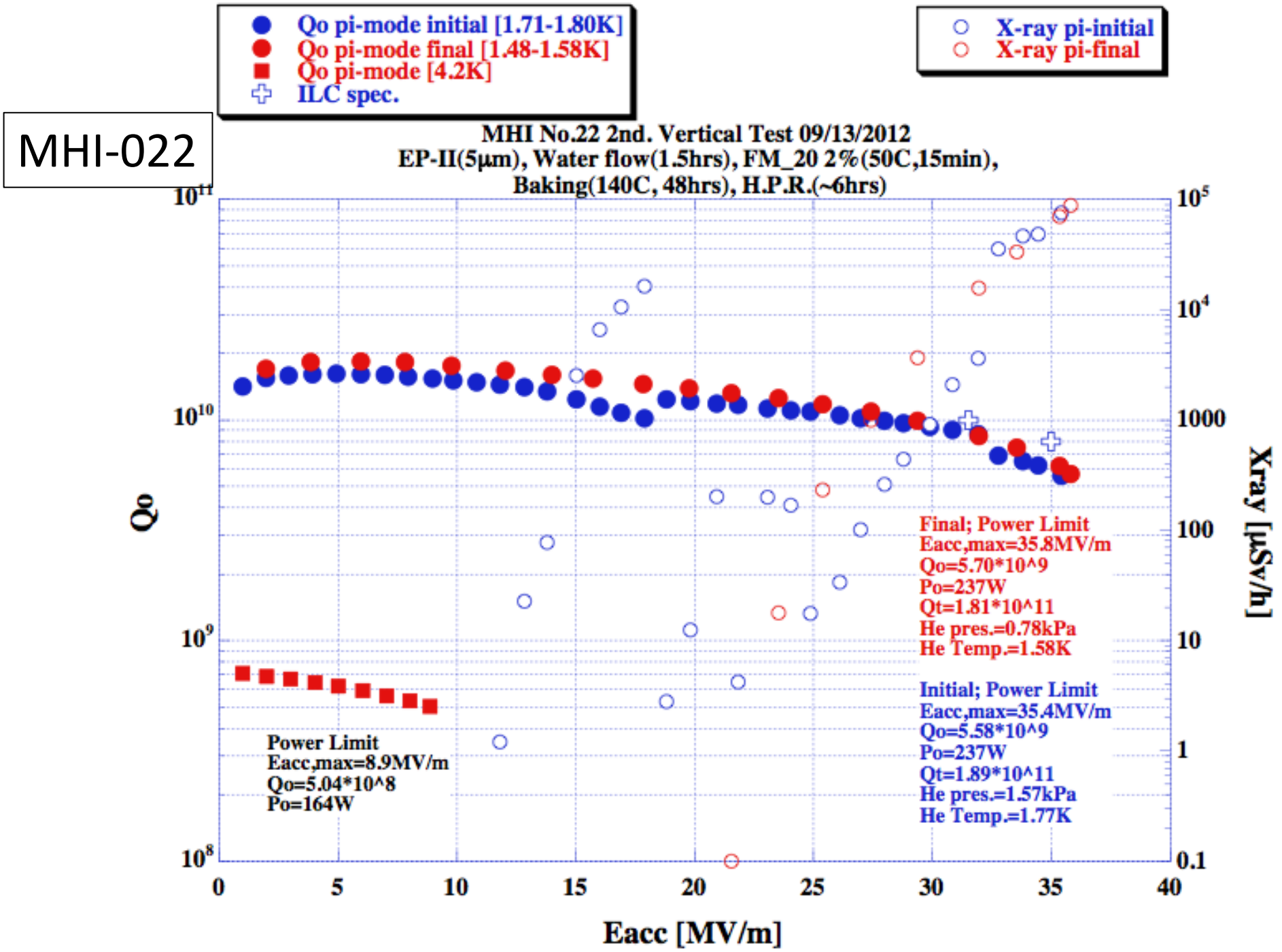
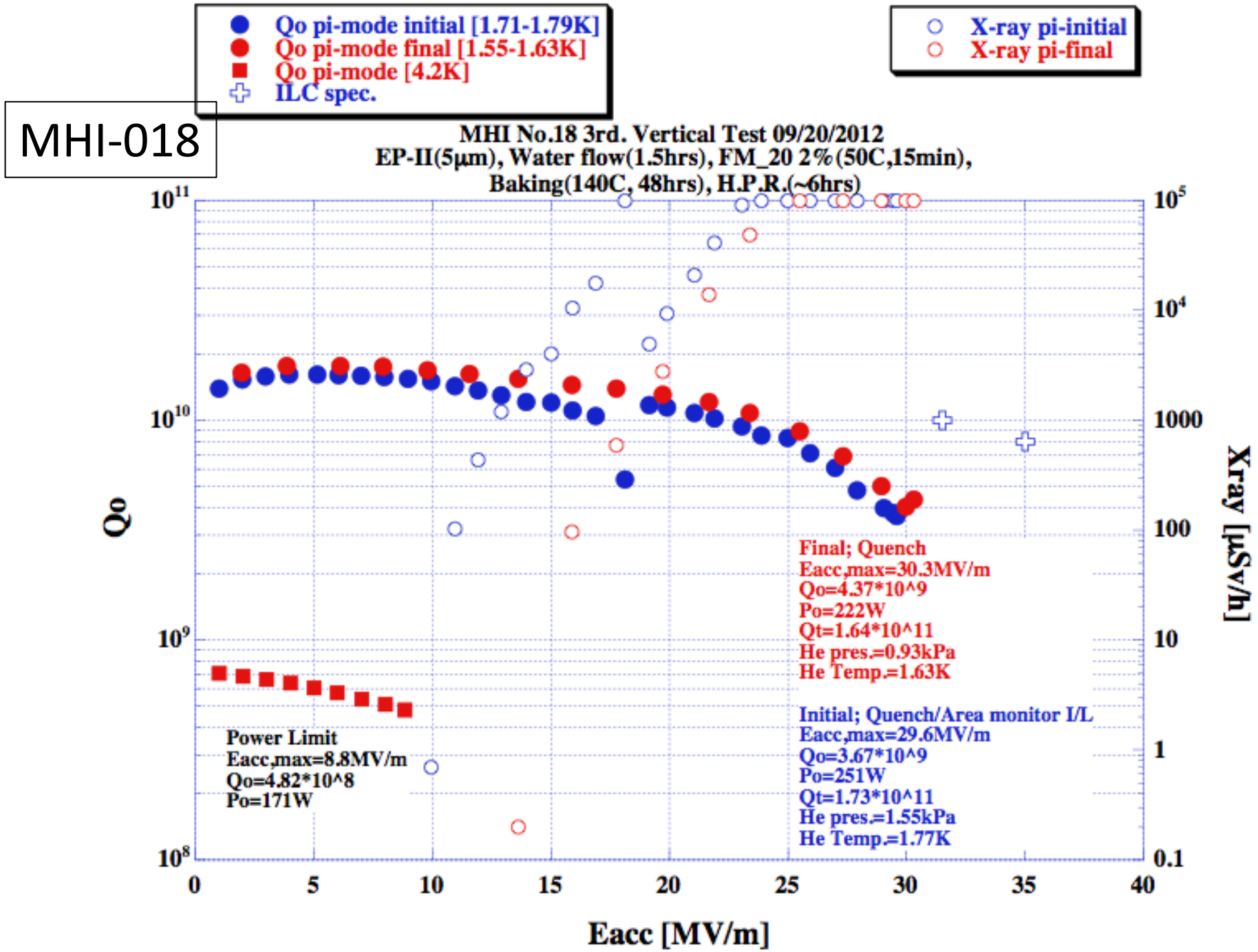
STF status 09252012

