



NASA AIRS/Sounder Science Team Meeting 20th Anniversary

(Times indicated are Pacific time)

Attendance codes: P for in person, V for virtual and R for recorded

Session 1:

Chair: Vivienne Payne
Tuesday, May 10, 2022

Time (PDT)	Name	Affiliation	Title
8:30 AM			Arrival and registration
8:50 AM	Margaret Srinivasan (P)	NASA JPL	Information and logistics
9:00 AM	Joao Teixeira (P)	NASA JPL	Climate of the 21st Century from an Infrared Perspective: Twenty Years of AIRS
9:30 AM	Claire Parkinson (V)	NASA GSFC	Aqua at 20
10:00 AM	Will McCarty (P)	NASA HQ	AIRS, NWP, and Me: Twenty Years of AIRS, with Thoughts on What's Next
AM Break: 10:30 AM - 11:00 AM			
11:00 AM	Fred O'Callaghan (V)	NASA JPL	AIRS 20 years in space
11:30 AM	Larrabee Strow (V)	UMBC	Maximizing the Scientific Return from the AIRS 20-Year Record
12:00 PM	Eric Fetzer (P)	NASA JPL	Moving from Testing to Validation to Science
Lunch: 12:30 PM - 1:30 PM			
Session 2: Chair: Joao Teixeira			
1:30 PM	Hank Revercomb (P)	U. Wisconsin-Madison	Happy Anniversary for Atmospheric IR Sounding: A historical perspective and big picture vision of the next steps
2:00 PM	Mitch Goldberg (V)	NOAA	How AIRS and the Science Team influenced NOAA and the International Community
2:30 PM	George Aumann (P)	NASA JPL	Lessons from 20 year of AIRS data
PM Break: 3:00 PM - 3:30 PM			
Session 3: Chair: Tom Pagano			
3:30 PM			short poster presentations
Session 4: Chair: Joao Teixeira			
4:30 PM	Vivienne Payne (P)	NASA JPL	Atmospheric composition in the past, present and future: A view from hyperspectral IR sounders
5:00 PM	Tom Pagano (P)	NASA JPL	AIRS project status and highlights since launch
5:30 PM	Bjorn Lambrigtsen (P)	NASA JPL	The Aqua Microwave Sounders: Why, what and how
End of Session: 6:00 PM			



Virtual NASA AIRS/Sounder Science Team Meeting

Session 5:

Chair: Eric Fetzer
Wednesday, May 11, 2022

Time (PDT)	Name	Affiliation	Title
8:30 AM	Amy Braverman (P)	NASA JPL	Data Fusion and Uncertainty Quantification for Sounders
9:00 AM	Claudia Stubenrauch (V)	Laboratoire de Météorologie IPSL CNRS	Towards a 3D description of Upper Tropospheric Cloud Systems using Synergistic Satellite Observations & Machine Learning
9:30 AM	Andy Dessler (V)	Texas A&M University	The water vapor feedback: An AIRS perspective

AM Break: 10:00 AM - 10:30 AM

10:30 AM	Brian Soden (V)	U. Miami	Monitoring Radiative Forcing and Radiative Feedbacks using AIRS Measurements
11:00 AM	Joan Alexander (V)	NorthWest Research Associates.	Global Perspectives on Small-scale Atmospheric Gravity Waves from AIRS
11:30 AM	Xianglei Huang (P)	U. Michigan	Direct use of AIRS radiances in physical climate studies: reviews and outlooks
12:00 PM	Adam Milstein (V)	MIT	AI Enhancement of AIRS/AMSU Retrievals

Lunch: 12:30 PM - 1:30 PM

Session 6:

Chair: Brian Kahn

1:30 PM	Yuk Yung (V)	Caltech	Global Patterns of Carbon Dioxide Variability from AIRS Observations
2:00 PM	Juying Warner (V)	U. Maryland	AIRS Data Records of CO, NH ₃ , and CH ₄ - History and Recent Updates
2:30 PM	Greg Elsaesser (P)	Columbia University/ NASA GISS	Bottom-up and Top-down uses of Aqua/AIRS T and Qv data in climate model development

PM Break: 3:00 PM - 3:30 PM

3:30 PM	Nadia Smith (V)	STC/SSEC	The value of CLIMCAPS-Aqua in evaluating atmospheric processes
4:00 PM	Oreste Reale (V)	SSAI and NASA GSFC	Two decades of Observing System Experiments to investigate the impact resulting from the assimilation of AIRS data in the NASA GEOS system
4:30 PM	Linette Boisvert (P)	NASA GSFC	What we've learned from 20 years of AIRS data in the Polar Regions
5:00 PM	Fred Prata (R)	AIRES Pty Ltd	Twenty years of observing volcanic emissions with AIRS

End of Session: 5:30 PM



Virtual NASA/Sounder Science Team Meeting

Session 7:

Chair: Bjorn Lambrigtsen
Thursday, May 12, 2022

Time (PDT)	Name	Affiliation	Title
8:30 AM	Tony McNally (V)	ECMWF	An AIRS eye view of how operational NWP has changed
9:00 AM	David Meyer (V)	NASA GSFC	GES DISC Support to Sounder Science
9:30 AM	Ruth Monarrez (P)	NASA JPL	Sounder SIPS: Then, Now, Tomorrow
AM Break: 10:00 AM - 10:30 AM			
10:30 AM	Sharon Ray (P)	NASA JPL	AIRS Applications: Activities, Next Steps and Training for Drought Monitoring, Flu Outbreak Prediction, Volcanic Plume Detection, & AWIPS
11:00 AM	Xu Liu (P)	NASA Langley	Explore Full Information Content of AIRS and CrIS Hyperspectral Data: PCRTM Forward Model and Associated Retrieval Algorithms
11:30 AM	Bill Irion (P)	NASA JPL	A Review of Optimal Estimation for Retrievals in the Thermal Infrared
12:00 PM	Allen Huang (P)	SSEC/CIMSS, U. Wisconsin-Madison	From IMAPP (2000-2021) to CSPP (2012-2022) - Decades Long of Promoting Hyperspectral Infrared Sounding Science and Applications
Lunch: 12:30 PM - 1:30 PM			
Session 8:			
<i>Chair: Sharon Ray</i>			
1:30 PM	Joe Taylor (P)	U. Wisconsin-Madison	The CrIS NASA L1b Product and the Multi-sensor Hyperspectral Infrared Climate Record
2:00 PM	Qing Yue (P)	NASA JPL	Atmospheric Boundary Layer As Observed by AIRS
2:30 PM	Brian Kahn (P)	NASA JPL	A twenty-year view of dynamic cloud processes: thermodynamic phase, ice microphysics, and turbulence scaling from AIRS
PM Break: 3:00 PM - 3:30 PM			
3:30 PM	Joao Teixeira (P) Vivienne Payne (P) Larrabee Strow (V)	NASA JPL NASA JPL UMBC	Open Discussion: a vision for the future of atmospheric sounding
End of Session: 5:30 PM			