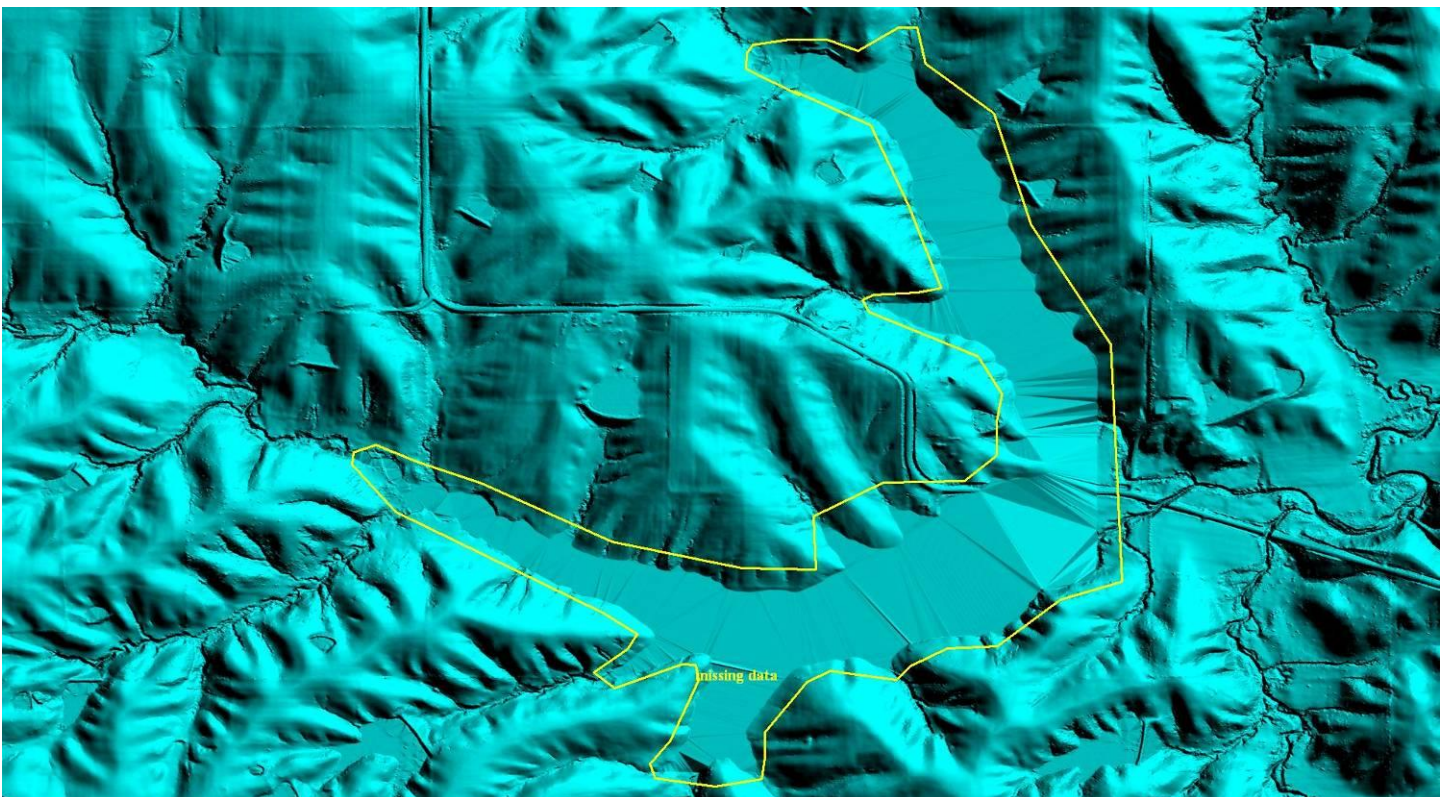
Elevation error (Fixed)
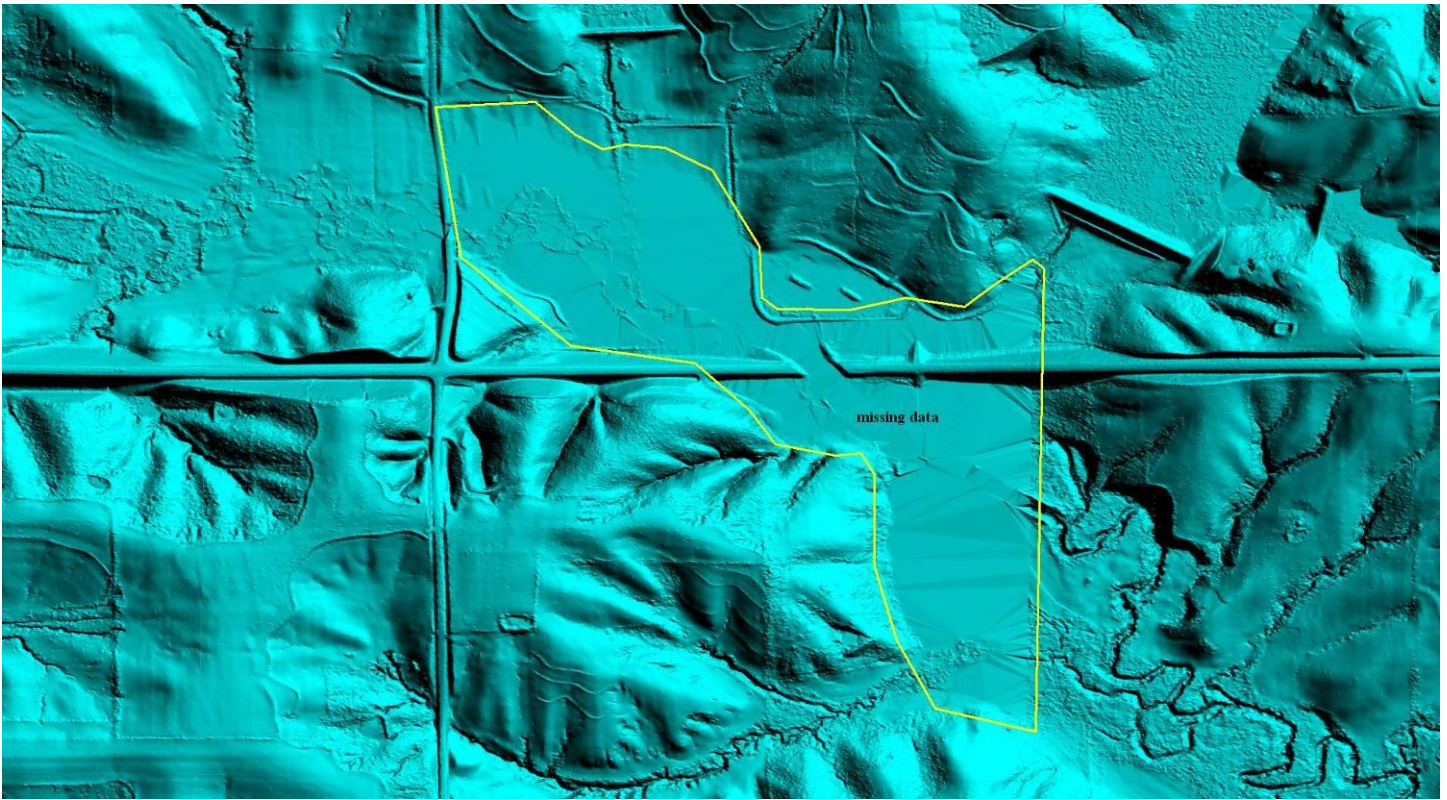

