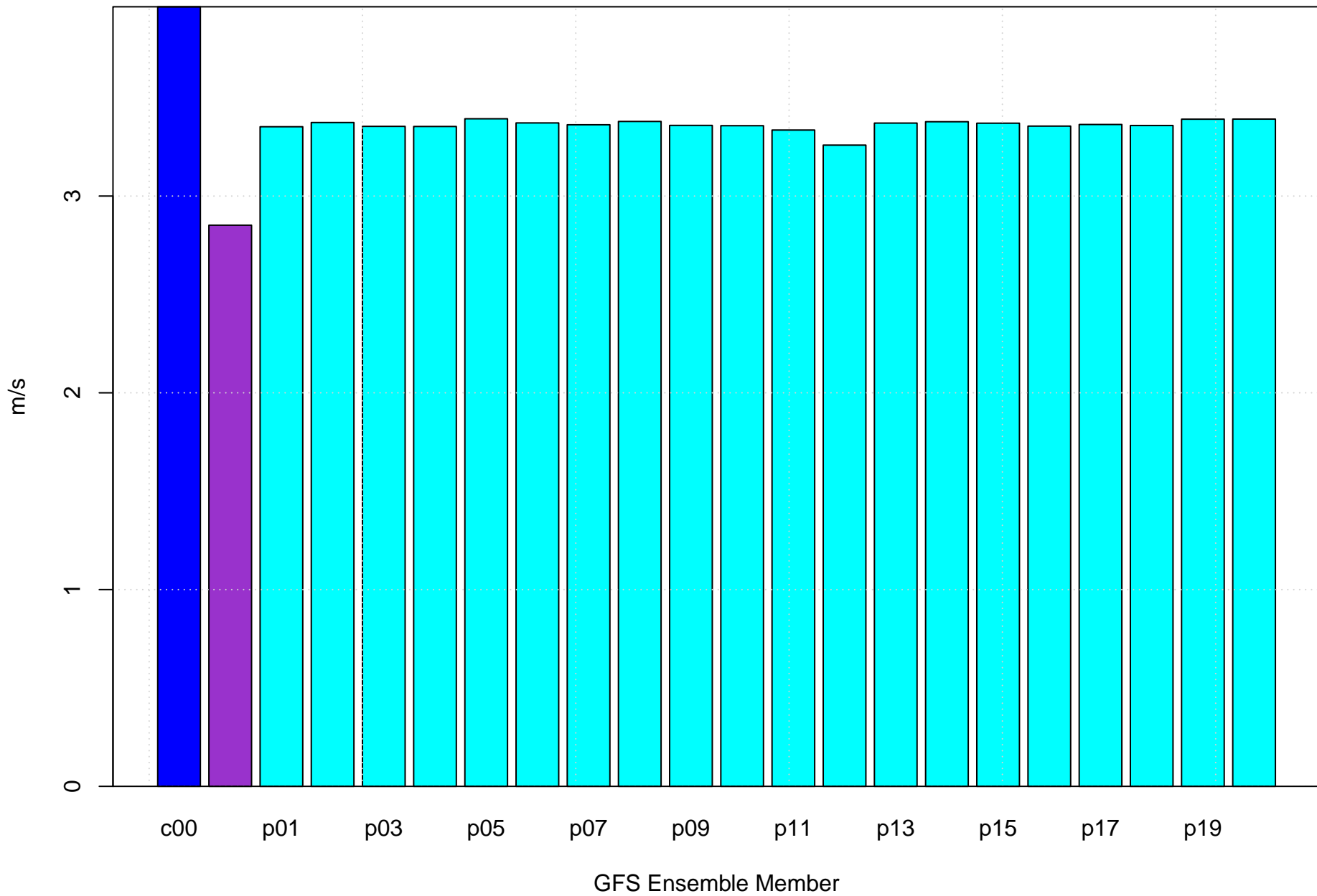**Mean vector surface wind error KDNN**
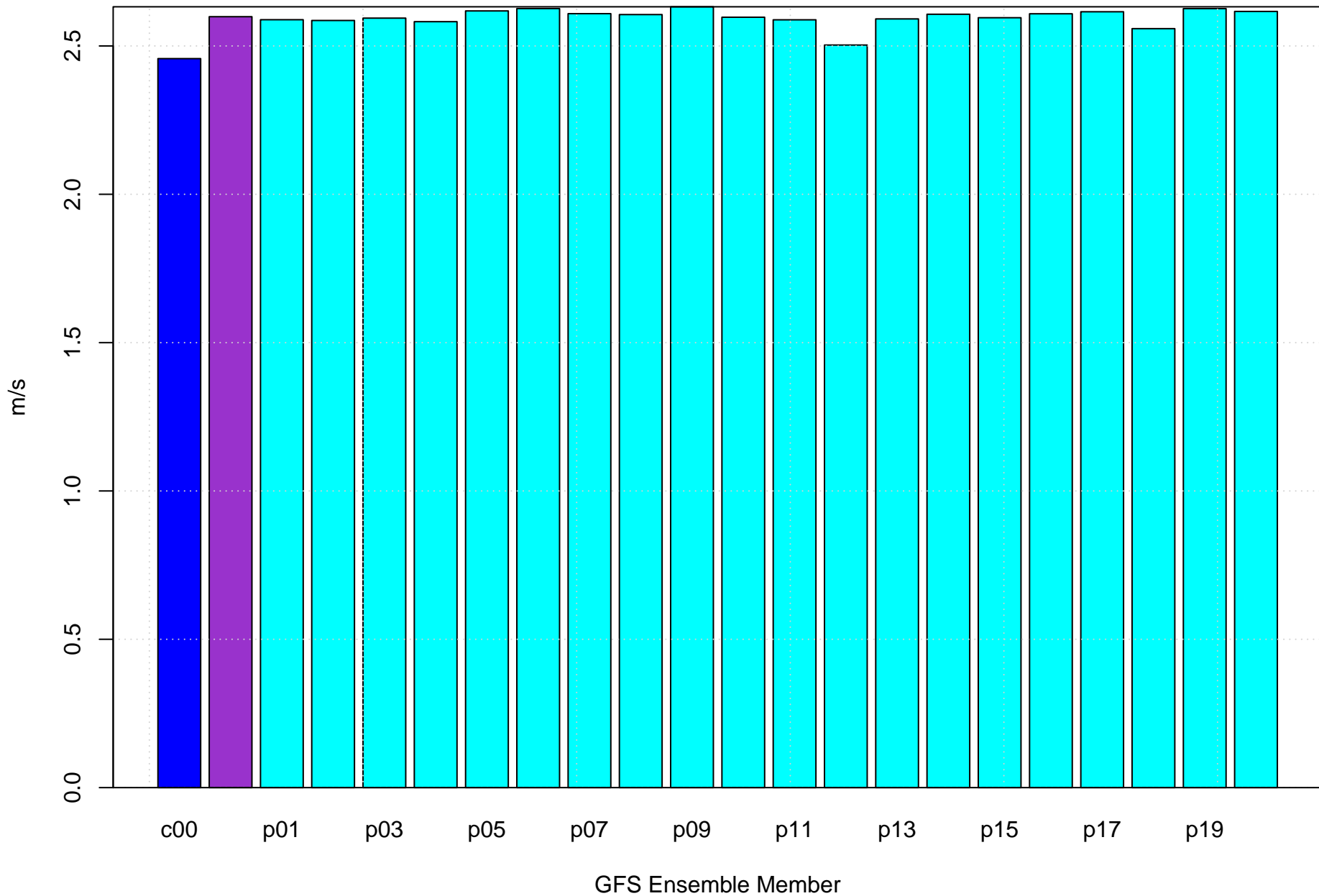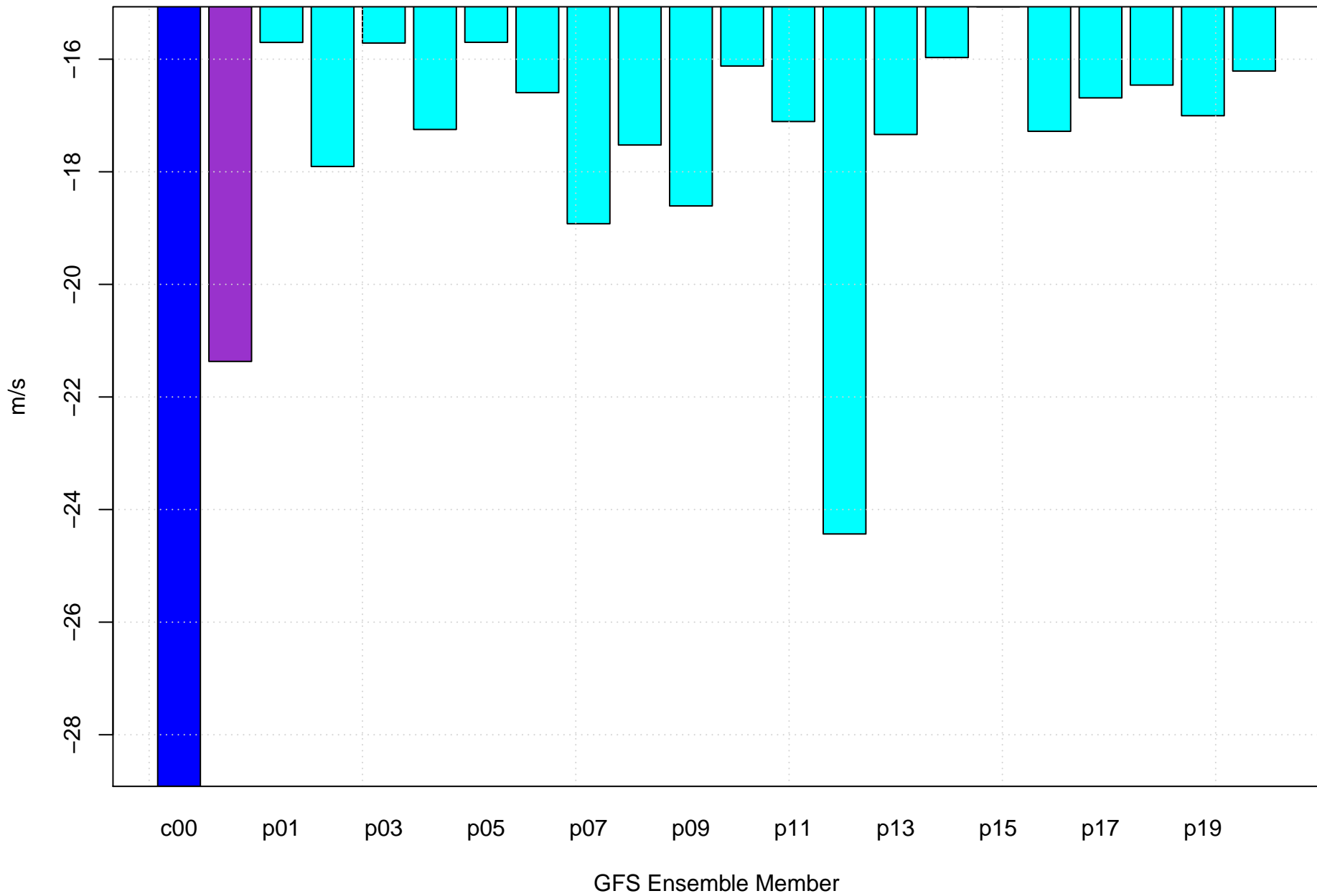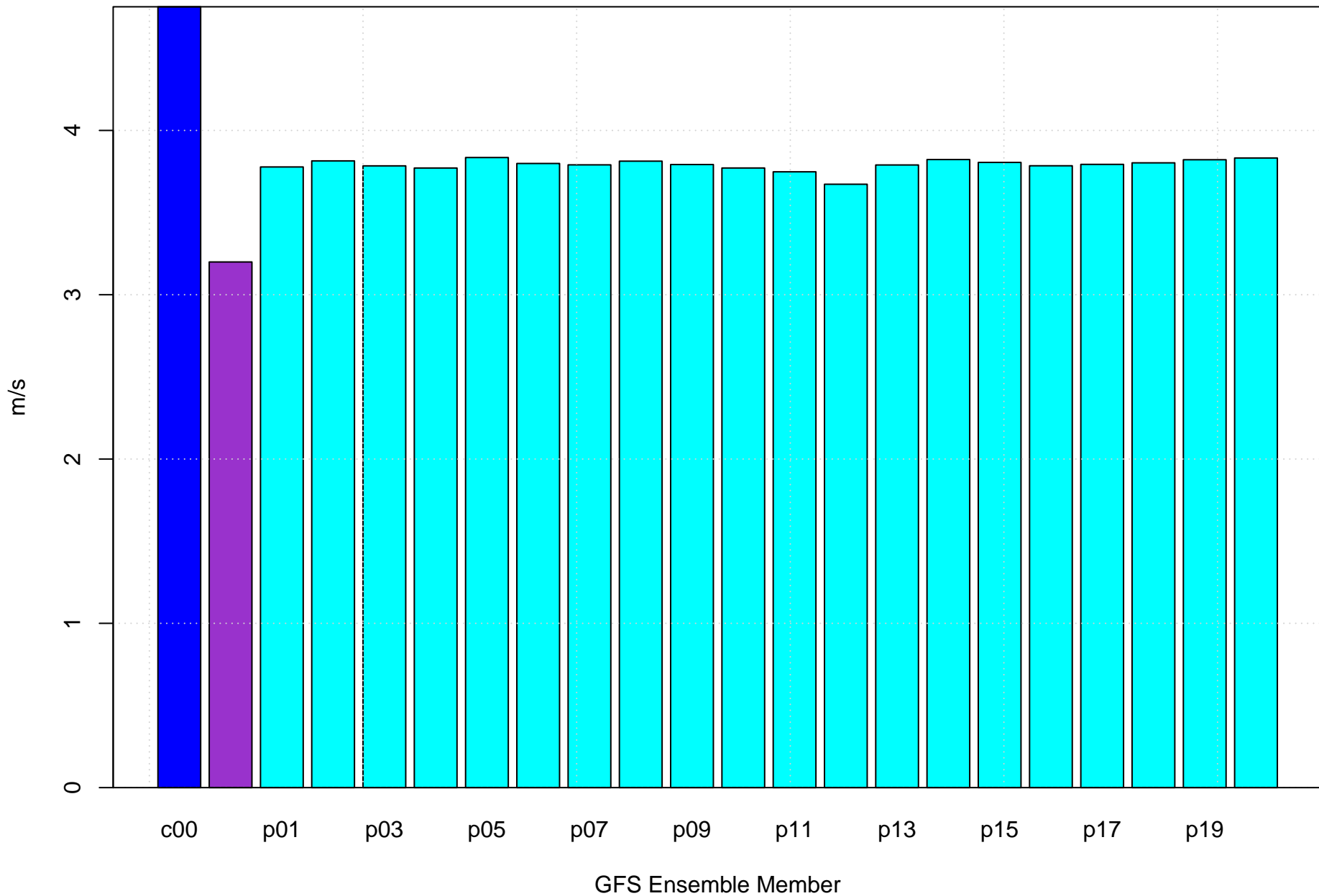
Surface wind speed bias KDNN

