L24-25: The results showed improved GHG flux prediction performance when combining field-measured soil parameters with remotely-sensed data.
Comment: "improved" compared with what?
Response: Thank you for the comment. We have made the changes to indicate that performance was better than models trained with isolated field-measured soil parameters and remotely sensed data only. "The RF models combining field-measured soil parameters and remotely-sensed data outperformed those with field-measured predictors or remotely-sensed data alone."

L28-30: Similar seasonal patterns of higher soil/ecosystem respiration (SR/ER-CO_2) and nitrous oxide (N_2O) fluxes in summer and higher methane (CH_4) uptake in autumn were observed in both the measured and predicted landscape fluxes.
Comment: Are you really measuring ecosystem respiration with a "fast-box" technique? Aren't you missing above-ground respiration? Particularly for the forests.
Response: Thanks for raising this issue. We forgot to define the SR/ER-CO_2 fluxes in this study. The forest CO_2 fluxes were measured only on the forest floor with little or no above-ground biomass; thus, they were termed soil respiration (SR). The CO_2 fluxes measured on grassland and arable land in autumn were also categorized as soil respiration (SR) since the grass was mowed and the arable fields were harvested and plowed. However, the arable and grassland measurements in summer were termed ecosystem respiration (ER) since we incorporated the above-ground biomass using chamber extensions. We have added these details in the methods section.
"The CO_2 fluxes quantified using the opaque chambers represented either soil respiration (SR) (root and microbial respiration) or ecosystem respiration (ER) (root, microbial, and plant respiration). The CO_2 measurements in autumn across the entire landscape were SR since above-ground biomass was not included in the chambers during measurements. In contrast, the summer CO_2 measurements on arable and grasslands were ER since the above-ground vegetation was incorporated using chamber extensions while the forest measurements remained as SR due to minimal above-ground vegetation on the forest floor."

L59-62: Nevertheless, the practicability of increasing the number of chamber measurement locations to quantify landscape fluxes is constrained by extensive human and technical resource requirements, hence there is a need for alternative ways of estimating GHG landscape fluxes.
Response: Thanks for the grammar correction of practicability to practicality. We have made the changes.

L69-71: The RF algorithm has been widely applied to gap-fill and upscale soil GHG fluxes in temperate ecosystems from point measurements to larger scales, with relatively better prediction accuracies (e.g., Philibert et al., 2013; Räsänen et al., 2021; Vainio et al., 2021).
Comment: Better compared with what?
Response: Thanks for the comment. We have adjusted the statement since the comparison of the ML algorithms was already made in the previous statement (L67-69).
"The RF algorithm has been widely applied to gap-fill and upscale soil GHG fluxes in temperate ecosystems from point measurements to larger scales (e.g., Philibert et al., 2013; Räsänen et al., 2021; Vainio et al., 2021)."

L88-95: In this study, we aimed to determine the potential of applying the RF algorithm to predict the spatial and seasonal variability of soil CO_2, CH_4, and N_2O fluxes using a high number of stratified sampling locations (n = 268) spread across a relatively large (~5.8 km^2) landscape with heterogeneous land uses (forest, grassland, and arable land). Specifically, we aimed to: (a) evaluate the effectiveness of high-resolution RS data and relatively low-resolution data on soil physico-chemical parameters in predicting soil GHG fluxes across different land uses; (b) predict high-resolution soil GHG fluxes at a landscape scale and detect GHG hot spots and cold spots; and (c) compare landscape GHG fluxes upscaled from RF-predicted high-resolution maps with aggregated landscape flux estimates from averaged (point) fluxes multiplied by landscape area.

Response: Thanks for the editorial changes.

"In this study, we determined the potential of applying the RF algorithm to predict the spatial and seasonal variability of soil CO_2, CH_4, and N_2O fluxes using a high number of stratified sampling locations (n = 268) spread across a relatively large (~5.8 km^2) landscape with heterogeneous land uses (forest, grassland, and arable land). Specifically, we: (a) evaluated the effectiveness of high-resolution RS data and relatively low-resolution data on soil physico-chemical parameters in predicting soil GHG fluxes across different land uses; (b) predicted high-resolution soil GHG fluxes at a landscape scale and detected GHG hot spots and cold spots; and (c) compared landscape GHG fluxes upscaled from RF-predicted high-resolution maps with aggregated landscape flux estimates from averaged (point) fluxes multiplied by landscape area."