Iowa 11 Elevation error

Iowa 11 Elevation error (Fixed)

seam line

Iowa 14 missing data (not fixed area flooded)

missing data

Iowa 15 missing data 1 (not fixed area flooded)

missing data

Iowa 15 missing data 2 (not fixed area flooded)
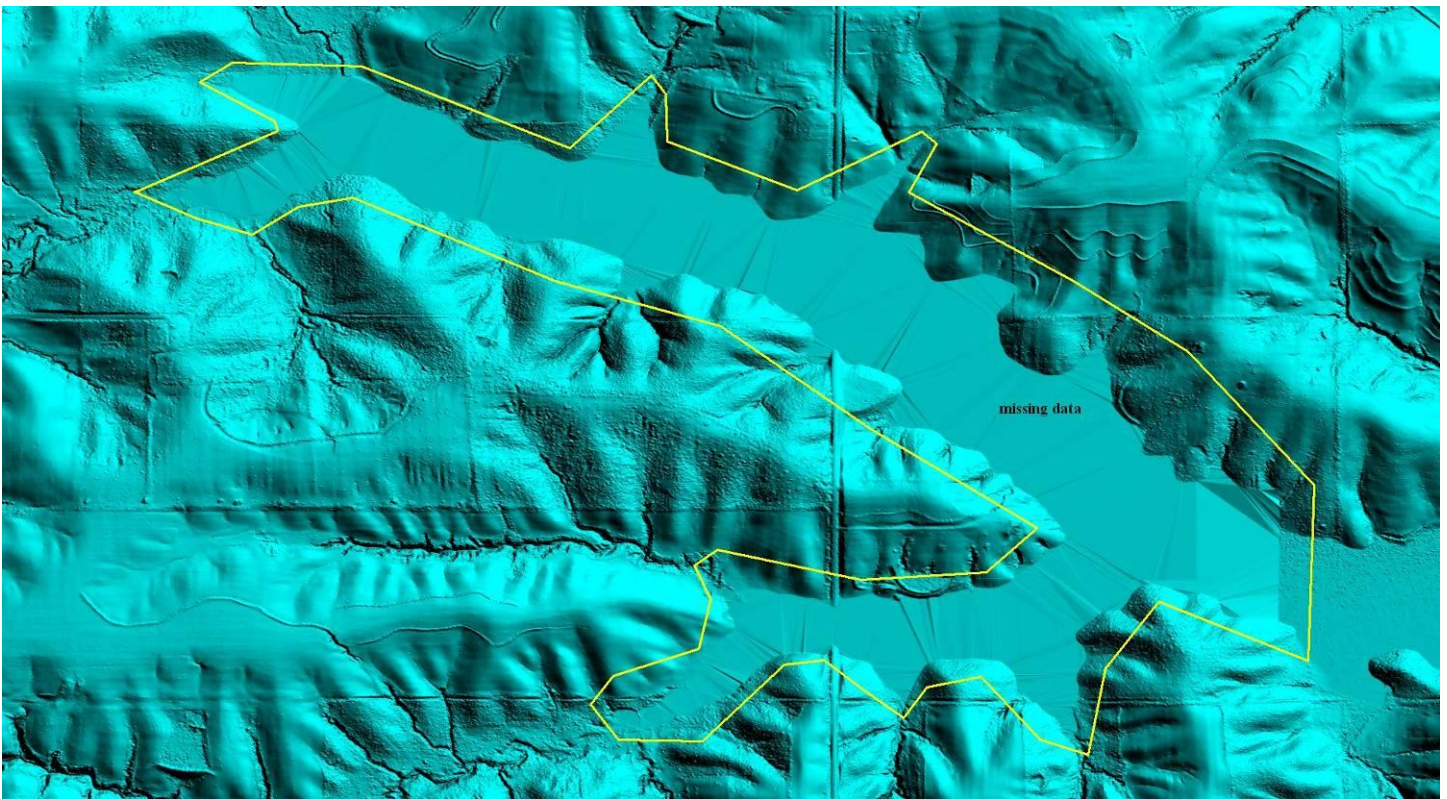
missing data

