Quality Assurance/Quality Control (QA/QC) and Additional Deliverables for Los Angeles Region Imagery Acquisition Consortium (LAR-IAC4)

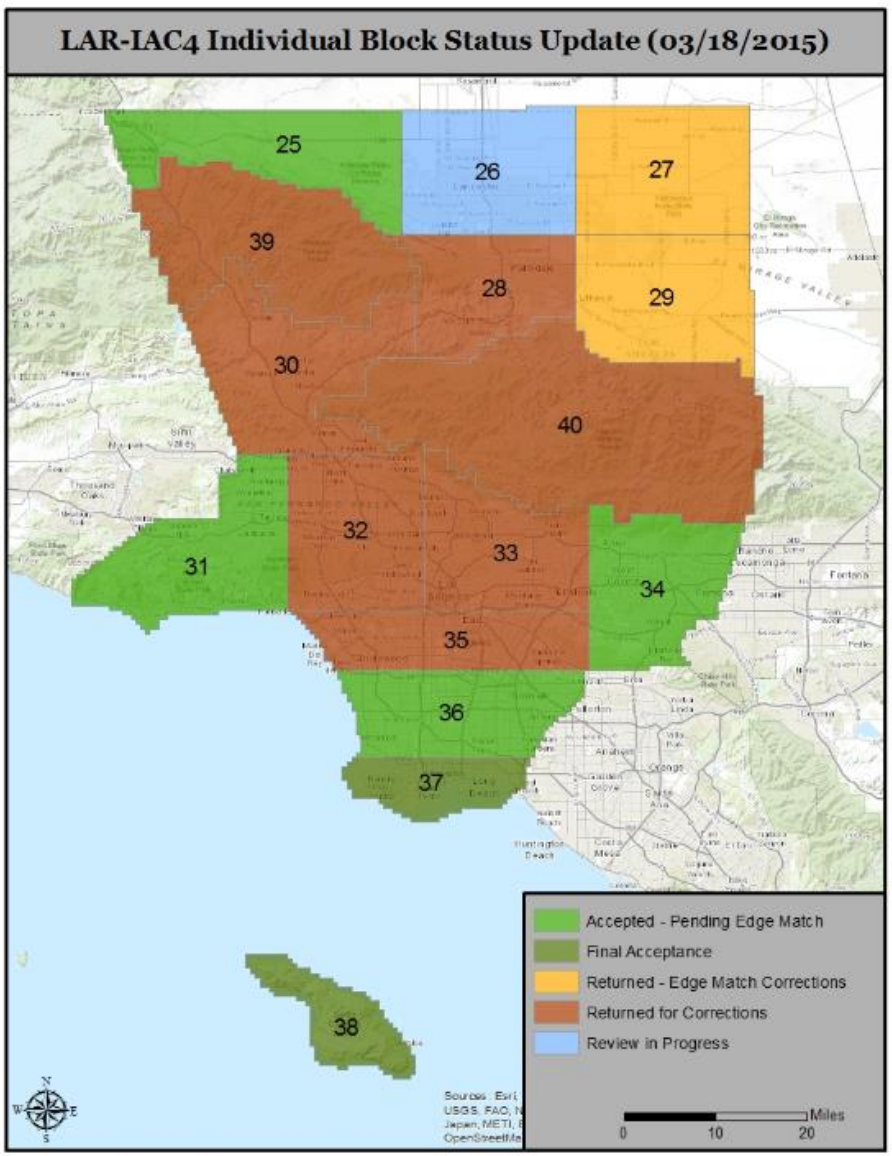
Dewberry & Davis Services Operations, Inc.

