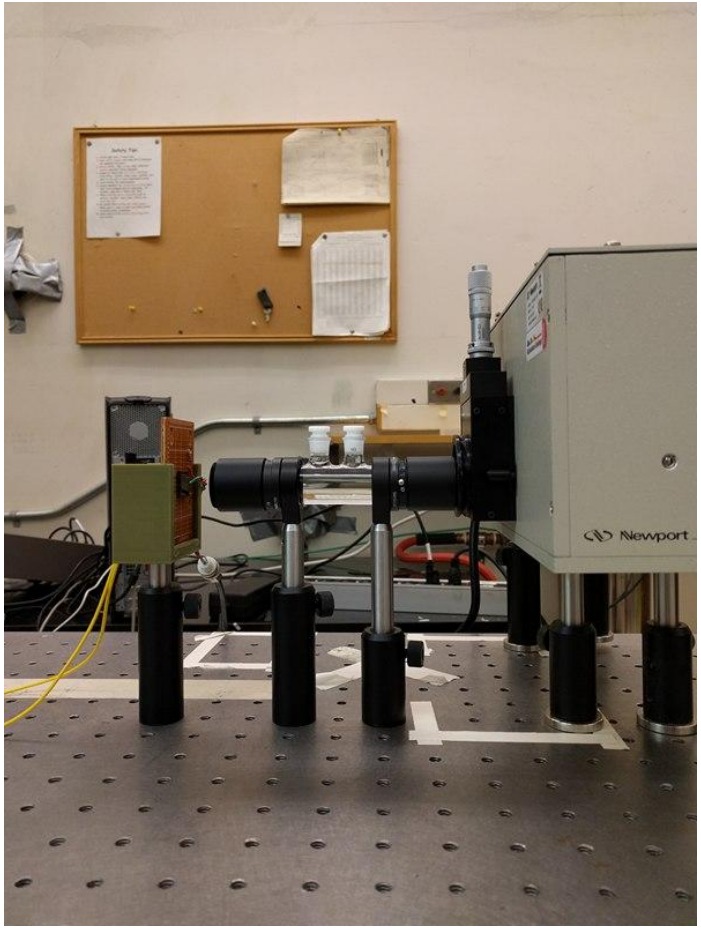
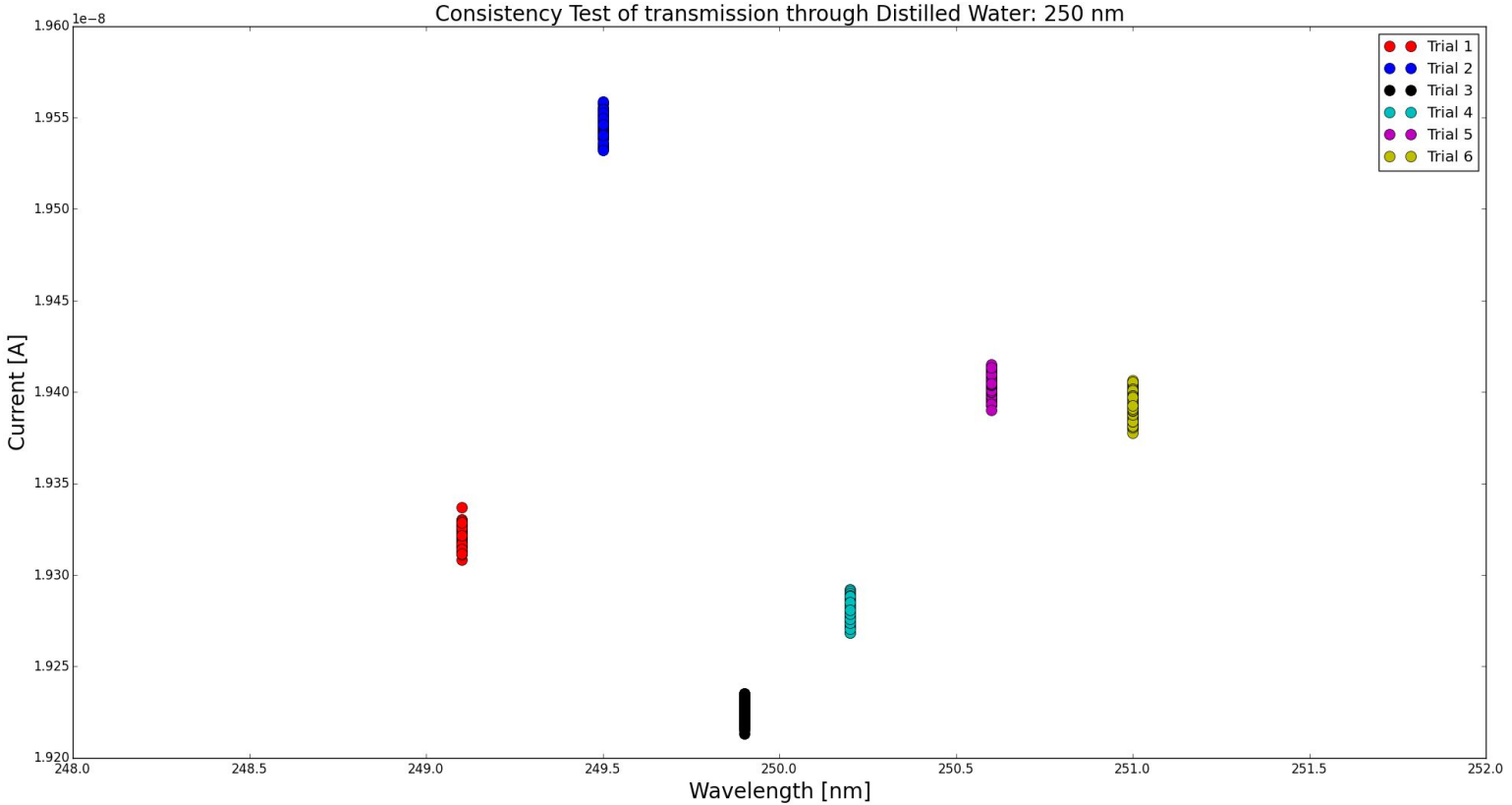
Weekly Update