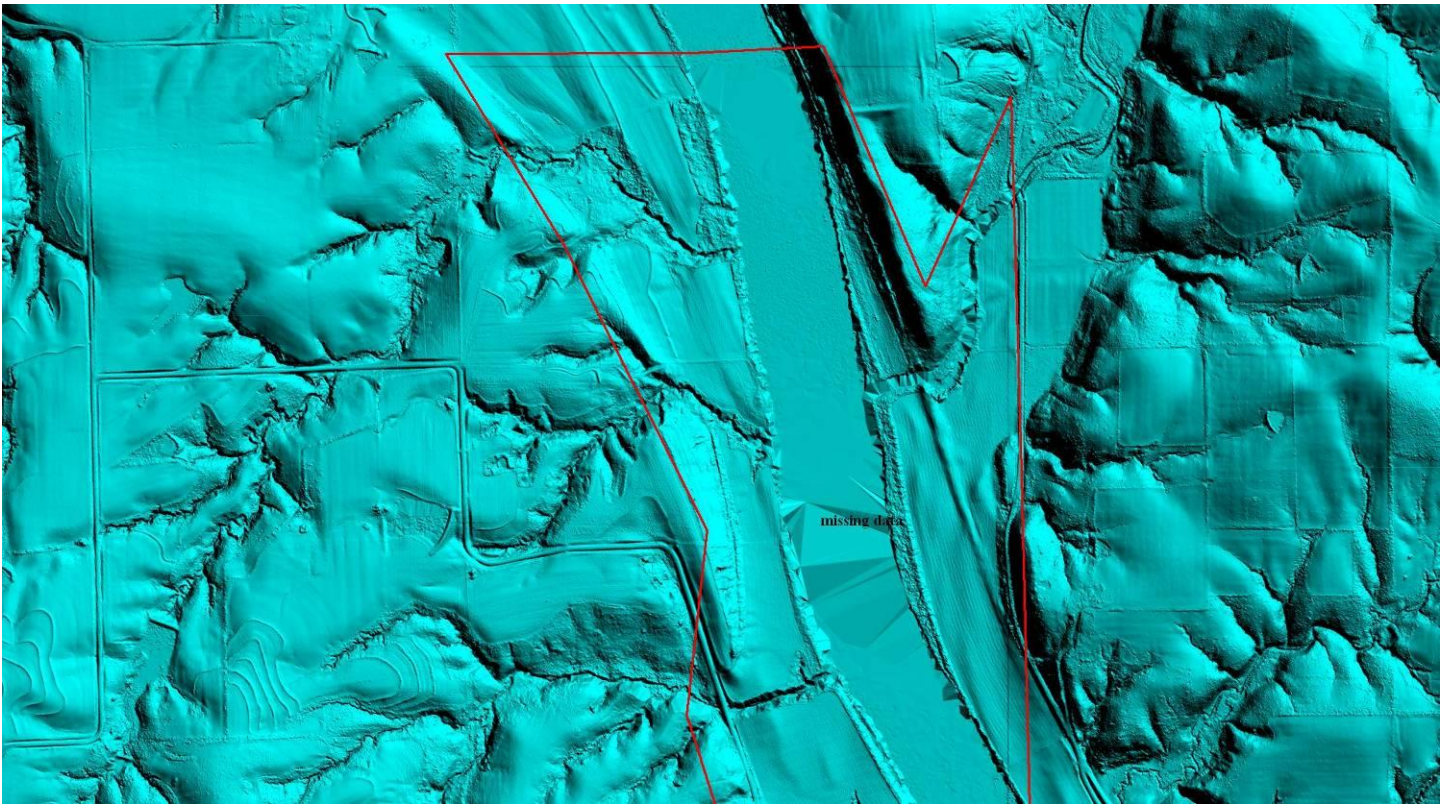# Iowa 15 missing data 3 (not fixed area flooded)
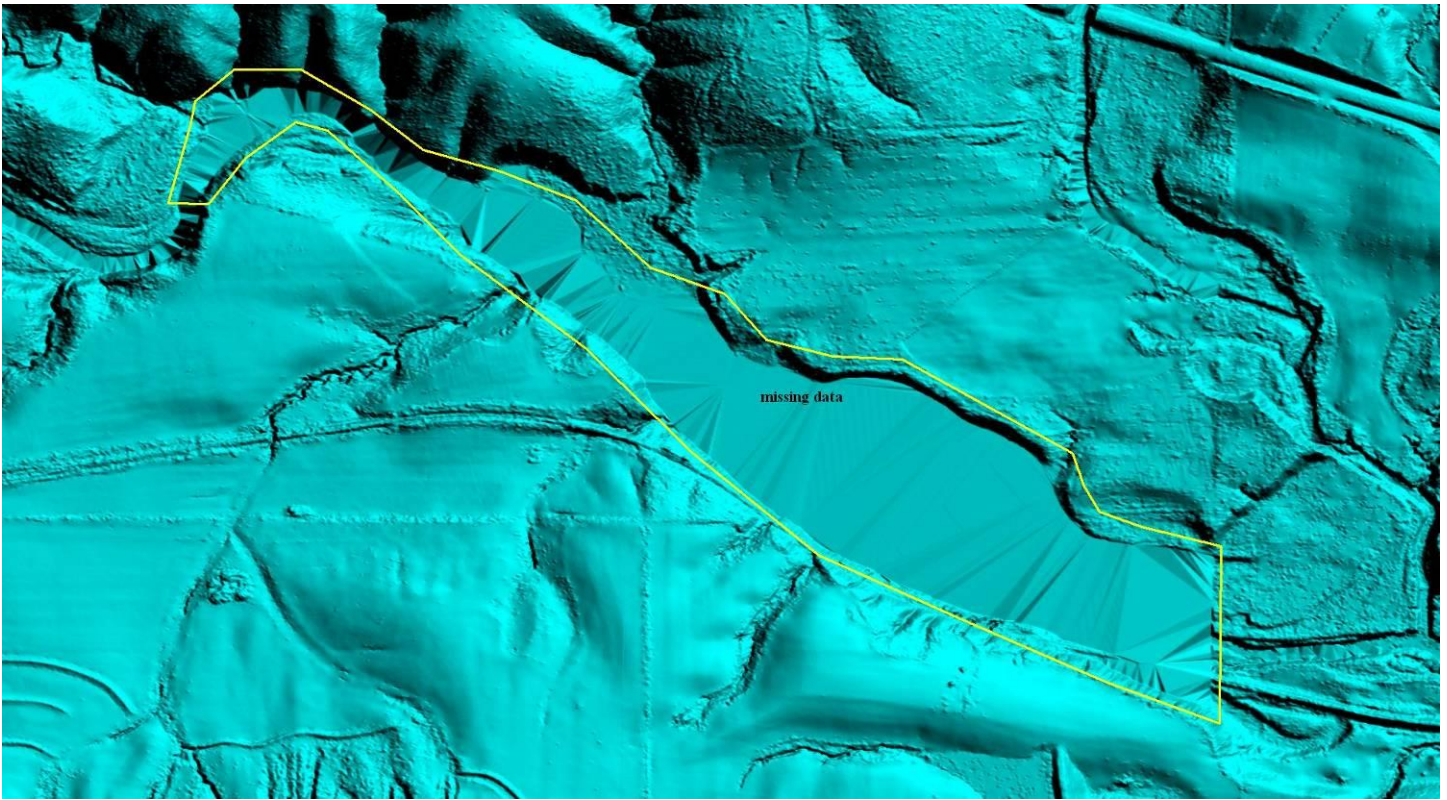
Level area
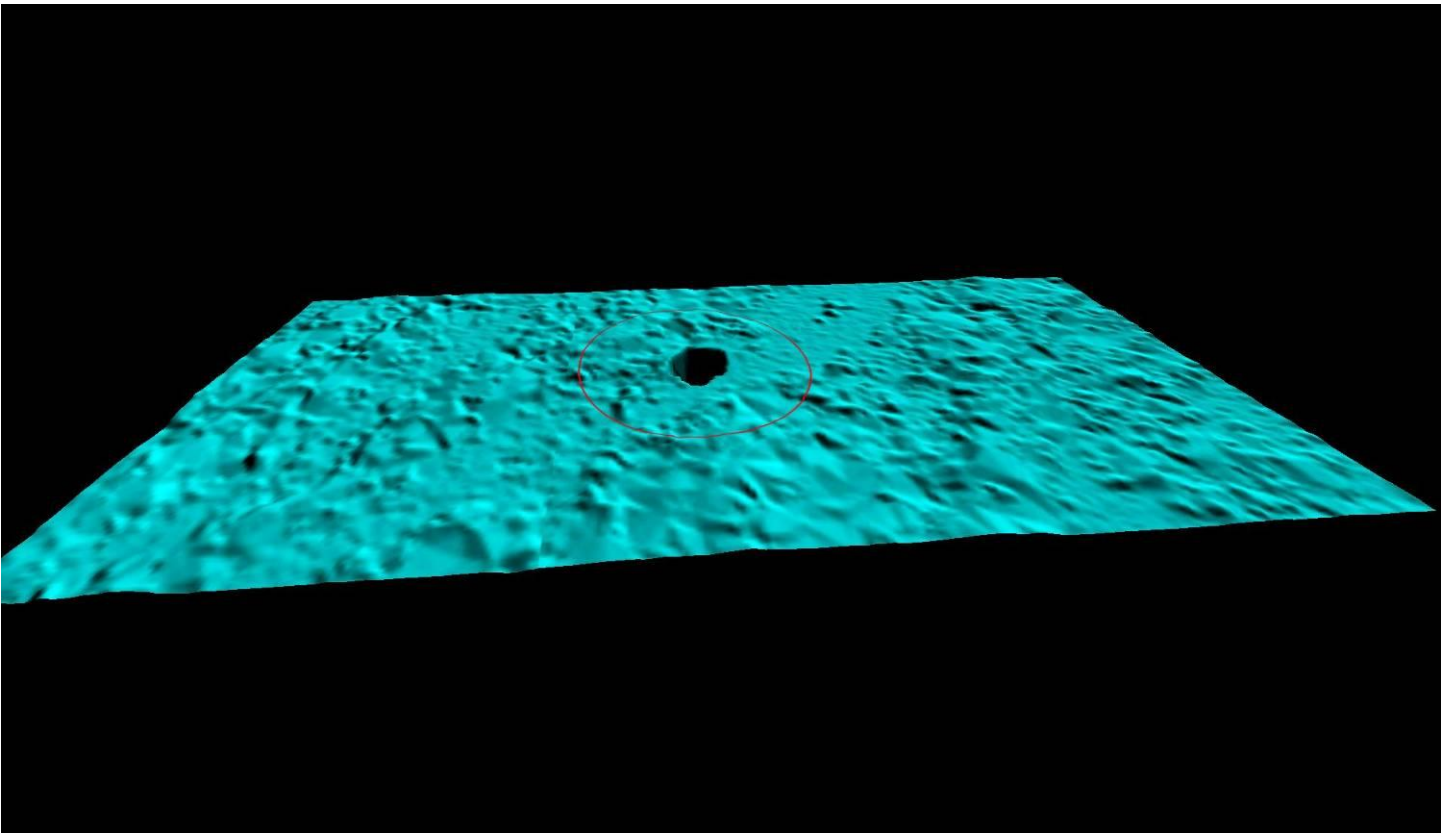
missing data

