## **Response to Editor Comments**

Title: Orphaned Oil & Gas Well Methane Emission Rates Quantified with Gaussian Plume

Inversions of Ambient Observations
Manuscript ID: egusphere-2025-344

Dear Editor Lok Lamsal and Mario Ebel,

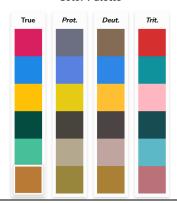
Thank you for your thorough editing. We have made the requested edits to our manuscript and detailed those changes below.

## **General Comments:**

2) Please ensure that the colour schemes used in your maps and charts allow readers with color vision deficiencies to correctly interpret your findings. Please check your figures using the Coblis – Color Blindness Simulator (https://www.color-blindness.com/coblis-color-blindness-simulator/) and revise the colour schemes accordingly. --> Figs. 4, 5, 10, S5

Thank you for the suggestion. We note that our previous scheme was acceptable for most people except those with dichromatic blue-blind. We have used this tool and <a href="https://www.davidmathlogic.com/colorblind">www.davidmathlogic.com/colorblind</a> to improve our color schemes. Here is a link to the 6-color color scheme that we have chosen and how it appears to different color anomalies: <a href="https://davidmathlogic.com/colorblind/#%23D81B60-%231E88E5-%23FFC107-%23004D40-%2347BF99-%23B87A35">https://davidmathlogic.com/colorblind/#%23D81B60-%231E88E5-%23FFC107-%23004D40-%2347BF99-%23B87A35</a>.

## Color Palette



## **Minor Comments**

L	William Comments		
	1	L52	Removed the phrase "in response to this legislation" as requested.
	2	L132	Removed the following sentence, which was redundant with L103-104:
			"These venting operations are often how CH4 emissions are estimated to
			calculate carbon credits."
	3	L143	Corrected grammar to "valve to check the consistency of composition"

4	L302	The statement below, as stated in the text, is correct. Faster windspeeds are considered to be more stable. (an additional reference: <a href="https://www.ready.noaa.gov/READYpgclass.php">https://www.ready.noaa.gov/READYpgclass.php</a> )
		"with class A "unstable" typified by the lowest windspeed and largest dispersion, to class F "stable" having the fastest windspeeds and least amount of dispersion"

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