RF11

Dropsonde Operator: Holger

Flight pattern: B2, Pacific

Goal: 32 drops along one lawn mower pattern

Actually launched: 21

Issues: 1

Today's flight started out smooth. I loaded 18 dropsondes at the beginning of the flight and loaded another 16 after we had dropped 15 sondes. We didn't close the baggage compartment door well past reaching 40,000 ft. The hope connected to both procedures was to keep to sondes and the launcher system a little warmer.

I was able to launch the first 20 sondes without any complication. Up to that point we did not have to maneuver any inclement weather and all sondes worked. The 21st sonde got stuck in the launcher. I was able to fish it out and launch another sonde without any problem. The next three attempts to launch a sonde all ended in a sonde stuck in the launcher refusing to come out when the valves opened. At that point Dave Raymond with my full support decided to return to base. He insists that the launcher problem is fixed before we return to operation.

I checked the launch tube several times, but found no obstruction. Therefore, the current hypothesis holds that the valve opens too slow, releasing all pressure before the sonde has a chance to move past the gate value. Today's flight saw temperatures below -70 C and significant amount of cloud particles at flight level, combined with some minor turbulence.

I expect Laura later this afternoon, who will bring some heaters that we can install on the launcher. Tomorrow is maintenance day, which we need to use to solve this issue.