
From: James Hammond
Sent: Friday, November 20, 2020 8:49 PM
To: hab@scienceheads.org
Subject: [hab] HAB5 - WCOM - Weather and Flight Forecast - D-1

Hello HAB5 volunteers,

Here is your WCOM report for T-1 Days from launch.

Compliance:

Our "Notice to Airmen" (NOTAM) has been filed as #ELB11/055. No issues.

Weather

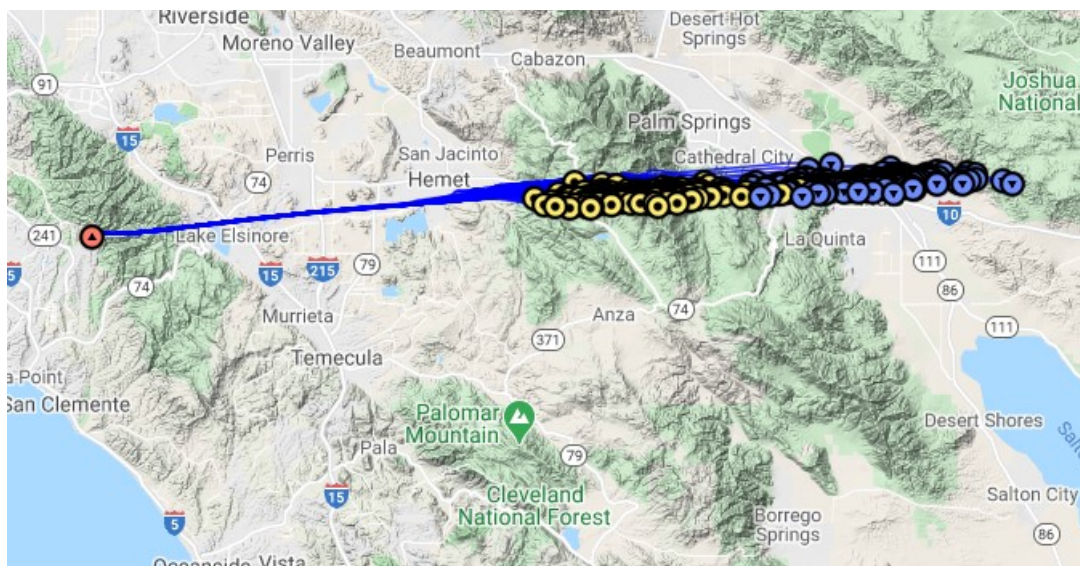
Weather forecasts should be very reliable at this point. The continuing bad news is that we are now seeing **significant cloud cover** at the launch site throughout the day.

Weather.com forecasts a mostly cloudy day, with a high temperature of 75F. At launch time, they predict a temperature of 69F, and winds from the SSW at 3mph.

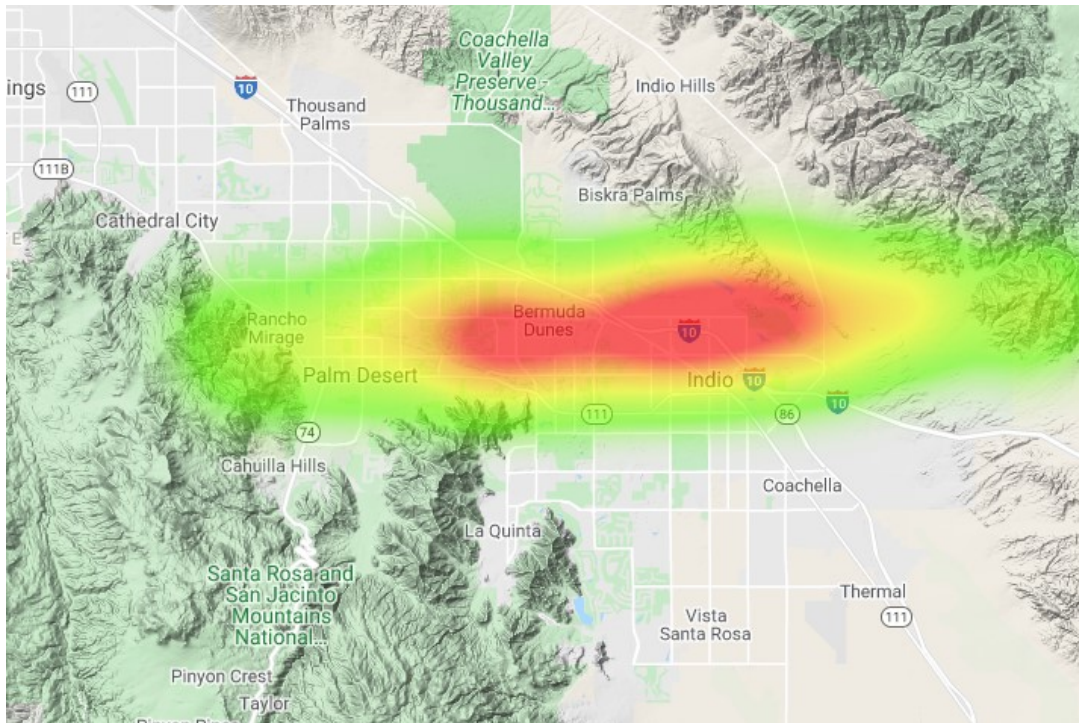
Wunderground.com also predicts a mostly cloudy day with a high of 74F. Launch time (10am) forecast is for 68F, with 66% cloud cover, and surface winds of 3 mph from the SSW, building to a peak of 7 mph from the SW at noon.

