

## **Planck intermediate results: XXXVI. Optical identification and redshifts of Planck SZ sources with telescopes at the Canary Islands observatories**

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### **Abstract**

© ESO, 2016. We present the results of approximately three years of observations of Planck Sunyaev-Zeldovich (SZ) sources with telescopes at the Canary Islands observatories as part of the general optical follow-up programme undertaken by the Planck Collaboration. In total, 78 SZ sources are discussed. Deep-imaging observations were obtained for most of these sources; spectroscopic observations in either in long-slit or multi-object modes were obtained for many. We effectively used 37.5 clear nights. We found optical counterparts for 73 of the 78 candidates. This sample includes 53 spectroscopic redshift determinations, 20 of them obtained with a multi-object spectroscopic mode. The sample contains new redshifts for 27 Planck clusters that were not included in the first Planck SZ source catalogue (PSZ1).

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### **Keywords**

catalogs, galaxies: clusters: general, Large-scale structure of Universe