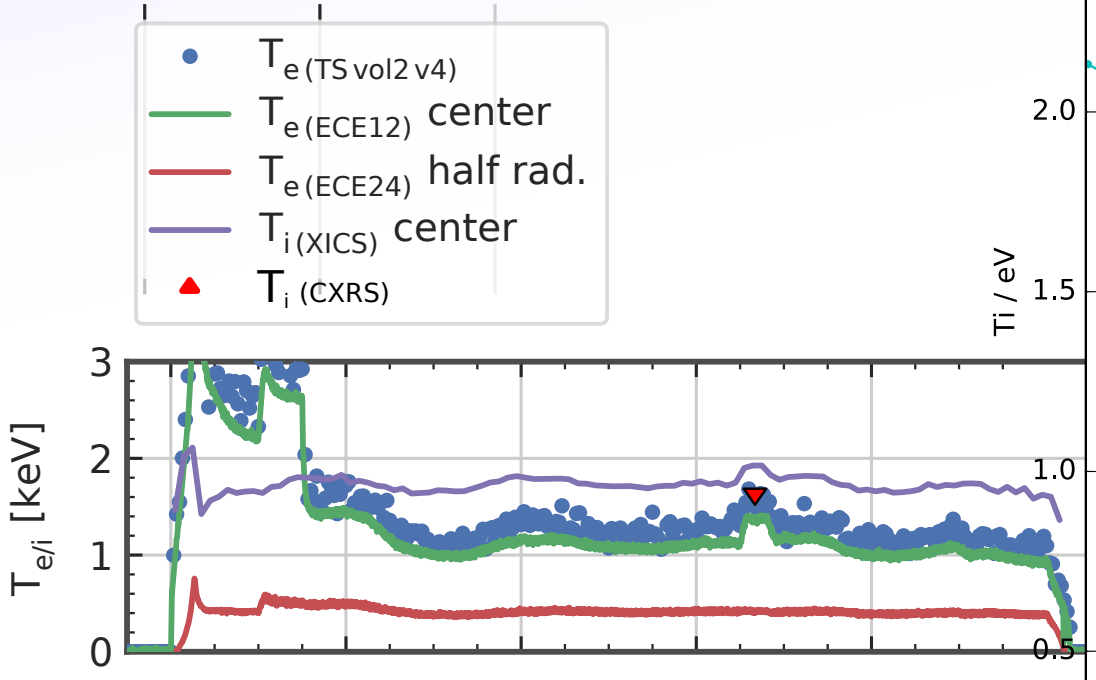
