Why is the GPS100 Speed Over Ground (SOG) reading different from the Speed Through Water (STW) reading?

169 Mark Oslund July 16, 2015 GPS100(Discontinued) 0 47.50K

Speed Over the Ground (SOG) is the speed of the vessel relative to the surface of the earth. Speed Through Water (STW) is the speed of the vessel relative to the water. It is possible for the STW to be zero while the SOG is 5 knots, for example if the boat was drifting in a 5 knot current. Likewise, it is possible for the STW to read 5 knots while the SOG reads zero knots, for example the boat is motoring at 5 knots against a current on the bow at 5 knots.

Online URL: https://maretron.com/wp-content/phpkbv96/article.php?id=169