

TD24 Summary (3)

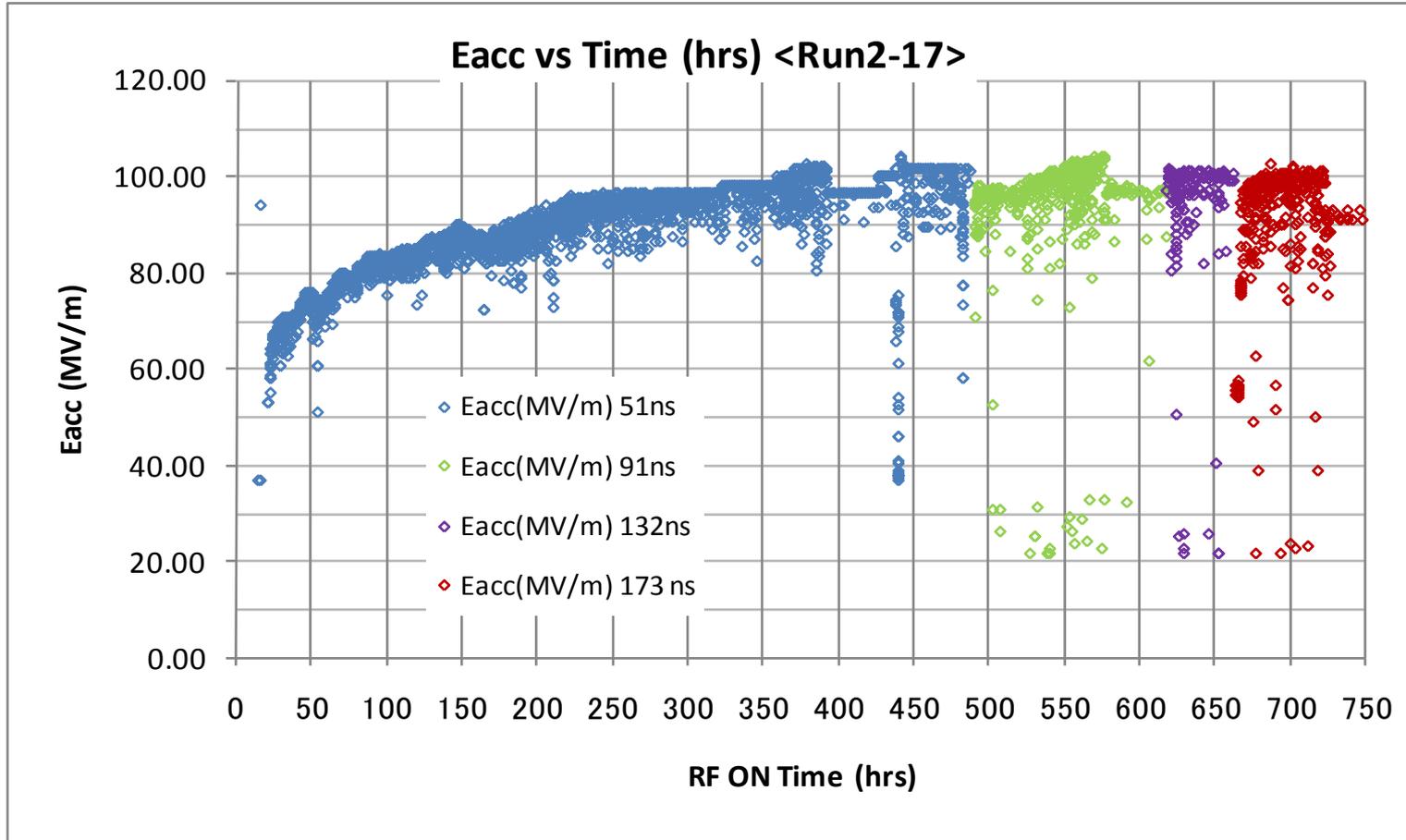
Oct. 20, 2011

T. Higo and X-band group

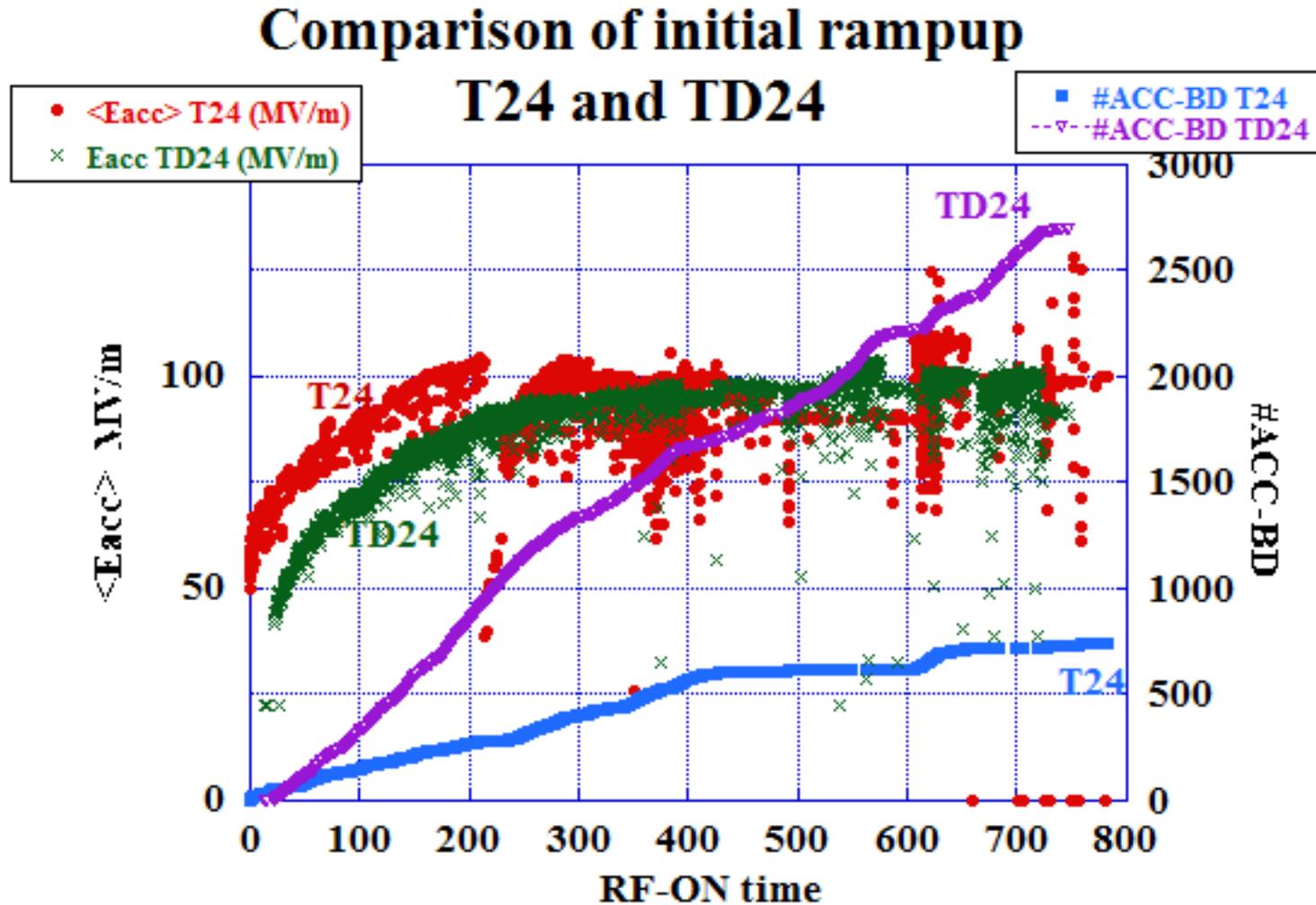
History

- TD24#4 was installed into Nextef in August.
- It has been being processed from early September.
- It passed about 750 hours as of now.
- Pulse width increased as 51, 91, 132, and now 173nsec.
- Stable operation with $E_{acc} \sim 100\text{MV/m}$ is established before increasing pulse width.
- It is on the way toward our usual, nominal goal of (100MV/m, 240nsec).