L88-97: We hypothesized improved prediction accuracies using a combination of RS datasets that act as proxies of key drivers of soil GHG fluxes (e.g., vegetation cover and water content) and the site-measured soil parameters representing the actual field conditions.

Comment: improved compared with what?

Response: Thanks for the comment. We compared the prediction accuracies of models trained with soil parameters only and remotely-sensed data only to those with combined predictors. We have revised the statement to make it clear.

"We hypothesized that combining RS data that act as proxies of key drivers of soil GHG fluxes (e.g., vegetation cover and water content) and site-measured soil parameters representing the actual field conditions would yield improved GHG flux prediction accuracies in our models than using either RS data or site-measured soil parameters in isolation."

L97-101: We also hypothesized that the high-resolution upscaled fluxes from the RF approach, which better captures hot and cold spot regions across the landscape, would avoid possible under- or overestimations of landscape fluxes derived from land use specific area-weighted averages calculated from few point chamber measurement locations.

This seems a bit out of place here. You haven't really mentioned why the RF better captures hot and cold spots on the landscape, so it seems odd to put it here in your hypotheses.

Response: Thank you for your observation. We have removed the RF to make the hypothesis more general.

"We also hypothesized that the high-resolution upscaled fluxes, which represent most GHG hot and cold spot regions across the landscape, would avoid possible under- or overestimations of landscape fluxes derived from land use specific area-weighted averages calculated from few point chamber measurement locations."

L106-107: Land uses within the landscape are mainly forests (57%) and arable lands (34%). Grasslands cover about 8% and are primarily located in riparian zones (Figure 1).
Comment: What type of forests? Beech? coniferous? a bit more precision here would be helpful.
Response: Thanks, this was expounded on the other publication. We have added the details now.
"The forest is mainly covered with mixed (44%) trees, 32% deciduous, and 23% coniferous trees (Figure 1a). The common species in the forest include European beech (*Fagus sylvatica*), spruce (*Picea abies*), European oak (*Quercus robur),* and Scots Pine (*Pinus sylvestris*) (Wangari et al., 2022)."

L107-109: The dominant soil types are cambisol (69%, forest and arable), stagnosol (23%, mainly arable), and gleysol (5%) which are found along grassland riparian zones (Wangari et al., 2022).
Comment: please indicate the classification system. I assume that this uses the WRB classification system?
Response: Thank you for your comment. The system is indeed the WRB classification. We have indicated this in the manuscript.
"The dominant soil types (World Reference Base classification) are cambisol (69%, forest and arable), stagnosol (23%, mainly arable), and gleysol (5%), which are found along grassland riparian zones (Wangari et al., 2022)."

L185-186: The optimal trained model was automatically selected using the mean absolute error (MAE) metric with the least value.
Response: Thanks for the grammar correction: least to lowest. We have corrected in the text.

L235-237: The performance of the final models selected for the prediction of landscape fluxes varied across input datasets (RS, SP, and CD), GHG fluxes (SR/ER_CO_2, CH_4, and N_2O), and land use (forest, grassland, and arable land) (Table 2).
Comment: is it really "ER" if you aren't measuring the respiration from the above-ground biomass (at least not in the forested area).
Response: Thanks again for the comment. As mentioned earlier, we have added the definition of the SR/ER CO_2 fluxes measured in this study.
"The CO_2 fluxes quantified using the opaque chambers represented either soil respiration (SR) (root and microbial respiration) or ecosystem respiration (ER) (root, microbial, and plant respiration). The CO_2 measurements in autumn across the entire landscape were SR since above-ground biomass was not included in the chambers during measurements. In contrast, the summer CO_2 measurements on arable and grasslands were ER since the above-ground vegetation was incorporated using chamber extensions while the forest measurements remained as SR due to minimal above-ground vegetation on the forest floor."

L287-288: The remaining landscape area (24%) had higher N_2O fluxes in autumn than in summer, particularly in forested areas.
Comment: I am not sure what you are trying to say here. Possibly that the majority of the landscape area with higher autumn N_2O fluxes were forests? Please clarify.
Response: We have modified the statement for clarity.
"Around 24% of the landscape, primarily on the forested areas, had higher N_2O fluxes in autumn than in summer."

