

## Stereo GUI

File Run View IP matches Threshold Profile Vector Layer Help

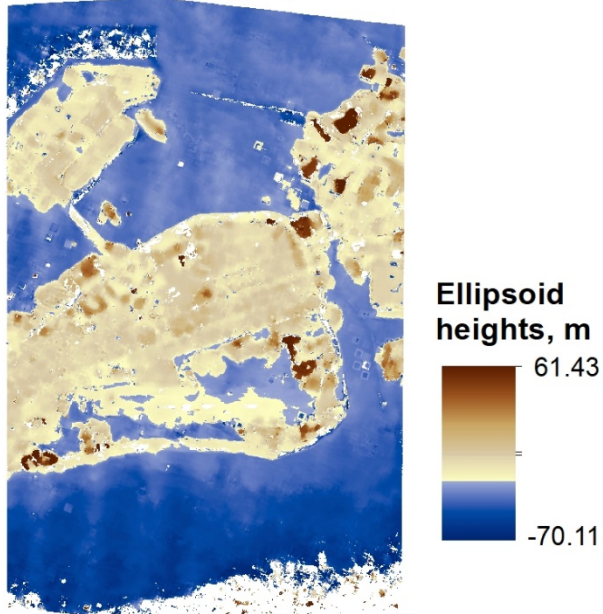
[illegible]

# Water elevation surface

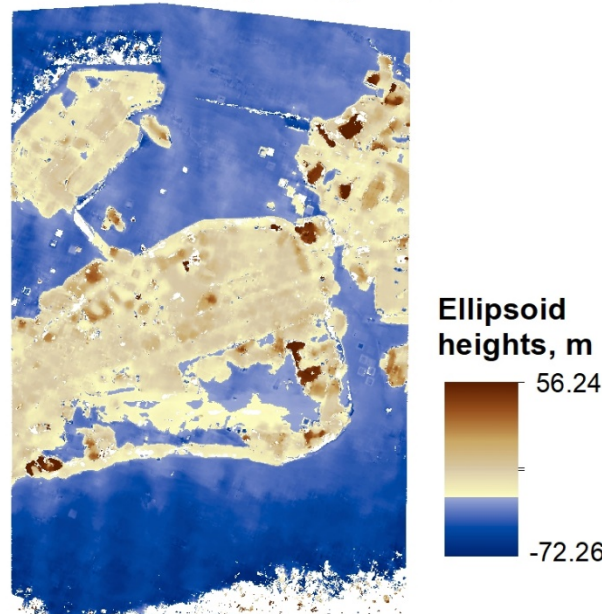
## Stereo GUI, Digitizing



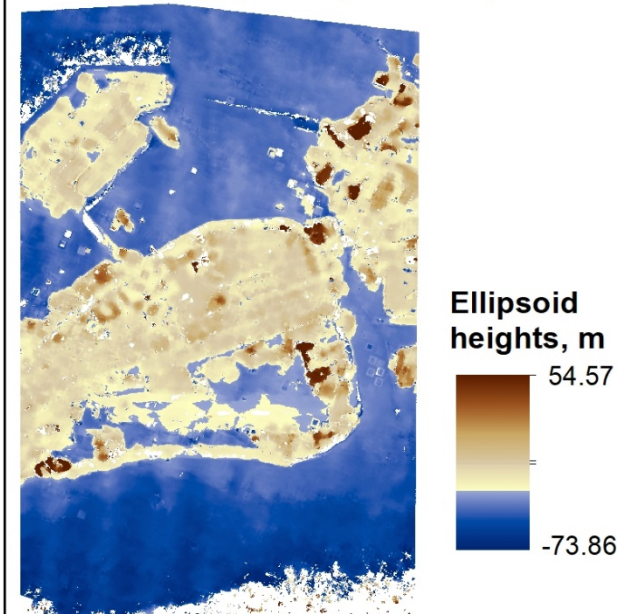
GRN TB, No camera adjustment  
No topographic alignment