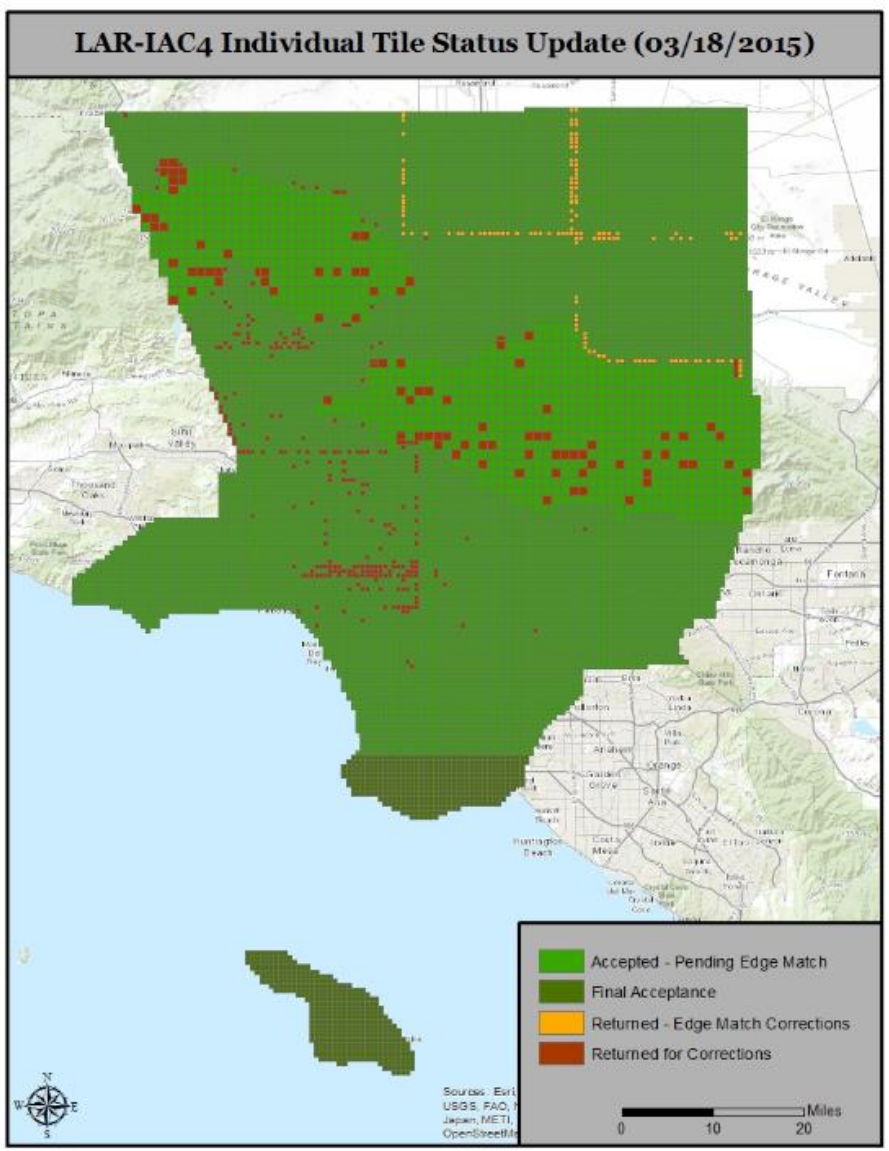
March 19, 2014

Current Status of QA/QC Activities

- All 16 delivery blocks have been through the QAQC process
  - Two (2) Blocks fully accepted
  - Four (4) Blocks pending acceptance
    - These blocks require final validation of the edge matching to adjacent blocks. This can only be called 100% complete when Dewberry has accepted all tiles along the edges.
  - Ten (10) Blocks in some stage of corrections and/or validation of corrections.
- Currently Dewberry has placed a total of 1716 edit calls for review and/or revision.
- Of the 1716 edit calls 885 are currently in progress of revision.
- The remaining edit calls include:
  - Artifacts (3), Blurry Areas (541), Building Lean (22), DTM Smear (51), Misalignment (36), Visible Seamline (166), Tonal Quality (8), Voids (3), and Warped Features (55)

