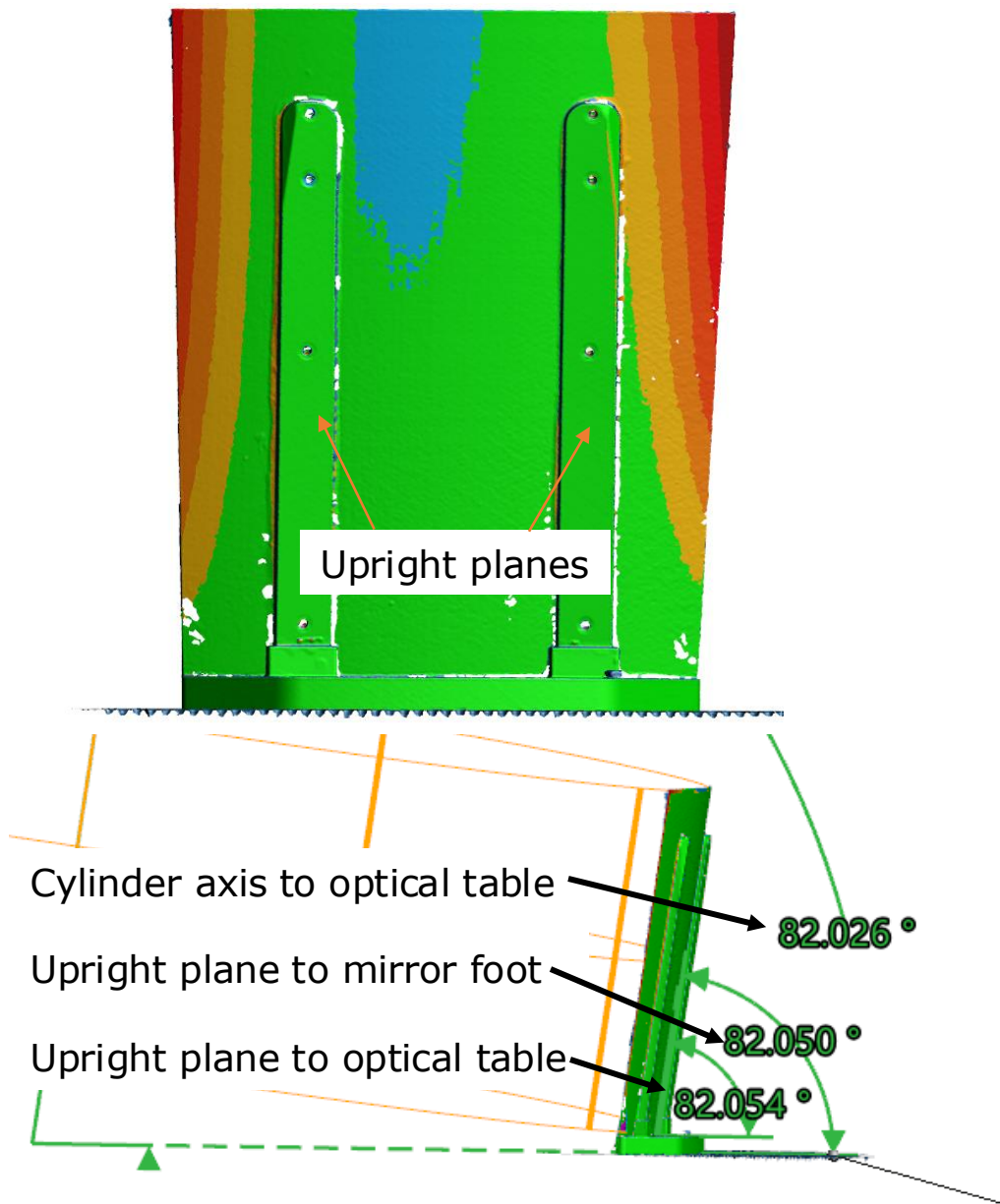
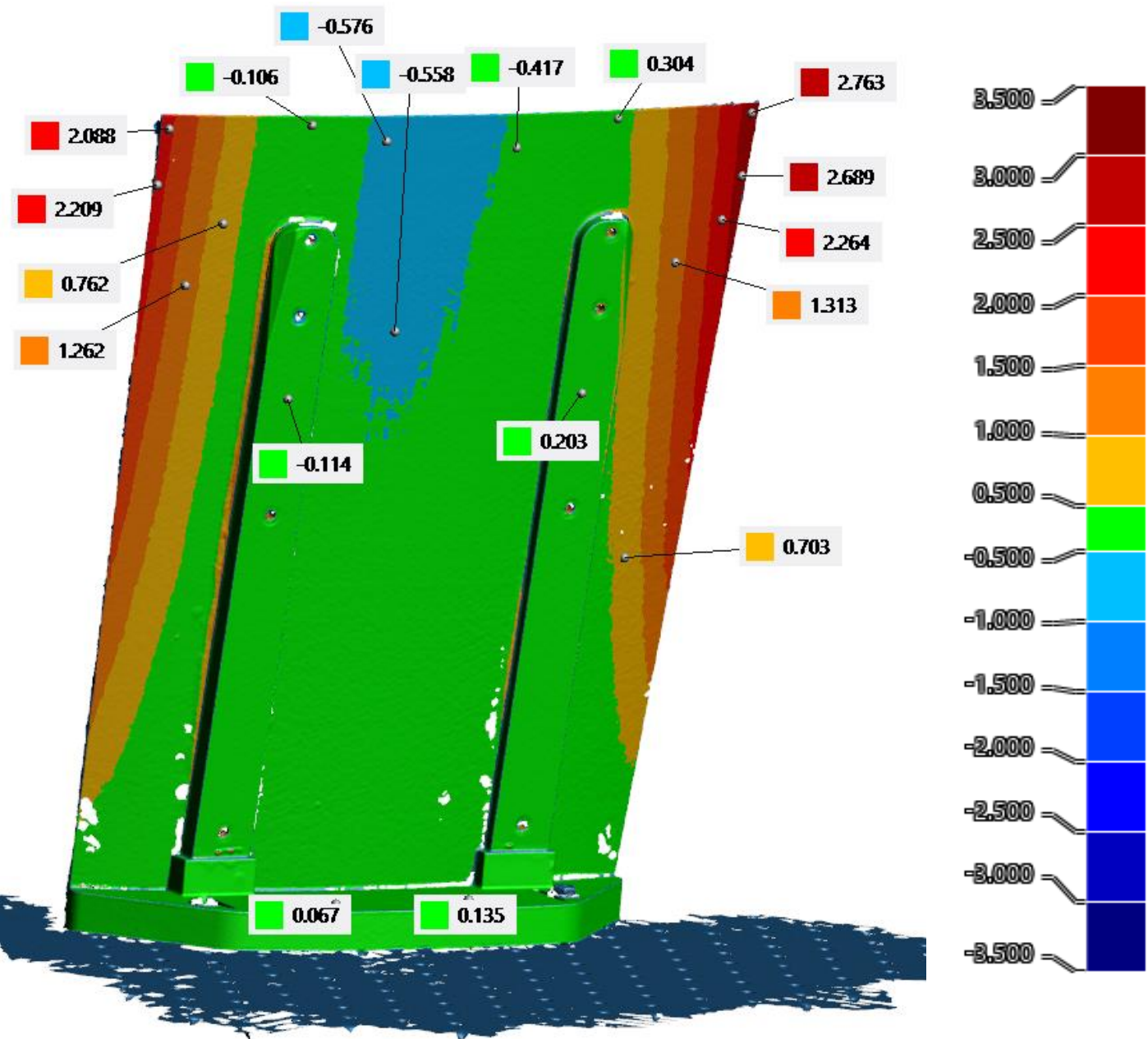


pfRICH Mirror Back scanning

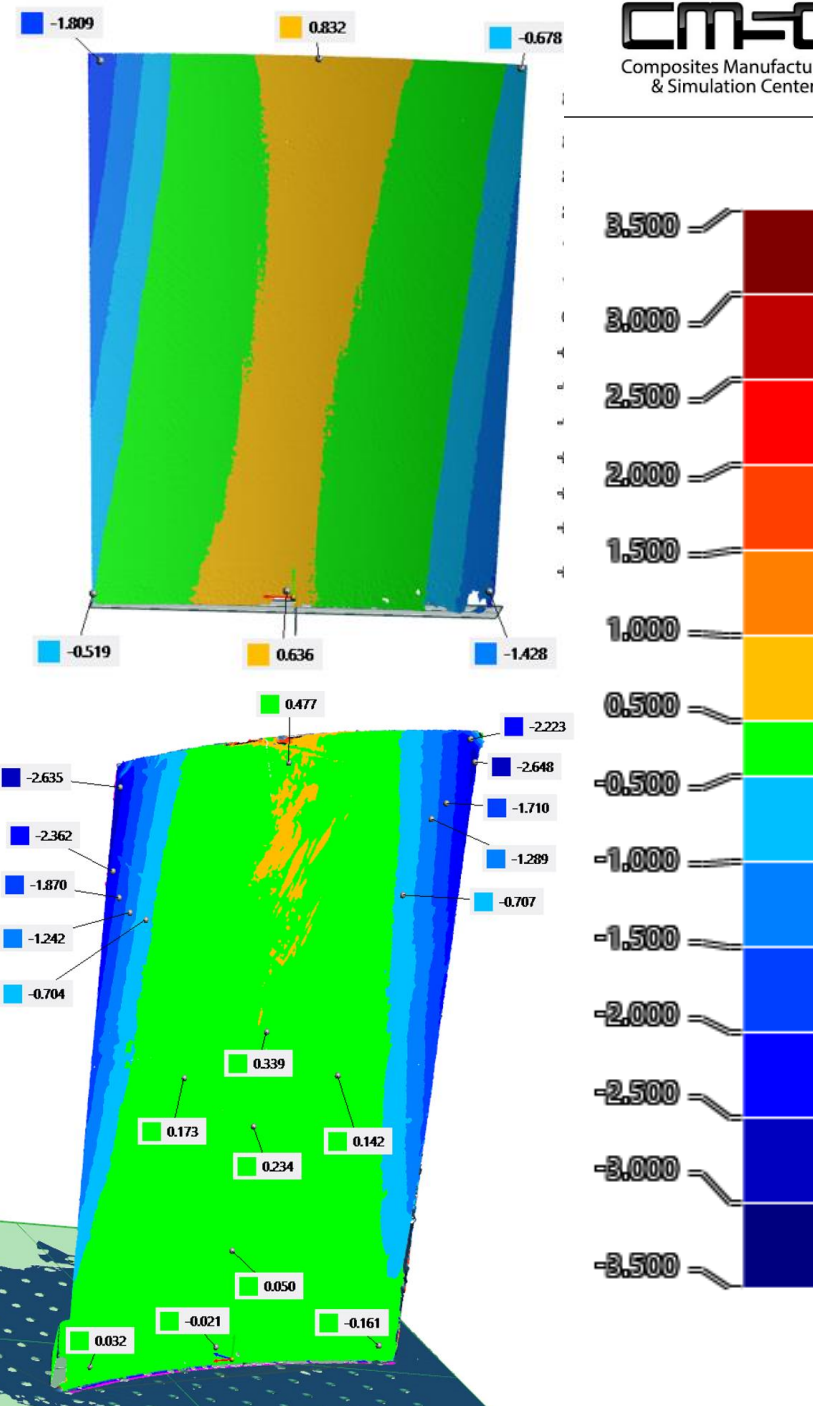
Simon Snyder-Smith, Sushrut Karmarkar, Andreas Jung

