

PECAN Mission Selection Process

- 1) Daily forecast discussions, open to all, will be held at 3 pm, starting Friday 29 May.
- 2) Plenary meeting immediately following the forecast discussion.

Proposals for any mission (MCS, CI, bore, LLJ) for the Night 1 or the following night (Night 2) presented at the plenary meeting and discussed.

- 3) The Mission Selection Team (MST) will meet following the plenary meeting to decide on the proposal(s) for Night 1 (definitive plan) and Night 2 (tentative plan)

Mission Selection Team

- 1) MST Chair: in charge of the overall mission
- 2) Ops Director (Vidal Salazar or Jim Moore)
- 3) UWKA flight scientist
- 4) P-3 flight scientist (from 6/14 only)
- 5) DC-8 flight scientist (from 6/28 only)
- 6) MCS scientist
- 7) CI scientist
- 8) Bore scientist
- 9) LLJ scientist
- 10) Mobile radar coordinator
- 11) Sounding coordinator
- 12) MP coordinator
- 13) S-POL + FP coordinator
- 14) Forecast Team Leader

MST Chair role:

- Facilitator and communicator, not a rep for any given mission proposal.
- tie-breaker for irreconcilable conflicts.
- Moderator of the discussion towards a speedy resolution
- IOP Director coordinating IOP.
- MST chair must be located in Hays.

Mission prioritization:

The Facility Request and EDO call for 10 MCS missions, 5 bore missions, and 5 CI missions. These numbers will remain of central guidance in the MST's daily planning, as the field phase progresses.

Fundamental principles:

- 1) Best achievable science
- 2) Fairness to all mission objectives
- 3) History of mission attempts and successes

CI and bores are difficult to predict and relatively short-lived, so they do not need as high a level of forecast confidence as MCSs in order to call for a CI or bore IOP.

In other words, missions are not decided solely on the highest forecast probability of occurrence.

LLJ missions are only called on a non-interference basis

Only one of four mission types are selected for Night 1 (definitive plan) and Night 2 (tentative plan): MCS, CI, Bore, or LLJ missions.

Each mission has its own deployment and sampling strategies and objectives.

No mixed-objective or multiple-target missions will be called for. Targets of opportunity may arise during IOP progression, and thus some IOPs thus may satisfy multiple objectives.

The mission, however, be charged toward the mission count for the mission that was originally selected