Hydrology and
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Supplement of

The effect of satellite-derived surface soil moisture and leaf area index land data assimilation on streamflow simulations over France

David Fairbairn et al.

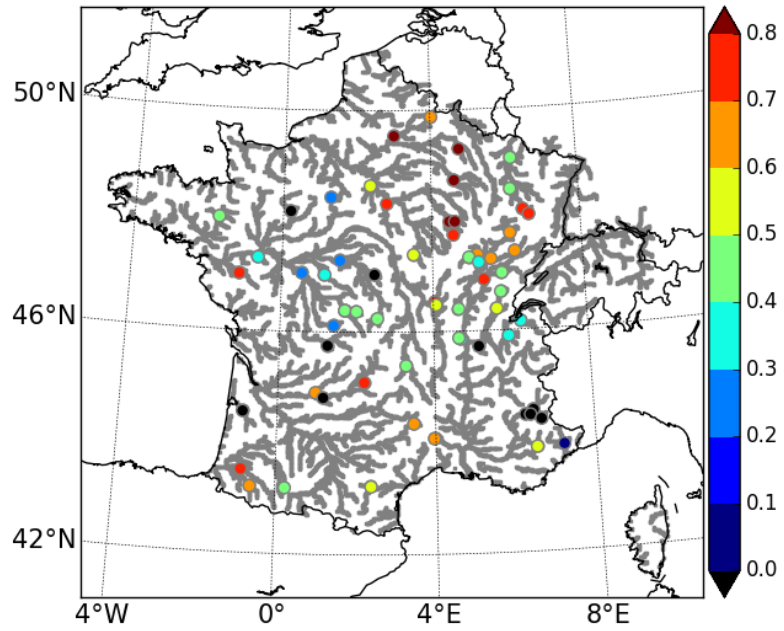*Correspondence to:* Jean-Christophe Calvet (jean-christophe.calvet@meteo.fr)

