TAGSAT-1 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~~ **Space Downlink Data**

Satellite Simplex Transmitter Data

Transmit Frequency: 1616.25 MHz		
Satellite Name: TAGSAT		
Data Field	**Data Answer**	**Description/Comments**
Polarization (XAP)	XAP = XAP01 L	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_____5_____ BEAMWIDTH _____100_____ XAD = XAD01 05G100B	(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).

For Nongeostationary (Orbital Data)	INCLINATION ANGLE_____97.5_____, APOGEE IN KILOMETERS_____525_____, PERIGEE IN KILOMETERS_____525_____, ORBITAL PERIOD IN HOURS __1_____AND FRACTIONS OF HOURS IN DECIMAL_.58__, THE NUMBER OF SATELLITES IN THE SYSTEM_____1_____, ORB = ORB,97.5IN00525AP00525PE001.58H01NRR01	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

Earth Station Data GlobalStar Constellation (Receiver)		
State (RSC)	RSC =	
City Name (RAL)	RAL =	
Latitude (DDMMSS)	Lat =	
Longitude (DDDMMSS)	Lon =	
Antenna Polarization (RAP)	RAP =	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 =	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN_____, BEAMWIDTH_____, AZIMUTHAL RANGE_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____ RAD =	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (BSS1)		

Part B: Ground Station, Earth to TAGSAT-1 S Band Receiver link data:

Earth Station Transmitter Data

Transmit Frequency: MHz		
State (XSC)	XSC = IN	
City Name (XAL)	XAL = UPLAND	
Latitude (DDMMSS)	Lat = 402553	
Longitude (DDDMMSS)	Lon = 0853030	
Antenna Polarization (XAP)	XAP = XAP01 L	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)	Elevation is 60 to 90 degrees XAZ = XAZ01 V6090	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____30_____, BEAMWIDTH_____5.3_____, AZIMUTHAL RANGE___0 - 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _276_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2_____ XAD =	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Satellite Receive Specifications		
Polarization (RAP)	RAP = RAP 01 L	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 = NB	NB= NARROWBEAM EC = EARTH COVERAGE

Dimension (RAD)	ANTENNA GAIN___4_____ BEAMWIDTH ____110_____ RAD =	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	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_____97.5_____, APOGEE IN KILOMETERS_____525_____, PERIGEE IN KILOMETERS_____525_____, ORBITAL PERIOD IN HOURS __1_____AND FRACTIONS OF HOURS IN DECIMAL_.58__, THE NUMBER OF SATELLITES IN THE SYSTEM____1_____, ORB = ORB,97.5IN00525AP00525PE001.58H01NRR01	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