H. Hayano


MHI-022
Qo pi-mode initial [1.71-1.80K]
Qo pi-mode final [1.48-1.58K]
Qo pi-mode [4.2K]
ILC spec.
X-ray pi-initial
X-ray pi-final
MHI No.22 2nd. Vertical Test 09/13/2012
EP-II(5μm), Water flow(1.5hrs), FM_20 2%(50C,15min),
Baking(140C, 48hrs), H.P.R.(~6hrs)
Qo
Xray [μSv/h]
Eacc [MV/m]
Final; Power Limit
Eacc,max=35.8MV/m
Qo=5.70*10^9
Po=237W
Qt=1.81*10^11
He pres.=0.78kPa
He Temp.=1.58K
Initial; Power Limit
Eacc,max=35.4MV/m
Qo=5.58*10^9
Po=237W
Qt=1.89*10^11
He pres.=1.57kPa
He Temp.=1.77K
Power Limit
Eacc,max=8.9MV/m
Qo=5.04*10^8
Po=164W


Qo pi-mode initial [1.71-1.79K]
Qo pi-mode final [1.55-1.63K]
Qo pi-mode [4.2K]
ILC spec.
X-ray pi-initial
X-ray pi-final
MHI-018
MHI No.18 3rd. Vertical Test 09/20/2012
EP-II(5μm), Water flow(1.5hrs), FM_20 2%(50C,15min),
Baking(140C, 48hrs), H.P.R.(~6hrs)
Qo
Xray [μSv/h]
Eacc [MV/m]
Final; Quench
Eacc,max=30.3MV/m
Qo=4.37*10^9
Po=222W
Qt=1.64*10^11
He pres.=0.93kPa
He Temp.=1.63K
Initial; Quench/Area monitor I/L
Eacc,max=29.6MV/m
Qo=3.67*10^9
Po=251W
Qt=1.73*10^11
He pres.=1.55kPa
He Temp.=1.77K
Power Limit
Eacc,max=8.8MV/m
Qo=4.82*10^8
Po=171W

STF cavity vertical test status (2010-2012)

