The current parallel run.

We currently have a parallel run which includes a revised set of 16 model configurations (there are also some changes to the configuration of the ensemble Kalman filter).

The model configurations have been tuned to produce less biased forecasts. This was deemed essential before extending the forecast range to 15 days.

An new land-surface algorithm is used (ISBA), leading to an improved simulation of the diurnal cycle.

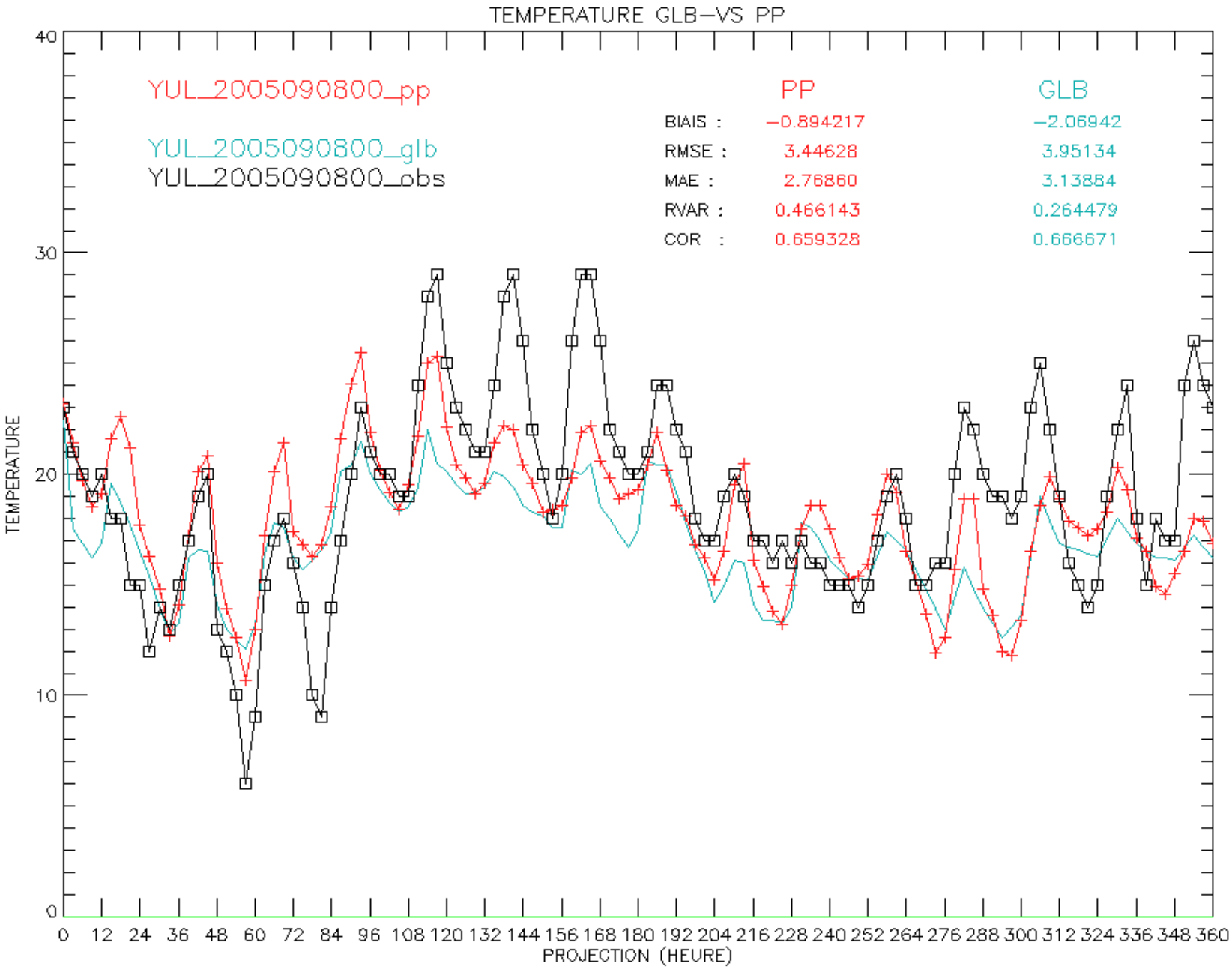
Once the parallel run is accepted for operational use, we will start running the EPS twice daily. The integrations will go to 15 days.

