The X-band Teaching and Research RAdar (XTRRA) at Purdue University, U.S.A.: Updates and new initiatives

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The XTRRA, an X-band, polarimetric, Doppler weather radar, was installed near the campus of Purdue University (in northwest Indiana) in 2019. As of this conference, the radar has been running quasi-operationally for one year, collecting unique observations of the lower atmosphere in an area not well observed by the nearest operational S-band weather radars (WSR-88D). In this presentation, we report progress on a number of projects related to the XTRRA and its data. Specifically,

Dissemination of graphical products via a public web site

Automated high wind alerts for Purdue campus based on XTRRA observations

Dual-Doppler retrievals of the wind fields in storms occurring between XTRRA and the nearest WSR-88D

Efforts to improve the quality of the dealiased Doppler velocities in regions of high azimuthal shear

Future plans related to the operation of the XTRRA will also be briefly discussed.

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