On behalf of all Co-Authors, we apologize for this strange sentence in the abstract:

"More importantly, when assimilating both $\text{CH}_4$ and $\delta^{13}\text{C}(\text{CH}_4)$ observations, but assuming source signatures are perfectly known increase these differences between the system with $\text{CH}_4$ and the enhanced one with $\delta^{13}\text{C}(\text{CH}_4)$ by a factor 3 or 4, strengthening the importance of having as accurate as possible signatures."

Here is a correction:

"More importantly, when assimilating both $\text{CH}_4$ and $\delta^{13}\text{C}(\text{CH}_4)$ observations, but assuming that the source signatures are perfectly known, these differences increase by a factor of 3 or 4, strengthening the importance of having as accurate signature estimates as possible."

We hope that it will clarify the statement.