

Detection and long-term quantification of methane emissions from an active landfill

This paper presents a long-term study on detecting and quantifying methane emissions from a landfill. The authors conducted 21 measurement campaigns over a period of 3 years, using a combination of ground-based and airborne measurements to estimate methane emissions. They found that the landfill was a significant source of methane emissions, with emissions varying depending on factors such as temperature and precipitation. The study provides valuable insights into reducing greenhouse gas emissions and highlights the importance of long-term monitoring to accurately estimate emissions. This study has more strengths as compared to weaknesses.

Strengths

- The study provides a comprehensive analysis of methane emissions from a landfill over a long period of time, which is valuable for understanding the factors that contribute to emissions.
- The authors used a combination of ground-based and airborne measurements, which provides a more complete picture of emissions than using only one type of measurement.
- The study highlights the importance of long-term monitoring to accurately estimate emissions and provides insights into how to improve monitoring methods.

Weakness

- The study only focuses on one landfill, so the findings may not be generalizable to other landfills.
- The paper could benefit from more discussion on the implications of the findings for reducing greenhouse gas emissions.

Overall, this paper provides valuable insights into detecting and quantifying methane emissions from landfills and highlights the importance of long-term monitoring for accurately estimating emissions. The study could be improved by providing more discussion on the implications of the findings for reducing greenhouse gas emissions.