TORUS-LItE Deployment Summaries

Required software: Integrated Data Viewer (IDV; https://www.unidata.ucar.edu/software/idv/)[1]

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Summary

Deployment summaries of key TORUS deployments have been developed. Each zipped folder has the xidv file to be opened in IDV and the supporting files that it reads. Each visualization includes the positions of all assets operating on a particular day updated at a 1-minute time interval, the radar reflectivity from the nearest WSR-88D, and scanning symbols for remote-sensing instruments. Flight altitudes are visualized for the UAS.

Acronyms

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CoMeT	Combined Mesonet and Tracker
LIDAR	Light Detection and Ranging
NOAA	National Oceanic and Atmospheric Administration
NSSL	National Severe Storms Laboratory
PPI	Plan Position Indicator
PRF	Pulse Repetition Frequency
RAAVEN	Robust Autonomous Aerial Vehicle-Endurant Nimble
RHI	Range Height Indicator
TTU	Texas Tech University
UAS	Unmanned Aircraft System
UCB	University of Colorado, Boulder
UNL	University of Nebraska – Lincoln
VWP	Vertical Wind Profile

Other notes

Error windows are likely to pop up when first opening the bundle. Each of these errors is associated with a data set that was not included in the bundle because the asset was not operational on a particular day.

Key for asset names

Platform	Description	Code in Graphical Summ	Icon
RAAVEN-2	UCB RAAVEN UAS	RAV2	
RAAVEN-5	UCB RAAVEN UAS	RAV5	

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[1] Tested with IDV version 6.2u1.

RAAVEN-6	UCB RAAVEN UAS	RAV6	
RAAVEN-7	UCB RAAVEN UAS	RAV7	
RAAVEN-8	UCB RAAVEN UAS	RAV8	
RAAVEN-9	UCB RAAVEN UAS	RAV9	
RAAVEN-10	UCB RAAVEN UAS	RAV10	
CoMeT-1	UNL mobile mesonet	C1	
CoMeT-2	UNL mobile mesonet	C2	
CoMeT-3	UNL mobile mesonet	C3	
Probe-1	NSSL mobile mesonet	Prb1	
Probe-2	NSSL mobile mesonet	Prb2	
LIDAR MM	NSSL mobile LIDAR, mobile mesonet, and mobile sounding system	LI-MM	
Windsonds	Windsonds	WS_[sondeID]	
Soundings	Radiosondes	[sondeSN]	
LIDAR Scan	Appears when LIDAR is scanning (no distinction is made between a VWP and a vertical stare)	LI_scn	
TTU Ka-1	Appears when a TTU Ka-band mobile radar is scanning - Range is based on the R_{max} for a typical TTU-Ka PRF - Sector includes a (360°) surveillance sweep corresponding to low-level PPIs and a sector within which RHIs were collected	TTUKa1	
TTU Ka-2	Appears when a TTU Ka-band mobile radar is scanning - Range is based on the R_{max} for a typical TTU-Ka PRF - Sector includes a (360°) surveillance sweep corresponding to low-level PPIs and a sector within which RHIs were collected	TTUKa2	
NOXP	Appears when NOAA x-band dual-polarimetric radar is scanning	NOXP	

	• Range is based the R_{max} for a typical NOXP PRF		