ELISA: A small balloon-borne experiment to guide future observations with FIRST

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ELISA (Experiment for Large Infrared Survey Astronomy) is a project for a small balloon-borne experiment operating, in the sub-millimeter from 100 to $600 \,\mu$ m, at stratospheric altitude. We will describe the experiment and its scientific objectives. A major goal of the ELISA project is to provide a complete census of dust emission in this wavelength range, at an angular resolution similar to the IRAS all-sky survey (typically 3.5'). Current plans envision 3 flights (including one in the southern hemisphere) before 2007, leading to a large survey along the Galactic plane (typically 5000 square degrees) as well as deeper observations toward high latitude cirrus clouds. The ELISA survey will therefore be available and well suited as a guide to plan FIRST observations, similar to the role of IRAS for ISO. In addition, by filling the angular resolution gap between the COBE and FIRST data-sets, the ELISA survey could enable routine cross calibration between the COBE and FIRST observations.