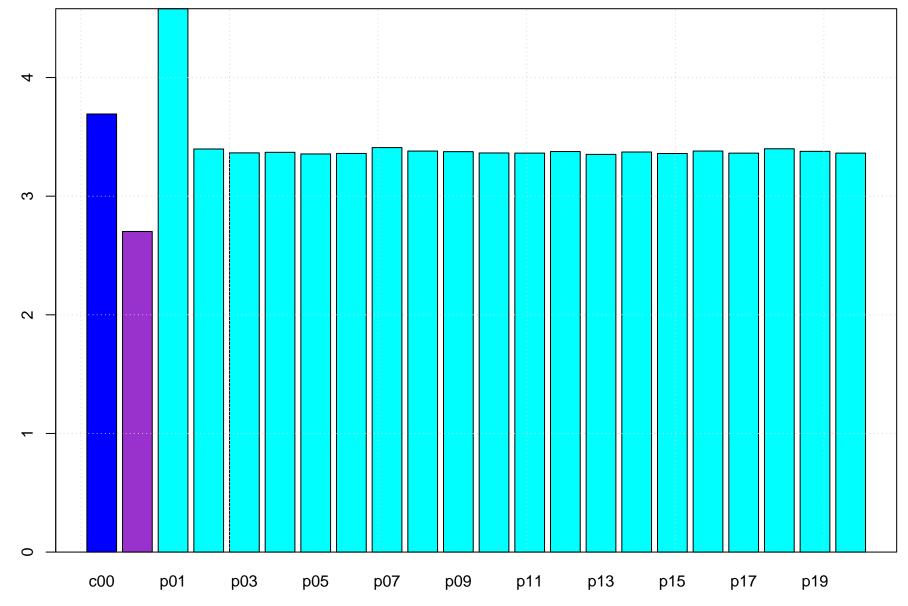
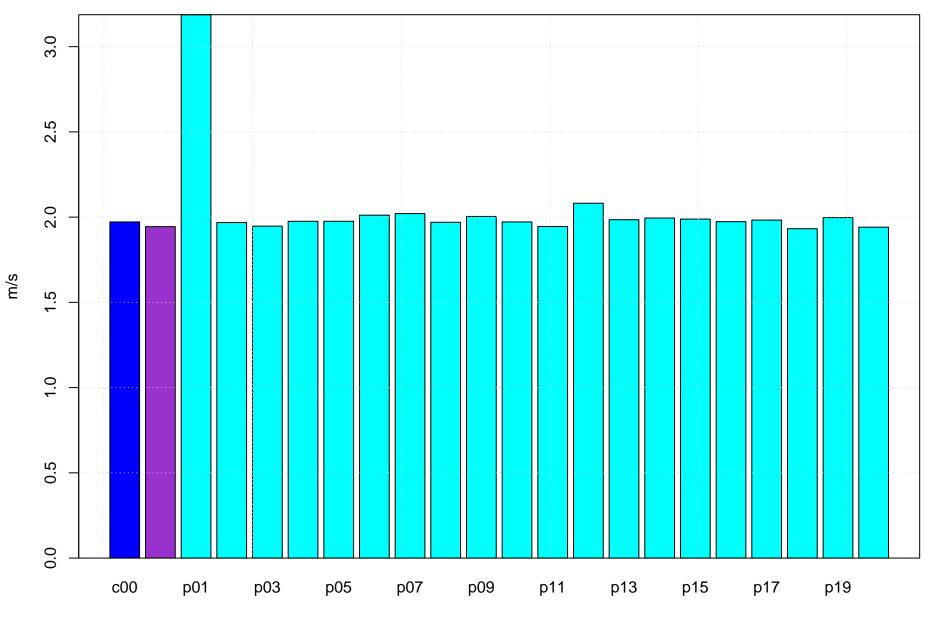
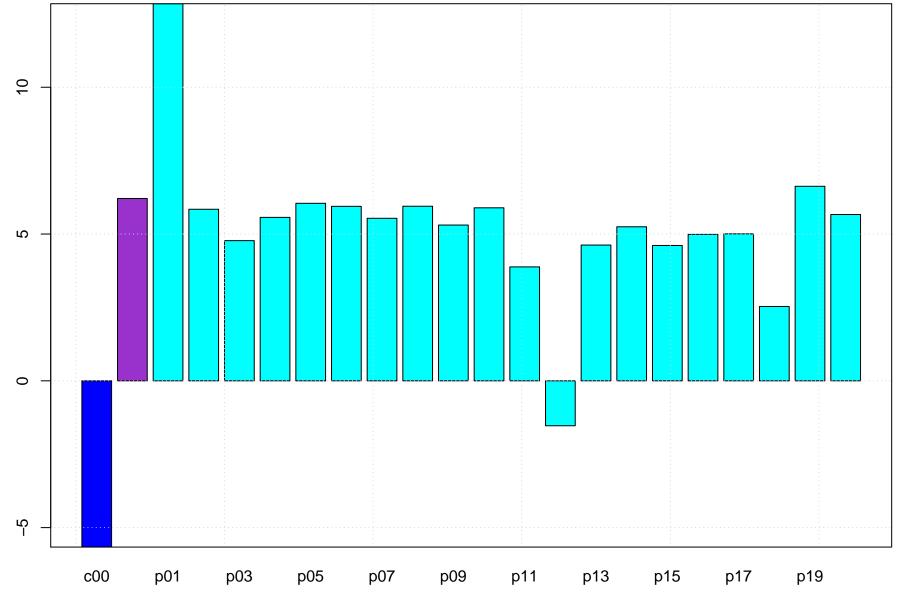
#### Mean vector surface wind error KGWO



