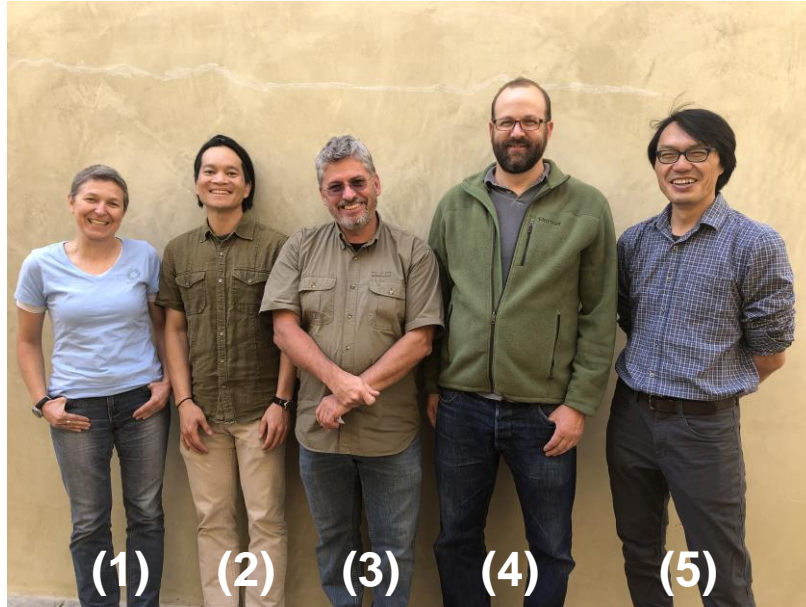


AmeriFlux Tech Team

LBNL: Sébastien Biraud³, Stephen Chan², Housen Chu⁵, Sigrid Dengel¹
Oregon State University: Chad Hanson⁴



AmeriFlux Tech Team

A resource for the AmeriFlux community

<http://ameriflux.lbl.gov/tech/support-services/>

- Provide calibrated PAR sensors
- Provide CO₂ and CH₄ calibration standards
- Loan spare instruments
- Provide technical support

Contact us: ameriflux-tech@lbl.gov



Profiling System Deployment

<https://ameriflux.lbl.gov/ameriflux-portable-profile-system/>

Instruments

- CO₂ & H₂O (LI-COR 840)
- Aspirated temperature (shielded Apogee st-110 thermistors)
- Pressure at base of tower

10 inlets at constant flow

Deployments

- 2015: US-WCr
- 2016: US-Ton
- 2017: US-MMS & US-UMd
- 2018: US-SB1



Rapid Response System

<http://ameriflux.lbl.gov/resources/rapid-response-flux-systems/>

Loan up to three years. Eddy covariance + micromet

Rapid response system #1:

- LI-COR based system
- **DEPLOYMENT in May 2019 in Arkansas (PI: Ben Runkle)**

Rapid response system #2:

- LI-COR based
- **DEPLOYED AT US-KS3 in Fall 2017 (PI: Ross Hinkle)**

Rapid response system #3:

- Campbell based system
- **DEPLOYMENT in June 2019 in Utah (PI: Dave Bowling)**



Year of Methane Loaners

<http://ameriflux.lbl.gov/resources/rapid-response-flux-systems/>

Loan up to 1-year. LI-COR 7700 IRGA

Loaner #1:

- **DEPLOYED at US-PLM May 2019 (PI: Inke Forbrich)**
- **See: <https://ameriflux.lbl.gov/ameriflux-year-of-methane-featured-site-us-plm-phm/>**



Loaner #2:

- **DEPLOYED AT US-HRP May 2019 (PI: Jim Tang)**



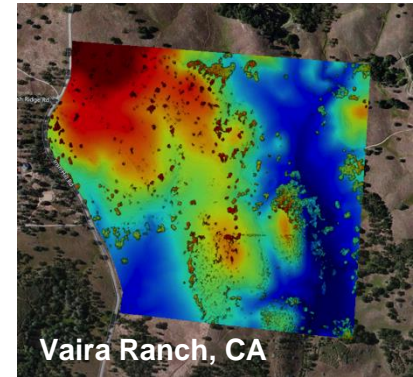
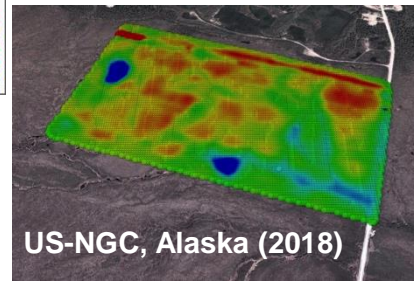
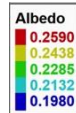
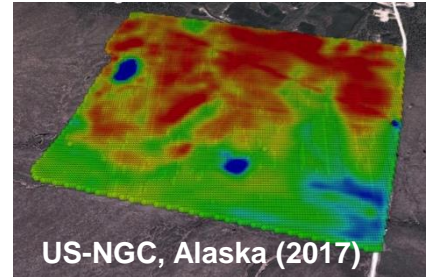
Loaner #3:

- **DEPLOYED as part of Rapid Response system #1 (PI: Ben Runkle)**

Unmanned Aerial Systems



- Develop small UAS (under 55lbs) with modular payload
- **Platforms**
 - DJI: S-1000, Inspire-1
 - 3D-Robotics: SOLO
 - ATLATL: custom built
- **Observations**
 - Visible, and NDVI
 - Albedo
 - Multispectral imagery....



Technical Resources

<https://ameriflux.lbl.gov/tech/technical-resources/>

These resources have been compiled by the AmeriFlux Tech Team based on questions we have received and our experience visiting sites.

- Eddy covariance best practices and protocols
- Data visualization tools
- Suppliers

Proposal Renewal

2020-2025

Ideas:

- How to scale-up the Site Visit program / increase visibility of Site Visit program.
- Investment in new technology
- Consolidate/New services
- Other effort

Questions / Feedbacks

Protocols and best practices

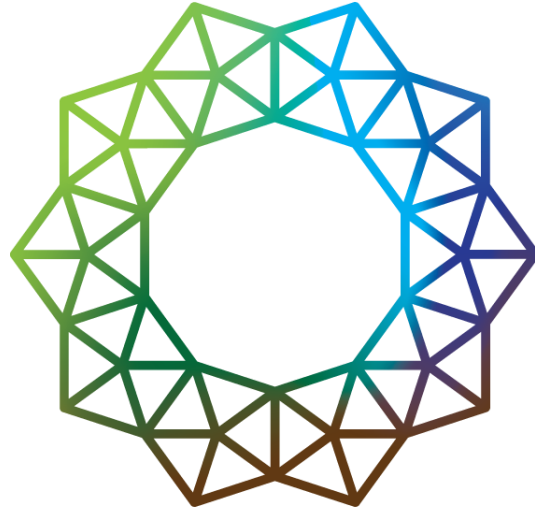
<http://ameriflux.lbl.gov/tech/technical-resources/>

Contact us: ameriflux-tech@lbl.gov



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Thank You



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