

Methane Emissions from the 2015 Aliso Canyon Blowout in Los Angeles, CA

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Single-point failures of the natural gas infrastructure can hamper deliberate methane emission control strategies designed to mitigate climate change. The 23 October 2015 blowout of a well connected to the Aliso Canyon underground storage facility in California resulted in a massive release of natural gas. Analysis of methane (CH_4) and ethane (C_2H_6) data from dozens of plume transects from 13 research aircraft flights between 7 Nov 2015 and 13 Feb 2016 shows atmospheric leak rates of up to 60 metric tonnes of CH_4 and 4.5 metric tonnes of C_2H_6 per hour. At its peak this blowout effectively doubled the CH_4 emission rate of the entire Los Angeles Basin, and in total released 97,100 metric tonnes of methane to the atmosphere.



Figure 1. IR camera image of leaking CH_4 plume from Aliso Canyon well SS-25. Image courtesy of Environmental Defense Fund.