Surface wind speed bias KGWO

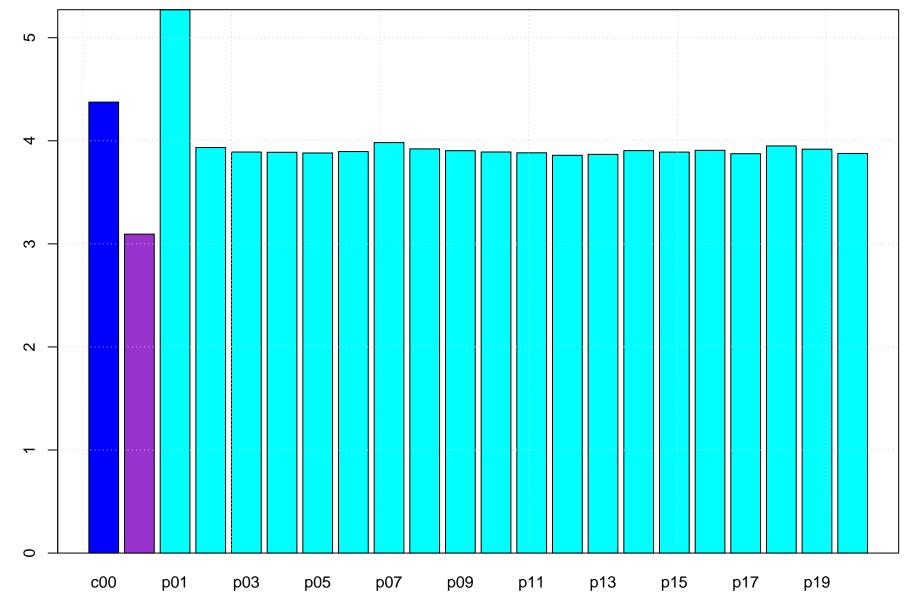


#### Surface direction bias KGWO



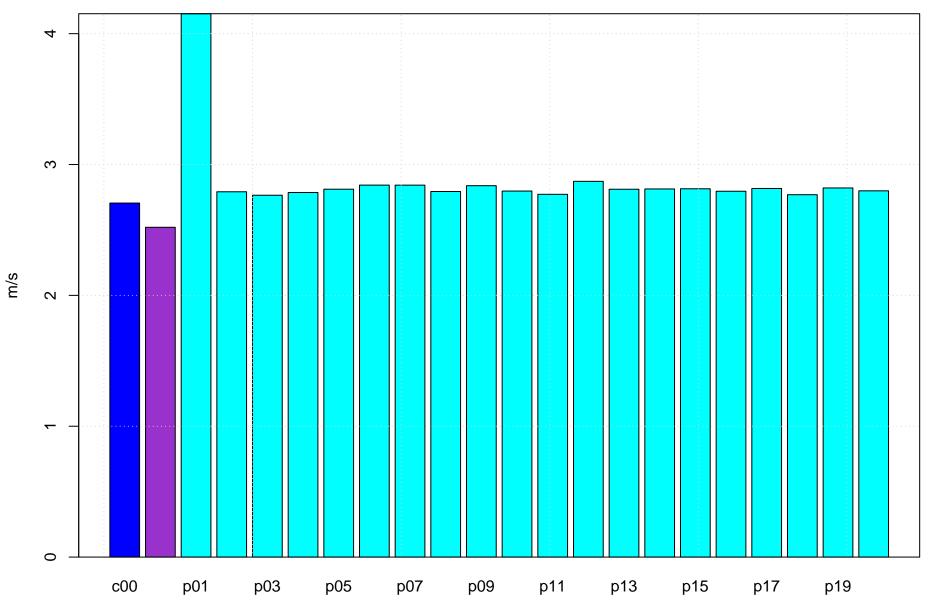
m/s

Surface vector wind vector RMSE KGWO

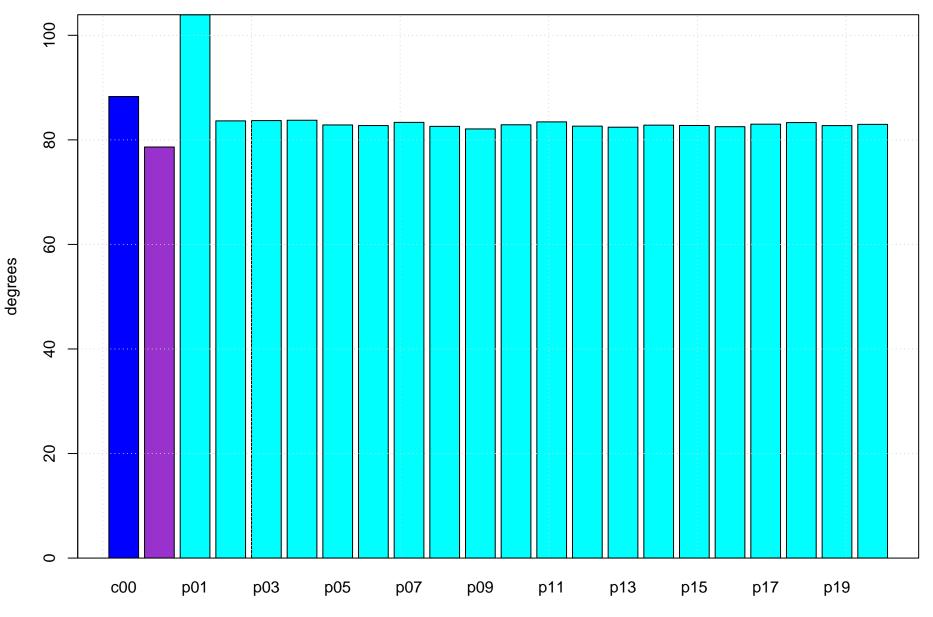


s/m

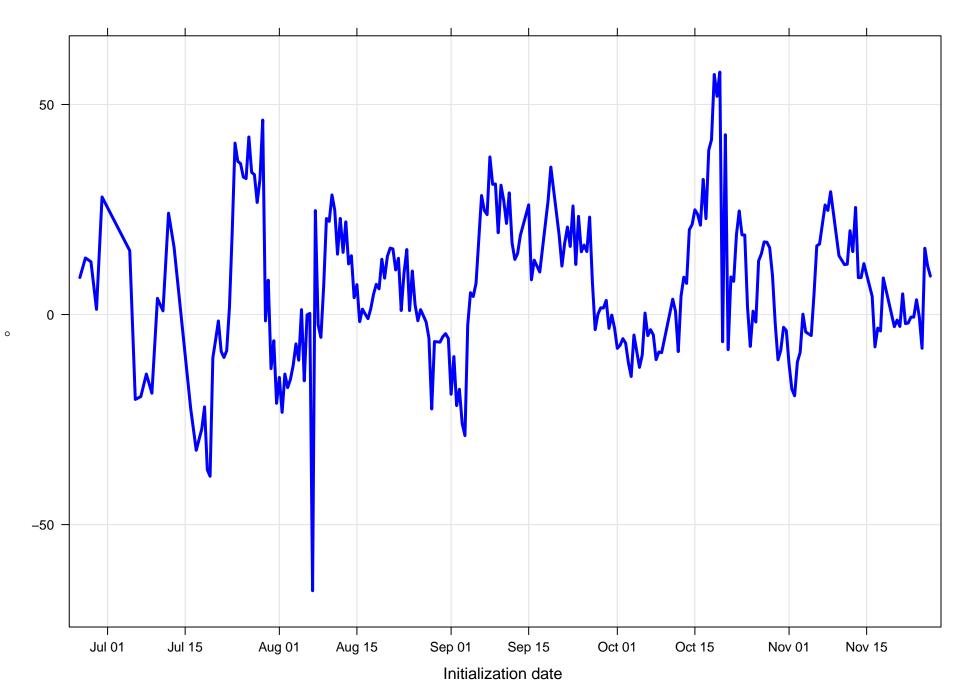
Surface wind speed RMSE KGWO



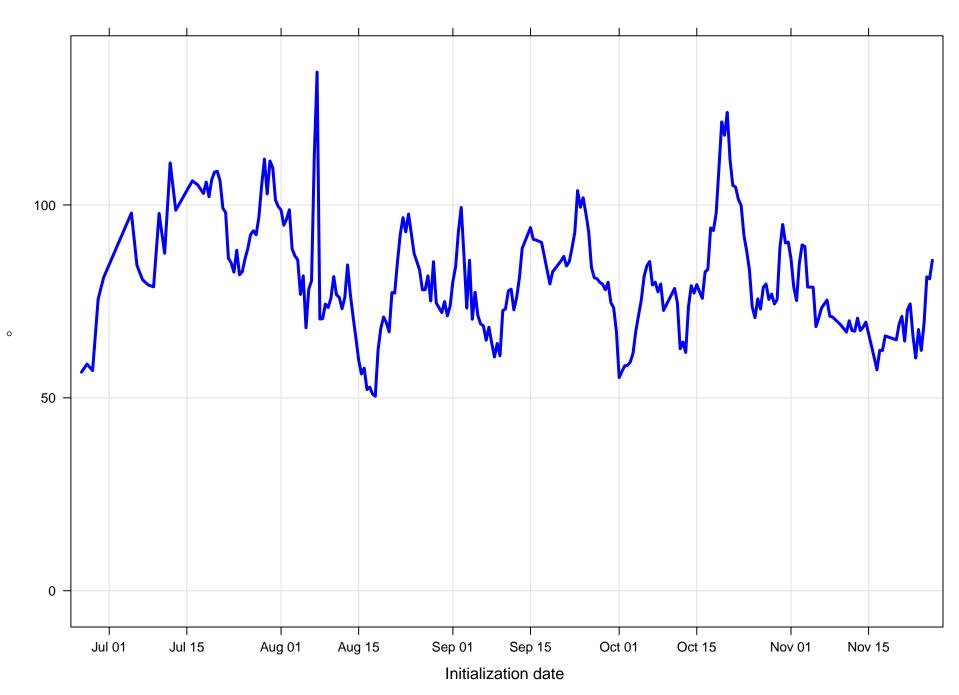
