

Supplementary Materials

for

PCA-MRM model to forecast TEC at middle latitudes

by

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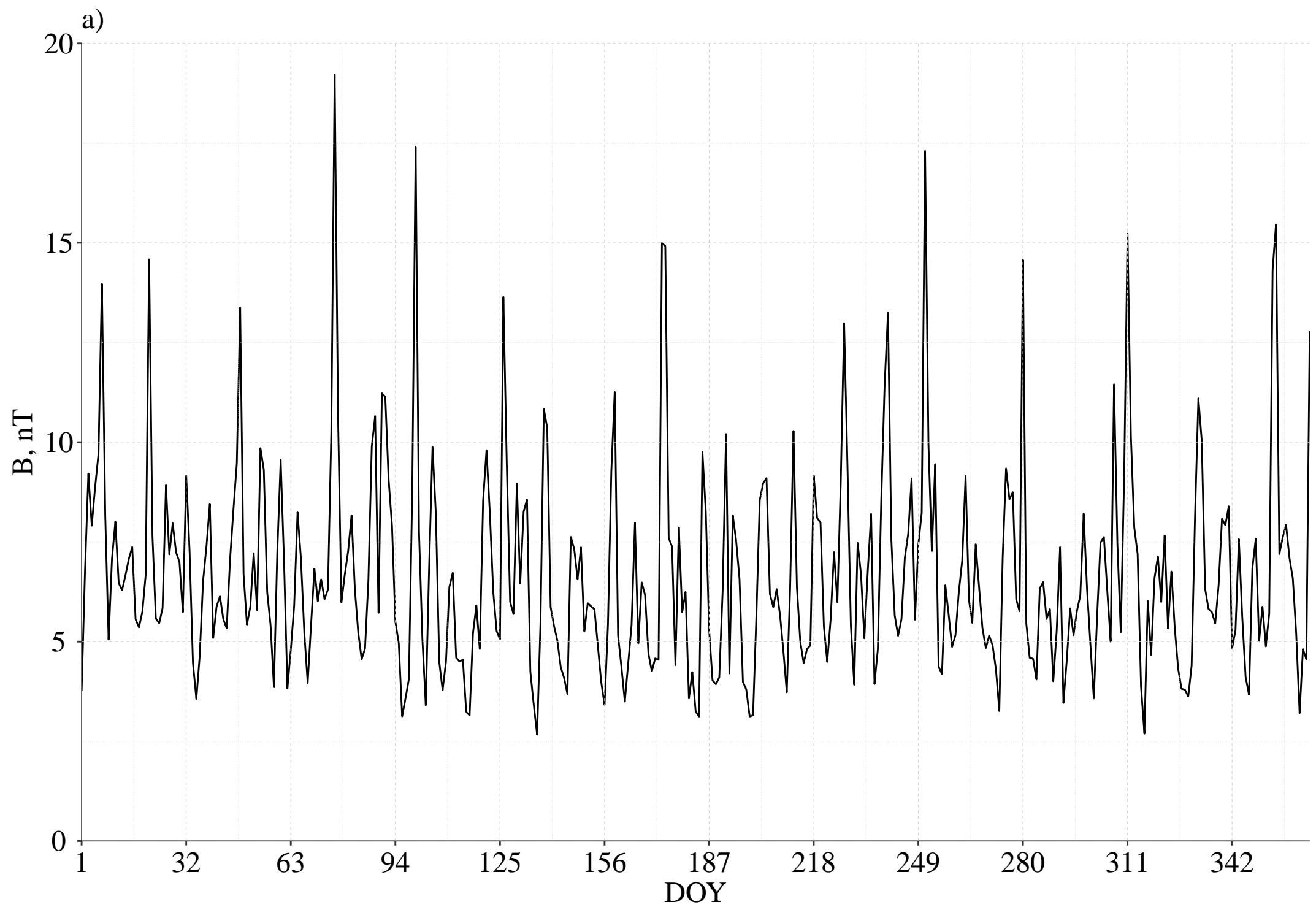
³ Instituto de Astrofísica e Ciências do Espaço, Univ Coimbra, OGAUC, Coimbra, Portugal; tvbarlyaeva@gmail.com

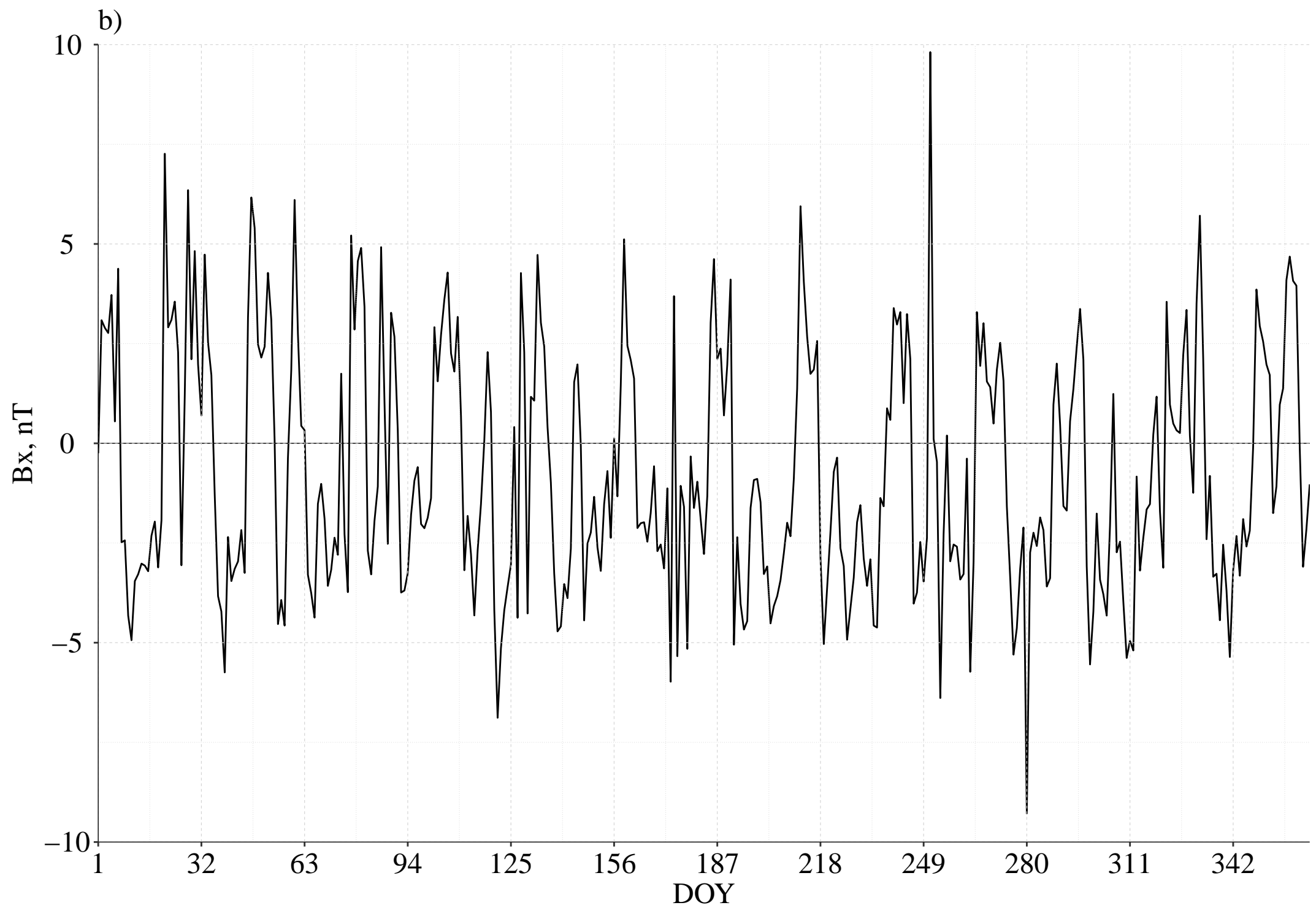
* Correspondence: annamorozovauc@gmail.com

