

Figure S1. Representative MO_2 - PO_2 relationships and P_{crit} calculations for *Doryteuthis pealeii* at 15°C. Breakpoint P_{crit} was calculated via the “segmented” R package. Sub-prediction interval (Sub-PI) P_{crit} was calculated by constructing a 95% prediction interval (dashed lines) around the oxyregulating data (black points). The sub-PI P_{crit} was defined as the intersection (red point) between the oxyconforming line and the lower bound of the prediction interval. Shaded bands are the 95% confidence intervals for the breakpoint lines. Values at the top of each panel are P_{crit} values (kPa).

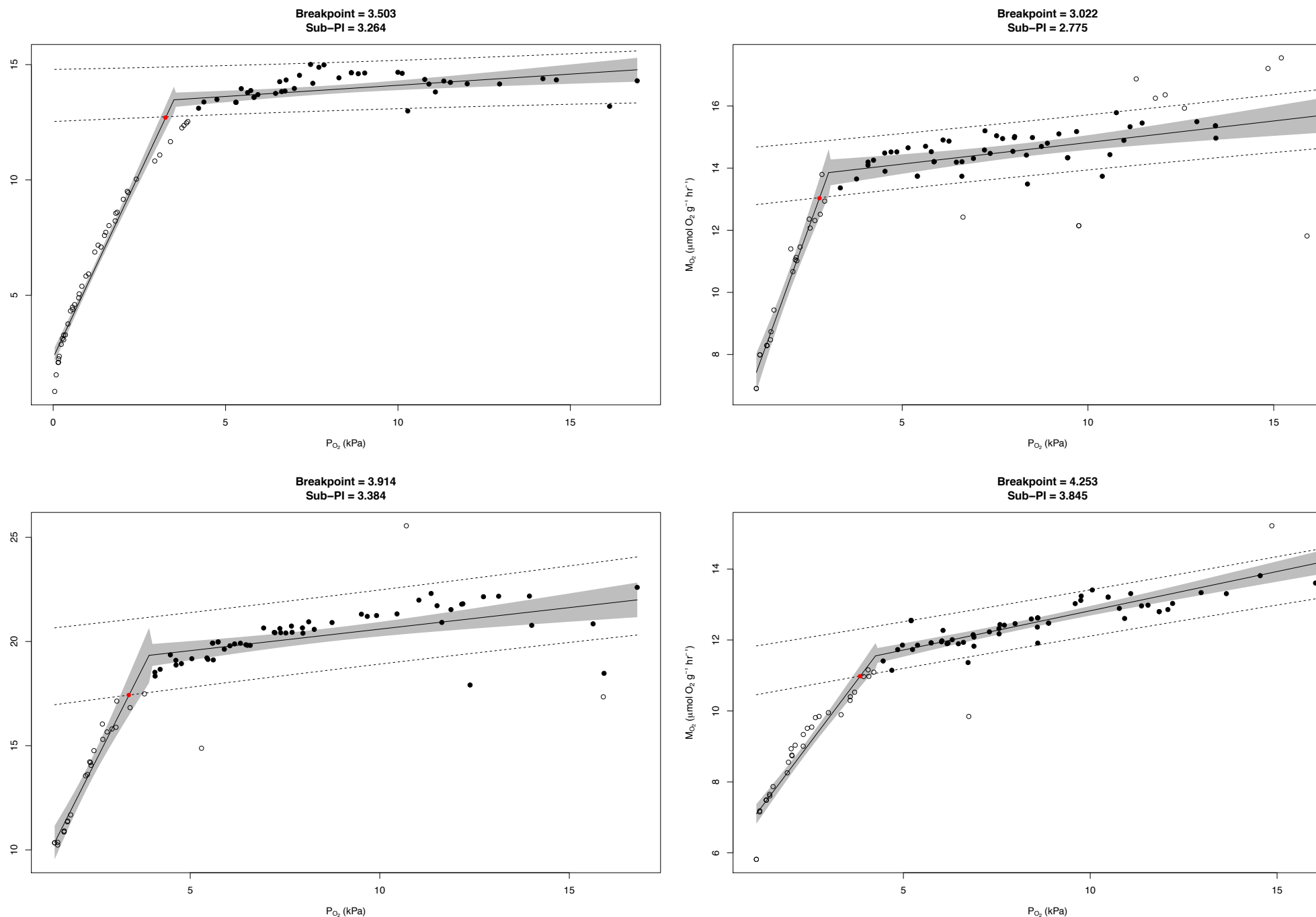


Figure S2. Representative MO_2 - PO_2 relationships and P_{crit} calculations for *Dosidicus gigas* at 23-27°C. Breakpoint P_{crit} was calculated via the “segmented” R package. Sub-prediction interval (Sub-PI) P_{crit} was calculated by constructing a 95% prediction interval (dashed lines) around the oxyregulating data (black points). The sub-PI P_{crit} was defined as the intersection (red point) between the oxyconforming line and the lower bound of the prediction interval. Shaded bands are the 95% confidence intervals for the breakpoint lines. Values at the top of each panel are P_{crit} values (kPa).