Surface direction RMSE KGWO



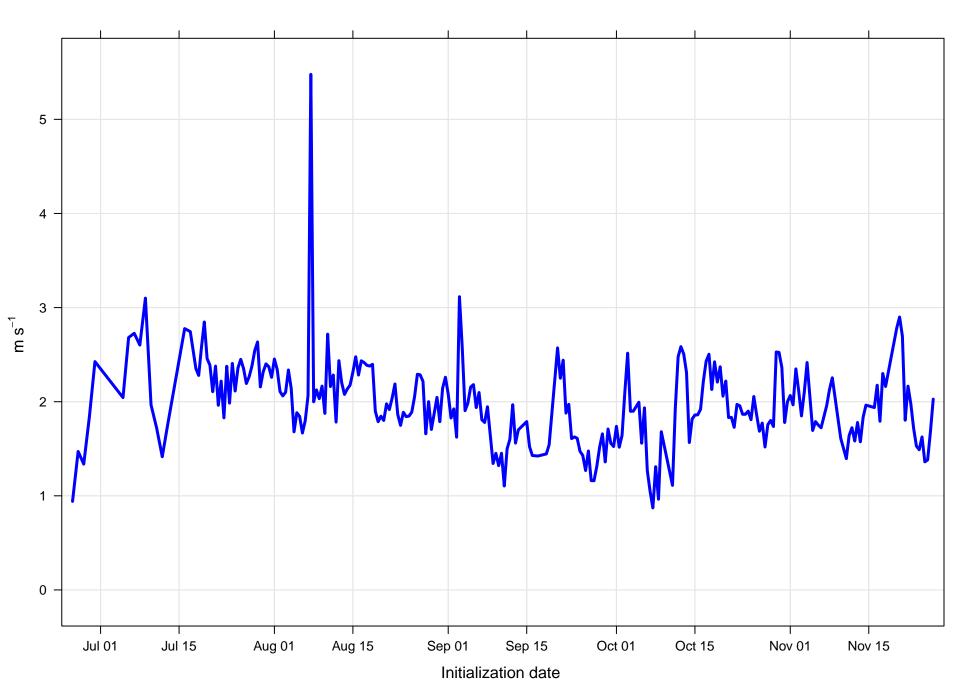
### Surface wind direction bias at KGWO all forecast hours and members



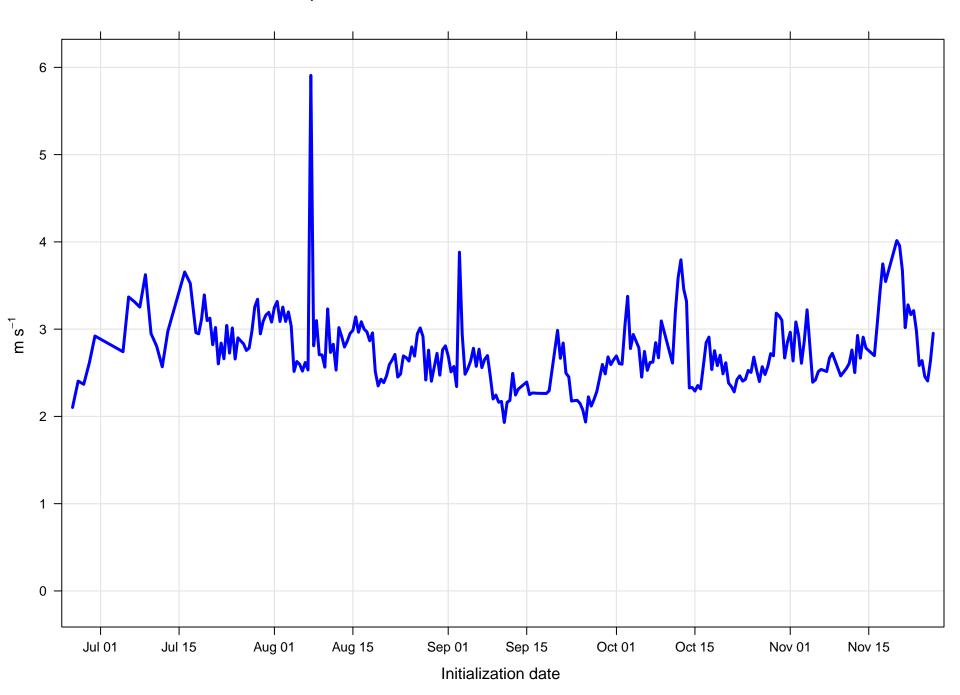
### Surface wind direction RMSE at KGWO all forecast hours and members



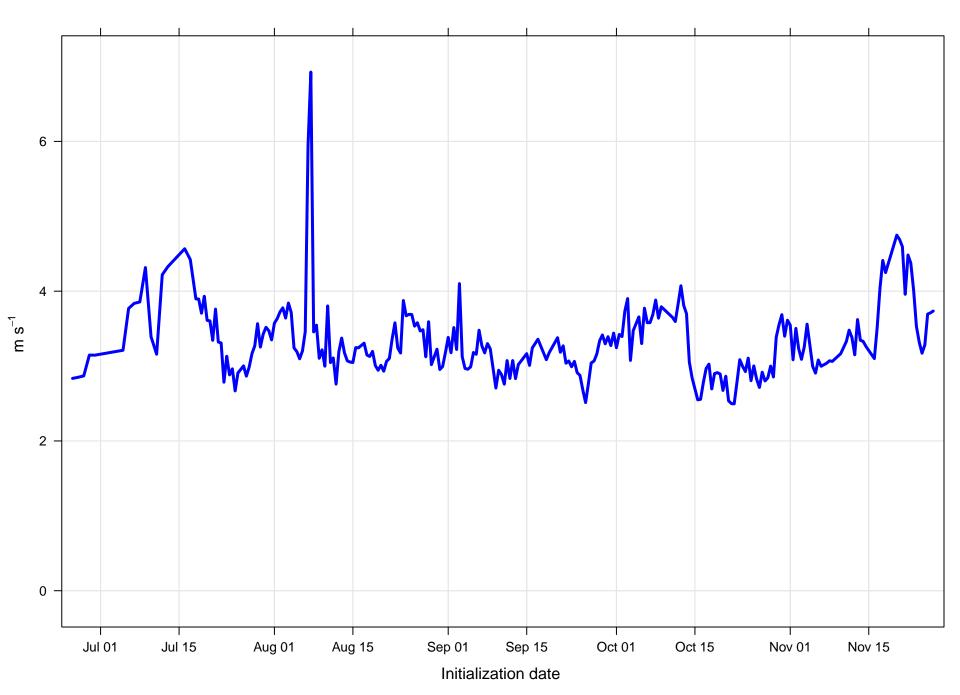
### Surface wind speed bias at KGWO all forecast hours and members



