

Figure 1. USGS topographic data extracted from NED for the Tampa Bay region.

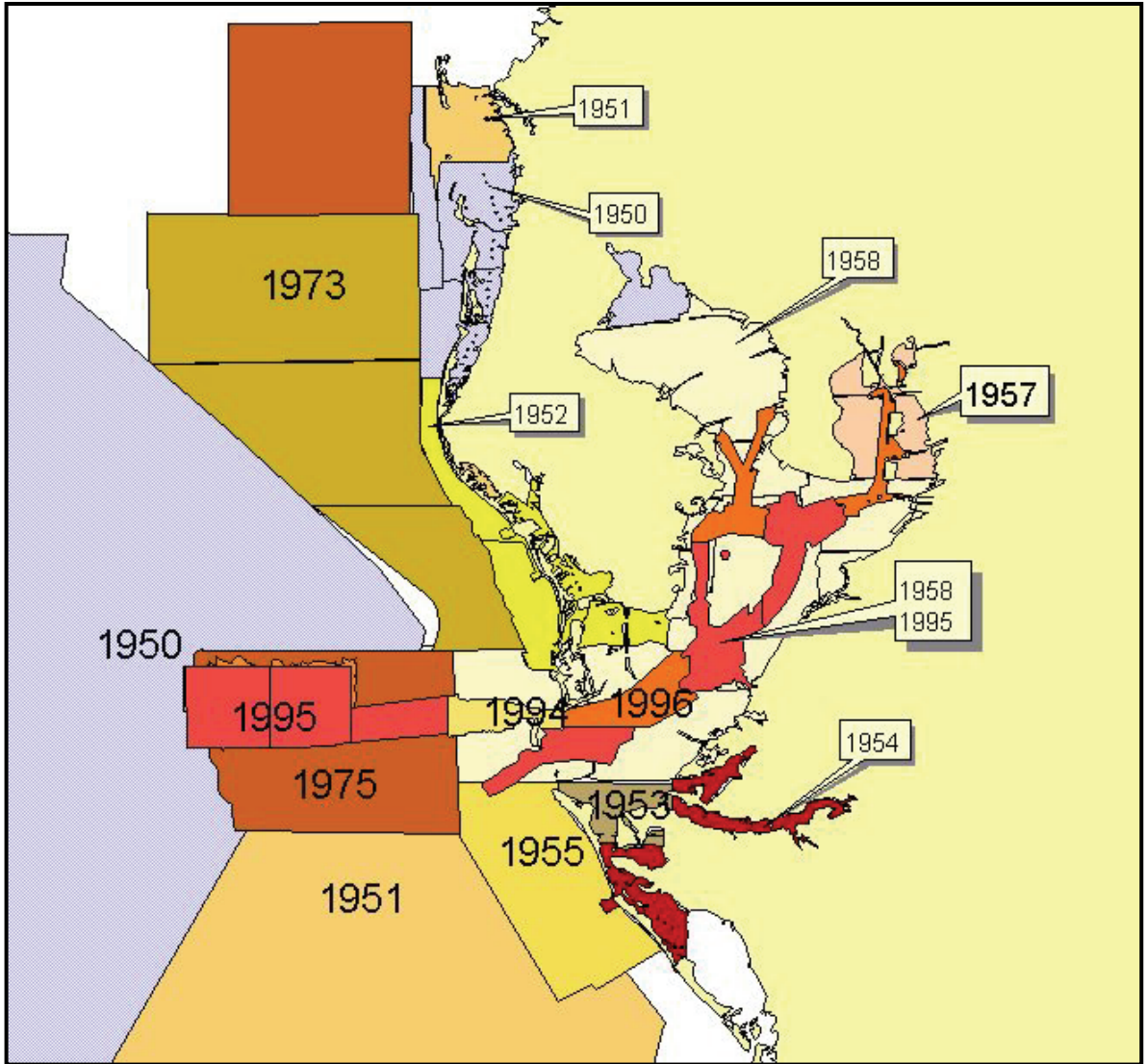


Figure 2. NOAA hydrographic surveys for Tampa Bay.