◎, ◯ :ILC spec. clear

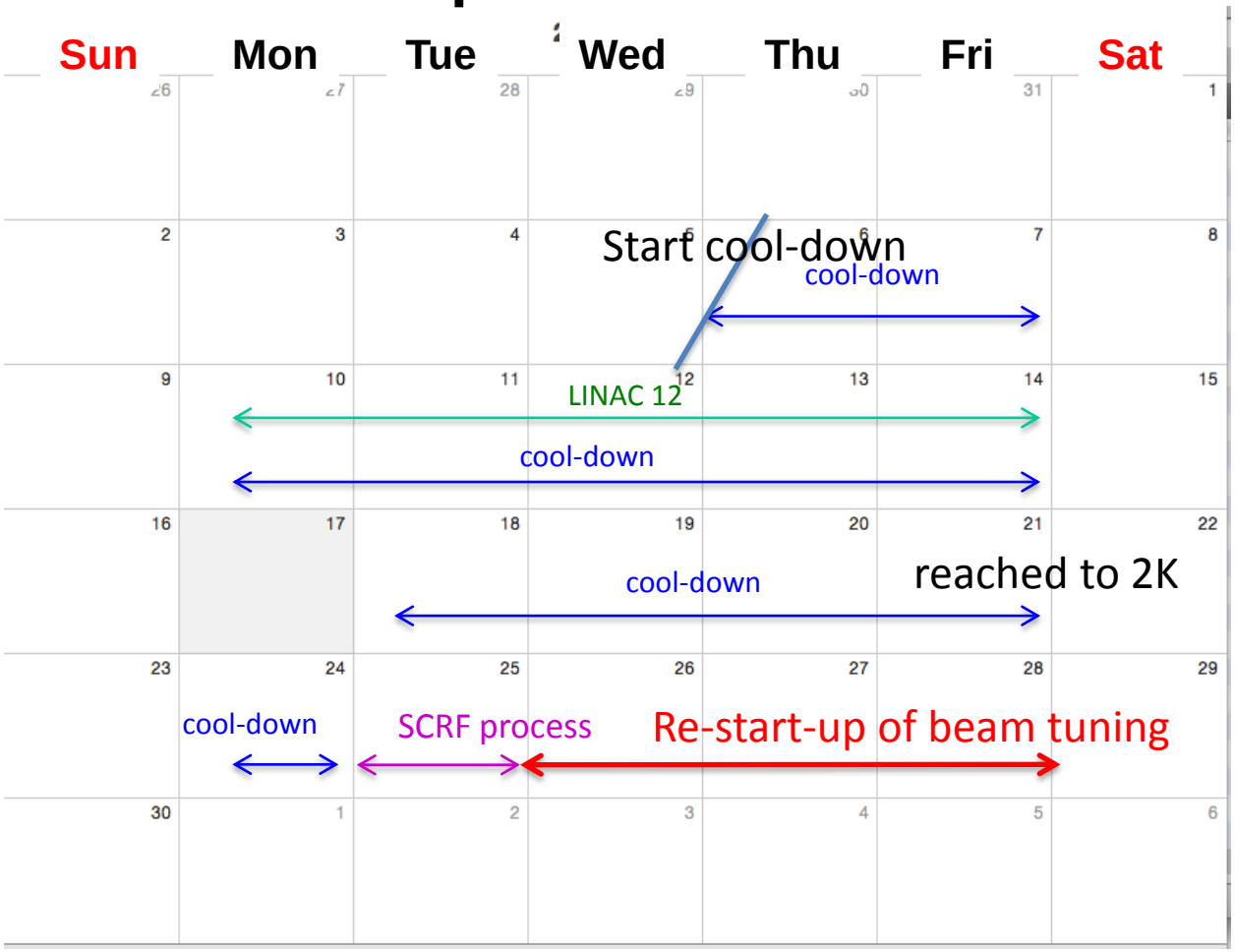
- **2010-2012 MHI cavities**

	name	reached gradient	to be installed	
◎	MHI-012	40.7MV/m	for capture cryomodule	Capture cryomodule
◯	MHI-013	32.2MV/m	for capture cryomodule	
◎	MHI-014	36.6MV/m	for CM-1 ILC cryomodule	CM-1 Cryomodule candidates
◎	MHI-015	35.7MV/m	for CM-1 ILC cryomodule	
◯	MHI-016	33.8MV/m	for CM-1 ILC cryomodule	
◎	MHI-017	38.4MV/m	for CM-1 ILC cryomodule	
◯	MHI-018	30.3MV/m	for CM-1 ILC cryomodule (field emission)	
