1. Spatio-temporal interpolations of the daily N_2O fluxes (mgN m^{-2} d^{-1}) obtained using the separable (**Figure S1**), product-sum (**Figure S2**), metric (**Figure S3**) and sum-metric (**Figure S4**) models to fit semivariograms in spatio-temporal regression-kriging, respectively.

2. Spatial-temporal distributions of kriging standard deviations of the predicted N_2O fluxes obtained using the separable (**Figure S5**), product-sum**(Figure S6**), metric (**Figure S7**) and sum-metric (**Figure S8**) models to fit semivariograms in spatio-temporal regression-kriging, respectively.

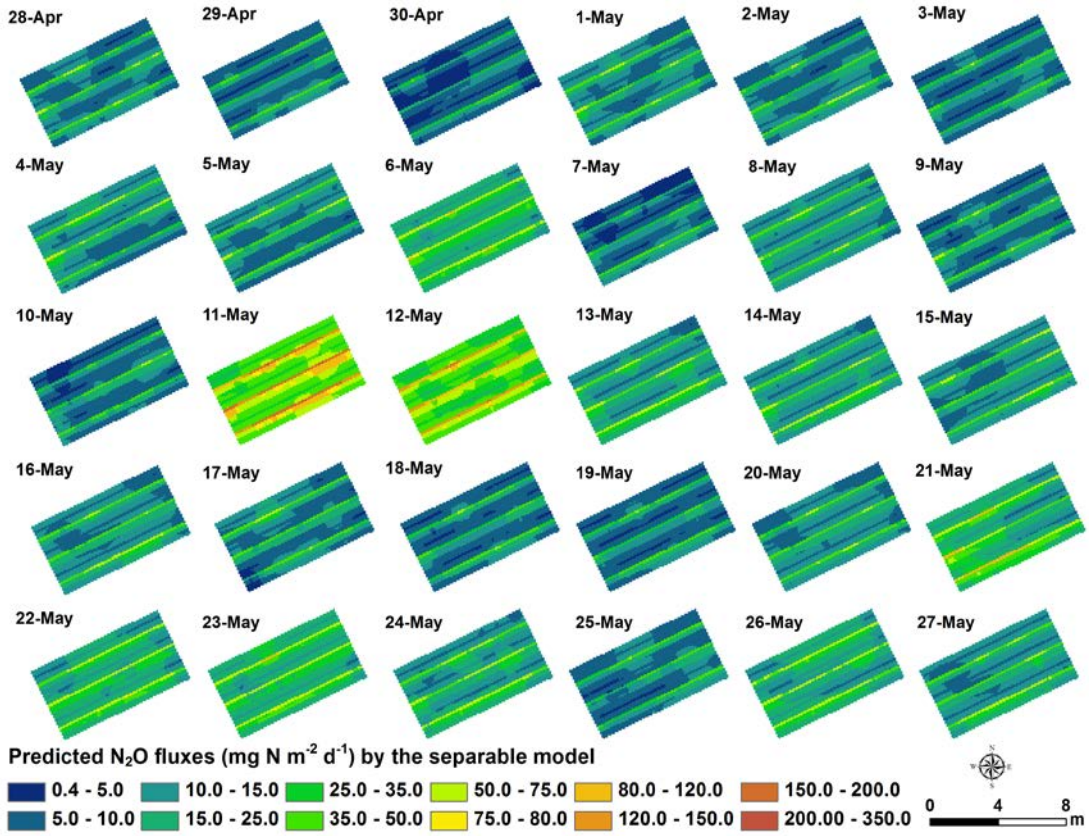


Figure S1:Spatio-temporal interpolation of the daily N_2O fluxes (mgN m^{-2} d^{-1}) using the separable model to fit semivariogram in spatio-temporal regression-kriging.

