

TORUS 2019 Deployment Summary Movies

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
Summary










These movies are included as summaries of key TORUS deployments and are generated from IDV (Integrated Data Viewer) visualizations that, along with the raw position data, are available separately. Each movie 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.

Acronyms

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	Unoccupied Aircraft System
UCB	University of Colorado, Boulder
UNL	University of Nebraska – Lincoln
VWP	Vertical Wind Profile

Key for asset names

Platform	Description	Code in Graphical Summ	Icon
CoMeT-1	UNL mobile mesonet	C-1	
CoMeT-2	UNL mobile mesonet	C-2	
CoMeT-3	UNL mobile mesonet	C-3	
Probe-1	NSSL mobile mesonet	P1	
Probe-2	NSSL mobile mesonet	P2	
LIDAR MM	NSSL mobile LIDAR, mobile mesonet, and mobile sounding system (radiosondes not visualized)	LIDAR	
Far Field MM	Far-field sounding system, NSSL mobile mesonet and mobile sounding system (radiosondes not visualized)	FF	
Windsond MM	NSSL mobile mesonet and windsond release vehicle (windsond balloons not visualized)	Windsond	

RAAVEN-0	UCB RAAVEN UAS	RAAVEN0	
RAAVEN-2	UCB RAAVEN UAS	RAAVEN2	
RAAVEN-3	UCB RAAVEN UAS	RAAVEN3	
RAAVEN-4	UCB RAAVEN UAS	RAAVEN4	
RAAVEN-5	UCB RAAVEN UAS	RAAVEN5	
LIDAR Scan	Appears when LIDAR is scanning (no distinction is made between a VWP and a vertical stare)	LIDAR_scn	
P3	NOAA P3 manned aircraft <ul style="list-style-type: none"> • Range is based on the R_{max} for a typical P3 PRF • Sectors indicate the approximate location of pseudo-dual-Doppler lobes 	P3	
TTU Ka-1	Appears when a TTU Ka-band mobile radar is scanning <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Range is based the R_{max} for a typical NOXP PRF 	NOXP	