Current Status of QA/QC Activities





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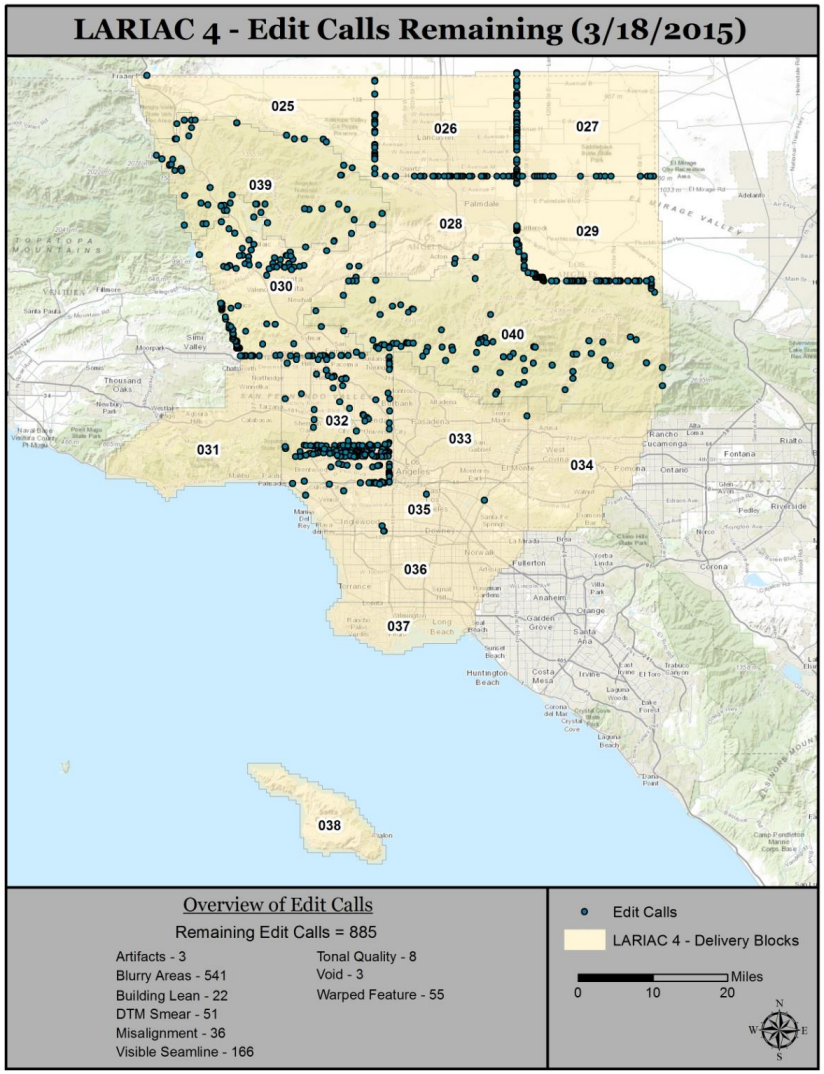
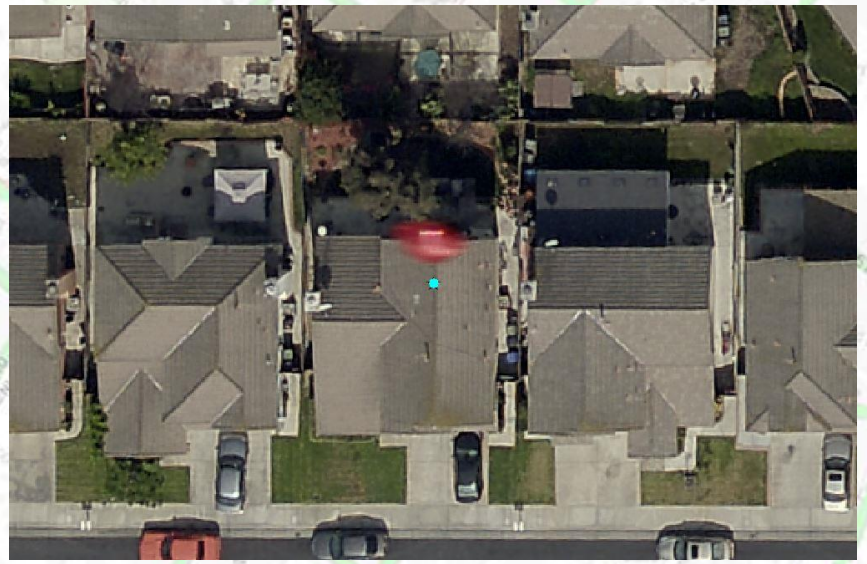


Types of Edit Calls

- Artifacts
  - Currently only three (3)remaining edit calls.
  - Artifacts or image blemish calls are for items that don't otherwise fit a specific call but there is something specific that could be improved in the area.
  - The example on the right shows one such call where there is a small red smear on the feature. It's unlikely that it represents a ground feature and could have been something in the air under the aircraft during acquisition. If a better shot of the building exists without this artifact it should be used.

