

**Figure S2. Multidimensional scaling (MDS) of morphological features *without* estimation of missing data.** Specimens are depicted in black, as vouchers, and features appear in red, as weighted averages of their contributions. Specimens highlighted in blue from the northeastern USA appear in Fig. 2 (YPM29380) and those highlighted in green from northeastern Canada and the southwestern USA in Fig. 5 (USNM30988 and USNM92912-5, respectively). One of the specimens highlighted in orange from the aquarium at Discovery Place, USA, appears in Fig. 6A (DP3-4). One of the specimens in the black boxes from the Arctic appears in Fig. 6C (USNM 44243-2) and the specimen from northwestern Canada in the grey box appears in Fig. 6D (USNM92913-1). Specimens highlighted in orange are *Aurelia coerulea* and in pink *Aurelia cebimarensis* sp. nov., identified based on genetic sequences (Table S4). See Table 1 for institution acronyms and Fig. 1, Tables S1-S3 for more information on specimens measured and morphological features.