TD24#4 processing at Nextef

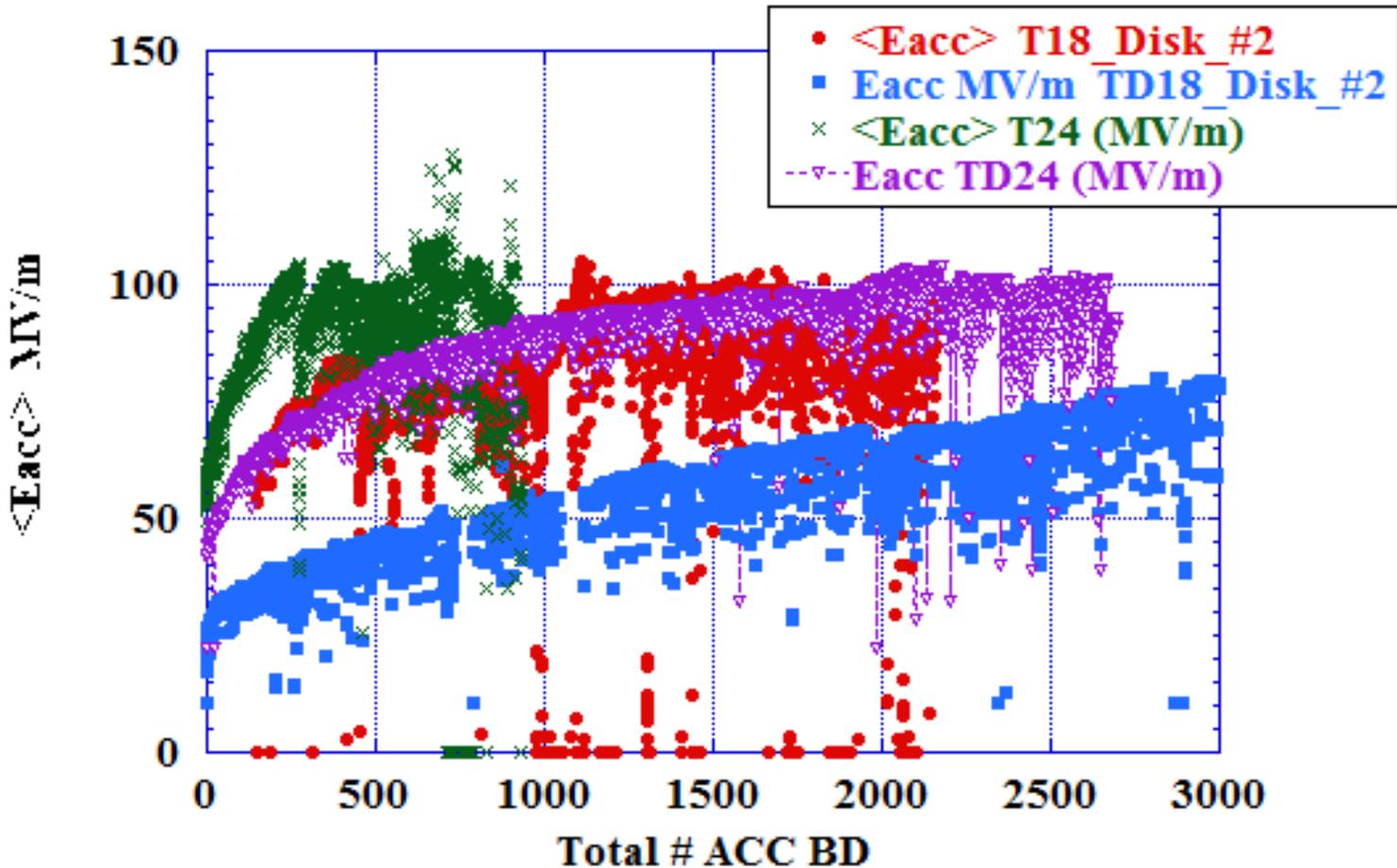


Comparison between T24 and TD24 at Nextef

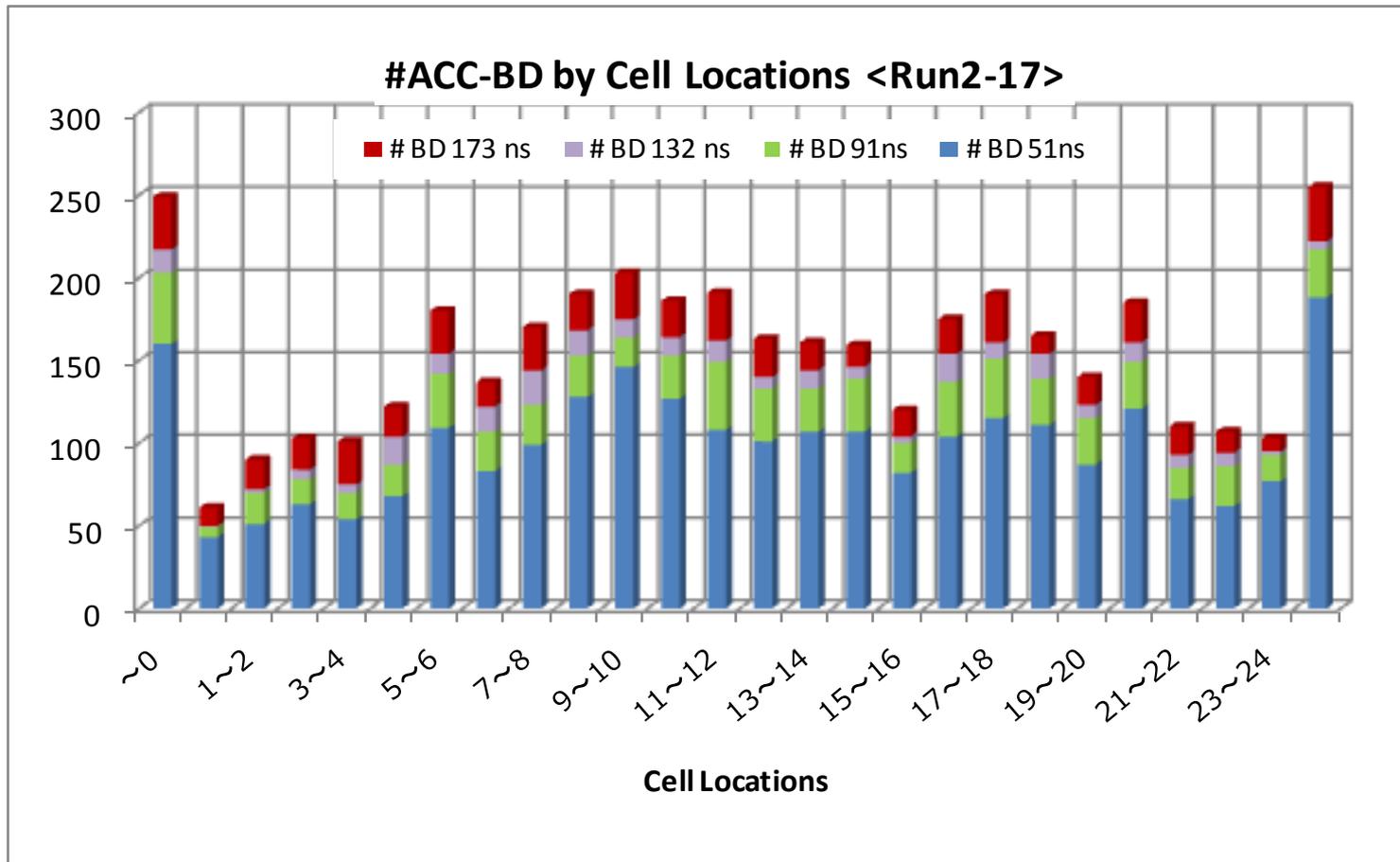


Comparison among four CLIC-prototype structures tested at Nextef

Eacc vs #ACC-BD



TD24#4 Location of BD cells



Performance of TD24#4

- It reached 100MV/m at 173nsec after 700 hours at 50Hz.
- E_{acc} ramping speed as a function of #BD is similar to T18, saying “much faster than TD18,” but slower than T24.
- BDR will be evaluated after widening pulse to 240nsec.
- Very rough estimate of the BDR at 90MV/m, 173nsec seems $\sim 1\text{BD}/\text{hour}$, $\sim 2 \times 10^{-5}\text{bpp}/\text{m}$.