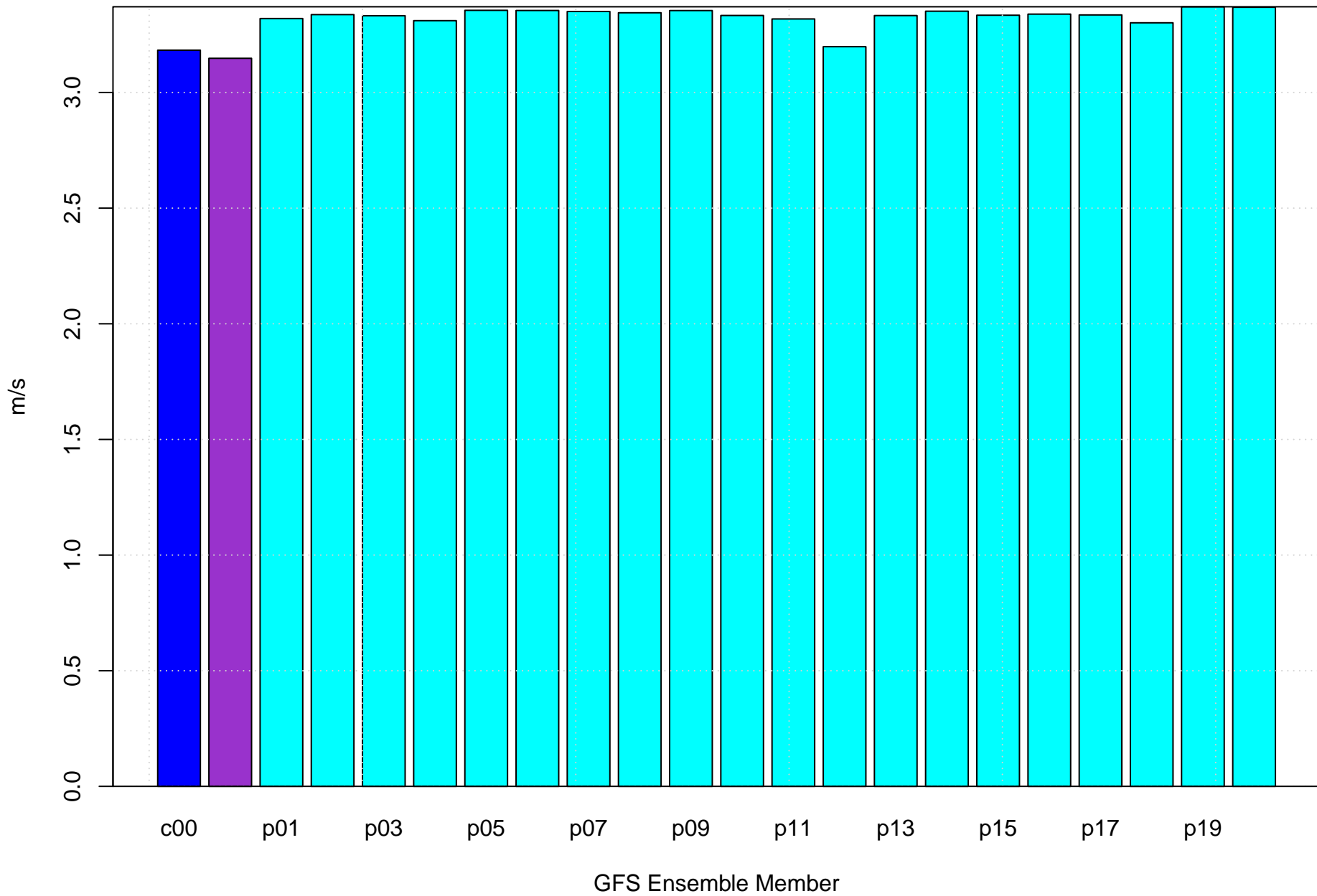**Surface direction bias KDNN**

m/s

GFS Ensemble Member

Surface vector wind vector RMSE KDNN

m/s

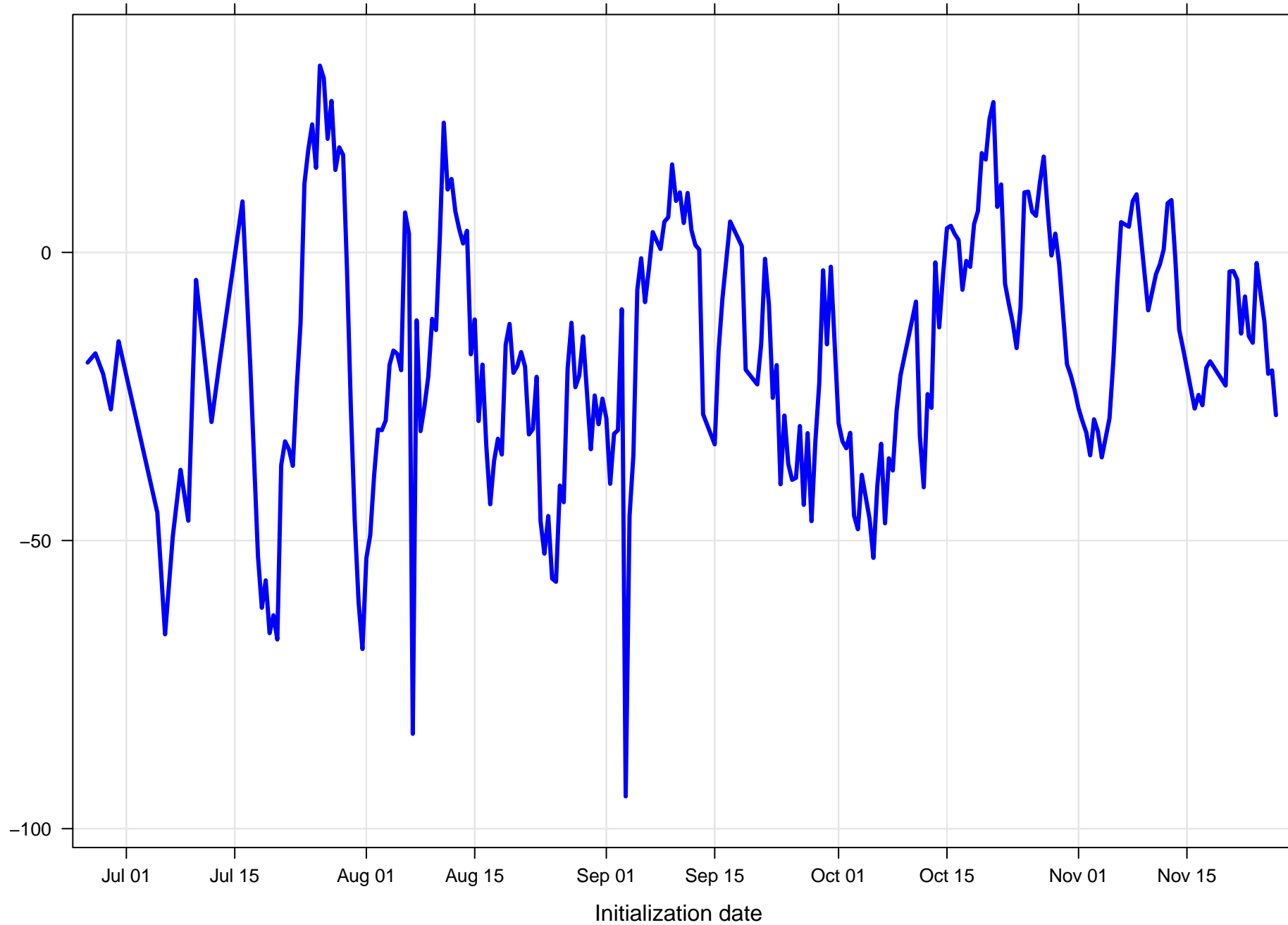GFS Ensemble Member

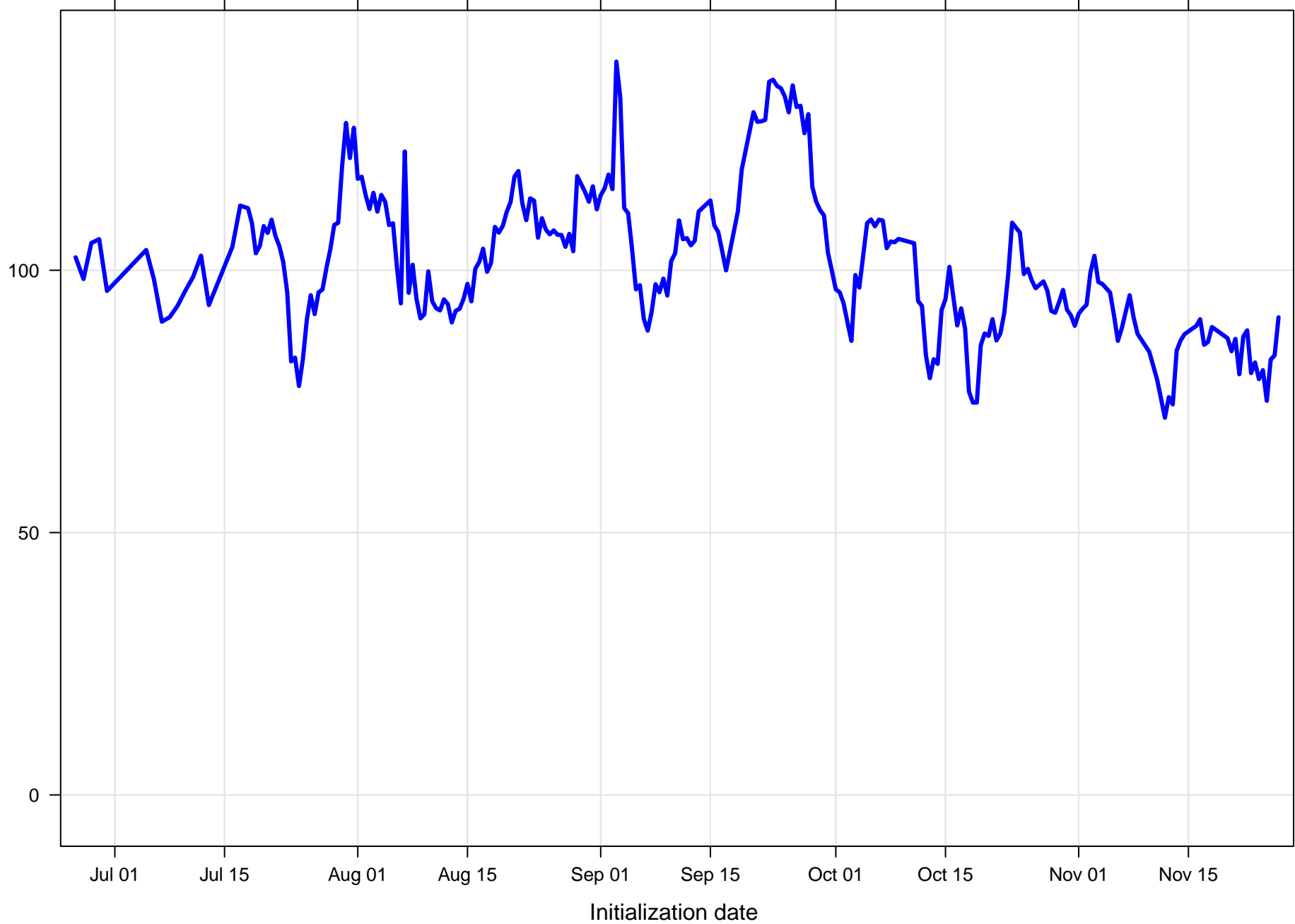# Surface wind speed RMSE KDNN

