Supplementary Materials: Evaluation of the Uncertainty in Satellite-based Crop State Variable Retrievals Due to Site and Growth Stage Specific Factors and Their Potential in Coupling with Crop Growth Models *Remote Sensing* 2019, *8*, remote sensing-567576.

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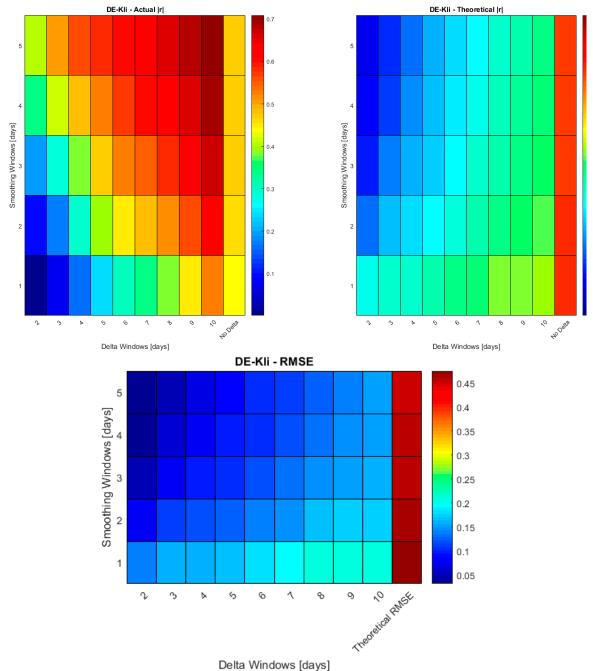


Figure S1. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at DE-Kli at different levels of smoothing and values of Δ . N = 256.



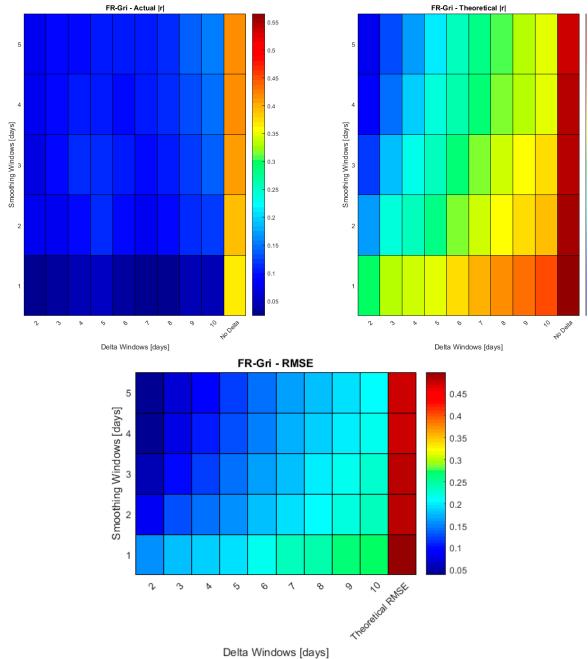


Figure S2. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at FR-Gri at different levels of smoothing and values of Δ . N = 258.



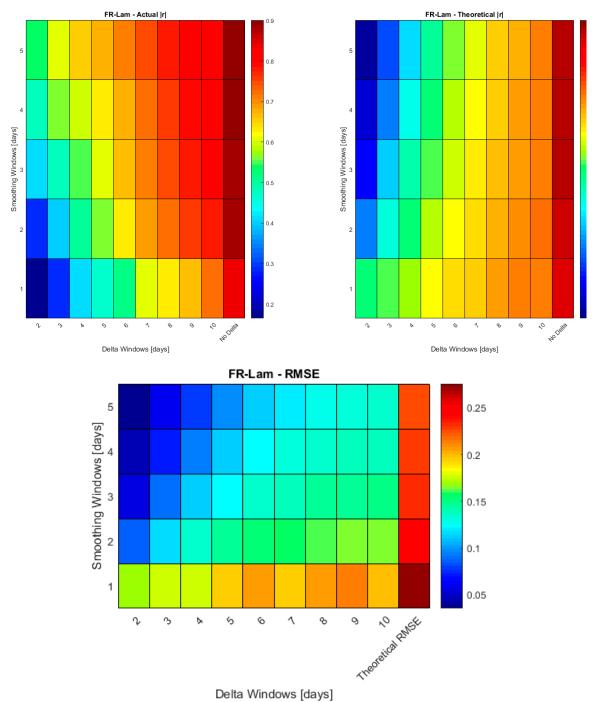


Figure S3. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at FR-Lam at different levels of smoothing and values of Δ . N = 461.

