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NIKA: a dual band KIDs camera

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***Abstract*—The Neel IRAM KIDs Array (NIKA) is a kinetic inductance detectors based instrument developed for millimeter wave astronomy. The instrument includes dual-band optics opening two observational windows at 150 and 220 GHz. The detectors mounted on the 150 GHz are lumped-element KIDs. The array mounted on the other frequency range is composed by 256 antenna coupled KIDs arranged in rectangular pattern. We present the results of the test-run made in October 2010 at the Institute for Millimetric Radio Astronomy (IRAM) 30-meter telescope at Pico Veleta. We will focus on the antenna coupled KIDs detectors results in particular on the optimization of the detector chip, design of lens array and on the sky measurements.**