

# Cavity status; recent KEK activities

## (1) MHI-016, MHI-017 ; 9 cell cavities field measurements

MHI-016: 1st VT 21.0MV/m @  $Q_0=1.1E10$  May 19,2011

defect on cell #1 was known after bulk EP,  
gradient was limited by this defect.

local grind will be applied before 2nd test.

MHI-017: 1st VT 38.4MV/m @  $Q_0=6.1E09$  June 02,2011

no defect was observed after bulk EP,  
ILC specification clear performance,  
so it will go module installation.

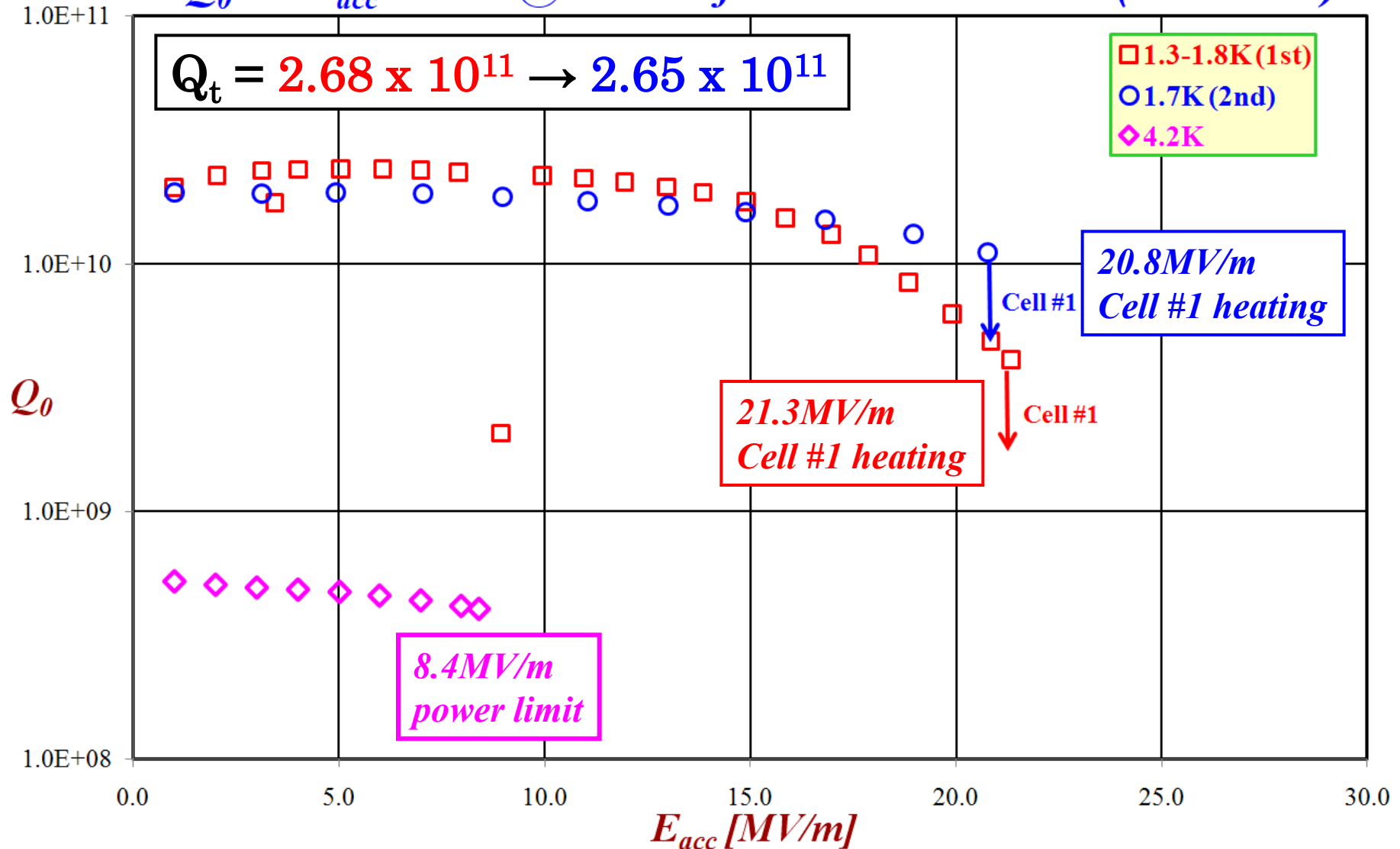
Next vertical test is scheduled on 16 June

(MHI-014, 3rd VT, field emission turned on by #8-#9iris scratch,  
local grind will be applied).