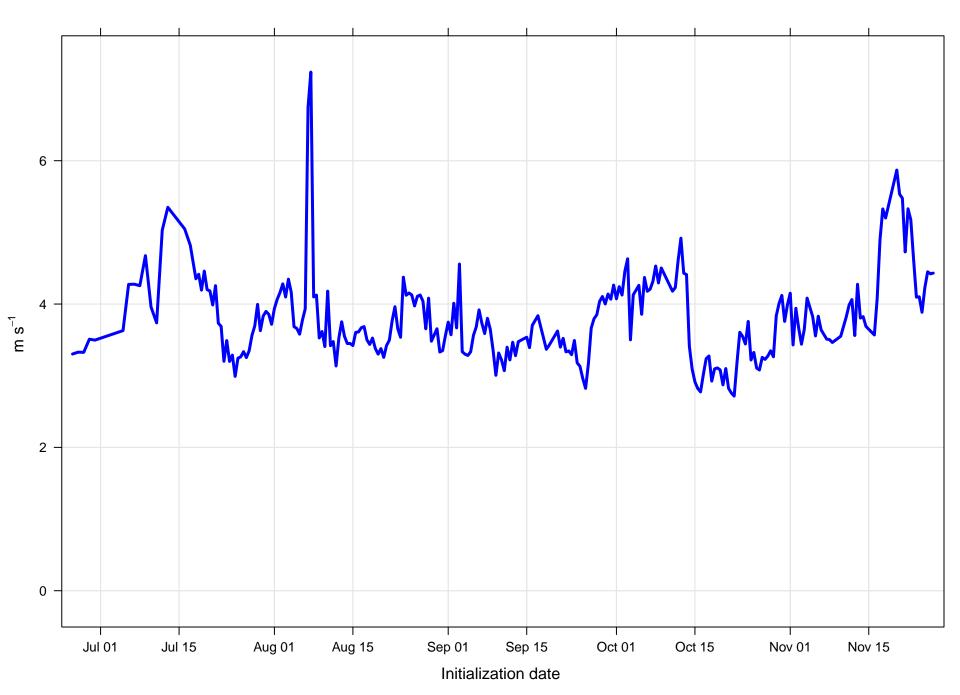
## Surface wind speed RMSE at KGWO all forecast hours and members



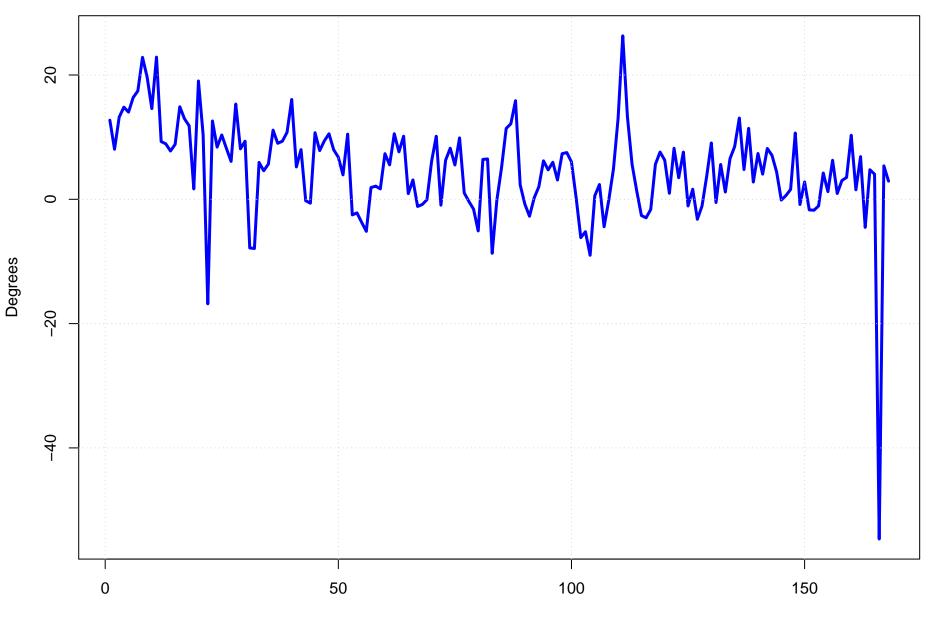
#### Surface vector wind mean error KGWO all forecast hours and members



