# Wave measurements

* 1 day of measurements useless for a long wave climate
* But often data from offshore station used to calculate waves from deep to shallow water using Swan. 1 day of measurements used to estimate the reliability of these wave predictions in the near shore area. Use the measurements to calibrate the model. Pressure sensor measures near shore waves. Wave buoy offshore data 🡪 translate to near shore & compare with measurements
* Waves difficult to measure: height measured as a percentage of the vertical distance between the top of the pier and the wave through.
* 2 days ago big storm at the Black sea. Now swell from the sea. Wednesday evening even more intense waves, today the wave height reduces within an hour before lunch. After lunch, the waves growth again.
* Due to a couple of storm in the last years the design significant wave height of many breakwater has increased from 6.5 m to 7.5m!
* During measuring the wave height was relatively small. Small waves were hard to measure (discussion is it a wave or not?). Partly caused by reflecting waves from the shore/vertical wall. We even missed the smallest waves!
* Jetty influences the waves, bottom differences near the pier influence waves?
* Visual observations: different opinions on what the height of a certain wave is