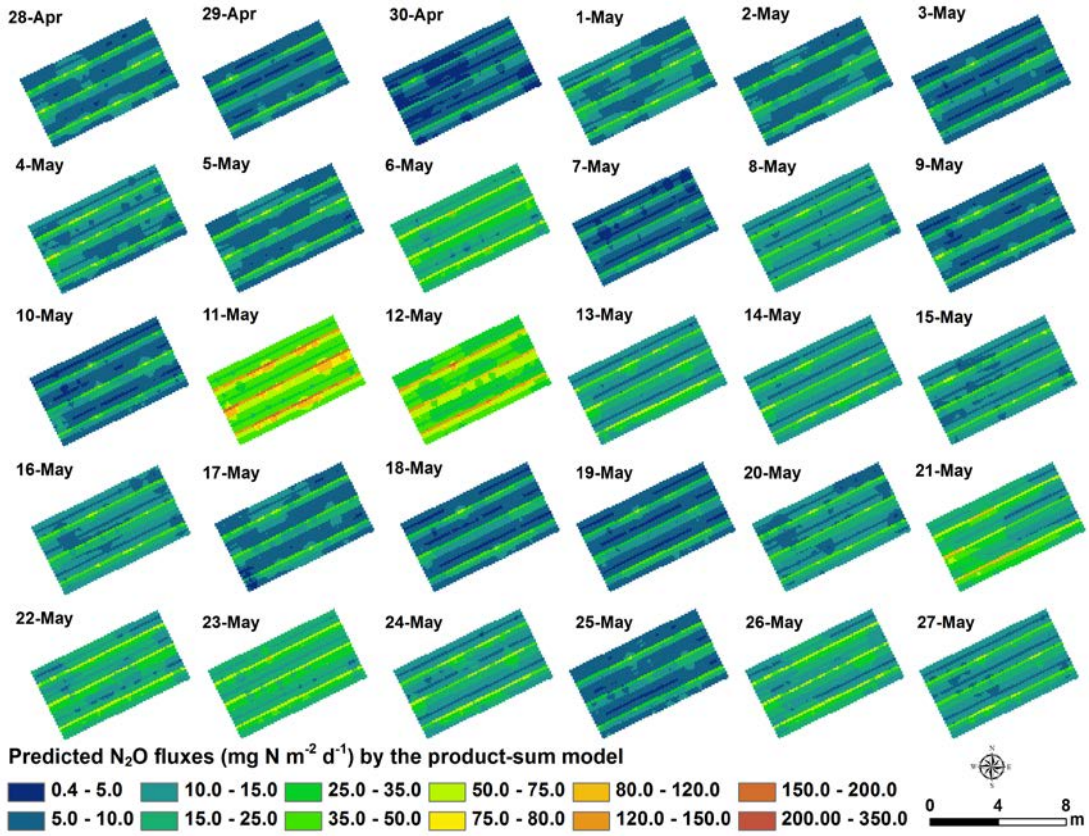


Figure S2:Spatio-temporal interpolation of the daily N_2O fluxes (mgN m^{-2} d^{-1}) using the product-sum model to fit semivariogram in spatio-temporal regression-kriging.