#### Surface vector wind RMSE at KGWO all forecast hours and members

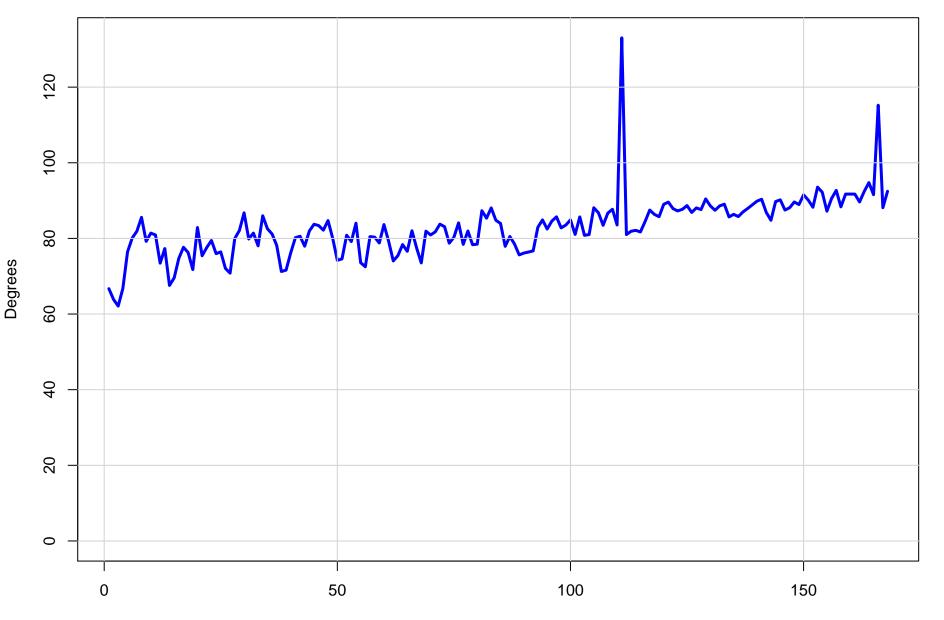


# Surface wind direction bias at KGWO by forecast hour

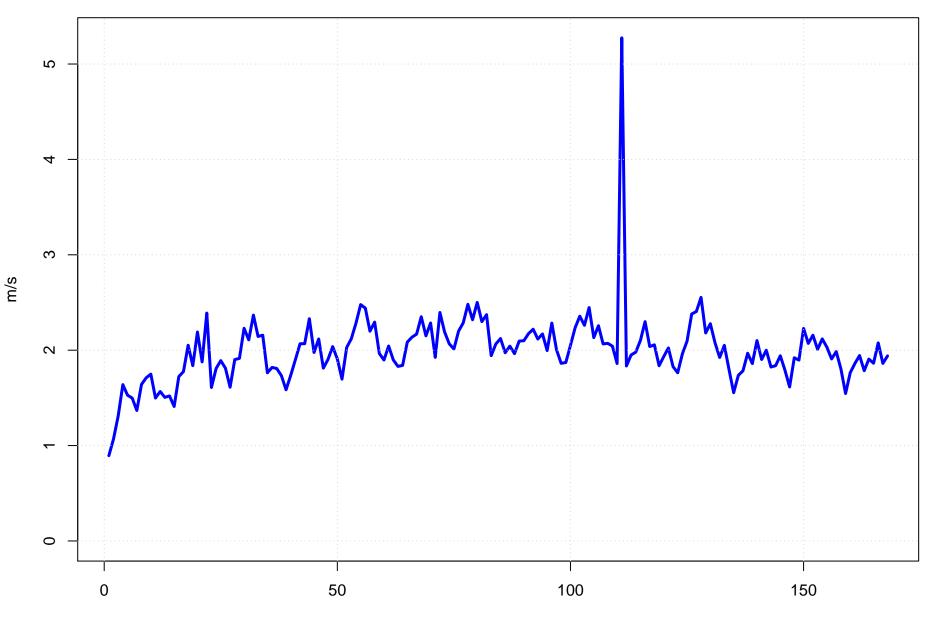


Forecast hour

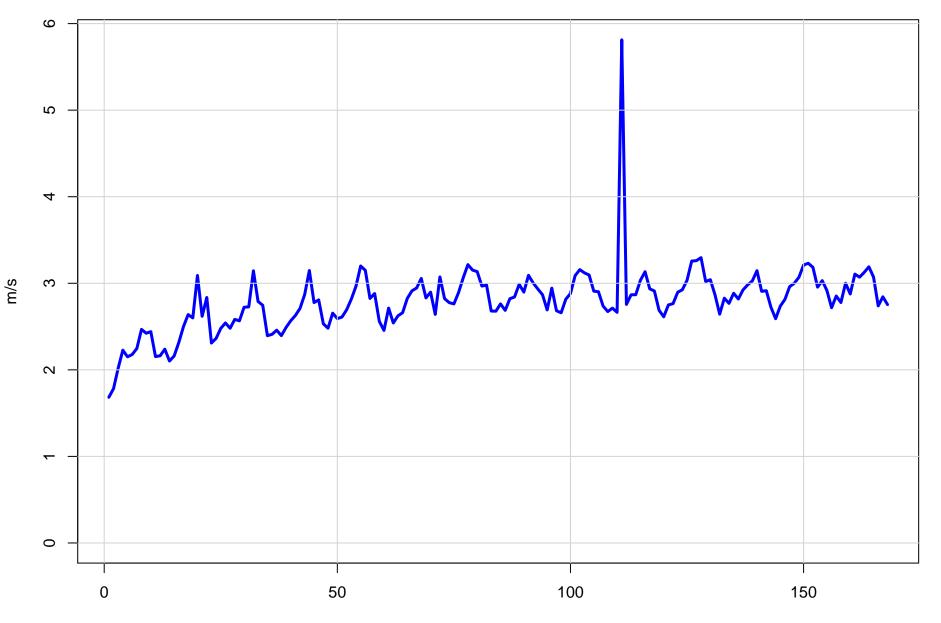
### Surface wind direction RMSE at KGWO by forecast hour



