Project Update: 8/3/20

SAHNNEE SHIN

Assembly Types

1: Middle, initial fiberglass

2: Top (above surface), initial fiberglass

3: Top (below surface), initial fiberglass

4: Bottom (above surface), initial fiberglass

5: Bottom (below surface), initial fiberglass

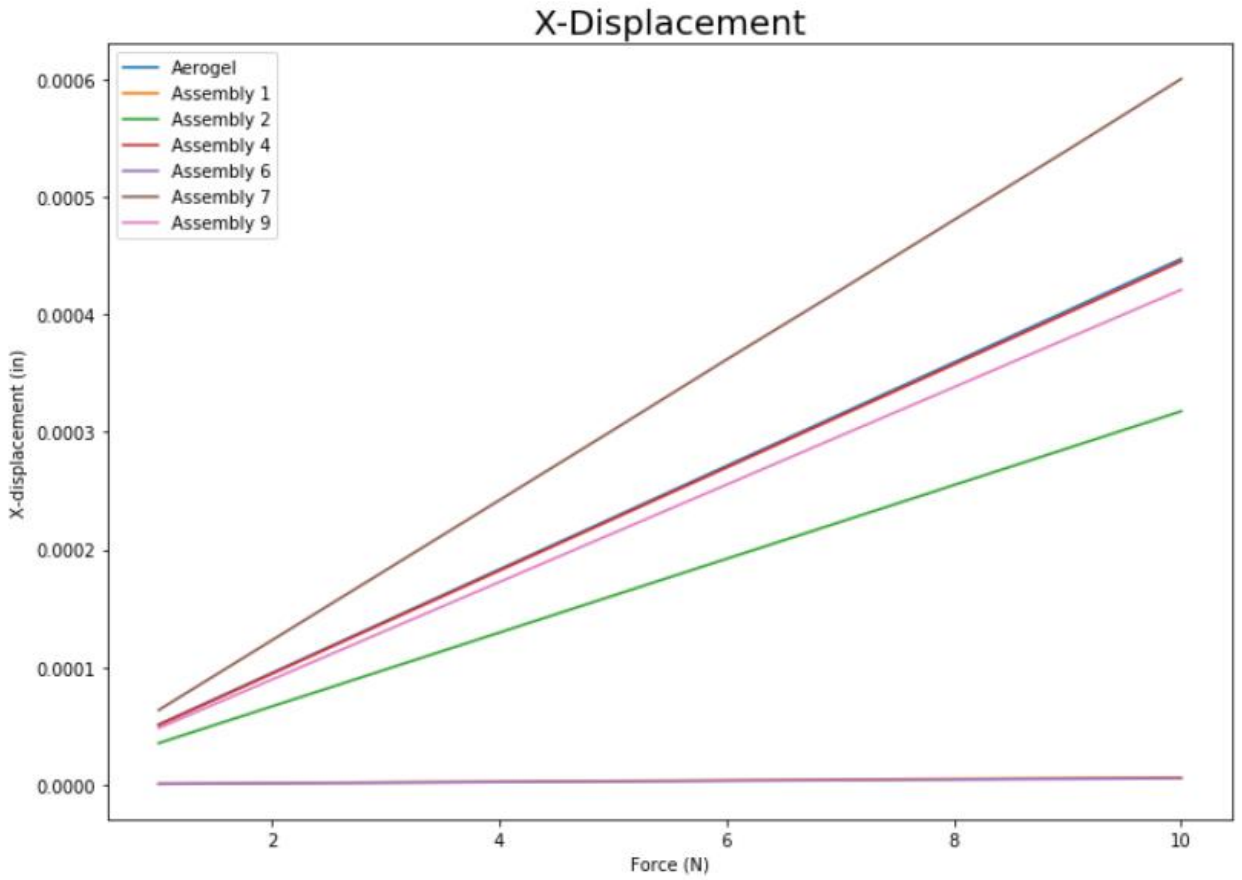
6: Middle, 2.15 in fiberglass

7: Top (above surface), 2.15 in

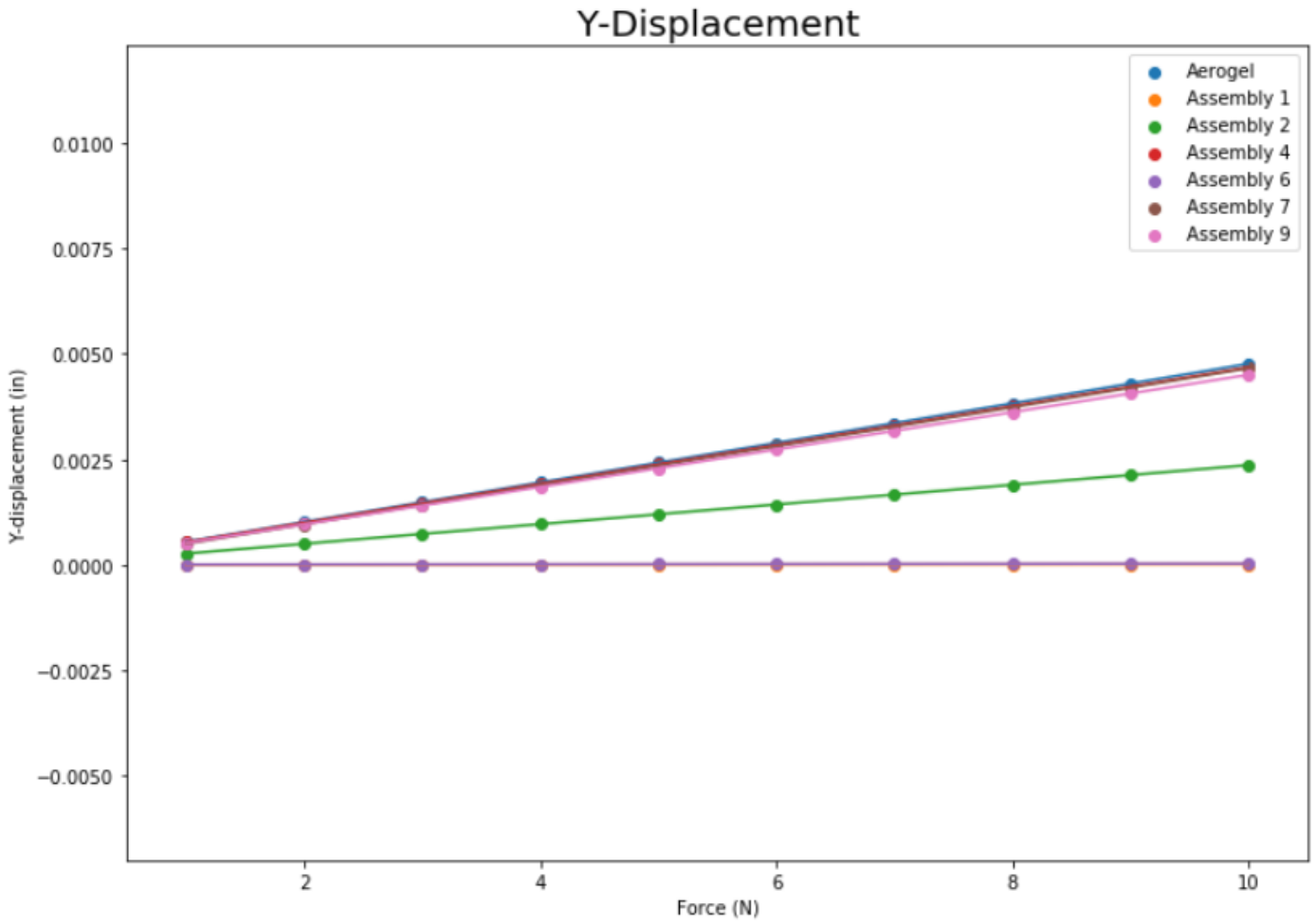
8: Top (below surface), 2.15 in

9: Bottom (above surface), 2.15 in

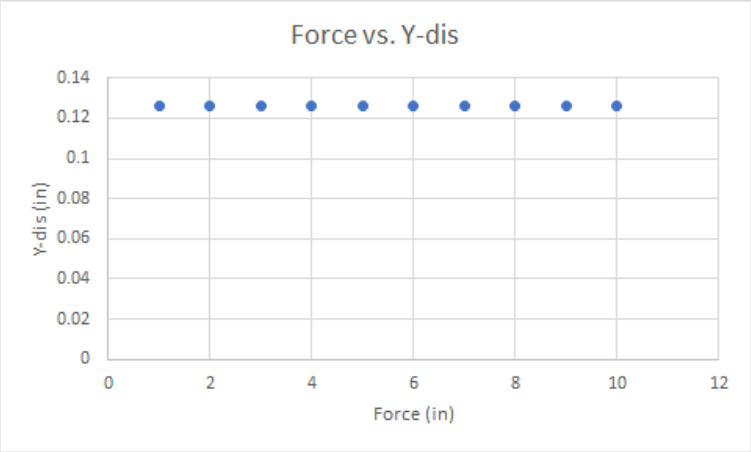
