

A PCA plot showing the distribution of fish species (labeled) over time (years). The x-axis is labeled 'Axis.1' and ranges from -0.25 to 0.25. The y-axis is unlabeled. Species labels include: *Hyporthodus*, *Lutjanus*, *Balistes*, *Alphhestes*, *Epinephelus*, *Gingimostoma*, *Caranx*, *Myrichthys*, *Zeaxelus*, *Uca*, *Ocyurus*, and *Haemulon*. Years are indicated near the data points: 1975, 1980, 1985, 1990, 1995, 2000, 2005, 2010, 2015, 2020, and 2025. The plot shows a clear temporal trend along Axis.1, with species shifting from negative to positive values over time.

PCA plot of 1990-2016 data. The x-axis is labeled 'Axis.1' and the y-axis is labeled 'Axis.2'. The plot shows a trajectory of data points over time, with labels for various years (1990, 1995, 2000, 2005, 2016) and species names (Epinephelus, Ctenopoma, Chaetodipterus, Mycteroperca, Hyporhamphus, Diplecistrum, Caramus, Calanx). The trajectory starts near the origin and moves towards the upper right quadrant.

PCA plot showing the first two principal components (Axis.1 and Axis.2) of morphological data for 15 fish species. The x-axis (Axis.1) ranges from -0.25 to 0.25, and the y-axis (Axis.2) ranges from -0.4 to 0.4. Species are labeled with their names and years. Blue labels indicate species with significant shape changes over time, while black labels indicate no significant change. Species include *Balistes* (1999, 2000, 2005), *Orthodus* (1995), *Myxus* (1980), *Acanthurus* (1975), *Sphyræna* (1985), *Priacanthus* (1985), *Carcharias* (2010, 2015), and others.

PCA plot showing the composition of fish species in 1975 and 1990. The x-axis is labeled Axis.1 and the y-axis is labeled Axis.2. Species are labeled with their names and years. A blue arrow points from the 1975 cluster towards the 1990 cluster, indicating a shift in species composition over time.