

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: 2266 MHz		
Satellite Name: Cubesatellite Test Bed (CTB) 14 and 15		
Data Field	Data Answer	Description/Comments
Polarization (XAP)	XAP = 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
Orientation (XAZ)	XAZ = EC	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (XAD)	ANTENNA GAIN: 6dB BEAMWIDTH: 180° XAD01 06G180B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = Non-geostationary	Choose either: Geostationary or Nongeostationary
For Geostationary	Longitude = N/A	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 97.6° APOGEE IN KILOMETERS 550 PERIGEE IN KILOMETERS 550 ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 0.58333 THE NUMBER OF SATELLITES IN THE SYSTEM 2  ORB,97.8IN00550AP00550PE1.583H02NR	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

<b>Earth Station Data (Receiver)</b>		
State (RSC)	RSC =GA	
City Name (RAL)	RAL = Pendergrass	
Latitude (DDMMSS)	Lat = 34 10 48 N	34.18 N
Longitude (DDDMMSS)	Lon = 83 48 12 W	-83.67 E
Antenna Polarization (RAP)	RAP = 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 = V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN 38dBi, BEAMWIDTH 1.9°, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 230 THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4  RAD01 38G001.9B000-360A00230H006.4	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes:		
<ol style="list-style-type: none"> <li>1. Use S-Note S945.</li> <li>2. REM AGN, Cubesat, CBT-14 &amp; CBT-15</li> </ol>		

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

Earth Station Transmitter Data

Transmit Frequency: 2037.5 MHz		
State (XSC)	XSC = GA	
City Name (XAL)	XAL = Pendergrass	
Latitude (DDMMSS)	Lat = 34 10 48 N	
Longitude (DDDMMSS)	Lon = 83 48 12 W	
Antenna Polarization (XAP)	XAP = 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 = V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN 38dBi, BEAMWIDTH 1.9°, AZIMUTHAL RANGE 000-360, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS 230 THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS 6.4  XAD01 38G001.9B000-360A00230H006.4	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
<b>Satellite Receive Specifications</b>		
Polarization (RAP)	RAP = 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
Azimuth (RAZ)	RAZ = EC	NB= NARROWBEAM EC = EARTH COVERAGE
Dimension (RAD)	ANTENNA GAIN: 6dB BEAMWIDTH: 180° RAD01 06G180B	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = Non Geostationary	Choose either: Geostationary or Nongeostationary

For Geostationary	Longitude = N/A	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)	<p>INCLINATION ANGLE 97.6°  APOGEE IN KILOMETERS 550  PERIGEE IN KILOMETERS 550  ORBITAL PERIOD IN HOURS 1 AND FRACTIONS OF HOURS IN DECIMAL 0.58333  THE NUMBER OF SATELLITES IN THE SYSTEM 2</p> <p>ORB,97.8IN00550AP00550PE1.583H02NR</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>