



Bily Kriz: 875m, *Picea abies*

Collelongo: 1560m, *Fagus sylvatica*

Solling (beech): 504m, *Fagus sylvatica*

Solling (spruce): 508m, *Picea abies*

So far 4 models:

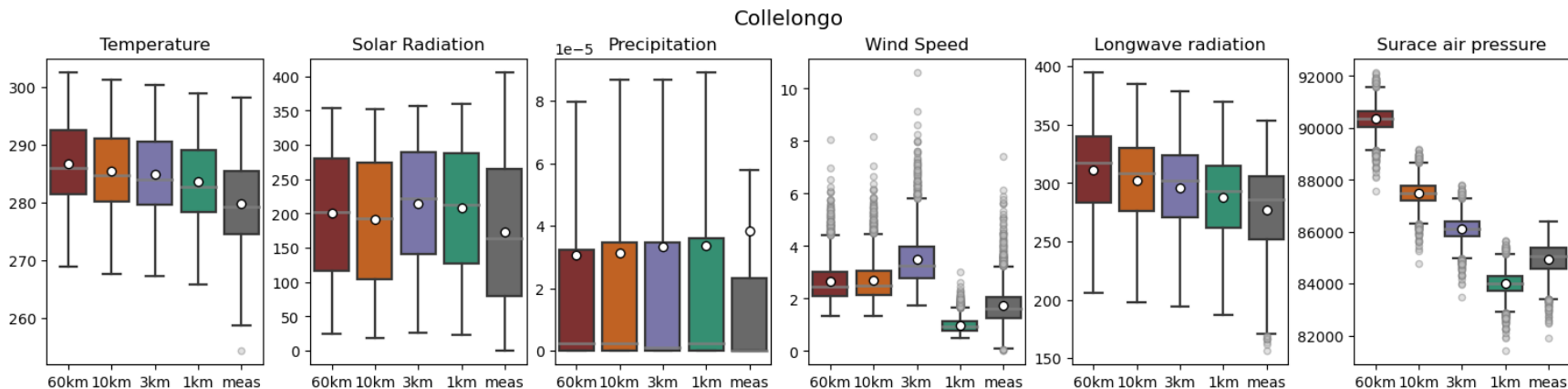
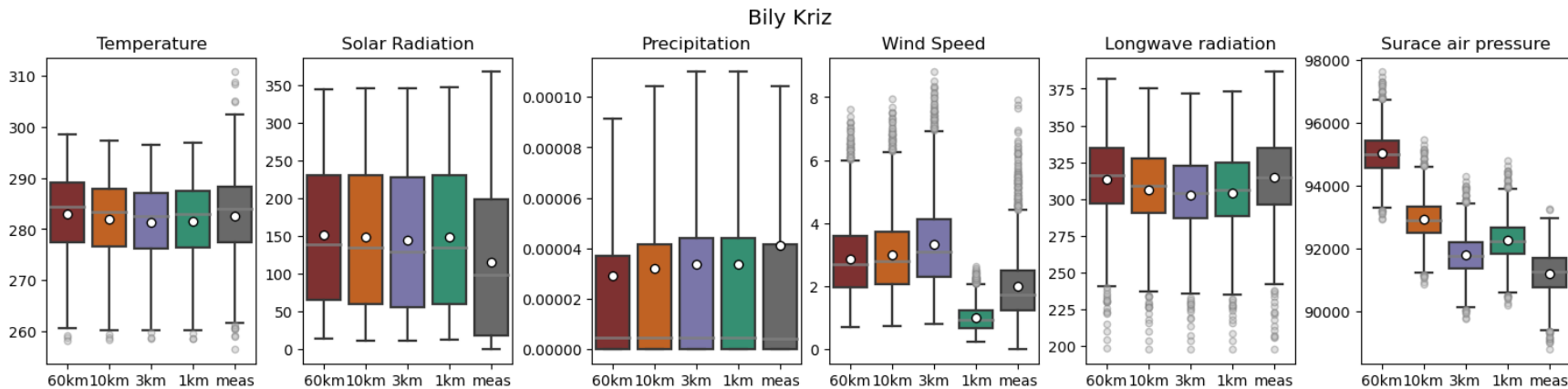
- 4C (daily)
- 3PG-Hydro (daily)
- 3D-CMCC-FEM (daily, no NEE)
- 3PGNBW (monthly, no evapo)