Surface wind speed bias at KGWO by forecast hour

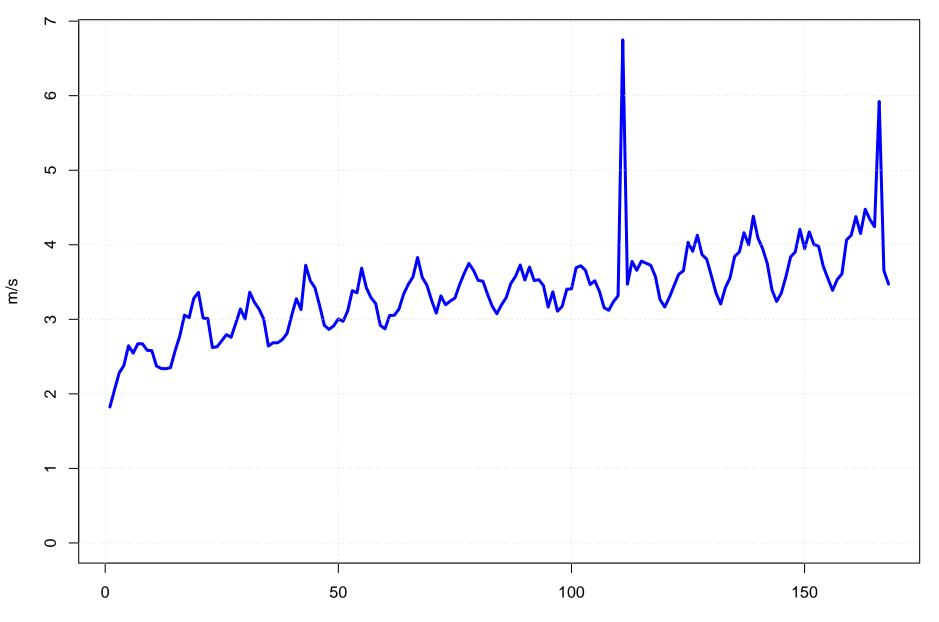


Surface wind speed RMSE at KGWO by forecast hour

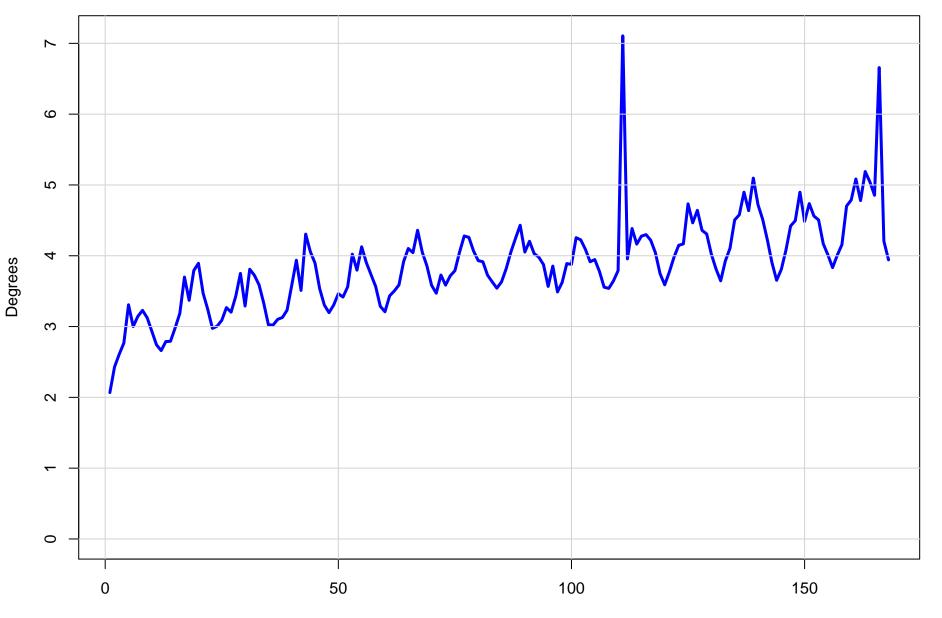


Forecast hour

Surfce vector wind error at KGWO by forecast hour

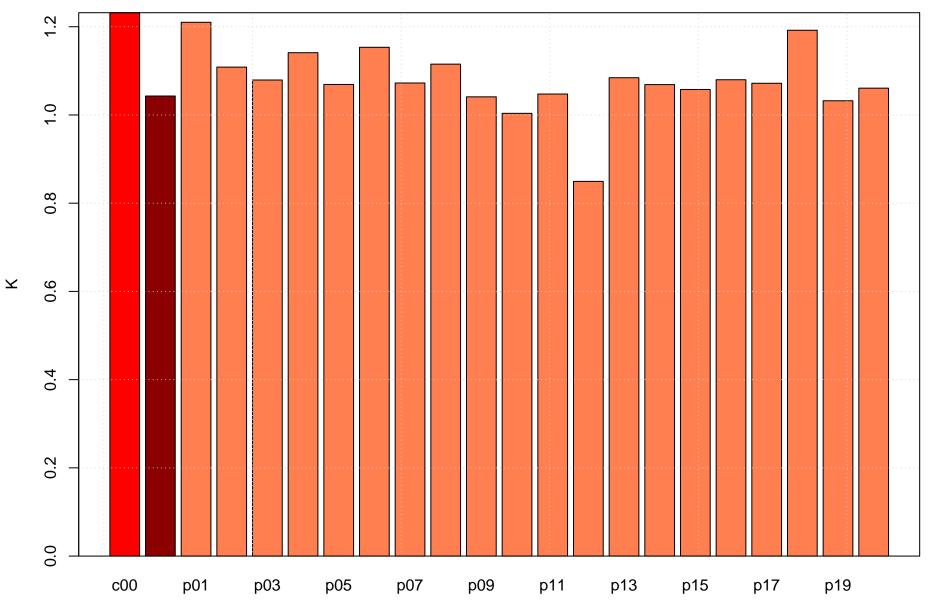


Surface vector wind RMSE at KGWO by forecast hour

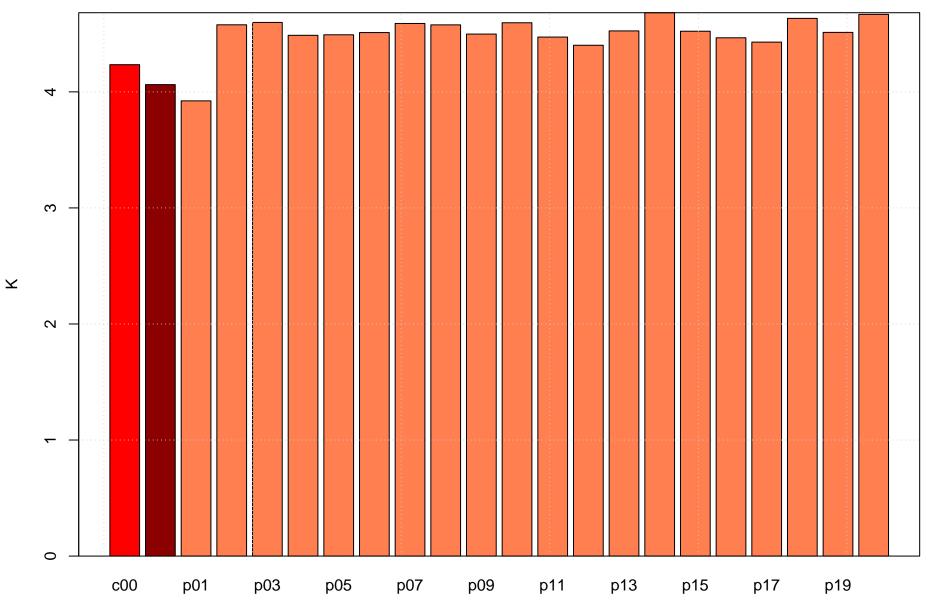


Forecast hour

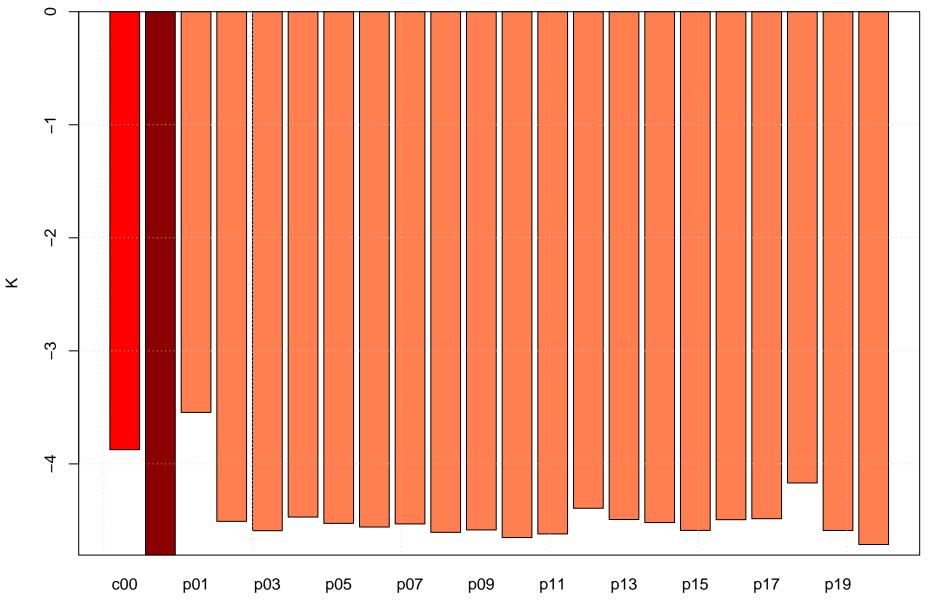
Surface temperature bias at KGWO



