From: James Hammond
Sent: Tuesday, November 17, 2020 12:36 PM
To: hab@scienceheads.org
Subject: [hab] HAB5 - WCOM - Weather and Flight Forecast - D-4

Hello HAB5 volunteers,

The flight prediction website app was not functioning yesterday, so we've delayed one day on the long-range forecast. Here is your WCOM report for T-4 Days from launch.

Compliance:
So Cal TRACON has confirmed receipt of information regarding our launch, and given instructions for notifying them that match what we have done in the past. No issues.

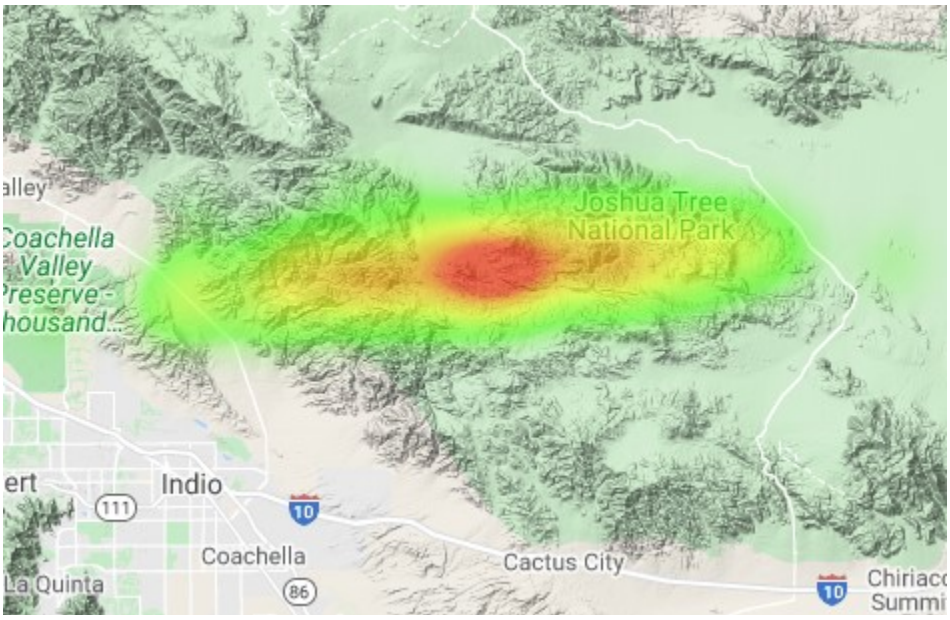
Weather
Weather forecasts may vary significantly from what they are showing now, but for now the forecast is for good flying weather.

As of today, Weather.com forecasts a sunny day, with a high temperature of 72F, and winds from the NNW at 9 mph.

Wunderground.com also predicts a sunny day with a high of 72F. Launch time (10am) forecast is for 65F, 16% cloud cover, and surface winds of 4 mph from the NE, building to a peak of 9 mph from the WNW at 2pm.

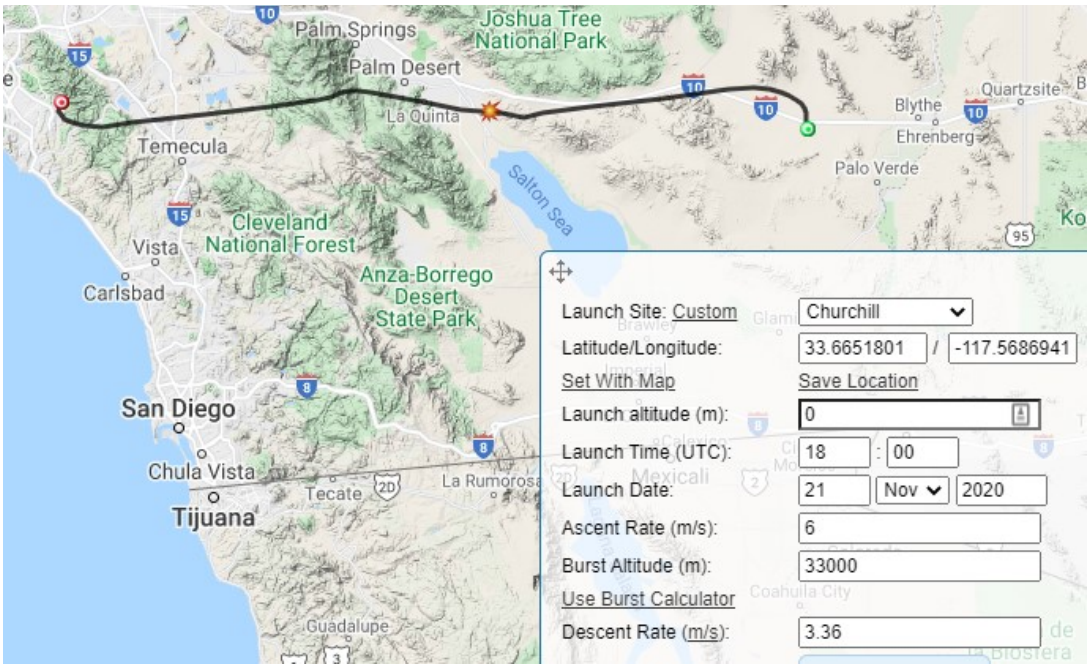
Flight forecasts
Flight predictions have shifted northward since my first simulation, which forecast a landing south of Indio. For a 10am launch, the flight path travels to the ENE throughout.

Landing predictions for the 1972g payload / 4100g nozzle lift show highest probability in the hills and mountains of Joshua Tree National Park. If this flight prediction was what we saw on the morning of the launch, we would add helium to shorten the flight and bring the landing zone back toward the flat, open areas around Indio.



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 more

easterly path, and 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.



Next WCOM update will be for D-2, Thursday.

Thank you,
--James Hammond
HAB4B WCOM