New configuration of models

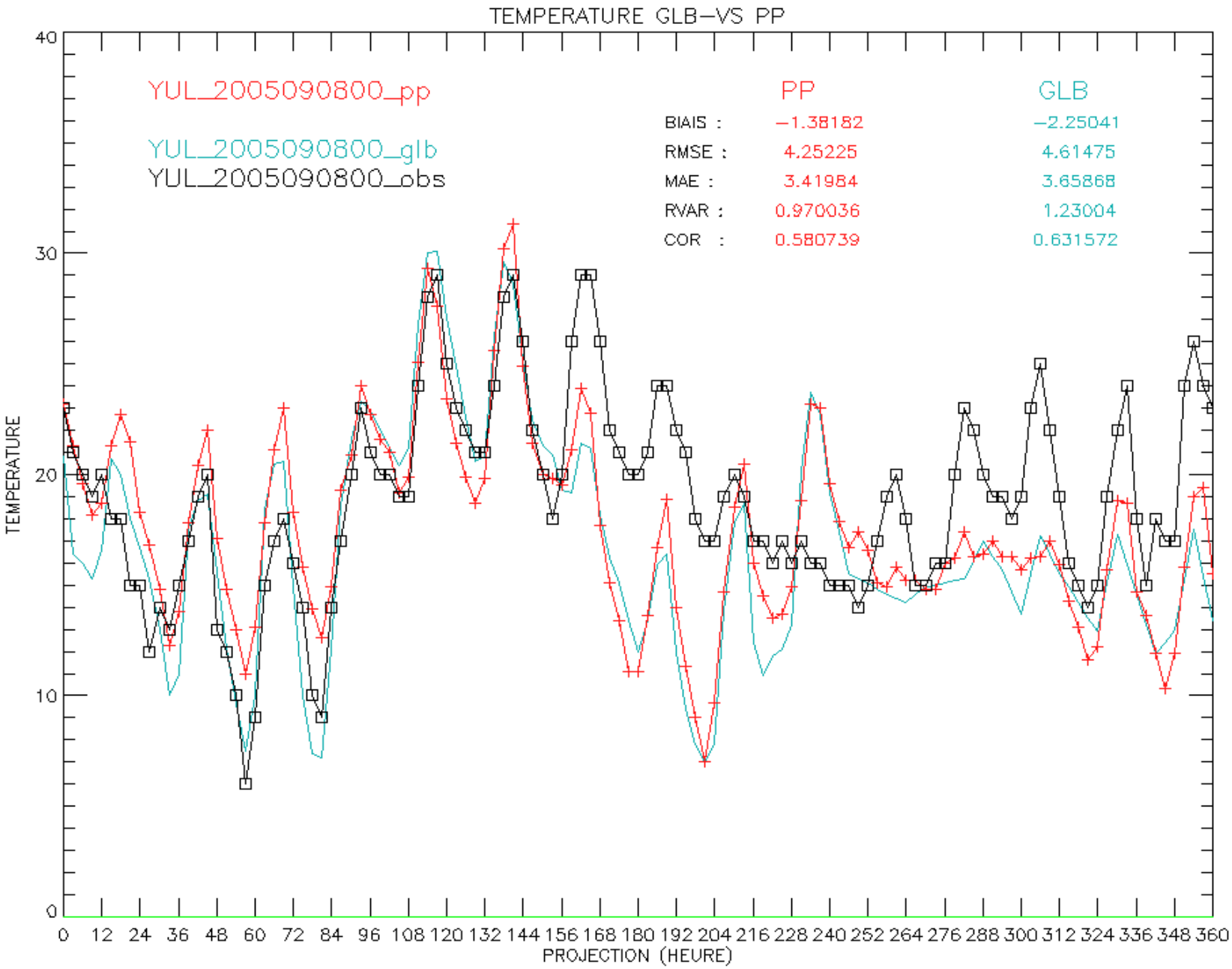
Combination of modules for different model perturbations

SEF (T149)	GWD taufac	Convection deep	Schemes shallow	Surface scheme	Number of levels	Time level
Control	8.0e-6	Kuo	conres	Fcrest	27	3
1	1.2e-5	Kuo	conres	ISBA	27	3
2	1.2e-5	Ras	turwet	Fcrest	27	3
3	4.0e-6	Kuo	conres	Fcrest	27	3
4	4.0e-6	Ras	turwet	ISBA	27	3
5	1.2e-5	Ras	turwet	Fcrest	27	2
6	1.2e-5	Kuo	conres	ISBA	27	2
7	4.0e-6	Ras	turwet	ISBA	27	2
8	4.0e-6	Kuo	conres	Fcrest	27	2
GEM (1.2)	**GWD** taufac	**Convection** deep	**Schemes** shallow	**Surface** scheme	**Number** of levels	**Time level**
9	8.0e-6	Kuosym	ktrsnt	Fcrest	28	2
10	8.0e-6	Ras	conres	ISBA	28	2
11	8.0e-6	Ras	conres	Fcrest	28	2
12	8.0e-6	Kuosym	ktrsnt	ISBA	28	2
13	8.0e-6	Kuostd	ktrsnt	Fcrest	28	2
14	8.0e-6	Kuostd	ktrsnt	ISBA	28	2
15	8.0-e6	Kuosym	conres	ISBA	28	2
16	8.0e-6	Kuo	conres	Fcrest	28	2

