

ADT and RF after LS1

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During LS1a number of consolidations and upgrades have been undertaken in the LHC RF, including replacement of a cryomodule (four cavities, beam 2), upgrade of klystron collectors and new solid state crowbar systems. The RF parameters will be outlined in view of the consequences of the increased beam current and energy, and the exotic bunch spacing for the scrubbing beams.

The LHC Transverse feedback system (ADT) is also undergoing a major upgrade during LS1, with double the total number of pickups to reduce the noise floor of the system, new beam position electronics and an upgraded digital signal processing system to accommodate all of the extra functionality that had been introduced during LHC run I, and more sophisticated signal processing algorithms to be deployed for run II. An external “observation box” to record transverse and longitudinal data from the RF and ADT systems is being implemented.

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Session Classification: Session 1 - LS1, HW Commissioning, Powering Tests - Coming out of LS1