◎	MHI-019	37.2MV/m	for CM-1 ILC cryomodule	
◯	MHI-020	28.5MV/m	for CM-1 ILC cryomodule (field emission)	
◎	MHI-021	38.9MV/m	for CM-1 ILC cryomodule	
◎	MHI-022	35.8MV/m	for CM-1 ILC cryomodule	

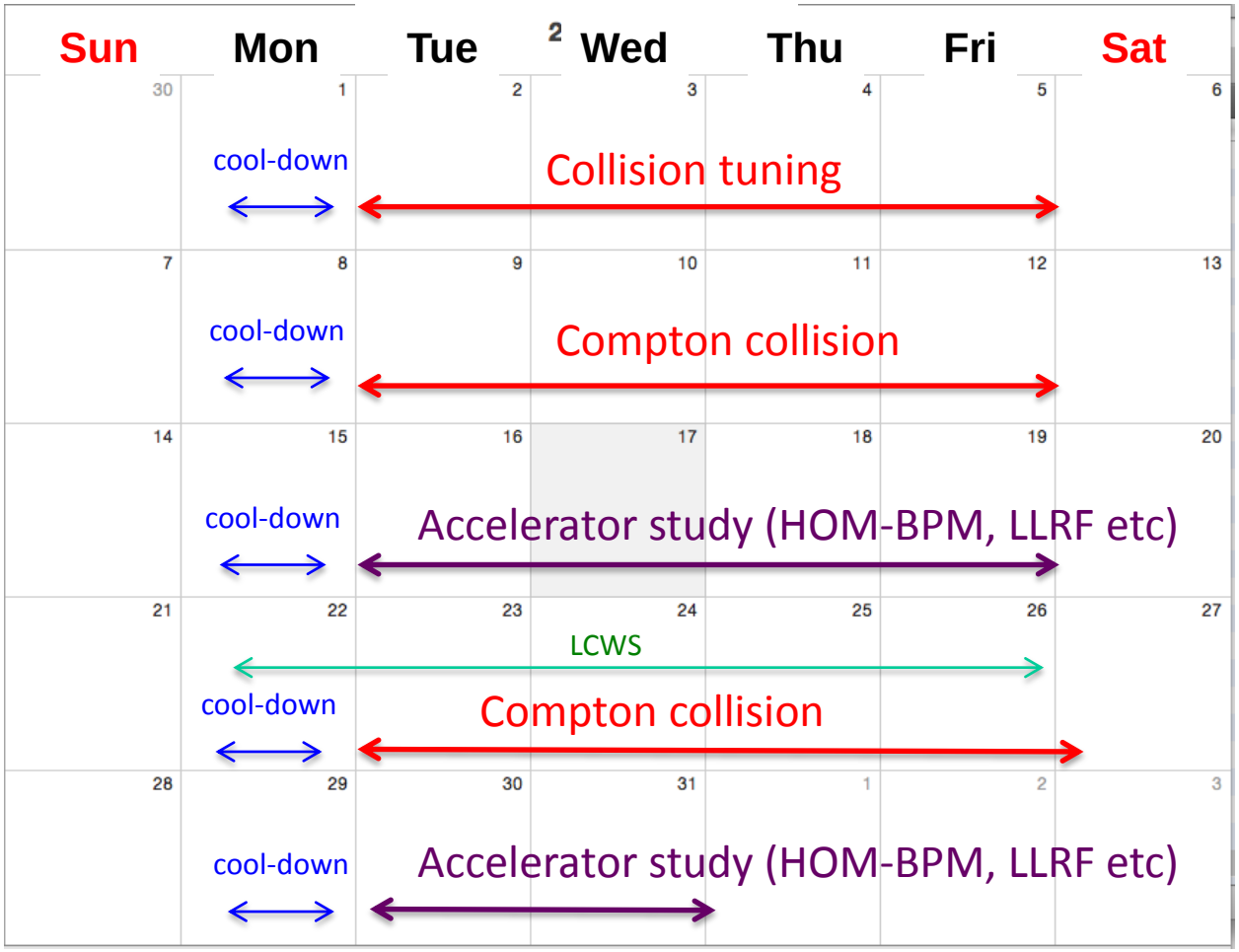
- **2010-2012 other vender cavities**

	TOS-02(w/o HOM):	1-st VT: 31.2MV/m, 2-nd VT:32.7MV/m
◎	HIT-02(with HOM):	1-st VT: 35.2MV/m, 2-nd VT:40.9MV/m
	KEK-00(w/o HOM):	1-st VT: 26MV/m, 2-nd VT:29MV/m, 3-rd VT:24MV/m
	KEK-01(with HOM):	under fabrication to be finished on November

