

## Reply to the comments on manuscript egusphere-2024-1896

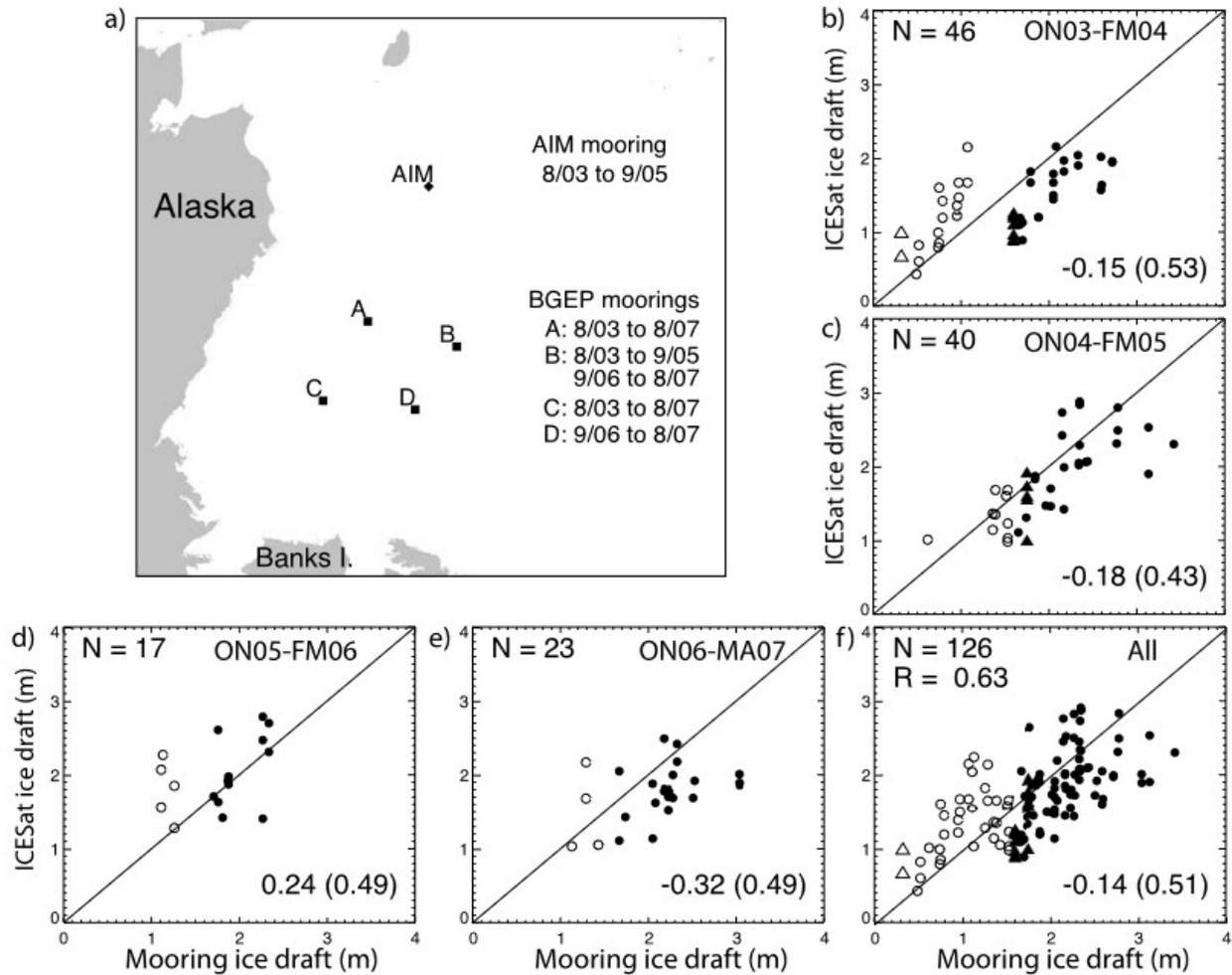
Edel et al. “Reconstruction of Arctic sea ice thickness (1992–2010) based on a hybrid machine learning and data assimilation approach”