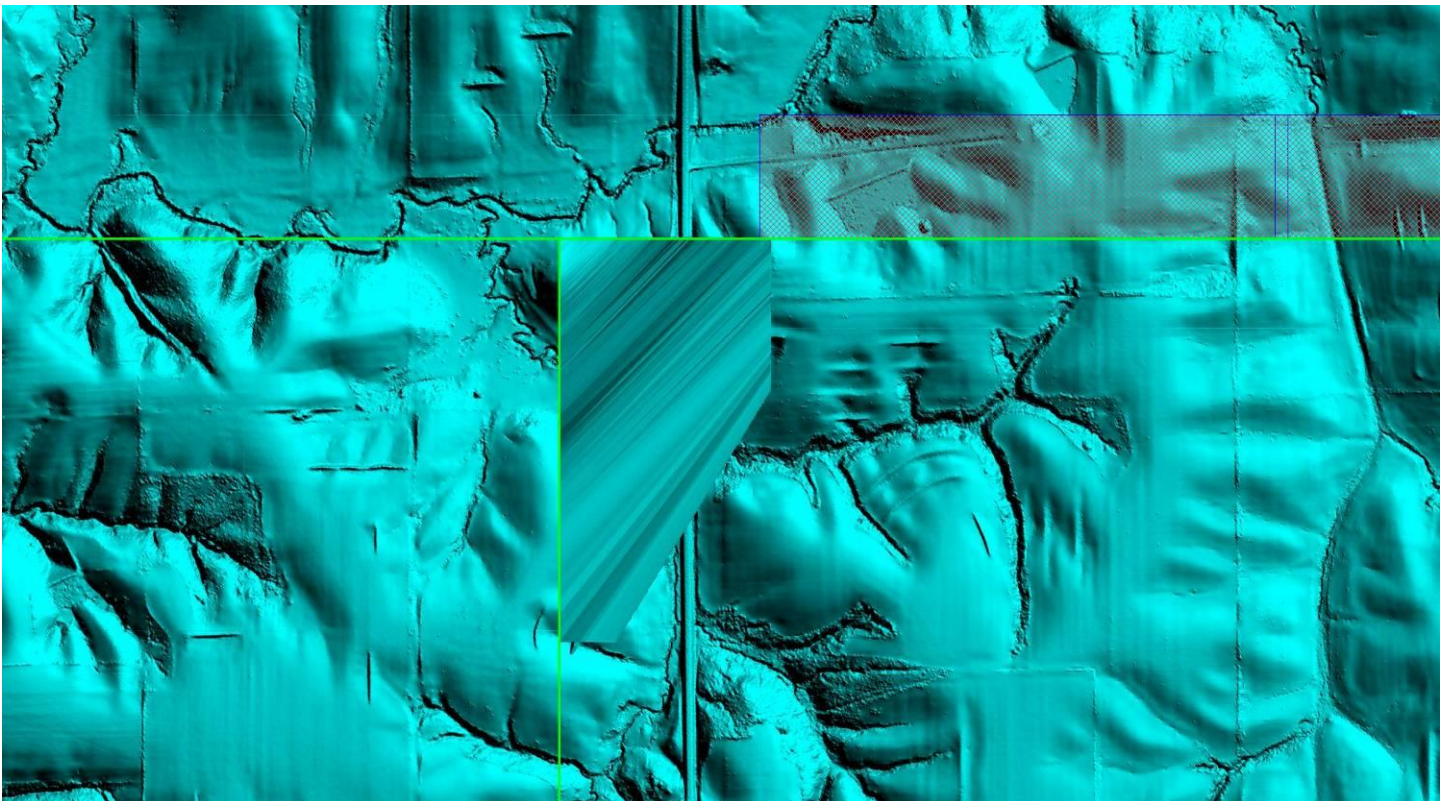# Level area (Fixed)
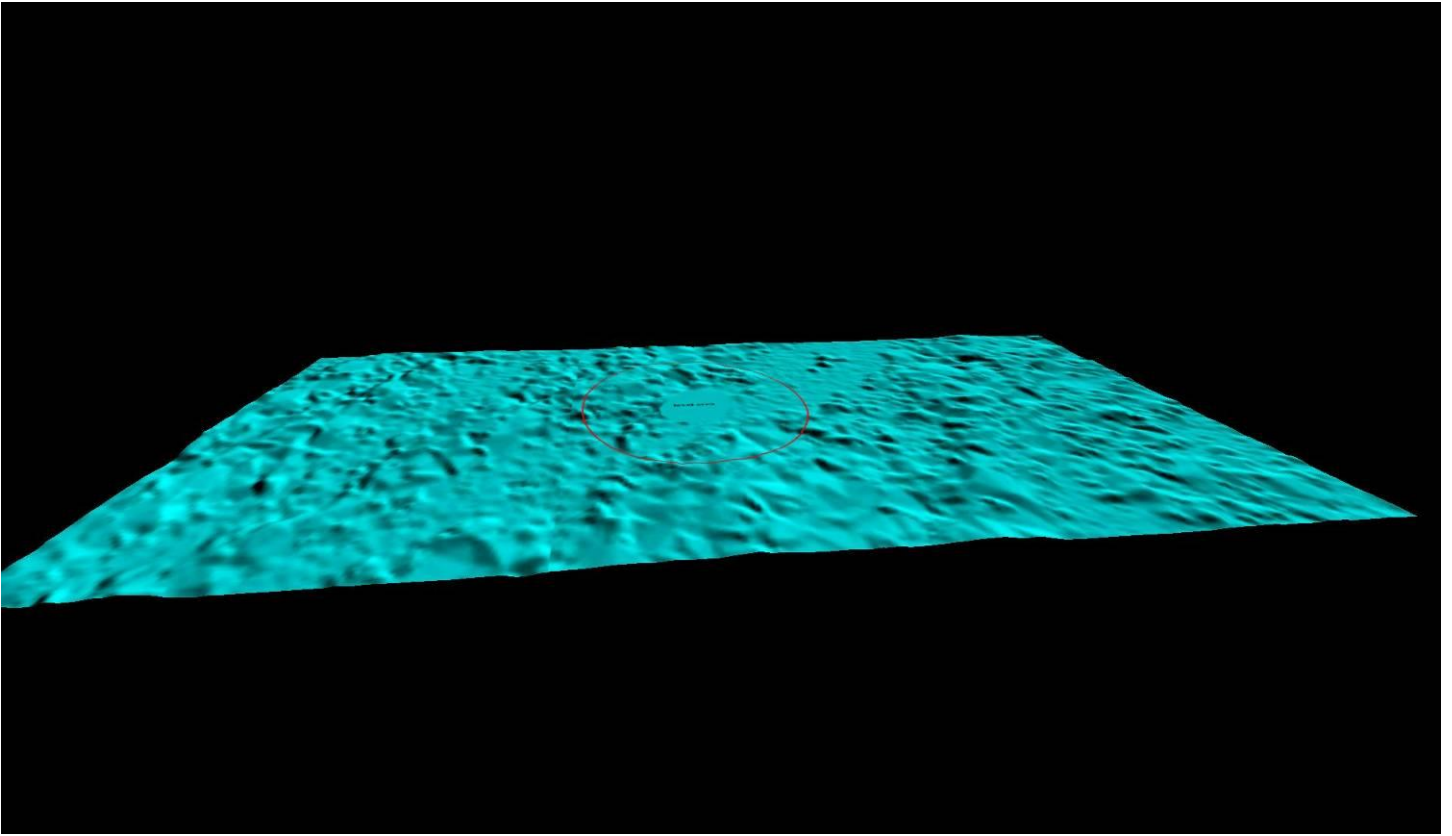