Result of MHI-016 1st VT

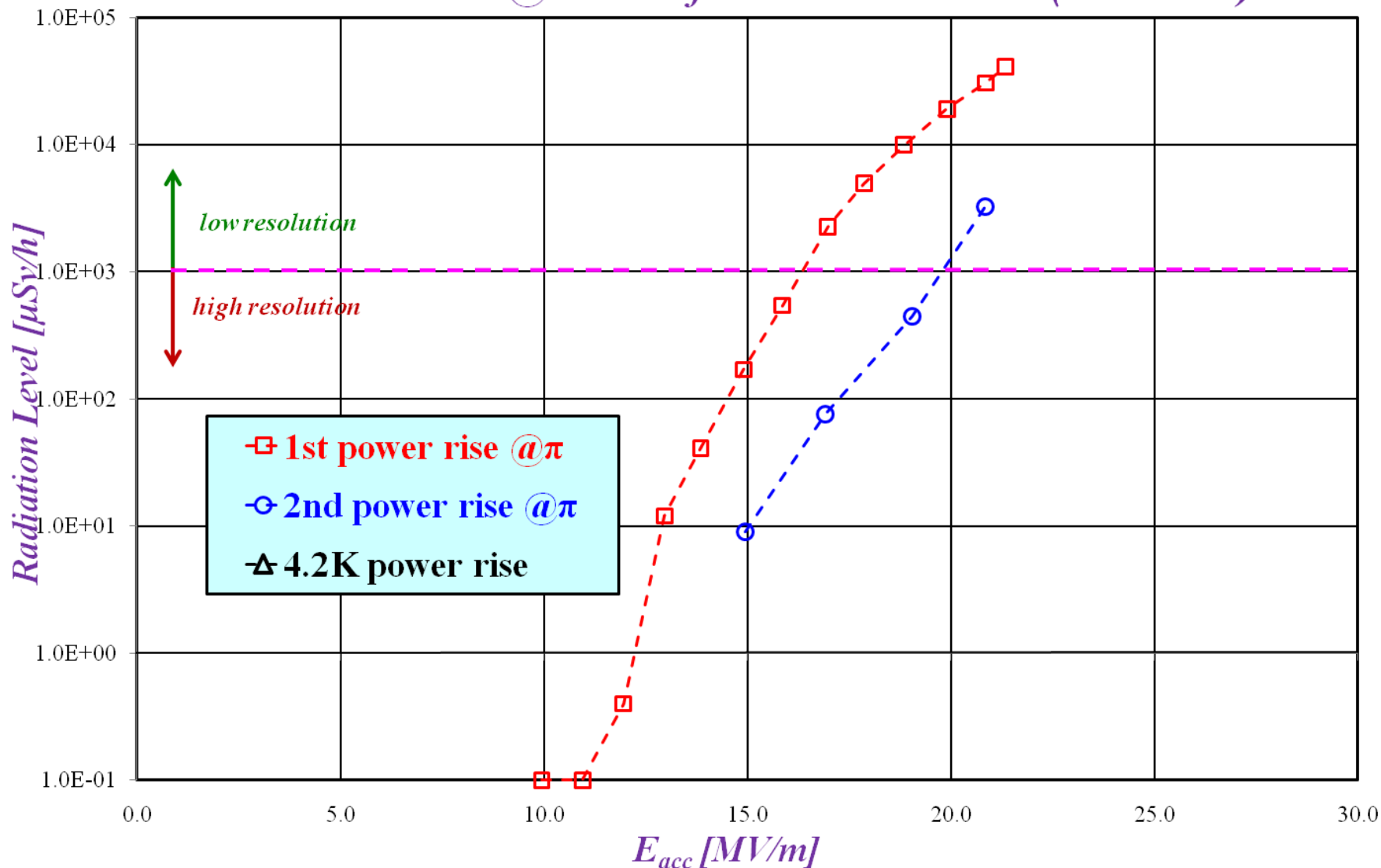
# $Q_0$ - $E_{acc}$ Curve for MHI #16 @1.8K & 4.2K