m/s

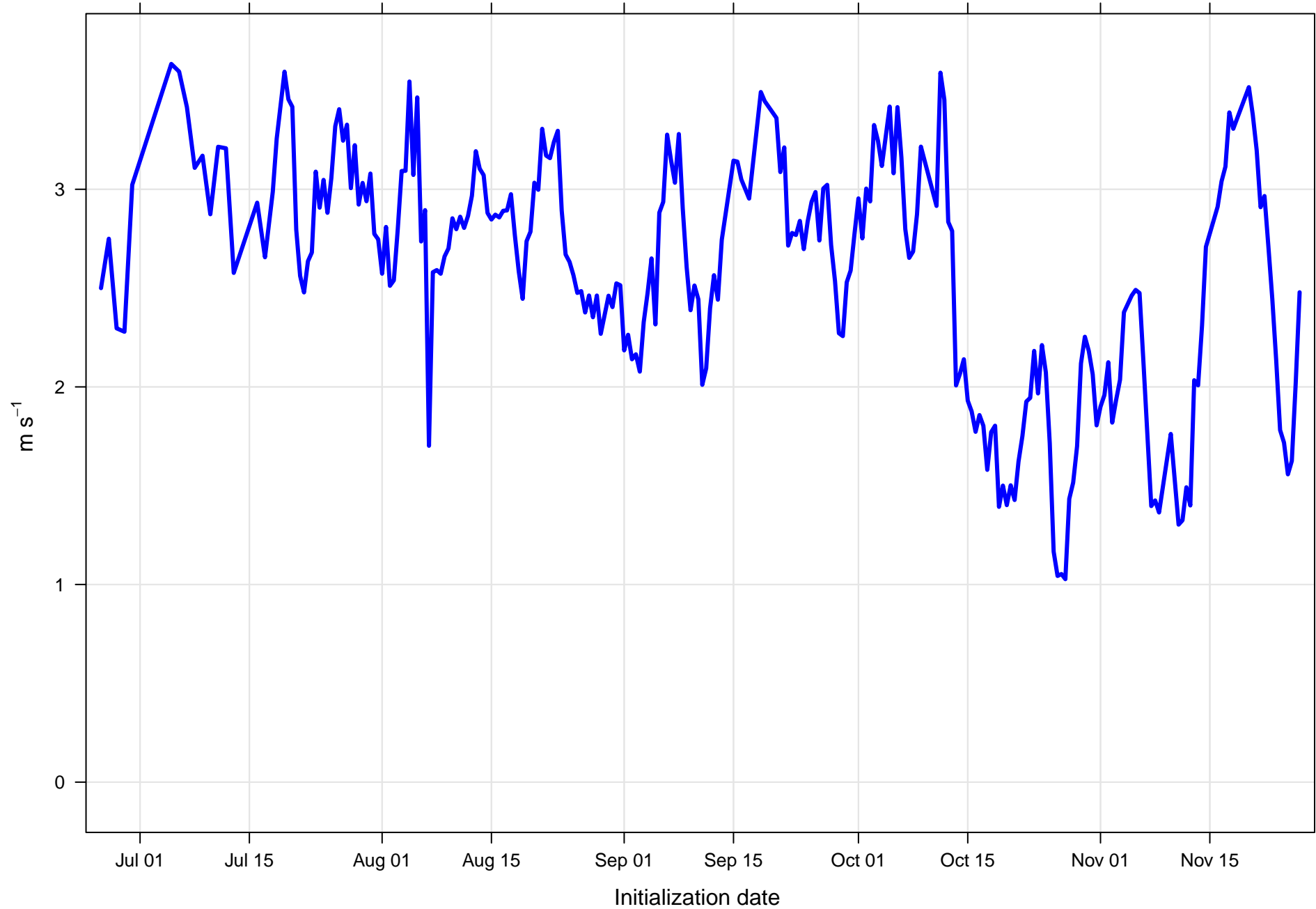GFS Ensemble Member

Surface direction RMSE KDNN
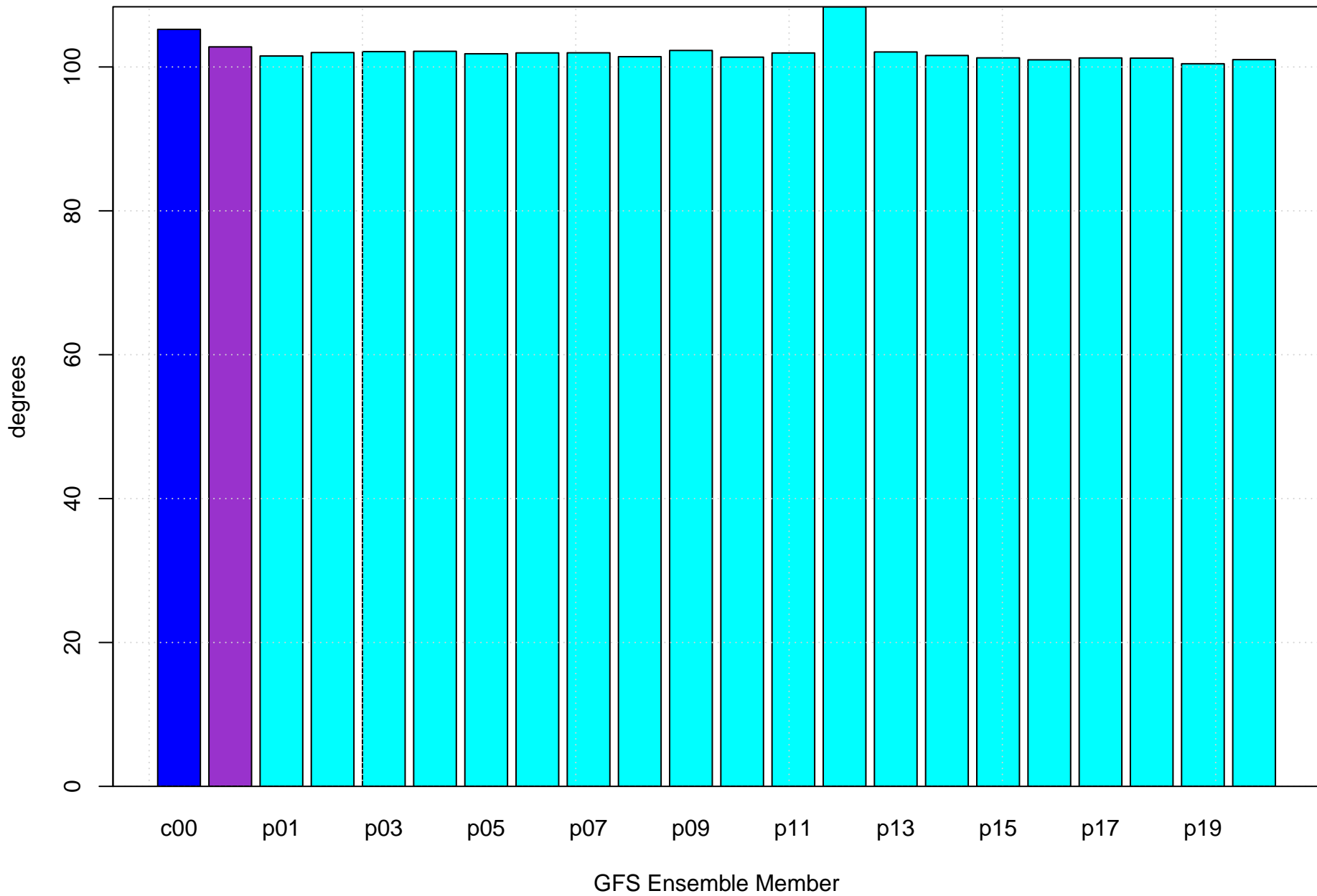
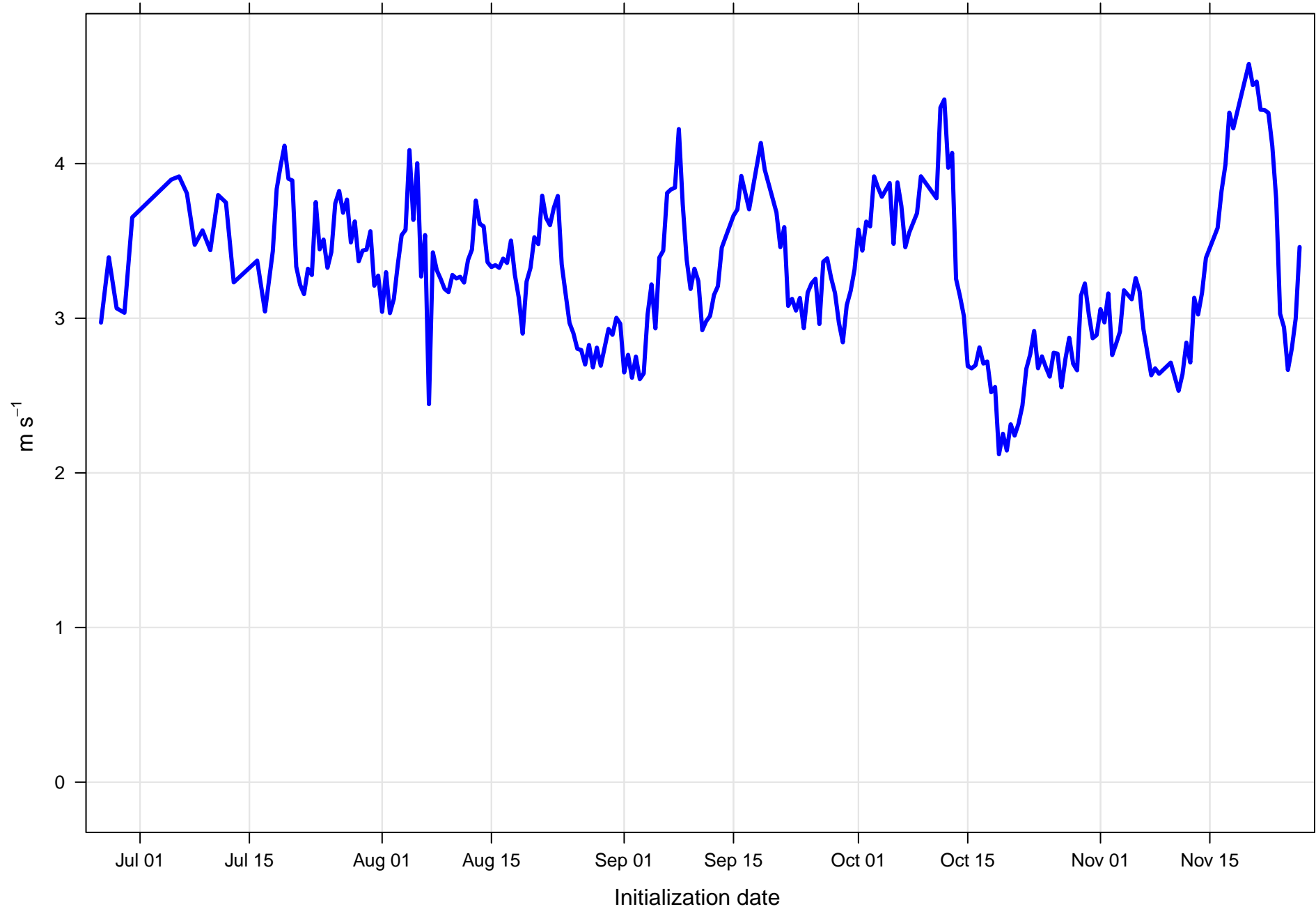Surface wind direction bias at KDNN all forecast hours and members

