The Mean Sea Surface DTU10mss - Comparison With Gps And Tide Gauges

Satellite altimetry and the Global Position System (GPS) are conveniently given in the same reference frame and can therefore be used to construct a vertical reference surface for offshore navigation. Here a new Mean Sea Surface DTU10MSS is presented with a vertical accuracy better than 10 cm in most areas of the world confirmed by extensive comparison with GPS leveled tide gauges around Britain and Norway. It is proposed that this model is used as a global vertical reference. This paper briefly outlines the update of the previous DTU model to DTU10MSS and presents comparisons on GPS positions measured at the ship relative to the sea surface model.