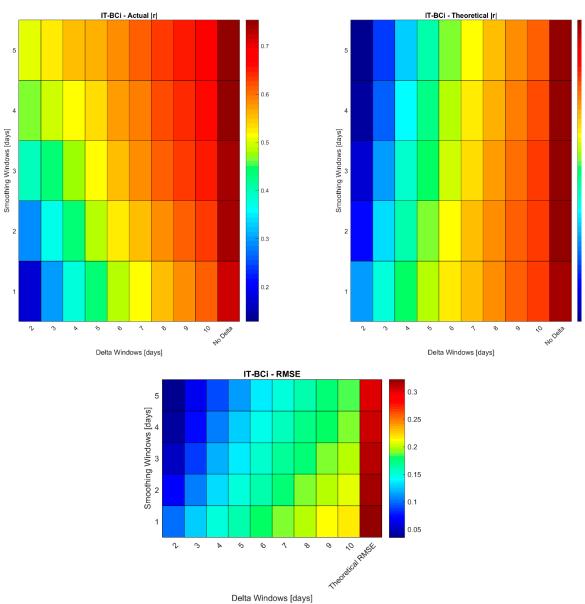
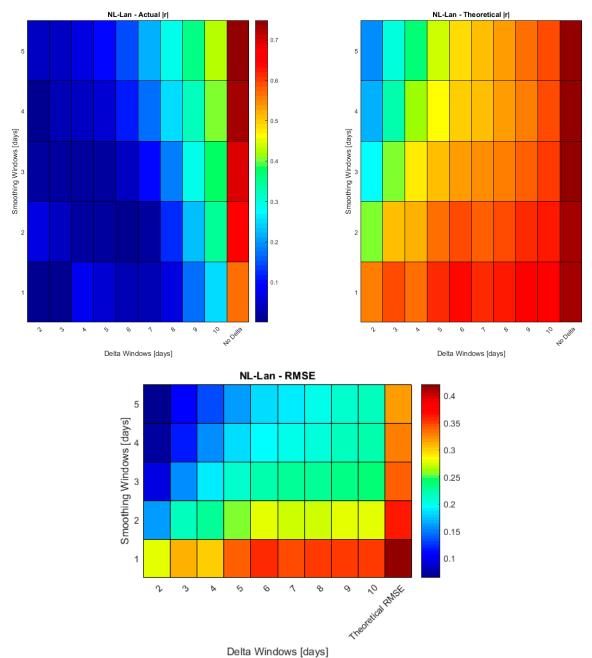


Figure S4. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at IT-BCi at different levels of smoothing and values of Δ . N = 536.

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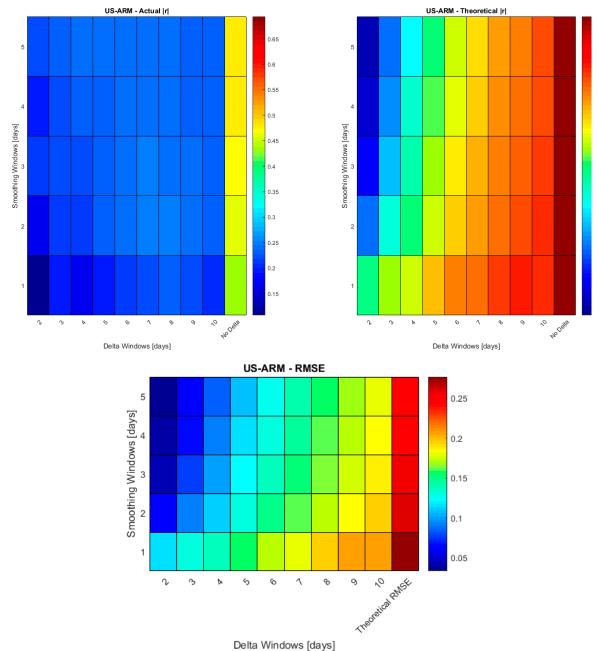
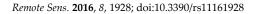


Figure S6. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at US-ARM at different levels of smoothing and values of Δ . N = 135.





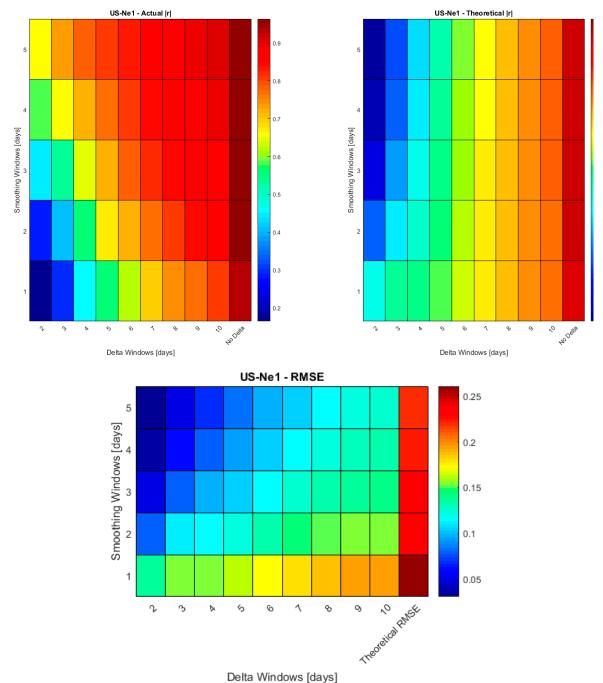


Figure S7. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at US-Ne1 at different levels of smoothing and values of Δ . N = 1427.

