

C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying DAPR.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

Traditional Methods Used:

TCARI

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Los Angeles, CA	9410660
Santa Monica, CA	9410840
Santa Barbara, CA	9411340
Oil Platform Harvest, CA	8411406
Port San Luis, CA	9412110
Monterey, CA	9413450

Table 13: NWLON Tide Stations

File Name	Status
H13201_Feature_Tides.tid	Final Approved

Table 14: Water Level Files (.tid)

File Name	Status
L397RA2018.tc	Final

Table 15: Tide Correctors (.zdf or .tc)

A request for final approved tides was sent to N/OPS1 on 10/28/2018. The final tide note was received on 01/29/2019.

H13201 shoreline features were reduced to chart datum (MLLW) using a .tid file created in Pydro utilizing the "TCARI TID file via S-57" function, then loaded in Caris Notebook. H13201 MBES data were reduced to MLLW using ERS via VDATUM processing methods. See Supplemental correspondence regarding approval of traditional tides for use in determining feature heights.

ERS Methods Used:

ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

OPR_L397_RA_18_lgECpoly_xyNAD83-MLLW_geoid12b

C.2 Horizontal Control

The horizontal datum for this project is North American Datum 1983.

The projection used for this project is Projected UTM 11N.

The Wide Area Augmentation System (WAAS) was used for real-time horizontal control for this survey.

C.3 Additional Horizontal or Vertical Control Issues

C.3.1 SBET Processing Method

Precise Positioning-Real Time Extended (PP-RTX) processing methods were used in Applanix POSPac MMS 8.2.1 software to produce SBETs for post-processing horizontal correction.