22 June, 2026



- ⬡ Before bonding
 - ⬡ 2.1 mm spring out deformation on small radius
 - ⬡ 2.6 mm spring out on large radius
- ⬡ After bonding (different part)
 - ⬡ Negligible deviation on small radius
 - ⬡ 3.1 mm spring out deformation on large radius
- ⬡ Spring-out in finished mirror at least partially present in unbonded carbon part
- ⬡ 3D-printed foot fixes spring-out on small radius

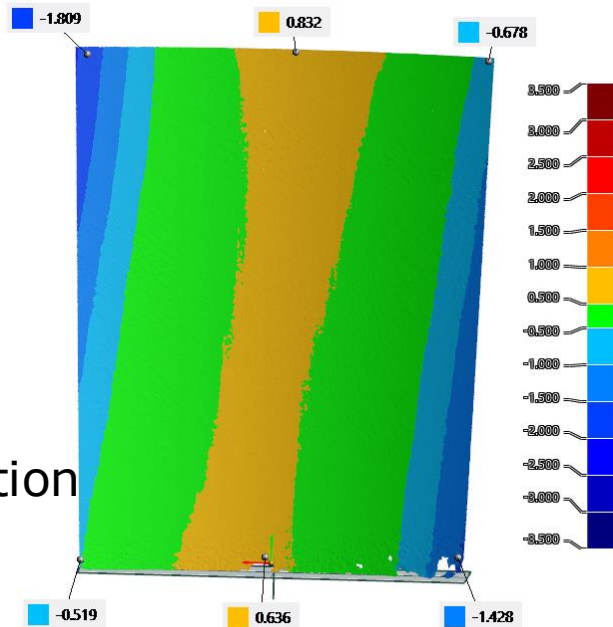
Before Bonding



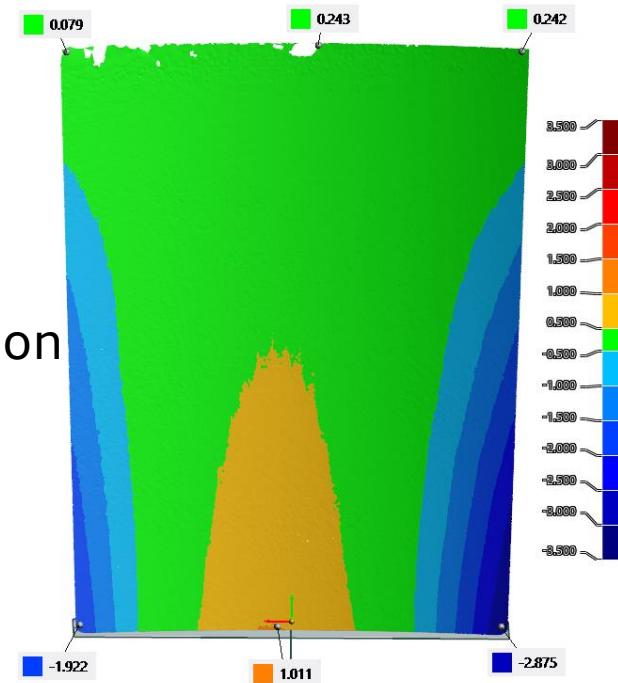
After Bonding

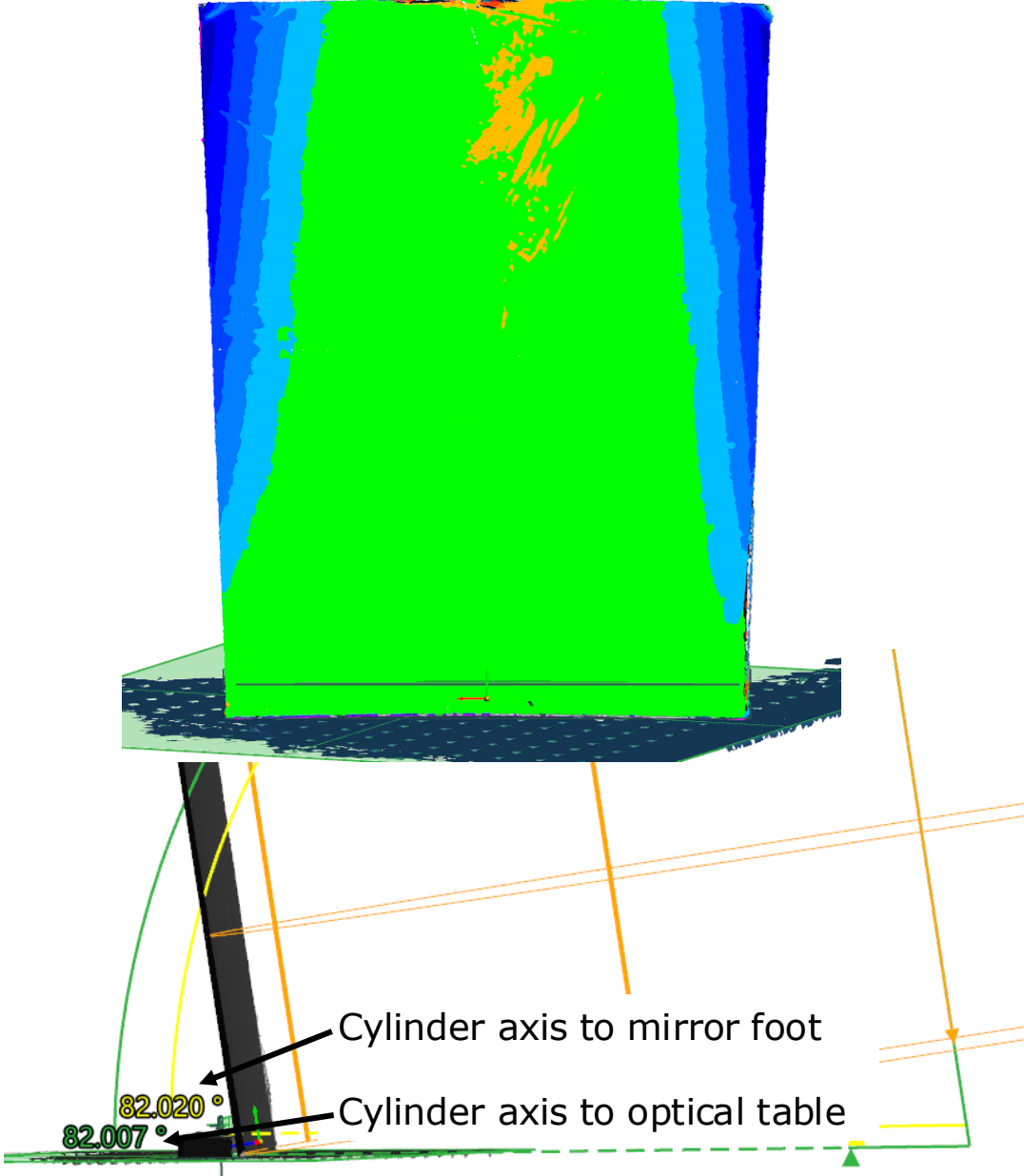
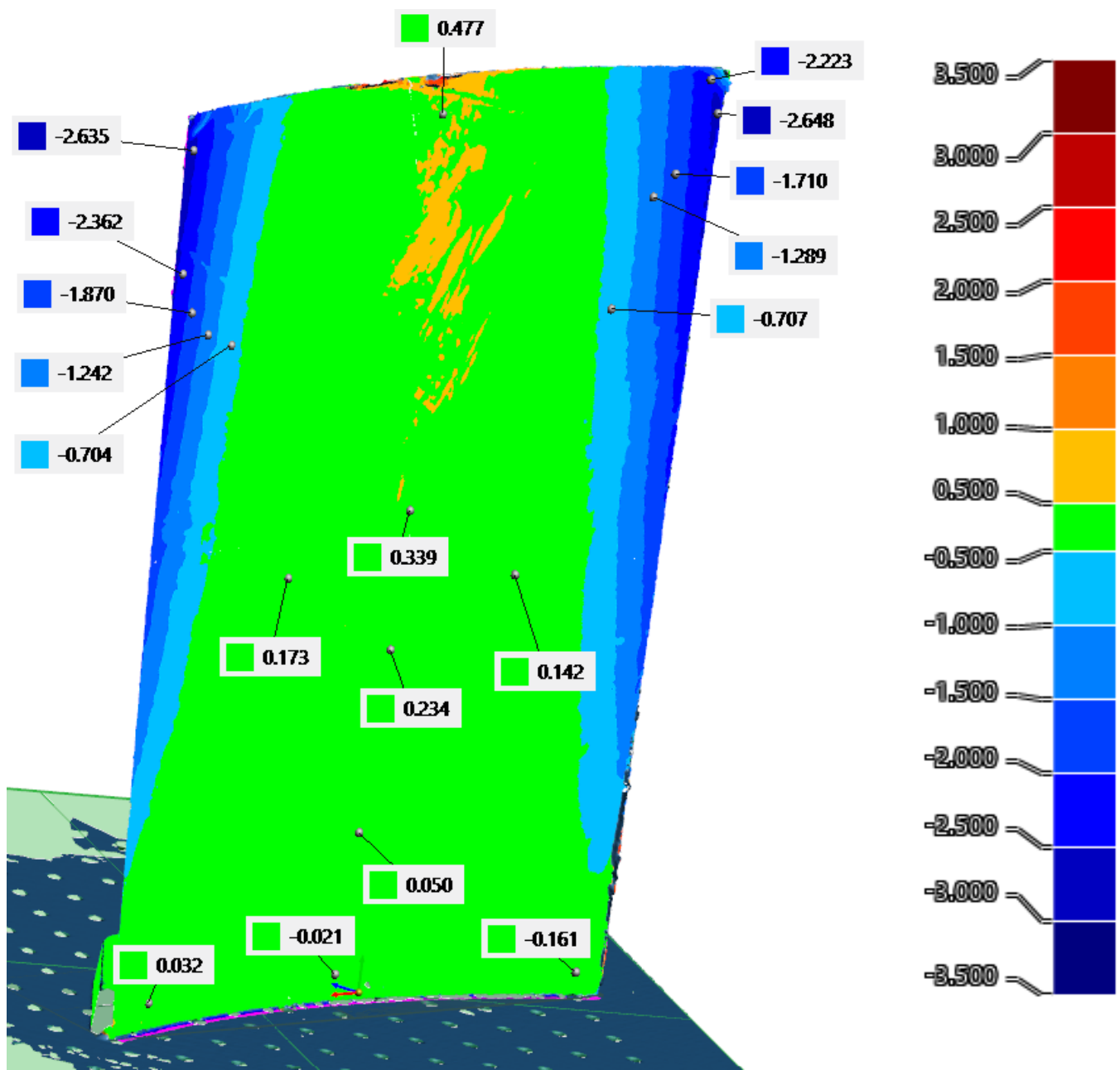
- ⬡ Sprung out small radius matches nominal large radius
- ⬡ Interesting option of intentionally flipping mirror substrate to match large radius and force small radius with bonded foot

Correct Orientation



Flipped Orientation





- ⬡ Shape is within 0.3 mm of nominal
- ⬡ No tool shape compensation
- ⬡ 3 mm deformation seen on mirror likely due to tool interactions, could be amended by new, compensated tool

