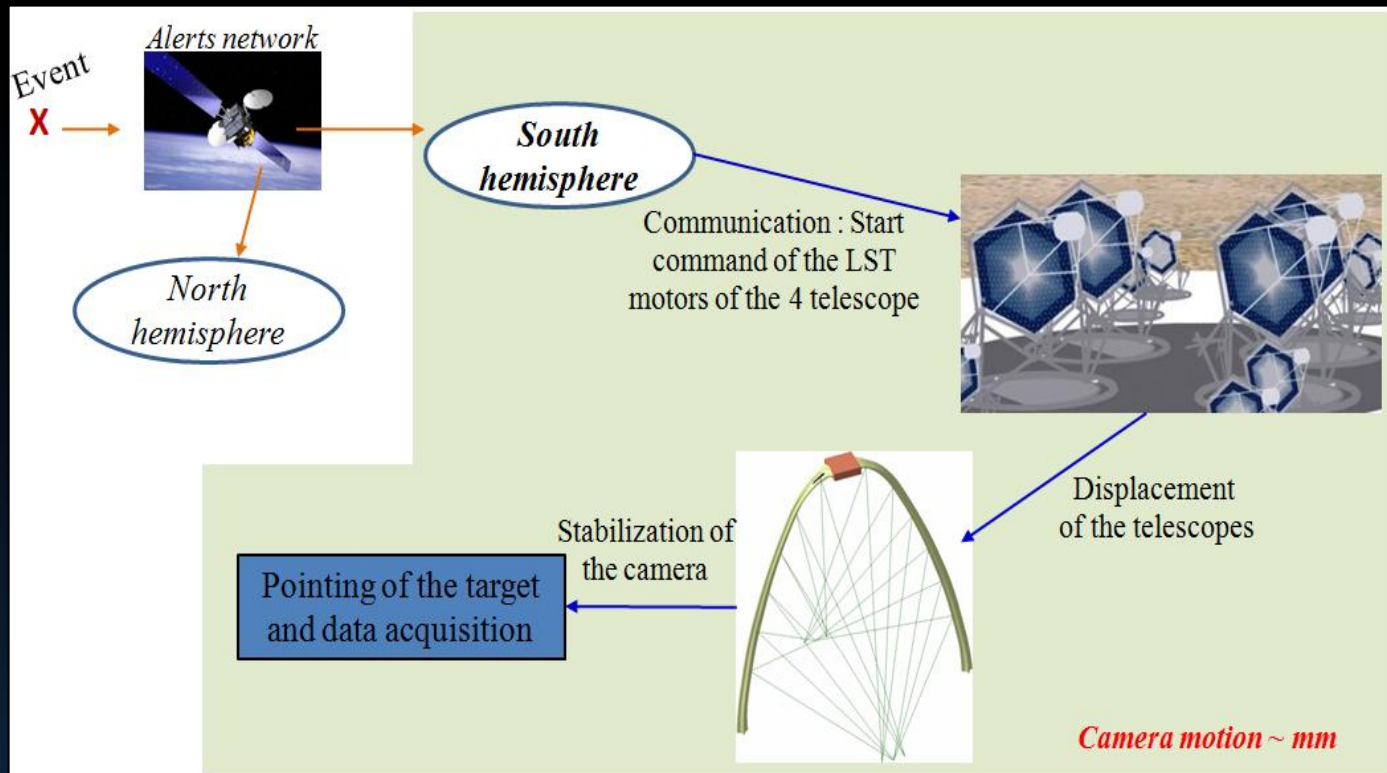

LST au LAPP
« Drive System »
« Amortissement de l'arche »

