MethaneSAT Mission Updates

• Primary Mission Objective
  – Provide the data needed to enable a 45% reduction in CH\textsubscript{4} 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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MethaneSAT Mission Updates

• 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

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