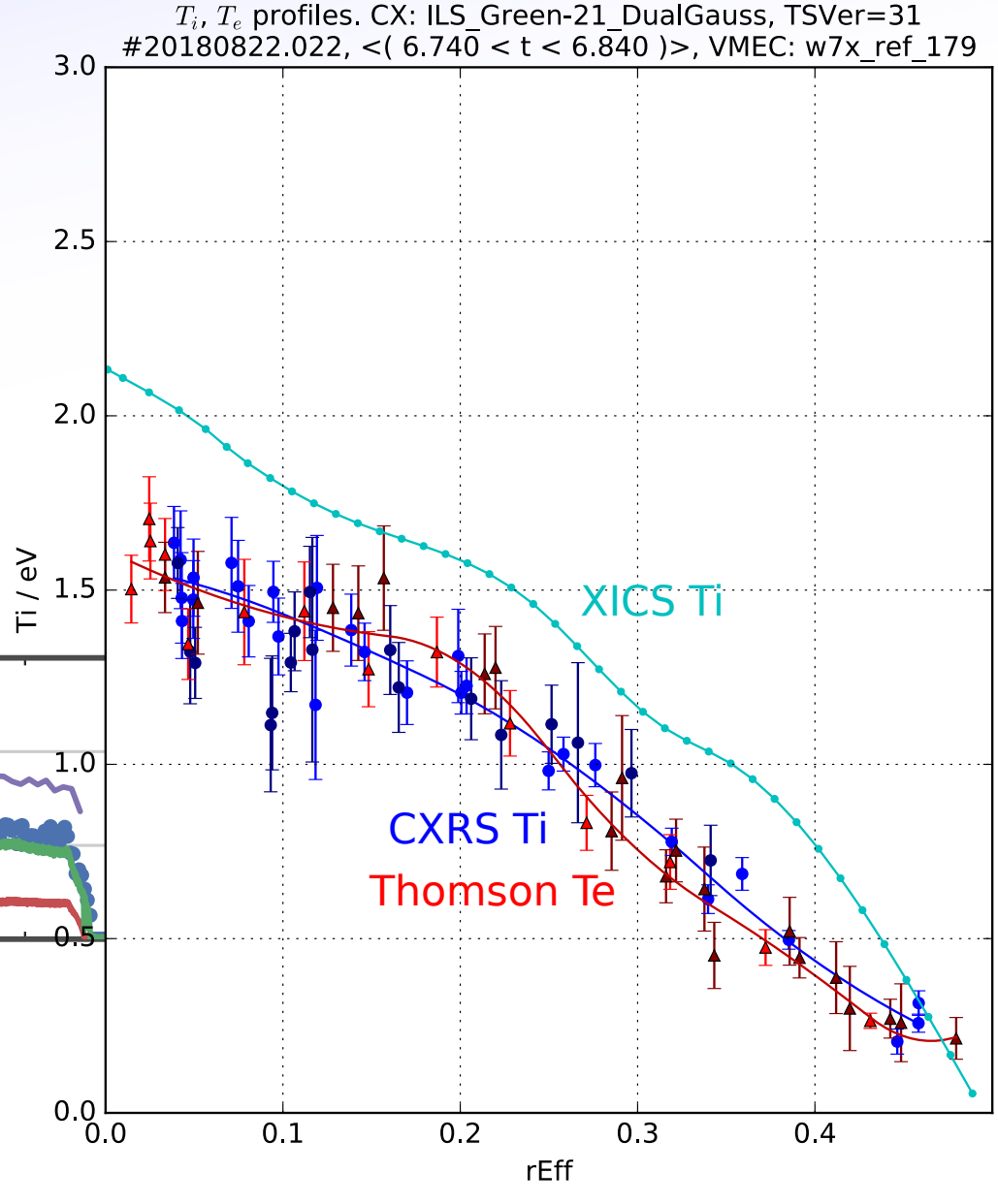
XICS vs CXRS

