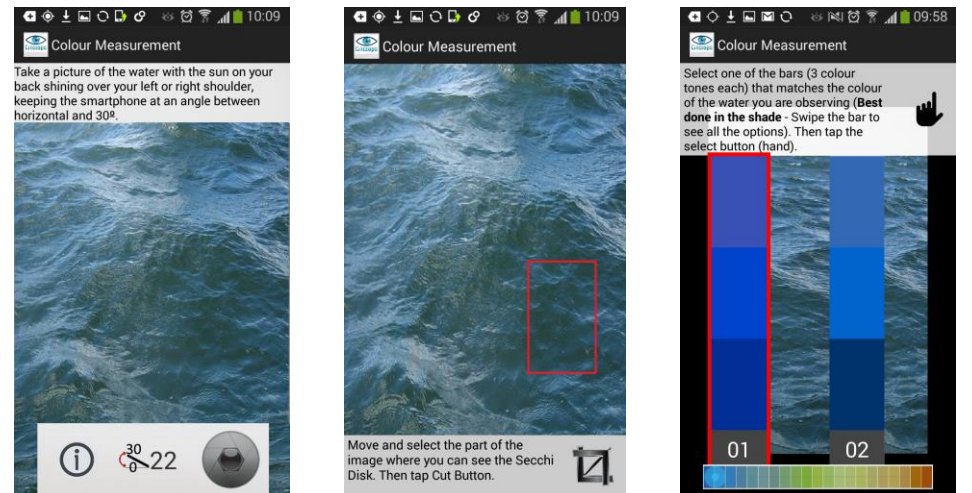


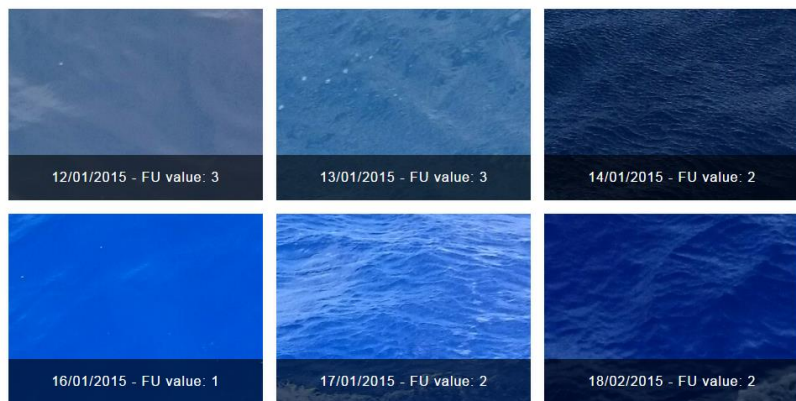
Citclops and the Barcelona World Race 2014-15

The Citclops project has engaged Barcelona World Race (BWR) skippers to collect data related to optical characteristics of ocean waters and to ocean's plankton using the *Citclops - Citizen water monitoring app*. Thanks to this collaboration, color and transparency measurements are carried out in-situ in remote oceanic areas.

The Citclops app and Citclops map-based visualization tools has been provided to be used during the BWR 2014-2015. Each team has been provided with 1 smartphone to carry out the experiment.



Week 3



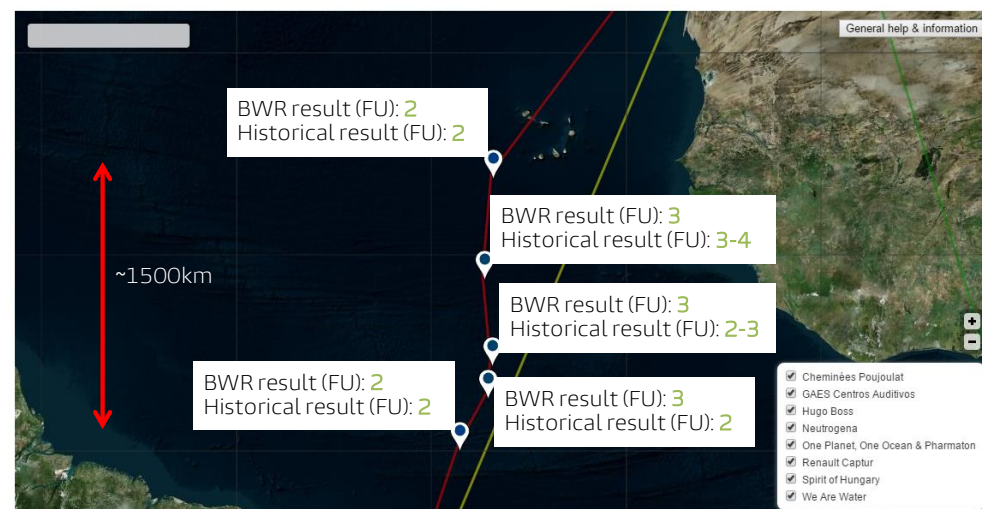
In-situ color measurements are based on the Forel-Ule (FU) scale. The Citclops water monitoring app allows to take pictures and to select an area of the sea so that the color of the water in this area can be compared with an on-screen FU 21 color bar.

The skippers have collected the geolocalized photos of surface water masses during the regatta and have transmitted them to project's researchers.

More than 140 water color samples have been collected during the race. Many of the samples came from previously inaccessible areas. These data have been a contribution to the historical data available so far (61434 FU results between 1889-1999). This information has been analyzed and compared with historical values trying to detect any changes.

There have been many limitations for obtaining results in a race of this type because of the extreme conditions, need to recharge the phone and limited communication.

The analyzed results are presented on the website:
<http://citclops-barcelonaworldrace.weebly.com>

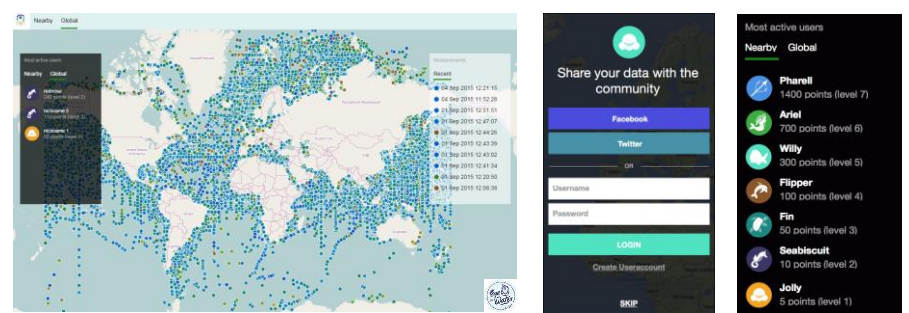


New release of the app and Citclops continuity

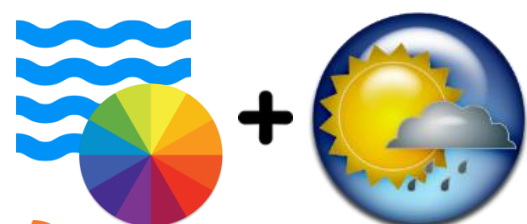


After the first Citclops color app, a new version of the color app and user interface has been developed named *EyeOnWater - Color*.

www.eyewater.org provides app users a personal experience and shows all observations to all interested.



Scientific importance of color and transparency



Besides water temperature and salinity the *color* and *transparency* of water belong to the oldest observed descriptors of lakes, seas and oceans. They have direct relation to plankton and food chain.

The color of water is an essential climate variable defined by the **World Meteorological Organization**.