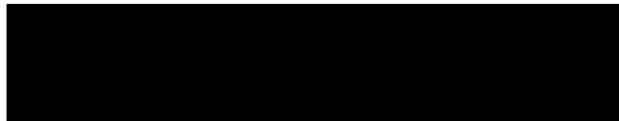


# Synthesis of Priorities and Recommendations

# Synthesis of Observing Facilities and Instrumentation

The color code:



- Currently exists, fine as is AND still needed



- Currently exists but improvements (accuracy, resolution, scanning capabilities, # of systems etc.) needed



- Currently exists but not easily accessible to the NSF research community



- Does not exist yet as an observing system (e.g. conceptual design, in development, etc.)

# Airborne Phased Array Radar (APAR)

- Needed for:
  - Orographic precipitation studies

# Disdrometers

- Needed for:
  - Orographic precipitation studies
- Needed improvements:

# Laser Air Motion System

- Needed for:
  - Vertical turbulence and wind structure for clear-air turbulence
  
- Needed improvements:

# Network of Flux Towers

- Needed for:
  - Boundary-layer measurements (eddy covariance sensors, state variables, and atmospheric composition) at several levels
  
- Needed improvements:

# Radiosondes

- Needed for:
  - Just about everything
- Accessibility:
  - Standalone soundings no longer part of LAOF
  - Many systems in the community