



Sensitivity of Lagrangian reconstruction to the temporal resolution of analysed winds

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Strong sensitivity of Lagrangian advective-diffusive reconstructions is found with respect to the temporal resolution of ECMWF winds. This result gives warning that using the standard 6-hourly archive might lead to serious overestimates of vertical transports, due to both undersampling of fluctuations and presence of spurious gravity waves excited by assimilation. Results of reconstruction performed with various combinations of analysis and short-term forecasts are presented, and strategies for off-line transport calculations are discussed.