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: 37.5-42.5 GHz Satellite Name: BlueWalker3		
Polarization (XAP)	XAP = T	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 = NB	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (XAD)	ANTENNA GAIN BEAMWIDTH XAD = 45G001B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B) Choose either:
Type of satellite (State = SP) (City = geo or non)	Type = Nongeostationary	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, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURSAND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, ORB,53.0IN00425AP00375PE001.54H01NR	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 (Receiver)		
State (RSC)	RSC = TX and HI	
City Name (RAL)	RAL = Midland and Kapolei	
Latitude (DDMMSS)	Lat = 315549N and 212011N	
Longitude (DDDMMSS)	Lon = 1021231W and 158518W	
Antenna Polarization (RAP)	RAP = T	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 = V10	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, VOO TO V90, EXAMPLE, RAZ01 VOO
Antenna Dimensions (RAD)	ANTENNA GAIN, BEAMWIDTH0.25, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
	RAD = 57G000B000-360A00871H000	

Part A: Space to Earth Downlink Data

Satellite Transmitter Data

Transmit Frequency: 758-768 MHz, 890-891.5 MHz, 891.5-894 MHz		
Satellite Name: BlueWalker3		
Data Field Data Answer Description/Comments		
Polarization (XAP)	XAP = 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 = NB	NB= NARROWBEAM EC = EARTH COVERAGE

Antenna Dimension (XAD)	ANTENNA GAIN BEAMWIDTH XAD = 33G004B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = Nongeostationary	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, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURSAND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, ORB,53.0IN00425AP00375PE001.54H01NR	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, REMO4 *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
Farth Station Loca	 	
State (RSC)	RSC = TX	
City Name (RAL)	RAL = Midland	
Latitude (DDMMSS)	Lat = 315549N	
Longitude (DDDMMSS)	Lon = 1021231W	
Antenna Polarization (RAP)	RAP = 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
Antenna Azimuth (RAZ)	RAZ = V45	L = LEFT HAND CIRCULAR, R = RIGHT HAND CIRCULAR, T = RIGHT AND LEFT HAND CIRCULAR,

	RAD = 00G360B360-360A00871H000	
FCC notes:		

Earth Station Loca	ation B (Receiver) – 890-891.5 MHz	
State (RSC)	RSC = HI	
City Name (RAL)	RAL = Kapolei	
Latitude	Lat = 212011N	
(DDMMSS)		
Longitude	Lon = 158518W	
(DDDMMSS)		
Antenna Polarization (RAP)	RAP = 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
Antenna Azimuth (RAZ)	RAZ = V45	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 = 00G360B360-360A00871H000	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes:		1

Earth Station Location C (Receiver) – 758-768 MHz		
State (RSC)	RSC = TX	
City Name (RAL)	RAL = Pine Springs	
Latitude	Lat = 313439N	
(DDMMSS)		
Longitude	Lon = 1042043W	
(DDDMMSS)		
Antenna	RAP = J	POLARIZATIONS INCLUDE :
Polarization (RAP)		H = HORIZONTAL,
Totalization (IVII)		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 = V45	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 = 00G360B360-360A00871H000	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes:		

Earth Station Loca	ation D (Receiver) – 758-768 MHz	
State (RSC)	RSC = TX	
City Name (RAL)	RAL = Silver	
Latitude	Lat = 320823N	
(DDMMSS)		
Longitude	Lon = 1005052W	
(DDDMMSS)		
Antenna	RAP = J	POLARIZATIONS INCLUDE :
Polarization (RAP)		H = HORIZONTAL, V = VERTICAL,
, ,		S = HORIZONTAL AND VERTICAL,
		L = LEFT HAND CIRCULAR,
		R = RIGHT HAND CIRCULAR,
		T = RIGHT AND LEFT HAND CIRCULAR,
	DA7 1/45	J = LINEAR POLARIZATION THE EARTH STATION RECEIVER ANTENNA
Antenna Azimuth	RAZ = V45	AZIMUTH (RAZ), THE MINIMUM ANGLE OF
(RAZ)		ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
_		EVALUE ASSUMBLIS
Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
Dimensions (RAD)	BEAMWIDTH,	NAD01 100030B000-300A0033711000
	AZIMUTHAL RANGE,	
	THE SITE ELEVATION ABOVE MEAN SEA	
	LEVEL IN METERS	
	THE ANTENNA HEIGHT ABOVE TERRAIN IN	
	METERS	
	RAD = 00G360B360-360A00871H000	
FCC notes:		

Part A: Space to Earth Downlink Data

Satellite Transmitter Data

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Satellite Name: BlueWalker3		
Data Field	Data Answer	Description/Comments
Polarization (XAP)	XAP = S	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 BEAMWIDTH XAD = 03G180B	(NTIA format (XAD), EXAMPLE, XAD01 16G030B)
Type of satellite (State = SP) (City = geo or non)	Type = Nongeostationary	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, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURSAND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, ORB,53.0IN00425AP00375PE001.54H01NR	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
Farth Station Dat	 a (Receiver) 437-438 MHz	
State (RSC)	RSC = TX	
City Name (RAL)	RAL = Midland	
Latitude (DDMMSS)	Lat = 315549N	
Longitude (DDDMMSS)	Lon = 1021231W	
Antenna Polarization (RAP)	RAP = S	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 = V10	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 = 13G084B360-360A00871H000	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
	RAD = 13G084B360-360A008/1H000	
FCC notes:		