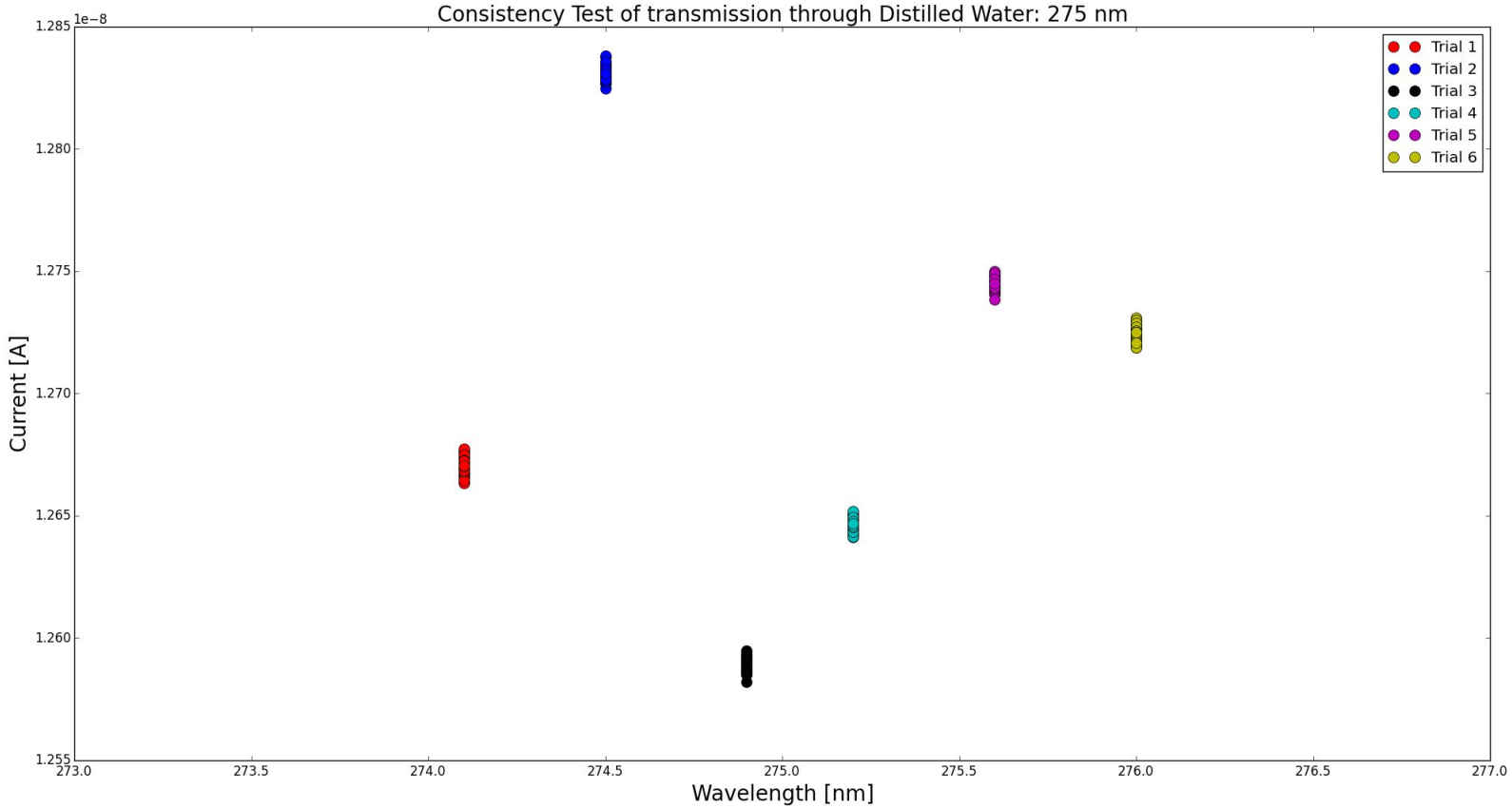
Nov 29, 2017

- Trying new setups
- This one is the better of the ones I’ve tried thus far
- Still a lot of… spread as we will see later
- I may have found a solution to this but I don’t want to be certain just yet
- Most consistent because I don’t have to move anything except the middle iris to change the water… still not the best