10: Bottom (below surface), 2.15 in

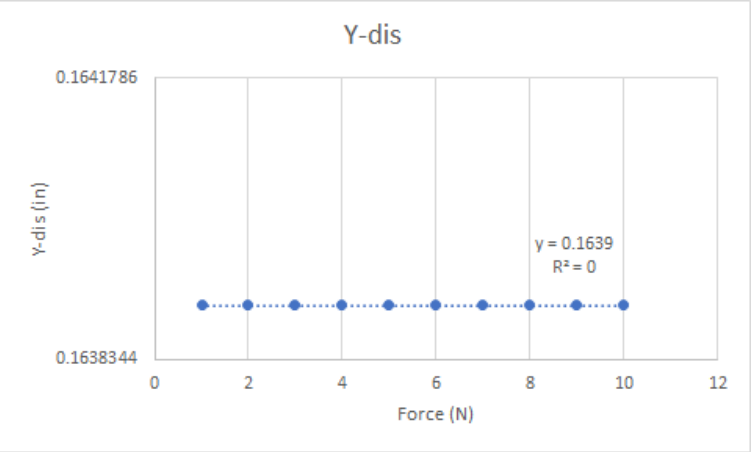


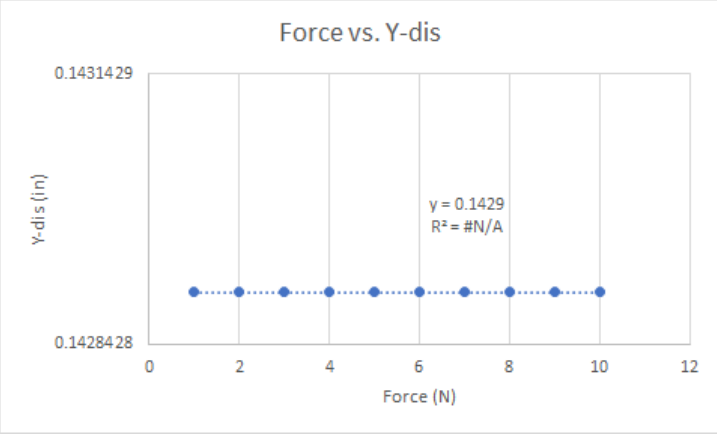
X-Displacement

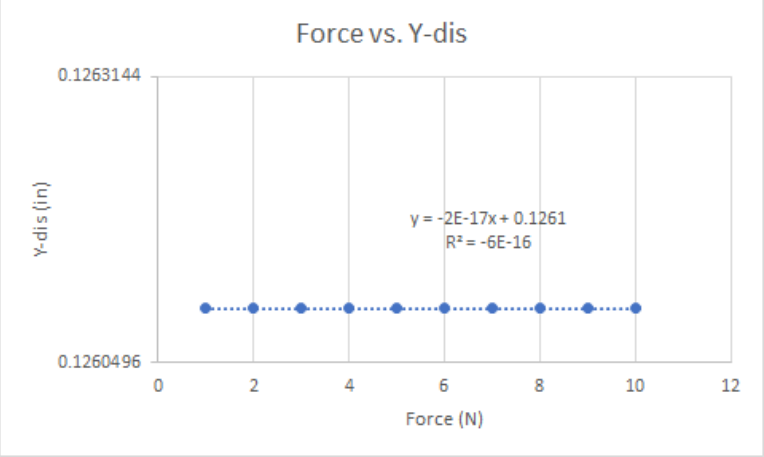


Y-Displacement









Omitted (glue for later)

- No change in y-displacement.

