



## Performance of Backshort-Under-Grid Kilopixel TES Arrays for HAWC+

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HAWC+ was selected as the second generation instrument for the Stratospheric Observatory for Infrared Astronomy (SOFIA). It is a far-infrared wide-field camera and polarimeter with general capability for the observatory with deployment anticipated in early 2016. In order to provide high mapping speeds, the camera utilizes kilopixel Backshort Under Grid (BUG) TES-based detector modules, provided by NASA/GSFC. These modules consist of a planar 32x40 pixel array of close-packed TES bolometers with a separate optical back-termination wafer inserted into the grid. The detector array is bump bonded to a 32x41 pixel time domain multiplexer from NIST/Boulder. The arrays are designed to provide background-limited sensitivity in all of the instrument's five selectable FIR bands (ranging from 53 to 215  $\mu\text{m}$ ). In order to provide for differential polarimetry, the camera employs two separate focal plane arrays, each a mosaic with two modules abutted to produce a nearly-filled 64x40 pixel active area. We present a summary of the detector characterization in the laboratory and discuss the derived detector parameters. These measurements provide the first demonstration of kilopixel BUG arrays.