

Lasers status

since the last technical stop (28 March- 5 April)

LASER1:

- 4 May: blue very stable. No problem
- 6 to 17 May: start tuning TiS because of RMS instability. Investigation failed to understand the problem.
- from 17 May: leave laser1 as it is because of no spare laser. Decided to focus on laser2.

LASER2:

- 4 April : water leak. Tuning from scratch (still technical stop, B=0T)
- 3 May: Error on display. Restart but then lamp and flow tube brake.
- 7 May: laser2 OFF: problem solved by replacing full power unit.
- 10 May: tuning YLF from scratch because pulse shape not good -> piece of flow tube inside crystal chamber.. (B=0 T)
- Since 10 May : YLF OK. TiS laser not: Low power, pulse width 35 ns and jitter 5-7 ns.
No more remote control for unknown reason since this power failure.
Work on it to put in place the spare unit we have (not the same model)

LASER3:

- 5 May: new lamp, normal maintenance (power degradation)
- 16 May: solenoid valve problem -> no more laser pulse.
under investigation (change valve then chips). Failed every 3-4 days. Restart laser is enough to solve this problem right now

Can try the new board but RED laser will be offline for a while (quite different model)



Power unit

valve

1 June



Broken flow tube → Water leak

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Prepulse: seems it's not the same filter mounted on laser1 and laser2 despite same label on it.

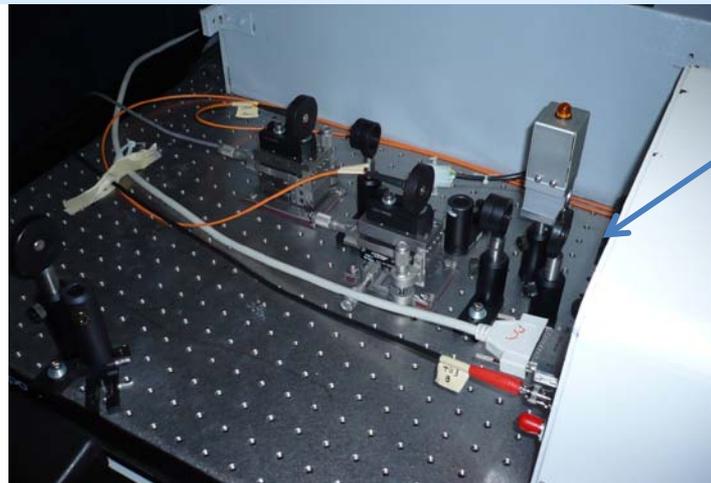
Correlation done with laser operation and data from Marc received 31 May.

Laser2 → bad filter, always prepulse.

Laser1 → no prepulse.

→ will see to change the filter today but need to define plan next week with this laser online (adjusting remote attenuation could be required, pulse width > 30ns)

In general will be nice need to know in which case I can stop laser sequence for a while (between 2 fills ? Wait beam dump ? or any time?) or leave laser as it is even if sequence is not green (light checker) → PRIORITY ?



Dichroic mirror,
blocking 520-800 nm

1 June

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