Surface wind direction RMSE at KDNN all forecast hours and members
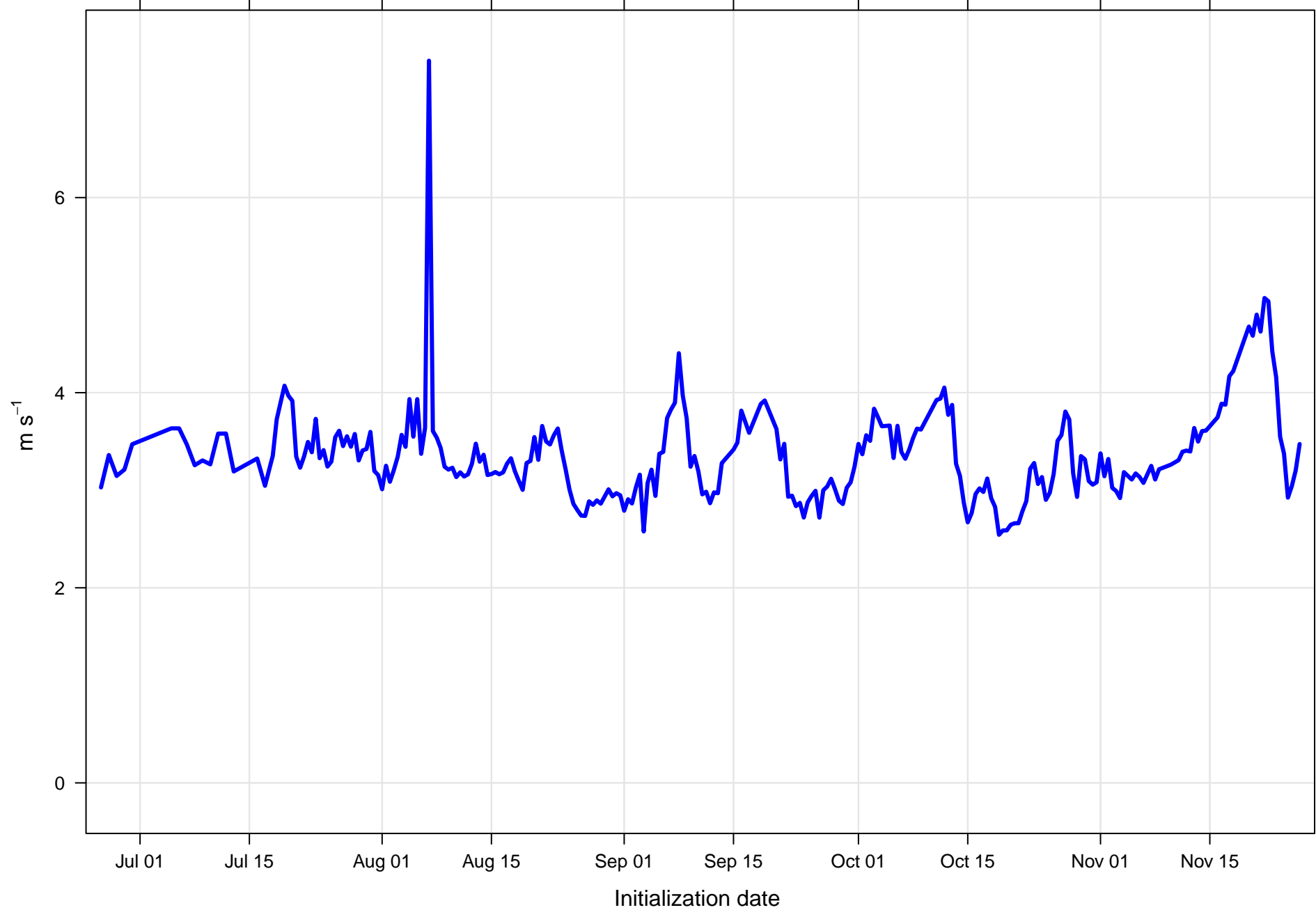
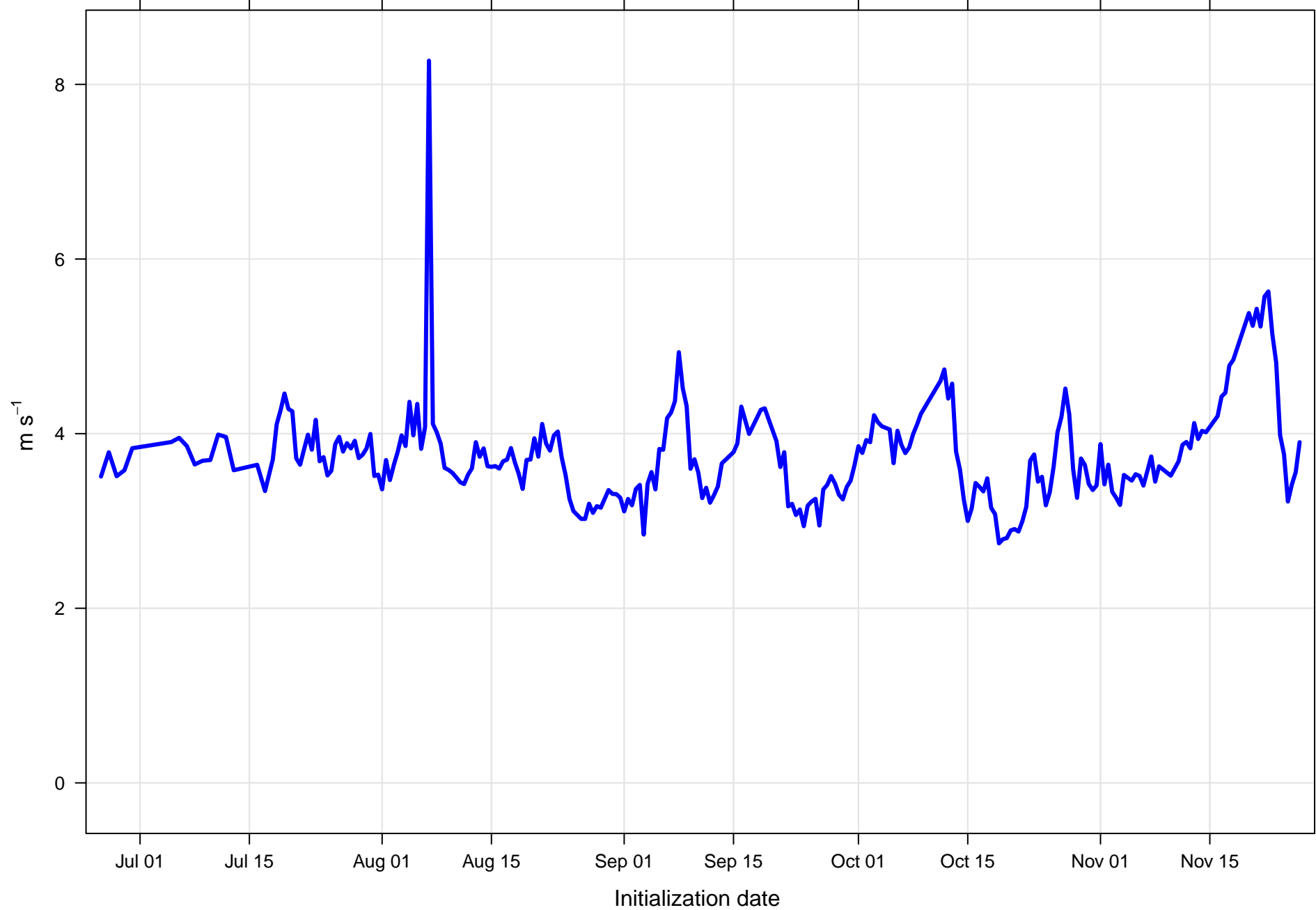Surface wind speed bias at KDNN all forecast hours and members

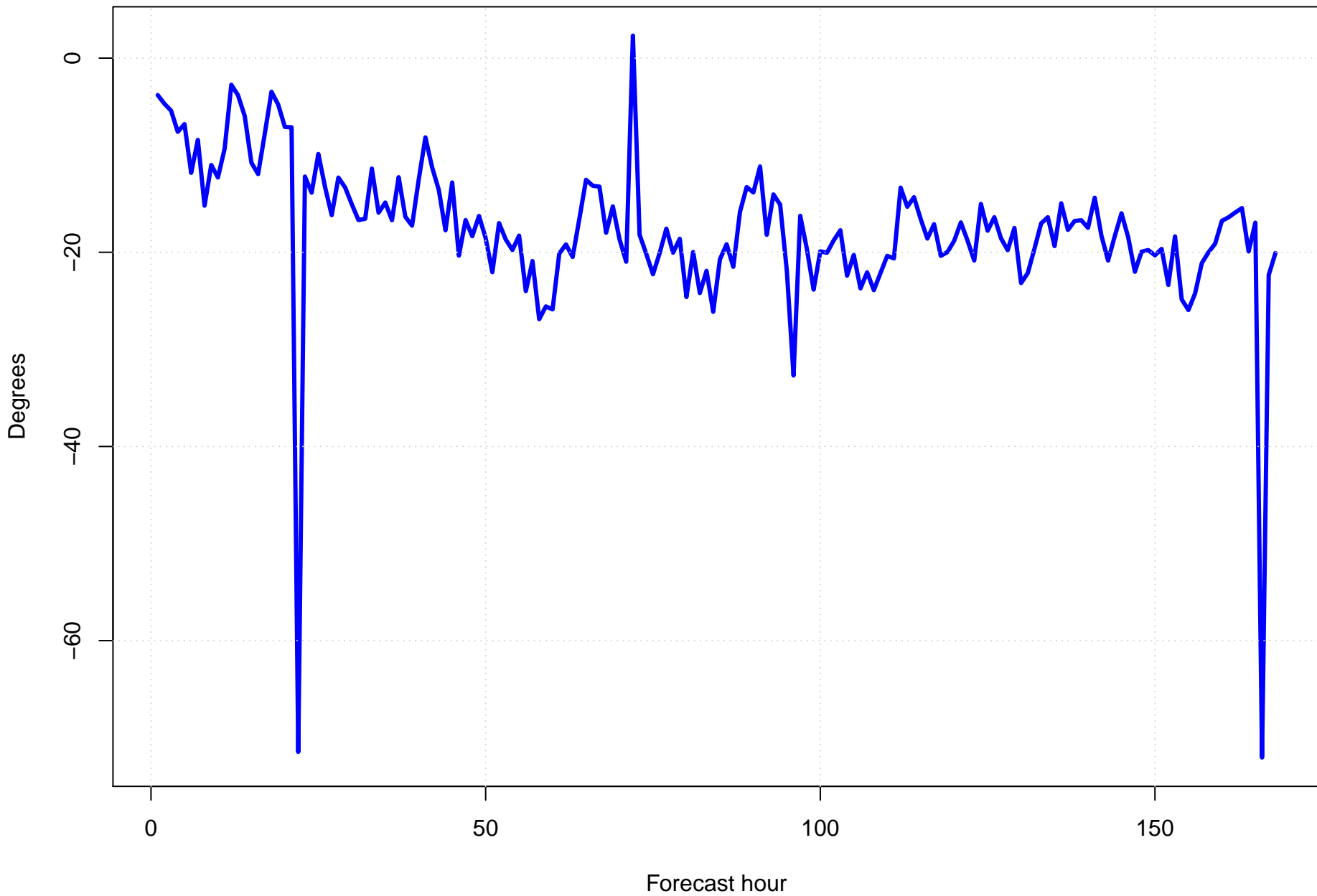Surface wind speed RMSE at KDNN all forecast hours and members

