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A Multi-wavelength View of an Active Region Structure around a Filament Channel

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The combination of multi-wavelength, high resolution, high cadence data from the Hinode X-Ray Telescope (XRT) and the Transition Region And Coronal Explorer (TRACE) give an unprecedented view of solar active region dynamics and topology in different wavelengths. We present results from active region 10930, observed in December 2006. Co-alignment of XRT and TRACE data yield a striking combination of a filament structure observed in TRACE and hot XRT loops that lie both above and along the filament channel. The overlying loops exhibit remarkable dynamics while the filament lies dormant, and numerous x-point and triple-leg structures undergo repeated brightenings. We find that TRACE and XRT observations are complementary, and correlation of these data facilitates co-alignment with other instruments.