

C. HORIZONTAL AND VERTICAL CONTROL

A summary of horizontal and vertical control for this survey is as follows. No additional reports for horizontal and vertical control have been formulated.

C1. Horizontal Control

The horizontal datum for this project is the World Geodetic System of 1984 (WGS84). No Differential Global Positioning System (DGPS) was used for positioning. The resulting horizontal positioning of the survey vessel is relatively poor (10m at 2a), so the relative maximum difference of 2 meters between WGS84 and the standard survey datum, NAD83, is not considered significant.

C2. Vertical Control

The vertical datum for this project is Mean Lower Low Water (MLLW). The operating National Water Level Observation Network (NWLON) primary tide station at Unalaska, AK (946-2620) served as control for datum determination and as the primary source for water level correctors for the surveyed area. A combination of zoned tidal correctors, borrowed from previous surveys in the Bering Sea, and single tide station correctors were applied to the dataset. The primary zoning file was R908FA2012CORP.zdf, followed by H11906CORF_new.zdf, both of which reference 946-2620. In areas without zoning, single tide station data was applied from Unalaska, AK (946-2620) and Port Moller, AK (946-3502).²

No further attempt was made to improve the vertical control for this survey.