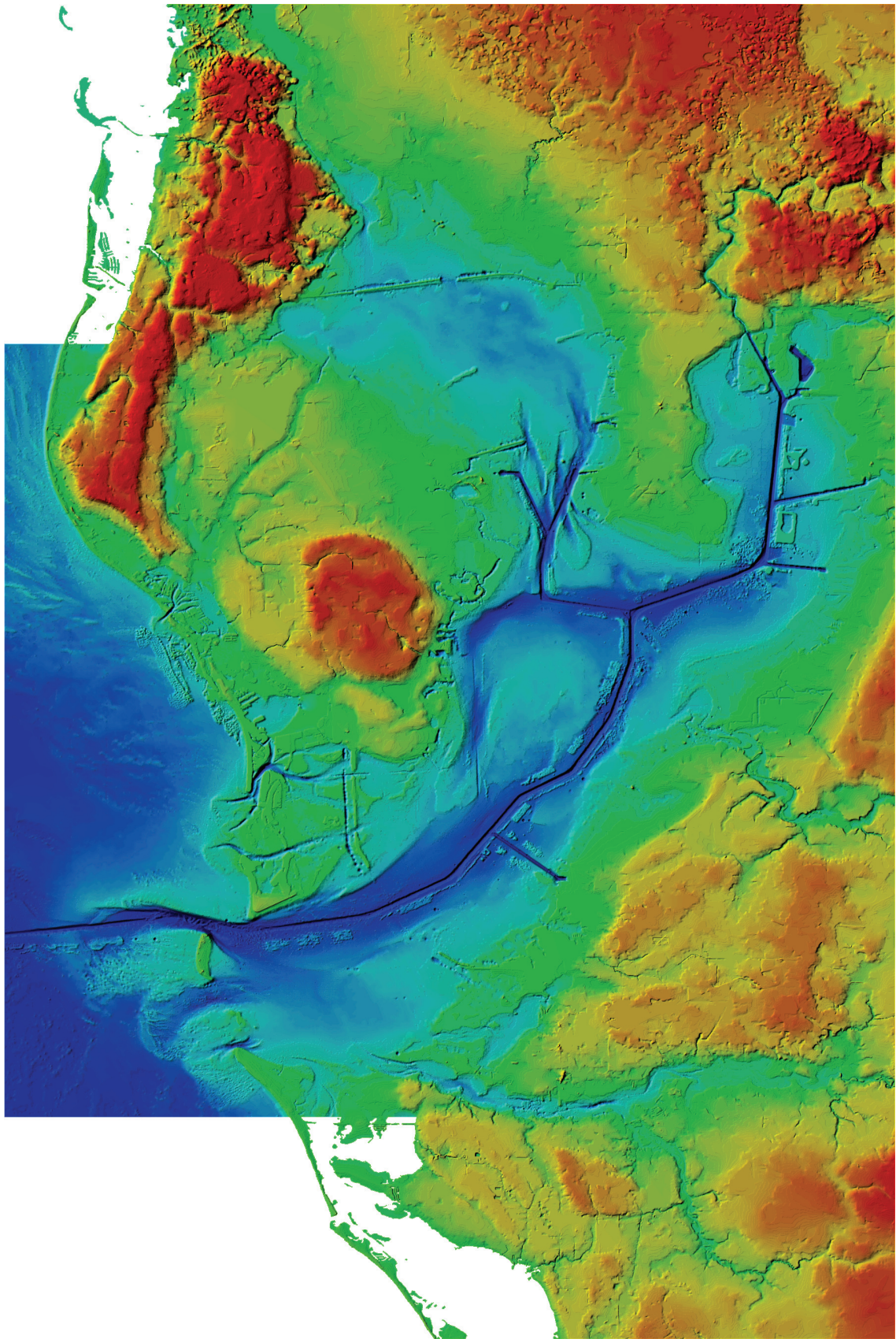
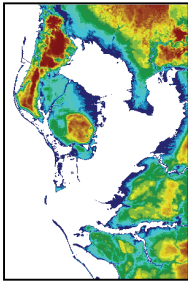
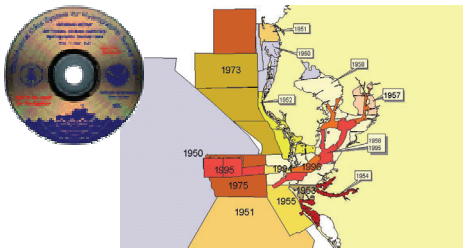


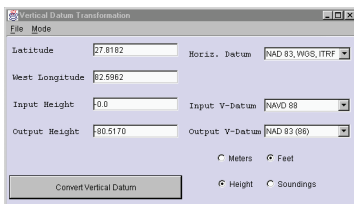
Figure 3. 1-arc-second seamless topographic/bathymetric elevation model for Tampa Bay.



