

DR Emittance in 2012

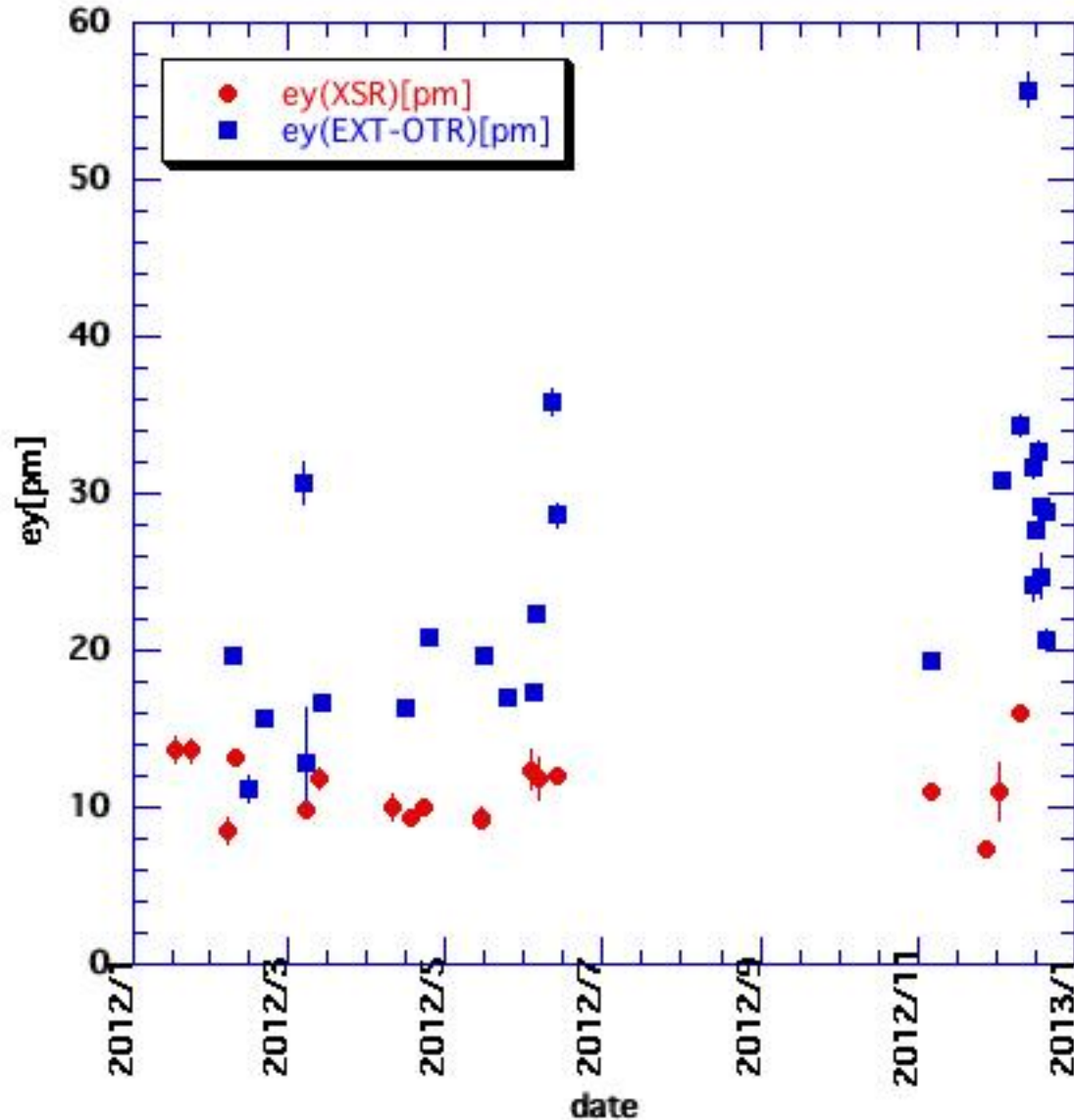
S.Kuroda(KEK)

