

PIs, Working Groups, and Focus Groups: A multi-tiered approach to addressing ASR objectives

On behalf of the WG chairs and SISC

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New ASR Science Plan

- Considers the atmospheric system as a continuum from the smallest to the largest particles and a hierarchy of processes acting on and within that continuum.
- Integration of observational and modeling efforts to more effectively obtain progress on reaching ASR and DOE objectives.
- A new WG structure organized along these lines.
- Please read the plan.

[www.sc.doe.gov/ober/Atmospheric System Research Science Plan.pdf](http://www.sc.doe.gov/ober/Atmospheric%20System%20Research%20Science%20Plan.pdf)
(or on the front page at asr.science.energy.gov)



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Avenues Towards Accomplishing ASR Objectives

The ASR mission is best served by a combined approach that includes individual PI research efforts AND larger organizational elements that can address more complex and comprehensive issues.

❖ **PI Research**: Basic and exploratory research. Relatively narrow and focused.

❖ **Working Groups**: Primary organizational element for Science Team. Provide structure for coordinating broader science initiatives, a means for higher-level representation within the ASR, and organization of meetings.

❖ **Instrument Groups**: Provide guidance for specific instruments and/or observational approaches (e.g., Radar Instrument Group).

❖ **Focus Groups**: Organized around specific, high-importance science topics or themes that are of greater complexity than an individual PI project.



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Transition to new WG structure