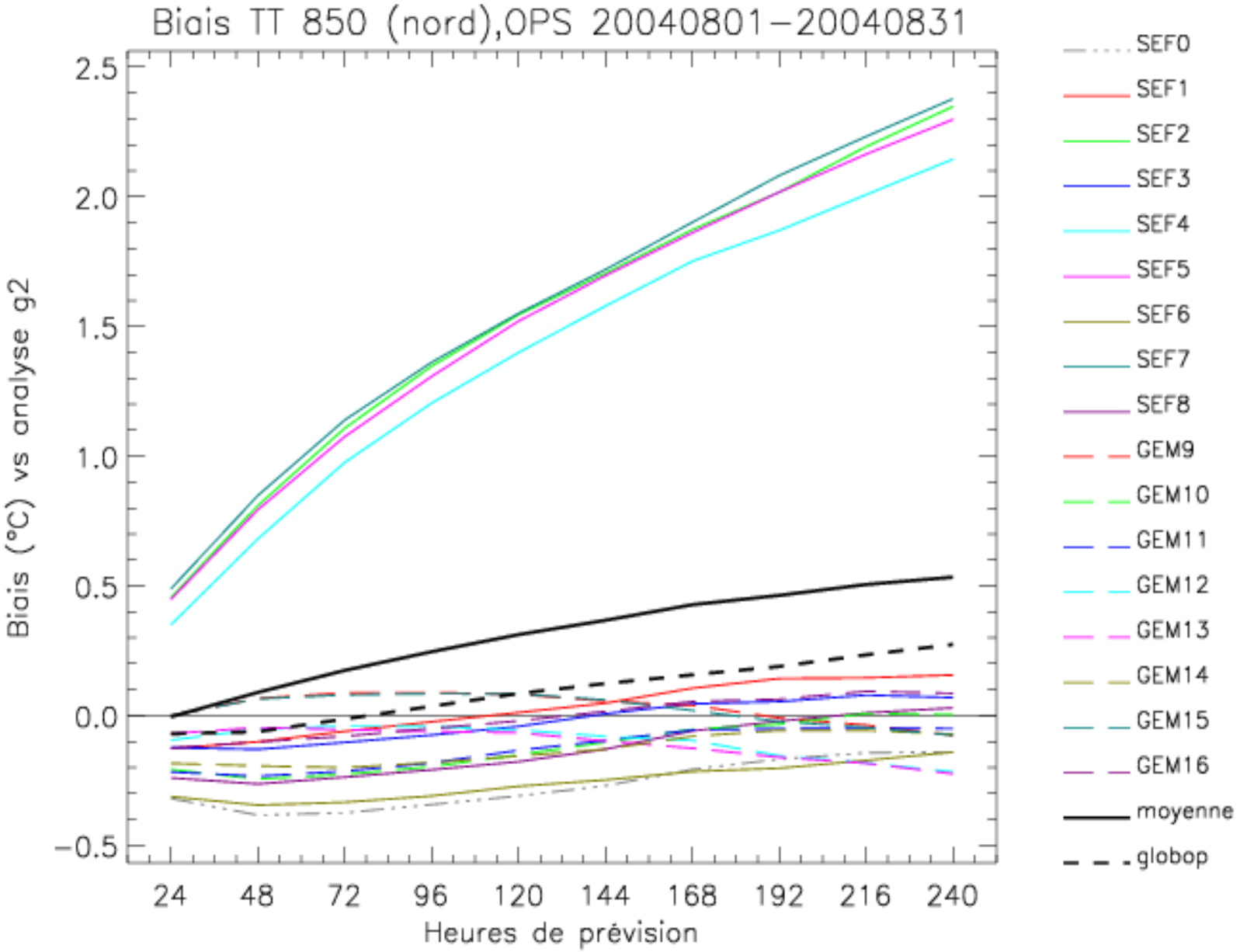
Problem with the diurnal cycle



Correction of the problem with the ISBA scheme



Bias problem in the operational configuration



Reduction of bias for the parallel configuration