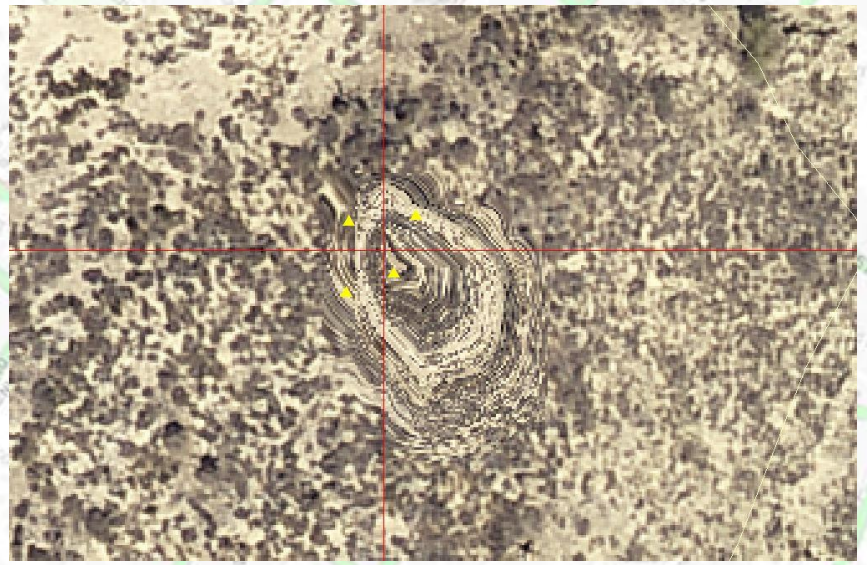


Types of Edit Calls

- Blurry Areas
  - Currently there are 541 remaining edit calls.
  - Blurry Area calls represent the largest group of calls on the LARIAC 4 project. Currently Pictometry has not been able to identify the source of these issues.
  - When blurry areas are identified Pictometry evaluates all other frames covering the same location for improved imagery. In the majority of cases a better image exists and the frame is replaced.

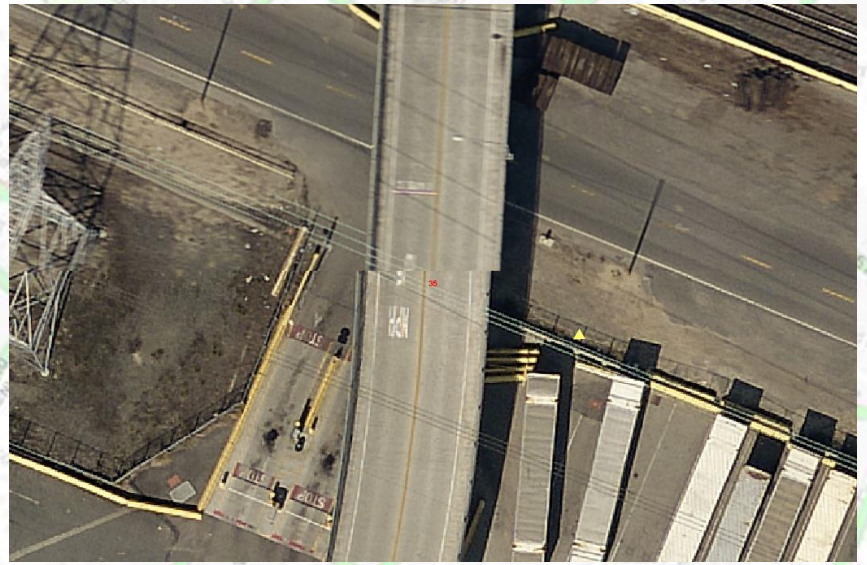
Types of Edit Calls

- DTM Smears
  - Currently there are 51 remaining edit calls.
  - DTM smears are primarily caused when the surface model used for orthorectification was incorrect.
  - These issues are corrected by revising the DTM in that location and reprocessing the image.