Missing data 1
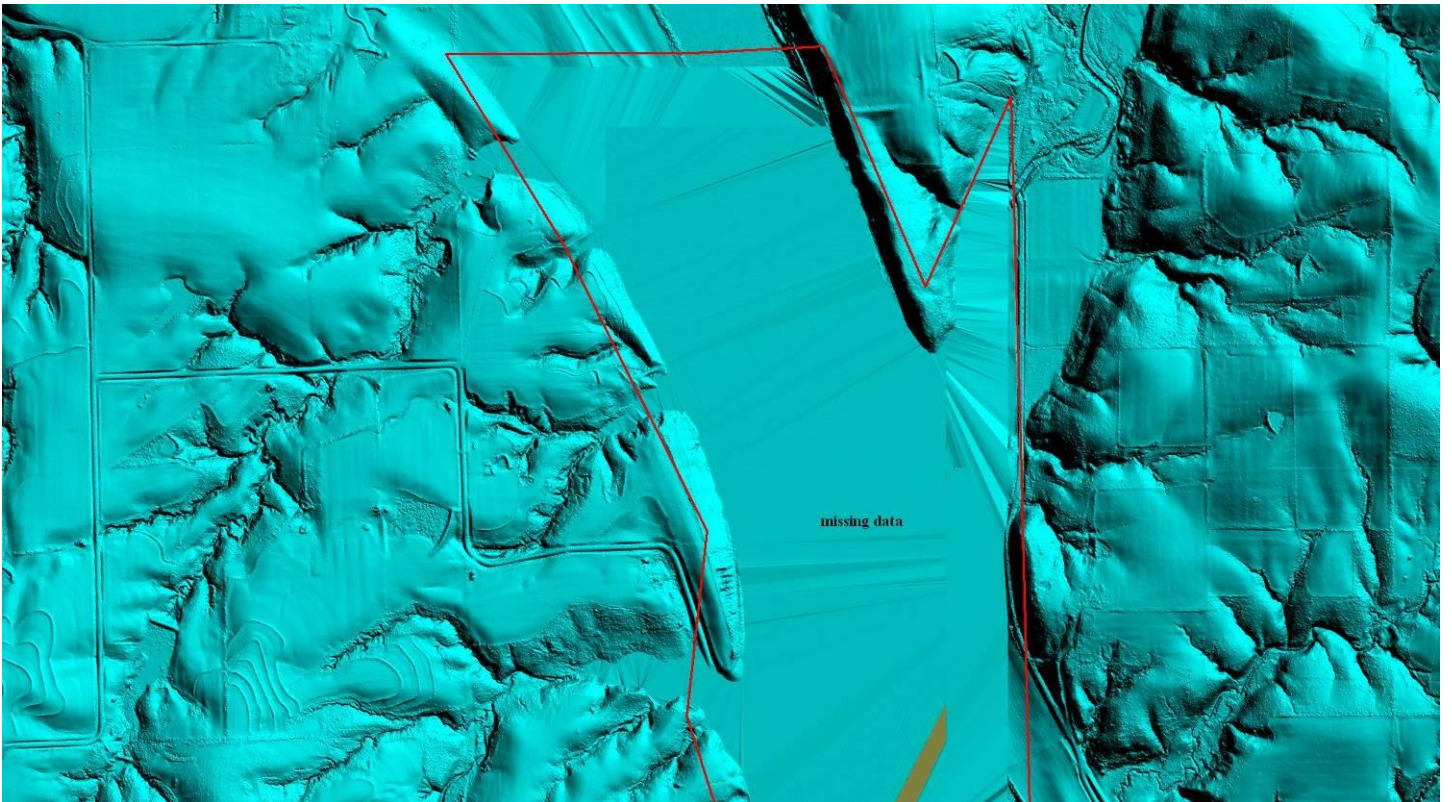