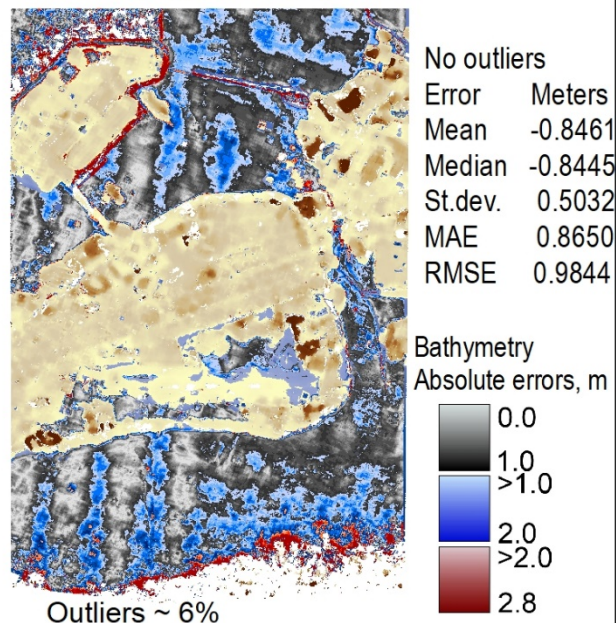
GRN TB, Camera adjustment  
No Topographic alignment



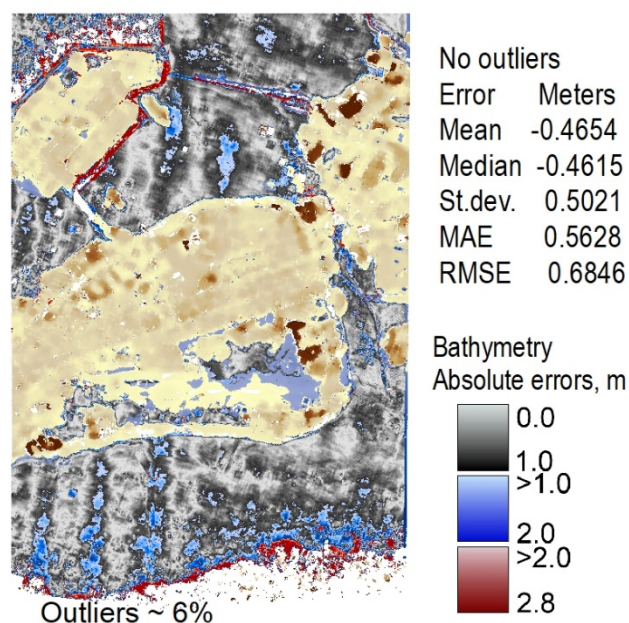
GRN TB, Camera adjustment  
Topographic alignment only



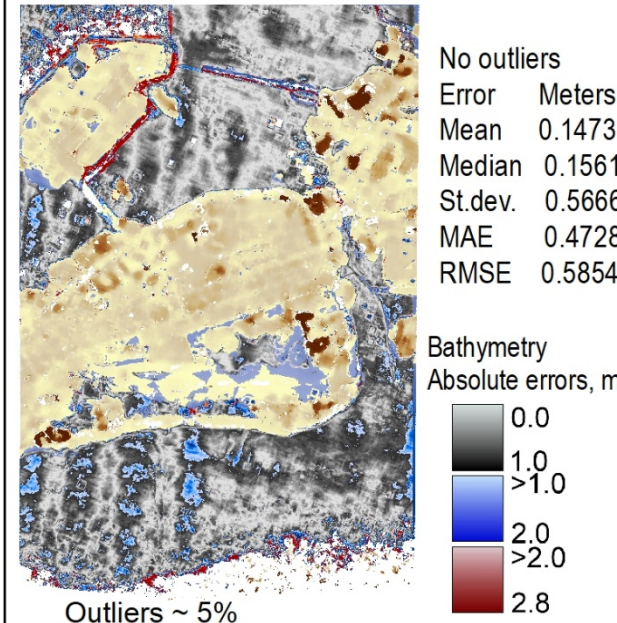
GRN TB, No camera adjustment  
No topographic alignment



