

MethaneSAT

Mission Updates



- Primary Mission Objective

- Provide the data needed to enable a 45% reduction in CH₄ emissions from oil & gas systems by 2025

- Mission Design

- Imaging spectrometers built by Ball Aerospace
Spacecraft bus by Blue Canyon Technologies
- Primary science teams at Harvard, SAO, & EDF
- SWIR: 1249-1305nm & 1605-1683nm; Sampling / resolution ~ 0.1nm / 0.3nm
- Agile targeting satellite; Targets ~200x200km at nadir; Pixels ~ 100m x 400m
- Wide swath & low detection threshold enable quantification & tracking of **area emissions** as well as point sources
- Standard data products will include a L4 emission flux estimate
- Building upon already existing EDF advocacy program

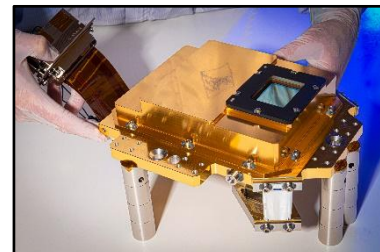
More details @ IWGGMS-17 – Presentation on Monday, 14 June 2021



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- Payload build progressing well with launch scheduled for Q4 2022
- Partnership with New Zealand
 - Mission Operations Control Centre; University of Auckland & Rocket Lab
 - Secondary science project aimed at agricultural emissions
 - Dr. Sara Mikaloff-Fletcher, NIWA, science lead.
- MethaneAIR aboard the NCAR GV
 - Research flights delayed due to COVID
Now scheduled for July/August 2021
 - Mapping flights in Permian Basin (Aug)
- Looking forward
 - **MethaneSAT data products will be available to the larger science community**
 - **Encourage national & international support for researchers to engage with these data**



O₂ Focal Plane Assembly
Image credit: Ball Aerospace



***More details @ IWGMS-17 – Presentation on Monday, 14 June 2021
(and lots of MethaneSAT / AIR posters too!)***

