

Update on AVA

Original Concept Split into Two Pieces:

X-band developments taking place in the context of CASA

with extensive discussion coming at the CPWG/CMWG Meeting on CLASIC IOP CASA results

Scanning cloud radar idea has morphed into a two-frequency system active/passive system

in order to facilitate along the path retrievals of liquid water

Supporting simulations in favor of the scanning radar are essential

Current Status of Supporting Simulations

Pavlos Kollias and Ed Luke have developed a detailed simulation system (including multiple frequencies, realistic beam widths, bulk water or bin microphysics treatments of cloud particles) for estimating radar returns from model output fields

Working with Eugene Clothiaux they have retrieved LES/CSRM fields from

ATEX (Andy Ackerman)

ASTEX (Andy Ackerman)

Amazon (Marat Khairoutdinov)

and run their radar simulator through these fields.

But, working with Eugene Clothiaux, edge effects in their simulations were too important and the fields needed to be expanded in size before application of the radar simulator to them.

In August, we renewed our efforts to get the simulations moving around the full circuit of field to retrieval to radiation simulation.

To move forward at this time we need **Ed Luke's** time. Is the RPWG interested in playing a major role here?