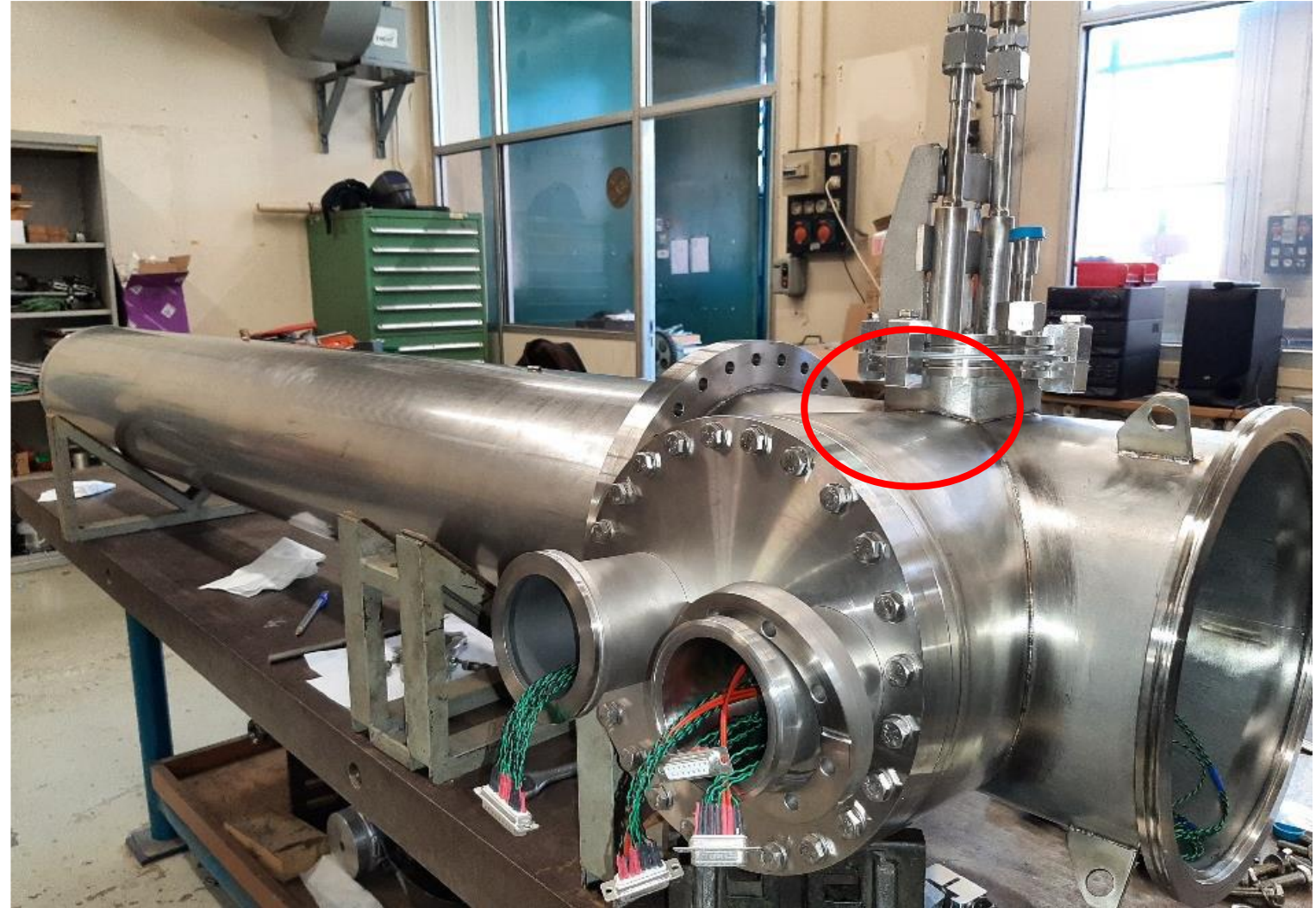


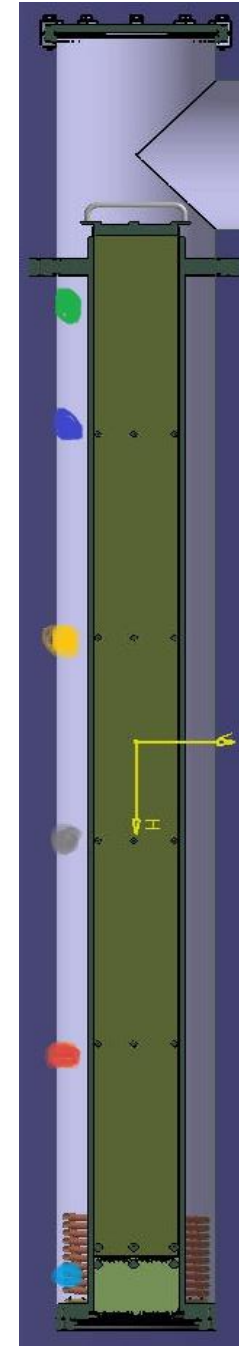
## Tests Status

- **Sealing not correct:** one welding (done in the industry) at the top which cannot be fixed easily
  - ⇒ remaining leak ( $\sim 10^{-4}$  mbar  $l^{-1} s^{-1}$ )
  - ⇒ few  $10^{-2}$  mbar obtained (reminder at CERN ( $10^{-3}$  mbar))