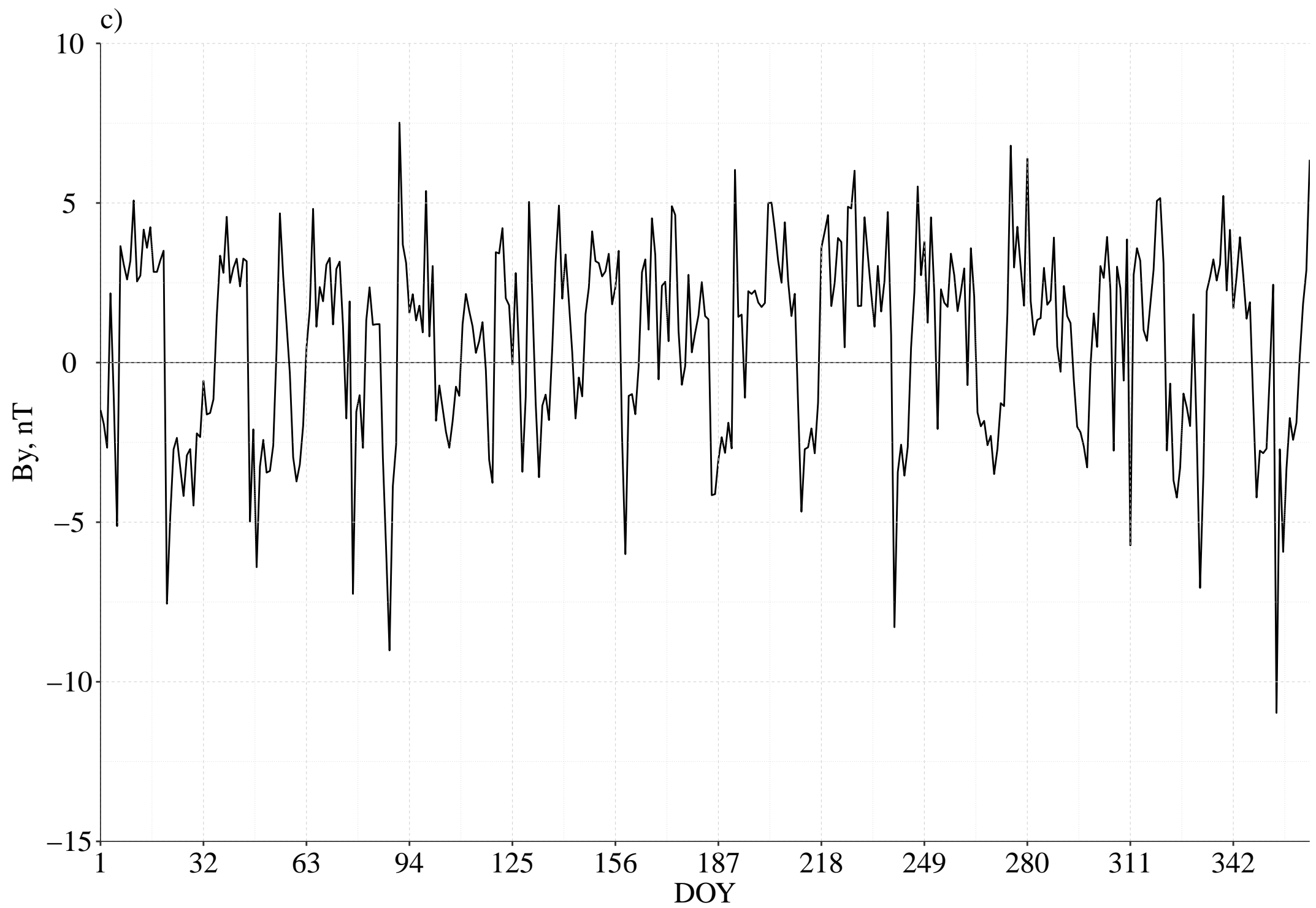
This file contains Supplementary Materials (SM) referenced in the main text:

Figures S1-S5: Variations (daily mean values) of space weather parameters used to make the PCA-MRM TEC models for 2015.

Figure S1. Variations (daily mean values) of the interplanetary magnetic field parameters used to make the PCA-MRM TEC models for 2015: scalar B (a), Bx (b), By_{GSM} (c) and Bz_{GSM} (d).