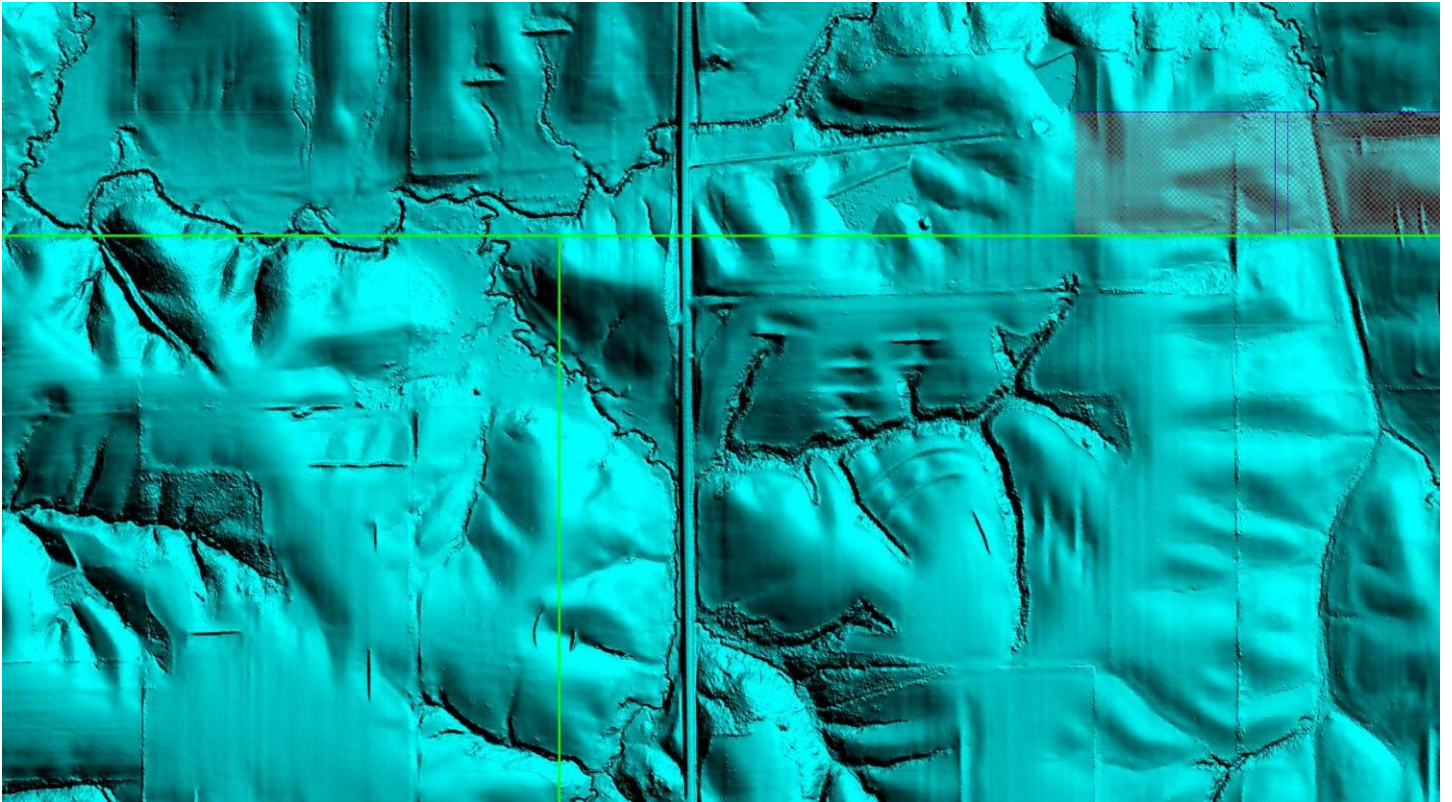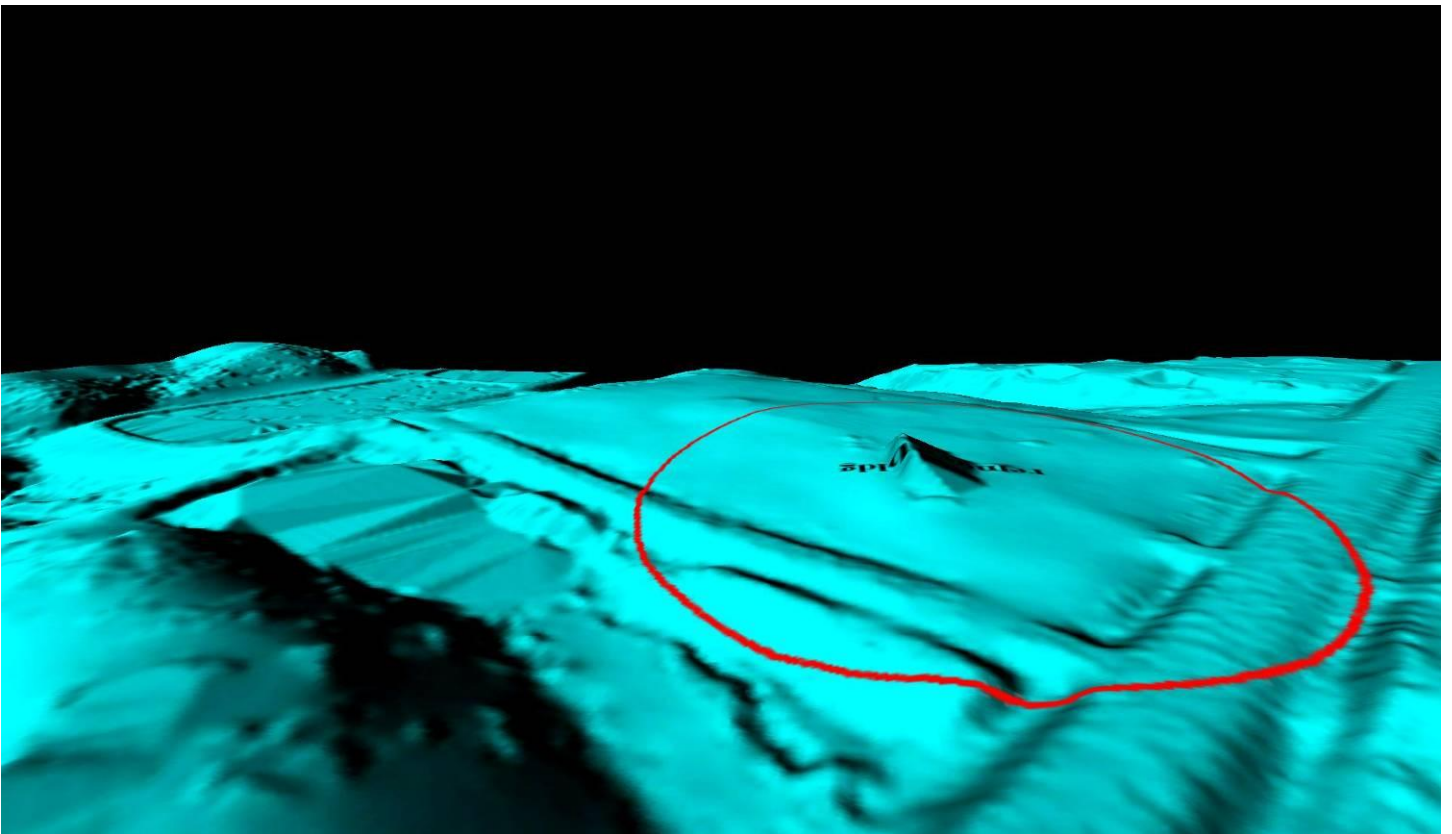# Missing data 1(Fixed)