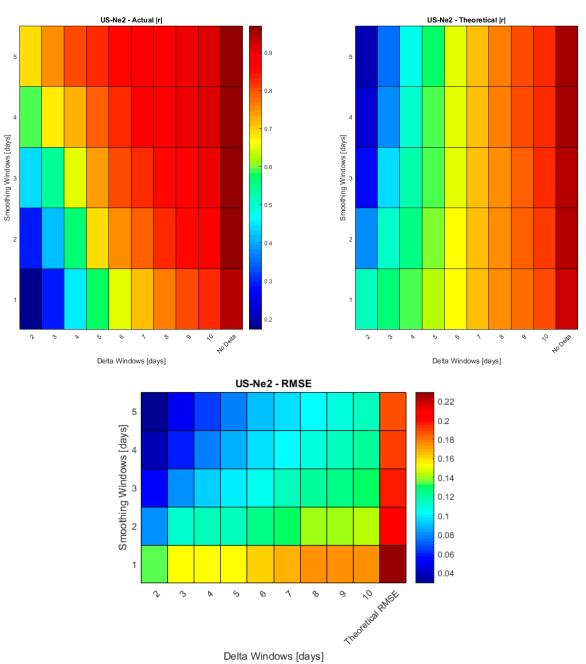
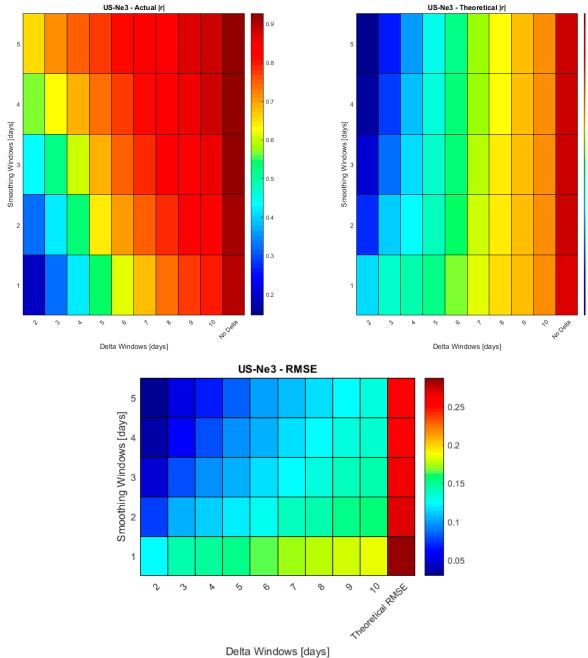


Figure S8. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at US-Ne2 at different levels of smoothing and values of Δ . N = 799.





Delta Windows [days] **Figure S9.** Actual versus theoretical |r| and RMSE performance of the ΔLUE_{Canopy} retrievals at US-Ne3 at different levels of smoothing and values of Δ . N = 786.



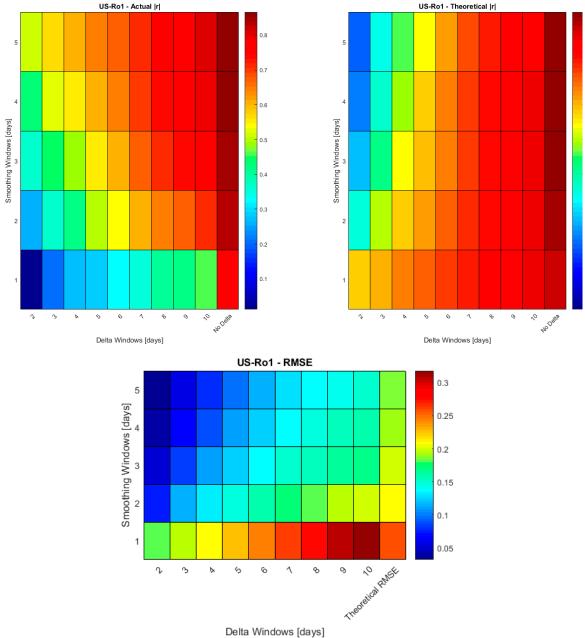


Figure S10. Actual versus theoretical $|\mathbf{r}|$ and RMSE performance of the ΔLUE_{Canopy} retrievals at US-Ro1 at different levels of smoothing and values of Δ . N = 263.



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