1 model to come: Biome-BGCMuso (Potentially also 1 more (CARAIB))

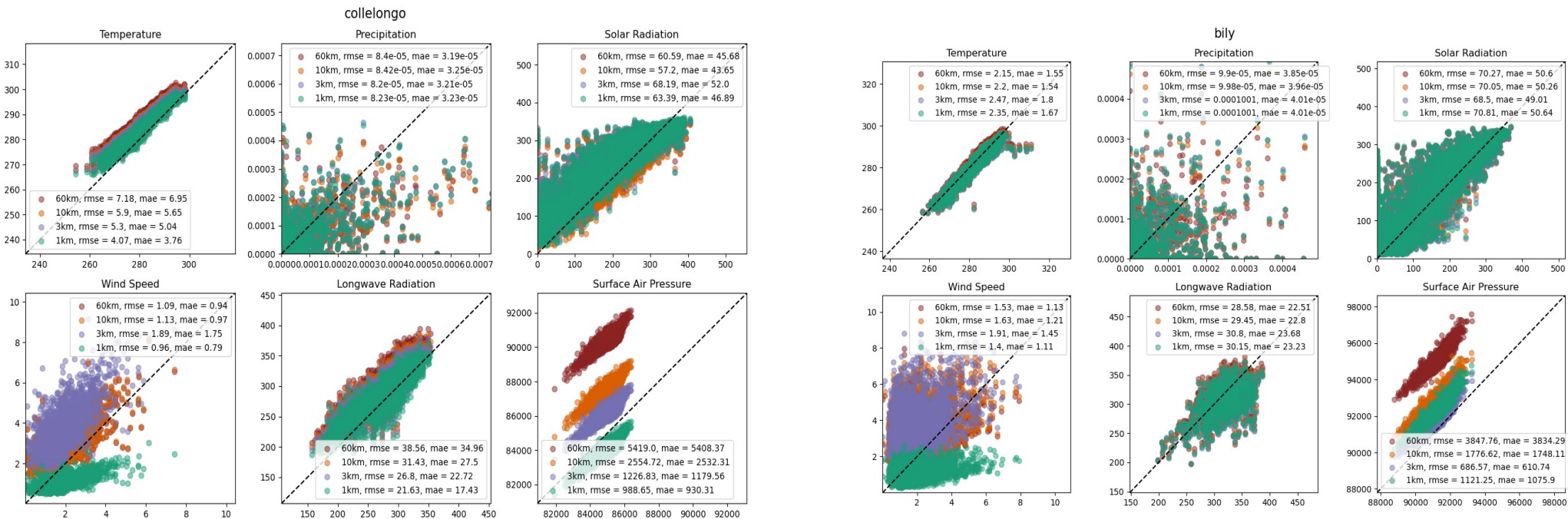
5 evaluation variables (carbon & water fluxes, stand-data):

- Gross primary production (GPP)
- Temporal & total annual GPP
- Net ecosystem exchange (NEE)
- Actual evapotranspiration (AET)
- Vegetation period start & end
- Diameter at breast height (DBH)

Meteo forcing → is the higher res data actually better?

