Yet More Analysis of XP1043

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Analysis Methodology

- J. Canik analysis indicates PsiN of the pump entrance for the candidate shapes clusters at certain values

  - 1.02, 1.04, 1.07, 1.11 and 1.15

- From data set shown at meeting 4, the value of jsat_parallel and the single probe temperatures are extracted two ways

  - 1: Nearest available binned data point taken from data, std. dev. shown as error bar

  - 2: bi-exponential fit value at the requested value
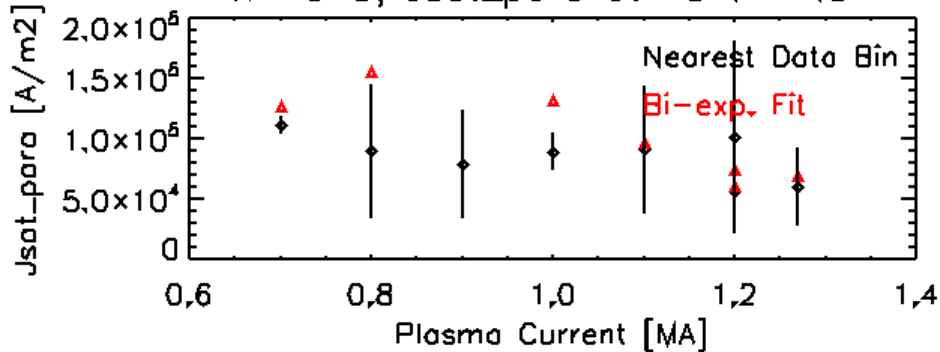
- More notes to follow on Te in the far-SOL

Jsat behavior at selected PsiN

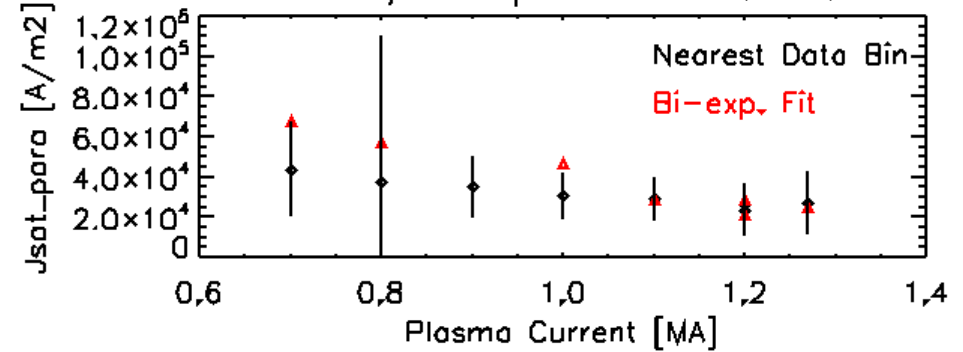- Near-SOL behavior not monotonic with Ip