$Q_0$  vs.  $E_{acc}$  Curve @  $\pi$  mode for MHI#16 1<sup>st</sup> V.T. (2011/5/19)



# Radiation Level in $\pi$ mode measurement @2K

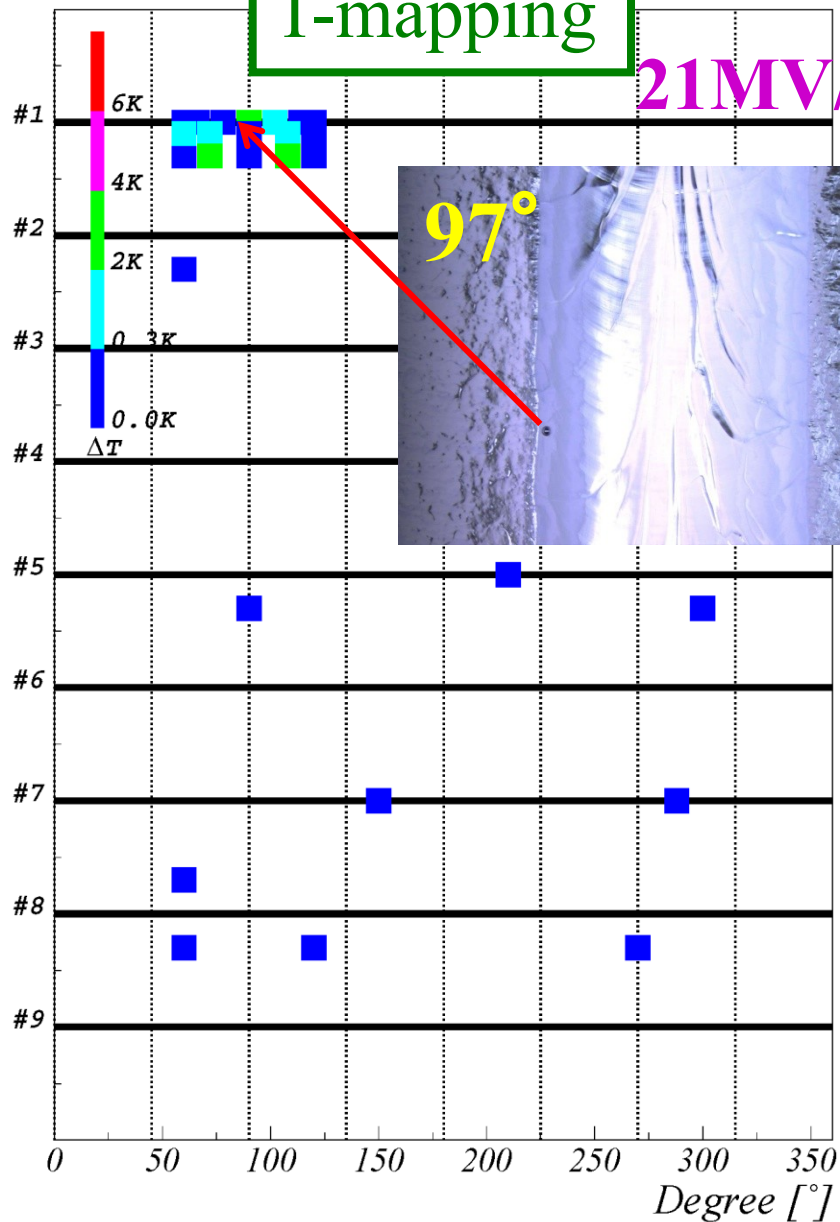
*Radiation Level @  $\pi$  mode for MHI#16 1<sup>st</sup> V.T. (2011/5/19)*