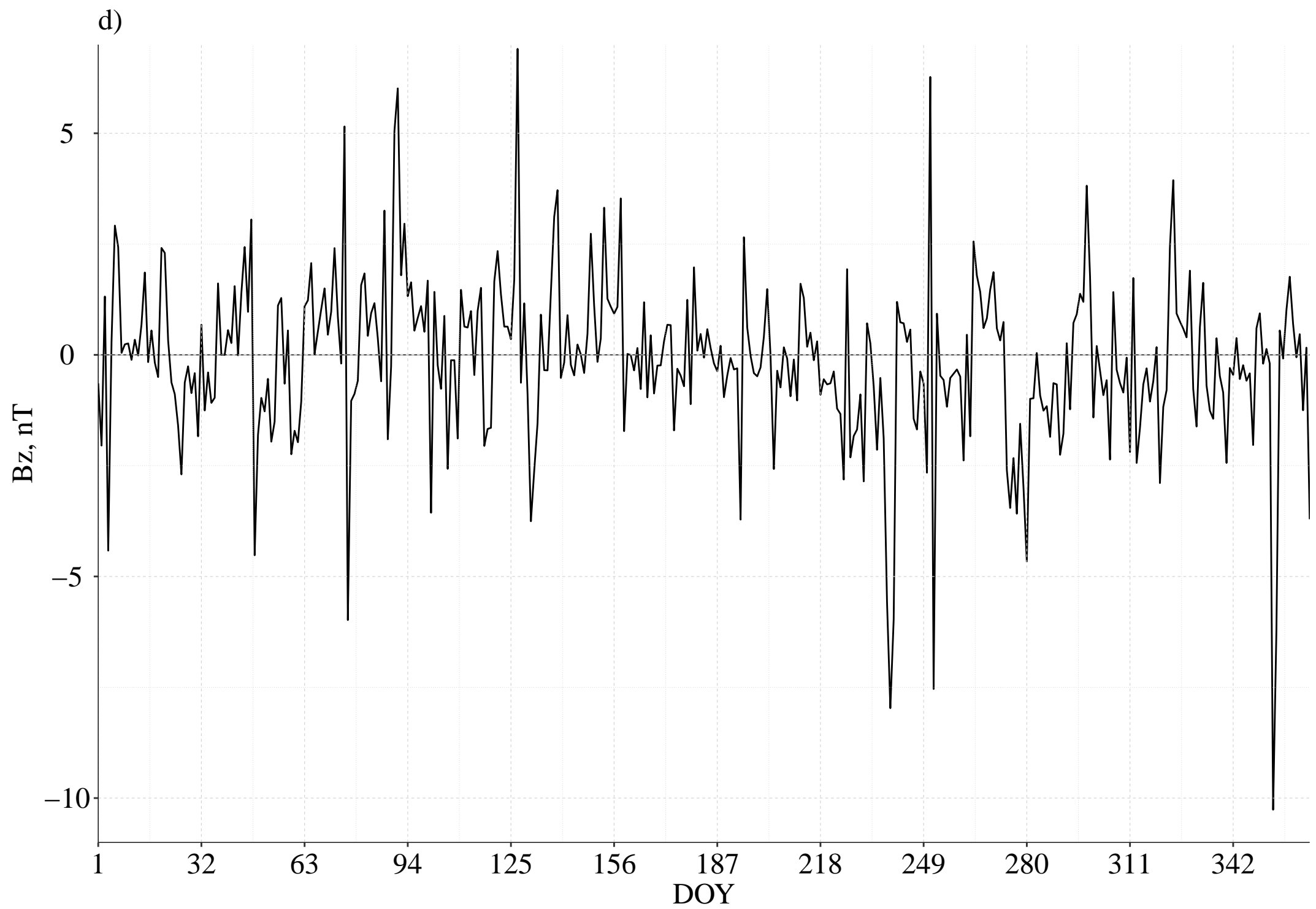
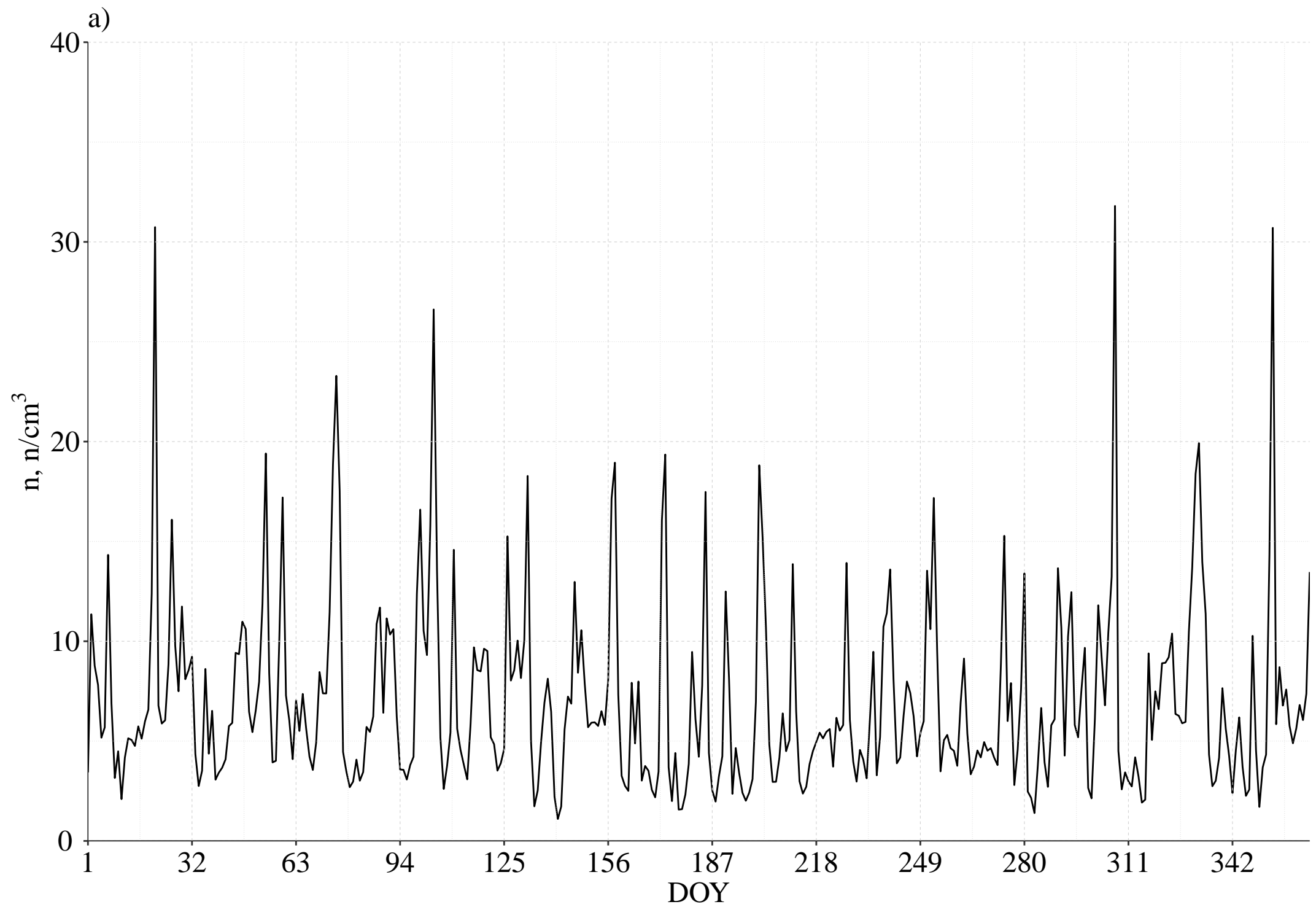