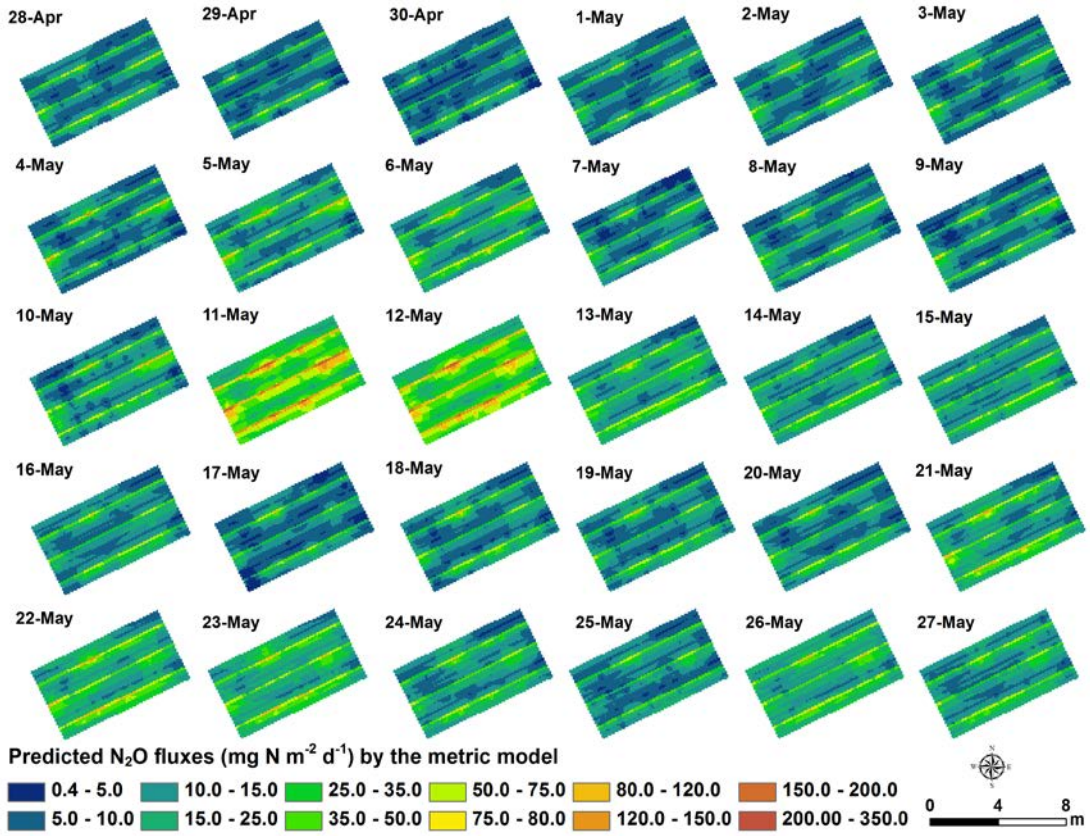
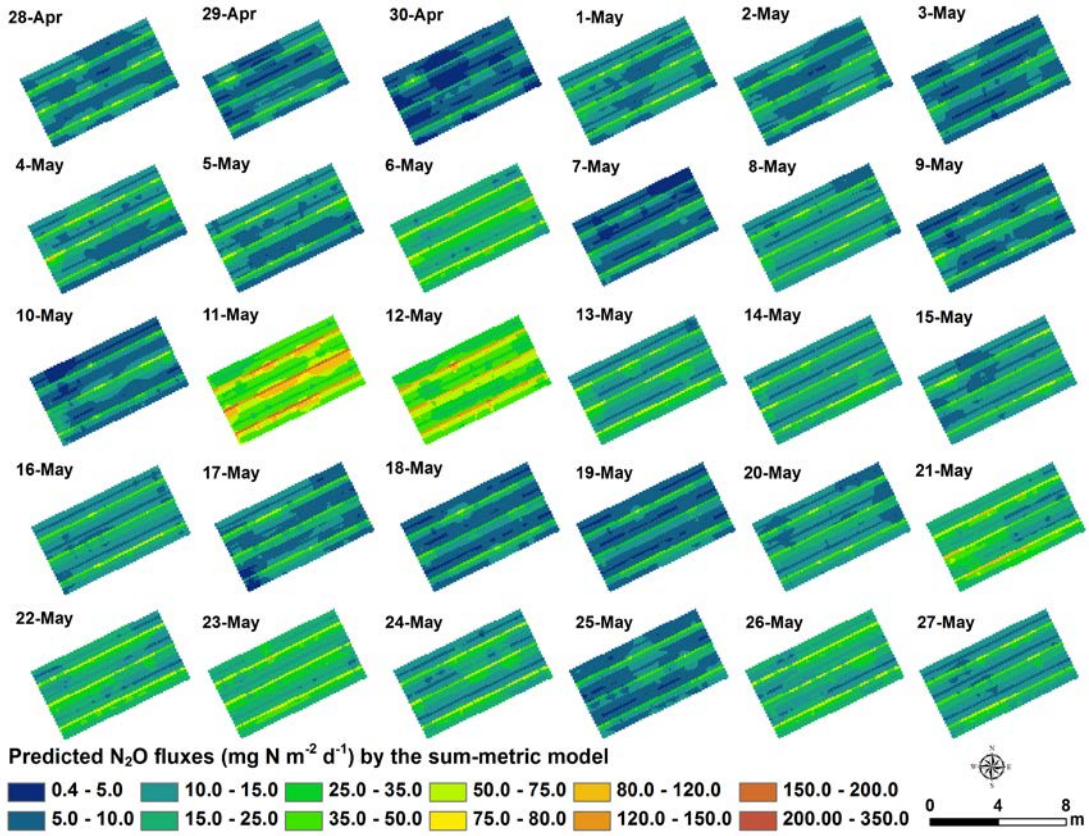


Figure S3:Spatio-temporal interpolation of the daily N_2O fluxes (mgN m^{-2} d^{-1}) using themetric model to fit semivariogram in spatio-temporal regression-kriging.



