Survey measurements of #1 P0Dule

• 1st P0Dule was glued on Friday, June 13, on new gluing table with a large crew
  • People; Clark, Walter, Dave, Glen, Truong, Chris(2), Arun, Joshua
• Measurements of dimensions were taken Monday, June 15, by Walter, Joshua and Peter and are reported here,

1st P0D on gluing table with steel skin template on top
Measurement from opposite edges of topside PVC frames (cm)

Horizontal width of PVC frames bulges out about ~3 mm from ends to middle. Top and bottom PVC frames are nearly flat. Diagonals are 321.15 and 321.0 cm so the frame corners are square.

Each side has 9 pins and bushings, and they have dimensions with similar similar bulge.

The thickness of the POD varies ~1.5mm. The thickness is below the top edges of the PVC frames. The top bars are horizontal (left-right) and the bottom bars are vertical (bot-top). The POD thickness is concave along the bot-top direction a the valley in the middle. The left-right direction has several local minima. Bar shape appears through the outer skin so vacuum pressure and glue kept skin glued to the bars.
Other Remarks on skin template & fibers

• the steel template used to cut the outer skins was placed on the P0D and the holes of the template were compared to the alignment pin positions in the table.
  • the left and right sides of the alignment pins in the table appear to bulge outward, 1.2 ~ 1.8 mm. We will assume the table pins as configured will define the P0D shape
  • the templates for the outer skins will need some modifications, probably 2 of the 4 bars need re-machining.

• The fibers were insert into the new #1 P0D to measure how much the mirror ends are recessed inside the PVC frame. They were measured at the ends and in the middle.
  • Fiber #1 (short 2198mm), was recessed, 4.5, 7.25, 5.0mm (end,middle,end)
  • Fiber #2 (short 2198mm), was recessed, 4.85, 6.8, 4.5mm (end,middle,end)
  • Fiber #3 (long 2338mm), was recessed, 5.4, 4.5, 5.0mm (end,middle,end)
  • fiber lengths are slightly shorter and perhaps could be increased ~2-3mm.