

Figure S1. Principle components analysis of morphological data. Variable loadings represented by grey arrows, colored points show individual salamanders of each species (*Chioglossa*, *Salamandra*, *Pleurodeles*, *Notophthalmus*, *Triturus*, *Cynops*, and *Paramesotriton*, N=3). The x and y axes represent the loadings of the first and second principle components. Terrestrial species are depicted on the far right, the fully aquatic newt, *Paramesotriton*, is shown on the far left, and semi-aquatic newts cluster towards the center of the plot. The first principle component describes 40.7% of the variance in the data set, while the second describes 25.5%.

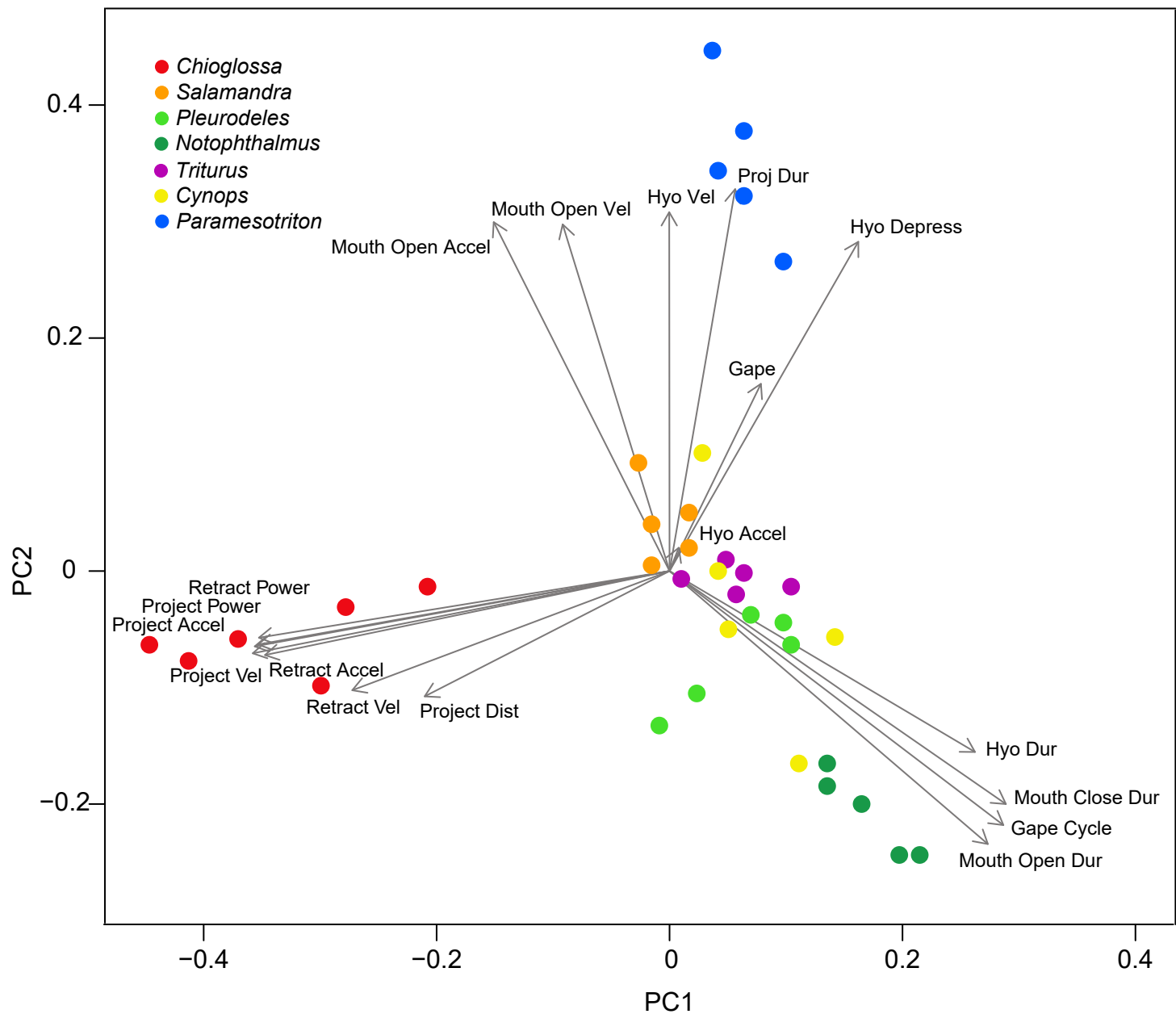


Figure S2. Principle components analysis of kinematic and performance data. Indications as in figure S1 (*Chioglossa*, N=6; *Salamandra*, *Pleurodeles*, *Notophthalmus*, *Triturus*, *Cynops*, and *Paramesotriton*, N=5). The fully terrestrial salamandrid, *Chioglossa*, has the greatest tongue-projection performance, and is distinct from the other salamandrids in principle components space. Compared to most semi-aquatic and aquatic newts, *Salamandra* shows specializations for terrestrial feeding, however, it is not as extreme as *Chioglossa*. The fully aquatic newt, *Paramesotriton*, also forms a distinct cluster with the greatest mouth opening velocity and acceleration, and hyobranchial depression velocity, suggesting specializations for aquatic feeding. The first principle component describes 40.5% of the variance in the data set, while the second describes 26%.

Table S1. Post hoc analyses summarizing adjusted p-values of morphological measurements between species.

[Click here to Download Table S1](#)

Table S2. Post-hoc analyses summarizing adjusted p-values of terrestrial feeding kinematics between species.

[Click here to Download Table S2](#)