



Fig. S1. Life span variations in Sr concentration for *Caranx latus* in northeastern Brazil. Shaded rectangles represent the Sr concentration range for marine (blue) and estuarine (green) signatures from Fig. 5. The expected position of the transition zone is presented by the dashed line. (a) sub-adult and adult profiles for individuals assigned to the different juvenile habitats during the first year of life; “type-1” estuaries, “type-2” estuaries, “unknown estuary”, “sea” and “unknown habitat”. (b) profiles of juvenile fish collected in each studied estuary; Goiana, Santa Cruz, Mundaú-Manguaba, Rio Formoso, Sirinhaém, Santo Antônio and Suape.