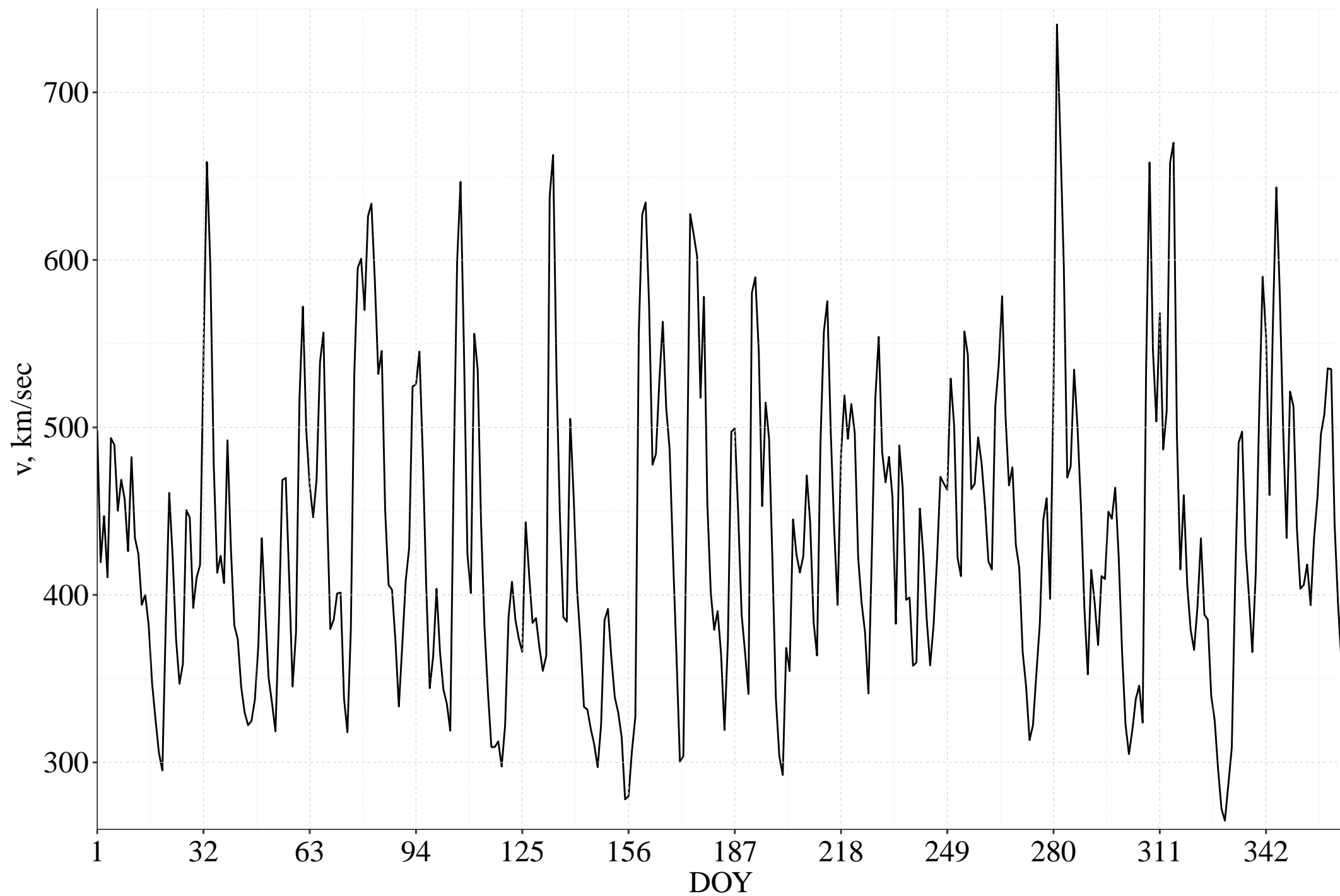