L401-402: To illustrate, parts of the landscape (24% and 37%) showed even opposite trends of higher N_2O fluxes and lower CH_4 uptake rates in autumn, and these areas were predominantly in the forested ecosystem.
Comment: Were these the same types of forests as the rest? Were there different tree species?
Response: Thank you for your comment. These findings were predominately in the mixed forest area. We have added this information to the text.
"To illustrate, parts of the landscape (24% and 37%) showed even opposite trends of higher N_2O fluxes and lower CH_4 uptake rates in autumn, and these areas were predominantly in the mixed forest ecosystem."

L403-405: For example, decaying fallen leaves during autumn can favor denitrification in forest soils but not in grassland or arable ecosystems.
Comment: Can you explain why? and a citation here would be very useful.
Response: Thank you for your comment. We have added an explanation of the mechanism based on the increase of carbon and nitrogen availability through the mineralization of the leaves when decaying.
"For example, decaying fallen leaves during autumn can favor denitrification in forest soils by increasing carbon and mineral N availability (e.g., Groffman & Tiedje, 1989), which may not be true for grassland or arable ecosystems due to harvesting and mowing."

L405-406: The higher CH_4 uptake rates in summer could be due to the increased exposure of some forest soils to the sun leading to drier and warmer soils that promote CH_4 oxidation (Steinkamp et al., 2000).
Wouldn't there be less sun in the summer? Weren't the forests predominantly deciduous cover?
Response: Thank you for your critical comment. The landscape was mainly dominated by mixed forests. We were motivated to include the sun because aspect was a key driver of CH_4 trends within the landscape. We have, however edited the text to link our findings to warmer temperatures rather than sun exposure.
"The higher CH_4 uptake rates in summer could be due to warmer summer temperatures leading to drier, more aerated forest soils that promote CH_4 oxidation (Steinkamp et al., 2000)."

L418-419: Increased soil moisture values, a key characteristic of the riparian regions, has also been reported to drive elevated soil GHG fluxes (Kaiser et al., 2018; Vainio et al., 2021).
I'm pretty sure that soil C content tends to be quite high in riparian areas as well. Which could also lead to higher SR_CO2.
Response: Thank you for your suggestion. We have added it in the discussion.
"Increased soil moisture values and higher soil C contents, key characteristics of the riparian regions, have also been reported to drive elevated soil GHG fluxes (Kaiser et al., 2018; Vainio et al., 2021)."

L424-425: This finding emphasizes the importance of capturing the N_2O hot spots and improving the spatial coverage of N_2O measurements, as it can introduce enormous uncertainty in landscape fluxes.
What do you mean by "capturing"? Do you mean both measuring emissions from these and determining how much of these are spread across the landscape? This may require a bit of clarification.
Response: Thank you for your comment and suggestion. We have rephrased the statement and made it clear.
"This finding emphasizes the importance of increasing the spatial coverage of N_2O measurements to include more hot spot areas, as they can introduce enormous uncertainty in landscape fluxes if not quantified."

L429-430: Identifying common patches with elevated emissions of the three GHGs can inform priority areas for implementing localized mitigation measures within a landscape.
Response: Thanks for the grammar correction.

L433-435: The mitigation strategies may include adjusting the fertilizer application rates, especially in specific areas that hold more water, probably due to topographical or soil conditions (e.g., Hassan et al., 2022).
Maybe mention above that these "common" hot spots were in arable soils with high water? Otherwise this comment seems a bit out of place
Response: Thank you for your comment. We have rephrased the text to give context to the discussion point.
"Because most of the common GHG hotspots in the arable soils were also in areas with high water content, mitigation strategies that aim at adjusting the fertilizer application rates at specific areas that hold more water may successfully lower the emissions (e.g., Hassan et al., 2022)."

L439-440: The expansion of forested areas will also likely have a much higher mitigation impact via CO_2 sequestration.
Much higher than what? Perhaps just use "high".
Response: Thank you for your comment. We have rephrased the statement as advised.
"The expansion of forested areas will also likely have a high mitigation impact via CO_2 sequestration".