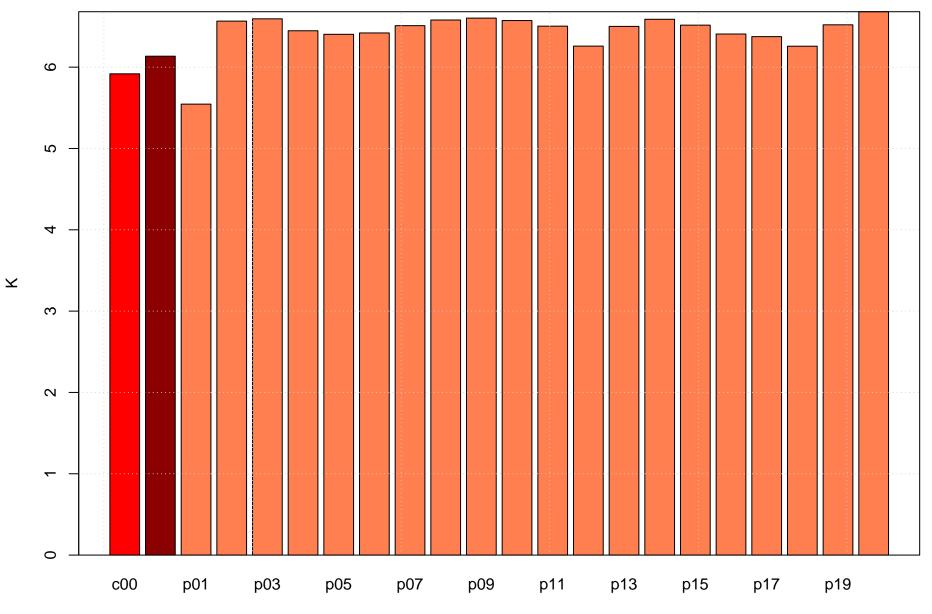
# Surface temperature RMSE at KGWO



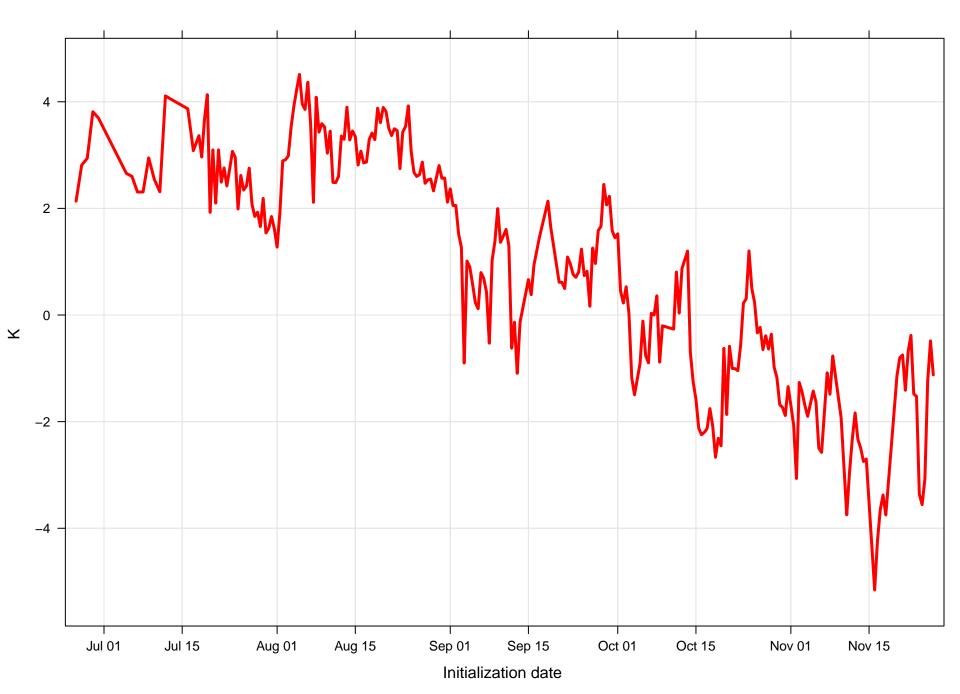
Surface dew point bias at KGWO



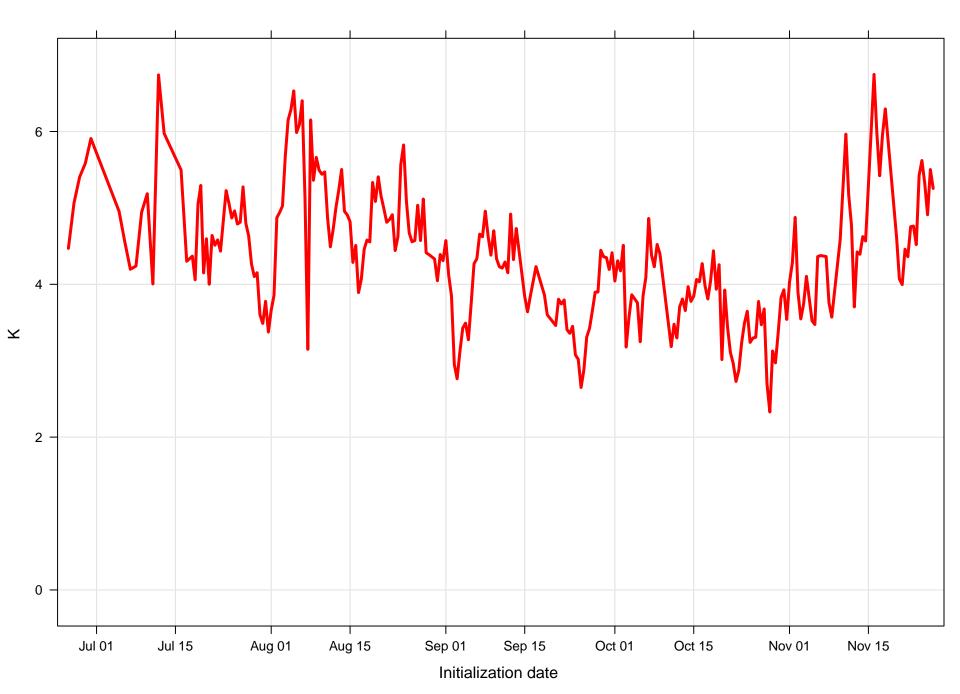
# Surface dew point RMSE at KGWO



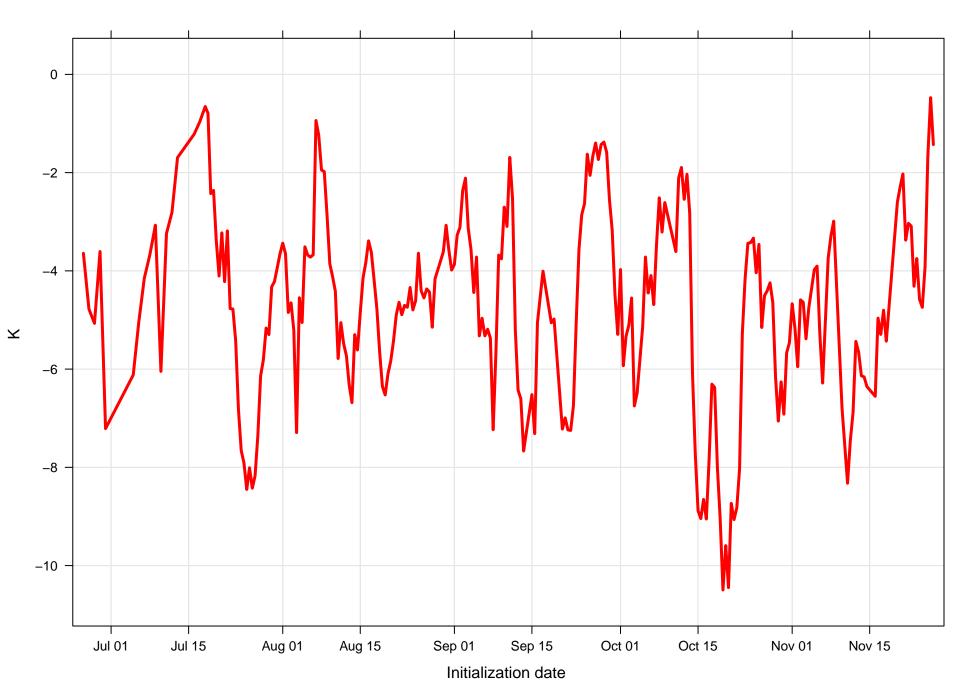
# Surface temperature bias at KGWO all forecast hours and members



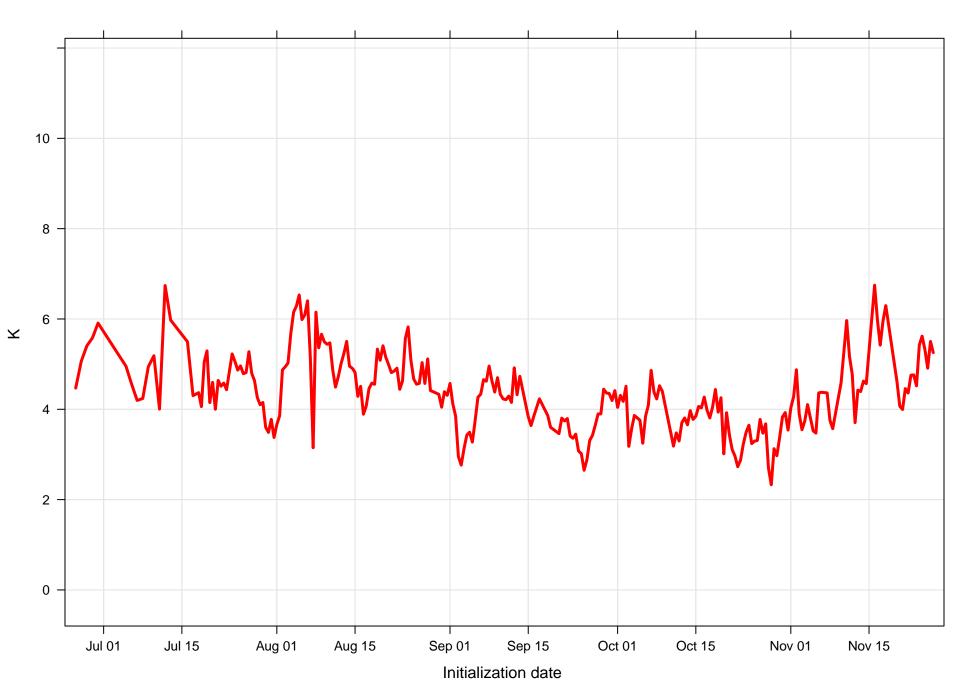
## Surface temperature RMSE at KGWO all forecast hours and members