FigureS4:Spatio-temporal interpolation of the daily N_2O fluxes (mgN m^{-2} d^{-1}) using the sum-metric model to fit semivariogram in spatio-temporal regression-kriging.

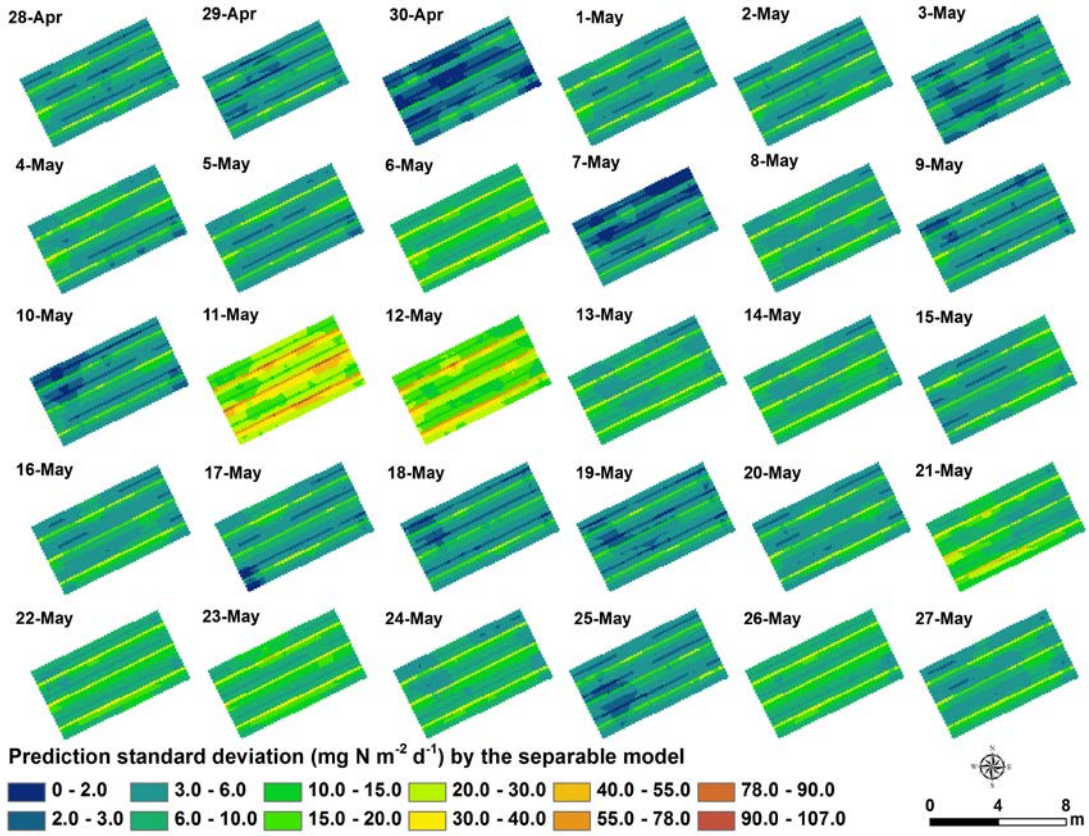


Figure S5: Spatial-temporal distribution of kriging standard deviations of the predicted N_2O fluxes using the separable to fit semivariogram in spatio-temporal regression-kriging.