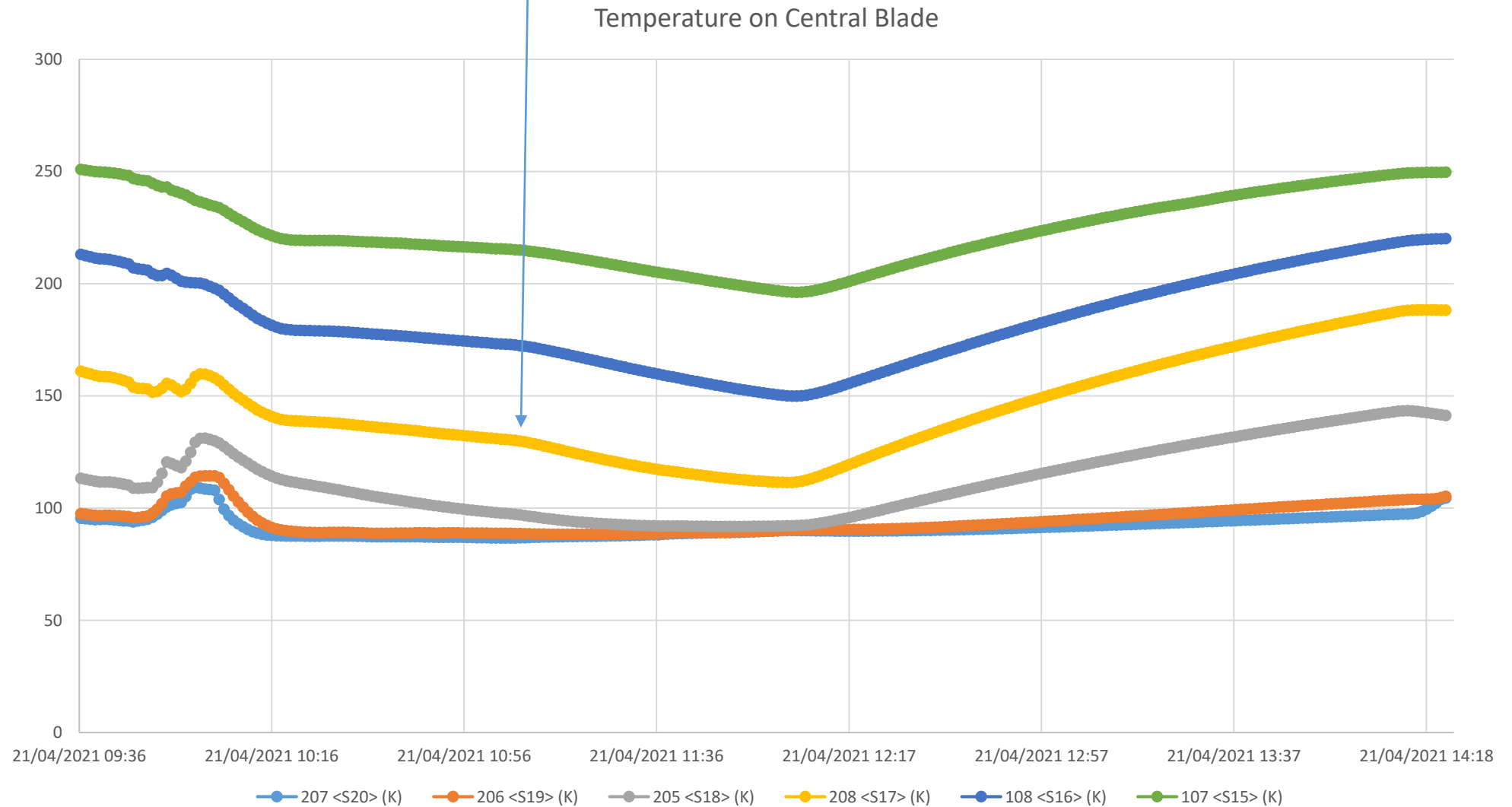
**Not critical for cold tests**



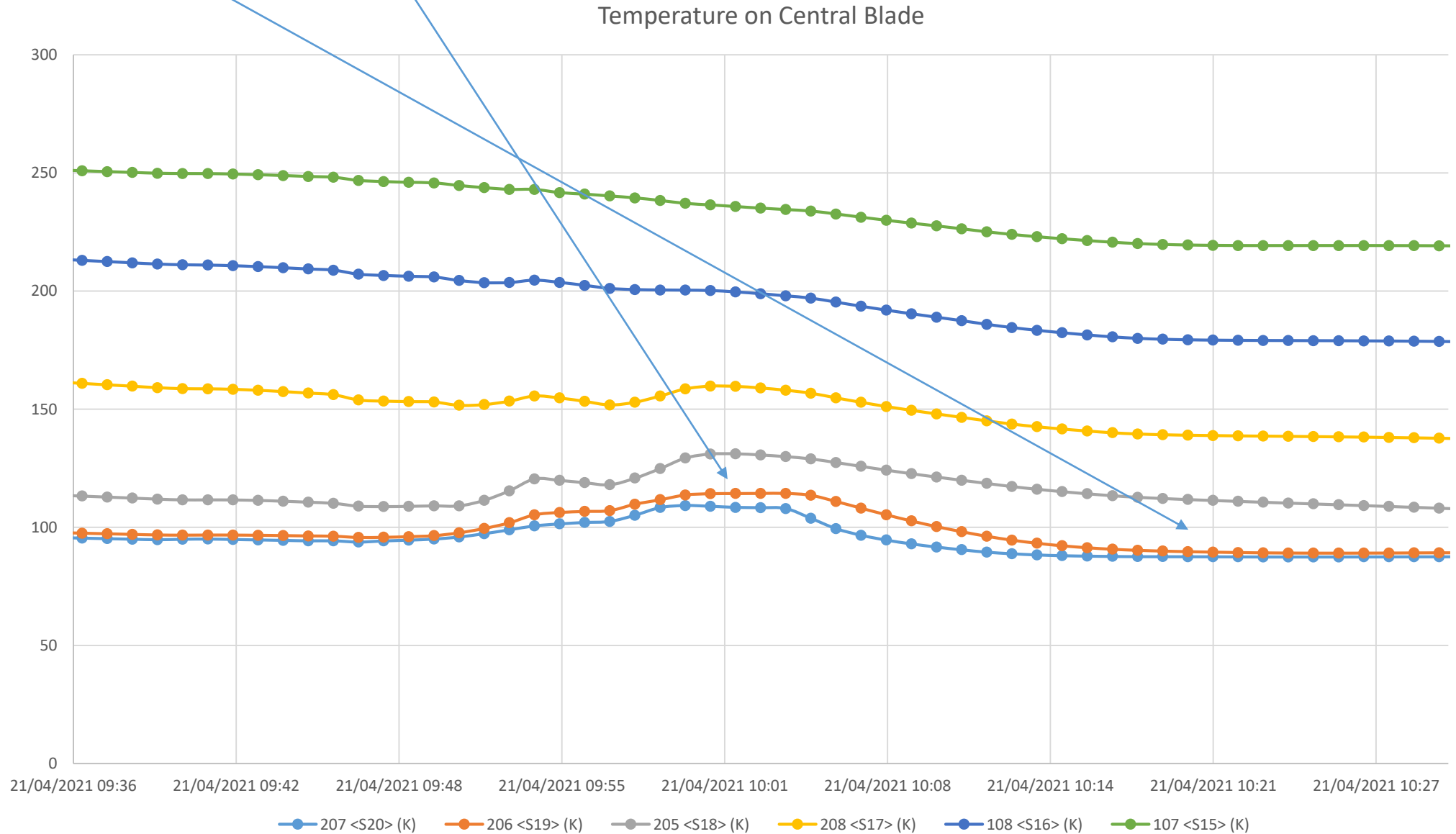
- Introduction of **blades** :
  - at **warm** temperature **OK**
  - at cold temperature **OK**
- Test in a cryostat filled with liquid Nitrogen
- Temperature profiles (tube, blades) with/without a simulated FE board heat dissipation
  - 6 measurement positions for 2 blades and on the tube
  - 1 measurement every minute
  - 1 sensor not working properly on the tube