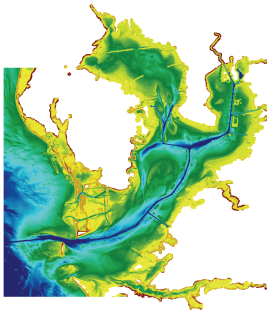
Extract topographic data
and convert vertical
reference frame



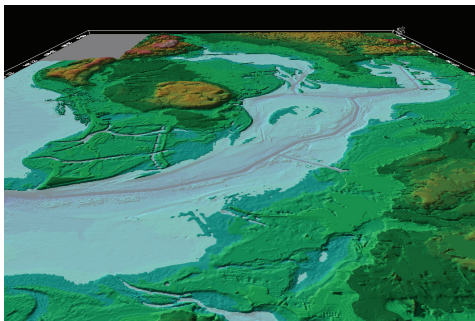
Extract hydrographic
survey data



Use VDatum to transform
vertical reference frame of
soundings



Interpolate bathymetry
grid from digital sounding
points



Mosaic land elevation grid
and bathymetry grid to
create final merged model

Figure 4. Processing stages for generation of merged topographic/bathymetric elevation model.

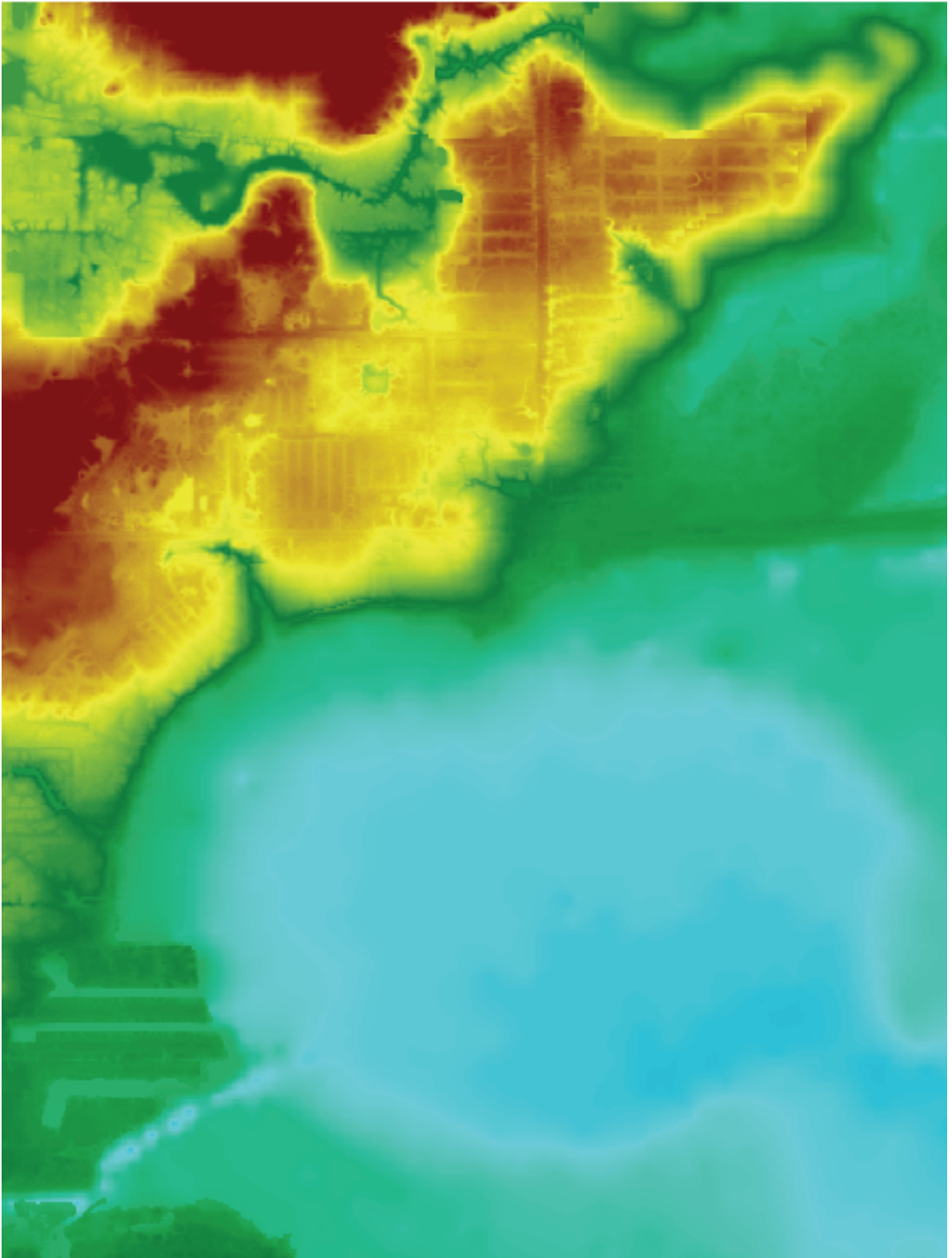


Figure 5. High resolution merge of topographic LIDAR data and gridded bathymetry data.