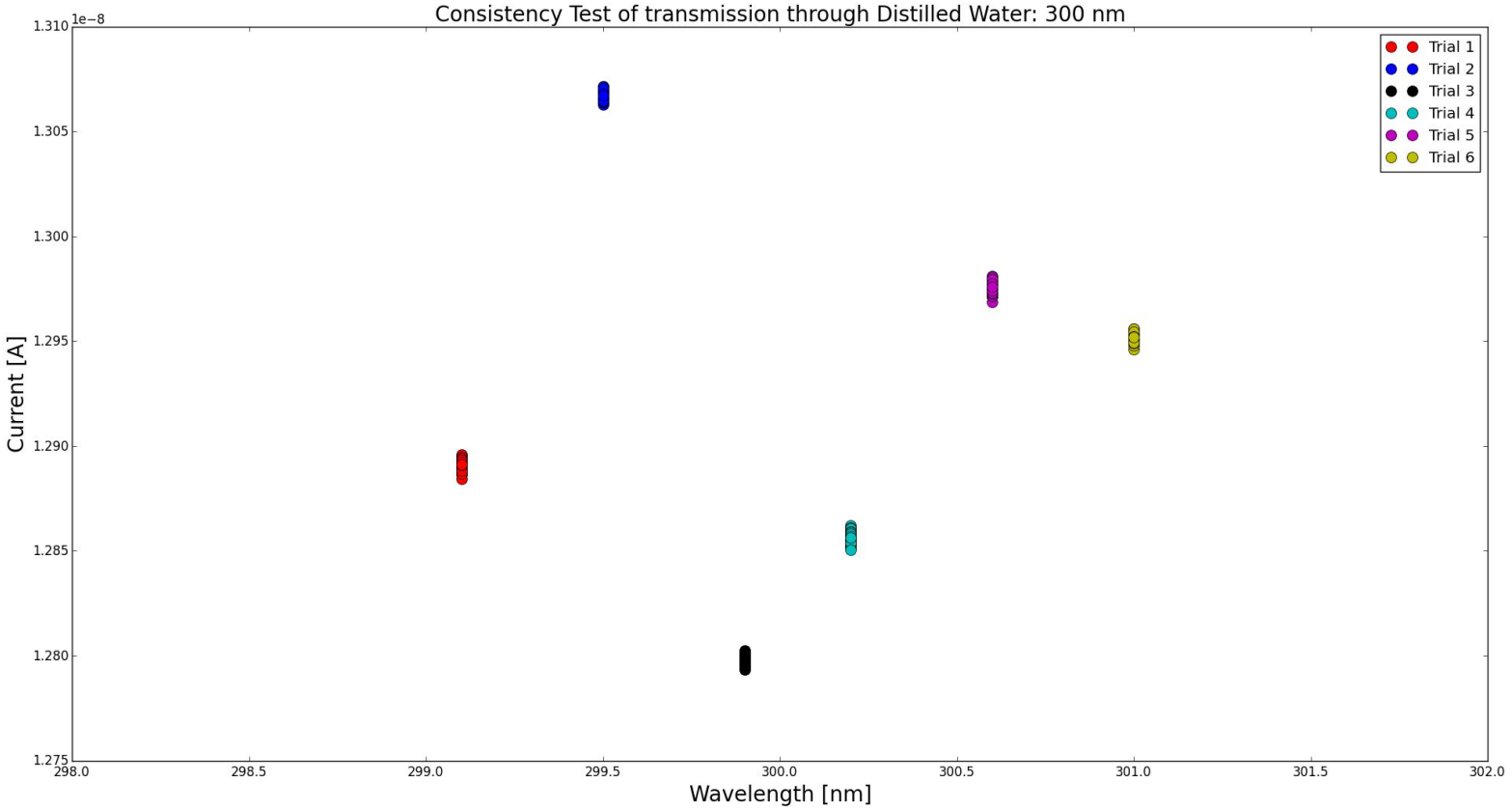




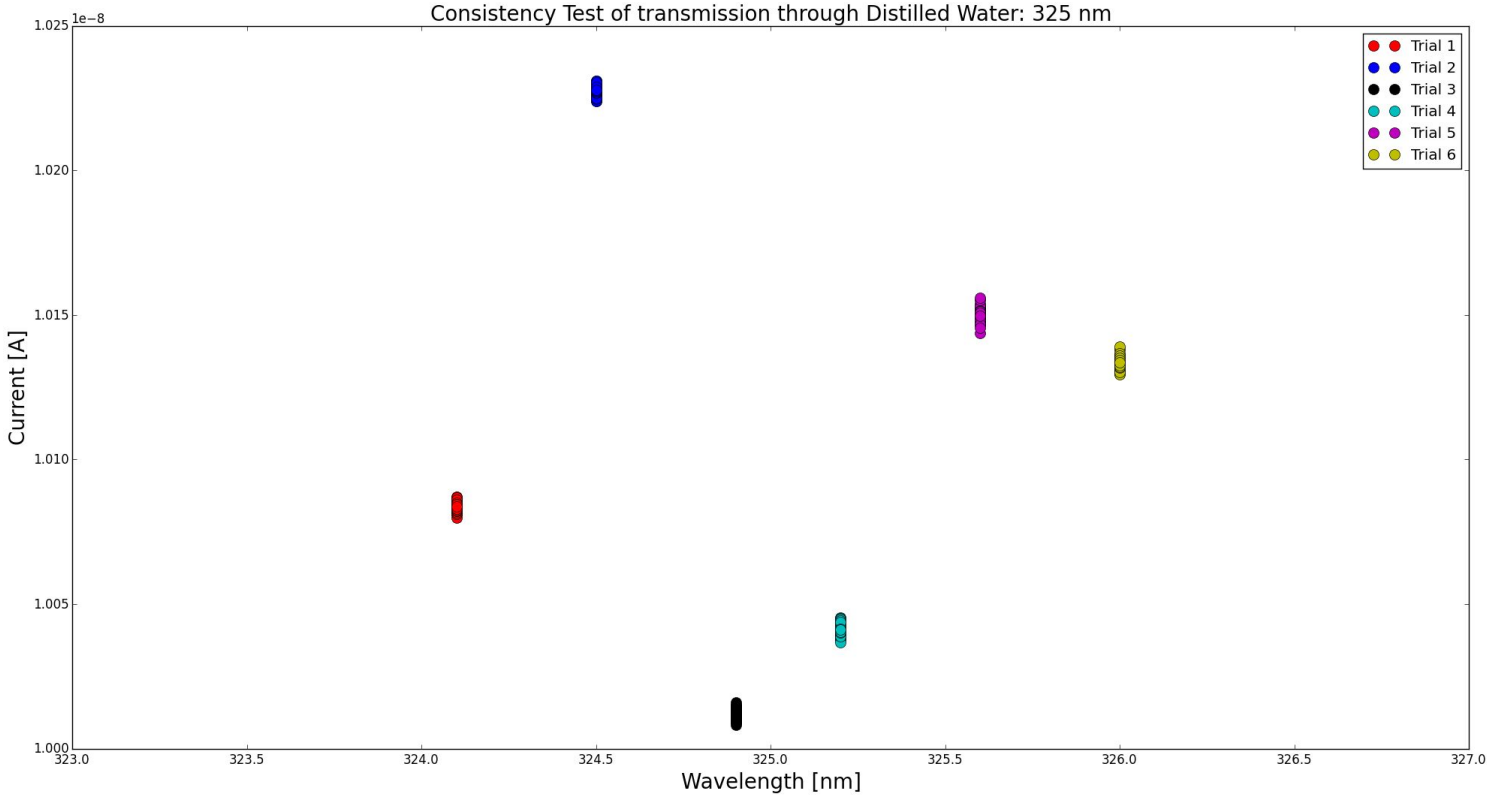
σ = 6.37e-12 for all points, trial 3/trial 2 = 1.5% difference