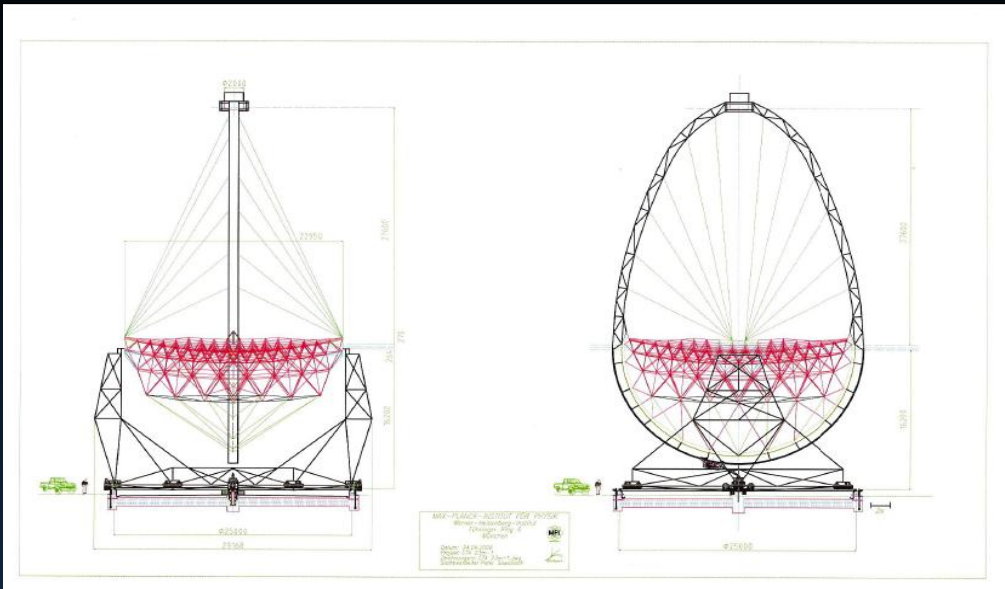
Les contraintes



- *Weight: 50 tones*
- *Focal distance: 23 - 24 m*
- *Rotation speed (fast): 180° in 20s*
- *Drive tracking position: <0.005 deg*

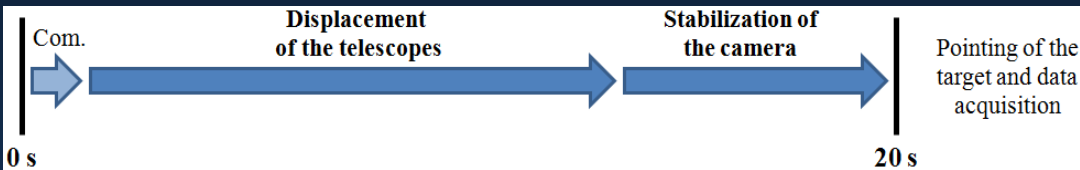
Les études en cours (1)

- 2 ingénieurs mécaniciens pour l' étude de l' arche et du système d'amortissement



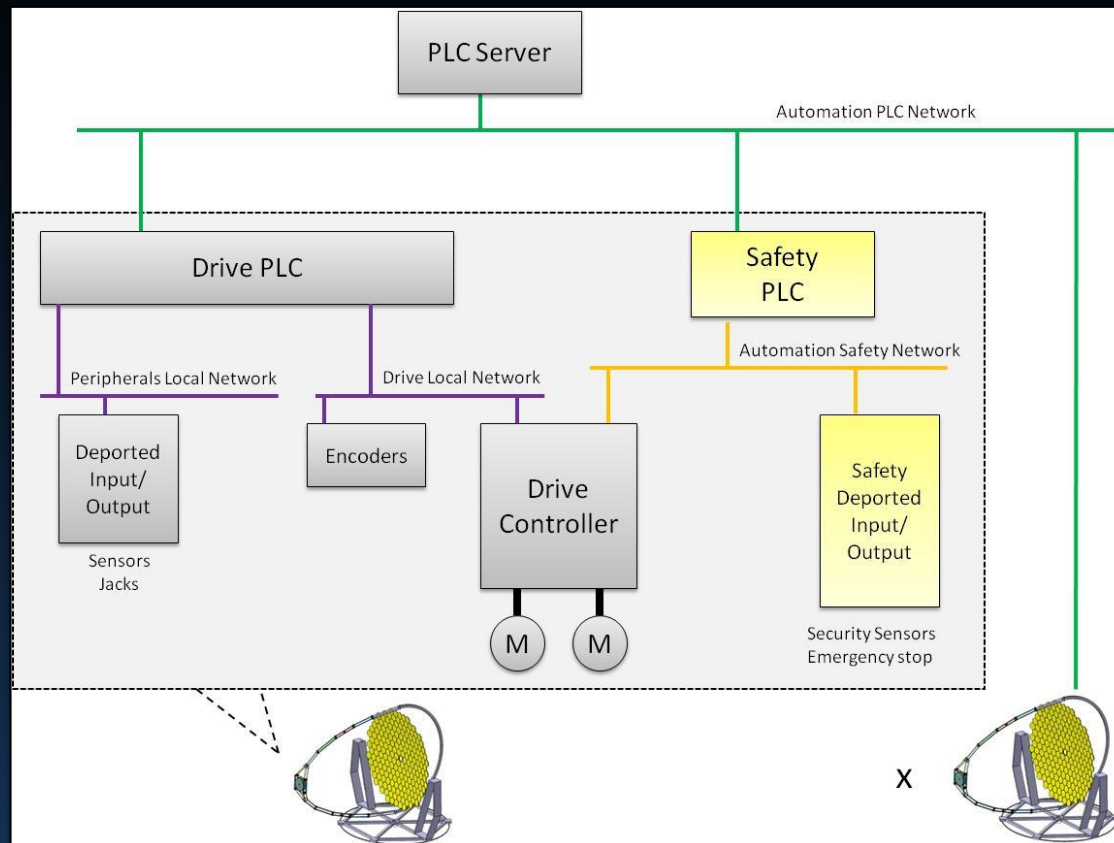
Principe d'amortissement des vibrations

Instrumenter les câbles avec
des **capteurs et actionneurs**
pour **agir sur les déplacements** de la
caméra