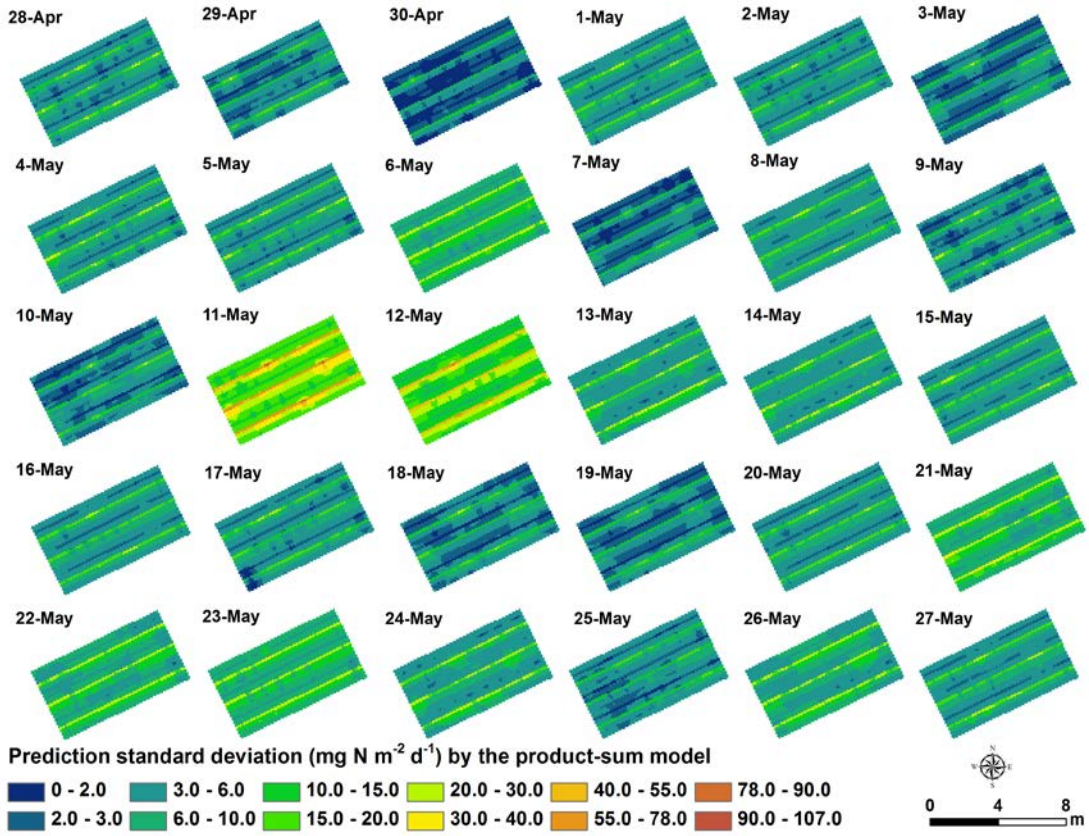


Figure S6: Spatial-temporal distribution of kriging standard deviations of the predicted N_2O fluxes using the product-sum to fit semivariogram in spatio-temporal regression-kriging.