Figure S2. Variations (daily mean values) of the solar wins parameters used to make the PCA-MRM TEC models for 2015: n (a), v (b) and p (c).



b)



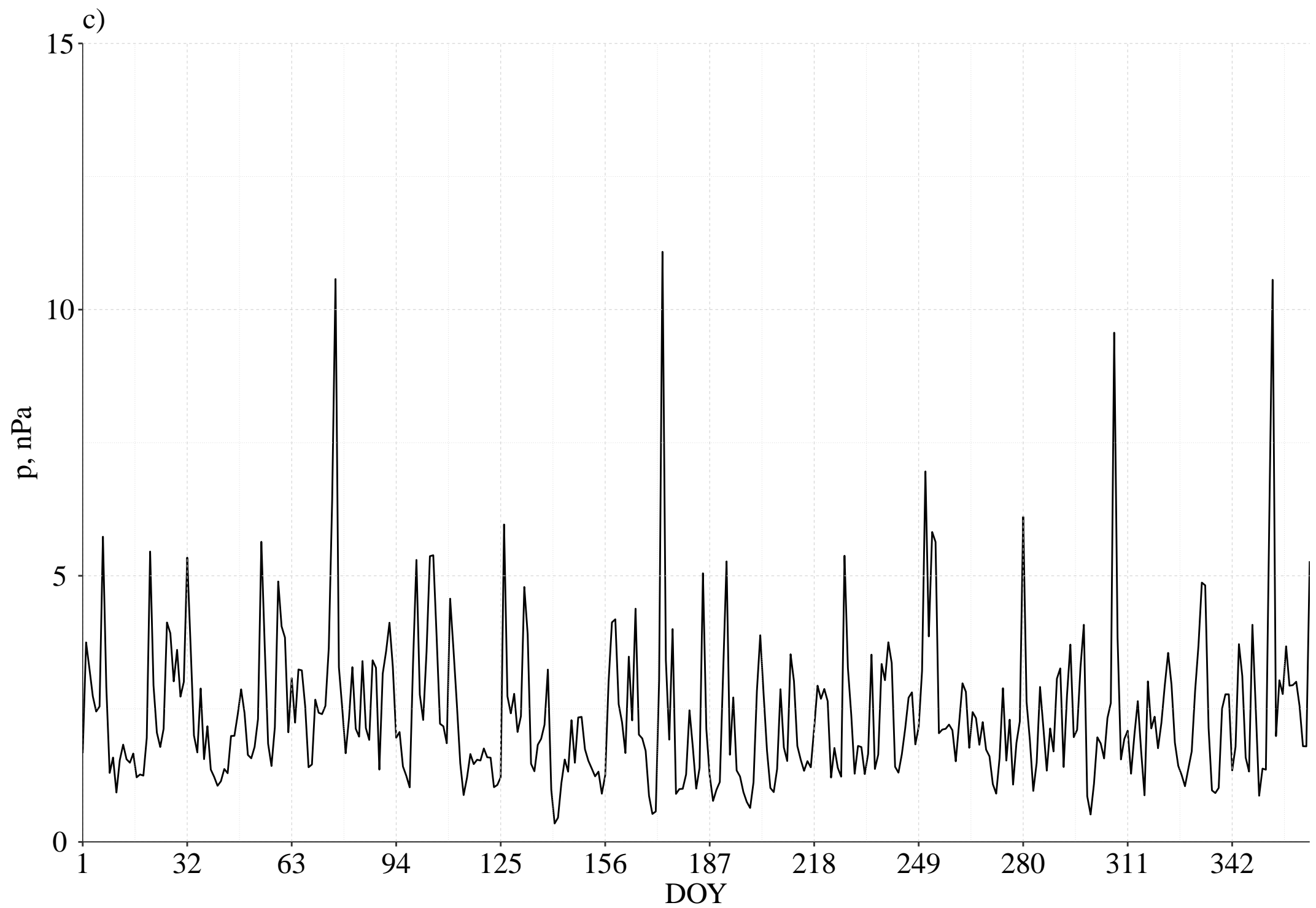
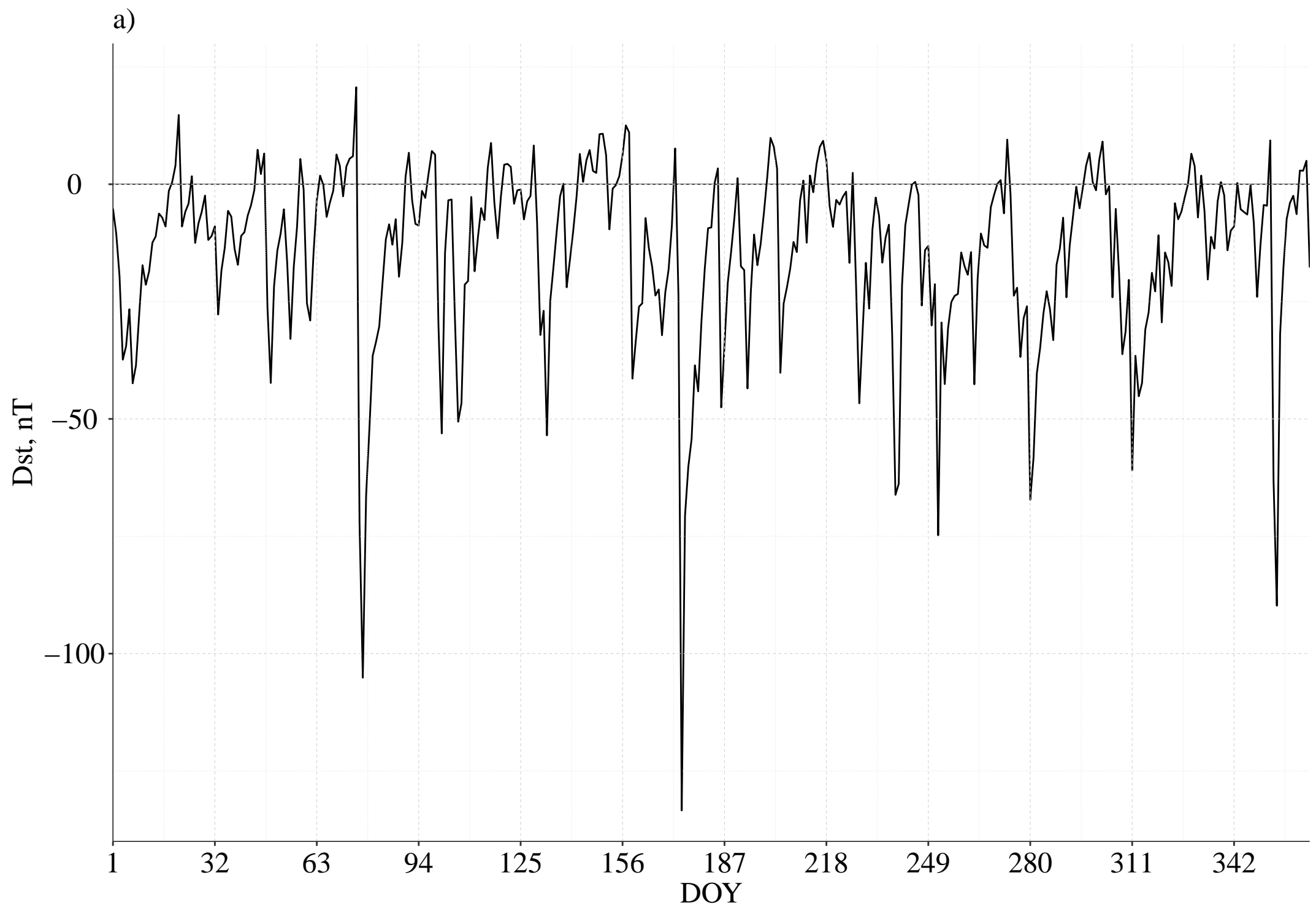
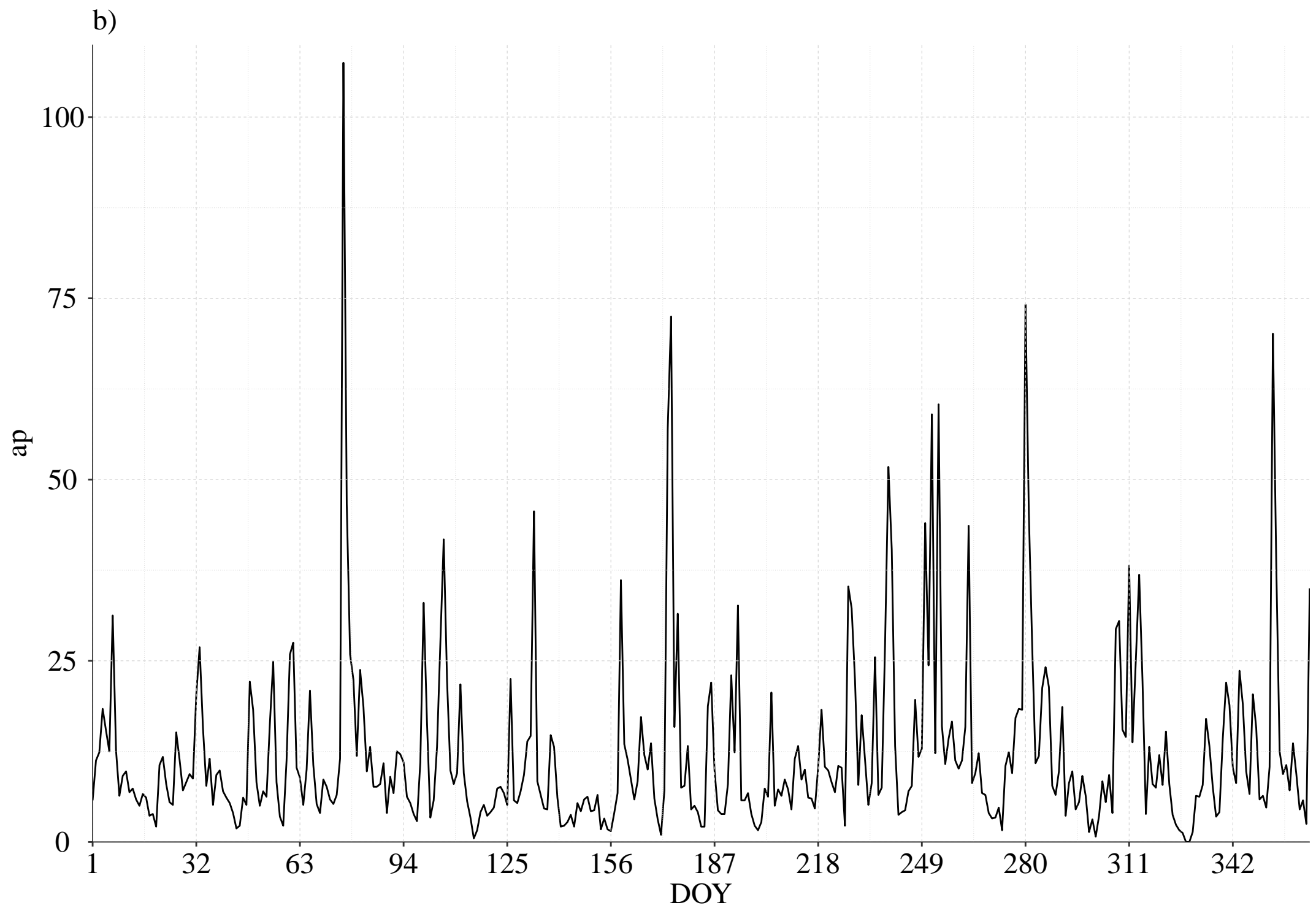
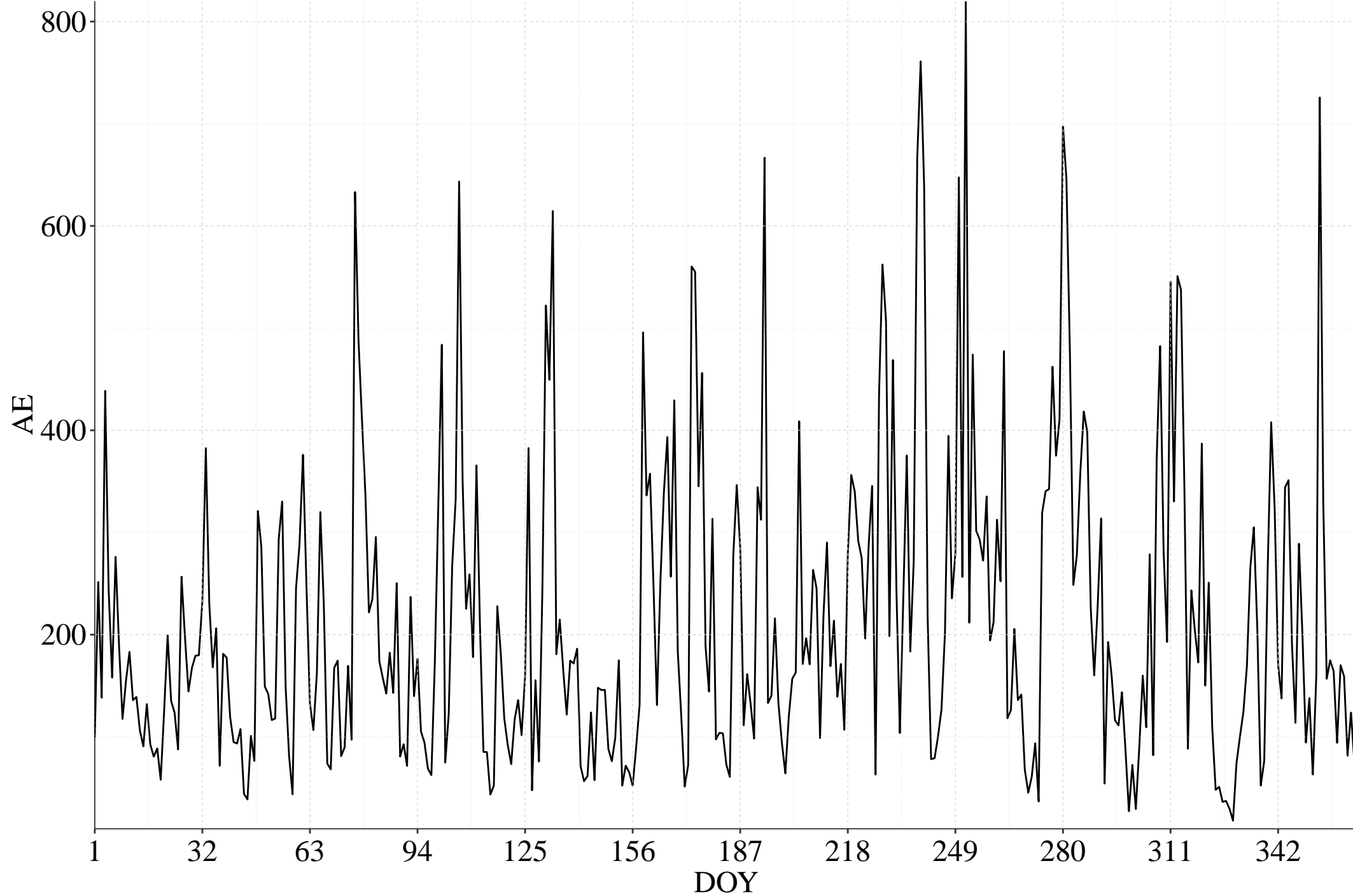