L442-444: We also found significant shifts in the geo-locations of hotspot regions between summer and autumn, suggesting that seasonal changes in land management and soil conditions may also lead to a temporal expansion or contraction of the hot spot regions.
Is there really a lot of "seasonal changes in land management"?
Response: Thank you for your questions. Yes, there is. For example, synthetic fertilizer application is only limited to periods before the growing season, i.e., early and late spring, while harvesting mainly occurs at the end of summer. Both these land management practices can have an effect on the temporal trends of GHGs. We supplemented the sentence for clarification: "We also found significant shifts in the geo-locations of hotspot regions between summer and autumn, suggesting that seasonal effects of land management (e.g., fertilization, harvesting, and residue management) and soil conditions may also lead to a temporal expansion or contraction of the hot spot regions."

L452-453: In agreement with our hypotheses, the landscape fluxes were either over or under-estimated by the area-weighted average approach compared to the RF modeling approach.
According to Figure 3, your predicted fluxes were biased towards underestimation. Wouldn't that suggest that the RF is underestimating landscape fluxes rather than that the area-weighted average approach over-estimates?
Response: Thank you for your critical comment. While we acknowledge that some of the overestimation we found was due to the general trend where the RF models underestimated high fluxes, we were convinced that the number of averaged sampling sites, biased with either high or low values, was responsible for the differences in the two approaches. For example, we found no significant differences when we compared one-to-one means between the measured and the RF-predicted fluxes (for the sampling sites) within the same season (See Figures 1 and 2 here). However, if our model underestimation

had a strong effect, one would expect the area-weighted average from the measured to be higher than the RF predicted fluxes.

When we compared the area-weighted approach to the cumulative landscape fluxes from the RF-generated maps, which in theory includes fluxes from most cold and hot spots, we found biases in the former approach due to seasonality. The area-weighted approach tended to overestimate during the summer and underestimate during autumn. These findings could mean that the simple area-weighted approach failed to represent cold spots in the summer due to biases toward measuring high-flux regions and hot spots in the autumn due to biases toward measuring low-flux regions. We had added some explanations in the discussion.

"An alternative explanation of the differences in landscape flux estimates from both approaches could be the underestimation of high fluxes by the RF models, which we also found in our study. However, the landscape means of RF predicted and measured fluxes from 30% of our sampled sites were primarily similar (Figure A1 in Appendices), suggesting that the lack of spatial representation of all hot and cold spots by the area-weighted mean approach rather than the inability of the RF models to reproduce high values accounted for the findings above."

L453-455: The overestimated landscape CO_2 and N_2O fluxes by up to 50% during the peak summer season suggest an overrepresentation of the high fluxes measured at most of the sampling points, resulting in elevated mean and upscaled fluxes.
is this the overestimate by the "area-weighted average approach"? because you say that this approach both over- and under-estimated the fluxes (compared with RF).
Response: Thank you for your critical comment. We have rephrased the statement to make it clearer that it is an overestimate from the area-weighted approach.
"The overestimated landscape CO_2 and N_2O fluxes by the area-weighted average approach of up to 50% during the peak summer season suggest an overrepresentation of the high fluxes measured at most of the sampling points, resulting in elevated mean and upscaled fluxes."

L460-461: An alternative explanation of the differences in landscape flux estimates from both approaches could be the underestimation of high fluxes by the RF models, which we also found in our study.
Wouldn't this be a bigger problem when trying to calculate annual fluxes than underestimating the low fluxes?
Response: Thank you for your question. We think missing out on cold or hot spots may be a bigger problem in estimating the annual fluxes of an entire landscape. This conclusion is motivated by the fact that when we compared one-to-one means between the measured and the predicted fluxes, we found no significant differences, which could mean that the error from the RF underestimation may not be that important when the fluxes are averaged. In addition, as we have shown for N_2O and CO_2, missing out on hot spots, for example, will result in significant uncertainties in calculating the final landscape fluxes.

L461-464: However, the landscape means of RF predicted and measured fluxes from 30% of our sampled sites were primarily similar (Figure A1 in Appendices), suggesting that the lack of spatial representation of all hot and cold spots by the area-weighted mean approach rather than the inability of the RF models to reproduce high values accounted for the findings above.
What about the other 70%? Were they randomly distributed? or was there some bias that could be noted?