### **Figures**

C07005

KWOK ET AL.: THINNING OF ARCTIC OCEAN SEA ICE

C07005



**Figure 4.** Comparison of ICESat estimates with ice draft from moorings. (a) Location of AIM and Beaufort Gyre Exploration Project (BGEF) moorings in the Beaufort and Chukchi seas. (b) ON03 and FM04 ICESat campaign. (c) ON04 and FM05 ICESat campaign. (d) ON05 and FM06 ICESat campaign. (e) ON06 and MA07 ICESat campaign. (f) All campaigns. (Triangles, ICESat versus AIM; circles, ICESat versus BGEF; open symbols, fall (ON campaigns); solid symbols, winter (FM and MA campaigns)). The number of samples ( $N$ ), the correlation ( $R$ ) between the two quantities, and the mean and standard deviation of the differences between the quantities are shown in Figures 4b–4f.

Figure R1: From Kwok et al. 2009 (Fig. 4).

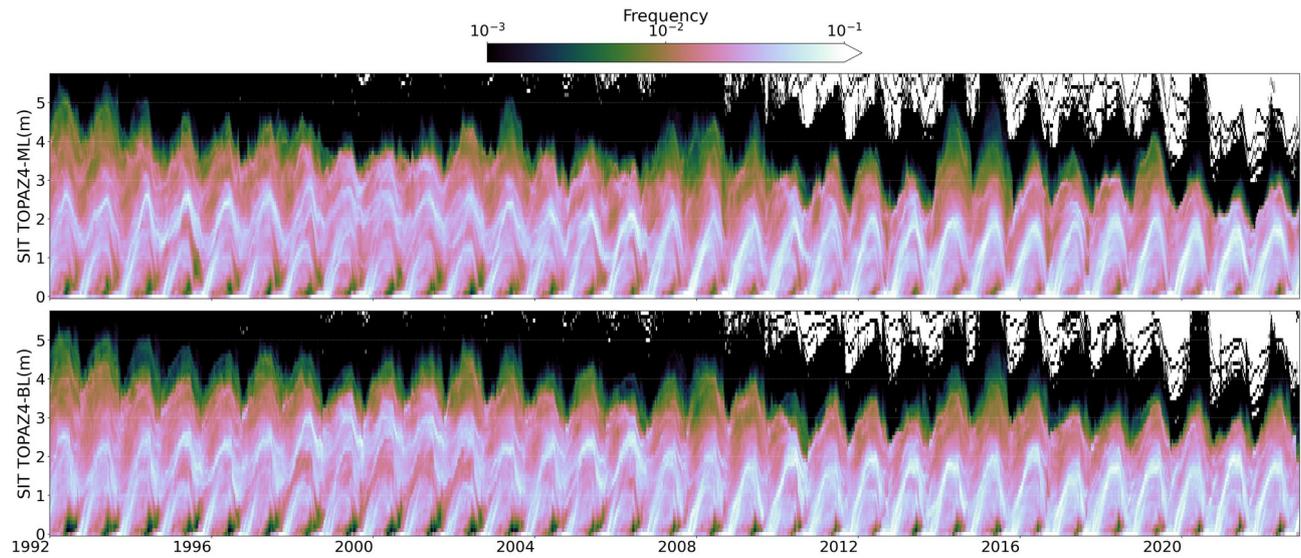


Figure R2: Distribution of daily SIT from TOPAZ4-ML (top) and TOPAZ4-FR (bottom).

