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Diving depths CHRISTOPHE CLANET, CNRS, France, THIBAULT GUILLET, Ecole polytechnique, France, MARTIN COUX, DAVID QUR, ESPCI, France — Many seabirds (gannets, pelicans, gulls, albatrosses) dive into water at high speeds (25 m/s) in order to capture underwater preys. Diving depths of 20 body lengths are reported in the literature. This value is much larger than the one achieved by men, which is typically of the order of 3. We study this difference by comparing the vertical impact of slender vs bluff bodies. We quantify the influence of wetting and of the geometry on the trajectory and discuss the different laws that govern the diving depth.

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