

Status update

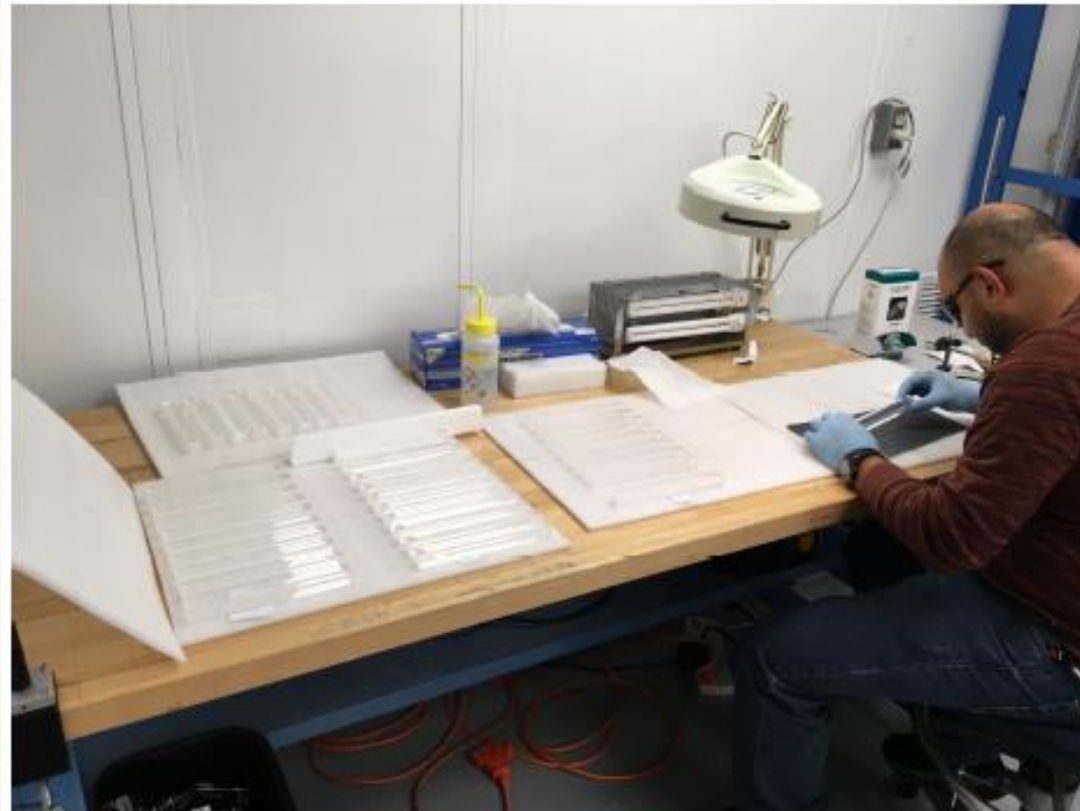
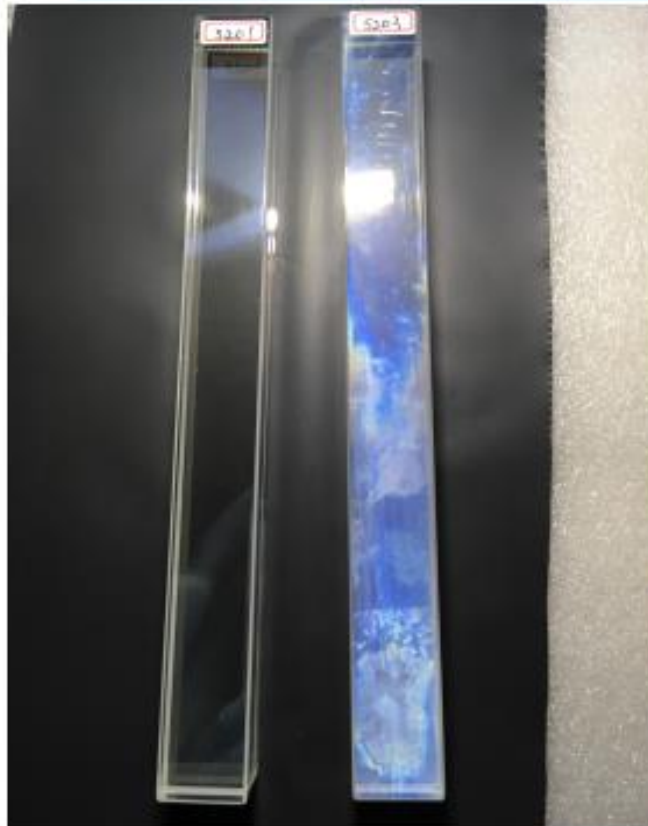
NPS meeting 11.16.17