Figure S3. Variations (daily mean values) of the geomagnetic indices used to make the PCA-MRM TEC models for 2015: Dst (a), ap (b), AE (c) and K_{COI} (daily sum, b).





c)



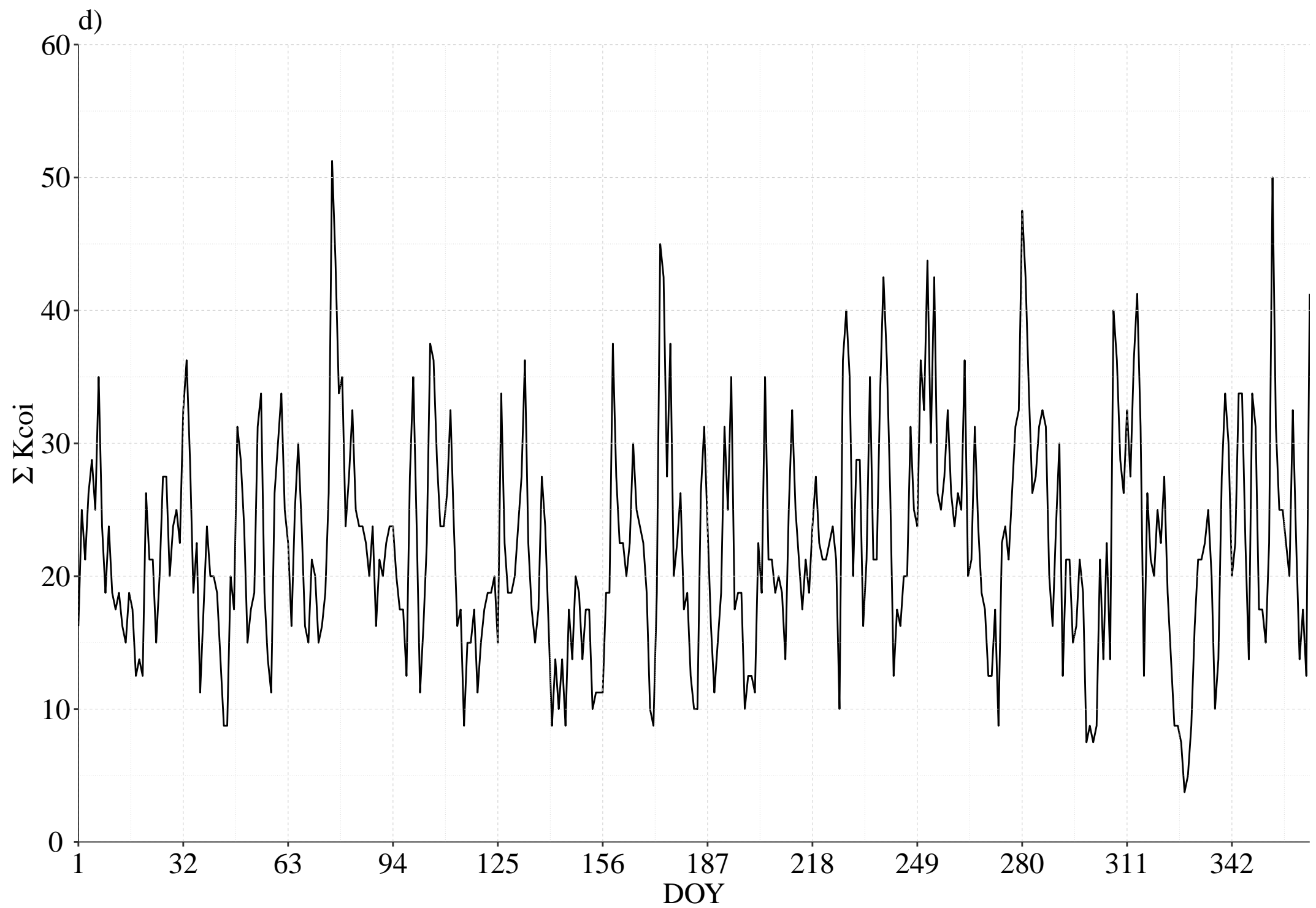
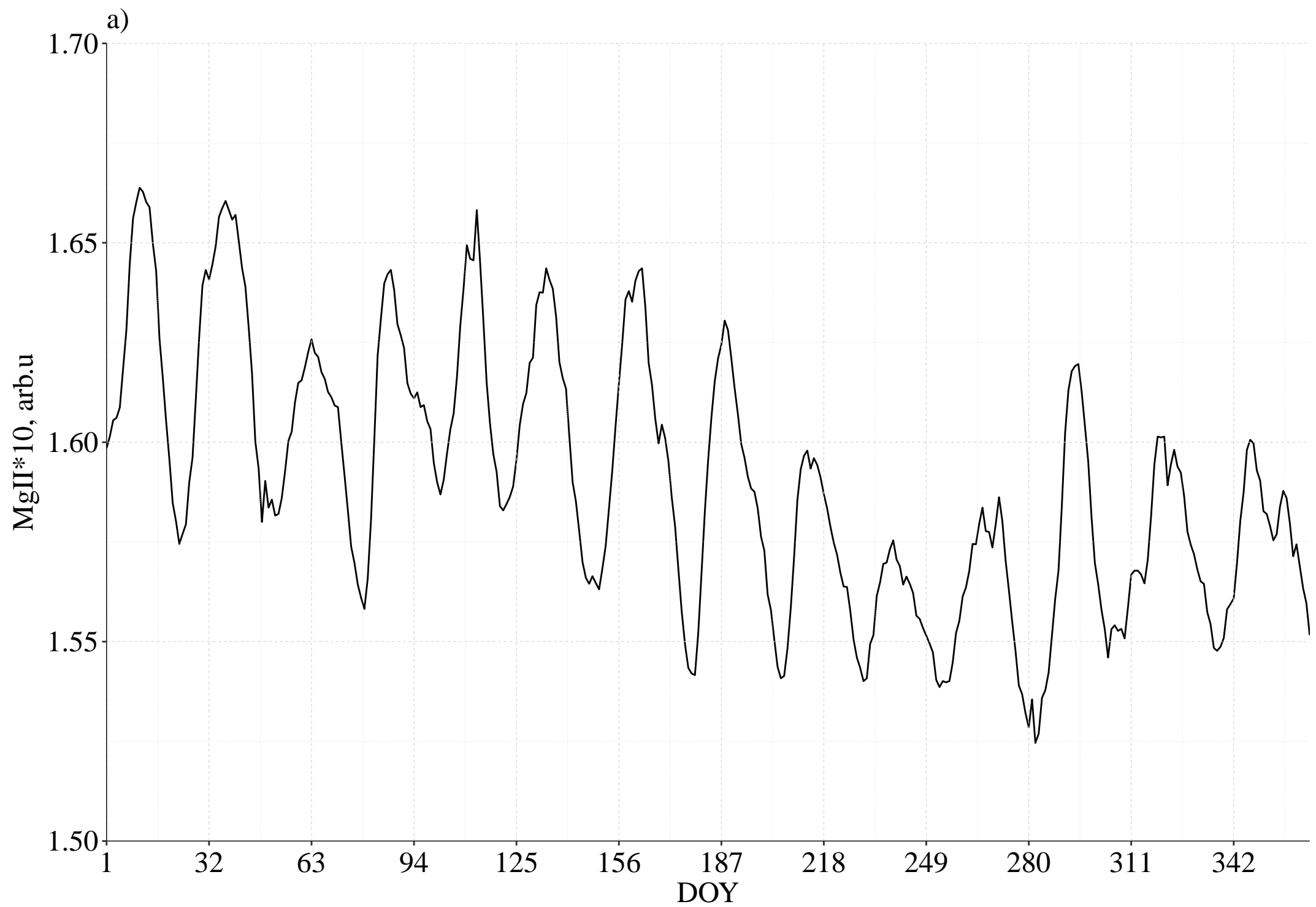