Surface vector wind mean error KDNN all forecast hours and members
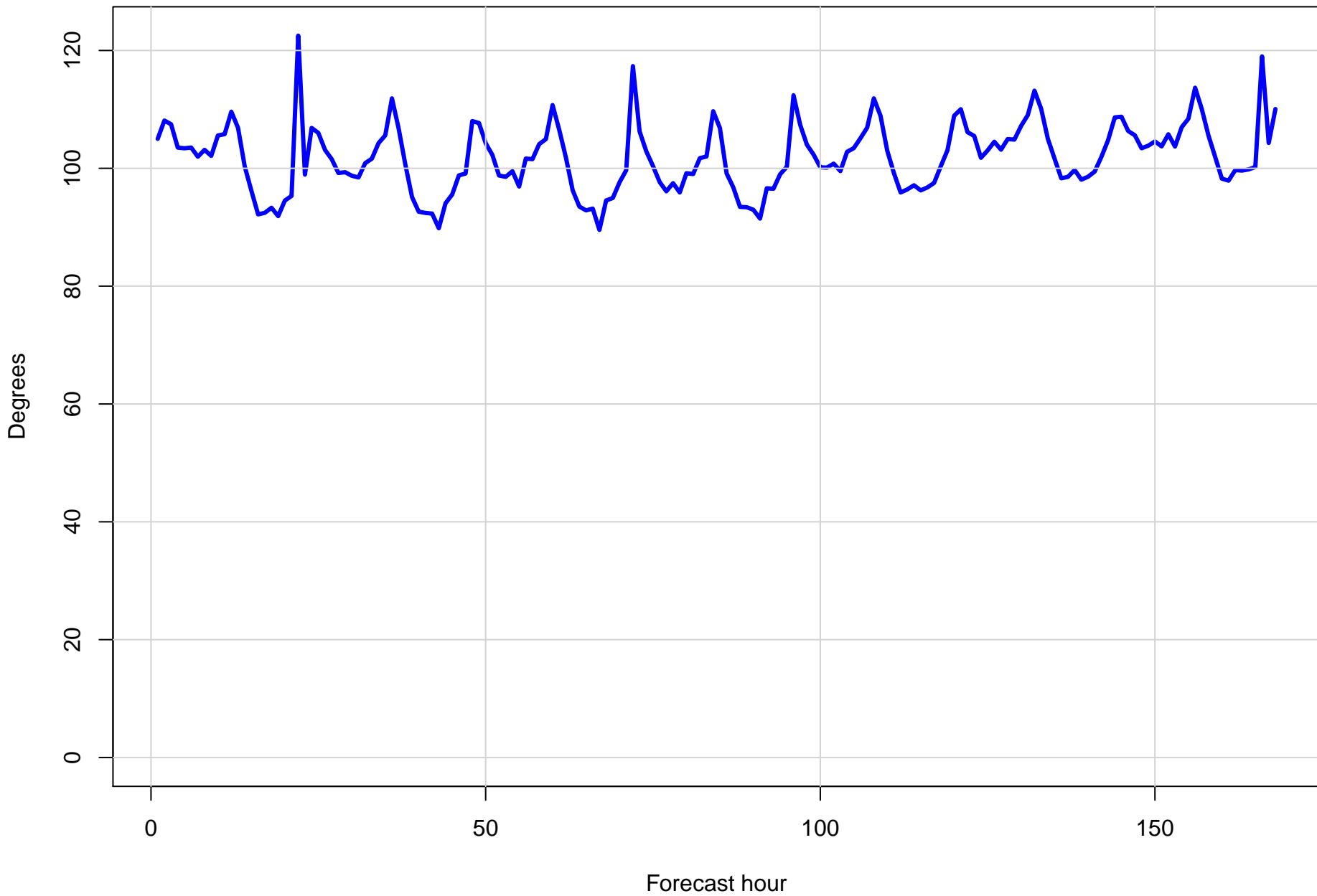
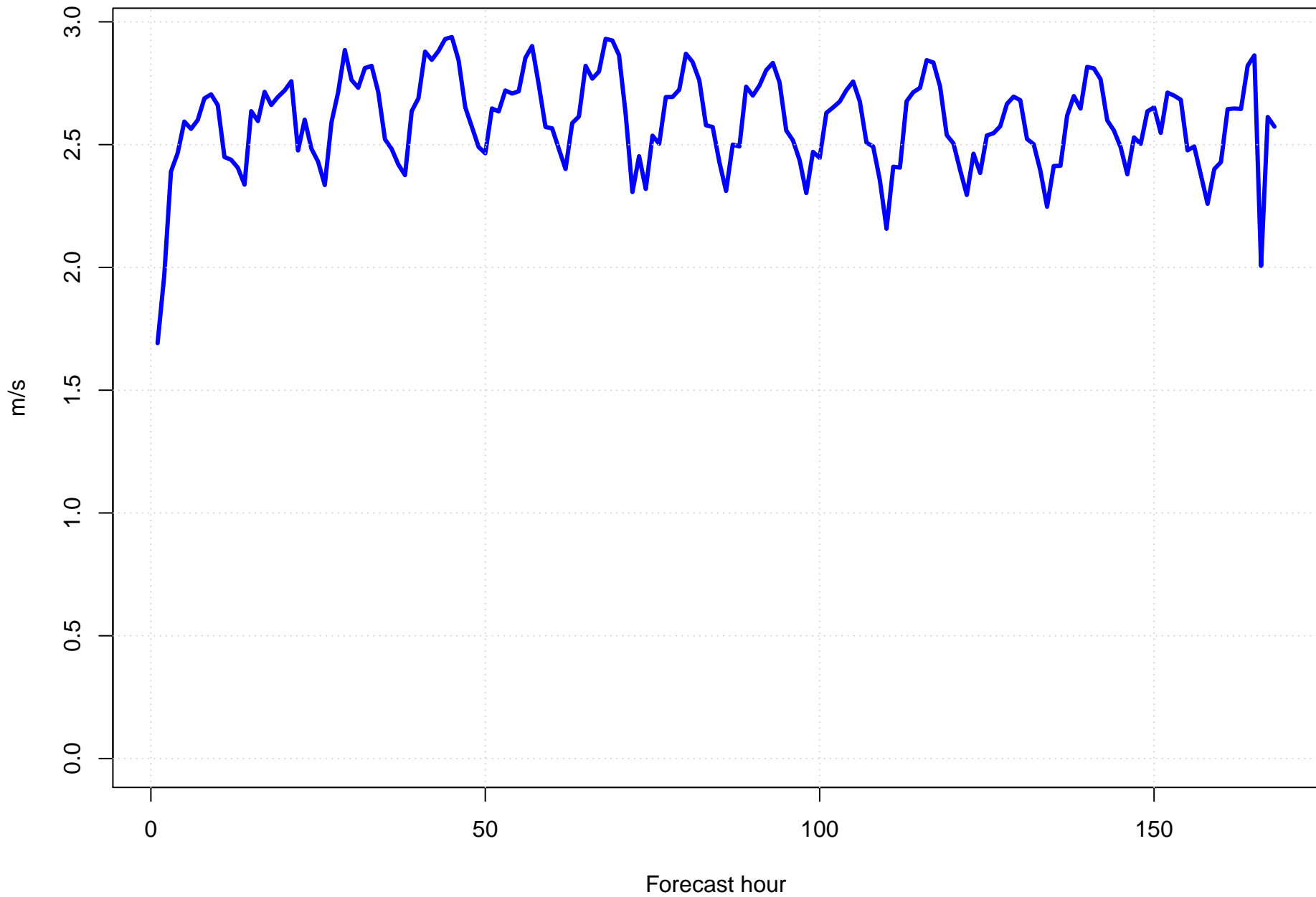Surface vector wind RMSE at KDNN all forecast hours and members

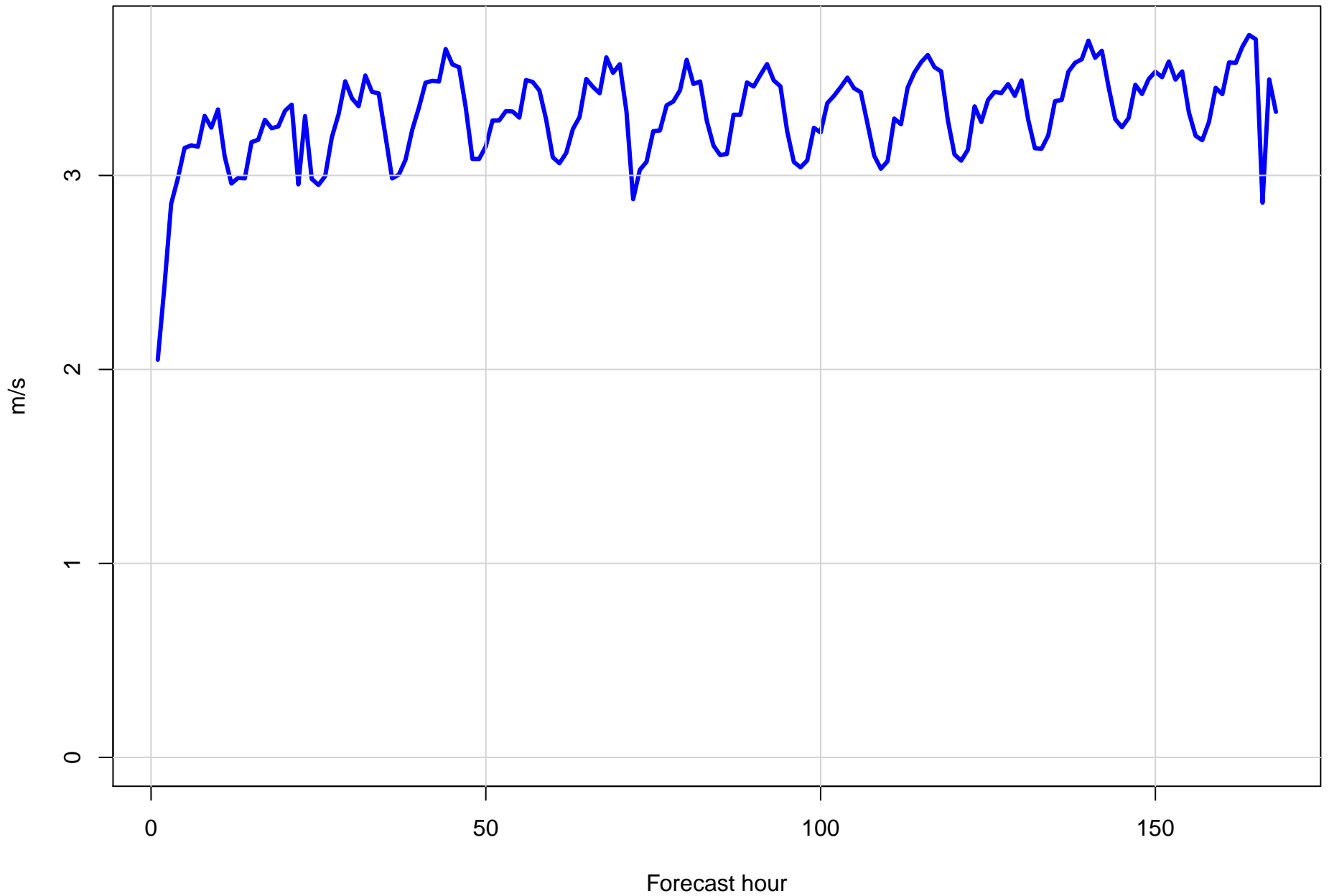**Surface wind direction bias at KDNN by forecast hour**