Cloud Modeling

Cloud Properties

Radiation

Aerosol

**Atmospheric Science
Program**



ASR
Atmospheric
System Research

Cloud Life Cycle

Cloud-Aerosol-Precip
Interactions

Aerosol Life Cycle



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Focus Groups

**A framework for integration of research activities
...and accelerated progress**

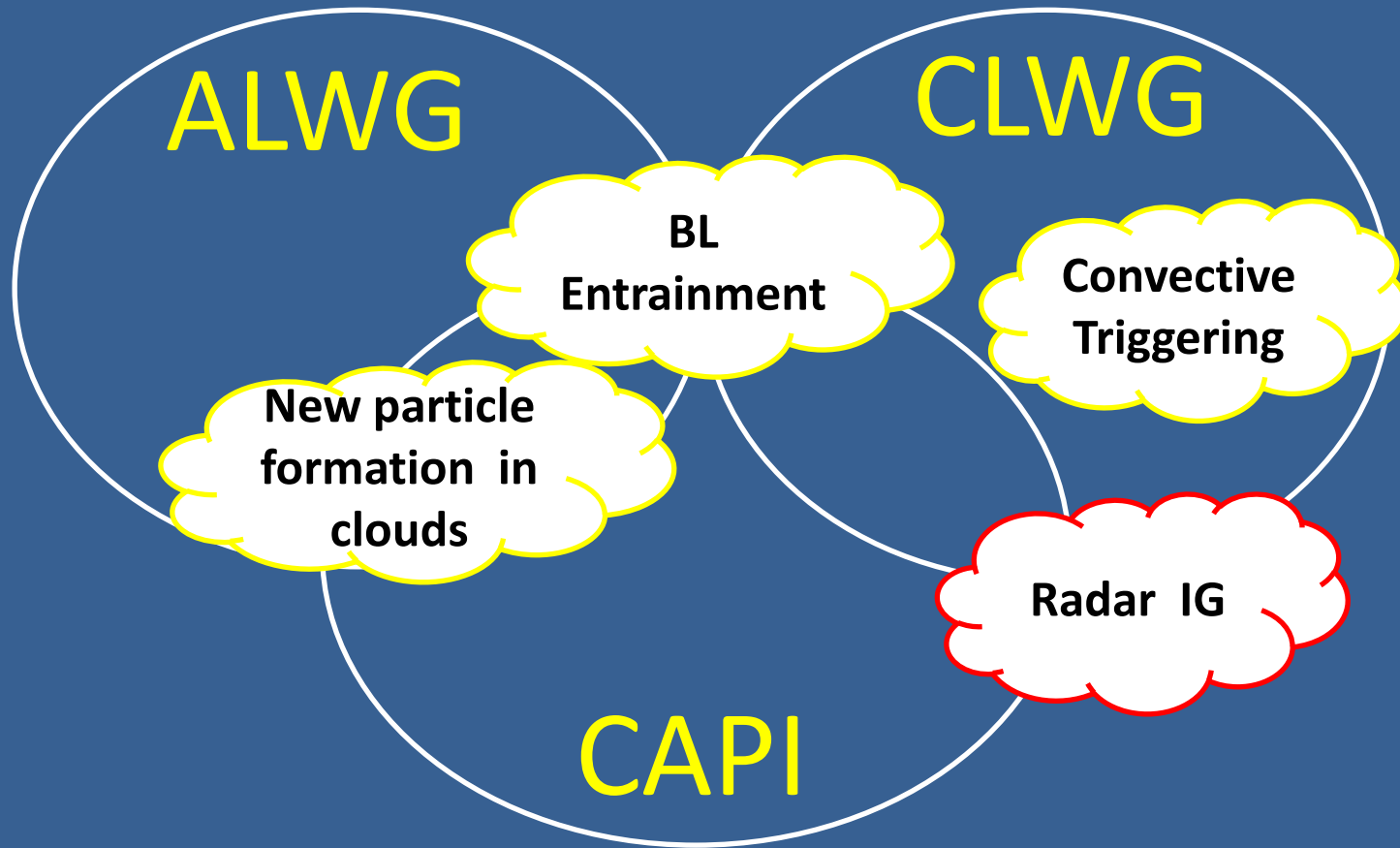
Overall Objective

To provide a framework for organizing, coordinating, and supporting scientific efforts that are of strategic importance to ASR yet are substantially larger than any individual PI effort. Typically these groups will focus on a specific process that is not well understood and modeled. The results, products, and/or output from these groups will comprise some of the important deliverables that help to define ASR and its progress.



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Where do Focus Groups fit into ASR



Example diagram only, NOT actual groups!



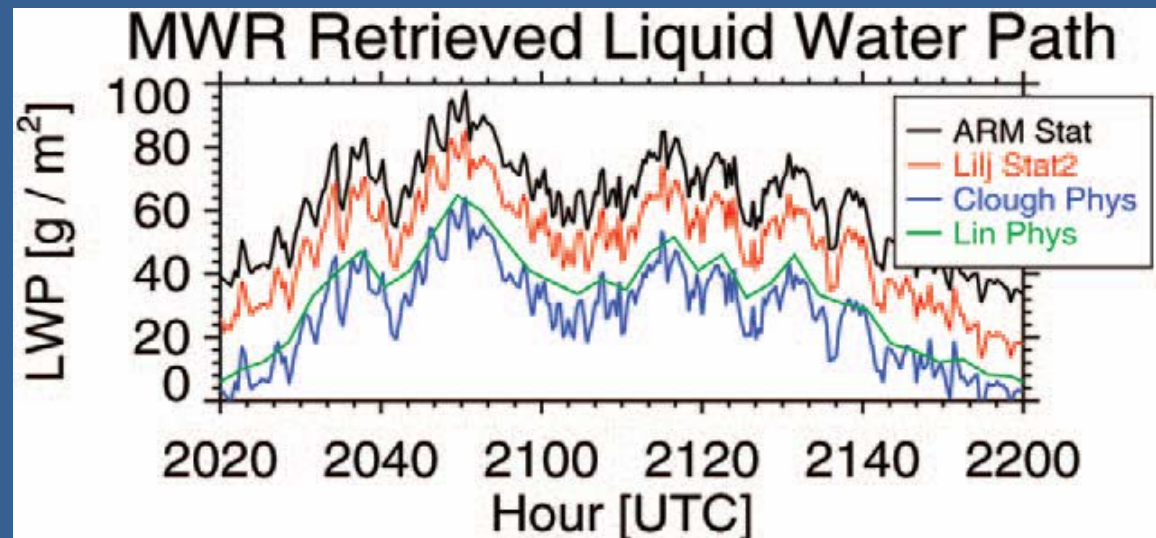
ASR
Atmospheric
System Research

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An Example from the Past

CLOWD – Clouds with Low Optical Water Depth

Narrow objectives, ~15 active participants,
made measurable progress at characterizing thin
liquid clouds in about 5 years,
lead to new observational strategies, data products
results summarized in *Bull. Amer. Meteor. Soc.*



The Vision for Focus Groups: Basic Guidelines

1. Have *well-defined, focused science objective(s)*, which are deemed to be of strategic importance to ASR programmatic objectives by the SISC and DOE management.
2. Have a *plan/approach* for using ARM/ASR data and coordinated group efforts to address the objectives. Plan should outline how the specific activities will lead to improvements in model representations.
3. Attainable progress on a *5-year time scale*, which does not necessarily mean that the group must disband at 5 years!



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The Vision for Focus Groups: Basic Guidelines (continued)

4. *A critical mass of participation* with identified leadership. Target size is 5 or more individual investigators or research groups. Typically participation from both observation and model perspectives.
5. *Demonstration of progress* via breakout sessions, talks, papers, products, parameterizations, IOPs, etc.
6. Develop a "*white paper*" that outlines the objectives, approaches, leadership, metrics for evaluating progress, and other details to acts as the guide for the group's activities.

Benefits of Focus Groups

- Recognition of activities w/i Working Groups, Science Team, and beyond
- Specific meeting time (i.e., priority for breakout session time).
- Increased leverage for prioritization.
- Potential infrastructure support (i.e., for VAPS).
- Potential increased programmatic focus in general.



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Formal Recognition Process

- Potential groups should gauge interest and build support among the Science Team, perhaps via breakout sessions at meetings.
- Develop a white paper that outlines how the group will meet the above Guidelines. (Recommended interaction with WG chairs)
- White paper used to petition for Focus Group designation, to be decided by consensus of the SISC and DOE management.
- Ongoing Focus Group status evaluated at least annually by the SISC to ensure robust progress.



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Provide your feedback

Draft guidelines are on the ASR working groups page at:
asr.science.energy.gov/science/working-groups

Please provide any feedback on the process to WG chairs.



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