Figure S4. Variations (daily mean values) of the solar UV and XR fluxes used to make the PCA-MRM TEC models for 2015: UV Mg II (a) and XR TIMED (b).



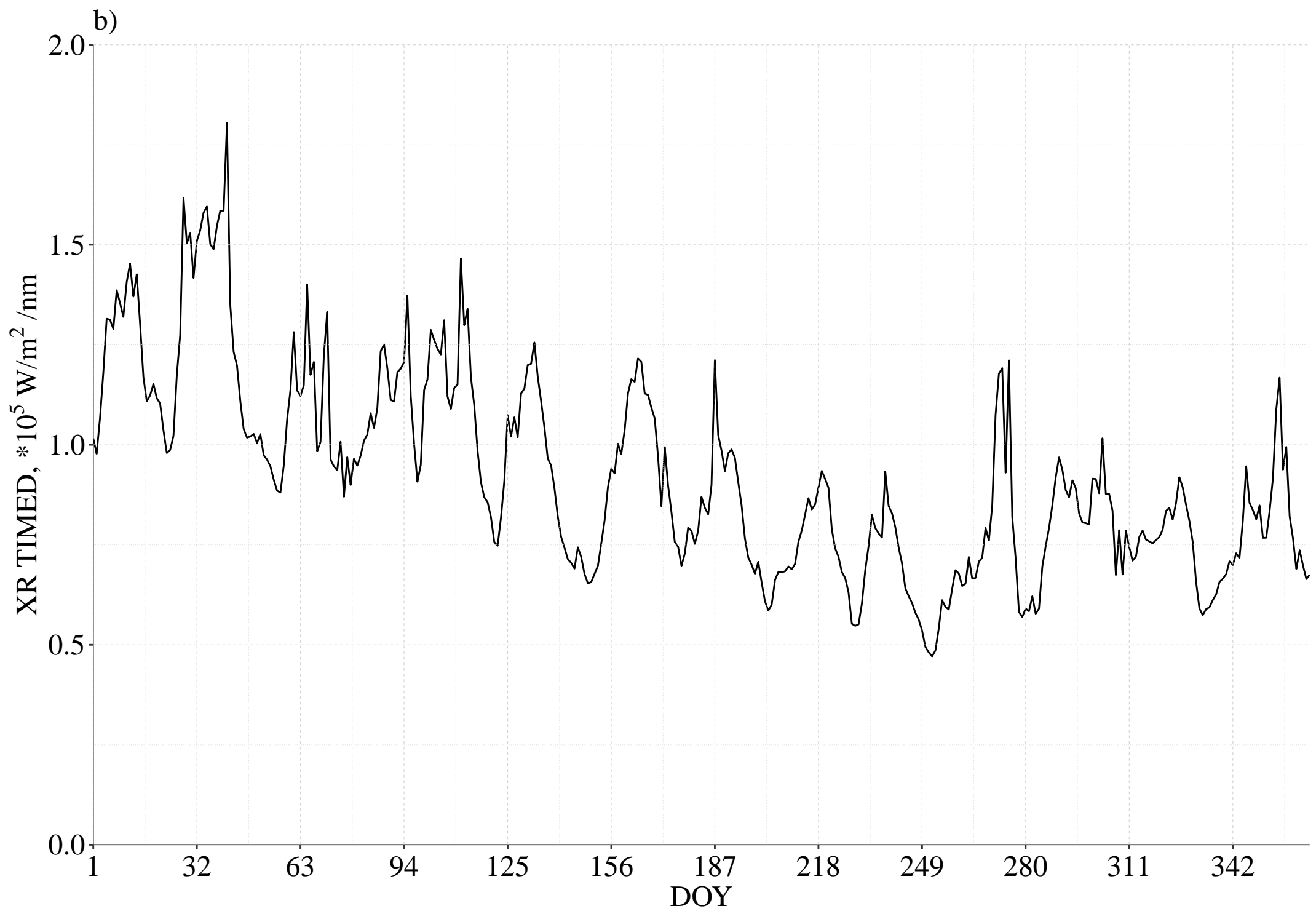


Figure S5. Variations (daily mean values) of the number of solar flares used to make the PCA-MRM TEC models for 2015: all flares (a), flares up to C-class (b) and M-class flares (c).