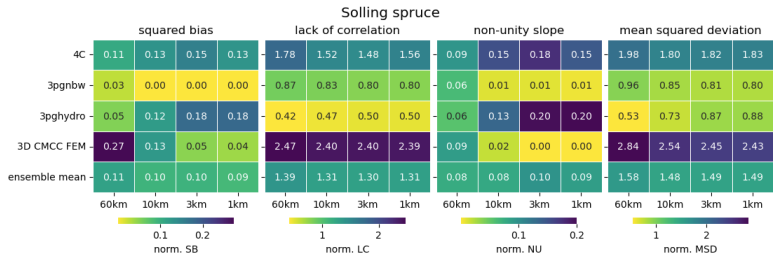
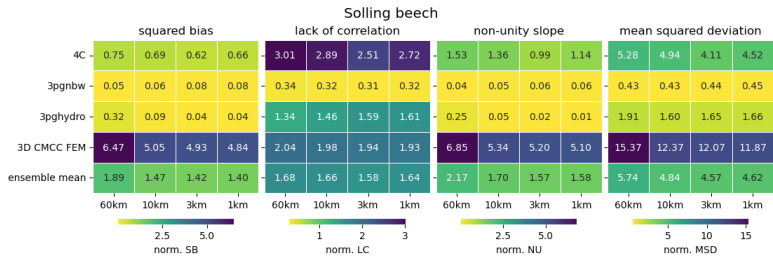
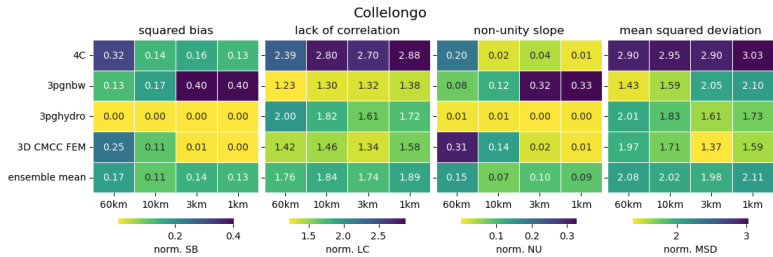
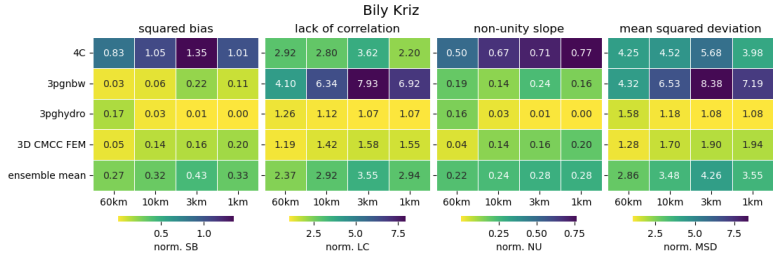


Meteo forcing → is the higher res data actually better?



