Hidden impacts of ocean acidification to live and dead coral framework:

Supplementary Information

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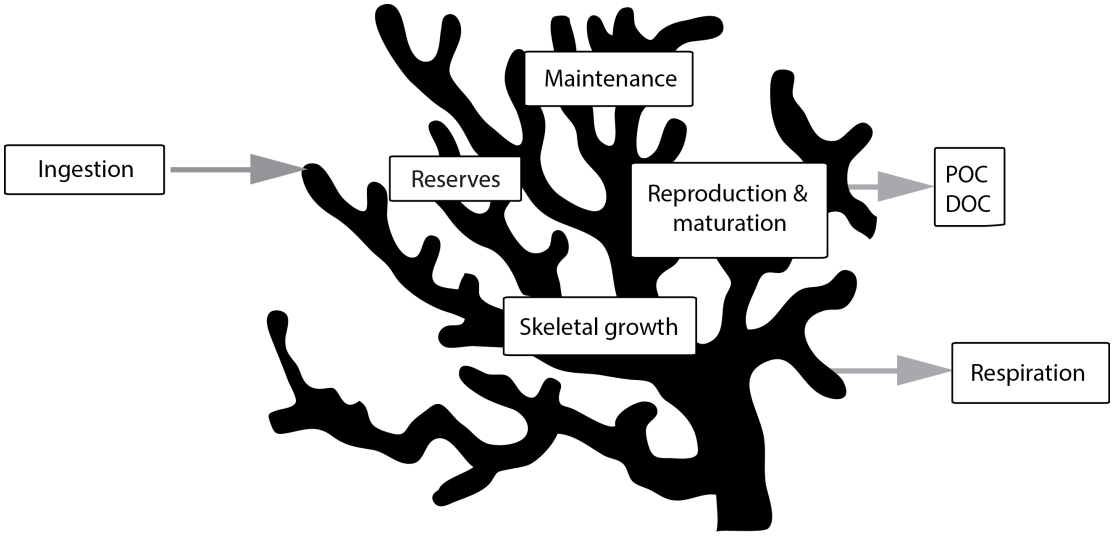
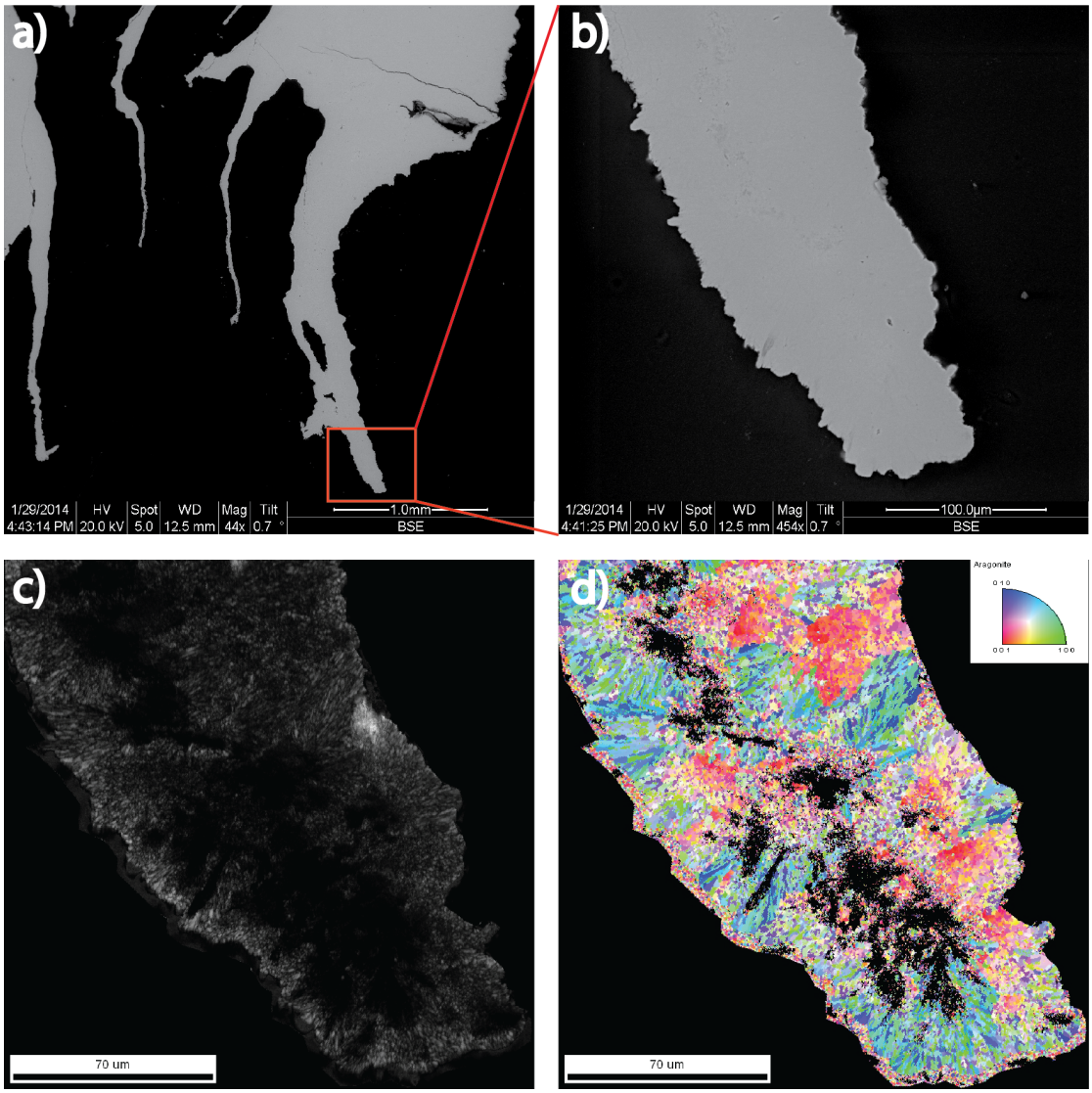
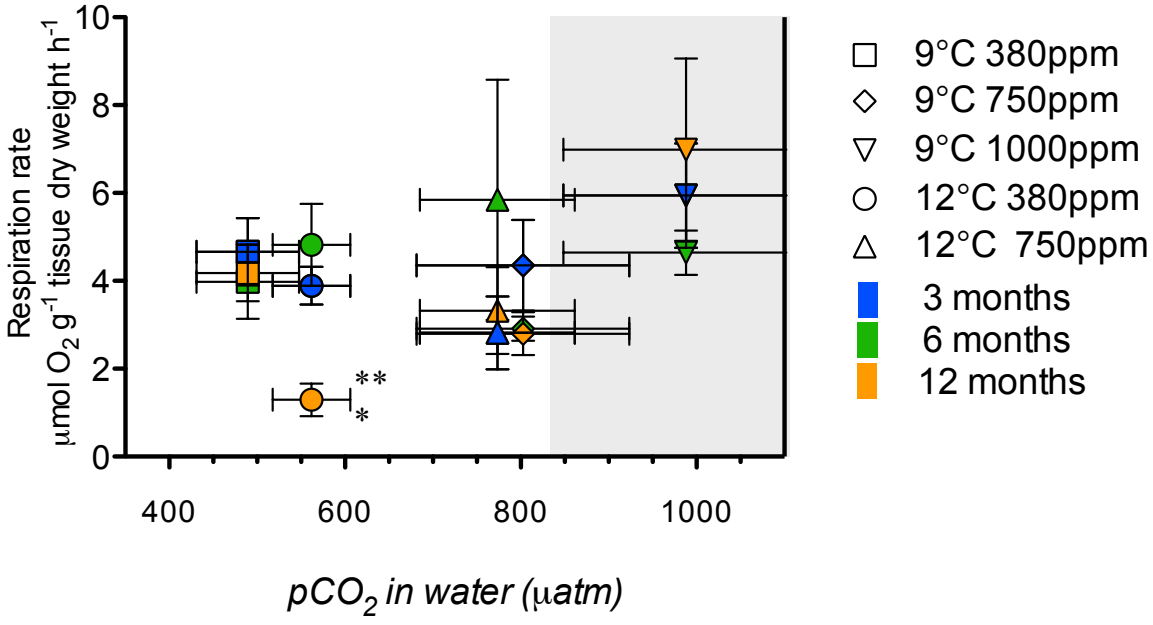


Supplementary Information Figure 1: *Simplified schematic of carbon energetic budget in Lophelia pertusa. Energetic inputs are through injestion of food sources to be used in downstream processess and in building up energetic reserves. POC and DOC stand for particulate and dissolved organic matter respectively.*



Supplementary Information Figure 2: ***(a)*** *Back Scatter Electron emission (BSE) image of polyp (grey), and* ***(b)*** *magnified area of interest of polyp tip.* ***(c)*** *Crystal Diffraction map and* ***(d)*** *orientation of aragonite crystals respectively. Colours in* ***(d)*** *indicate crystal orientation.*



Supplementary Information Figure 3: *Respiration rates (µmol O_2 g^{-1} dry tissue mass h^{-1} ± SE, n = 8) at 3, 6 and 12 month time points from all experimental treatments. * and ** denote significant differences at that time point between and within treatments respectively. The shaded area represents water conditions where $\Omega_{Aragonite} < 1$.*