


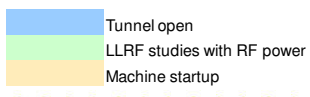
Coordination of LLRF tests during KW34-36 (Aug 17-Sept 6)

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Outline of 3-week intervention

		Daytime (0700-1900)	Overnight (2000-0600)
KW34 (Aug 17)	Monday	Tunnels open	
	Tuesday		
	Wednesday		
	Thursday		
	Friday		
	Saturday		
	Sunday		
KW35 (Aug 24)	Monday		LLRF studies
	Tuesday		
	Wednesday		
	Thursday		
	Friday		
	Saturday		
	Sunday		
KW36 (Aug 31)	Monday		
	Tuesday		
	Wednesday	Close tunnels	
	Thursday	Startup	
	Friday		
	Saturday		
	Sunday		




- Tunnel open
- LLRF studies with RF power
- Machine startup



General aims

- At beginning of KW34, declare all LLRF systems 'off limits' except for 9mA related work + ATCA demo
- All LLRF checklists to be completed and LLRF systems ready by end of KW35 (Mon 0600, Aug 31)
- ATCA demo requires:
 - **Dedicated RF study time (I suggest Sun Aug 30)**
 - **Dedicated beam time (will be likely be late in KW38)**
- All systems declared 'off limits' after Mon Aug 31



Draft 9mA LLRF studies outline for KW35

- **Monday**
 - SimconDSP end-to-end checkout: functionality, DOOCS, DAC,...
- **Tuesday**
 - Finish SimconDSP end-to-end checkout
 - Parallel work at ACC2/3, DSP system tests (BLC, "Slope")
- **Wednesday**
 - Verify MPS interlock functionality; commission piezo control
 - Parasitic: ATCA signal checks
- **Thursday**
 - Turn on all RF systems, set up operation with long RF pulses.
 - Cavity filling optimization by phase modulation
- **Friday**
 - System characterization with RF (measure noise levels, regulator gain optimization,...)
- **Saturday / Sunday**
 - Contingency for 9mA preparations (Saturday)
 - ATCA feedback tests (Sunday)



Questions

- Is the studies outline about right for the 9mA studies?
- Shift coverage...
 - Which LLRF experts are available cover shifts...?
 - What do we need re FLASH operators?



LLRF system readiness checklist

- ACC456 SimconDSP systems installed and tested
- ACC456 SimconDSP system operational in closed loop mode with RF power
- ACC456 SimconDSP operation checked end-to-end via doocs screens
- Integrity of RF probe and drive signals verified end-to-end for all stations
- MPS interlock functionality verified at ACC1, ACC23, ACC456
- RF inhibit from LLRF system to RF amplifiers verified at ACC1, ACC23, ACC456
- Beam loading compensation functions tested in ACC456 SimconDSPs
- Beam loading compensation functions tested in ACC23 and ACC456 DSP systems
- Piezo tuner controllers installed and tested
- Piezo LFD compensation checked end-to-end via doocs screens and with RF power
- DAC operational and new channels installed and data streams verified
- New DAQ and monitoring tools checked out
- *Anything missing?*
- *Responsible person for each item?*
- *What will be required to complete these items by Aug 30?*