What's Done In 2012

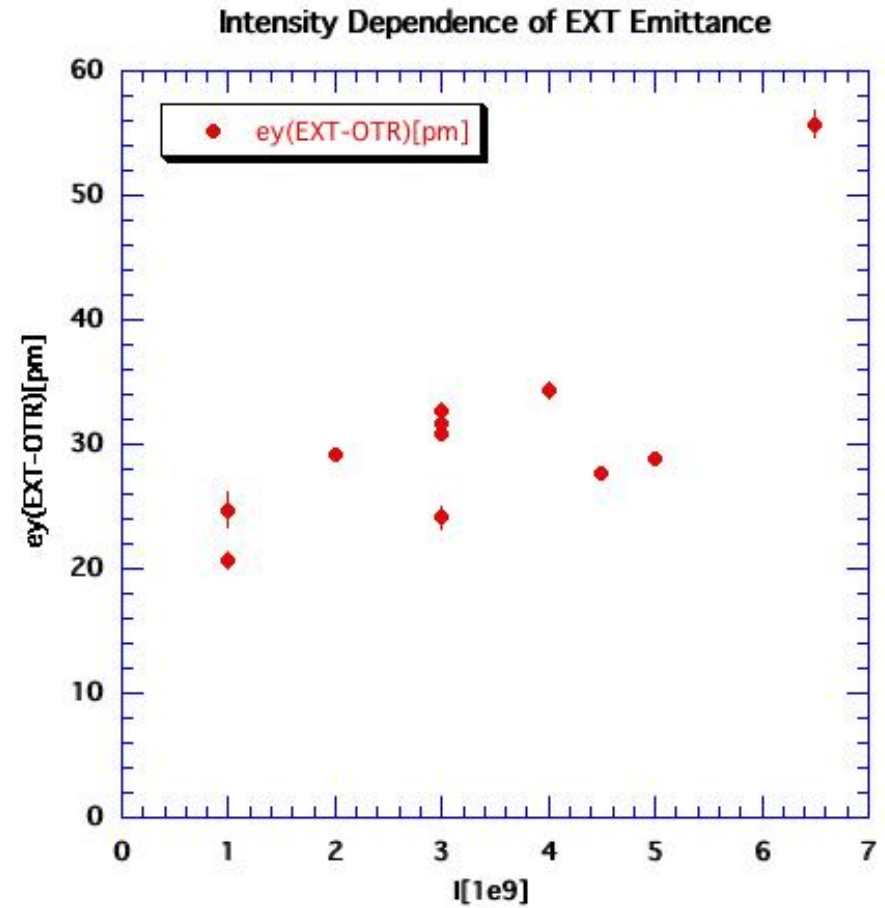
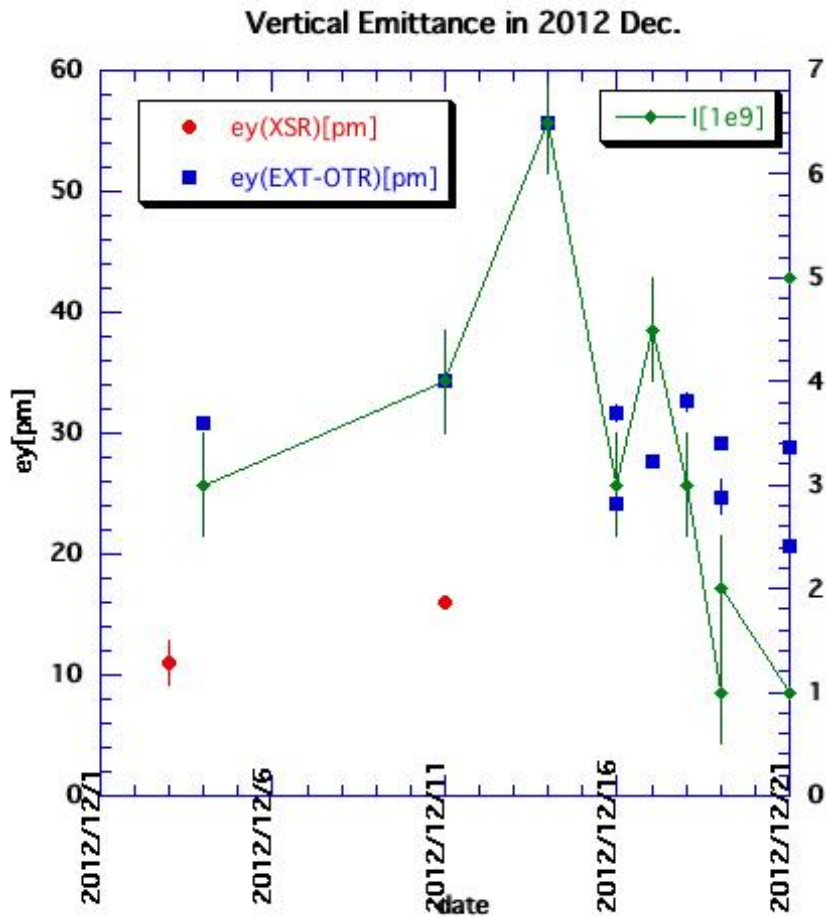
- Almost nothing special to be reported
- Re-alignment in summer shutdown
- Weekly emittance tuning
 - η correction
 - Coupling correction
- Urgent re-alignment for the earthquake on 7th Dec. (Araki-san's report)

Summary of ε_y of ATF-DR 2012

Vertical Emittance in 2012



Emittance in Dec. 2012



Summary and Future Plan

- Vertical emittance in ATFDR was around 10pm throughout the year 2012.
- Further smaller emittance might help smaller beam size @ IP or high current operation for ATF2.
- For example, $\varepsilon_y=2\text{pm}$ needs to measure beam size of 2.4 μm assuming $\beta_y=3\text{m}$ which is the one at the XSR monitor. While the minimum beam size XSR monitor can measure is about 4 μm .
- New Laser wire monitor is installed in higher β_y region. (Rawankar's talk)