

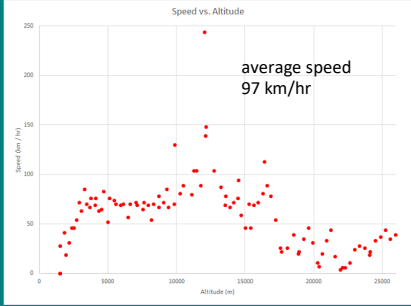


Stratospheric Conditions: A Near-Space Balloon Project

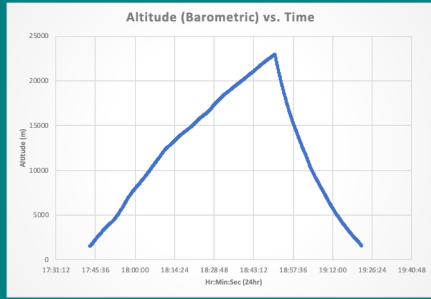
Emilie Prudhomme, Alondra Patino, Roham Wahabzada, Monte Howell, Addison Fredeen, Roberto Rodriguez, Jonah Hedlund, Winnie Kortemeier, Elizabeth Tattersall, Thomas Herring--Western Nevada College



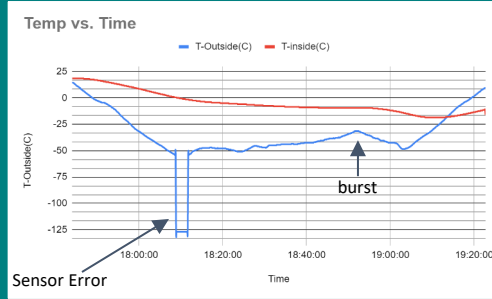
Speed vs. Altitude



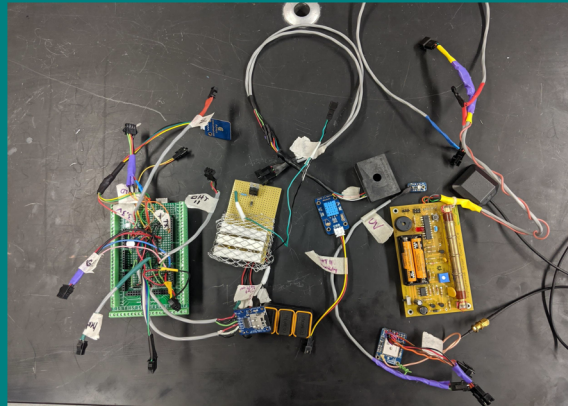
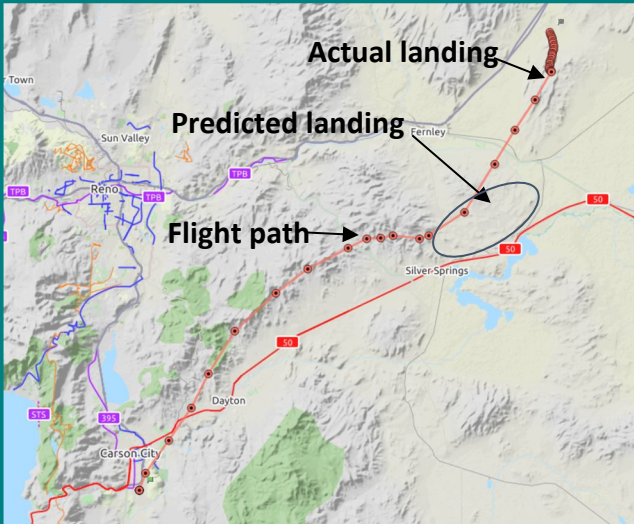
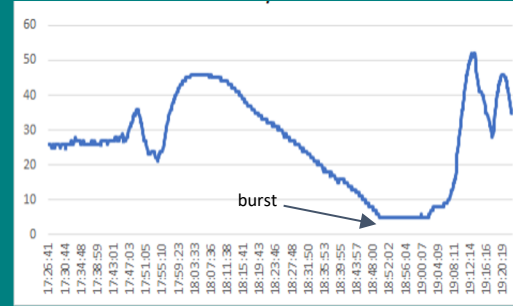
Altitude vs. Time



Temperature vs Time

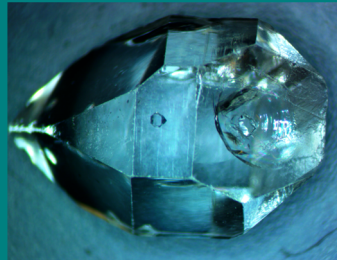


Humidity vs Time



Payload:

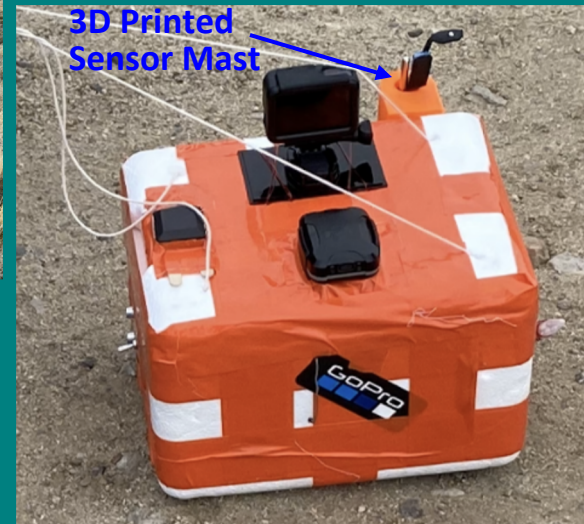
- Arduino
- RobotDyn (built in SD)
- Relative humidity sensor
- Heater Module
- Temperature sensor
- GPS chip
- Securing hardware
- Quartz crystal



Quartz crystal with fluid inclusions was not cracked by the low temperatures or pressures



Payload was dented upon landing



3D Printed Sensor Mast

View of Tahoe and Washoe Lakes from 11,890m (39,000ft)



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