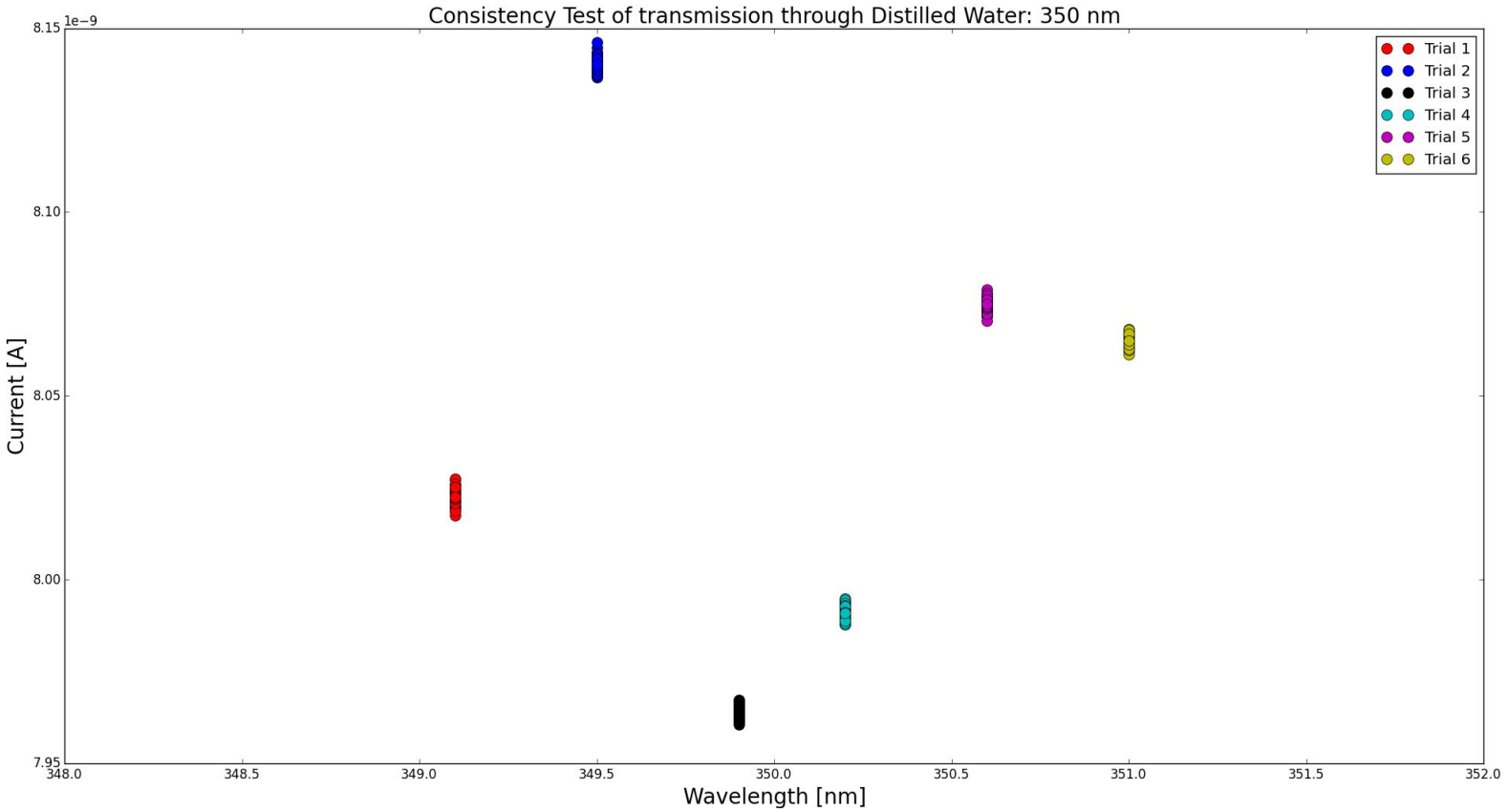
σ = 2.33e-12 for all points, trial 3/trial 2 = 1.8% difference



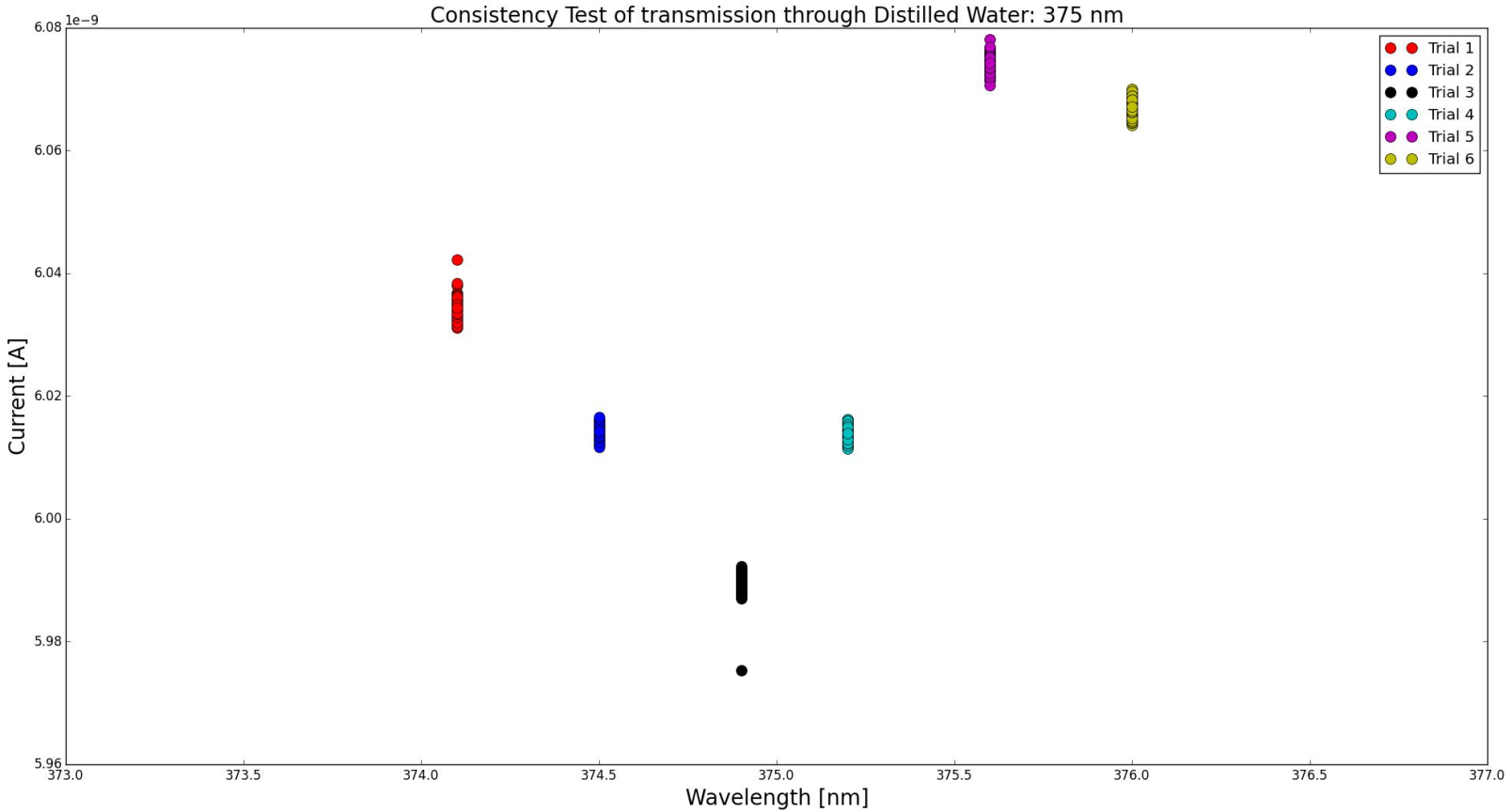
σ = 1.83e-12 for all points, trial 3/trial 2 = 2% difference