Stand-scale: DBH

Diameter at breast height (DBH) Increment

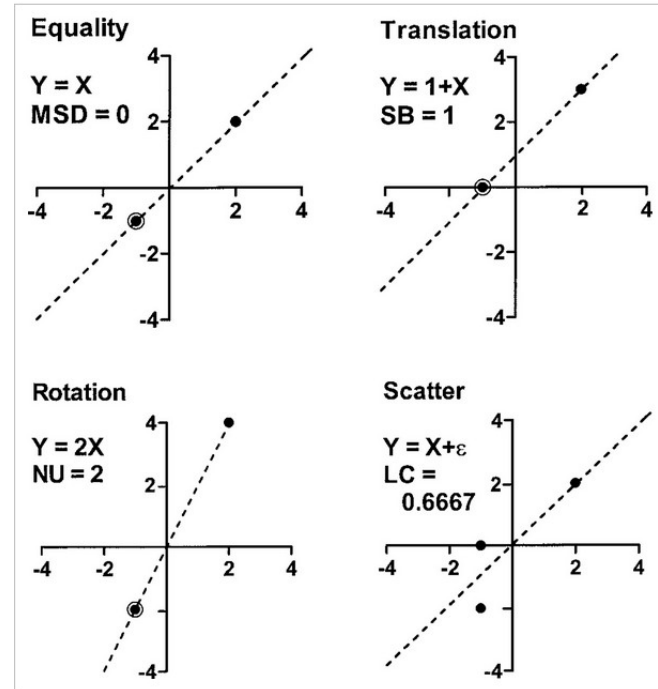


Squared bias → translation

Non-unity slope → rotation

Lack of correlation → scatter

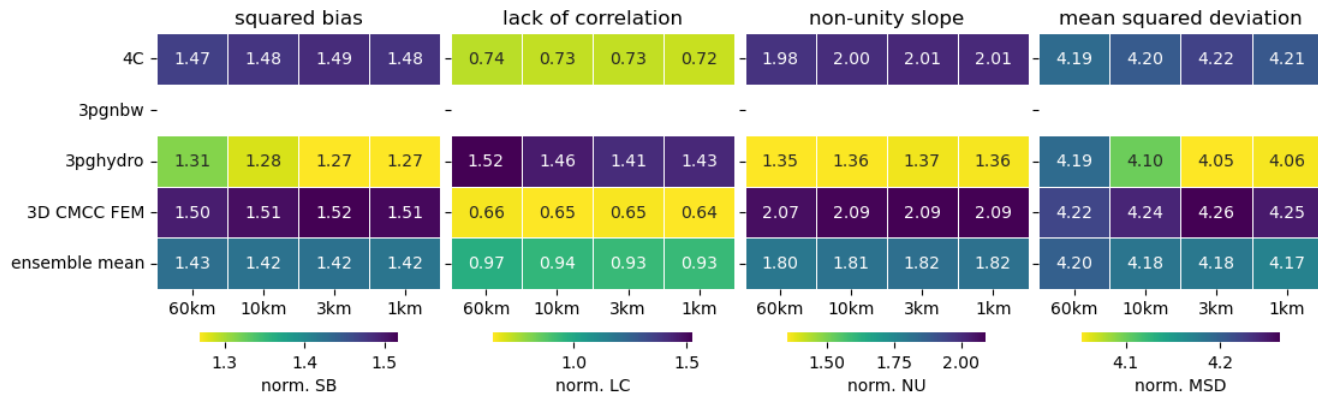
Mean squared deviation → sum of the above...



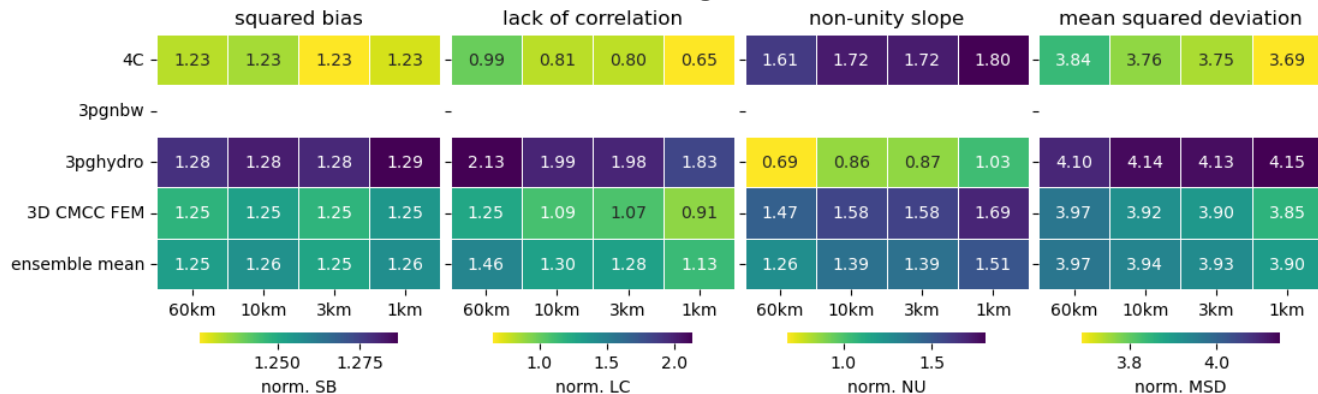
Water fluxes: Actual evapotranspiration (AET)

Actual Evapotranspiration (AET)

