5.0 MST RADAR NETWORKS AND CAMPAIGNS: SESSION SUMMARY AND RECOMMENDATIONS

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The session dealt with discussions of scientific reasons for campaigns and networks, as there are for instance: the determination of sources of propagation and dissipation of atmospheric disturbances and waves. Also measurements of different parameters with different methods and instruments, particularly the use of radars operating at different frequencies, was felt to be very useful. Special campaigns for comparison of different methods using the same sort of instruments or complementary instruments, e.g., radar and radiometers, were also deemed to be of special interest. Suitable combinations of instruments could be: MST radars, incoherent-scatter radars, low- and medium-frequency (partial reflection) radars, meteorological radars, acoustic sounders, microbarographs, radiosondes, radiometers, multifrequency MST radars, lidars, satellites, rockets, balloons, aircrafts and gliders.

Some dominant campaigns in which MST radar were or will be included in addition to many other instruments, are: ALPEX (Europe), COLDFRONTS (Australia), FRONTS, GALE, MAP/WINE, MAC/SINE, MAC/EPSILON, MESOGERS, PRESTORM, TOGA, STATE and WAGS. Two networks are presently in operation: Colorado Wind profiler and Penn State University Network.

A new idea of tutorial projects was brought up, since it was felt that exchange of experience and mutual training of researchers and operators of radar science and those of meteorological science would be most essential. It was particularly suggested that during any such experiments, project or campaign scientists of both these disciplines should cooperate as closely as possible.

Another way to improve mutual understanding of problems and to facilitate interpretation of radar results and the atmosphere phenomena would be to hold training courses, schools or seminars. It was strongly recommended by the workshop participants to work on plans for preparing and holding such courses to train meteorologists and radar scientists and v.v. Particularly the experience gained and the comprehensive material collected during the three workshops on technical and scientific aspects of MST radar would be a very useful basis for such courses.

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