望遠鏡の運用状況

Operation of the telescope

Daigo Tomono

Telescope Engineering Division

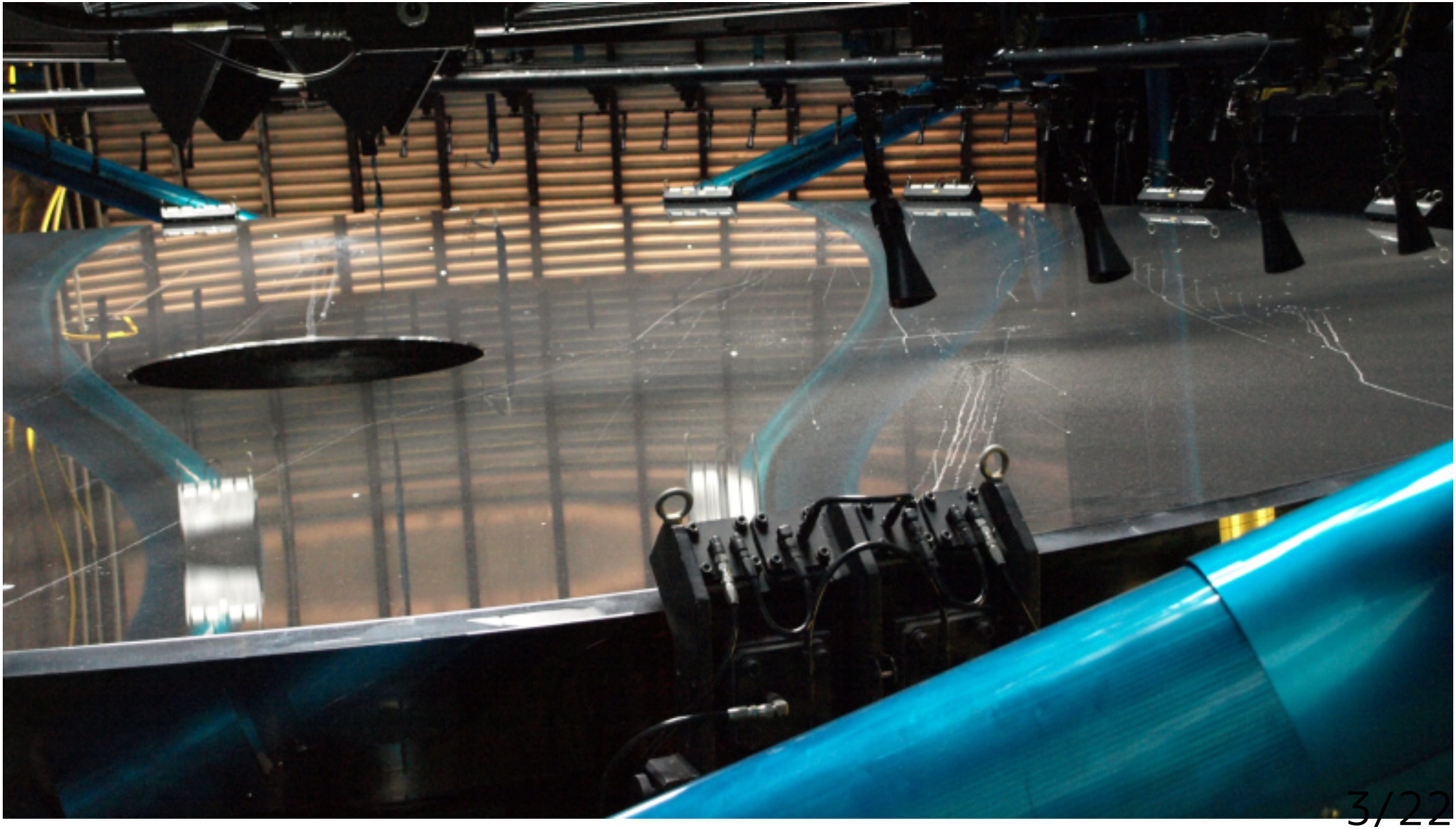
Agenda

- In 2010
  - Good news
  - Bad news
- For the future
  - In 2011
  - Beyond 2011