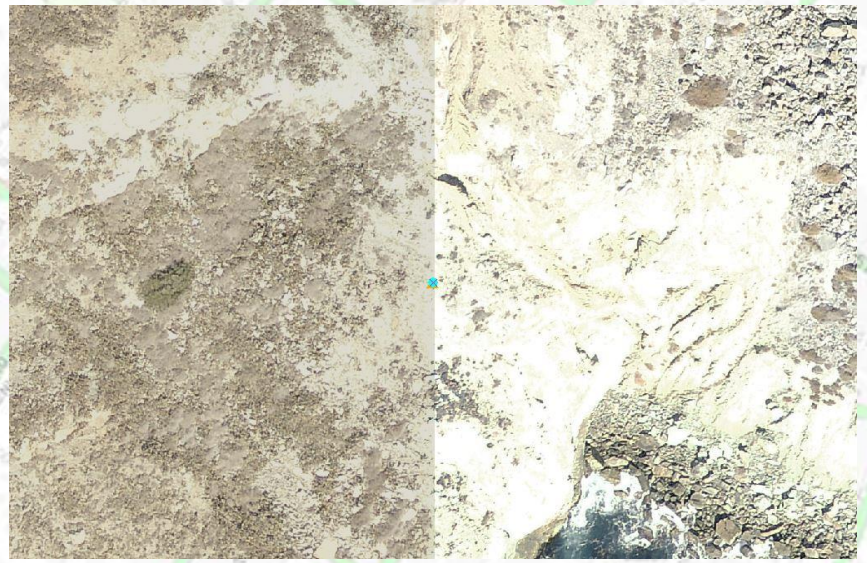
Types of Edit Calls

- Misalignments
  - Currently there are 36 remaining edit calls.
  - Misalignments can be caused by a variety of issues including changes in the DTM and initial orthorectification of the image.
  - In some cases in the LARIAC 4 project some of the misalignments were caused by differences in the location of the feature relative to the location of the camera (ie leaning in different directions)



Types of Edit Calls

- Visible Seamlines
  - Currently there are 166 remaining edit calls.
  - Visible seamlines are typically caused by differences in conditions at time of acquisition.
  - In the example on the right there is a stark difference in the radiometry on the right and left of a tile edge.
  - These issues are revised by improving the consistency between the seam and submitting new tiles.

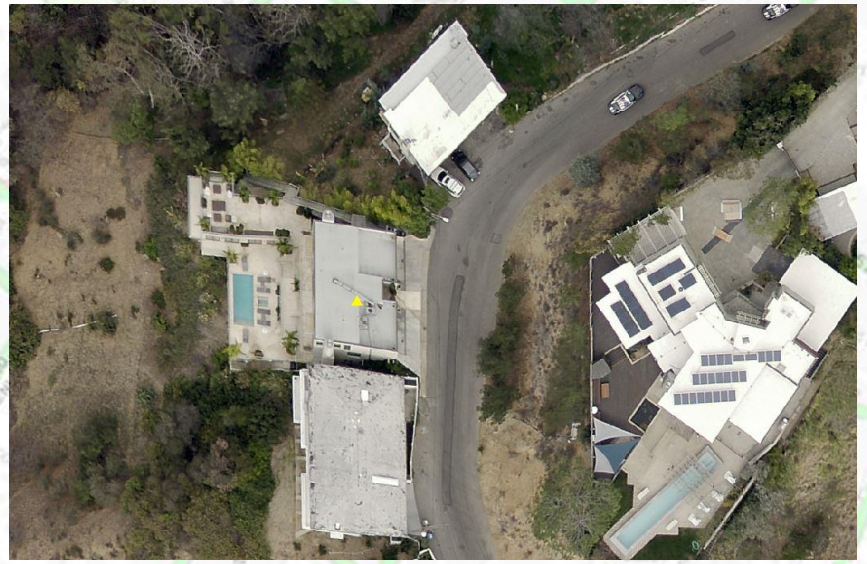


Types of Edit Calls

- Voids
  - Currently there are 3 remaining edit calls.
  - Voids can be caused by a few different processing issues. In the case on the right the void is present because the image assigned to the mosaic polygon did not have sufficient coverage to completely fill the area.
  - Adjacent images are used to fill in the void areas