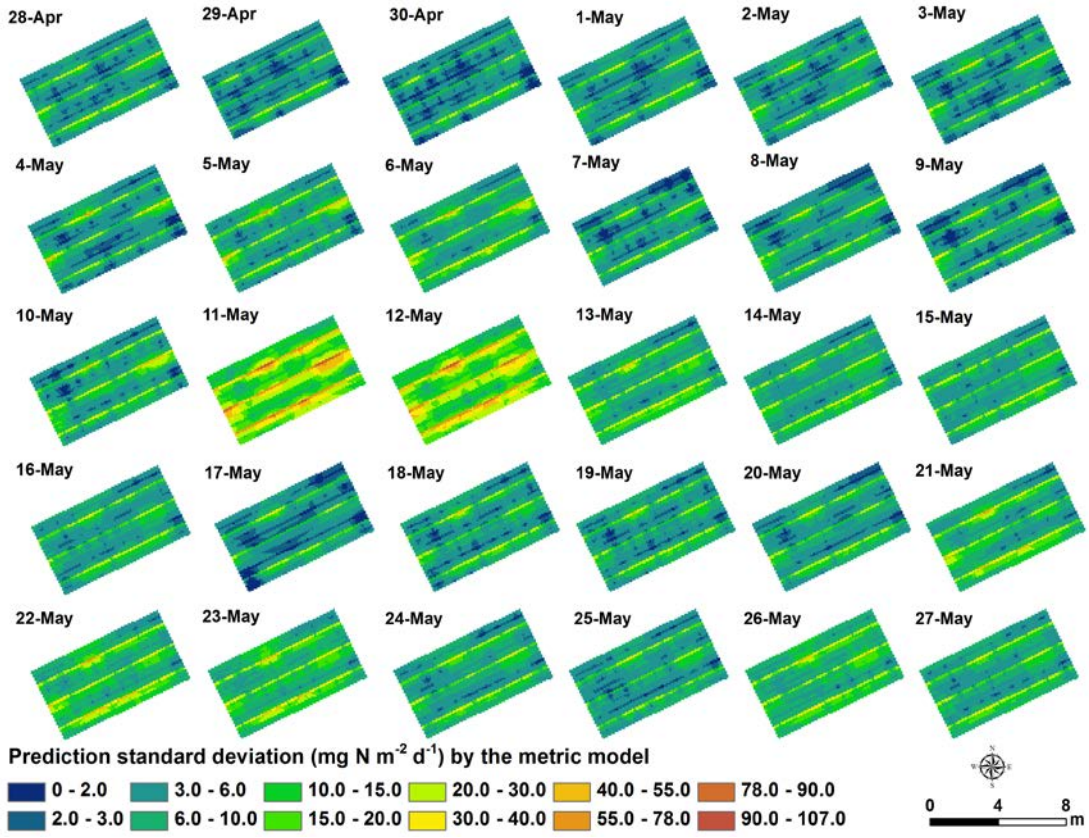


Figure S7: Spatial-temporal distribution of kriging standard deviations of the predicted N_2O fluxes using the metric to fit semivariogram in spatio-temporal regression-kriging.

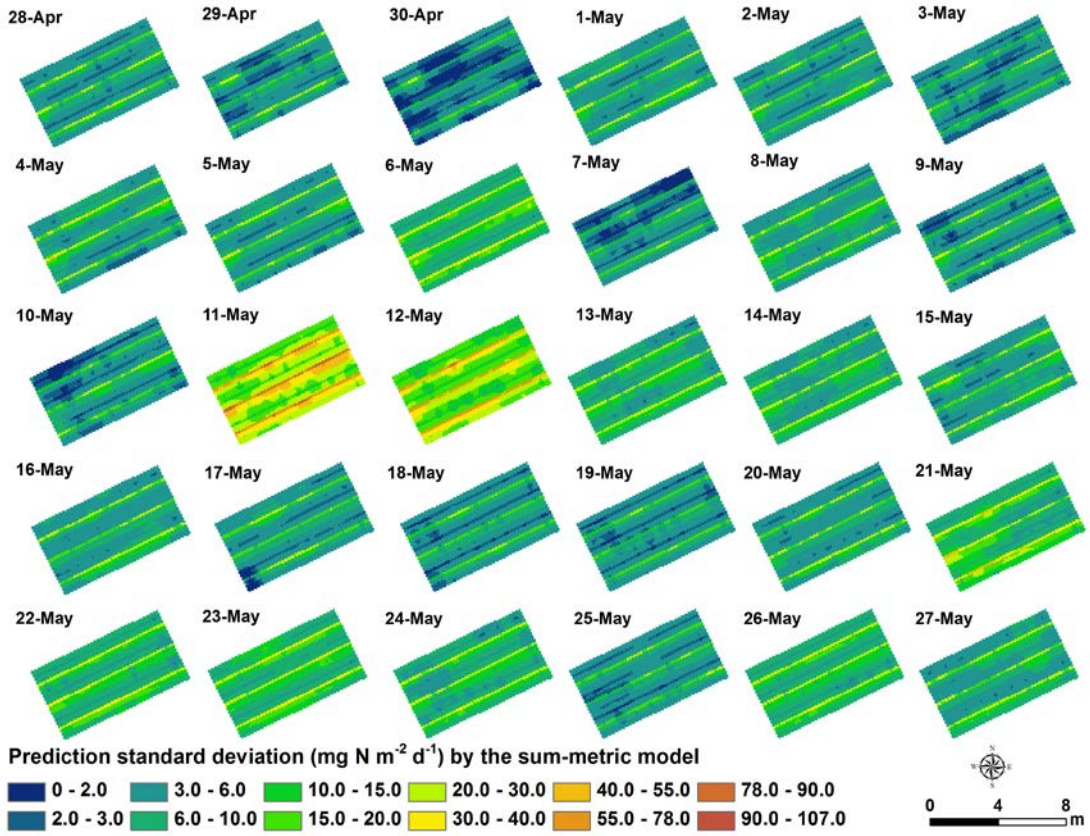


Figure S8: Spatial-temporal distribution of kriging standard deviations of the predicted N_2O fluxes using the sum-metric to fit semivariogram in spatio-temporal regression-kriging.