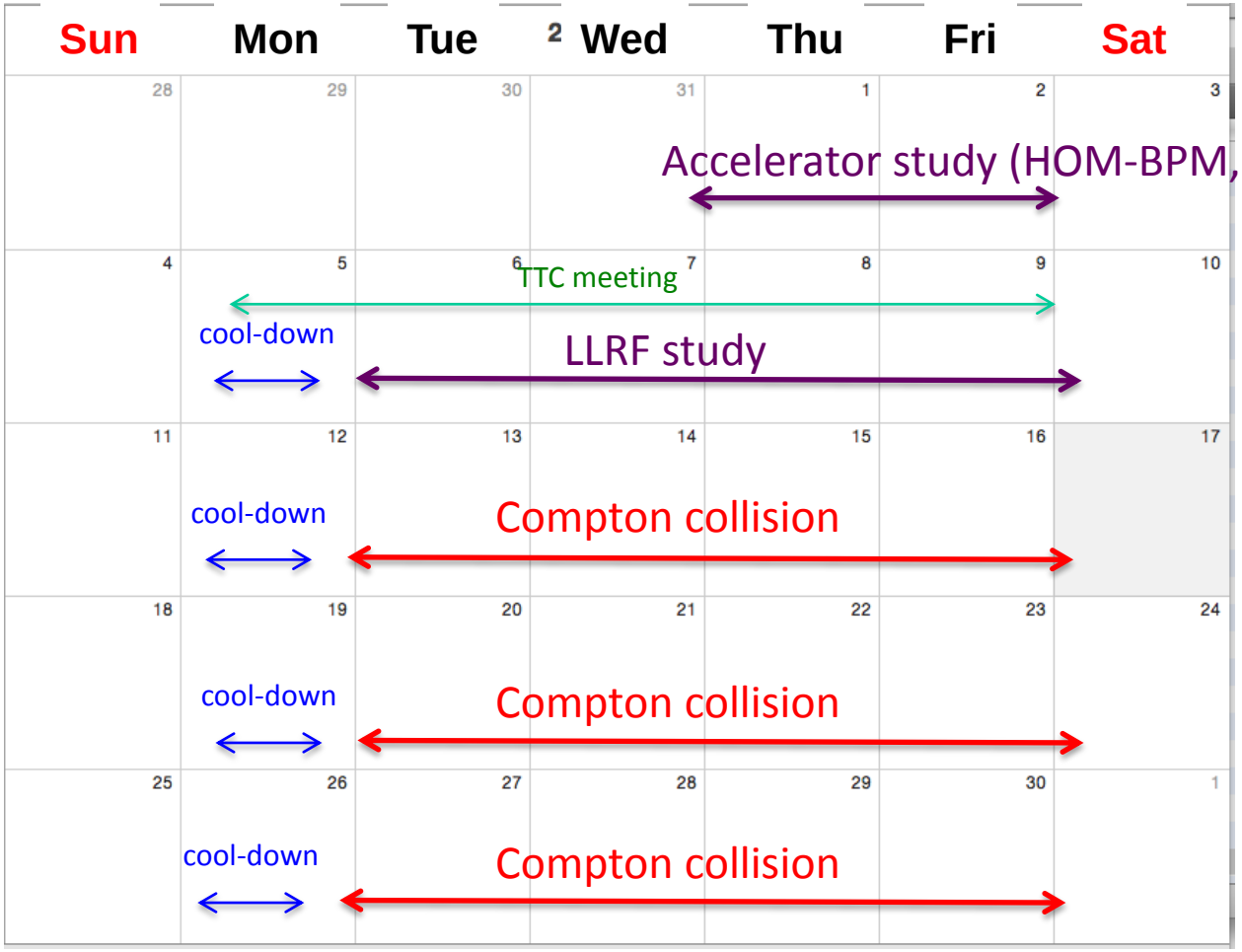
STF Accelerator 2012 fall-run



October 2012



November 2012



December 2012