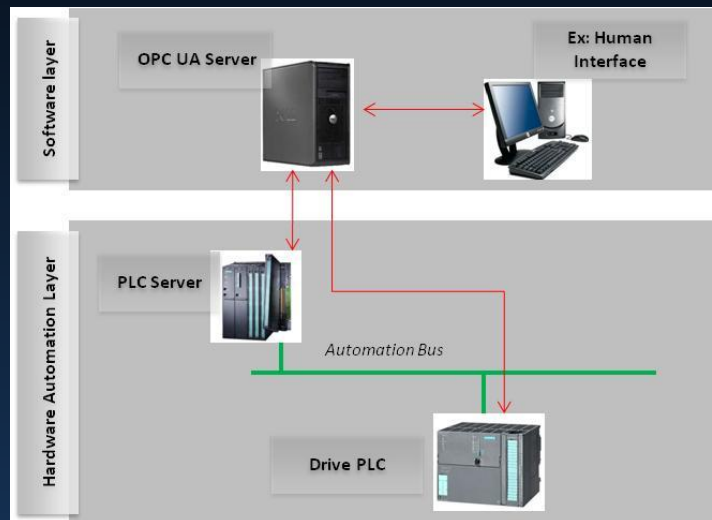
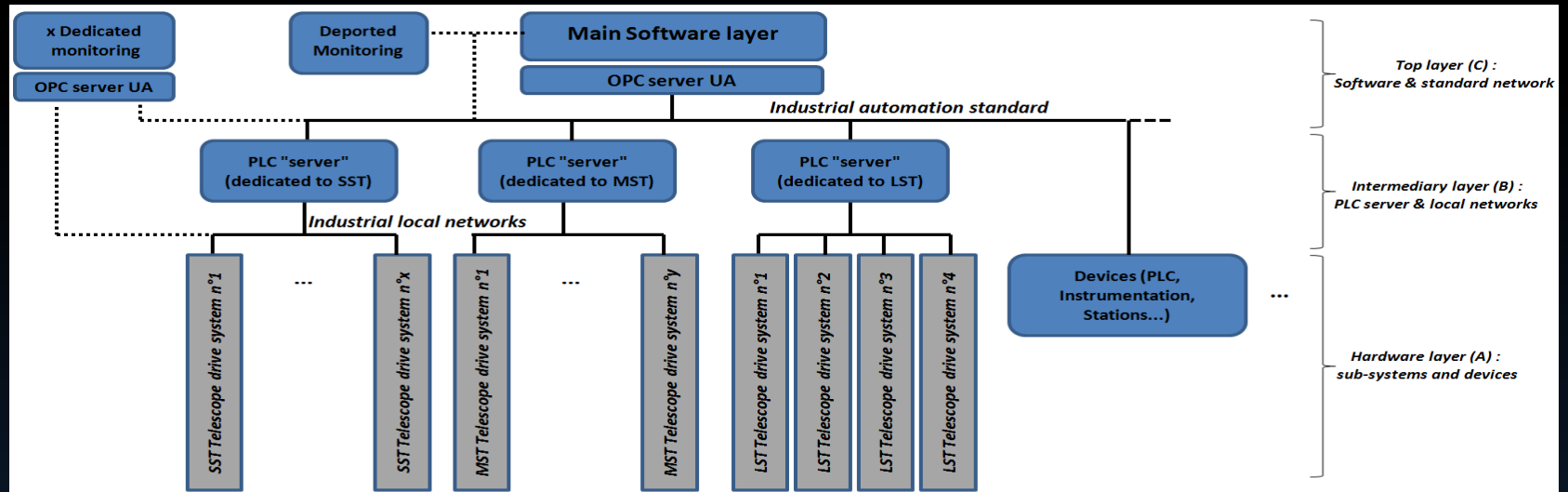


Les études en cours (2)