Degrees

Forecast hour

Surface wind direction RMSE at KDNN by forecast hour

Surface wind speed bias at KDNN by forecast hour

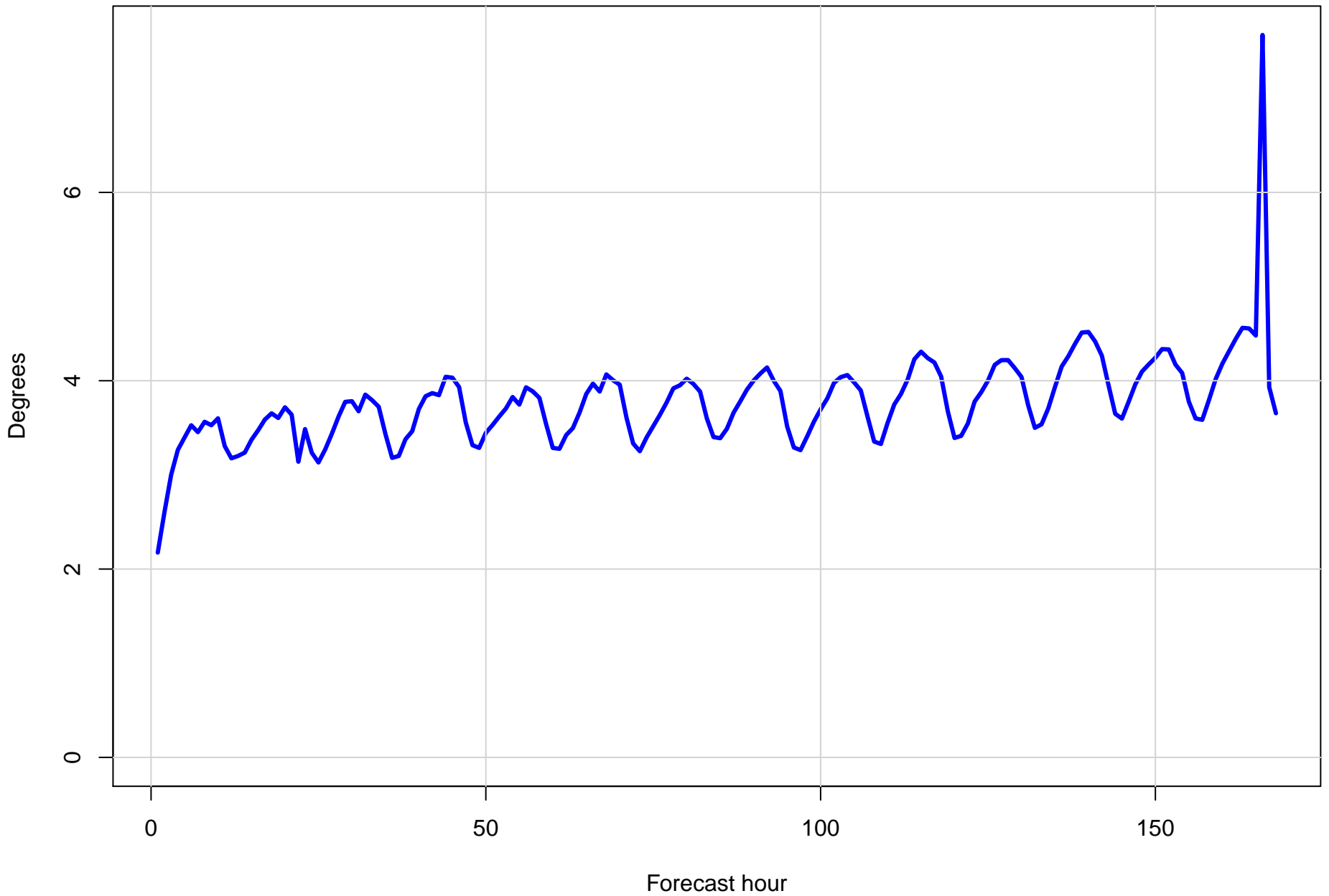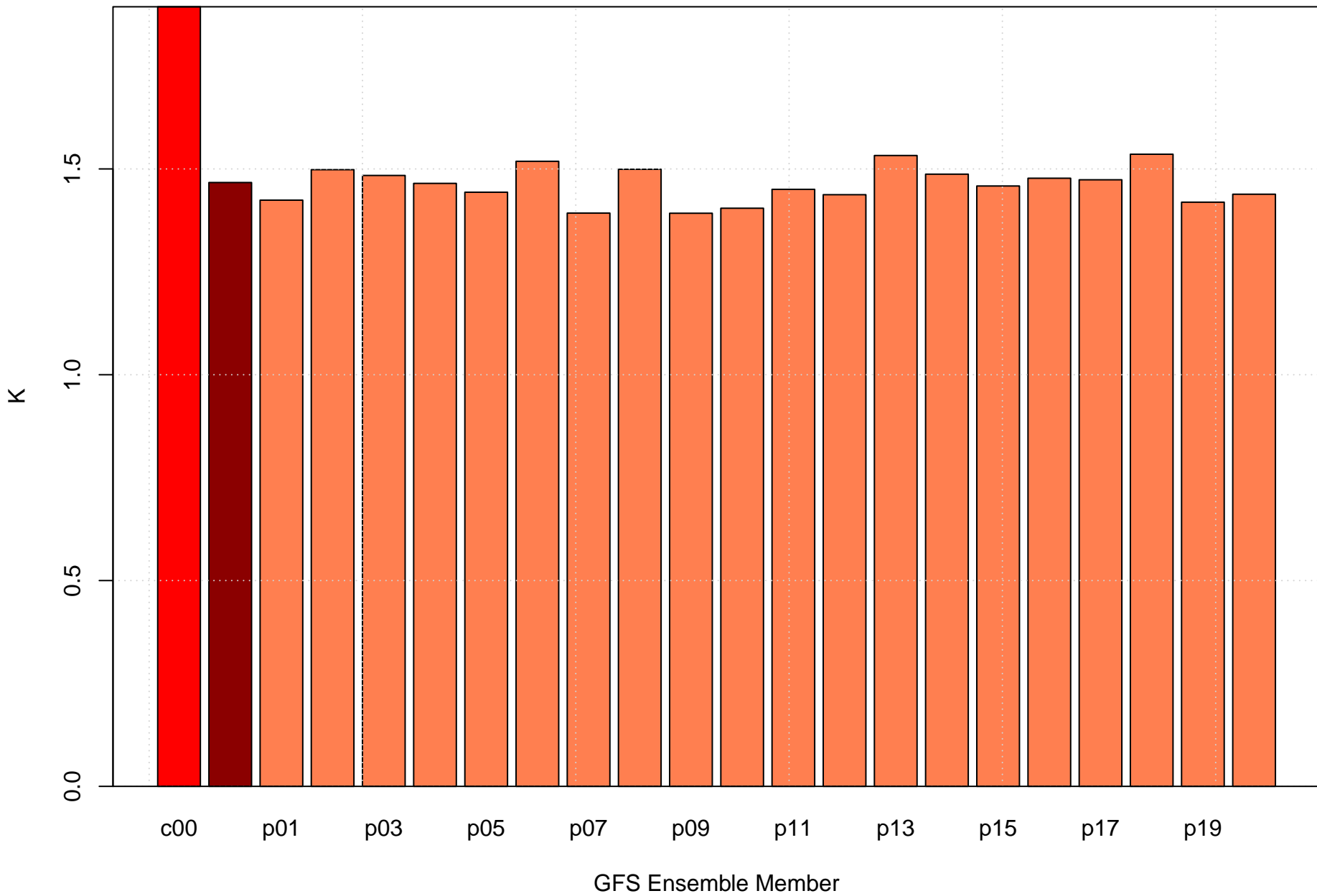**Surface wind speed RMSE at KDNN by forecast hour**

Forecast hour

m/s

Surfce vector wind error at KDNN by forecast hour
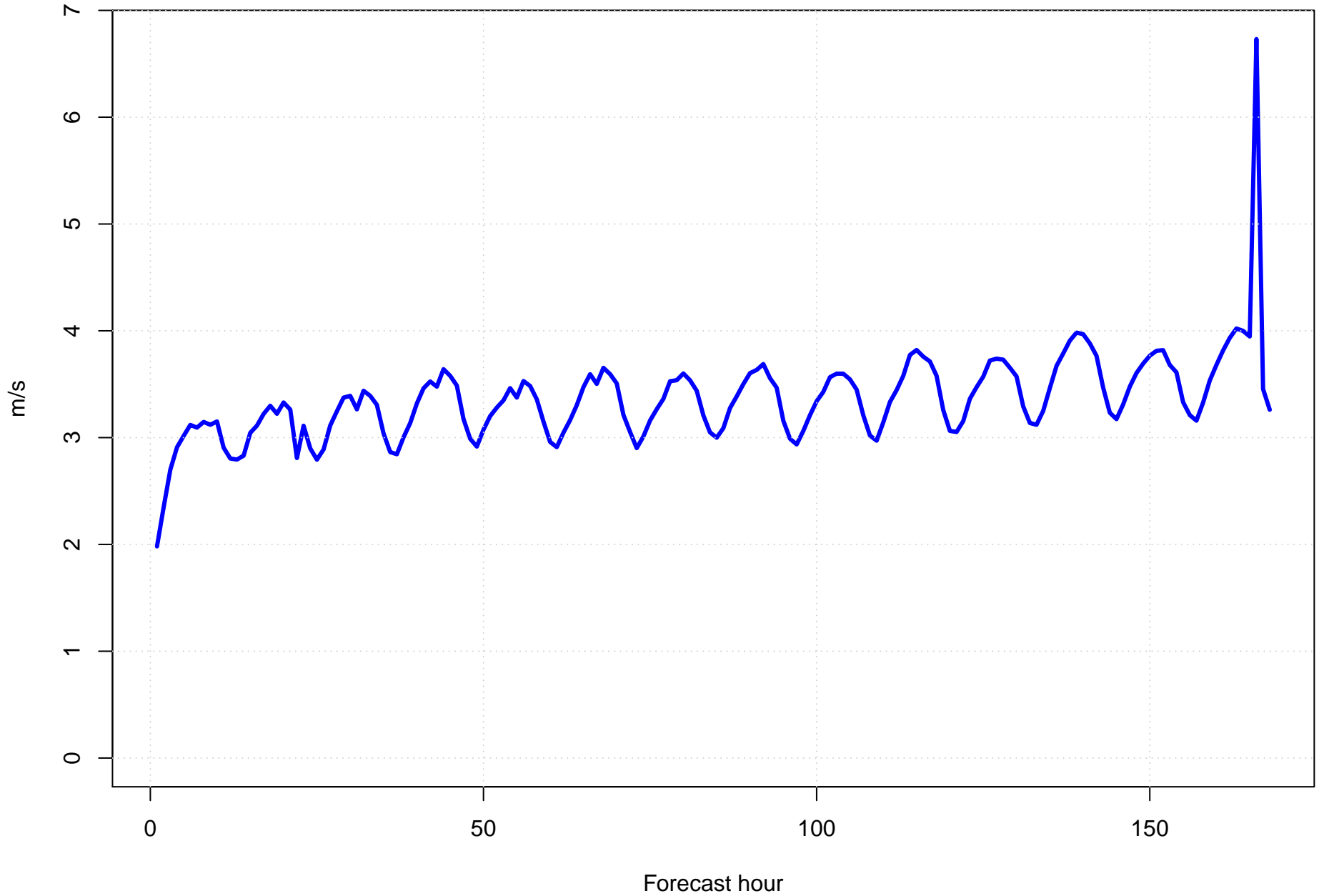
m/s

