Impact of the soil data assimilation of the forecast quality of the upper air fields

Example of time-series in SYNOP stations - Gardermoen

Without OI

With OI

Improve daily cycle

Improved RH2

Reduced wg2

Verification

T2m

RH2m

Ps

T profile

RH profile

Conclusion: The OI_main scheme with the statistically pre-calculated coefficients can be used as a reference in validating performance of the EKF soil data assimilation scheme. To beat OI_main is not a simple task!

References