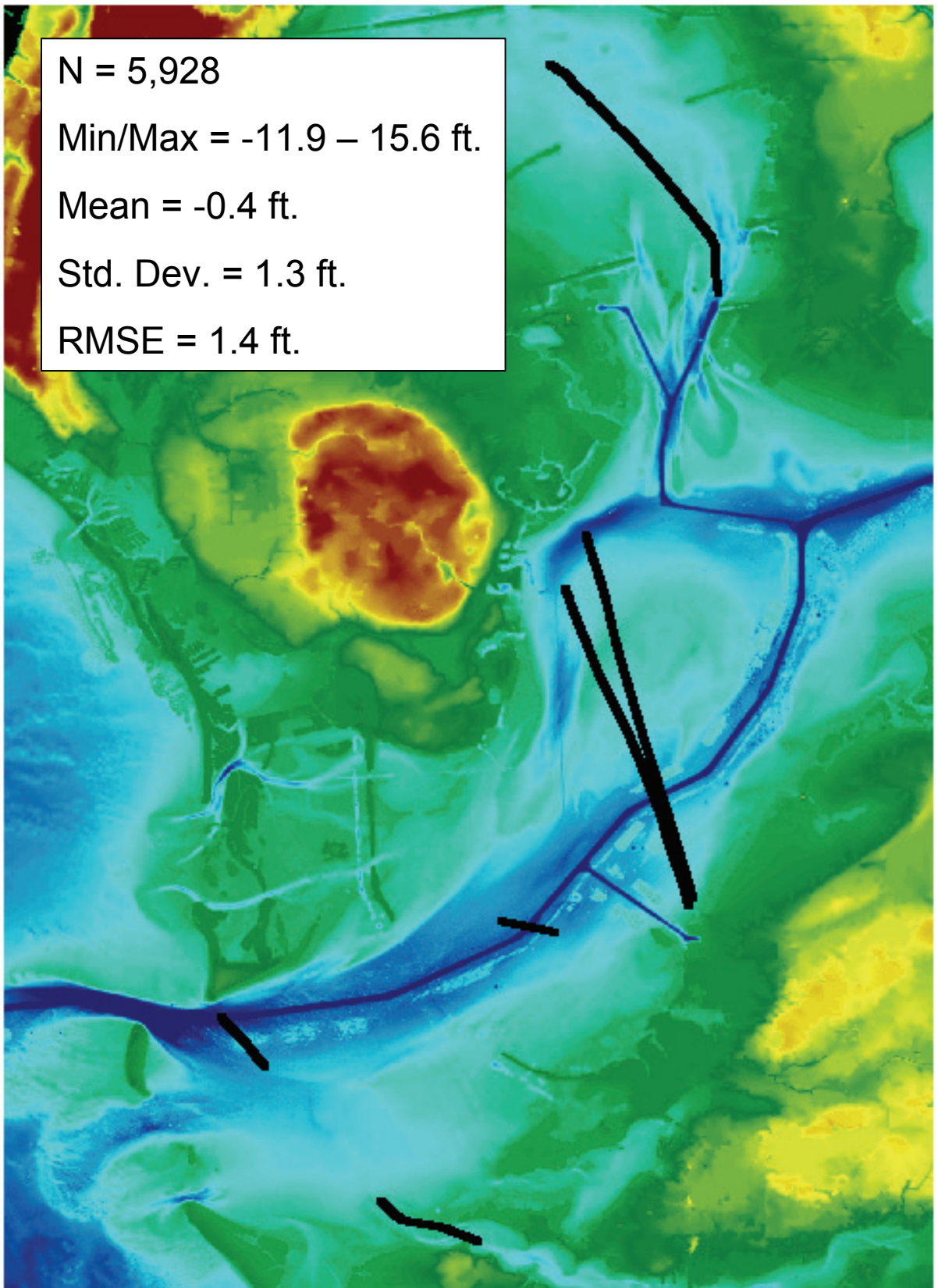


Figure 6. Reference transects (heavy black lines), and accuracy statistics for gridded bathymetry.