Forecast hour

Surface vector wind RMSE at KDNN by forecast hour

Surface temperature bias at KDNN

GFS Ensemble Member

Surface temperature RMSE at KDNN

K

GFS Ensemble Member

Surface dew point bias at KDNN

K

GFS Ensemble Member
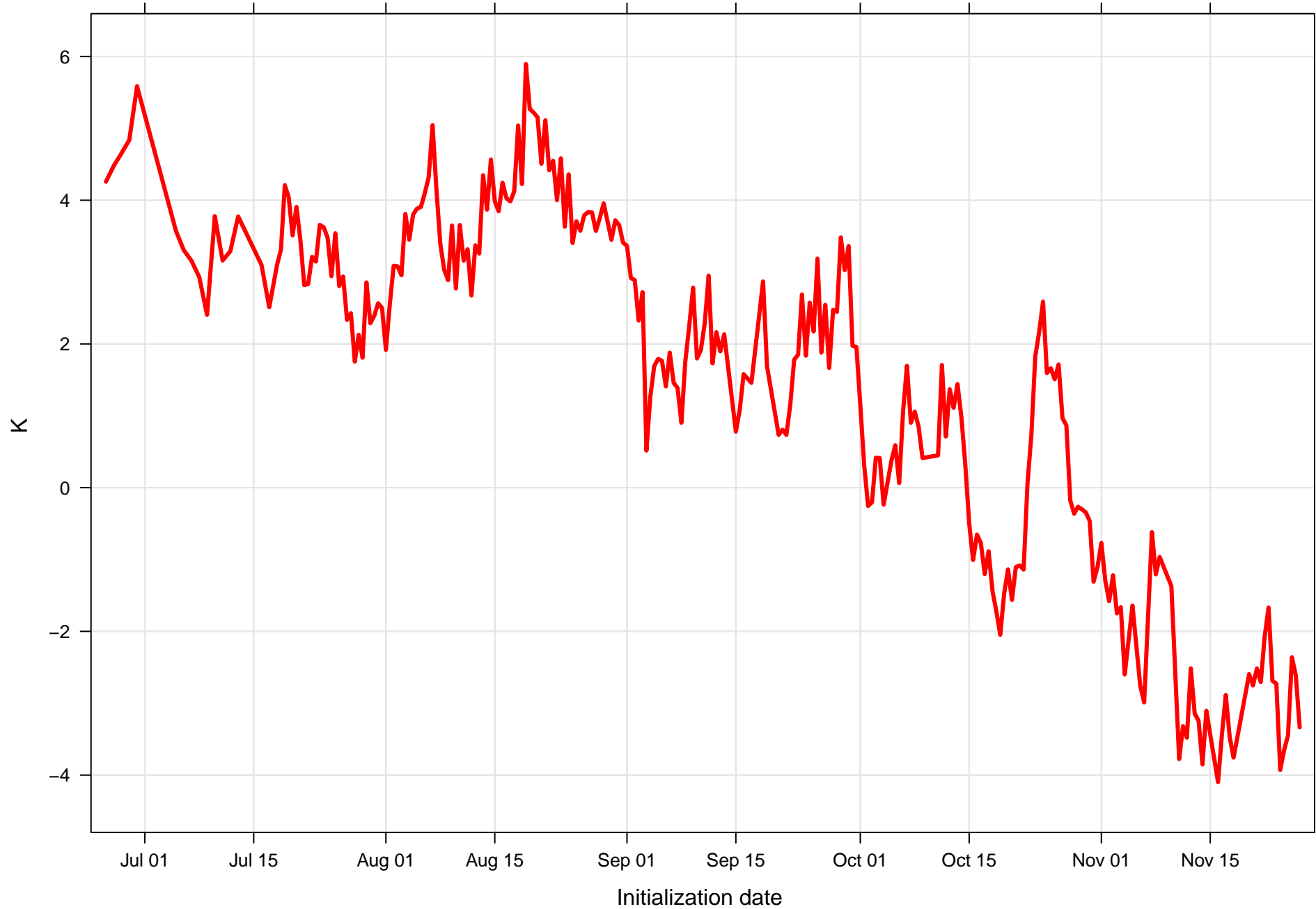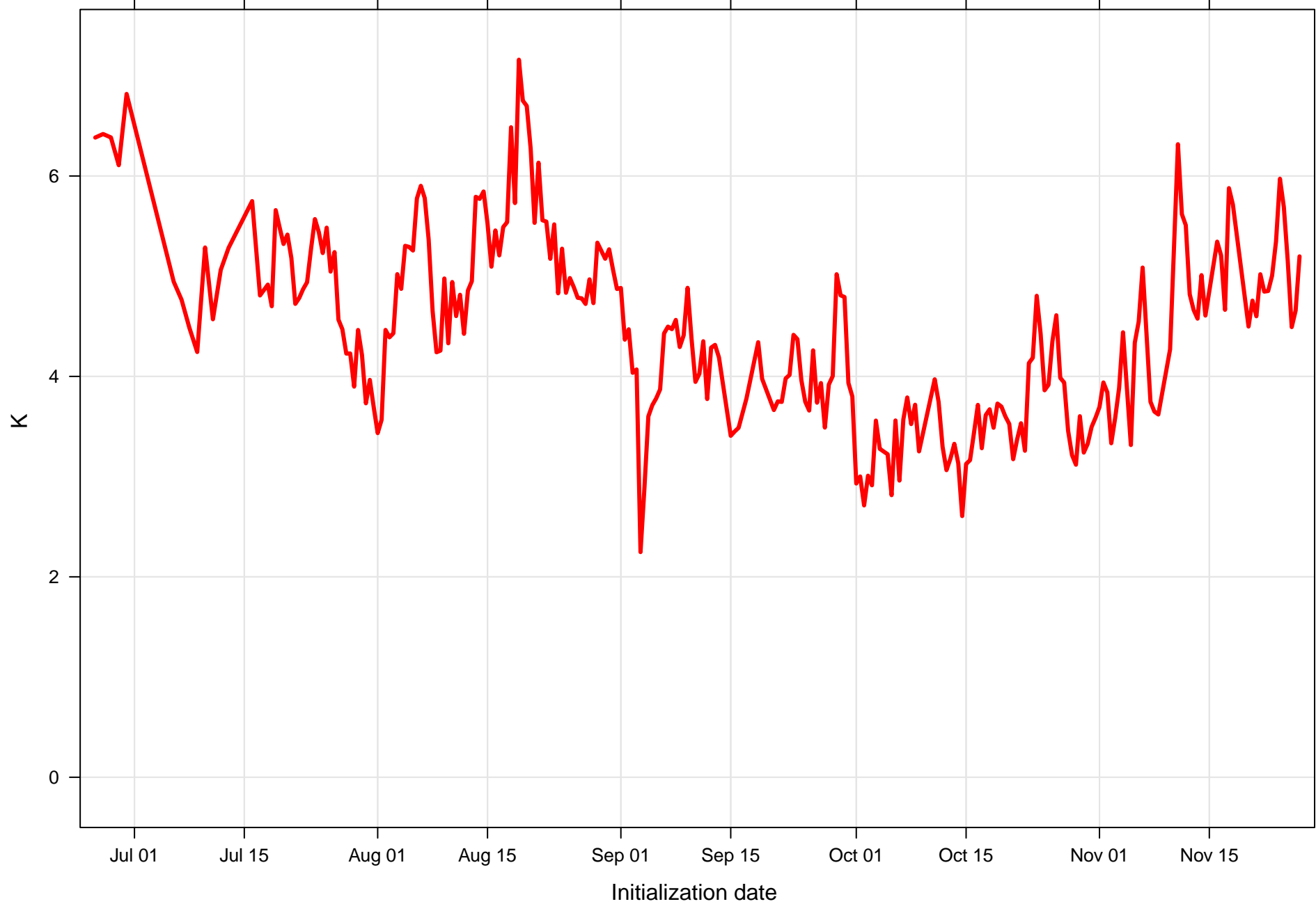
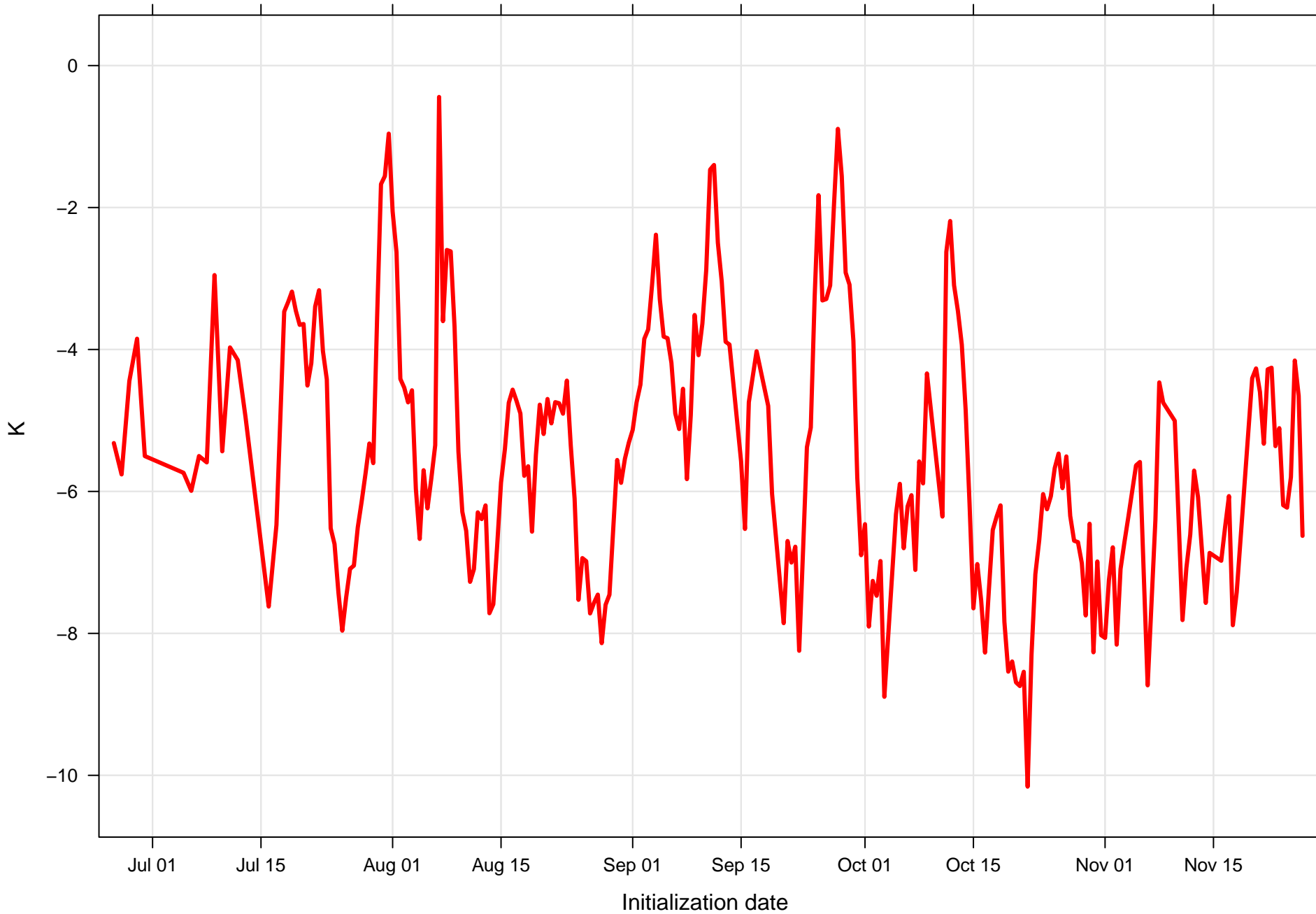**Surface dew point RMSE at KDNN**
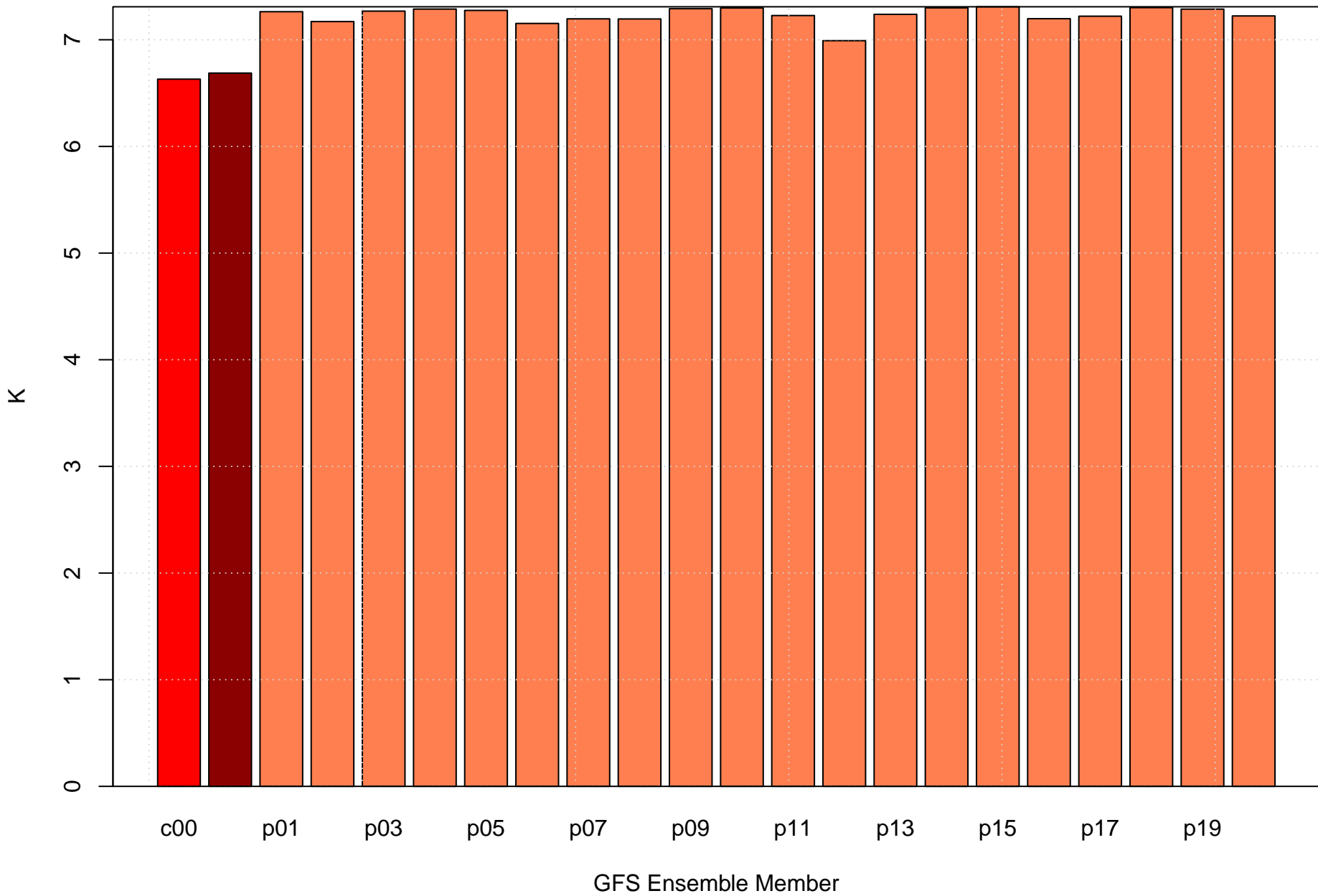
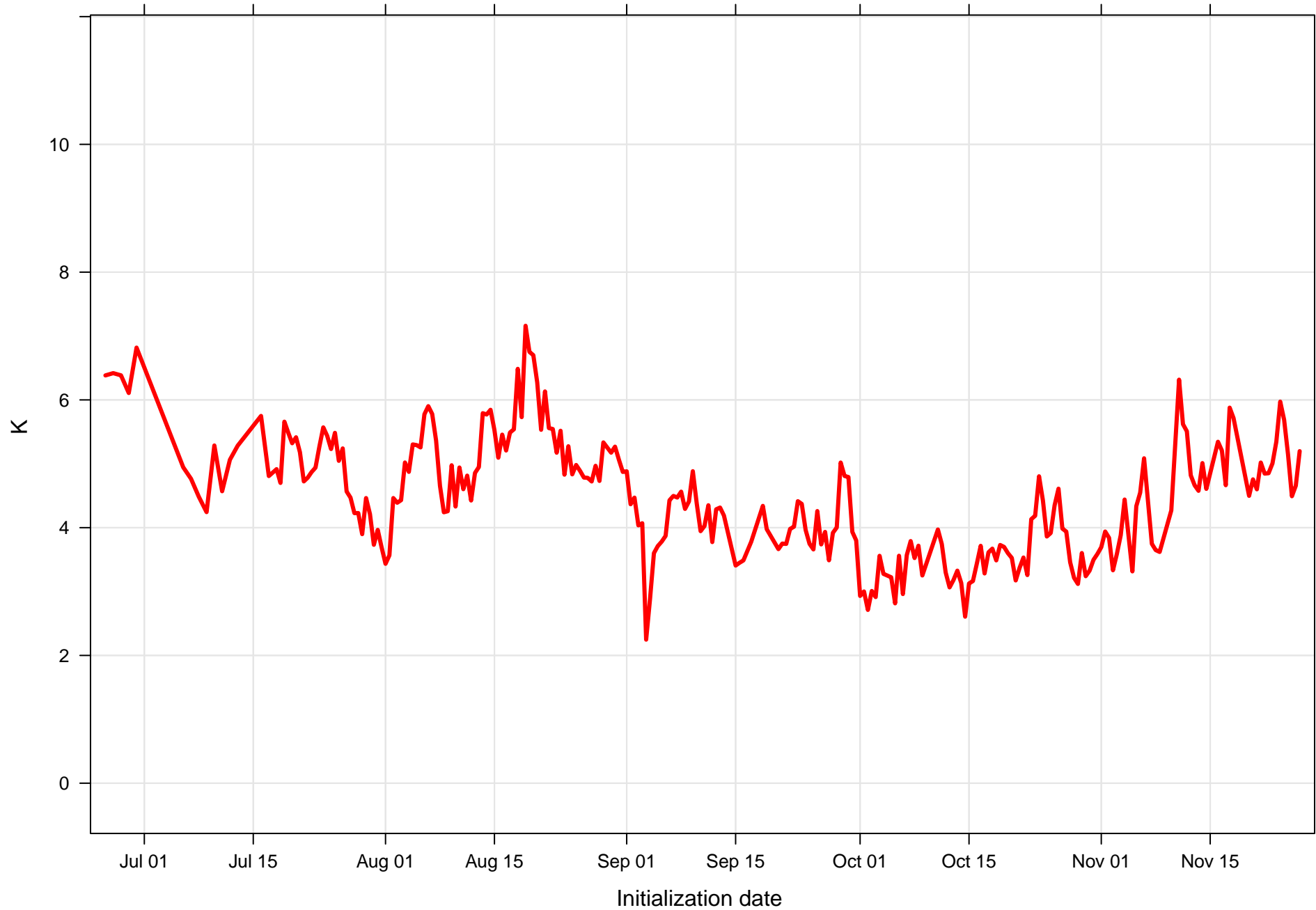Surface temperature bias at KDNN all forecast hours and members