Earth Station Transmitter Data

Transmit Frequency	/: 47.2-50.2 GHz and 50.4-51.4 GHz	
State (XSC)	XSC = TX and HI	
City Name (XAL)	XAL = Midland and Kapolei	
Latitude	Lat = 315549N and 212011N	
(DDMMSS)		
Longitude	Lon = 1021231W and 1580518W	
(DDDMMSS)		
Antenna	XAP = T	POLARIZATIONS INCLUDE :
Polarization (XAP)		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 = V10	THE EARTH STATION Transmitter ANTENNA
(XAZ)		AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, VOO TO V90, EXAMPLE, XAZ01 V00
Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY,
Dimensions (XAD)	BEAMWIDTH: 0.20 deg ¹ ,	XAD01 16G030B000-360A00357H006
	AZIMUTHAL RANGE ,	
	THE SITE ELEVATION ABOVE MEAN SEA	
	LEVEL IN METERS	
	THE ANTENNA HEIGHT ABOVE TERRAIN IN	
	METERS	
	XAD = 59G000B000-360A00871H000	
Satellite Receive Sp		
Polarization (RAP)	RAP = T	POLARIZATIONS INCLUDE :
		H = HORIZONTAL,
		V = VERTICAL, S = HORIZONTAL AND VERTICAL,
		L = LEFT HAND CIRCULAR,
		R = RIGHT HAND CIRCULAR,
		T = RIGHT AND LEFT HAND CIRCULAR,
Azimuth (RAZ)	RAZ = NB	J = LINEAR POLARIZATION NB= NARROWBEAM
AZIIIIULII (NAZ)	NAZ - NB	EC = EARTH COVERAGE
Dimension (RAD)	ANTENNA GAIN	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
	BEAMWIDTH	
	RAD = 45G001B	
Type of satellite	Type = Nongeostationary	Choose either:
(State = SP)		Geostationary or Nongeostationary
City = G/No		inongeostational y

¹ Because there does not appear to be a way to place a <1 value on the string, AST has used "00" in the string and added the actual value of 0.2 on the specific line.

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). IF ANY SATELLITES ARE NONGEOSTATIONARY,
For Nongeostationary (Orbital Data)	INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS, ORBITAL PERIOD IN HOURSAND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, ORB,53.0IN00425AP00375PE001.54H01NR	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 Transmitter Data

Transmit Frequency: 846.5-849 MHz/845-846.5 MHz		
State (XSC)	XSC = TX/HI	
City Name (XAL)	XAL = Midland/Kapolei	
Latitude	Lat = 315549W/212011N	
(DDMMSS)		
Longitude	Lon = 1021231W/1580518W	
(DDDMMSS)		
Antenna	XAP = J	POLARIZATIONS INCLUDE :
Polarization (XAP)		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 = V45	THE EARTH STATION Transmitter ANTENNA
(XAZ)		AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
, ,		LLEVATION, VOO TO V90, EXAMPLE, XAZOT VOO
Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY,
Dimensions (XAD)	BEAMWIDTH,	XAD01 16G030B000-360A00357H006
	AZIMUTHAL RANGE,	
	THE SITE ELEVATION ABOVE MEAN SEA	
	LEVEL IN METERS	
	THE ANTENNA HEIGHT ABOVE TERRAIN IN	
	METERS	
	XAD = 00G180B000-360A00871H000	
Satellite Receive Sp	pecifications	

		DOLARIZATIONS INICIARE
Polarization (RAP)	RAP = 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 = NB	NB= NARROWBEAM EC = EARTH COVERAGE
5		(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Dimension (RAD)	ANTENNA GAIN	(NTIA TOTTIAL (RAD), EXAMPLE, RADUL 166030B)
	BEAMWIDTH	
	RAD = 37G002B	
T C		Choose either:
Type of satellite	Type = Nongeostationary	Geostationary or
(State = SP)		Nongeostationary
City = G/No		Nongcostationary
· ·	1 21 - 4 -	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT
For Geostationary	Longitude =	ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND
		REPORT ITS LONGITUDE (XLG AND/OR RLG).
For	INCLINATION ANGLE ,	IF ANY SATELLITES ARE NONGEOSTATIONARY,
1		REPORT ITS INCLINATION ANGLE, APOGEE
Nongeostationary	APOGEE IN KILOMETERS,	IN KILOMETERS, PERIGEE IN KILOMETERS,
(Orbital Data)	PERIGEE IN KILOMETERS ,	ORBITAL PERIOD IN HOURS AND FRACTIONS OF
(ORBITAL PERIOD IN HOURS AND	HOURS IN DECIMAL, THE NUMBER OF SATELLITES
		IN THE SYSTEM, THEN TO1, EXAMPLE,
	FRACTIONS OF HOURS IN DECIMAL,	REM04
	THE NUMBER OF SATELLITES IN THE	*ORB,98.0IN00510AP00510PE001.58H01NRT01,
	SYSTEM .	AND FOR SPACE-TO-SPACE
	JIJILIVI	COMMUNICATIONS WITH ANOTHER
		NONGEOSTATIONARY SATELLITE ADD AN
	ORB,53.0IN00425AP00375PE001.54H01NR	ADDITIONAL
		*ORB FOR IT ENDING IN R01, EXAMPLE, REM05
		*ORB,72.9IN03209AP00655PE013.46H01NRR01

