Updated Radiosonde Launch Plan 3 March 2015

Routine launches from the fixed PISAs

(Nsondes * Nmissions)=TotalPerMission Better for the DA component of the experiment to help specify mesoscale environment for analysis of the cases afterwards

- Regular launches are more advantageous for building composites •
- MCS: Launches every 3 hours: 00, 03, 06, 09, 12 UTC
- FP-3 and FP-6 could launch additional radiosonde based on conditions[†]
- Bore: Launches every 3 hours: 00, 03, 06, 09, 12 UTC, with additional launch just prior to bore passage (6*5)=30
- CI: Launches every 3 hours: 00, 03, 06 UTC •
- FP-3 and FP-6 would also launch at 01:30 UTC during each CI mission
- LLJ: Launches at 00, 03, 06, 09, 12 UTC
- FP-3 and FP-6 would also launch at 01:30 UTC during each LLJ mission
- Total if all of these are launched: 120 per FP (not counting the extras from FP-3/6)

Mobile PISA sonde launches

- MCS: 4 / mission, with launches every 90 min from specified start time (4*10)=40
- Bore: 2 ahead of bore (probably on regular time schedule) with ideally one of these going up about 15-30 min ahead of the bore, and one 2 hours after bore passage
- (4*6)=24CI: Launches every 3 hours: 00, 01:30, 03, 06 UTC •
- LLJ: Launches at 00, 01:30, 03, 06, 09, 12 UTC •
- Total if all of these are launched: 115 per MP

Other points:

- The true launch time will be 30-min before the specified time (so that the radiosonde is in the mid-troposphere by the nominal launch time)
- CI mission would prefer to have additional missions that use fewer radiosonde resources, if possible. Do we change the FP plan for CIs to be 2 sondes per mission (at 00 and 03 UTC) so that 7 missions (instead of 5) can be supported?
- The short-term forecasts would benefit greatly if there were 18 UTC launches at the • FPs, especially in the western domain (FP-2, FP-5). Do we have the ability to purchase an additional 20 radiosondes per site (as these would only be launched on days when we anticipate one of the primary PECAN missions)? Do these two FPs have manpower to launch them, as this greatly extends their operational day?
- The PECAN project needs to have a consistent prelaunch routine for all radiosonde launches. Holger Vömel (EOL) will organize a conference call among all radiosondelaunching facility leads to discuss this (and other radiosonde issues) in later March.

(3*5)=15

(5*10)=50

(5*5)=25

- (3*5) = 15
- (6*6)=36

[†] FP-3 and FP-6 have 150 sondes, whereas the other FPs have only 120.