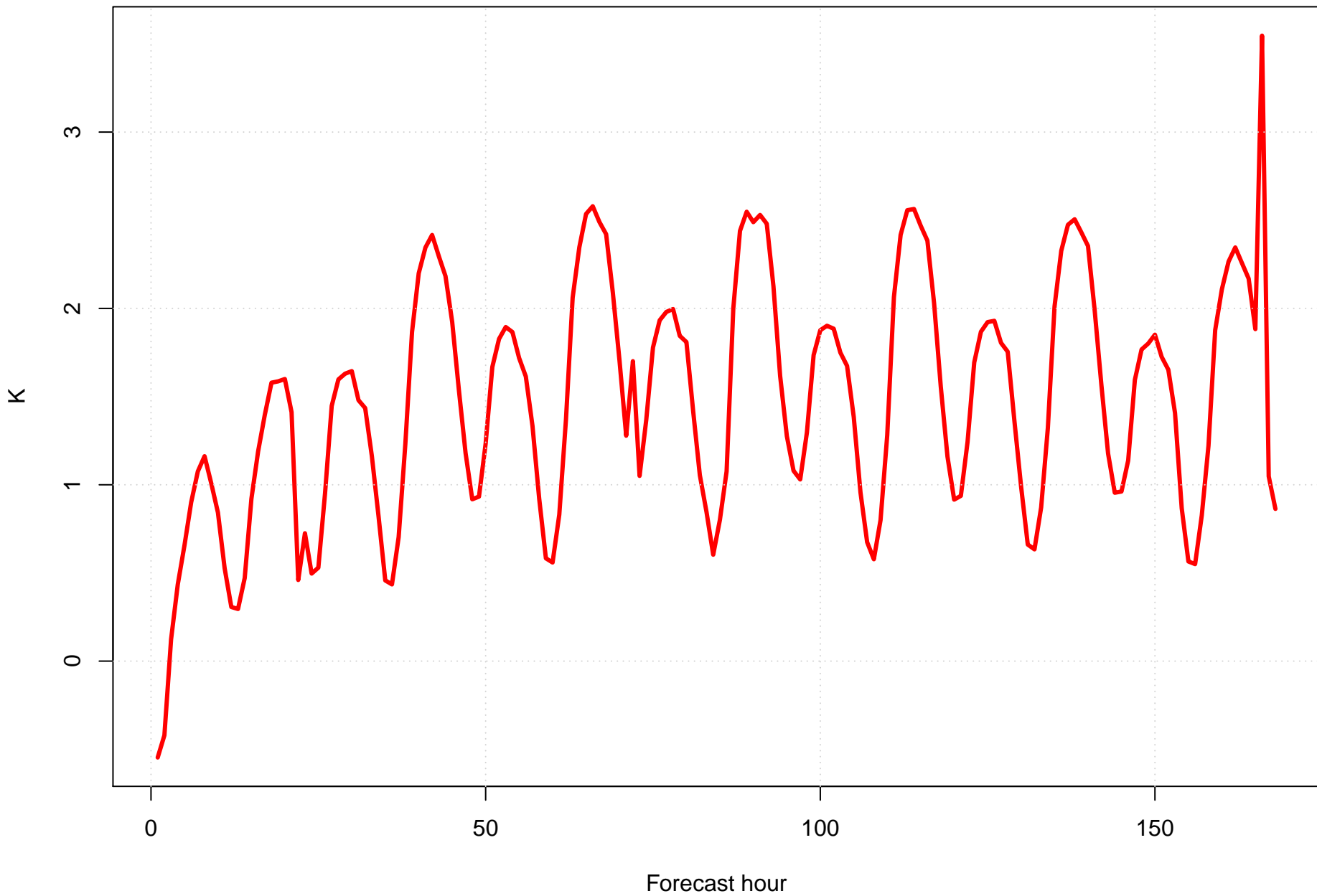Surface temperature RMSE at KDNN all forecast hours and members

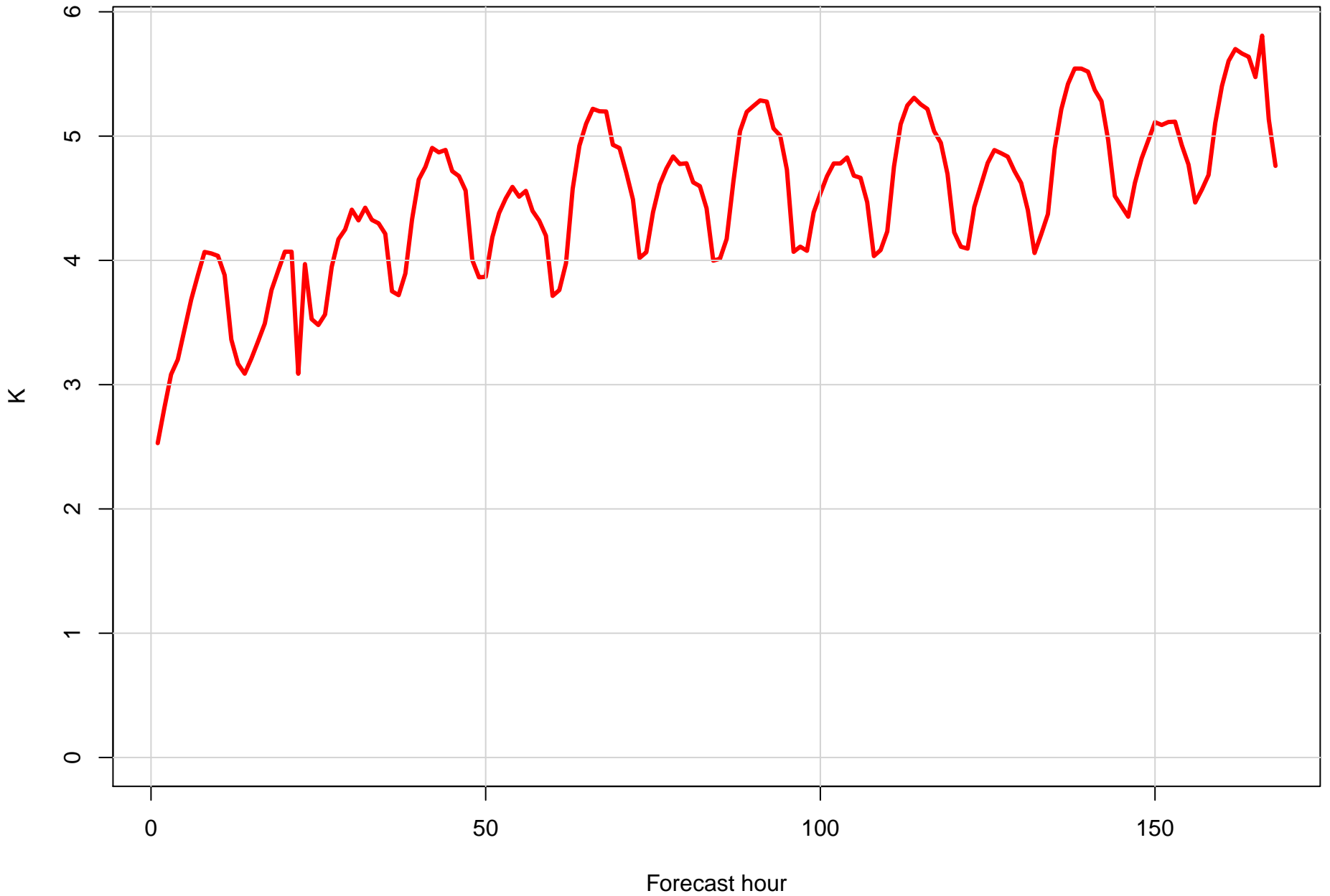Surface dew point bias at KDNN all forecast hours and members

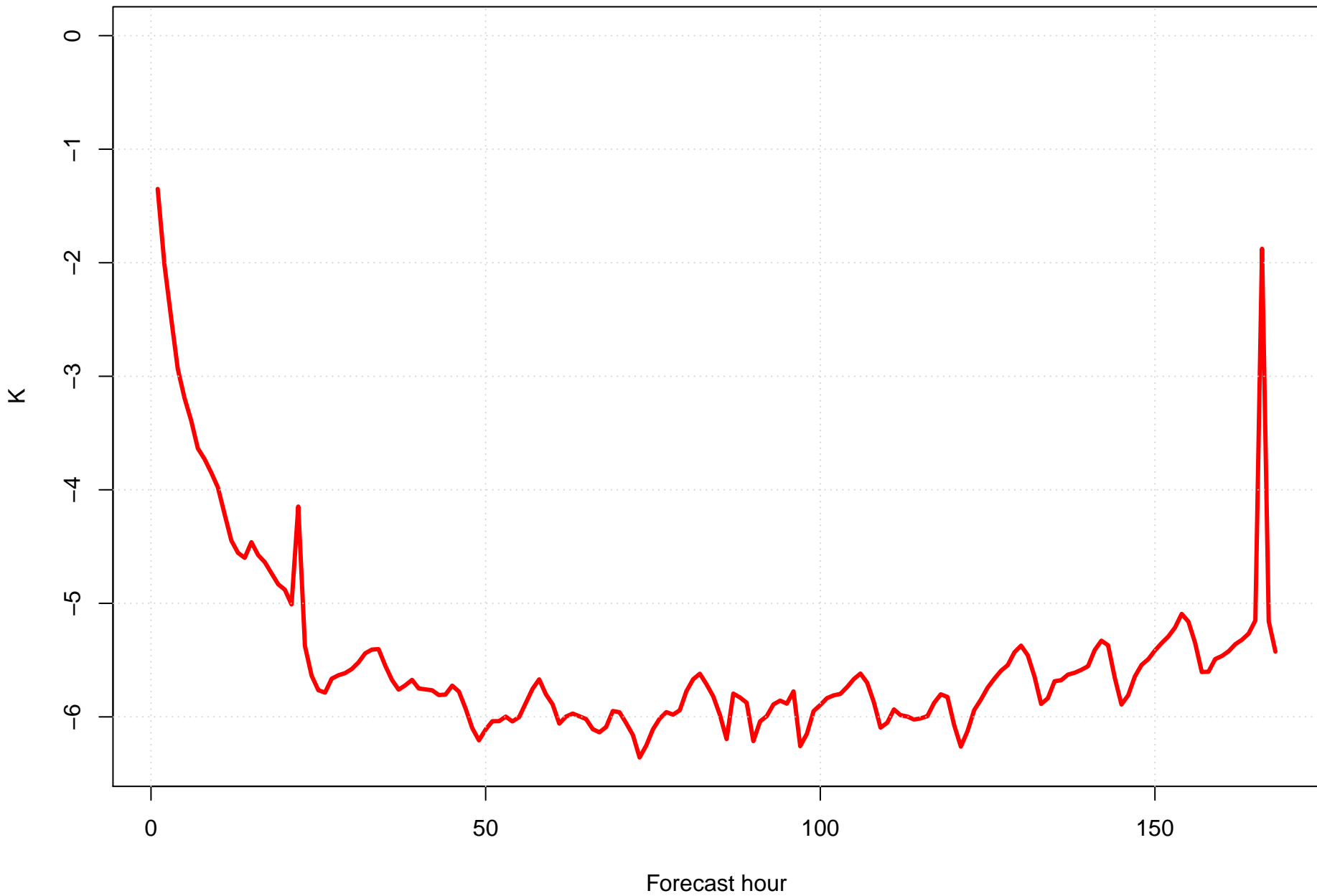Surface dew point RMSE at KDNN all forecast hours and members

Surface temperature bias at KDNN by forecast hour

Surface temperature RMSE at KDNN by forecast hour

Surface dew point bias at KDNN by forecast hour

K

Forecast hour

Surface dew point RMSE at KDNN by forecast hour