Vladimir Berdnikov

NPS Crystals visual inspections

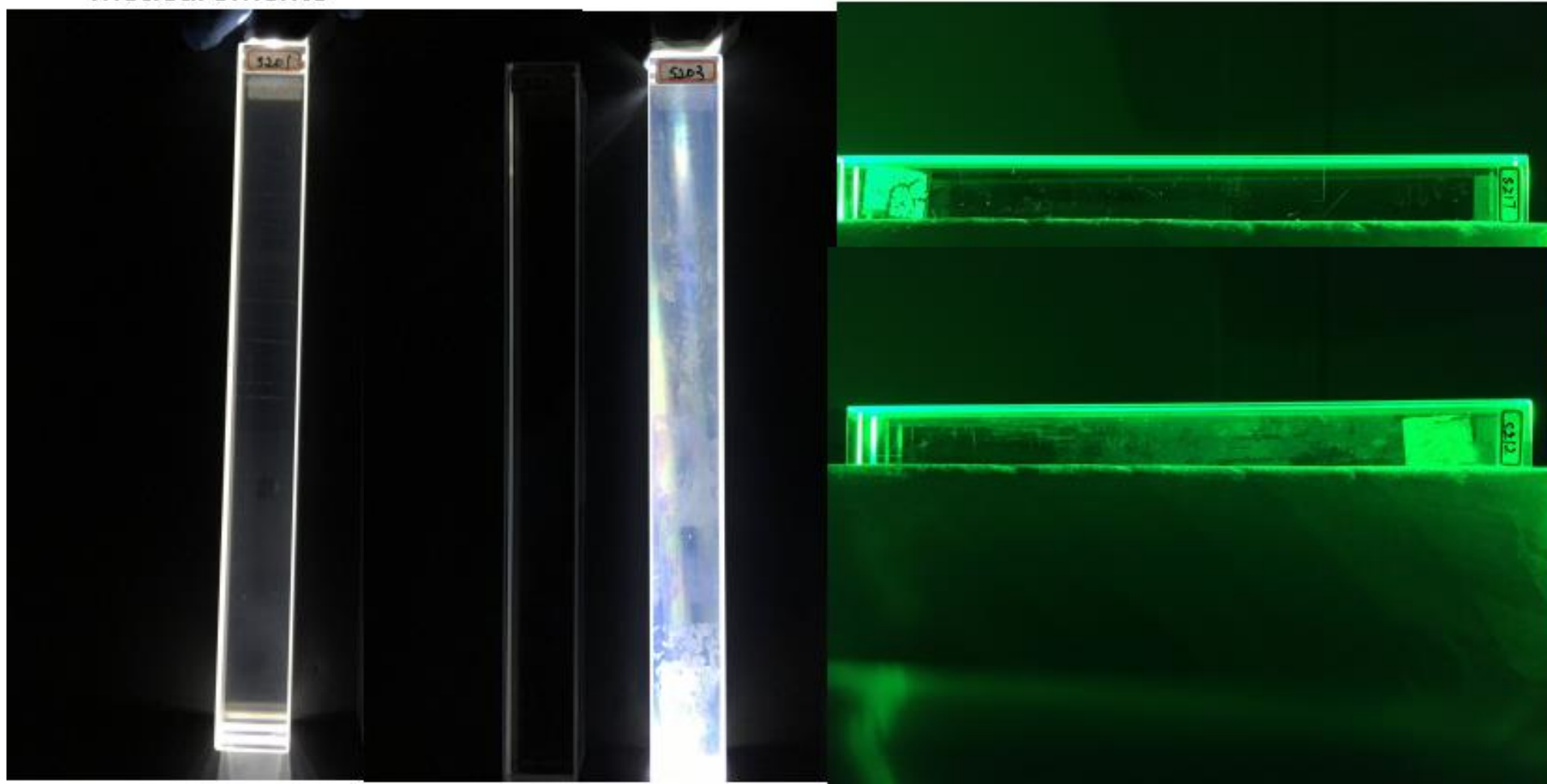
List of actions and time expanded:

Actions	Time(hours)	Comments
1)unpacking	1	measured
2)inspection(I stage)	0.5	measured
3)inspection(II stage)	2	measured
4)dimension measurements	?	in progress
5)chemical cleaning	?	questionable
6)packing	2	measured



NPS Crystals visual inspections

- In second package of crystals more than 10 crystals with completely different look have been observed
- The surfaces of that crystals covered with chemical film
- Scratched labels and glue prints of old labels
- Chemical film can not be clean with isopropyl alcohol
- Crystals with chemical film observed in box numbers (B2-5), (B2-6)
- Two boxes with “worse” crystals and two common boxes sent to CUA for optical measurements



NPS crystals dimension measurements

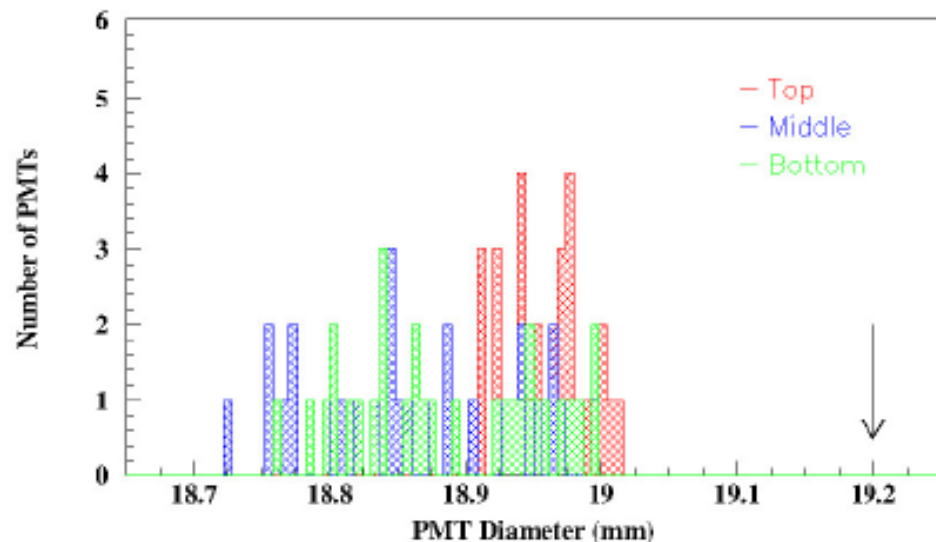
- Measuring tool arrived in Tuesday
- Tool accuracy is 1um
- Light and sound signal when probe touch surface
- With Arshak working on measuring method and safety of crystals during measurements
- Searching of granite table



- Walter Kellner working on it
- Table for granite plate need to be clean and paint before moving to clean room
- New Table or even a new granite plate is a possible solution
- Should be ready by end of next week

PMT's dimension measurements (Hamlet)

- For measurements used "Mitutoyo 0-1 inch" device with accuracy ~1 μm
- Actual measuring method accuracy level is ~20 μm
- The plot shown results of R4125 PMTs diameter measurement for the randomly selected 30 PMTs (10 from each delivered package)
- Different colors are represent measurements at different PMT areas:
 - close to photocathode (red)
 - half length of phototube (blue)
 - close to the pins (end of PMT)
- Results show that at all areas diameter of PMTs bellow relative to our required limit 19.2 mm
- PMT dimensions are acceptable



DAQ in NPS cleanroom

- NPS calorimeter prototype cosmic tests
- PMT`s tests (developing method and setup with HallD folks)
- Do we want to “destroy” DAQ at aerogel clean room ?
- Help from HallC DAQ group will be needed when all hardware will be at place