missing data

Missing data 2
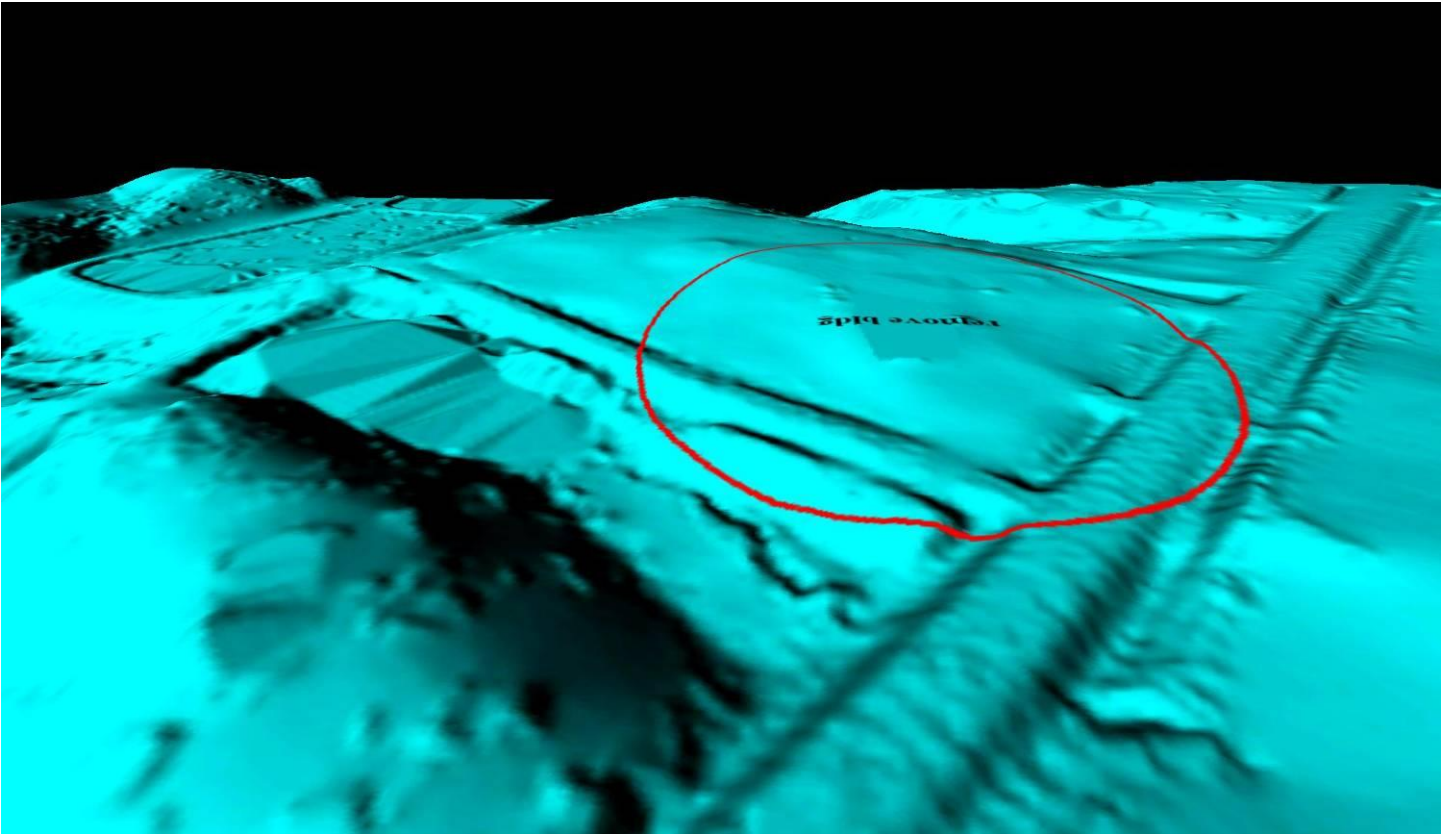
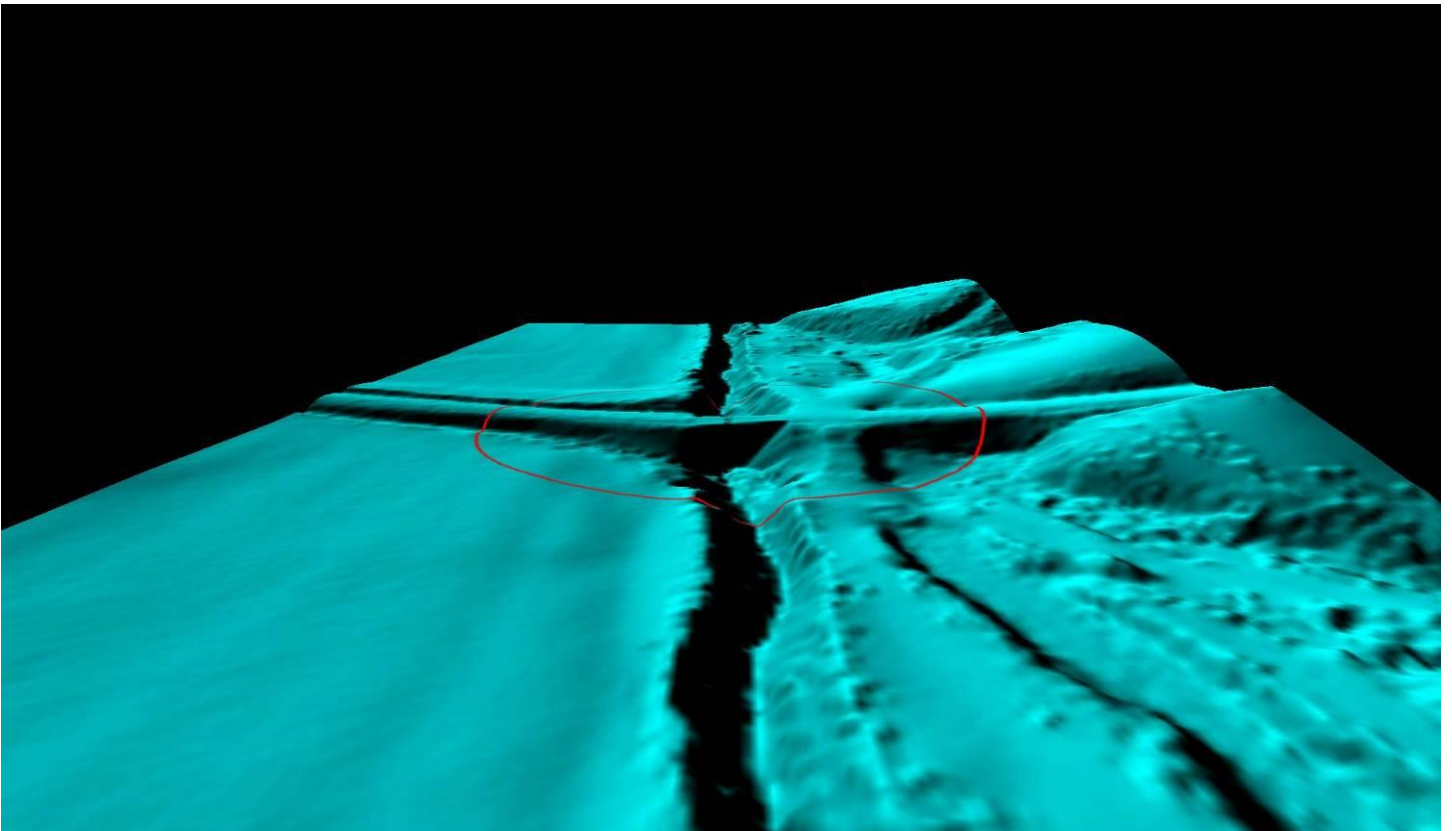# Missing data 2 (Fixed)

Remove bldg

Remove bldg (Fixed)

