

News from $z \sim 6 - 10$ galaxy candidates found behind gravitational lensing clusters

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Abstract. Following up on the detailed results from our searches for $z \sim 6-10$ galaxies using gravitational lensing clusters described in Richard *et al.* (2006), we have obtained new observations, which are presented here. For a general overview of the project see Schaerer *et al.* (2006). First, deep HST/ACS observations in the z-band confirm 17 out of 18 high redshift candidates as optical drop-out objects; the remaining object appears faint and star-like. Second, Spitzer/IRAC images at 3.6, 4.5, 5.8 and 8.0 μm have been obtained. 11 out of 18 candidates are in “free”, uncominated regions. These 11 high- z candidates are undetected, with upper limits which are compatible with their SED if these objects are blue star-forming galaxies at high redshift (see Fig. 1). In conclusion, our new observations corroborate so far the high- z nature of the majority of the candidates.

Keywords. galaxies:high-redshift, infrared: galaxies, early universe

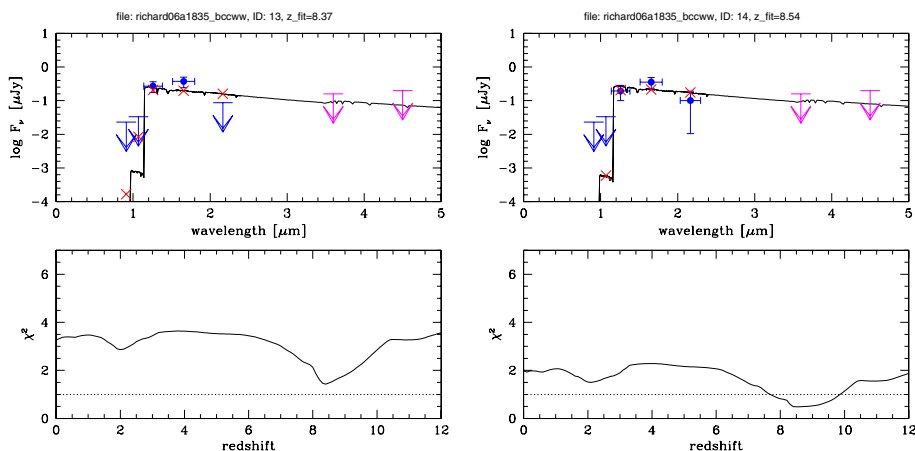


Figure 1. SED of two high- z candidates from Richard *et al.* including HST, ground-based, and Spitzer photometry corroborating their high redshift nature (here $z \sim 8.-8.5$).

References

Richard, J., *et al.* 2006, A&A, 456, 861

Schaerer, D., *et al.* 2006, The Messenger, 125, 20 [astro-ph/0610138]