Response: Thank you for the question. The split was done randomly; hence, the distribution of the sites was also random. The mean comparison results for both the test and the training dataset were primarily similar (See Figure 1: test data and Figure 2: training data).

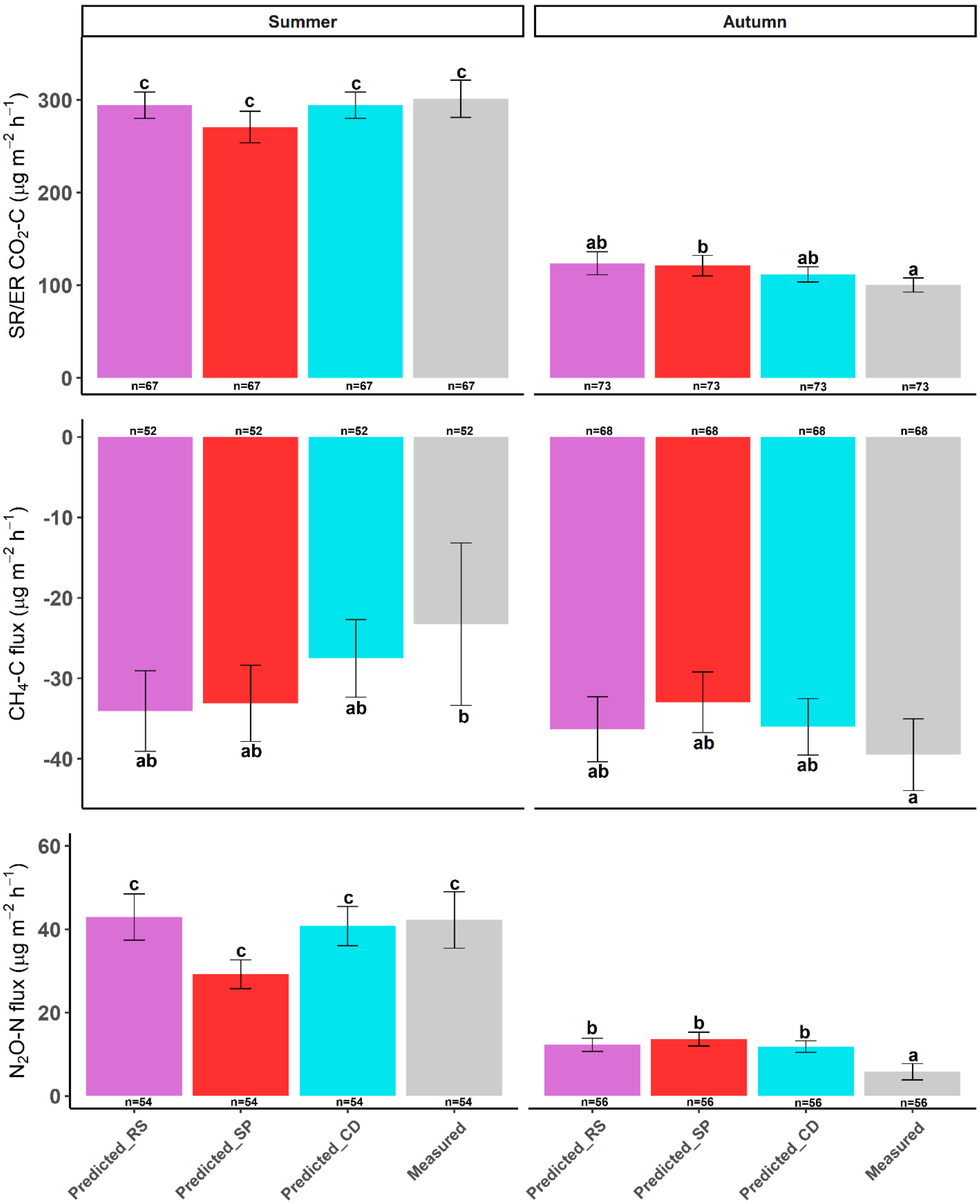

Figure 1: Bar graphs showing the mean fluxes (±SE) predicted using remote sensing (RS), soil properties (SP), and combined data (CD) and the measured fluxes at the sampling sites in the 30% model test dataset. The upper-case and lower-case letters indicate significant differences ($p<0.05$) in the mean fluxes in the different seasons and across the measured and predicted fluxes.

