**Electronic Supplemental Material**

**Biology Letters**

**Coastal regions of the northern Antarctic Peninsula are key for gentoo populations**

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Data for article and electronic supplemental material are available in the Dryad Digital Repository at:https://doi.org/10.5061/dryad.5x69p8d20

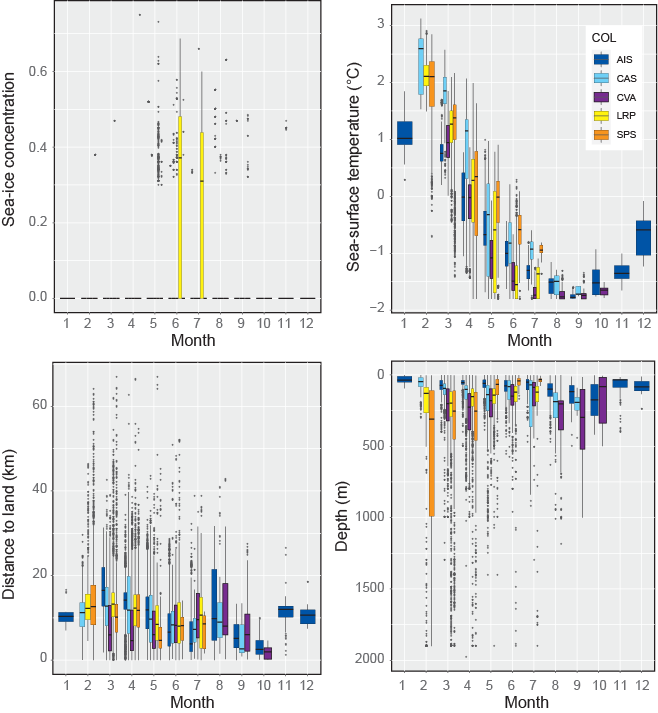
**Figure S1.** Distribution of gentoo penguin (*Pygoscelis papua*) breeding sites within the western Antarctic Peninsula region and CCAMLR Statistical Area No. 48.1 (red line); (*a*) current breeding sites with seven newly established colonies (data source: Mapping Application for Penguin Populations and Projected Dynamics - MAPPPD, see Humphries *et al*. 2017); (*b*) active sites and the estimated numbers of breeding pairs from a census in 2017 or the latest one before 2017 available at MAPPPD when applicable; (*c*) population trends (1990-2017) at five investigated breeding sites: Lions Rump (LRP) and Stranger Point (SPS) on King George Island, Cape Sherriff (CAS) on Livingston Island, the Argentine Islands (AIS) within Wilhelm Archipelago, and Cierva Cove (CVA) on the Antarctic Peninsula [Dykyy et al. 2019, González-Zevallos *et al*. 2013, Hinke *et al*. 2017, Juáres *et al*. 2020, Korczak-Abshire *et al*. 2013]. Produced using data from the SCAR Antarctic Digital Database and CCAMLR GIS web site.

Figure_S1.tif

**Figure S2**. Location estimates for adult and fledgling gentoo penguins tracked from five investigated breeding colonies (see Figure S1c) in the western Antarctic Peninsula region during the austral winter of 2017 (Dryad Digital Repository, see Korczak-Abshire *et al.* 2020).



**Figure S3**. Monthly distributions of physical habitat variables encountered by all-aged gentoo penguins originating from the five investigated colonies. Only data for February to October are displayed in the main manuscript (Dryad Digital Repository, see Korczak-Abshire *et al.* 2020).



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