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Advanced Optics for Imaging Applications: UV through LWIR IV

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Reflected-ultraviolet imaging is a rather mysterious area of the imaging field. There is relatively little actual UV imagery to be found on the Internet. Digital ultraviolet imaging is becoming increasingly affordable and lends itself to a number of interesting applications that have been largely overlooked, and digital sensors are available that span the UV spectrum from 200 to 400 nm. Dr. Austin Richards, Oculus Photonics. Reflected-ultraviolet imaging is a rather mysterious area of the imaging field. Conference: Advanced Optics for Imaging Applications: UV through LWIR IV. Authors: Jamie L. Ramsey. As the desire to have compact multispectral imagers in various DoD platforms is growing, the dearth of multispectral optics is widely felt. With the limited number of material choices for optics, these multispectral imagers are often very bulky and impractical on several weight sensitive platforms. To address this issue, NRL has developed a large set of unique infrared glasses that transmit from 0.9 to $> 14 \frac{1}{4} \mu\text{m}$ in wavelength and expand the glass map for multispectral optics with refractive indices from 2.38 to 3.17. They show a large spread in dispersion (Abbe number) and offer some unique s FLIR's LWIR camera cores provide leading-edge imaging performance and reliability in a compact, lightweight packages. FLIR has sold more LWIR cores than any other manufacturer. It utilizes FLIR infrared video processing architecture to enable advanced image processing and several industry-standard communication interfaces while keeping power consumption low. The 12 μm pitch Vanadium Oxide (VOx) uncooled detector comes in two resolutions " 640 x 512 or 320 x 256. It is available with multiple lens configurations, adding flexibility to integration programs.