

## NOXP Deployments for TORUS 2019

Date	Latitude	Longitude	Location/Comment	Time (UCT)	Scan Type
May 23	36.0862	100.7844	North of Pampa, TX	2248	SailsNear 210-030 deg
			GPS problem-not on data	2248-2317	
				2317	Stop
May 23	36.0410	100.3663	North of Canadian, TX	0009	
			Elev Drive problem	0009	
			Start	0047	SailsNear 240-060
			Funnel cloud west	0053-0054	
				0116	SailsFar 240-060
				0130	Stop
May 24	33.9880	100.4762	East of Matador, TX	x	
			Bug Out – no data	x	
May 25	34.1662	101.5201	Northwest of Lockney, TX	1943	Clutter Scan
				1945	SailsFar 210-330
				2003	SailsNear 240-360
				2028	Stop
May 25	33.9347	101.2544	Southeast of Floydada, TX	2325	Clutter Scan
				2328	SailsFar 260-020
				2335	SailsNear 260-045
				2357	Stop
May 26	38.1792	102.4272	Northwest of Lamar, CO	2157	SailsNear 280-040
				2216	SailsNear 300-060
				2225	Stop
May 27	40.3669	103.5279	Northeast of Brush, CO	2052	SailsNear 220-360
			Brief Tornado west?	2058	
				2126	Stop
				0030	Surv,SPRF,PPI
				0132	Stop
May 27	40.4394	102.3247	South of Holyoke, CO	2326	Clutter Scan
			Brief Tornado southwest?	2326	
				2330	SailsNear 225-345
			Bug Out	2354	Stop
			RFD west, Brief Tornado west?	2355	
May 27	40.2926	101.5317	South of Enders, NE	0137	SailsFar 220-040
				0159	Stop
May 28	39.3499	98.1163	South of Beloit, KS	2250	SailsFar 240-360
			Tornado west-southwest	<2250	
			New Tornado west-southwest	2050	
				2300	SailsNear 240-040
			Tornado dissipates west	2305	
			Outflow Bndry N-moving S	2310	
				2326	Stop

June 2	36.8204	102.5175	North of Boise City, OK	0003	Clutter Scan
				0009	SailsNear 240-360
			2 <sup>nd</sup> trip bad to the west	0010	
				0024	Stop
June 2	36.6464	102.4204	South of Boise City, OK	0054	Clutter Scan
				0057	SailsFar 270-030
				0112	Stop
June 7	37.0923	102.5799	South Edge of Campo, CO	2311	Clutter Scan
				2314	SailsFar 260-360
			Weak cyclonic shear aloft	2324	
			Storm dying	2344	Stop
June 8	39.2933	101.7449	Southwest of Goodland, KS	2102	ClutterScan
			Truck not level; leveler issue	2106	SailsNear 260-020
			Change leveling, still not level	2109	
			Cyclonic shear mid-levels	2111	
				2134	SailsNear 280-040
			Tornado 1 northwest	2139	
			Tornado 2 northwest	2149	
			Tornado 1 dissipates	2150	
			Tornado 2 dissipates	2156	
				2201	Stop
June 8	39.3089	101.3554	Just South of Brewster, KS	0010	Clutter Scan
				0013	SailsNear 260-020
			Good Meso & hook WNW	0020	
			Front flank echo close	0037	Stop
June 8	39.2367	101.3728	South of Brewster, KS	0052	Clutter Scan
			Wall cloud west	0054	SailsNear 225-345
			Wall cloud rotation stronger	0057	SailsNear 260-020
			Tornado west	0106	
			Blowing dust in inflow	0106	
			Tornado dissipates	0108	
			Small hail starting	0112	Stop
June 11	36.8678	100.9094	West of Turpin, OK	2119	BL Scan
			Transmitter fault	2123	
			Dryline Study	2124	BL Scan
				2134	Stop
June 11	37.6294	99.1079	Just North of Haviland, KS	0019	Clutter Scan
			Level Offset x: +.5, y: +.5	0019	
			Supercell northwest	0021	F&L 300-060
				0036	Stop
June 11	37.5869	99.3036	Just South of Greensburg, KS	0116	Clutter Scan
				0117	F&L 045-180
			Anticyclonic shear 12 km SE	0118	
			Supercell 20 km SE	0126	
			TVS-like shear SE; funnel reprt	0134	
				0140	Stop
June 13	36.5592	102.5894	South of Boise City, OK	0037	Clutter Scan
				0040	SailsNear 290-050
			Strong outflow north, moving S	0050	

			Target storm weakening	0051	
			Developing storm northwest	0100	F&L 290-050
			Forward Anvil Precip starting	0100	
			In rain	0109	Stop
June 13	36.5017	102.5352	East-southeast of Felt, OK	0146	F&L 290-050
			Level offset x:-.5, y:-.3	0146	
			Wk shear on GF northwest	0146	
			Precip starting	0150	Stop
June 14	36.4180	100.8304	Just West of Perryton, TX	2114	Clutter Scan
			Dryline Study	2117	BL Scan PPI
			P3 overhead	2120	
			N-S BL rolls, strongest east	2121	
			P3 overhead	2154	
			P3 Overhead	2212	
			Dust devil vortex 15 km east	2142	
			Boundary 20 km SE, moving N	2205	
			Stronger vertical shear east	2222	
				2232	Stop
June 15	34.9831	102.4470	Northwest of Hereford, TX	2211	Clutter Scan
			CY LP west, AC supercell SW	2212	F&L 150-290
			AC TVS: Tornado reported	2214	
			LP close by to the west	2221	Stop
June 15	35.0997	102.2037	South of Wildorado, TX	2259	SailsNear 160-270
			AC supercells S & SW	2302	SailsNear 130-250
				2317	Stop
June 15	35.1006	102.4372	South of Vega, TX	2345	Clutter Scan
			AC Supercell southwest	2347	SailsFar 180-300
			AC meso 240 deg/35 km	2348	
			AC and CY meso's aloft	2353	
			Splitting AC & CY supercells	0001	
			Both supercells weakening	0005	
			AC supercell fading fast	0017	
			AC supercell dead	0026	Stop

### Scan Type Key:

SailsFar = Sector, 18 Elev Angles (0.5-20 deg; one revisit for 0.5-01.0 deg), 40 samples, 3.9 min duration

SailsNear = Sector, 18 Elev Angles (0.5-30 deg; one revisit for 0.5-01.0 deg), 40 samples, 3.9 min duration

BN = Boundary Layer = PPI, 9 Elev Angles (0.5-10 deg), 80 samples, 5 min duration

F&L = Fast and Low = Sector, 0.5° – 6.0°, 32 samples, 1.5 minute duration

Clutter = PPI, 4 Elev angles (0.5-3.0), 120 samples, 3 min duration

**Note:** NOXP compressor failed before operations on June 11. All data collected after that time used nitrogen to pressurize the transmitter, and there was no pressurization of the waveguide. The possible effects of those changes on sensitivity and other performance issues are not known at this time.