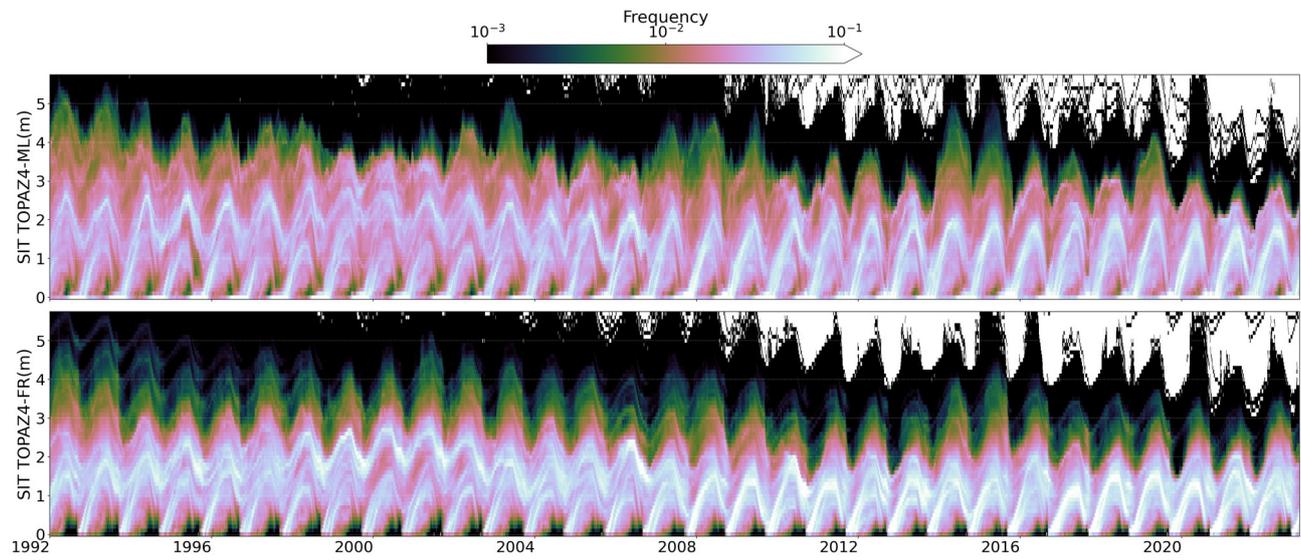


Figure R3: Distribution of daily SIT from TOPAZ4-ML (top) and TOPAZ4-BL (bottom).

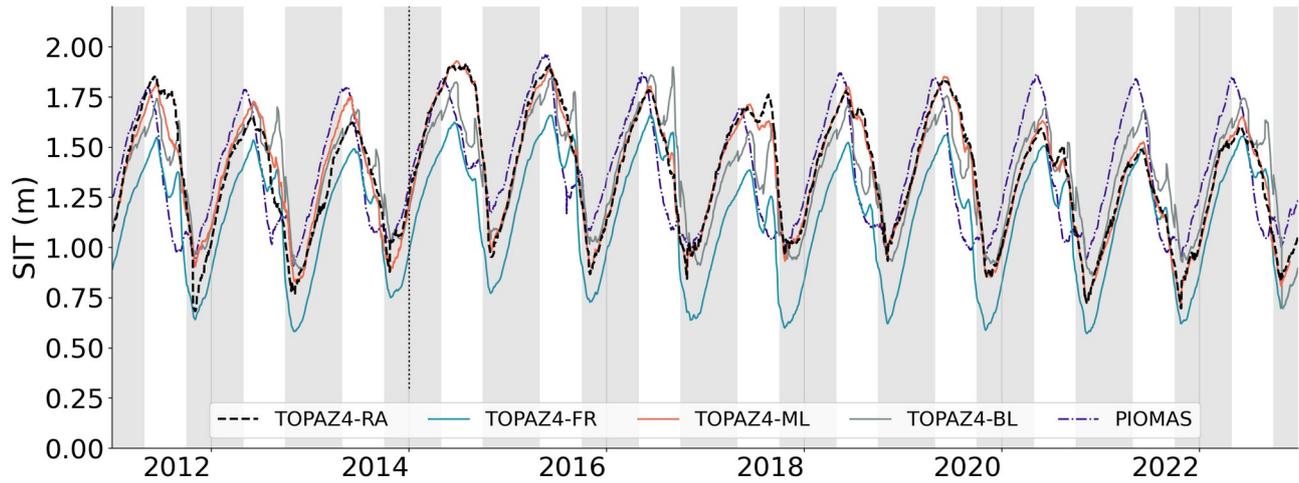


Figure R4: Same as Figure 6, with the addition of PIOMAS.