

NTIA Space record data form

NTIA requires the following data for space related experiments using government shared spectrum. For each transmit frequency, please provide the data for both ends of the transmit-receive link. Use Part A to describe the satellite to ground information. Part B is for all ground to space transmit links.

Part A: Space to Earth Downlink Data

Satellite Transmitter Data

Transmit Frequency: 401.175 MHz		
Satellite Name: Spacelce		
Data Field	Data Answer	Description/Comments
Polarization (XAP)	XAP = XAP01 J	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Orientation (XAZ)	XAZ = XAZ01 NB	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (XAD)	ANTENNA GAIN ____ 1.4 ____ BEAMWIDTH ____ 48 ____ XAD = XAD01 01G048B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = NON	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).

<p>For Nongeostationary (Orbital Data)</p>	<p>INCLINATION ANGLE <u>51.6</u>, APOGEE IN KILOMETERS <u>400</u>, PERIGEE IN KILOMETERS <u>400</u>, ORBITAL PERIOD IN HOURS <u>1</u> AND FRACTIONS OF HOURS IN DECIMAL <u>.55</u>, THE NUMBER OF SATELLITES IN THE SYSTEM <u>1</u>,</p> <p>ORB = 51.6IN00400AP00400PE001.55H01NRT01</p>	<p>IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, THEN T01, EXAMPLE, REM04 *ORB,98.0IN00510AP00510PE001.58H01NRT01, AND FOR SPACE-TO-SPACE COMMUNICATIONS WITH ANOTHER NONGEOSTATIONARY SATELLITE ADD AN ADDITIONAL *ORB FOR IT ENDING IN R01, EXAMPLE, REM05 *ORB,72.9IN03209AP00655PE013.46H01NRR01</p>

Earth Station Data (Receiver)		
State (RSC)	RSC = IL	
City Name (RAL)	RAL = URBANA	
Latitude (DDMMSS)	Lat = 40N 06 54 400654	
Longitude (DDDMMSS)	Lon = 88W 13 41 0881341	
Antenna Polarization (RAP)	RAP = RAP01 R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (RAZ)	RAZ = RAZ01 V10	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00

Antenna Dimensions (RAD)	ANTENNA GAIN _____ 11.5 _____, BEAMWIDTH _____ 42 _____, AZIMUTHAL RANGE _____ 0-360 _____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____ 222 _____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____ 17 _____ RAD = RAD01 11G042B000-360A00200H017	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
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FCC notes:

1. Use S-Note S945.
2. REM AGN, Cubesat, Spacelce

Part B: Ground Stations, Earth to Space link data:

Earth Station Transmitter Data

Transmit Frequency: 402.675 MHz		
State (XSC)	XSC = IL	
City Name (XAL)	XAL = URBANA	
Latitude (DDMMSS)	Lat = 40N 06 54 400654	
Longitude (DDDMMSS)	Lon = 88W 13 41 0881341	
Antenna Polarization (XAP)	XAP = XAP01 R	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Antenna Azimuth (XAZ)	XAZ = XAZ01 V10	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN _____ 11.5 _____, BEAMWIDTH _____ 42 _____, AZIMUTHAL RANGE _____ 0-360 _____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____ 222 _____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____ 17 _____ XAD = XAD01 11G042B000-360A00200H017	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

Satellite Receive Specifications		
Polarization (RAP)	RAP = RAP01 J	POLARIZATIONS INCLUDE : H = HORIZONTAL, V = VERTICAL, S = HORIZONTAL AND VERTICAL, L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR, J = LINEAR POLARIZATION
Azimuth (RAZ)	RAZ = RAZ01 NB	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (RAD)	ANTENNA GAIN ___ 1.4 ___ BEAMWIDTH ___ 48 ___ RAD = RAD01 01G048B	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = NON	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND REPORT ITS LONGITUDE (XLG AND/OR RLG).
For Nongeostationary (Orbital Data)	INCLINATION ANGLE ___ 51.6 ____, APOGEE IN KILOMETERS ___ 400 ____, PERIGEE IN KILOMETERS ___ 400 ____, ORBITAL PERIOD IN HOURS ___ 1 ___ AND FRACTIONS OF HOURS IN DECIMAL ___ 55 ____, THE NUMBER OF SATELLITES IN THE SYSTEM ___ 1 ____, ORB = 51.6IN00400AP00400PE001.55H01NRT01	IF ANY SATELLITES ARE NONGEOSTATIONARY, REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, THEN T01, EXAMPLE, REM04 *ORB,98.0IN00510AP00510PE001.58H01NRT01, AND FOR SPACE-TO-SPACE COMMUNICATIONS WITH ANOTHER NONGEOSTATIONARY SATELLITE ADD AN ADDITIONAL *ORB FOR IT ENDING IN R01, EXAMPLE, REM05 *ORB,72.9IN03209AP00655PE013.46H01NRR01