

Abstract Submitted  
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**BLAST resolves origins of Cosmic Infrared Background** HENRY NGO, UBC, BLAST COLLABORATION — The cosmic infrared background (CIB), composed of starlight which is absorbed by dust and re-emitted at infrared wavelengths, has approximately the same intensity as the optical background. The CIB is most intense at around  $200\ \mu\text{m}$ , where the atmosphere is very opaque, which makes observing it very difficult. The Balloon-borne Large-Aperture Submillimetre Telescope (BLAST) operates above 99.5% of the atmosphere and has made the first direct observations at 250, 350 and  $500\ \mu\text{m}$ . In December 2006, BLAST completed an 11-day flight over Antarctica. 220 hours of data were collected, 90 of which were spent in the Great Observatories Origins Deep Survey (GOODS) South Field. We calculate the covariance of the BLAST data with catalogs of  $24\ \mu\text{m}$  sources. With this method, we measure the CIB brightness levels at BLAST wavelengths. This analysis resolves the CIB into contributions from  $24\ \mu\text{m}$  identified galaxies. At  $500\ \mu\text{m}$ , we find that over half of the light comes from sources with redshifts greater than 1.2. Furthermore, this analysis allows us to determine the characteristics of the galaxies which produce the CIB.

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