Bily Kriz



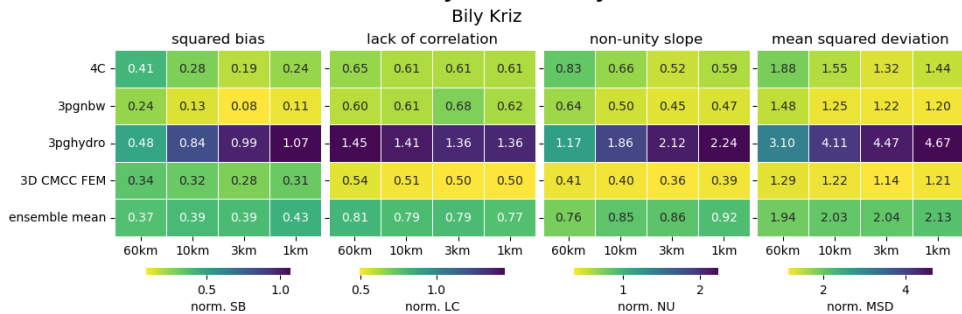
Collelongo



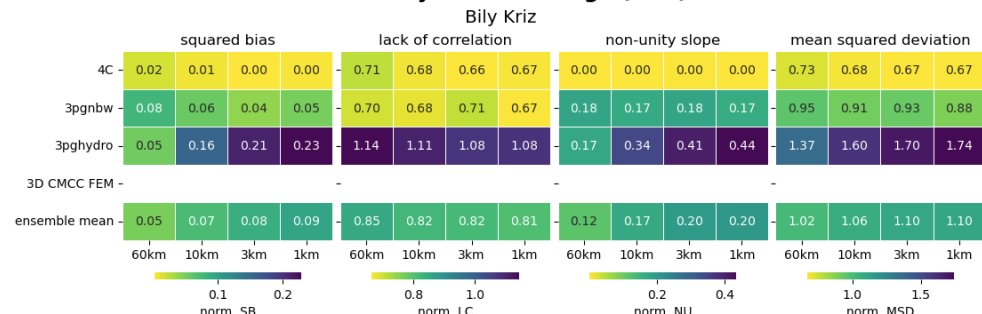
Carbon fluxes: GPP & NEE

monthly aggregation (→ not much difference, used monthly because 1 model only has monthly output)

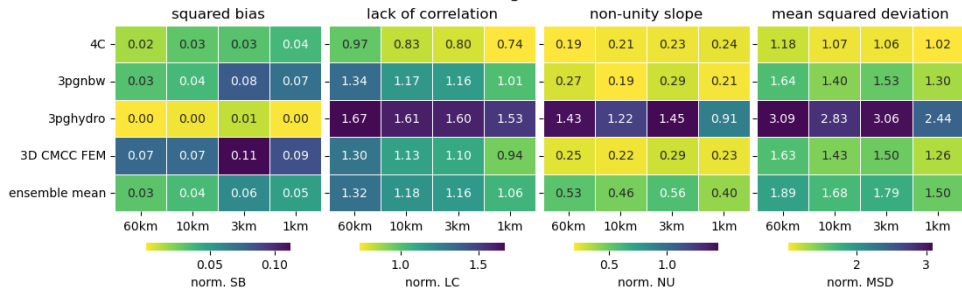
Gross Primary Productivity (GPP)



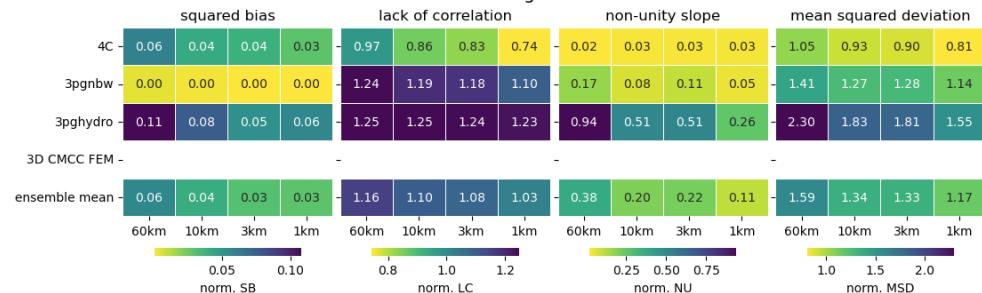
Net Ecosystem exchange (NEE)



