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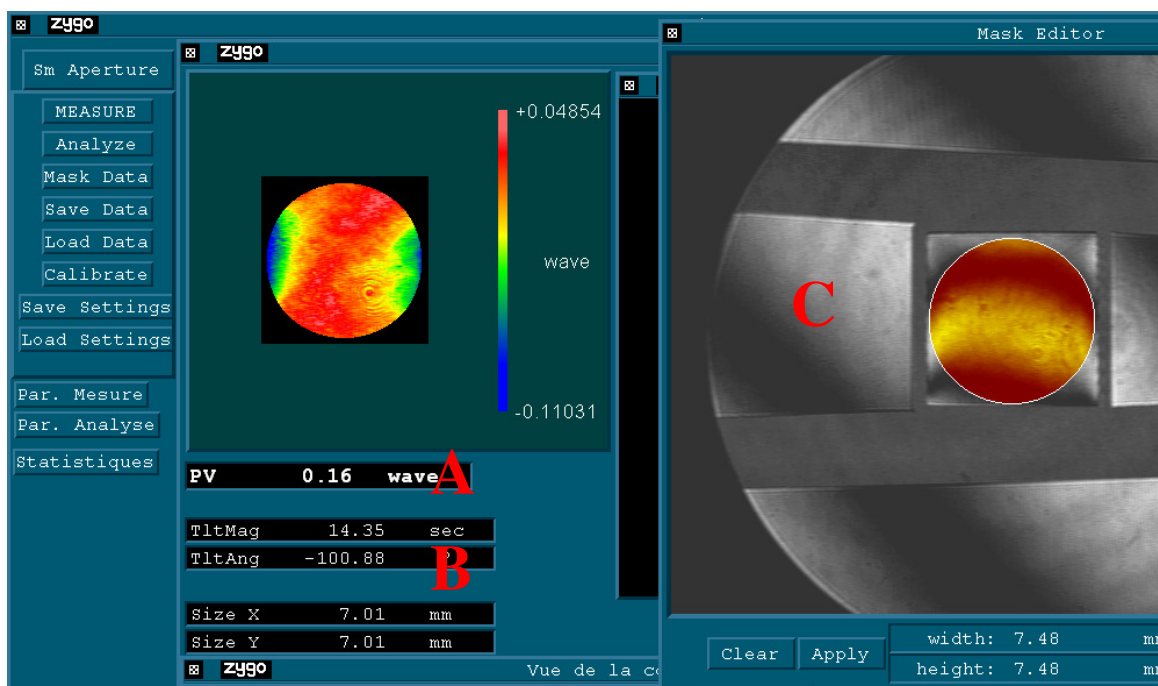


### English presentation of Zygo equipment

#### 1) -PTI 250 from Zygo®

Cristal laser acquired a brand new interferometer from Zygo, the PTI 250, to monitor bulk quality and optical wedge during production of KTP OPO. It allows aperture from 3x3mm<sup>2</sup> up to a circle of 50mm diameter, giving access to either unitary control or whole batch of production.

Wave Front distortion and optical wedge are measured in the same time, thus gain of time and better quality control during production.



A) Wave Front distortion « PV : Peak to Valley »  $0,16\lambda = \lambda/6$

B) TiltMag is the value of optical wedge, 14 seconds for this crystal.

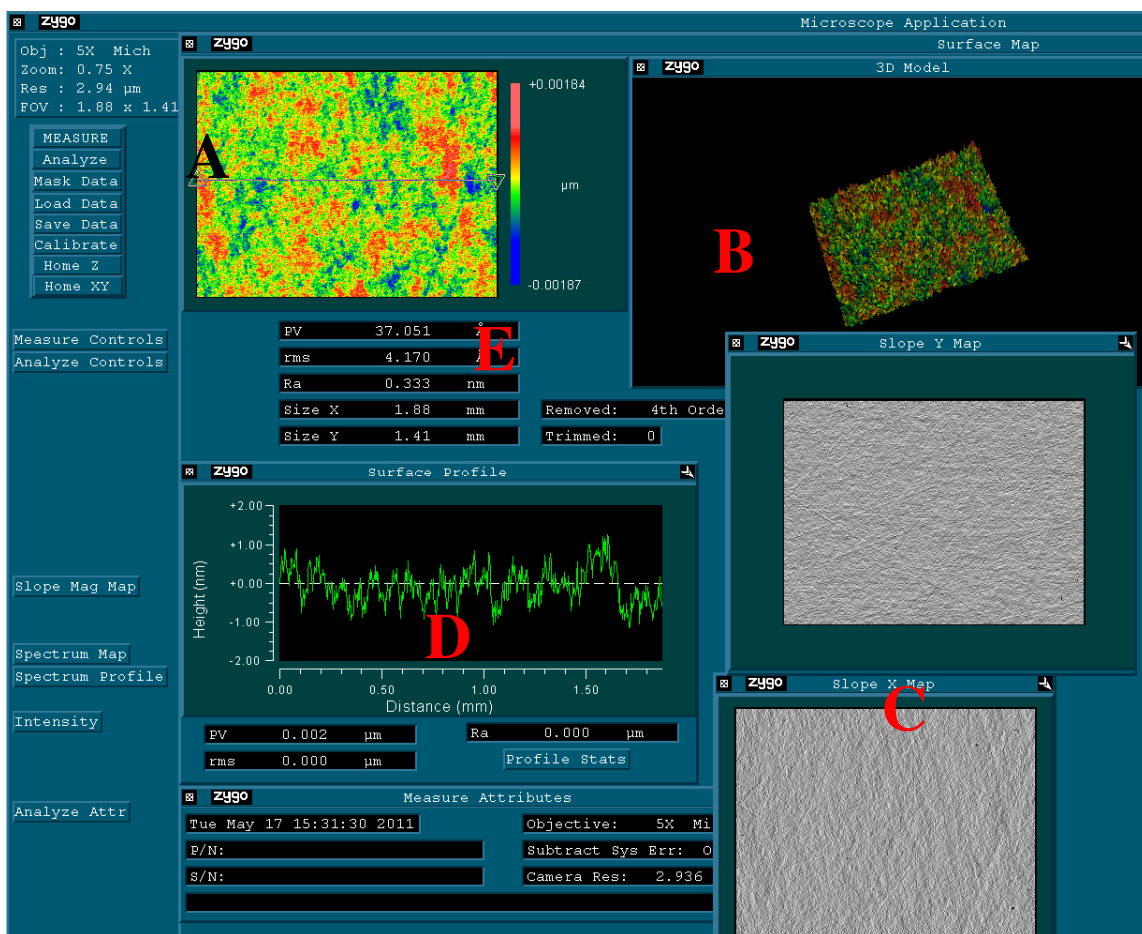
C) Global view of the crystal.

## 2) New view 7100 from Zygo

This brand new equipment is the first profiler available at Cristal laser to evaluate roughness. With two different lenses, we can spot large area of  $2 \times 1,5 \text{ mm}^2$  to smaller area of  $0,2 \times 0,15 \text{ mm}^2$ .

This allows determining the better compromise for polishing between roughness, length of the crystal and general aspect. Thin sleeks can be detected and therefore can be removed before end of polishing.

It is also a powerful equipment to analyse potential defects and track those before delivery.



- A) global 2D aspect.
- B) global 3D aspect.
- C) Enhancement of defects.
- D) Profile of area A
- E) Roughness RMS (example here  $4,1 \text{ A}^\circ$ )