Figure S1: Map of the SIM discharge Nash efficiency scores for the 67 stations with low-anthropogenic influence over France for the NIT simulation, calculated over the period 2007-2014. The river network is also shown.
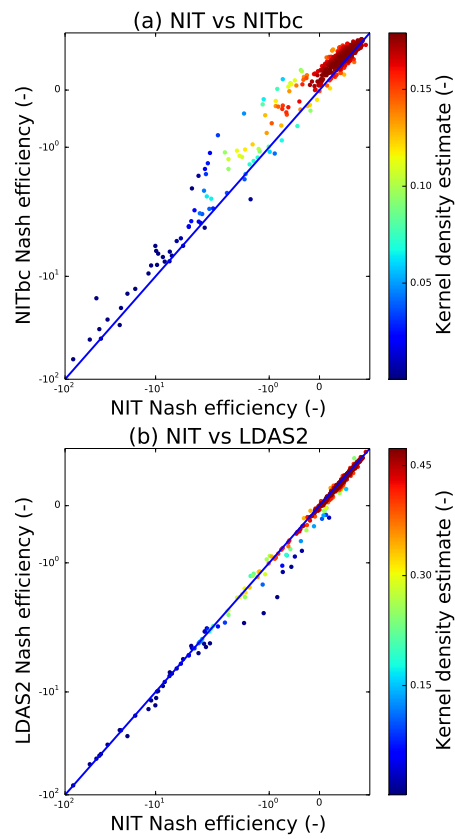
Figure S2: Scatter plots of the SIM discharge Nash efficiency scores for all 546 stations for (a) NIT vs NITbc and (b) for NIT vs LDAS2. The scores are calculated over 2007-2014.
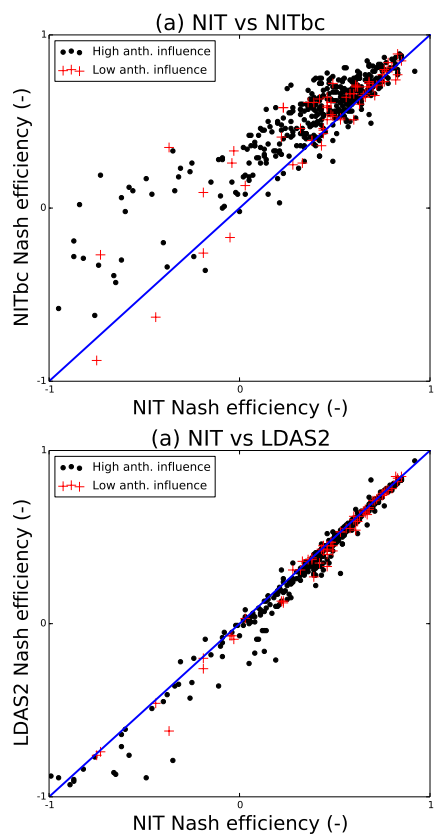
Figure S3: Same as Fig. S2, but the stations are classified with either low (67 stations) or high anthropogenic influence (479 stations). For the sake of clarity, the Nash scores are shown between -1.0 and 1.0.
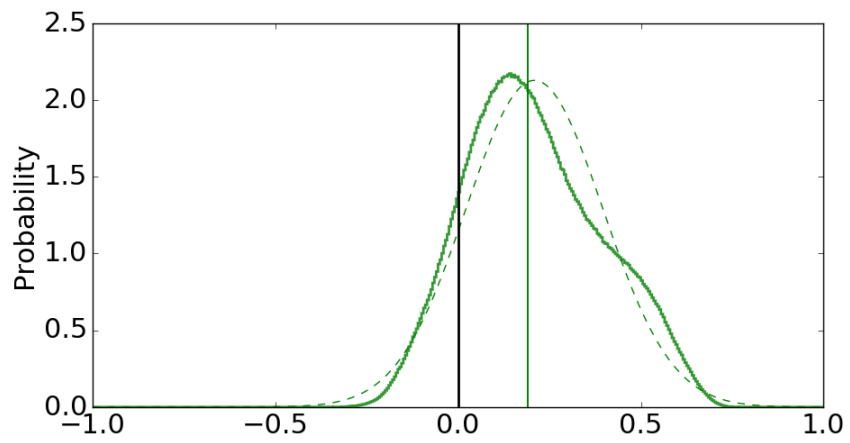