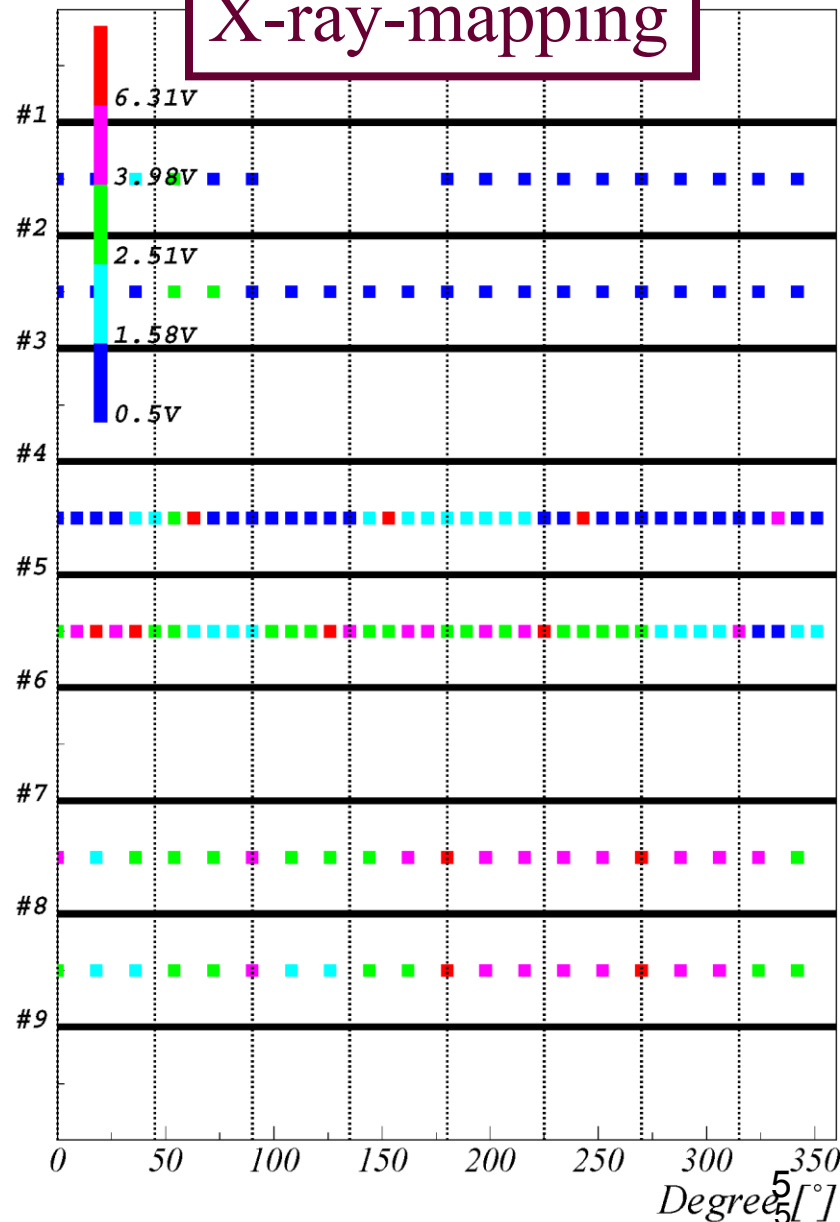
# Comparison between T-mapping and X-ray mapping @2<sup>nd</sup> $\pi$