Typical examples.
Well coupled high-ne off-axis ECRH
--> Should have Ti=Te





O. Ford
S. Bozhenkov
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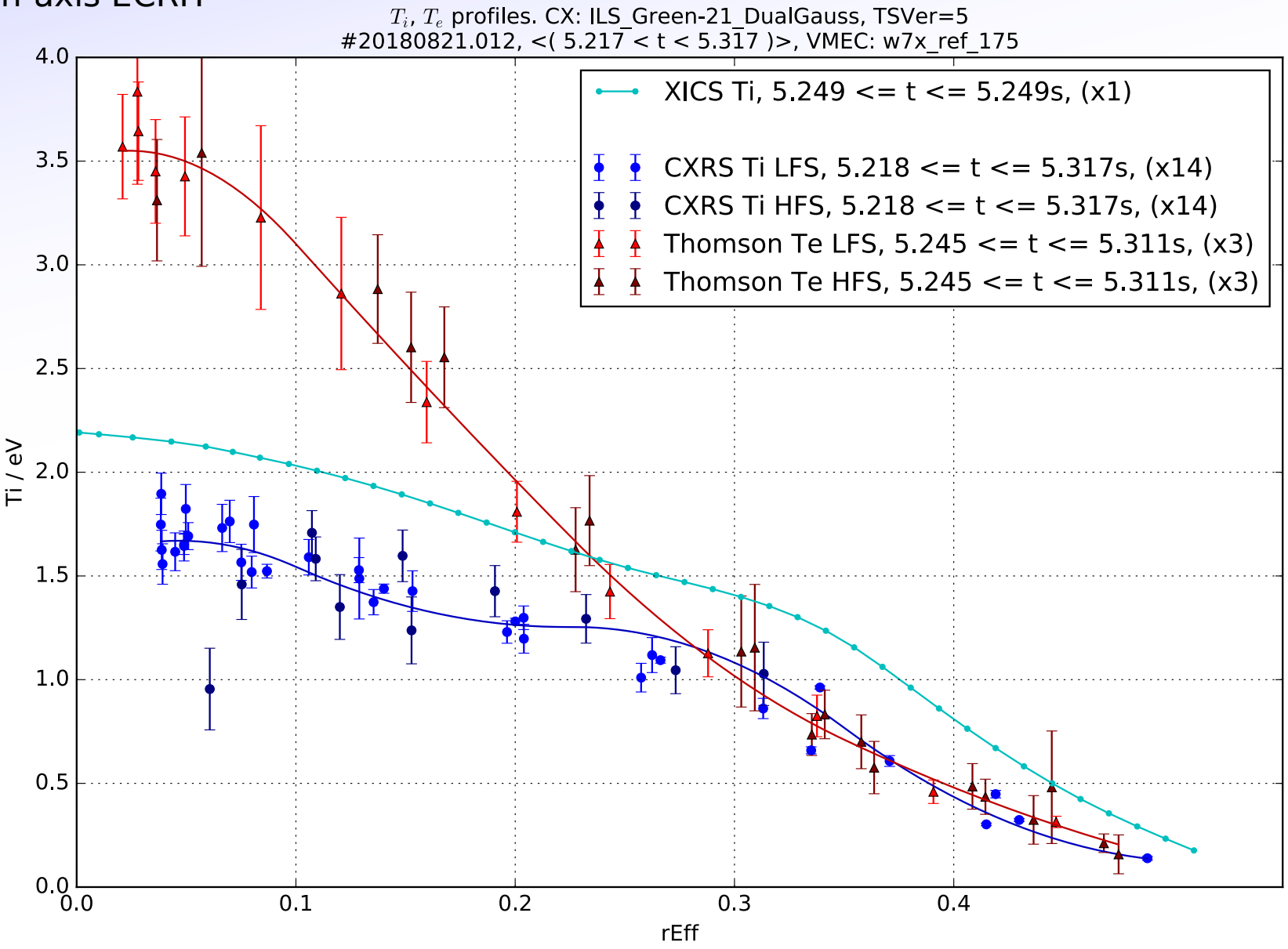
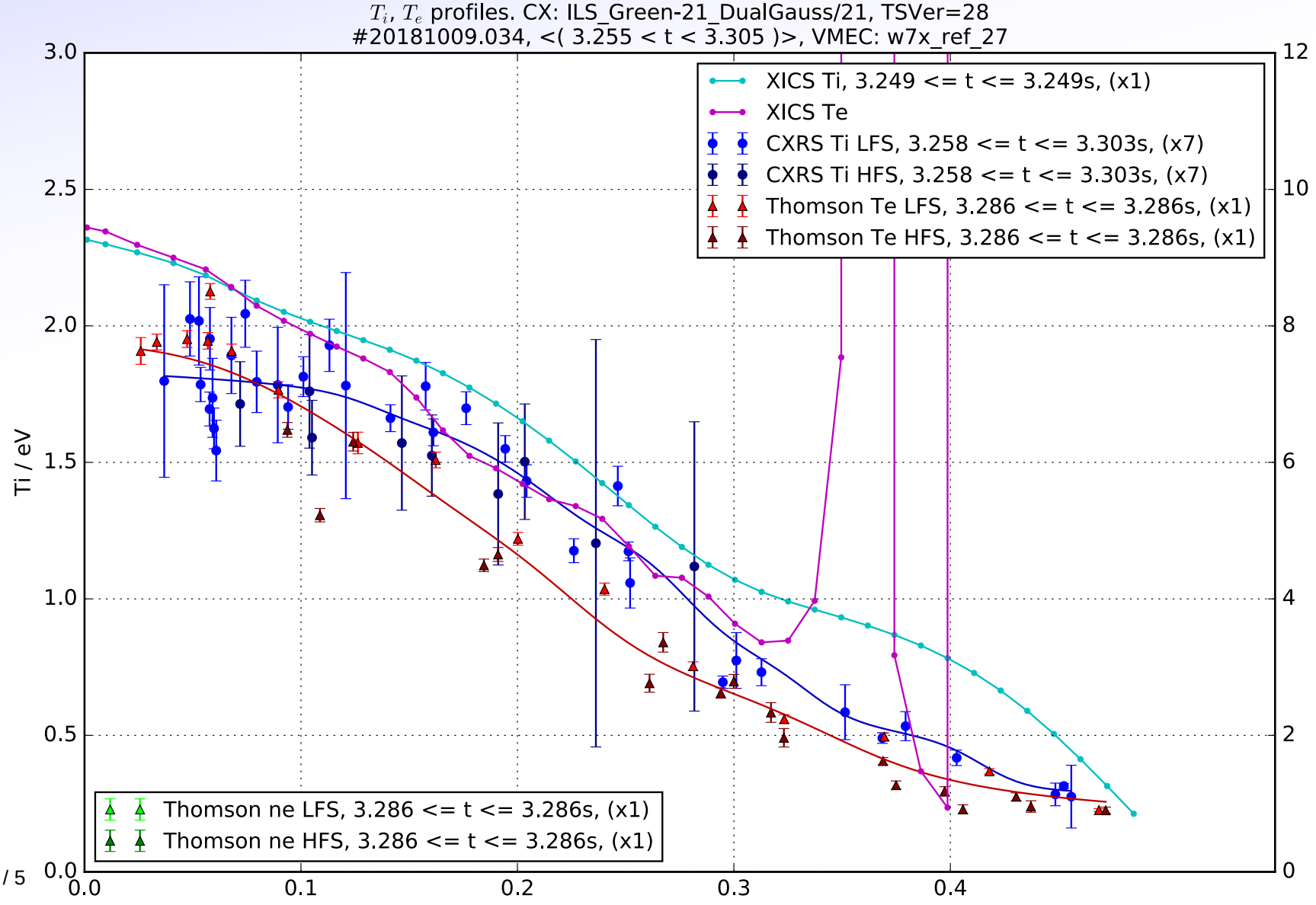
XICS vs CXRS