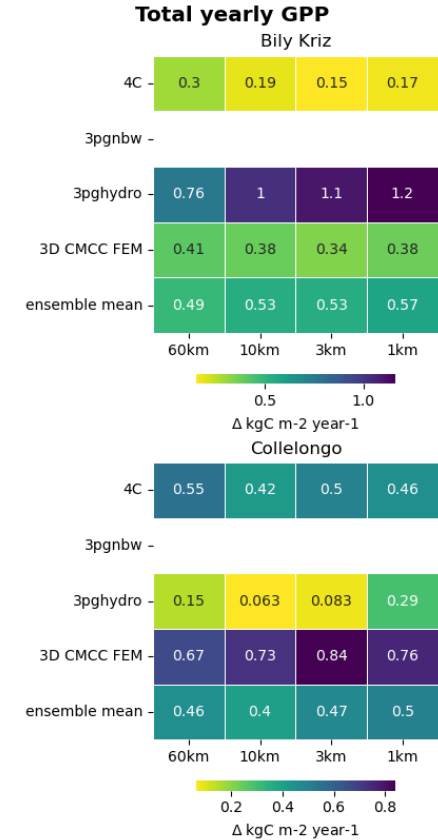
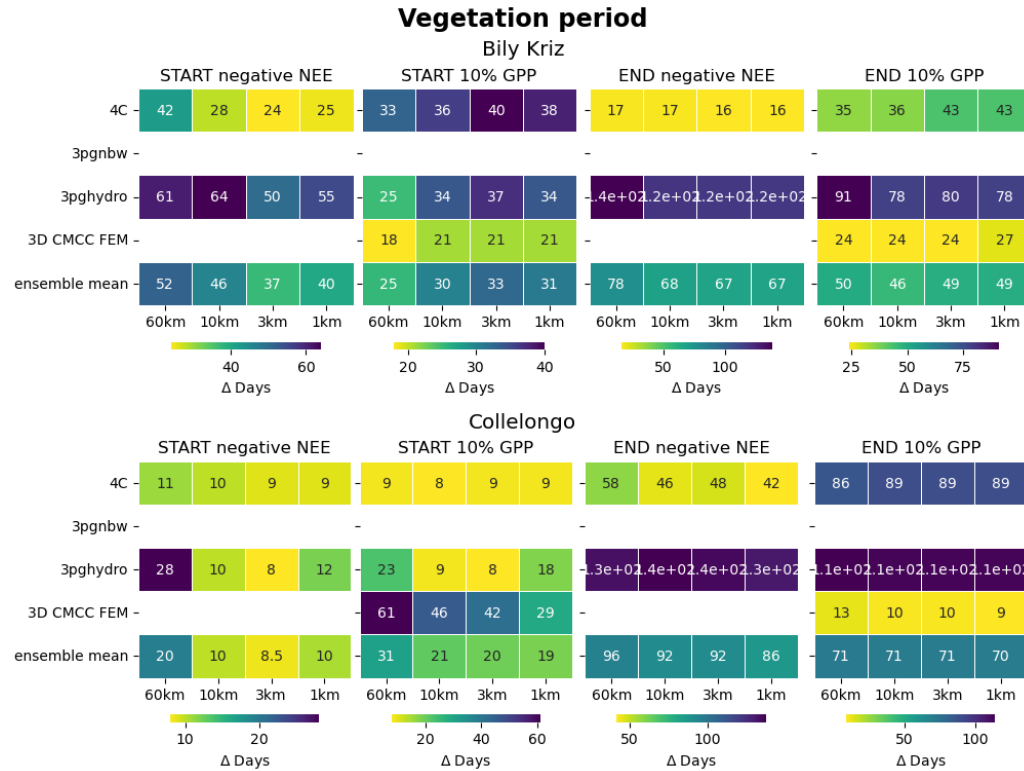
Collelongo



