

Effects of CAE on ion power balance

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Summary of results:

- Modes are undetectable below beam energies of 70kV.
- Some ion temperature "anomaly" remains in absence of detectable modes.
- Measurements so far at relatively low power, few shots, small Ti anomaly.
- Necessary to have more complete documentation

Proposed experiment:

- Should follow CAE threshold XP to capitalize on understanding of CAE threshold conditions.
- Continue experimental plan outlined in XP32 - document Ti/Te with/without detectable CAE activity.
- Measure, to extent possible, CAE amplitude, damping rates (improved reflectometer).
- Inject maximum power without triggering CAE activity.