

## **DRAFT DISCUSSION TOPICS.**

After writing the notes of the Everett meeting of the IN-WG it seems to me that there are some questions that would be useful to discuss and debate. Answers to these questions, and to others that will no doubt emerge, will be useful for the review to be given at the March workshop and will be needed in order to write the ICE prospectus.

1. 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? (Perhaps Andy could take a jab at this for the cold temperatures and AI for the moderately cold ones.)
2. 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. (I am not sure who can address this – many views would be useful.)
3. 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 might want to take this on.)
4. 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? (Could Marcia and Andy address this one?)
5. 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 Marcia worked on this issue, if I am not mistaken.)
6. What are the strongest arguments for connecting dust with IN? (AI and Dave)
7. What models could be used for the wave cloud experiment?

In addition, we need ideas on what educational activities we'd undertake as part of ICE related to ice nucleation. Then there is the general concern to keep looking for important things we might be missing in the discussions so far.