Remove bridge

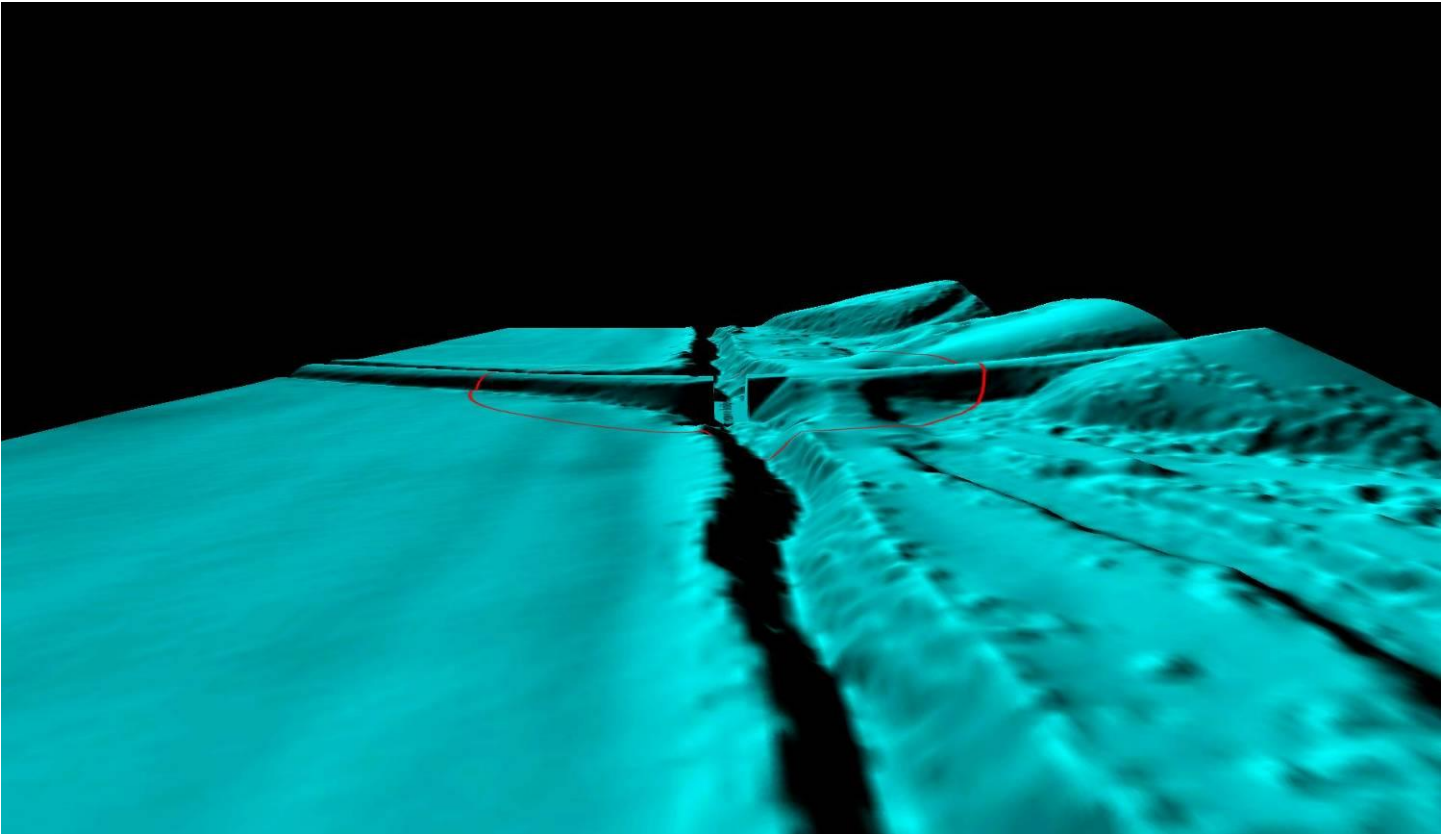# Remove bridge (Fixed)

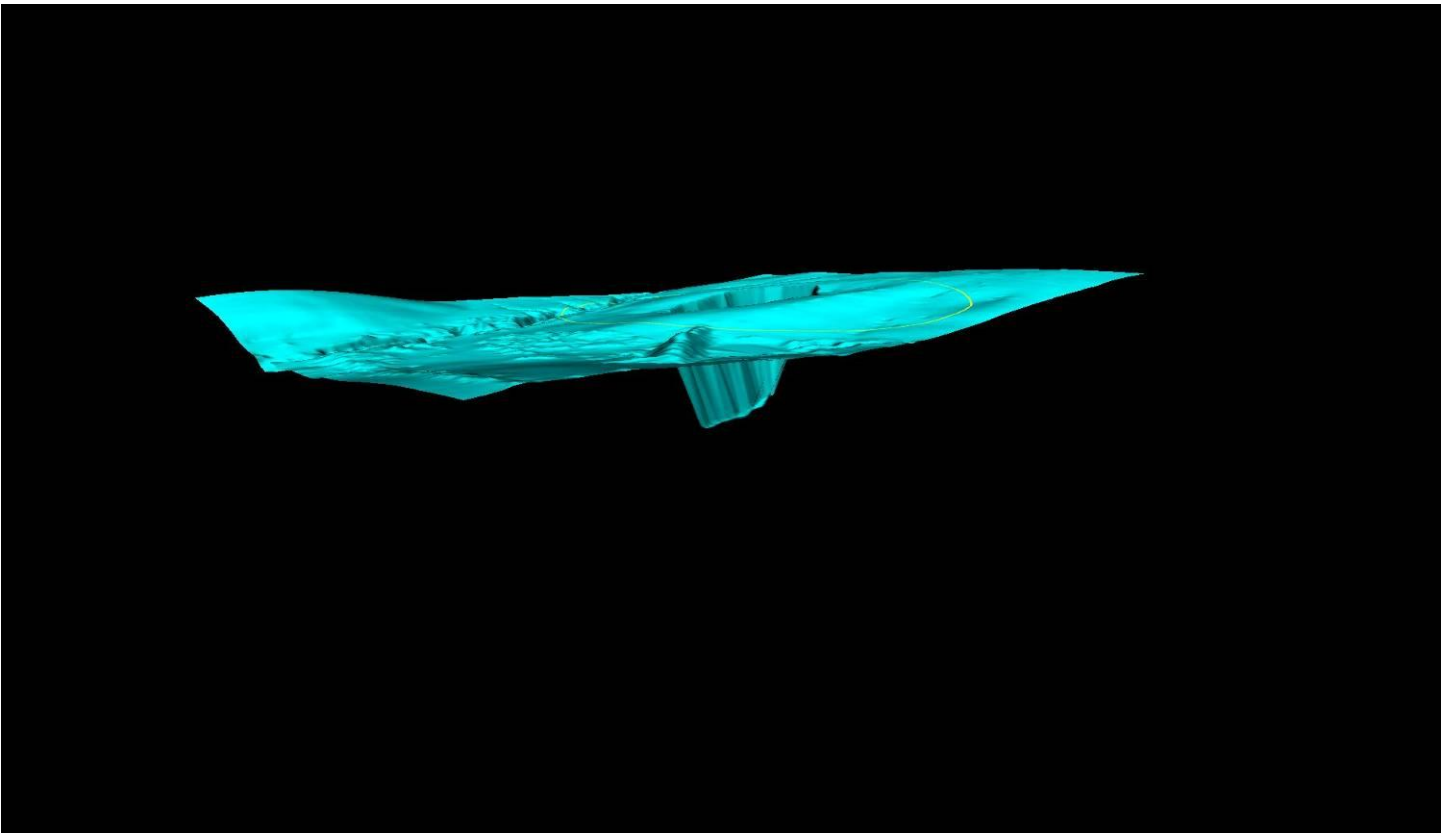# Iowa 03 Elevation error

Iowa 03 Elevation error (Fixed)