Metabolic Cold Adaptation (MCA) is the phenomenon whereby cold climate species display an elevated metabolic rate (MR) relative to their warm climate relatives at the same trial temperature. Essentially, MCA predicts the conservation of the rate of temperature-dependent biological processes in the face of lower environmental temperatures. This controversial theory has received mixed support in the literature, but appears to be present as a general trend among insect species. Here, we examine MCA across 67 Drosophilid species from across the globe.