1107-35-104 Mihaela Ifrim* (ifrim@math.berkeley.edu) and Daniel Tataru. The lifespan of small data solutions in two dimensional water waves.

We consider water wave equations in two space dimensions expressed in position-velocity potential holomorphic coordinates, and prove that small data solutions have at least cubic lifespan, while small localized data leads to global solutions. (Received January 06, 2015)