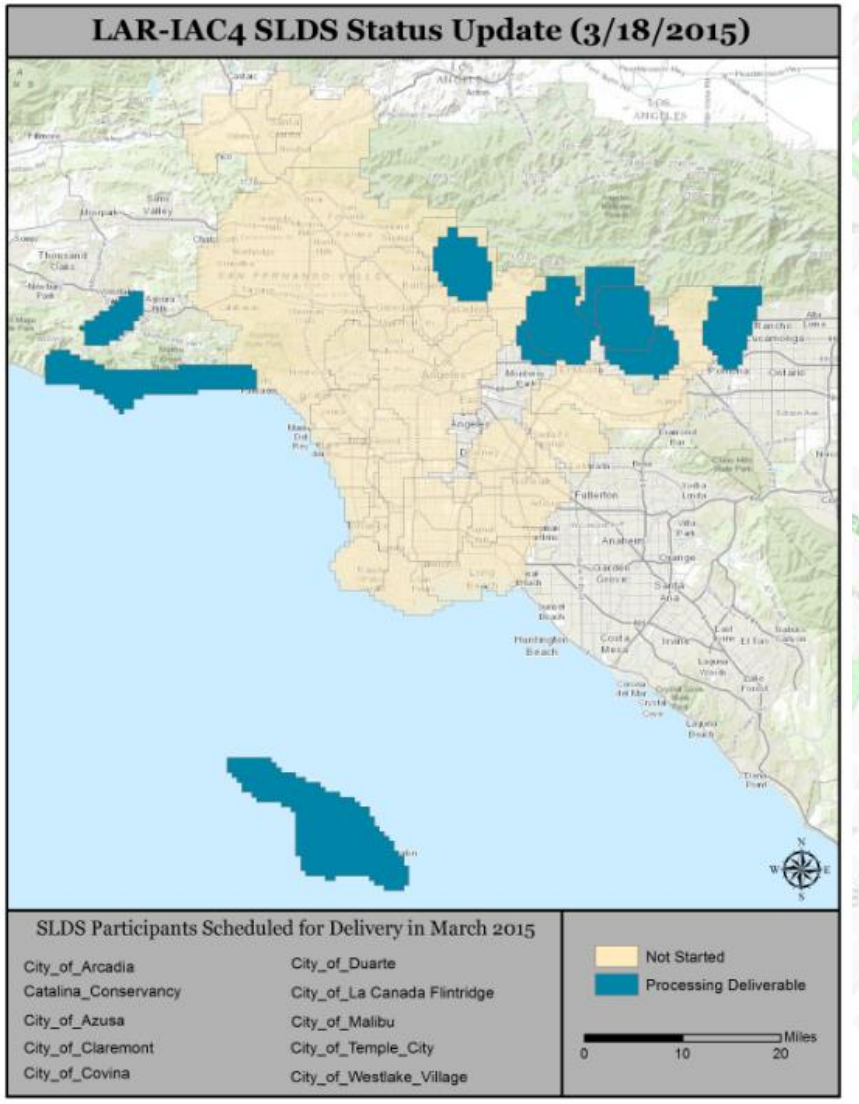
Types of Edit Calls

- Warped Features
  - Currently there are 55 remaining edit calls.
  - Warped features are caused by issues in the DTM where either there is not sufficient detail in the surface model or the features have changed requiring updates to the model.
  - These issues are corrected by adding additional breaklines on and around the features to improve the model used during orthorectification.



SLDS Participant Deliverables

- Processing is currently underway to begin delivery of the participant deliverables.
- There are currently 10 participants that are being processed (as shown in the map to the right).
- The first 10 participants will be shipped by the end of March.
- Remaining participants will be delivered throughout the month of April. As imagery is accepted a weekly evaluation will be made on which participants can be processed. Once we've accepted all the tiles in a specific area a delivery date will be established.



Questions?