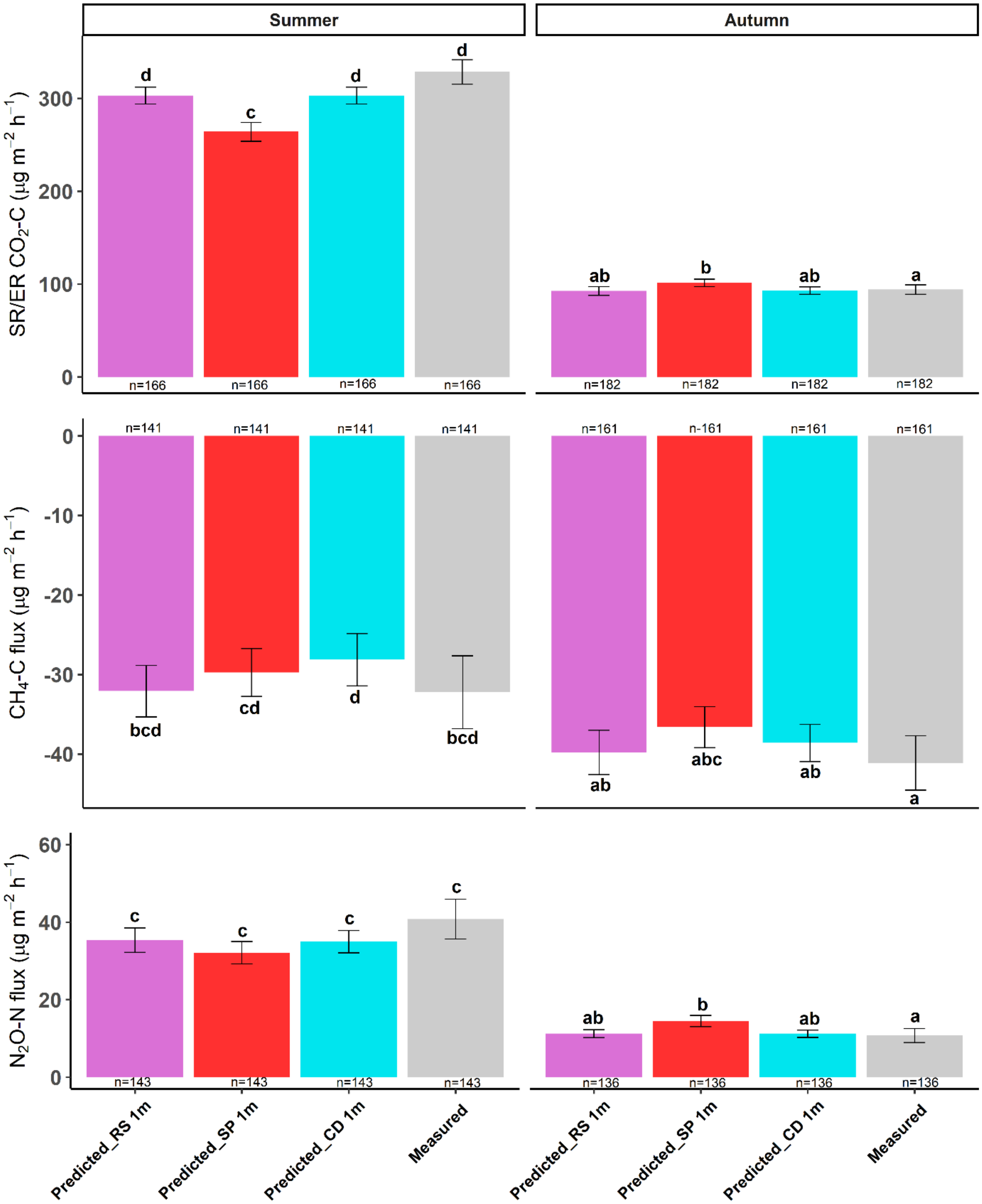

Figure 2: Bar graphs showing the mean fluxes (±SE) predicted using remote sensing (RS), soil properties (SP), and combined data (CD) and the measured fluxes at the sampling sites in the 70% model training dataset. The upper-case and lower-case letters indicate significant differences ($p<0.05$) in the mean fluxes in the different seasons and across the measured and predicted fluxes.