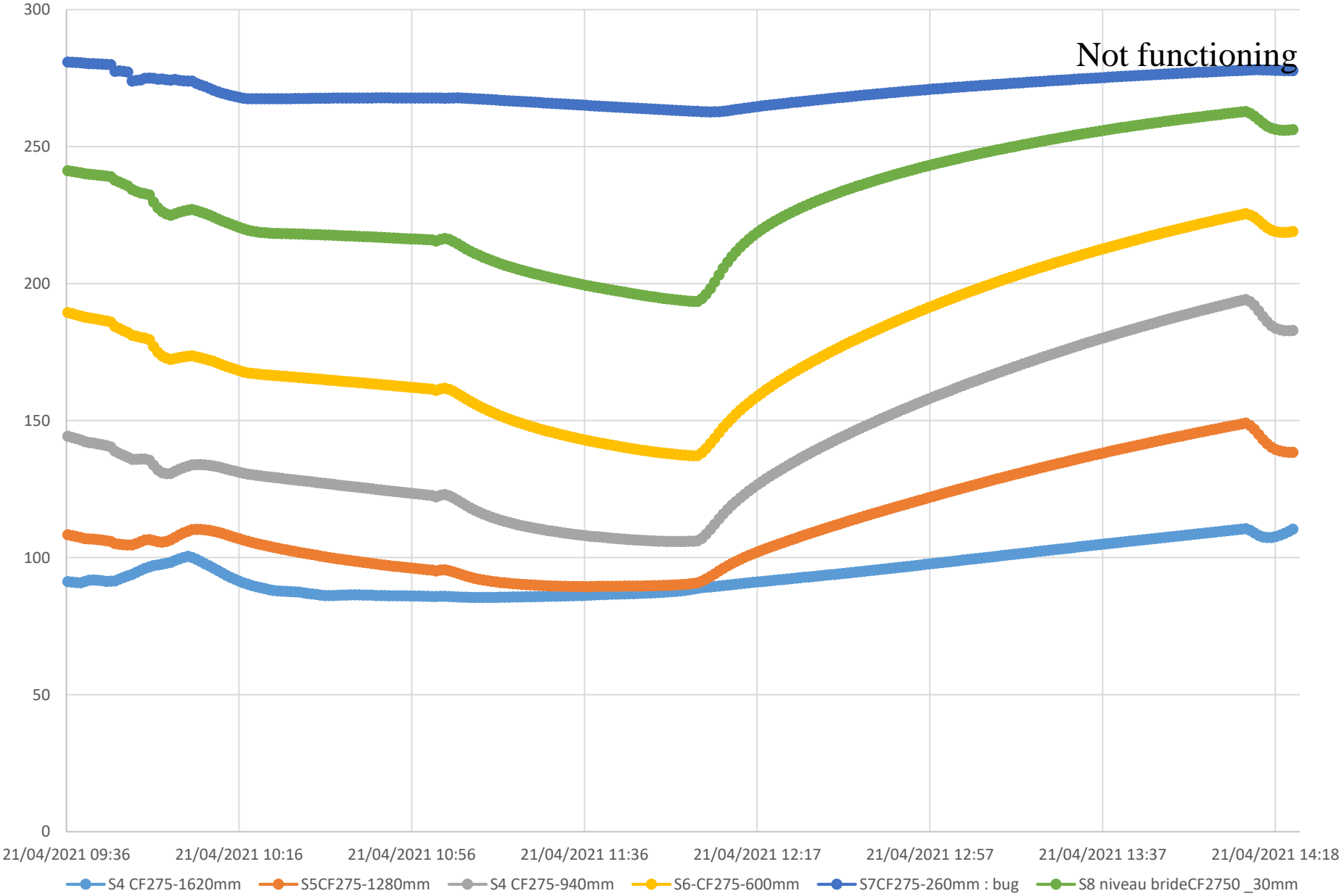
- 9h35 : Nitrogen flushing
- 10h : blade removal and tests of all slots
- 10h05 : cooling : Nitrogen injection in thermalisation circuit
- 10h20-11h10 : heating with 2x5W (change of slope in cooling)
- 12h00-14h: tries to adjust temperature in the bottom part



- Effect of blade removal and introduction
- No increase due to heating start: just a change of slope in cooling (see previous slide)



Temperature at the tube surface



# Conclusion

- First quick tests of the whole system
  - ⇒ Measurements OK
  - ⇒ Flushing OK
  - ⇒ Cooling system OK
  - ⇒ Simulated Heat Dissipation OK
- Handling of blades without problem
- 88 K reached in the bottom part. Stable within 1 K
- Second round of tests foreseen in the coming weeks on longer period to reach equilibrium for each measurement
- Test of electrical continuity: waiting for passthrough board from CERN