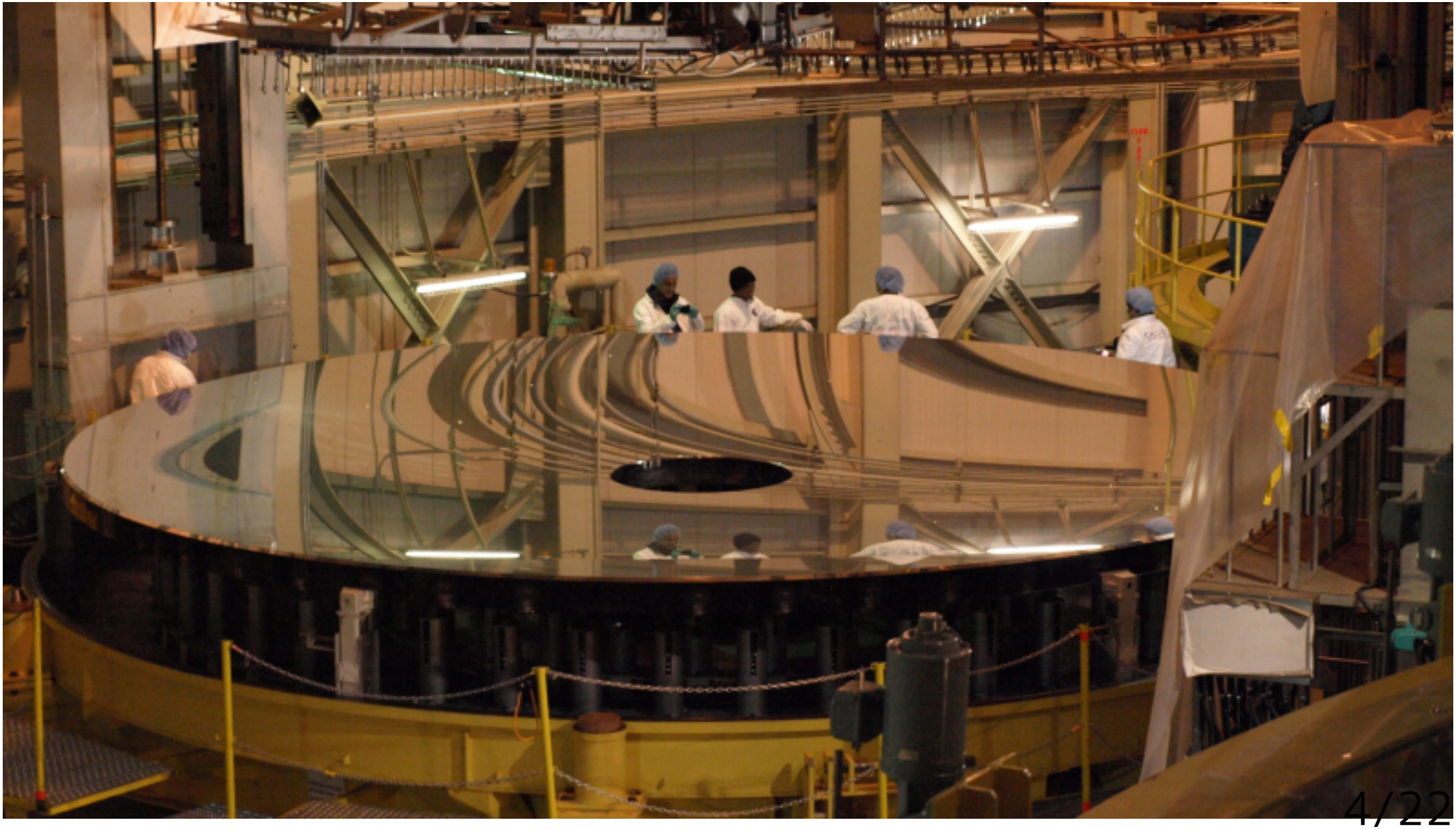
Good news

- Realuminized M1
- Modified telescope for HSC
- Solved dome encoder alarms

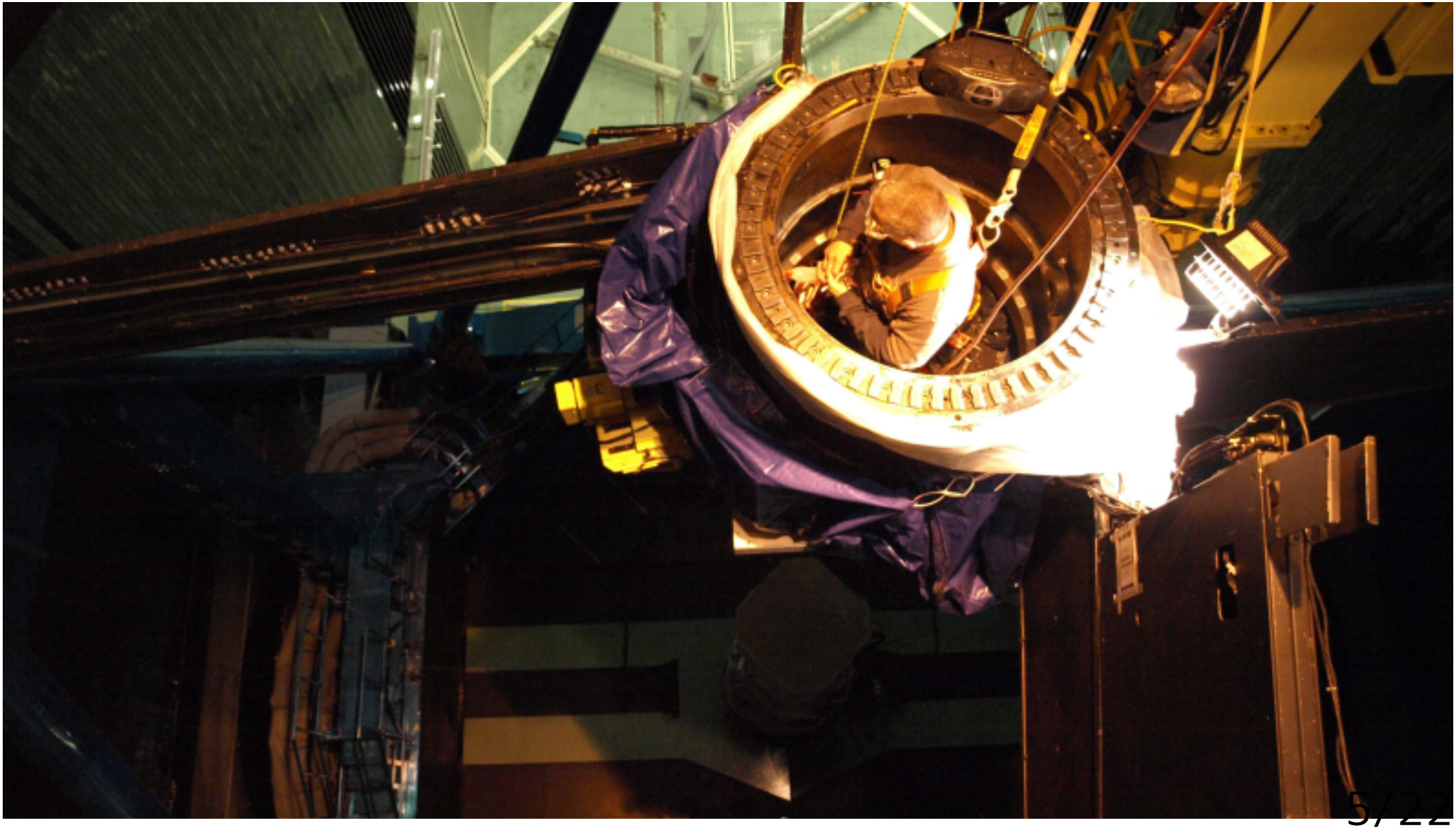
Before aluminization



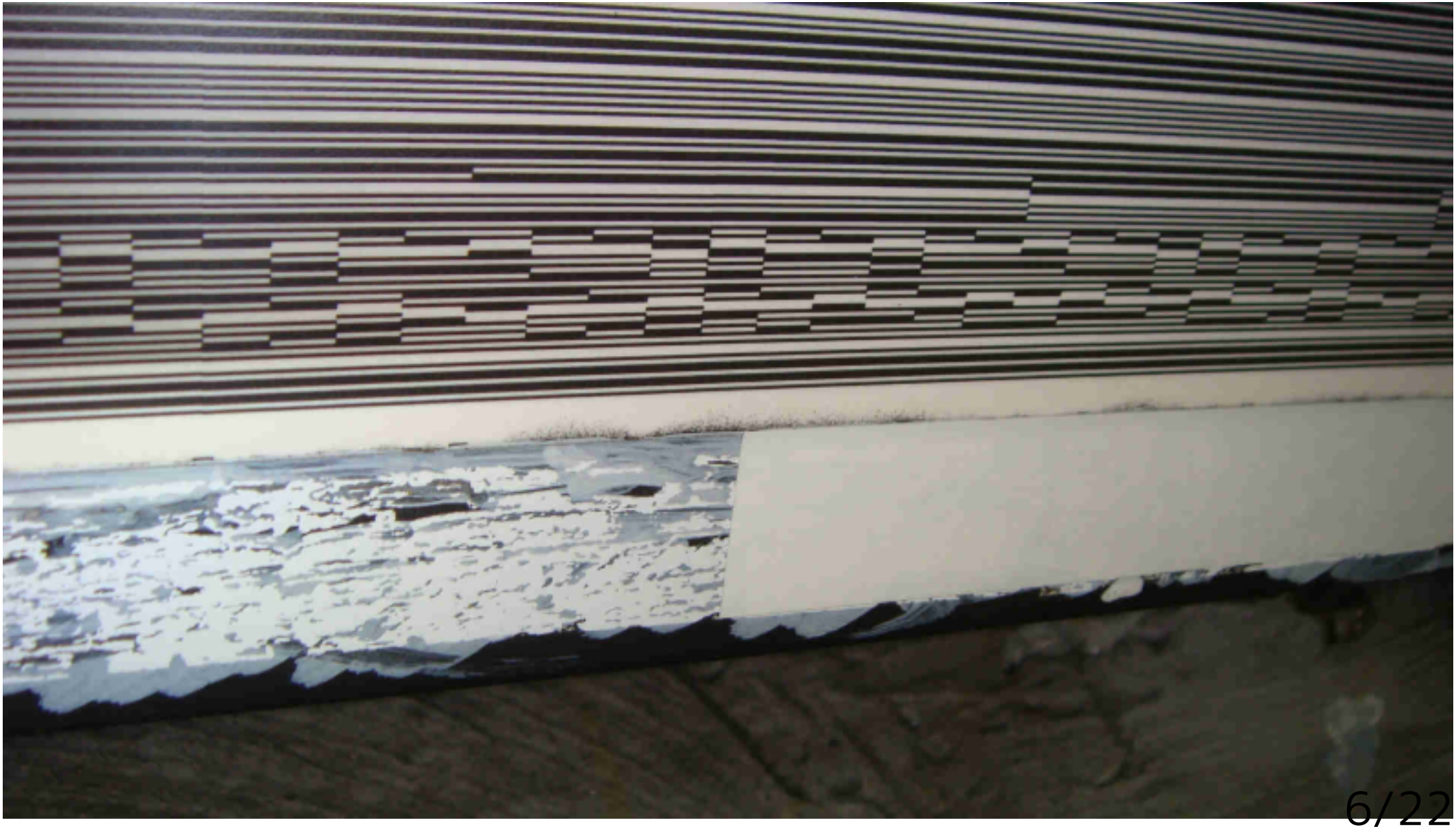
After aluminization



Modification for HSC



Encoder alarms



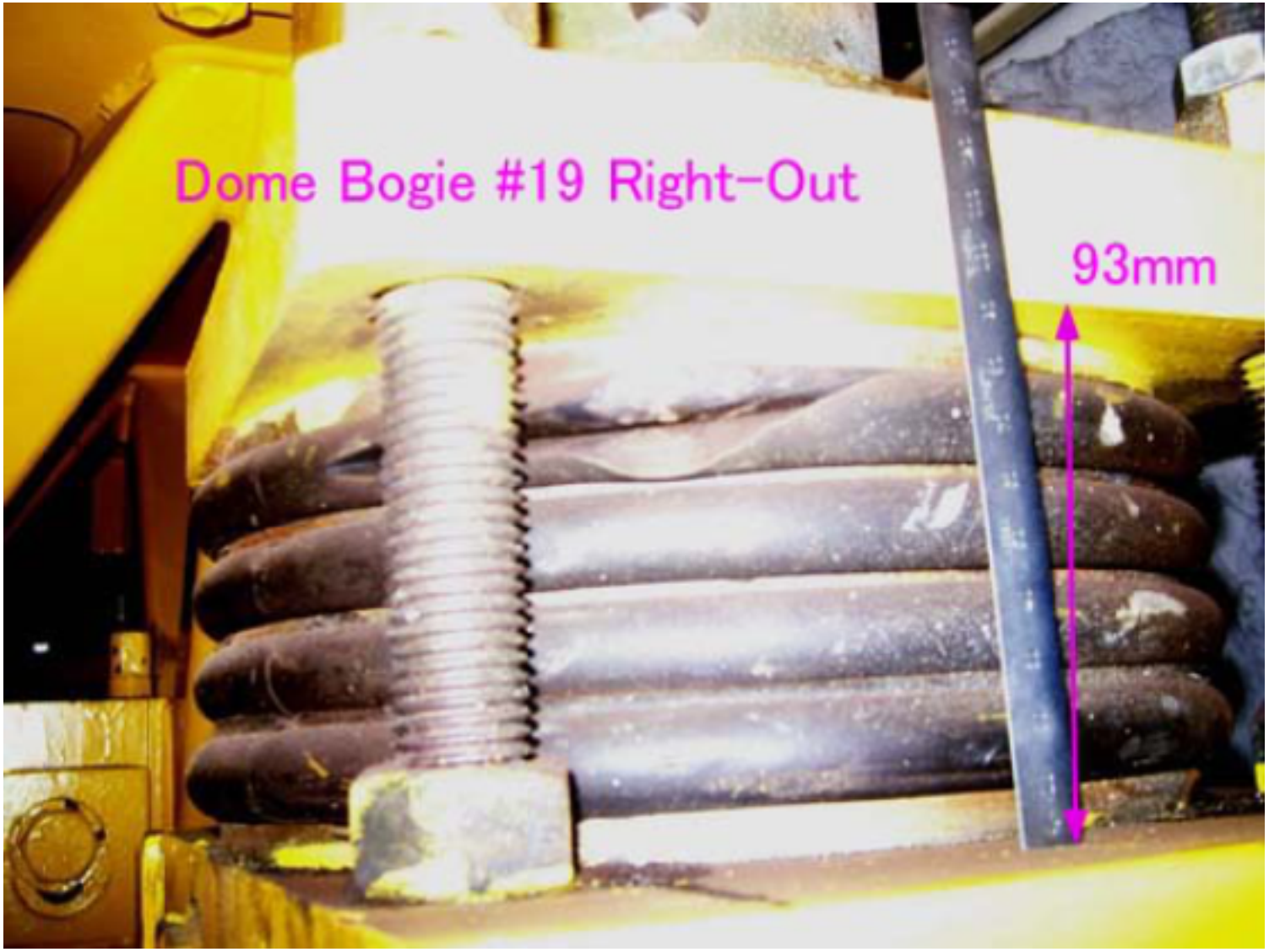
Good news, continued

- Upgraded MLP1
- Upgrading MLP2
- etc

Bad news

- Cracks on rubber springs for dome bogies
  - Performance of new springs still to be confirmed

Rubber spring w/crack



Measuring new springs

Bad news, continued

- Not-so-smooth observations
  - AGSH shutters
  - AGSH probe on POpt
- Many other issues
  - Prioritizing to fix one by one

In 2011

Detailed schedule TBD

S11A: Feb-Jul

Assemble HSC on ESB and/or in the dome

S11B: Aug-Jan w/downtime

Mount HSC onto telescope, test things, and commission HSC

For the coming years

- Prime focus instruments
- TMT

are coming with higher demand for manpower and money.

For the coming years

It costs manpower & money to keep

- Telescope until 2020 or 2030
- Minimize machine troubles
- All of functions
- Functions in specifications

For the coming years

光赤外専門委員会
すばる望遠鏡診断グループ 報告

Report from the Subaru Telescope Diagnostics Group

- March 2010

Conclusion 2

切羽詰まりつつある保守運用の現実を直視すべし

We should look straight the severe reality of the maintenance operations.