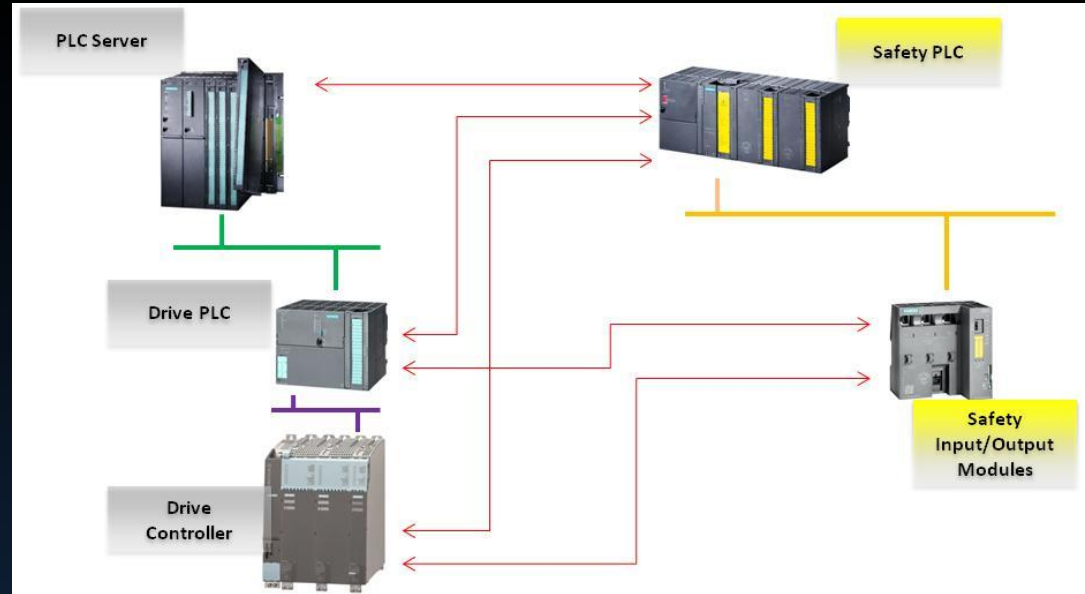
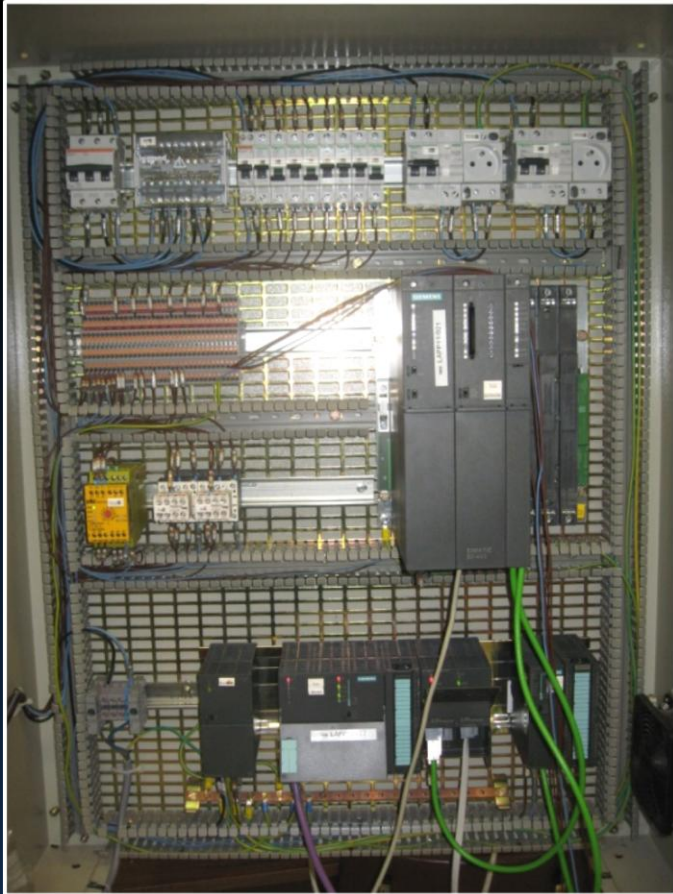
- 2 ingénieurs « Automaticien » pour l'étude du « Drive System »



Architecture



Banc Test au LAPP



Evaluation of communications between all automation components.

Array Drive System : Work in progress

- Test bench on PLC (currently “Siemens”) and field bus organization to meet a cost effective PLC and network architecture vs. expected performance (i.e. 20” for 90 deg elevation and 180 deg rotation)
- Telescopes layout => network topology
 - ✓ Data transmission
 - ✓ PCL logical & physical organization
 - Hierarchical vs Star Architecture depending mainly on the reaction time



- Network availability => link redundancy, reaction times
- Data flow prioritization => bandwidth reservation, synchronization, RealTime