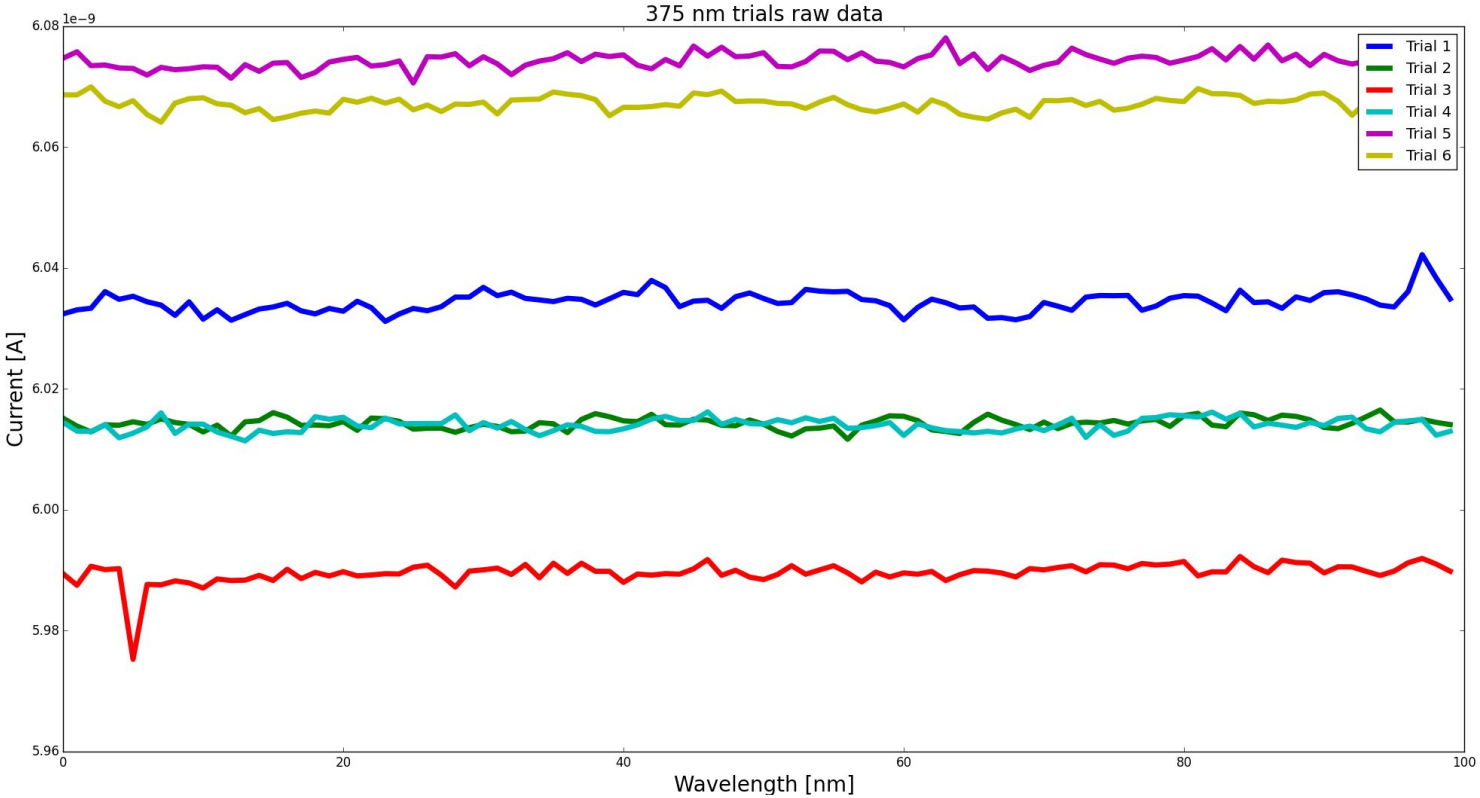
σ = 1.54e-12 for all points, trial 3/trial 2 = 2.1% difference



