

# ABSTRACT

In the working environment of lifeguards, knowledge of the prevailing currents is important to guarantee the safety of the bathers. Based on earlier exploratory research, it is conjectured that there is a time difference between the reversal of the currents mentioned in the flow charts and the currents observed in the bathing area.

The aim of this thesis is to determine the effective moment of reversal near the beach in order to construct useful guidelines which are relevant to the work of the lifeguards.

To achieve this goal, on the one hand, a survey was conducted with the beach rescuers to check their work experiences. On the other hand, a measurement campaign was organized to measure the current reversals on the spot, using an anchor buoy with GPS tracker.

The results of the measurement campaign show that there is indeed a time difference closer to the beach compared to the three hours predicted by the flow charts.

On average, the reversal of the flow is observed 02:44 after low tide and 02:26 after high tide in the bathing area. The measurements thus confirm the practical experiences of the lifeguards, who have already taken this time difference into account in their daily work.