GRN TB, Camera adjustment  
No topographic alignment



GRN TB, Camera adjustment  
Topographic alignment only

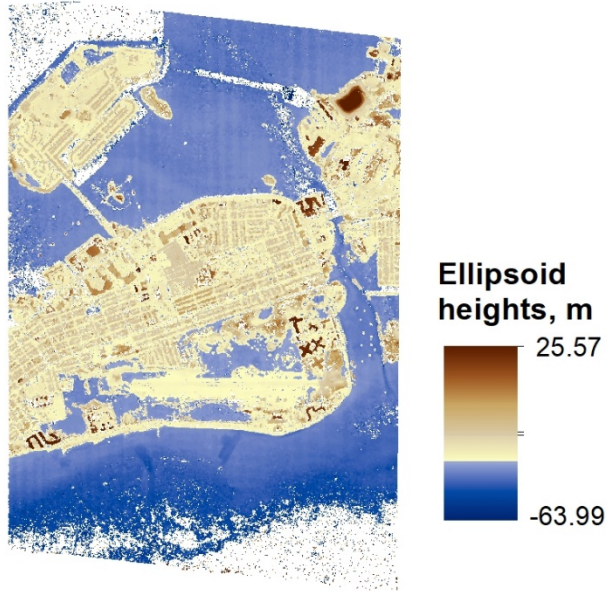


## Test Green band

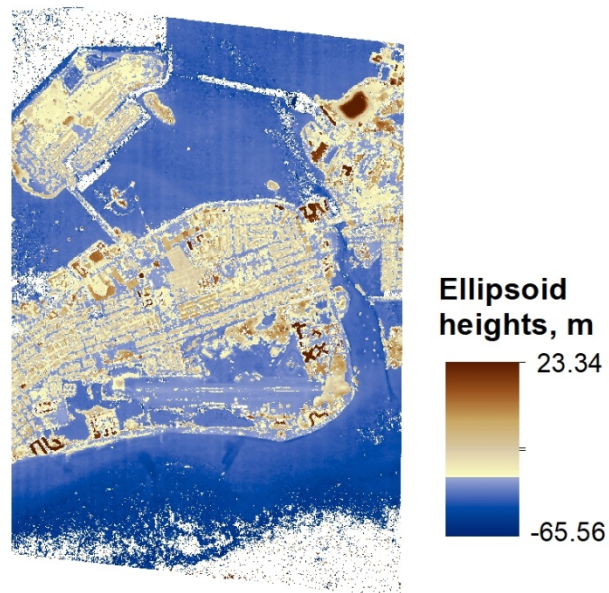
- Seamless topo-bathymetry, or only topo / bathymetry
- Max. depth penetration ~ 7 m
- Water elevation surface: Digitizing, Stereo GUI
- Use KDE for NIR1 band threshold
- Refraction index (Parrish, 2000):  $n=1.340125$
- Camera/bundle adjustment
- Alignment to previous FS topographic data (in ellipsoid height) using Iterative Closest Point (ICP) method.



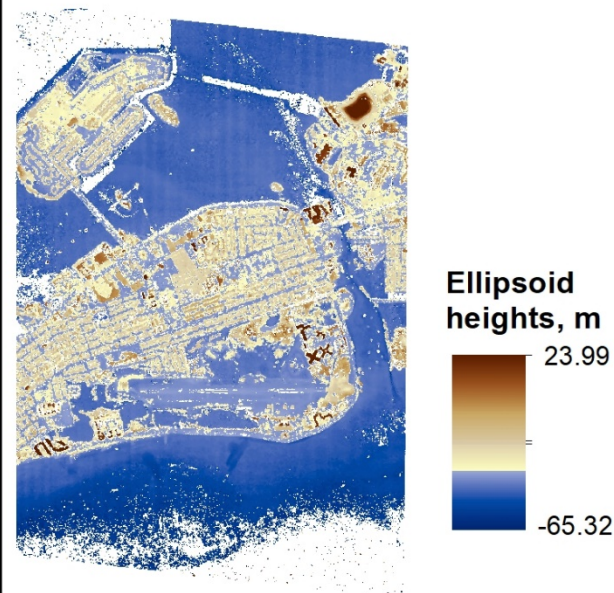
PAN TB, No camera adjustment  
No topographic alignment