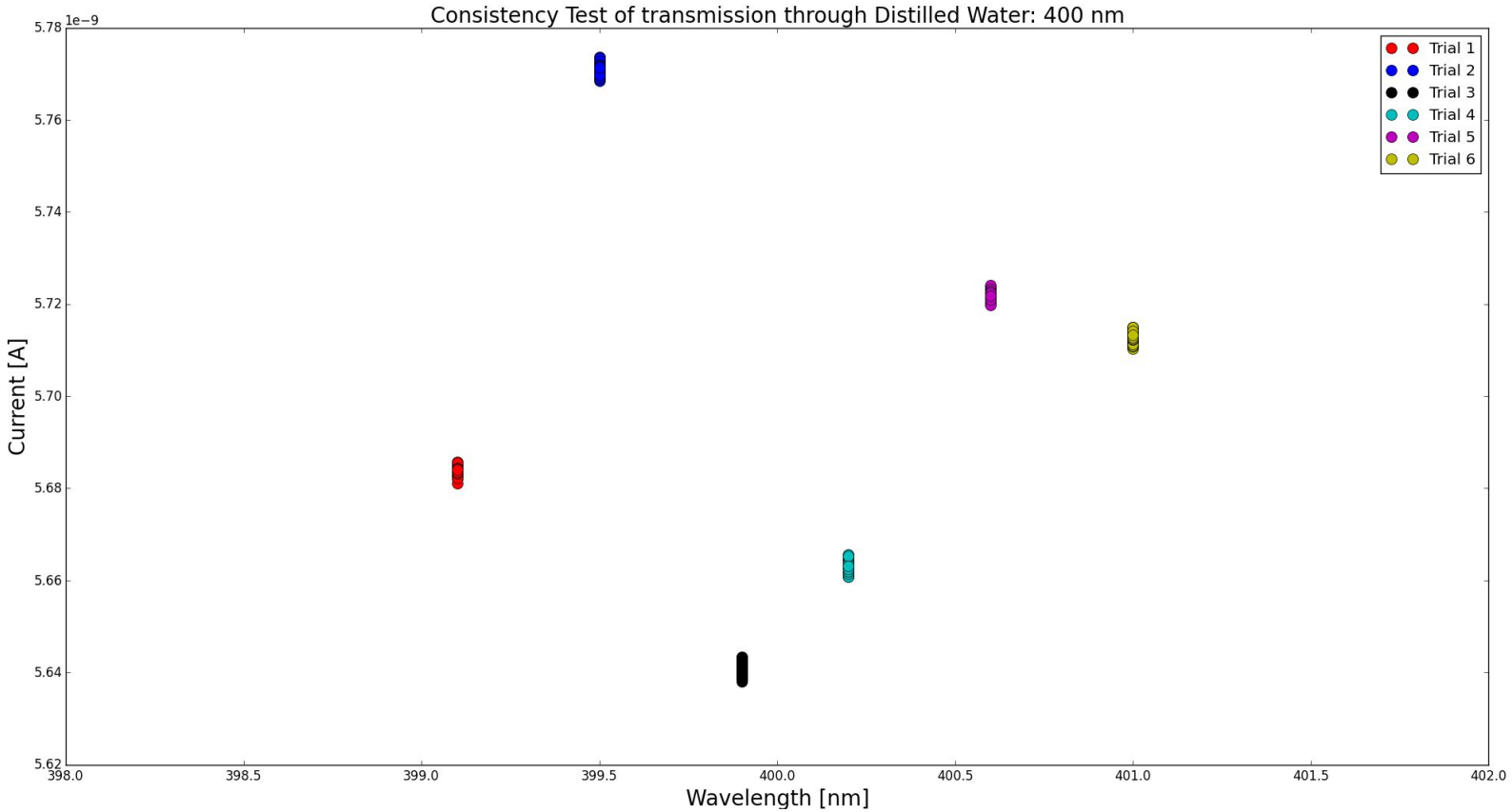
σ = 1.23e-12 for all points, trial 3/trial 2 = 2.1% difference



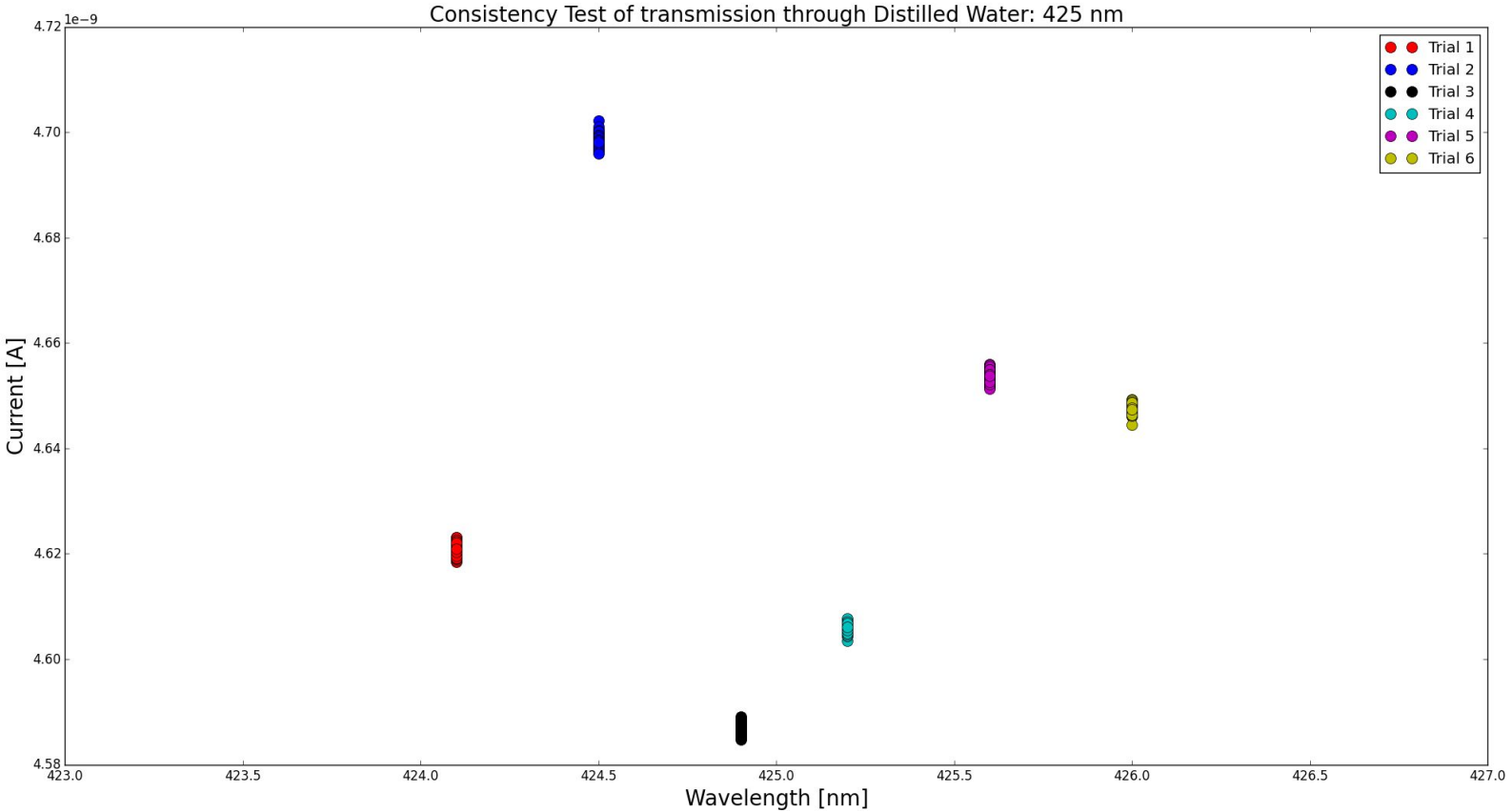
σ = 1.20e-12 for all points, trial 3/trial 2 = 0.5% difference