Flight forecasts

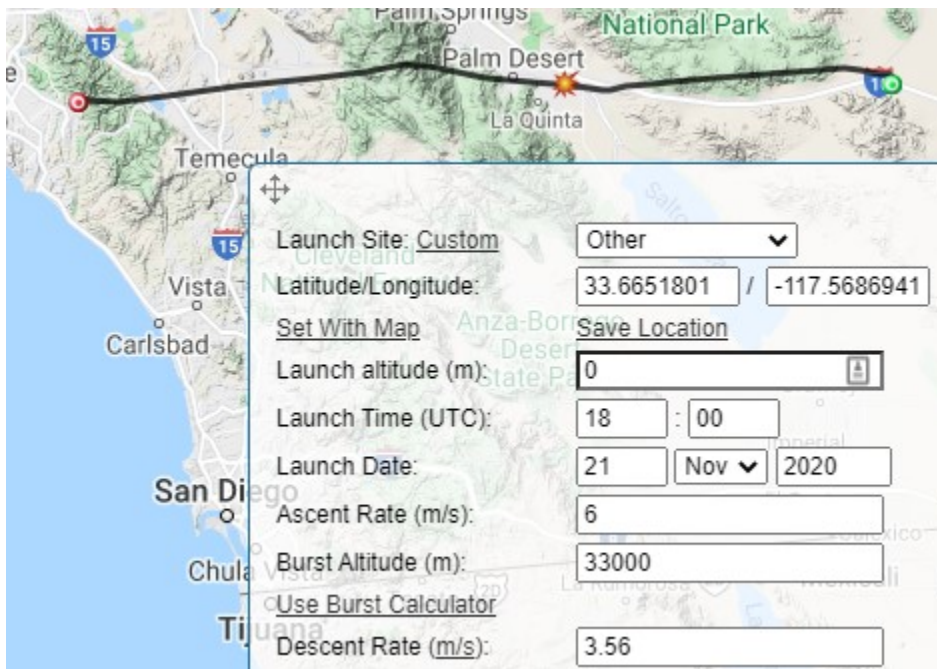
Flight predictions with the final, slightly higher payload weight, and increased neck lift have shifted slightly southward. For a 10am launch, the flight path travels to the ENE throughout.



Landing predictions for the 2210g payload / 4373g nozzle lift show highest probability between Palm Desert and Indio, and almost entirely away from mountains. This is a highly favorable landing zone. If the flight goes longer than expected, though, we could end up in much more rugged terrain.



Since we've had less-than-accurate predictions with the ASTRA planner software on the past few flights, I also ran predictions with the CSUF Landing Predictor (predict.habhub.org), which predicts a similar path, but with a landing considerably further to the east. Since recent flights have resulted in longer-than-predicted flights, I am inclined to give this prediction significant weight.



Final flight predictions will be made by LOPS in the hour prior to launch tomorrow morning.

Happy flying, everyone!

Thank you,
--James Hammond
HAB5 WCOM