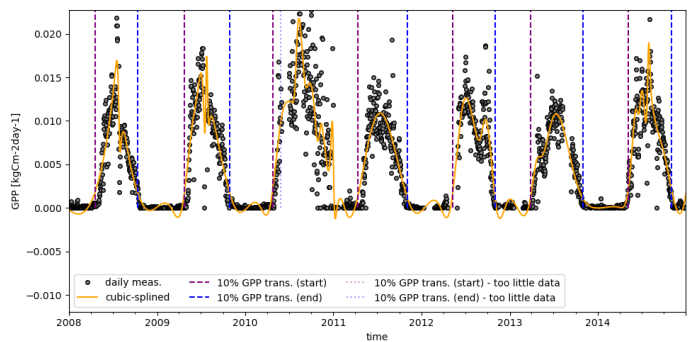
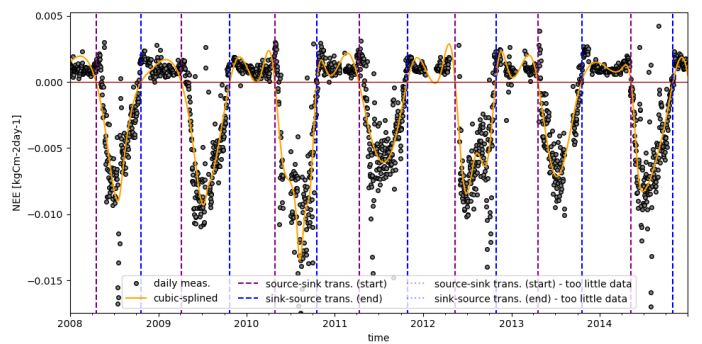
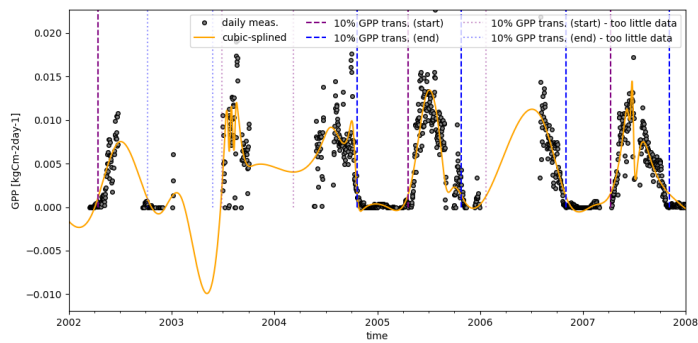
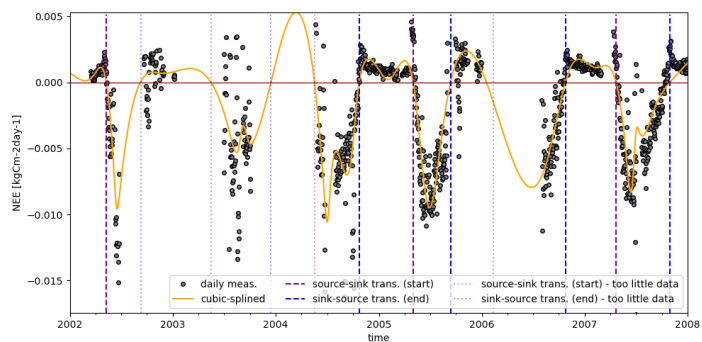
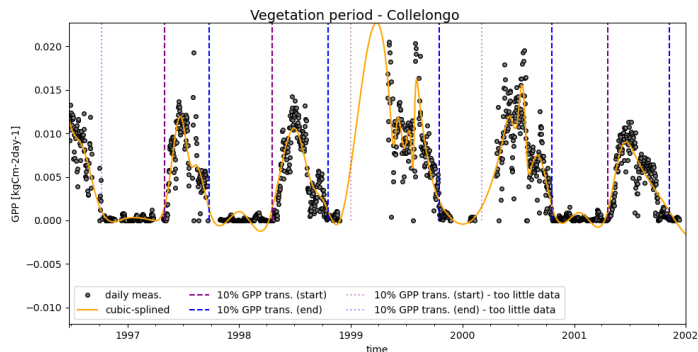
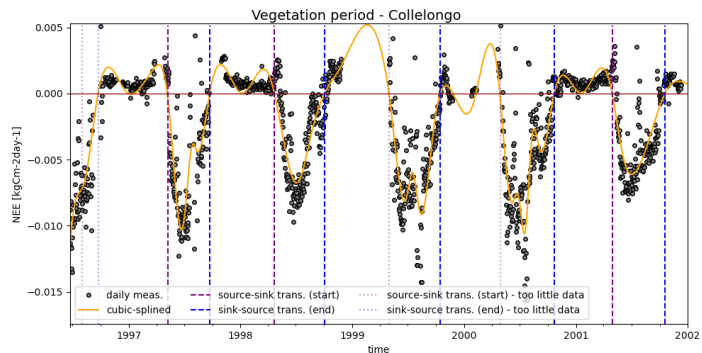
Collelongo



Vegetation period & total GPP



Vegetation period - Collelongo



Vegetation period – Bily Kriz

