

DISCUSSION TOPICS.

The questions listed below frame some of the issues that appear to be important to address as part of the preparation for proposing a plan in accordance with the "Goals" statement. Additional questions will have to be added, specially to the F series. Answers to these questions will, hopefully, generate large segments of the material for the IN-WG contribution to the ICE prospectus.

Where indicated, initial inputs are expected from the individuals identified in brackets. Where no names are given the field is open to any and all. First round of inputs should be posted by the end of September. Identifying the topic number on the email subject line would be helpful.

1. Wave cloud experiment.

- W1. Does evidence in hand indicate what modes of ice nucleation dominate in wave clouds at different temperatures, and either in mid-continental or west-coast environments? How far can we go in answering this? *[Andy and Al]*
- W2. How serious is the doubt that ice crystal concentrations were seriously underestimated by past measurements? This question arises from Lawson's data with the CPI and from the nearly ubiquitous exponential size distributions of ice crystals. The focus should still remain on wave clouds to the extent possible.
- W3. What are the development steps necessary toward an airborne IN detector in wave cloud inflow air? Clearly, this is linked to question 1. *[Dave and Harry]*
- W4. What additional aerosol and cloud parameters need to be determined and with what accuracies in order to perform the wave cloud experiment? Are we ready for this, or when will we be ready? *(Marcia and Andy)*
- W5. What models could be used for the designing and evaluating the wave cloud experiment?
- W6. What laboratory experiments make sense as complements - in preparation and in evaluation - to the field experiment?

2. Fundamental questions.

- F1. How compelling is the evidence that evaporation enhances the number or activity of IN? What are the details known so far? How to become more secure on this issue? *(Harry and Paul)*
- F2. What are the strongest arguments for connecting dust with IN? *[Al and Dave]*

