



## **Reanalysis of GPS data over 1995-2014 to monitor tide gauges for sea level studies**

Médéric Gravelle (1) and Alvaro Santamaría-Gómez (1,2)

(1) LIENSS, Université de la Rochelle, La Rochelle, France (mederic.gravelle@univ-lr.fr), (2) School of Land and Food, University of Tasmania, Hobart, Australia

The University of La Rochelle (ULR) analysis centre has participated to the International GNSS Service (IGS) Repro2 campaign which aims at reanalysing worldwide GPS data for high precision products such as satellite orbits & clocks and terrestrial reference frame (station positions and velocities). The ULR has the particular aim of processing the densest network of GPS stations nearby tide gauges whose data have been collected through the SONEL ([www.sonel.org](http://www.sonel.org)) data assembly centre of the global sea-level observing system (GLOSS) and the IGS TIGA working group.

Daily position estimates of a set of 749 stations have been obtained using GAMIT/GLOBK software over the period 1995-2014, and then stacked and aligned to the International Terrestrial Reference Frame (ITRF08) using CATREF software. Here we provide the evaluation of this solution, with particular emphasis to the estimated vertical velocities