

RF07

When loading the sondes before the flight today, I noticed there's a significant difference in the texture of the tubes. Some of them are very smooth and polished, others are pretty rough. I have a log of which ones are smoother and which ones are rougher, to see if there's any correlation to sondes ejecting cleanly.

During the flight, there were two sondes that failed while loading. They got stuck on the safety gate valve lip, so had to be pulled out. I talked to Dean, and only the Global Hawk version of AVAPS has a button to restart the sounding if this happens, so the only way to remedy this is to take the sonde out and put it into the launcher bin to be re-loaded. One of the sondes I pulled out fine and launched. The second sonde when I tried to pull it out of the launcher I popped the parachute instead.

On Sonde 21 (ID 183640239) the parachute popped in the launch tube. So there is no actual launch on this sounding. When I tried to launch the sonde nothing happened, so I went back and pulled it out. I'm not sure if the parachute popped prematurely or if it only happened at launch. Either way it stayed firmly in the launch tube even when the gate was open, and did not slide out at all. By the time I got the sonde out and another sonde loaded, it was time for the next drop anyway.

On the last sonde (190520083) the sonde appeared to die at launch. This may be the first failure we've seen due to the PTU module shorting out the pins. With the schedule so far, I haven't been able to apply tape to any sondes. Now that it's been an issue, I'll see if there's time to at least fix some of them tomorrow morning. Otherwise, Saturday's maintenance day will probably be spent getting some sondes fixed. Back to back flights don't allow much time to make changes between flights. We're not allowed to bring the sondes out of the airport, so that means we can only mess with them on maintenance days.