Conclusion 3

保守哲学の再確認と要求性能レベルの見直しによる運用のスリム化の追求を

We should reevaluate philosophy for maintenance and redefine requirements to make operations lean.

Reduce costs by

- Defining year to shutdown telescope?
- Allow more downtime during nights?
- Retire less used functions?
- Loosen some specifications?

Costs for longer life

We are now considering to have more engineers:

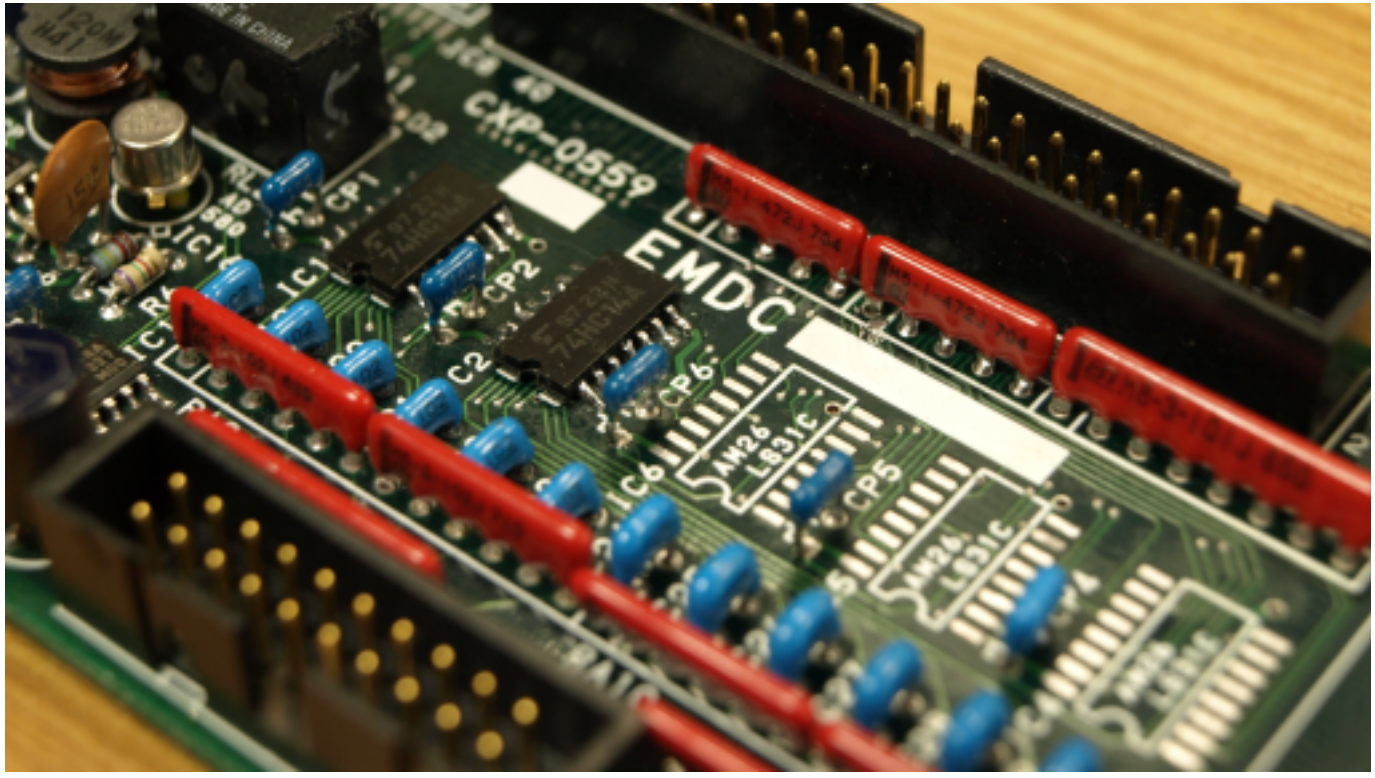
- 2 more for -2020
  - CalCONT & M1 actuators
- 2 more for -2030
  - Dome drives & shutters on AG/SH

We would like to

balance costs
& benefits
talking with
the users.

Good news, some more

We have a new member & are now able to repair PCBs.



Thank you

- http://teldiv.subaru.nao.ac.jp/
- tomono at subaru.naoj.org