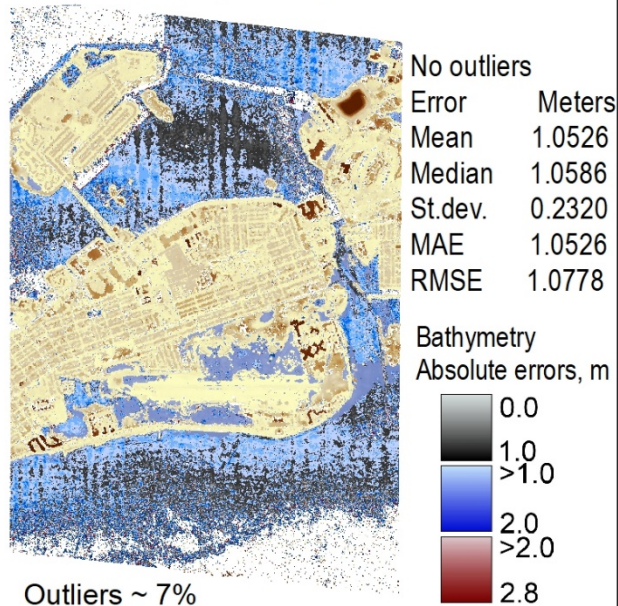
PAN TB, Camera adjustment  
No Topographic alignment



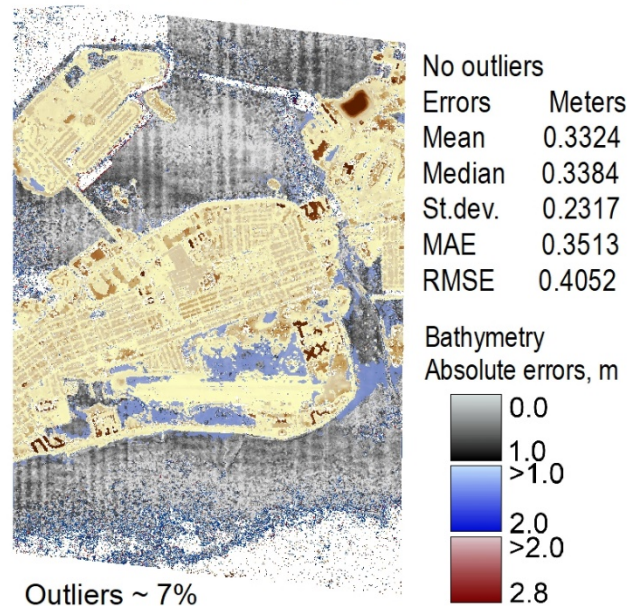
PAN TB, Camera adjustment  
Topographic alignment only



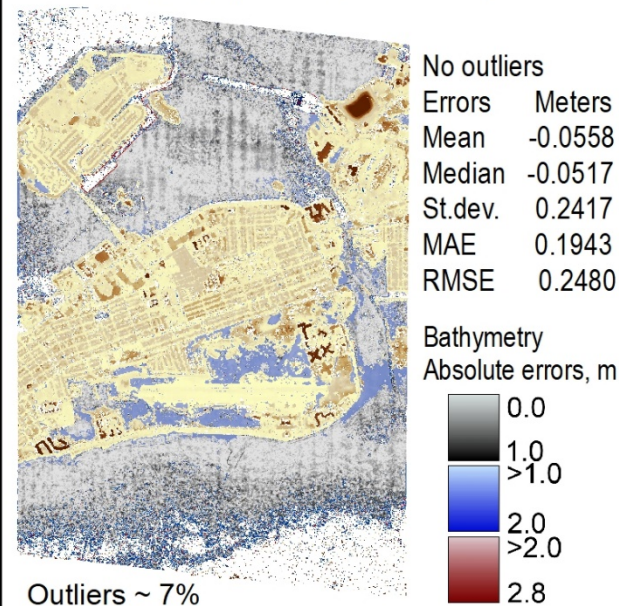
PAN TB, No camera adjustment  
No topographic alignment



PAN TB, Camera adjustment  
No topographic alignment



PAN TB, Camera adjustment  
Topographic alignment only



## Test PAN band

- Seamless topo-bathymetry, or only topo / bathymetry
- Max. depth penetration ~ 4.5 m
- Water elevation surface: Use results from the GRN band
- Land/water mask: Transform NIR1 land/water mask to match PAN size and resolution
- Refraction index (Parrish, 2000):  $n=1.337172$
- Camera/bundle adjustment
- Alignment to previous FS topographic data (in ellipsoid height) using Iterative Closest Point (ICP) method.