Earth Station Transmitter Data

Transmit Frequency: 788-798 MHz		
State (XSC)	XSC = TX	
City Name (XAL)	XAL = Pine Springs and Silver	
Latitude	Lat = 313439N and 320823N	
(DDMMSS)		
Longitude	Lon = 1042043W and 1005052W	
(DDDMMSS)		
Antenna	XAP = J	POLARIZATIONS INCLUDE :
Polarization (XAP)		H = HORIZONTAL,
Tolarization (XAT)		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 = V45	THE EARTH STATION Transmitter ANTENNA
	AAZ - V43	AZIMUTH (XAZ), THE MINIMUM ANGLE OF
(XAZ)		ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY,
Dimensions (XAD)		XAD01 16G030B000-360A00357H006
Difficitions (AAD)	BEAMWIDTH, AZIMUTHAL RANGE ,	
	THE SITE ELEVATION ABOVE MEAN SEA	
	LEVEL IN METERS	
	THE ANTENNA HEIGHT ABOVE TERRAIN IN	
	METERS	
	XAD = 00G180B000-360A00871H000	
Satellite Receive Sp	pecifications	
Polarization (RAP)	RAP = 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 = EC	NB= NARROWBEAM
Azimutii (NAZ)	IVAZ – EC	EC = EARTH COVERAGE
Dimension (RAD)	ANTENNA GAIN	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
	BEAMWIDTH	
	RAD = 37G002B	
Type of satellite	Type = Nongeostationary	Choose either:
(State = SP)		Geostationary or Nongeostationary
City = G/No		Nongeostational y
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY, REPORT
,		ITS LATITUDE AS 000000N (XLA AND/OR RLA) AND
For	INCLINATION ANGLE ,	REPORT ITS LONGITUDE (XLG AND/OR RLG). IF ANY SATELLITES ARE NONGEOSTATIONARY,
		REPORT ITS INCLINATION ANGLE, APOGEE
Nongeostationary	APOGEE IN KILOMETERS,	IN KILOMETERS, PERIGEE IN KILOMETERS,
(Orbital Data)	PERIGEE IN KILOMETERS,	ORBITAL PERIOD IN HOURS AND FRACTIONS OF
	ORBITAL PERIOD IN HOURSAND	HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, THEN TO1, EXAMPLE,
	FRACTIONS OF HOURS IN DECIMAL,	REM04
	THE NUMBER OF SATELLITES IN THE	*ORB,98.0IN00510AP00510PE001.58H01NRT01,
	SYSTEM,	AND FOR SPACE-TO-SPACE COMMUNICATIONS WITH ANOTHER
		NONGEOSTATIONARY SATELLITE ADD AN
	ORB,53.0IN00425AP00375PE001.54H01NR	ADDITIONAL
		*ORB FOR IT ENDING IN R01, EXAMPLE, REM05 *ORB,72.9IN03209AP00655PE013.46H01NRR01
		OND, 72. SHOUSEDS AT GOODS FLOTS. 40HOLINKOL

Earth Station Transmitter Data

Transmit Frequency	/: 437-438 MHz	
State (XSC)	XSC = TX	
City Name (XAL)	XAL = Midland	
Latitude	Lat = 315549N	
(DDMMSS)		
Longitude	Lon = 1021231W	
(DDDMMSS)		
Antenna Polarization (XAP)	XAP = 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
Antenna Azimuth (XAZ)	XAZ = V45	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN, BEAMWIDTH, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS XAD = 13G037B000-360A00871H000	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Satellite Receive Sp	l	
Polarization (RAP)	RAP = 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 = EC	NB= NARROWBEAM
Dimension (RAD)	ANTENNA GAIN BEAMWIDTH RAD = 00G180B	EC = EARTH COVERAGE (NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Type of satellite (State = SP) City = G/No	Type = Nongeostationary	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	INCLINATION ANGLE,	IF ANY SATELLITES ARE NONGEOSTATIONARY,
Nongeostationary	APOGEE IN KILOMETERS,	REPORT ITS INCLINATION ANGLE, APOGEE IN KILOMETERS, PERIGEE IN KILOMETERS,
(Orbital Data)	PERIGEE IN KILOMETERS,	ORBITAL PERIOD IN HOURS AND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, THEN TO1, EXAMPLE,

ORBITAL PERIOD IN HOURSAND FRACTIONS OF HOURS IN DECIMAL, THE NUMBER OF SATELLITES IN THE SYSTEM, ORB,53.0IN00425AP00375PE001.54H01NR	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