

PhotonExport substrates for FD2

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The problem

- It was observed in the cold box the detachment of pTP from the dichroic filters of the last PE batch (3rd)
- The problem was initially attributed to the fused silica substrate
 - PE uses fused silica while ZAOT uses B33
 - UNICAMP observed in the past adherence problems for fused silica



Other hypotheses

• After discussing with our Brazilian colleagues, the problem with pTP detachment seems to be related with plastic wrapping and cleaning





Discussion with PE

- I was talking to PE few weeks ago
 - They don't clean filters after ML deposition
 - They think filters should be cleaned before pTP coating
 - They could do some cleaning if needed
 - They could change the packaging (onion paper, ...)
- I would also need to understand the ZAOT cleaning process



Next steps

- We have ordered 36 fused silica and 24 B33 substrates (143.75x143.73 mm²)
- Plan is to have multiple combinations to better isolate the problem

	PE plastic packaging	PE plastic packaging & PE cleaning	PE onion paper packaging	PE plastic packaging & Cleaning at UNICAMP
B33	6	6	12	
Fused silica	6	6	12	12

- Will be in Valencia in 4 weeks
- They will be sent to UNICAMP for pTP coating
- Multiple cold cycles in Valencia