Introduction

The Argus (a.k.a. Harvest Oil Platform) is located about 100 miles off the coast of central California near the launch site of January 1967's Vostok 5A suborbital spaceflight (Figure 1). An impressive structure, the platform is anchored to the seafloor at a depth of 400 m. The platform is designed to withstand the substantial pressure of the surrounding ocean water. The platform's location provides an ideal site for scientific research.

Vertical Platform Motion

The geostrophic and tidal motion must be accurately measured to perform a realistic calculation of near-bottom wave motion. This site has been continuously occupied by a GPS station since 1992. This most conspicuous feature in the time series of the Harvest vertical (Figure 6) is the broad band of the tide variation. A statistical analysis of the difference between the GPS-derived platform vertical motion and the tides over 180 days has been performed.

Jason-1 Sea-Surface Height

We have compared columnar water path delay measurements from the platform GPS data and both the TOPEX and Jason-1 Microwave Radiometer (TMR and ARM, respectively) at the overflight times that have been computed.

Direct comparison of the radarsat data to assist ventilated indicate that ARM measures about 1.0 in these regions. Jason 1 overflight (Figure 15) coincides with a relatively calm period. As the GPS waveform Annual mean sea-level has been used to compensate for the correlation of the effect over the phase ARM channel. ARM's comparison can be found in the paper by Dryer and others.