Typical examples.
On-axis ECRH



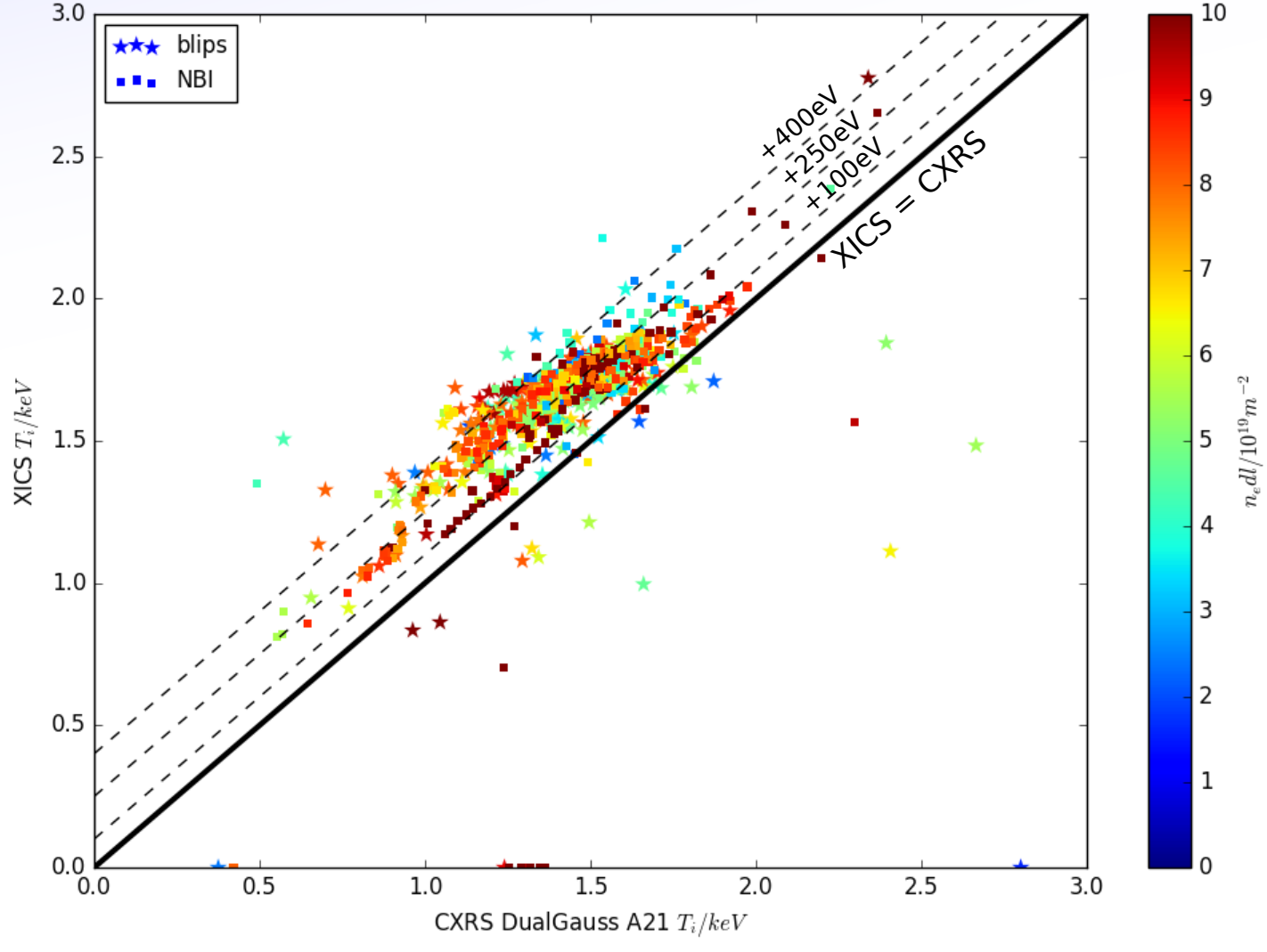
XICS vs CXRS

Typical examples.
NBI --> Ion heating --> Ti > Te



XICS --> CXRS

Rough statistical view for all NBI plasmas.
- Improper treatment of mapping (Vacuum field only)
- Appears to give ~250±150eV