- Far-SOL exhibits downward trend
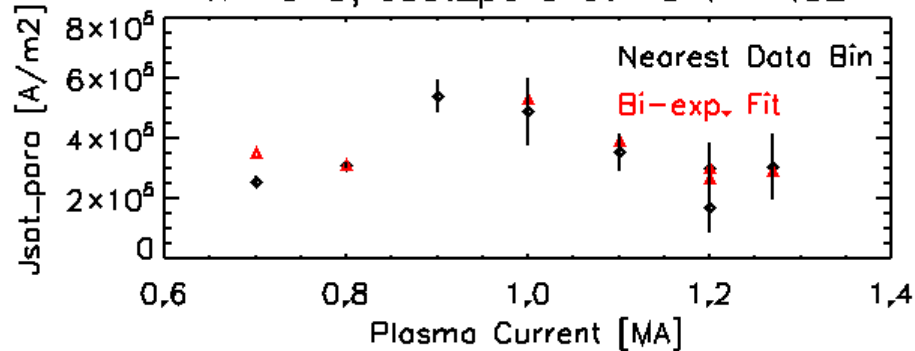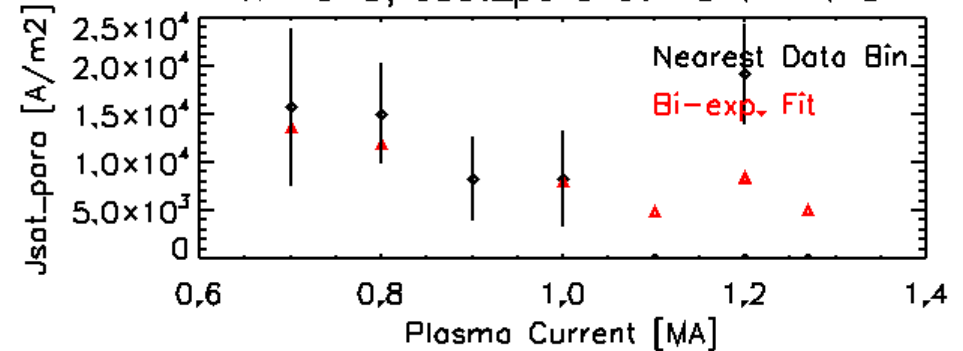
Far-SOL Te Behavior

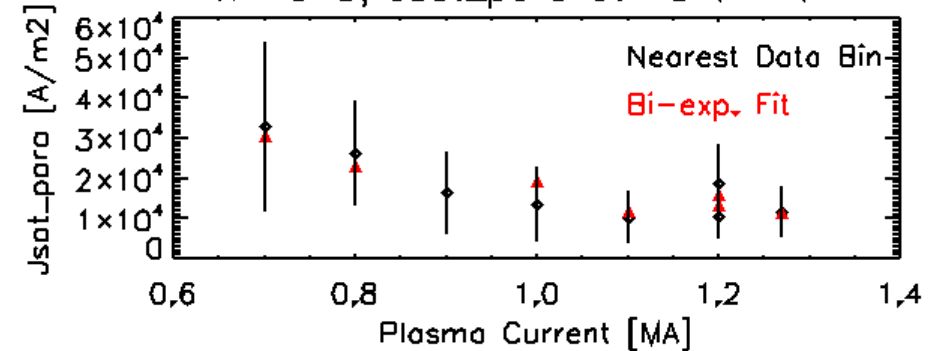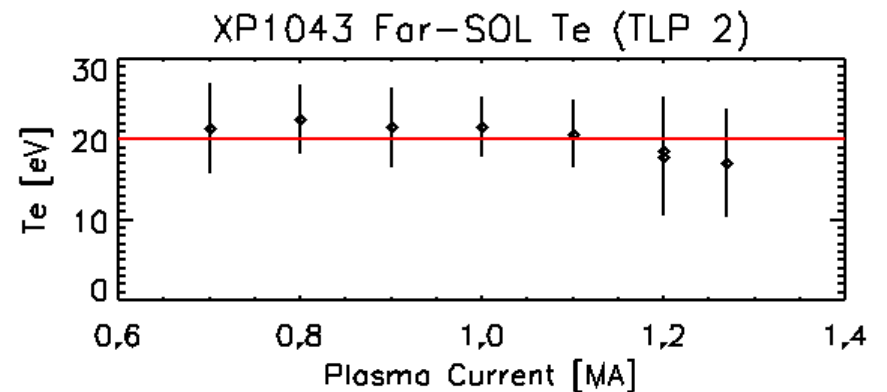- Triple-Langmuir probe (probe 2) at 65cm used for Te

- Flat-top period where probe is >= second separatrix PsiN used to produce mean Te

- Standard Dev. shown as error bar

- Statistically, there does not seem to be much trend in the far-SOL Te

Discussion

- The decrease in far-SOL flux with Ip seems consistent with earlier analysis of decay lengths

- As near-SOL contracts (and near-SOL contains 90%) of cumulative fraction, less should impinge PFCs in the far-SOL