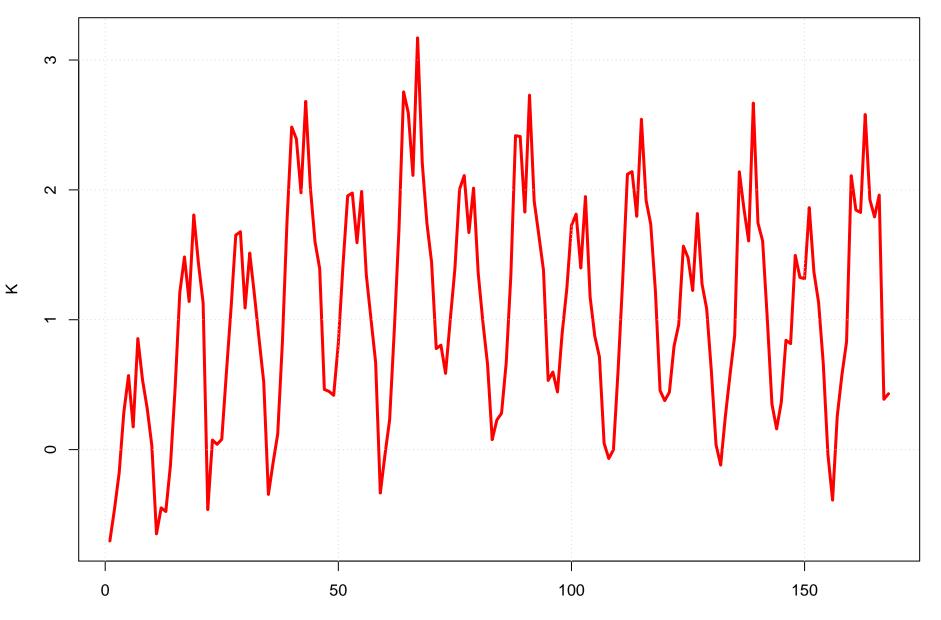
## Surface dew point bias at KGWO all forecast hours and members



## Surface dew point RMSE at KGWO all forecast hours and members

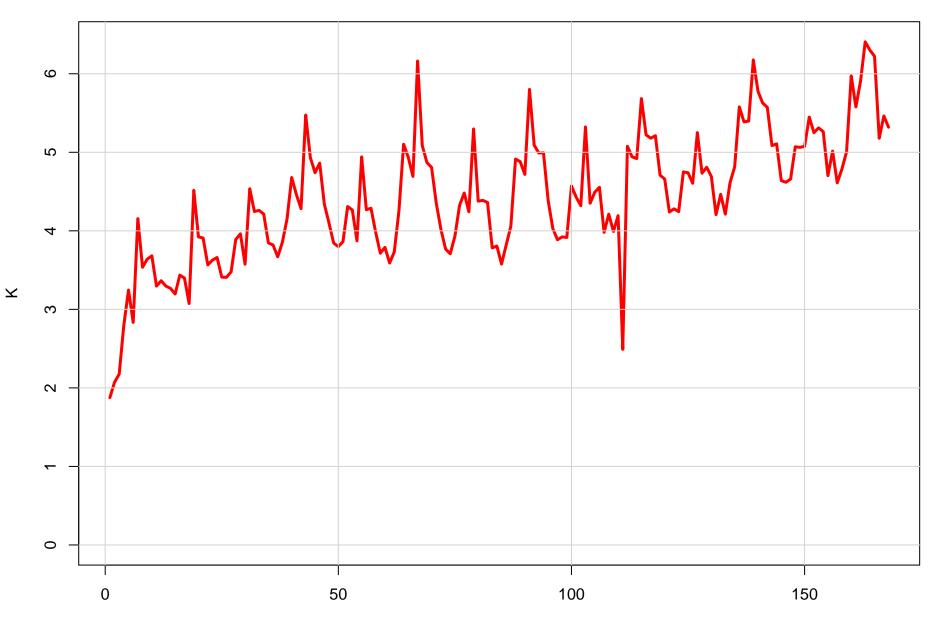


Surface temperature bias at KGWO by forecast hour

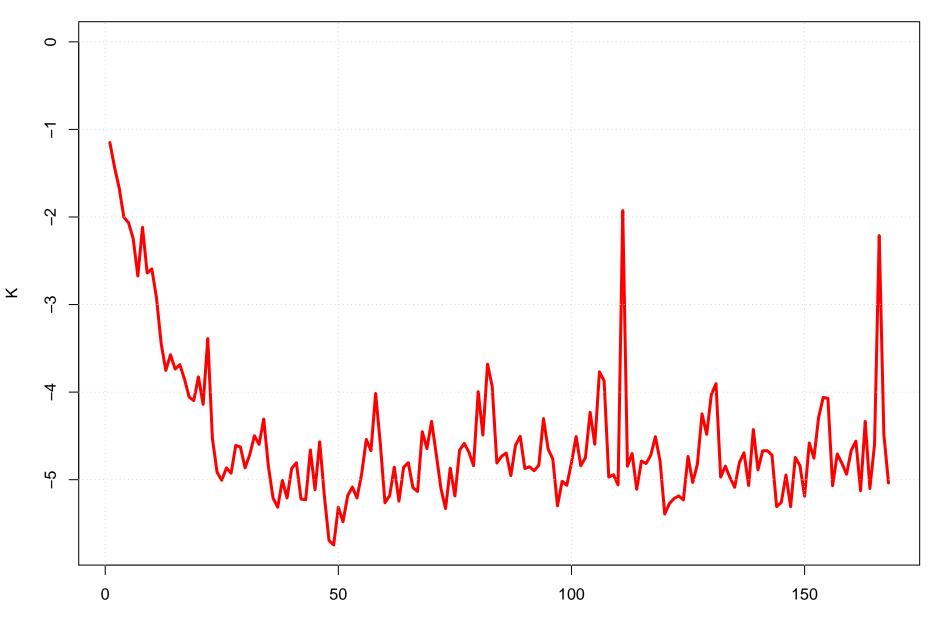


Forecast hour

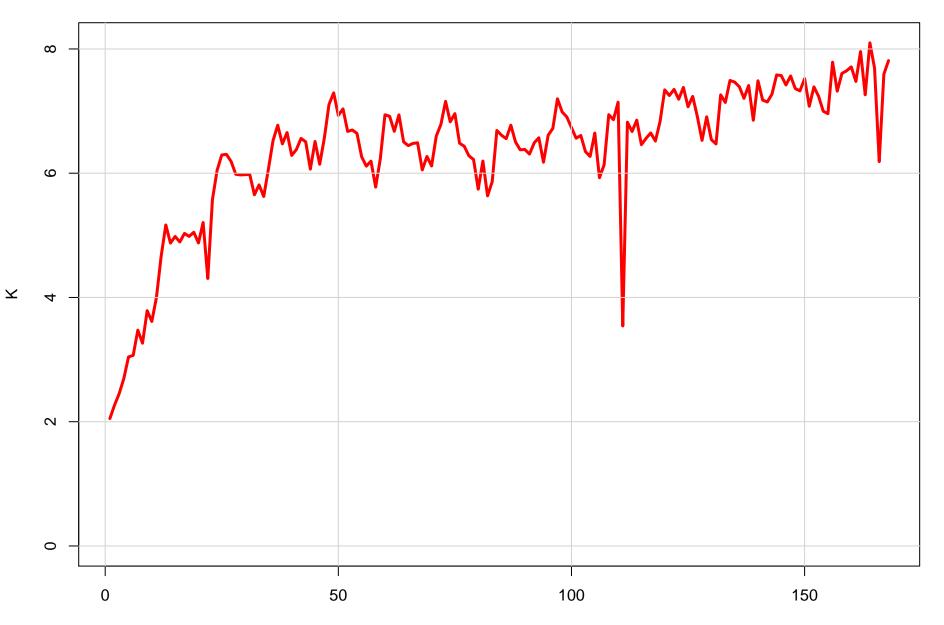
# Surface temperature RMSE at KGWO by forecast hour



Surface dew point bias at KGWO by forecast hour



Surface dew point RMSE at KGWO by forecast hour



Forecast hour