L468-469: The high (50%) overestimation of landscape N_2O fluxes suggested the higher sensitivity of reliably estimating N_2O fluxes using the (aggregated means) conventional method.
you keep mentioning that the aggregated means over (or under) estimates landscape fluxes. But that is only when compared to the RF method. Do we really know that the RF method is more accurate? For me, the only way to know for sure would be to compare with a tall flux tower that actually measures the landscape flux.
Response: Thank you for your critical comment. You are correct that there is no way of exactly validating the results from the RF maps in our study to determine how accurate they are in representing total landscape fluxes. However, on purely methodological grounds, an average that better represents the heterogeneity of GHGs across an entire landscape, such as that computed by the RF models, offers improved estimates than only a few measured points. We also showed this in our earlier publication, where the mean flux uncertainties decrease logarithmically with the number of measurements done (Wangari et al., 2022). The next steps are to use the results from the RF maps to guide field measurements by chambers or flux towers and check the validity of the model. We plan to work on this in a follow-up project.

L479-481: This study's high spatial resolution upscaling (1 m pixel) enabled capturing small-scale variabilities in GHG fluxes within short distances, which would have been missed out with coarser resolution upscaling.
Response: Thank you for the grammar correction. We have made the changes.

L497: Table 3: Comparison of other that have upscaled landscape fluxes using the random forest algorithm.
other what? Other "studies"?
Response: Thanks for the grammar correction. We have rephrased the statement to make it clearer.
"Comparison with other studies that have upscaled landscape fluxes using the random forest algorithm."

L510-511: Figure A4: Maps showing the hot and cold spots of the (a) summer and (b) autumn seasons. These regions were defined using each season's specific threshold.
I'm not sure of this "hot" and "cold" spot designation. To me, hot spots are places in the landscape that have high annual emissions. And I think it may be difficult to determine a hot spot from two measurements across an entire year. Areas that had relatively high emissions during both campaigns could probably be considered hot spot, but I'm not sure if we should consider a site a "hotspot" if it had relatively high emissions during only one of the campaigns.
Response: Thank you for your critical comment. You are right that it will be very interesting to see if these spatial hot or cold spots in our study are persistent throughout the year, which would clearly designate them as such. However, due to our study's temporal limitation, we only designated them as summer/autumn hot or cold spots. We have added this clarity in the materials and methods section where we calculated the hot and cold spots to indicate that these are only for summer and autumn. We have also added a reflection of this in the conclusion.
Materials and methods:
"2.6 Identification of summer and autumn GHG 'hot' and 'cold' spots from predicted landscape fluxes"
Results:
"3.4 Summer and autumn hot spots and cold spots"

Conclusion:
"While we identified hot and cold spots of soil GHG flux across the Schwingbach landscape through RF modeling, the entire exercise was limited to two seasons (summer and autumn). For this reason, it is still unclear whether these hot and cold spots persist throughout the year and their overall contribution to the annual landscape GHG flux estimates. Future studies should, therefore, aim at increasing the temporal resolution of similar spatially extensive measurements to at least monthly scales, which, when combined with remotely-sensed data, may be able to create similar landscape flux maps and identify the contribution of GHG hot and cold spots to annual estimates."

L513-514: Table B1 a, b, c: Cross-validation results of different models developed for SR/ER-CO_2 fluxes in 1a) forest, 1b) grassland and 1c) arable land using different predictors in the training dataset. Stepwise elimination of the least important predictors was implemented.
This does not agree with Table 2. I think that this is for the calibration data and Table 2 is for the validation data, but that is not clear with the Table captions.
Response: Thank you for your critical comment. Table 2 and Tables B1-B5 show the cross-validation results of the trained models. We have seen the issue of why Table 2 is different: i.e., Tables B1, B3, and B5 have the log-transformed RMSE and MAE values for CO_2 and N_2O fluxes. We have now adjusted Tables B1, B3, and B5 to have retransformed values of RMSE and MAE to align with Table 2.

