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Shrinking Loop Observations for the 2008 April 9 Flare

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Abstract. Supra-arcade downflows (SADs) have been observed with TRACE (extreme ultra-violet (EUV)), SOHO/LASCO (white light), SOHO/SUMER (EUV spectra), and Hinode/XRT (soft X-rays (SXR)). Characteristics such as plasma deficiency and trajectories which slow as they reach the top of the arcade are consistent with post-reconnection magnetic flux tube cross-sections. The magnetic flux within the tubes provides pressure against filling with plasma as the tubes retract from a reconnection site high in the corona until they reach a more potential magnetic configuration – a process in line with the standard model of reconnection. Viewed from a perpendicular angle, SADs should appear as shrinking loops rather than downflowing voids. We will present observations of supra-arcade downflowing loops (SADLs) from a flare that occurred on 2008 April 9 and show that their speeds and decelerations are consistent with those determined for SADs.