Figure S4: Innovation (thick line) histogram and its Gaussian fit (dashed line) for the SSM product without seasonalCDF matching.
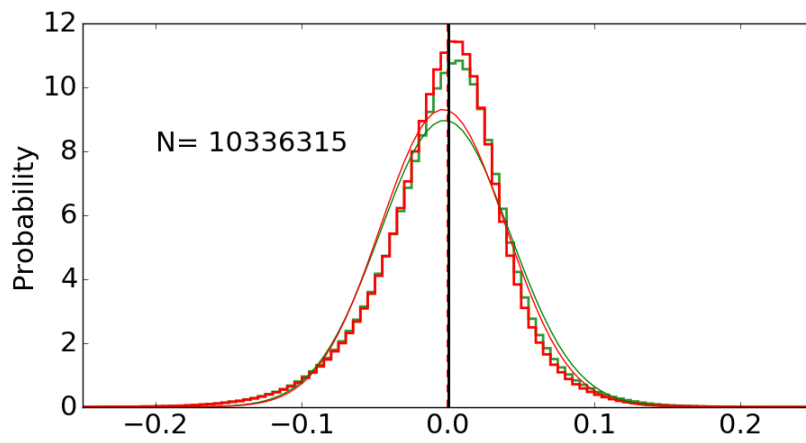
Figure S5: Innovation (green thick line) and residual (red thick line) histograms, as well as their Gaussian fits respectively, for the SSM product with seasonal CDF matching.
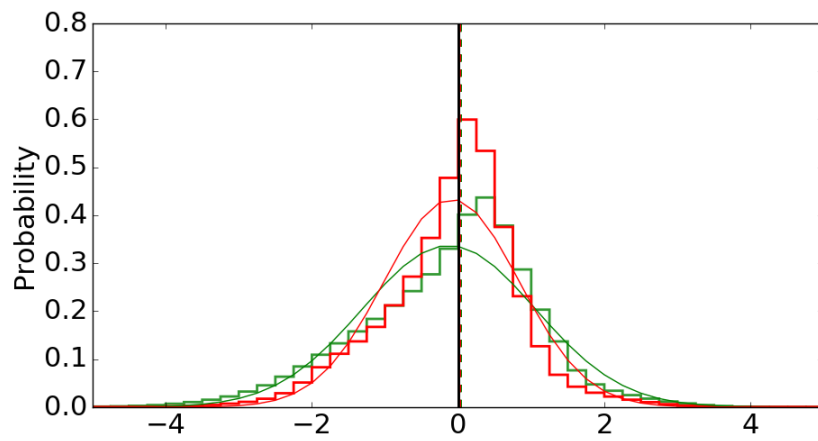
Figure S6: Innovation (green thick line) and residual (red thick line) histograms, as well as their Gaussian fits respectively for LAI product.
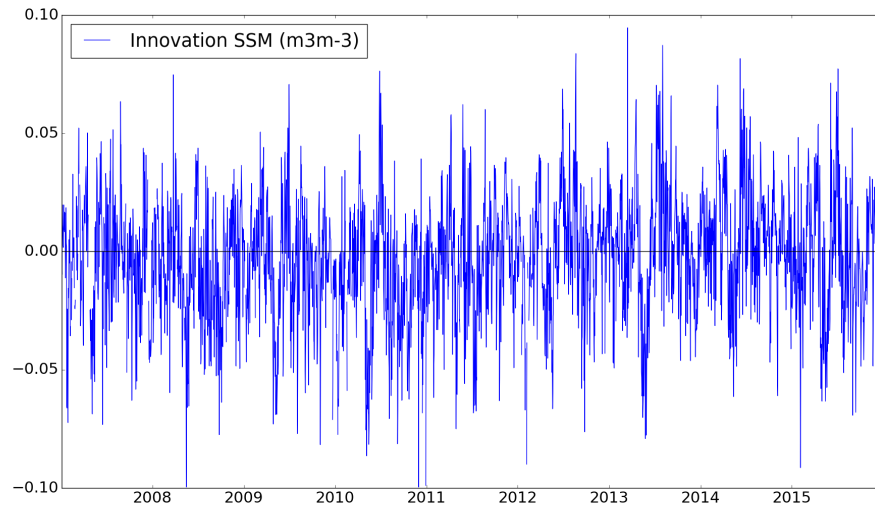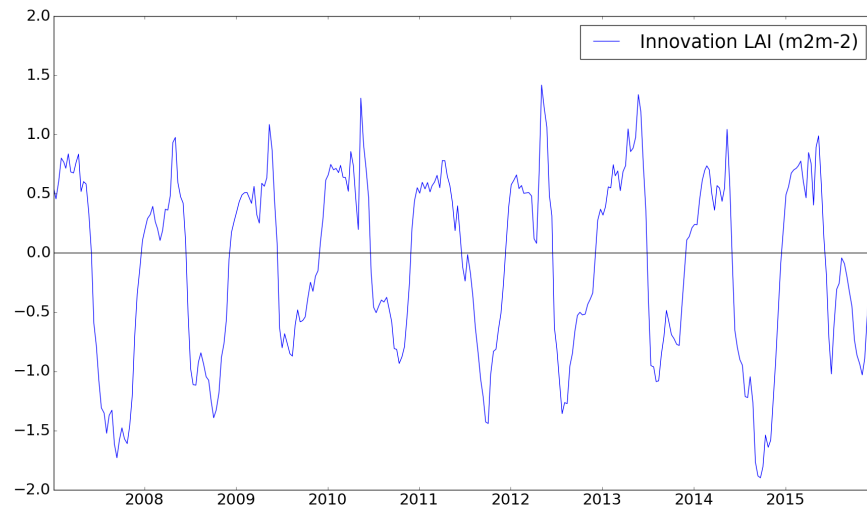
Figure S7: Temporal evolution of SSM innovations.

Figure S8: Temporal evolution of LAI innovations.

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