Table B6: The minimum, maximum, mean, standard deviation, and standard error of the measured fluxes at all the sampling p
and the predicted landscape fluxes using remote sensing (RS), soil properties (SP), and combined data (CD).

Measured fluxes at sampling points		Summer					Autumn				
Land use	**Flux type**	**Min**	**Max**	**Mean**	**STDEV**	**SE**	**Min**	**Max**	**Mean**	**STDEV**	**SE**
Forest		60	589	210	111	12.0	10	446	74	53	5.5
Grassland	SR/ER-CO_2-C (mg m^{-2} h^{-1})	136	693	350	123	14.1	9	419	131	82	8.6
Arable		78	877	431	192	23.3	14	238	84	51	6.1
Forest		-201	176	-62	47	5.1	-214	7	-68	48	4.9
Grassland	CH_4-C (μg m^{-2} h^{-1})	-84	221	-9	43	5.2	-100	28	-23	21	2.4
Arable		-133	157	8	74	12.3	-43	11	-17	10	1.4
Forest		-13	117	14	24	2.9	-17	78	5	11	1.3
Grassland	N_2O-N (μg m^{-2} h^{-1})	-17	281	32	57	7.0	-18	154	12	30	3.7
Arable		13	282	84	65	8.4	-15	54	12	12	1.6
Predicted landscape fluxes (RS data)											
Forest		37	327	171	51	0.03	38	288	74	26	0.01
Grassland	SR/ER-CO_2-C (mg m^{-2} h^{-1})	59	484	294	70	0.10	39	477	186	89	0.13
Arable		35	668	324	111	0.08	28	559	102	86	0.06
Forest		-147	65	-70	21	0.01	-148	65	-72	25	0.01
Grassland	CH_4-C (μg m^{-2} h^{-1})	-60	50	-15	17	0.02	-64	32	-18	11	0.02
Arable		-60	89	-5	23	0.02	-60	75	-16	11	0.01
Forest		-8	38	7	5	0.003	-6	27	4	4	0.002
Grassland	N_2O-N (μg m^{-2} h^{-1})	-8	144	26	34	0.05	-9	69	12	8	0.01
Arable		0	190	60	33	0.02	-1	183	18	17	0.01
Predicted landscape fluxes (SP data)											
Forest		55	343	194	34	0.02	41	214	70	14	0.01
Grassland	SR/ER-CO_2-C (mg m^{-2} h^{-1})	72	470	320	38	0.05	52	319	128	44	0.06
Arable		36	733	266	90	0.06	28	733	124	60	0.04
Forest		-123	54	-51	11	0.01	-138	-29	-51	10	0.01
Grassland	CH_4-C (μg m^{-2} h^{-1})	-65	37	-8	8	0.01	-65	13	-10	6	0.01
Arable		-87	85	-7	26	0.02	-67	85	-13	17	0.01
Forest		-9	49	9	7	0.00	-9	23	6	4	0.00
Grassland	N_2O-N (μg m^{-2} h^{-1})	-6	124	20	8	0.01	-7	54	7	7	0.01
Arable		12	157	45	10	0.01	0	150	19	9	0.01
Predicted landcsape fluxes (CD data)											
Forest		82	325	185	31	0.02	42	195	66	14	0.01
Grassland	SR/ER-CO_2-C (mg m^{-2} h^{-1})	155	496	322	47	0.07	52	349	145	61	0.09
Arable		68	694	321	105	0.08	29	568	110	59	0.04
Forest		-125	55	-57	18	0.01	-136	-27	-59	19	0.01
Grassland	CH_4-C (μg m^{-2} h^{-1})	-69	36	-6	9	0.01	-69	13	-11	6	0.01
Arable		-72	78	0	24	0.02	-72	53	-17	11	0.01
Forest		-9	49	9	7	0.00	-9	23	6	4	0.00
Grassland	N_2O-N (μg m^{-2} h^{-1})	-9	152	25	31	0.05	-8	83	6	7	0.01
Arable		16	168	58	21	0.02	1	128	16	12	0.01

Is this really "ecosystem respiration"? I would guess that your chamber was not big enough to measure respiration from the forest above-ground biomass.

Response: Thanks for raising this issue. As mentioned earlier, we have added these details in the methods section.