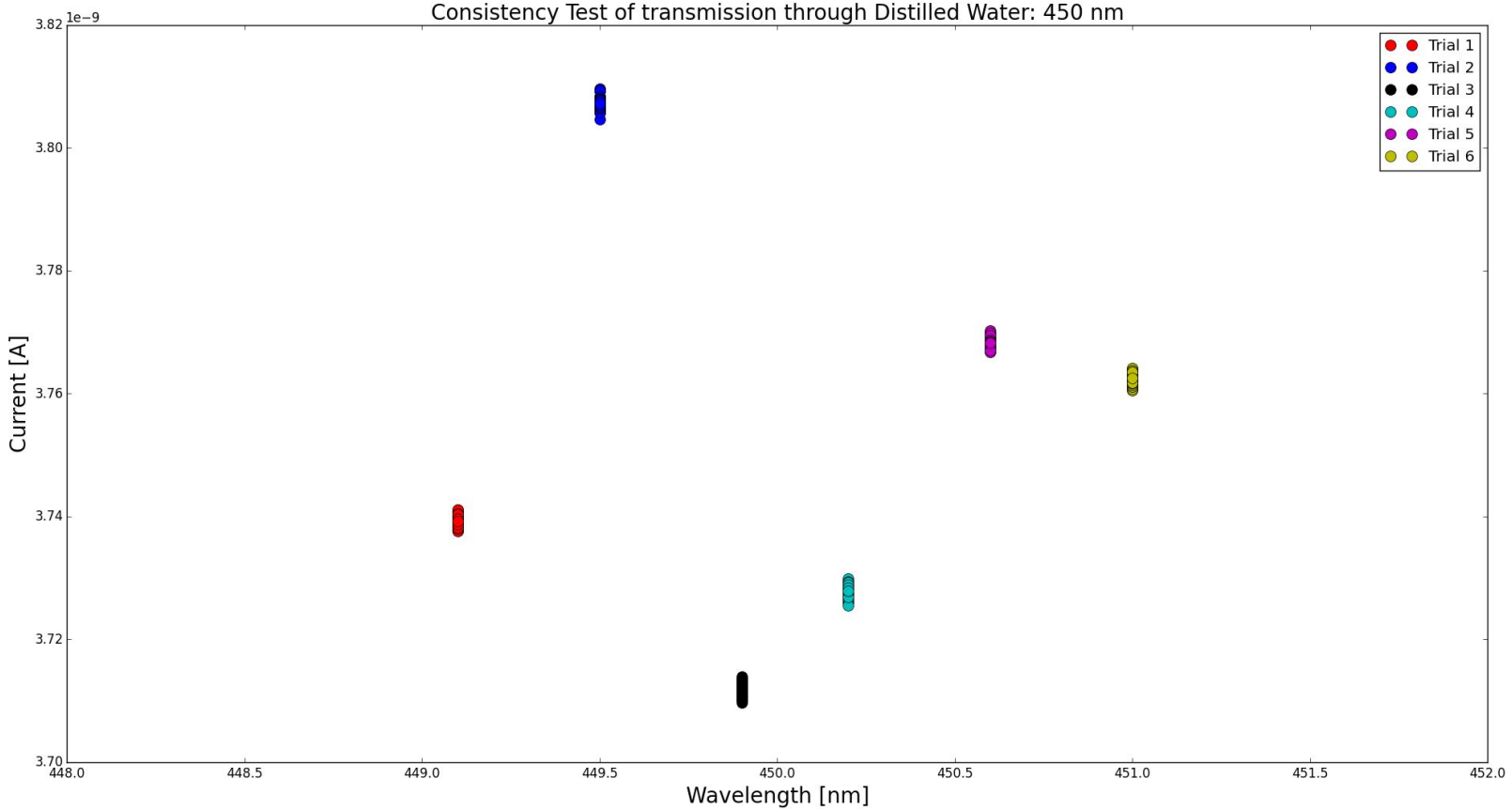
Doesn’t really explain why so low, suspect trial 2 is bad to begin with…



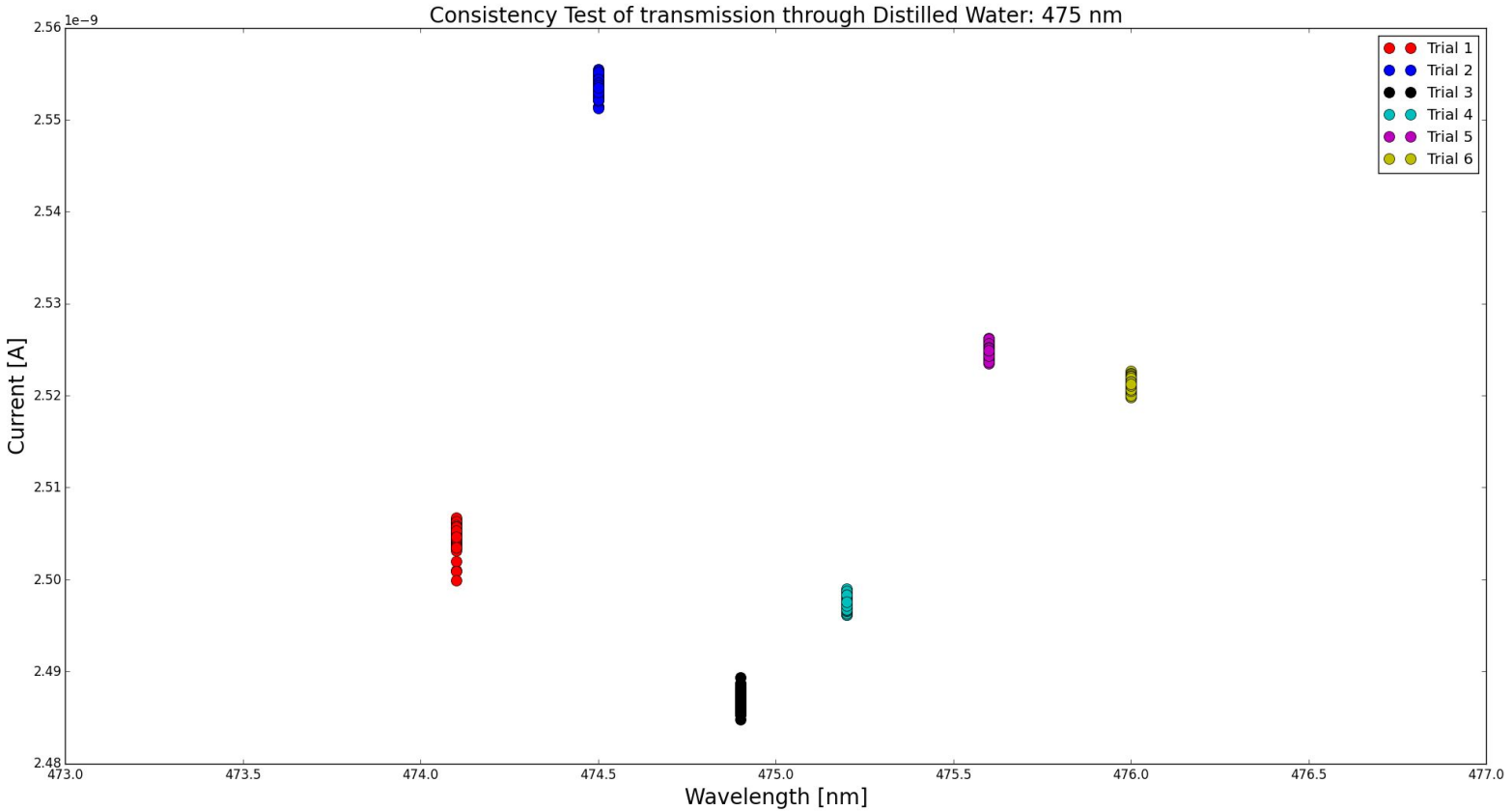
σ = 1.00e-12 for all points, trial 3/trial 2 = 2.2% difference