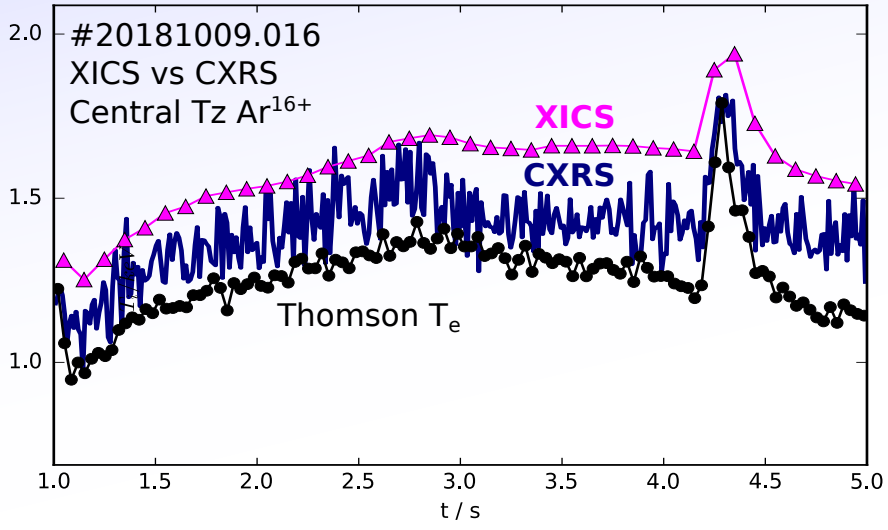


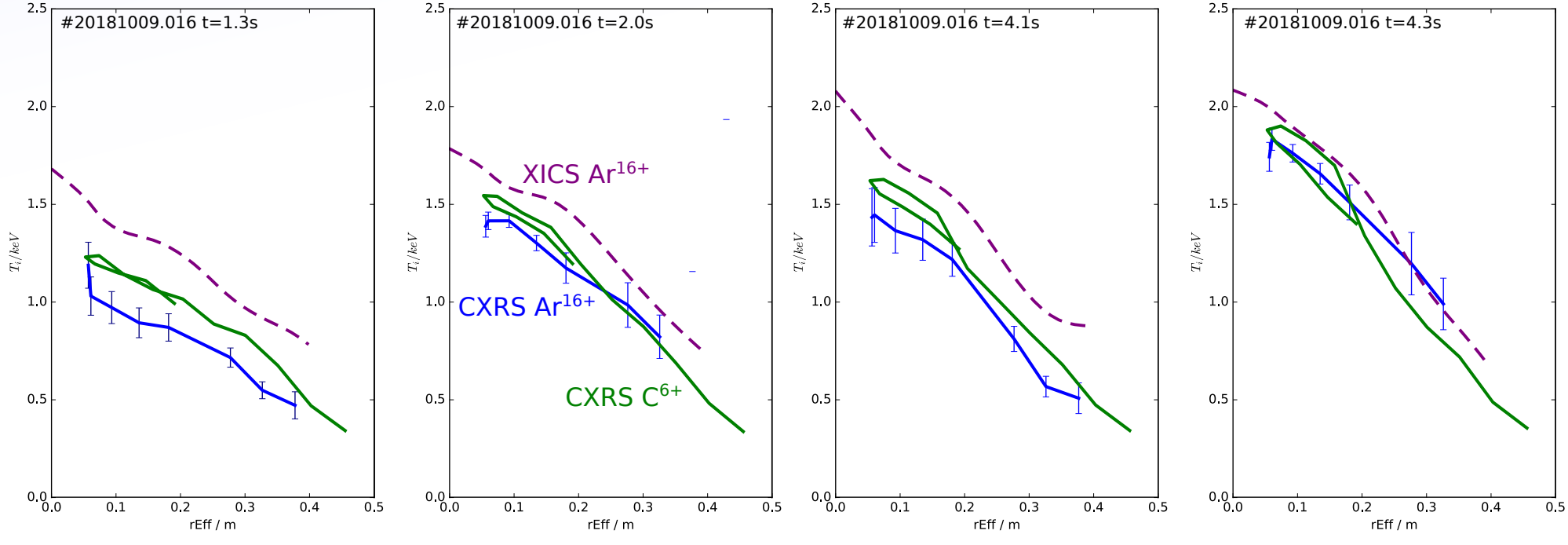
XICS cross-calibration

Argon (Ar^{15+}) for cross-calibration with XICS.
(Ar^{16+} + H --> Ar^{15+}* + p, n=14 - 13, 436.6nm)

- Investigate CXRS XICS T_i discrepancies - Is it T_C vs T_{Ar16+}? or diagnostic?

- Absolute Ar^{16+} intensity to support XICS calibration (if CX cross-sections are OK)





Argon^{16+} CXRS measurements more consistent with Carbon^{6+}. XICS Ar^{16+} usually higher. Gradients always consistent --> Supports XICS inversions.