- Most likely due to separation of fiberglass and aerogel

- Assembly: 3, 5, 8, 10

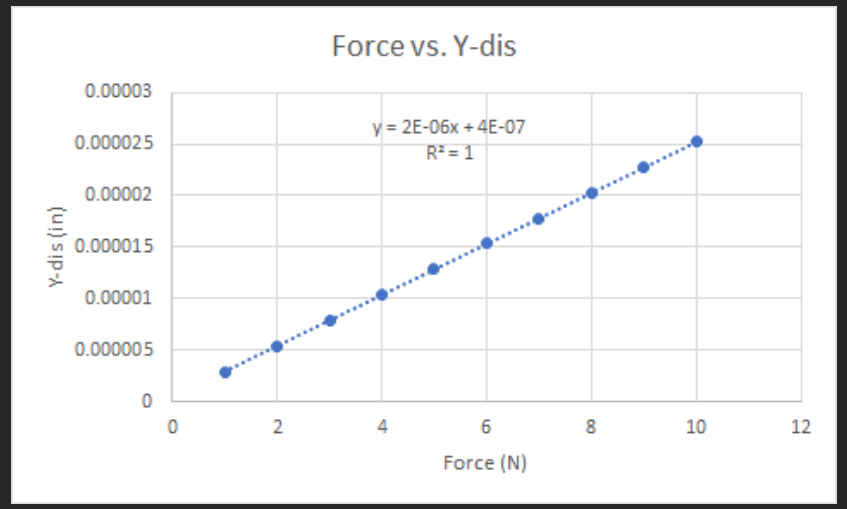
- Below surface (top and bottom)

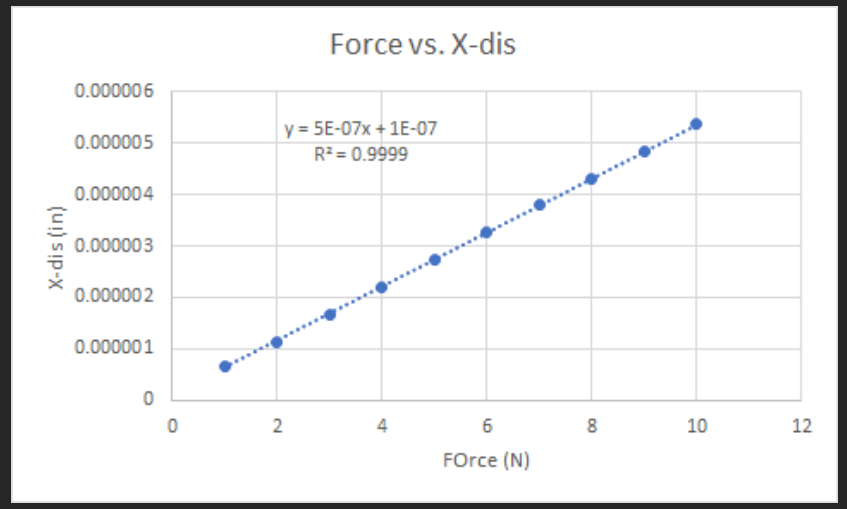
Ideal Fiberglass Location

- Assembly 6 had the smallest change in both X and Y displacements.

- Less likely to break with increased force.

- Middle of gel with 2.15 in fiberglass.





Outlook

- Test with various fiber properties:
  - Changing fiber density within 10%-90%
  - Various fiberglass dimensions (smaller than 2.15?)
- Glue separated material: 2, 5, 8, 10