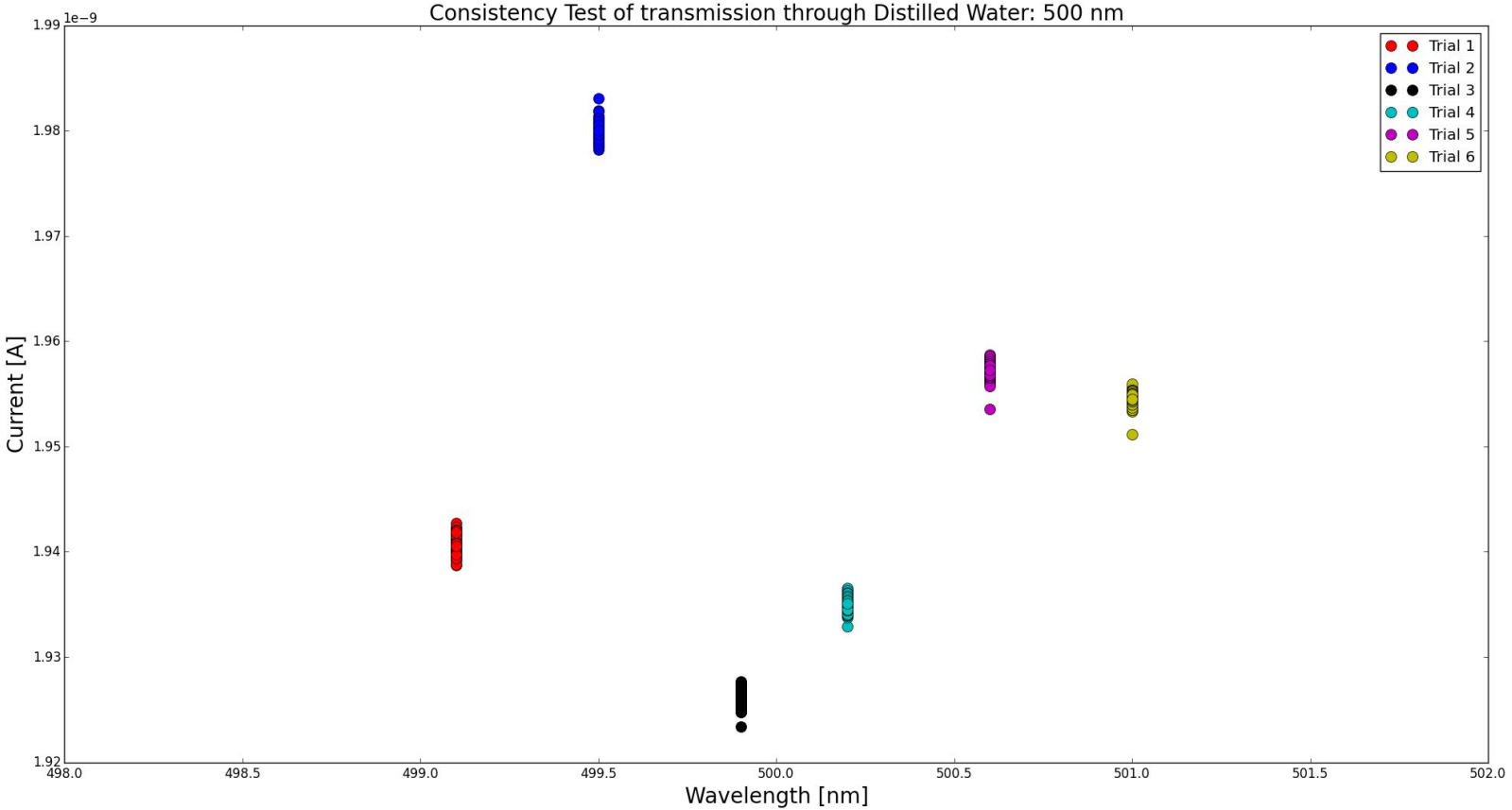
σ = 7.67e-13 for all points, trial 3/trial 2 = 2.3% difference



σ = 7.04e-13 for all points, trial 3/trial 2 = 2.5% difference



σ = 5.73e-13 for all points, trial 3/trial 2 = 2.6% difference



σ = 6.18e-13 for all points, trial 3/trial 2 = 2.7% difference

- Trial 2 may not be the best representation
- I think I figured out how to make it more consistent, thus why trials 5 and 6 were usually more consistent
- Disregarding trial 2, most points lie within 0.5% of each other, for example, at 250 nm, trial 1/trial 5 is 0.4% difference
- Could do a 2 or 3 more trials to see if my hypothesis works
    - If it does I can begin with the actual samples
    - Maybe it’s good enough, just say trial 2 was not good
- Has to do with the alignment