T-mapping

21 MV/m

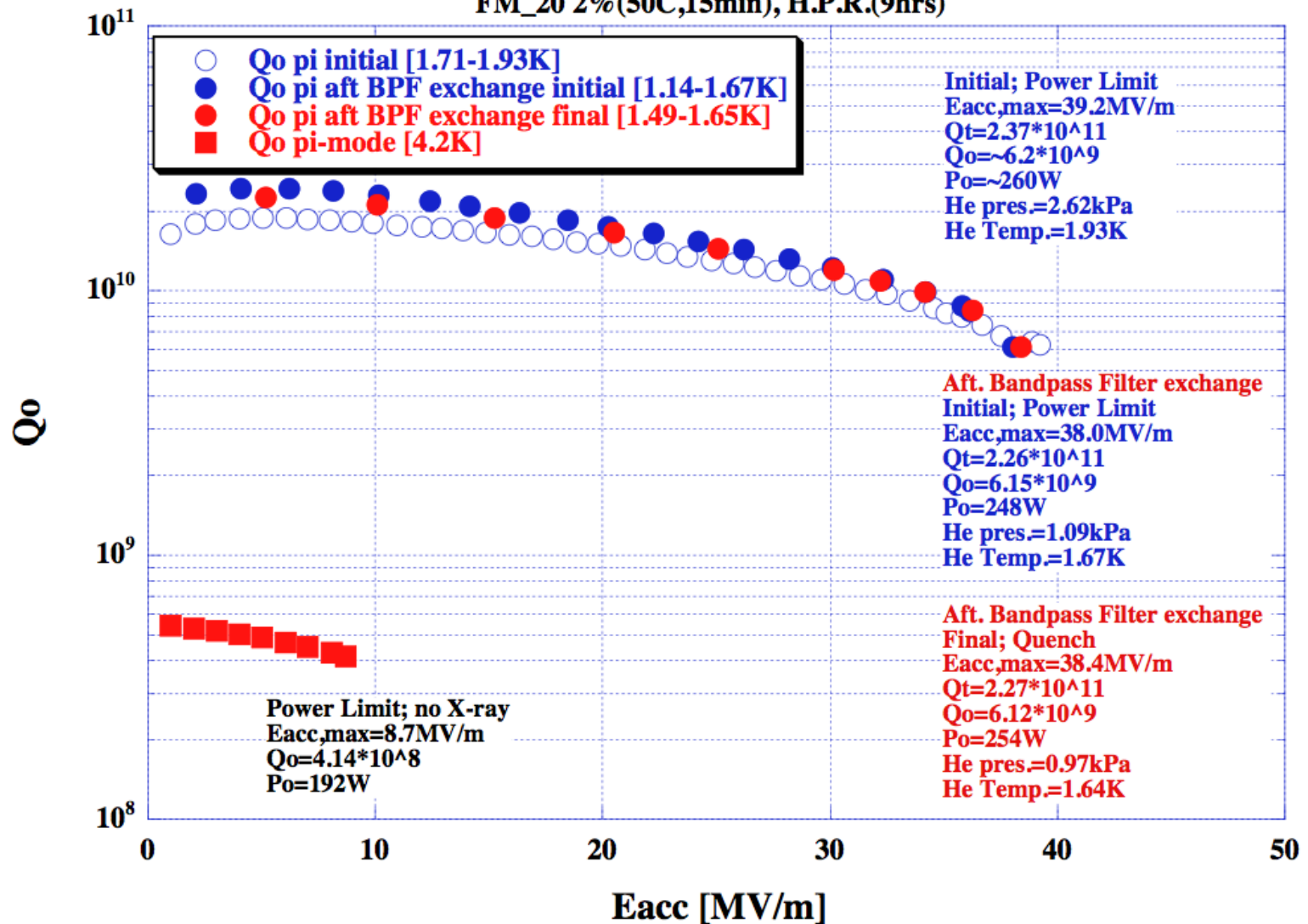


X-ray-mapping



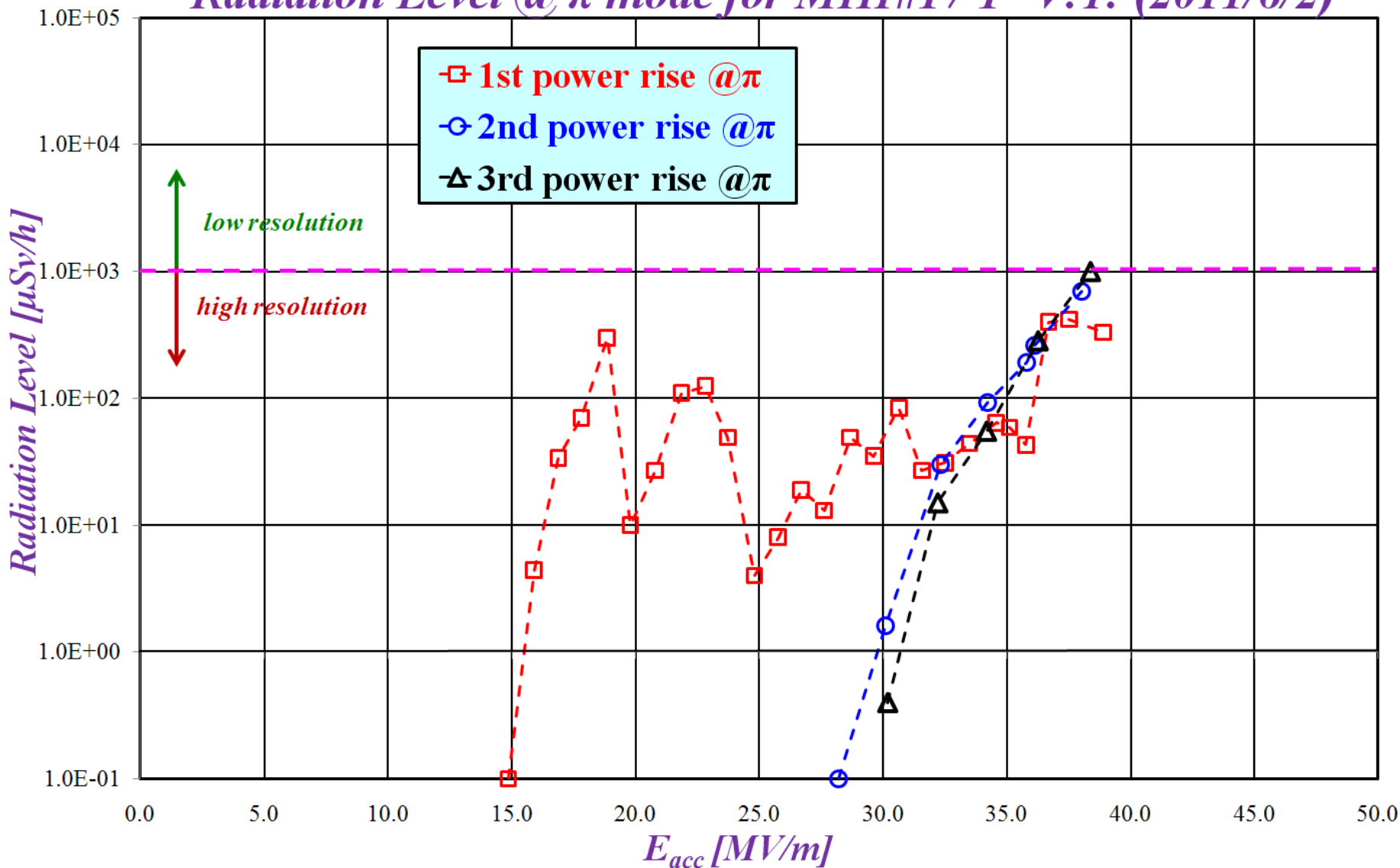
Result of MHI-017 1st VT

MHI No.17 1st. Vertical Test 06/02/2011  
 EP-II( $\sim 37\text{mA/cm}^2$ ,  $20\mu\text{m}$ ), Water flow(1.5hrs),  
 FM\_20 2%(50C,15min), H.P.R.(9hrs)



# Radiation Level in $\pi$ mode measurement @2K

*Radiation Level @  $\pi$  mode for MHI#17 1<sup>st</sup> V.T. (2011/6/2)*





# Comparison between T-mapping and X-ray mapping @3<sup>rd</sup> $\pi$

