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		
Data Field	Data Answer	Description/Comments
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
Antenna Dimension (XAD)	ANTENNA GAIN BEAMWIDTH XAD = 45G001B	(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,97.4IN00516AP00436PE001.57H01NR	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 Dat	a (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, V00 TO V90, EXAMPLE, RAZ01 V00
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 RAD = 57G000B000-360A00871H000	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes:		

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	Type = Nongeostationary	Choose either:
(State = SP)		Geostationary or
(City = geo or		Nongeostationary
non)		
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY,
		REPORT ITS LATITUDE AS 000000N (XLA AND/OR REA) AND REPORT ITS LONGITUDE (XLG AND/OR
		RLG).
For	INCLINATION ANGLE,	IF ANY SATELLITES ARE NONGEOSTATIONARY,
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
	FRACTIONS OF HOURS IN DECIMAL,	REM04
	THE NUMBER OF SATELLITES IN THE	*ORB,98.0IN00510AP00510PE001.58H01NRT01,
	SYSTEM,	AND FOR SPACE-TO-SPACE
		NONGEOSTATIONARY SATELLITE ADD AN
	ORB,97.4IN00516AP00436PE001.57H01NR	ADDITIONAL
		*ORB FOR IT ENDING IN R01, EXAMPLE, REM05 *ORB 72.9IN03209AP00655PF013.46H01NRR01
Earth Station Loca	ation A (Receiver) – 891.5-894 MHz	
State (RSC)	RSC = TX	
City Name (RAL)	RAL = Midland	
Latitude	Lat = 315549N	
(DDMMSS)		
Longitude	Lon = 1021231W	
(DDDMMSS)		
Antenna	RAP = J	POLARIZATIONS INCLUDE :
Polarization (RAP)		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 = V45	THE EARTH STATION RECEIVER ANTENNA
(RAZ)		ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna	ANTENNA GAIN,	RAD01 16G030B000-360A00357H006
Dimensions (RAD)	BEAMWIDTH,	
	AZIMUTHAL RANGE,	
	THE SITE ELEVATION ABOVE MEAN SEA	
	LEVEL IN METERS	
	THE ANTENNA HEIGHT ABOVE TERRAIN IN	
	METERS	
	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 (DDDMMSS)	Lon = 158518W	
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

tion C (Receiver) – 758-768 MHz	
RSC = TX	
RAL = Pine Springs	
Lat = 313439N	
Lon = 1042043W	
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
RAZ = V45	THE EARTH STATION RECEIVER ANTENNA
	AZIMUTH (RAZ), THE MINIMUM ANGLE OF
	ELEVATION, VOO TO V90, EXAMPLE, RAZO1 VOO
	tion C (Receiver) – 758-768 MHz RSC = TX RAL = Pine Springs Lat = 313439N Lon = 1042043W RAP = J RAZ = V45

Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY,
Dimensions (RAD)	BEAMWIDTH, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS	KADUI 16G0308000-360A00357H006
	RAD = 00G360B360-360A00871H000	
FCC notes:		

Earth Station Location 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,
Antenna Azimuth	RAZ = V45	AZIMUTH (RAZ) THE MINIMUM ANGLE OF
(RAZ)		ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY,
Dimensions (RAD)	BEAMWIDTH,	RADUI 16G0308000-360A00357H006
	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

Transmit Frequency: 400.15-401 MHz/437-438 MHz

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 FC = FARTH 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,97.4IN00516AP00436PE001.57H01NR	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	a (Receiver) 400.15-401 MHz/437-438 MH	Hz
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
FCC notes:		

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	
Antenna	XAP =	H = HORIZONTAL,
Polarization (XAP)		V = VERTICAL,
		S = HORIZON I AL AND VERTICAL,
		R = RIGHT HAND CIRCULAR,
		T = RIGHT AND LEFT HAND CIRCULAR,
Antenna Azimuth	ΧΔ7 =	THE EARTH STATION Transmitter ANTENNA
(XAZ)		AZIMUTH (XAZ), THE MINIMUM ANGLE OF
(,,,,_)		ELEVATION, V00 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	pecifications	
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
Azimuth (RAZ)	RAZ = NB	NB= NARROWBEAM
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		

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).
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,97.4IN00516AP00436PE001.57H01NR	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

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)		V = VERTICAL.
		S = HORIZONTAL AND VERTICAL,
		L = LEFT HAND CIRCULAR,
		T = RIGHT AND LEFT HAND CIRCULAR,
		J = LINEAR POLARIZATION
Antenna Azimuth	XAZ = V45	THE EARTH STATION Transmitter ANTENNA
(XAZ)		ELEVATION, VOO TO V90, EXAMPLE, XAZO1 VOO
Antenna	ANTENNA GAIN,	EXAMPLE ASSUMING NONGEOSTATIONARY,
Dimensions (XAD)	BEAMWIDTH,	
	AZIMUTHAL RANGE,	
	THE SITE ELEVATION ABOVE MEAN SEA	
	LEVEL IN METERS	
	THE ANTENNA HEIGHT ABOVE TERRAIN IN	
	METERS	
	XAD = 00G180B000-360A00871H000	
Satellite Receive Specifications		

Polarization (RAP)	RAP = I	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	(NTIA format (RAD), EXAMPLE, RAD01 16G030B)
	BEAMWIDTH	
	RAD = 37G002B	
Type of satellite	Type = Nongeostationary	Choose either:
(State - SD)		Geostationary or
(State - SF)		Nongeostationary
City = G/No		
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
(Orbital Data)		IN KILOMETERS, PERIGEE IN KILOMETERS,
		URBITAL PERIOD IN HOURS AND FRACTIONS OF
	ORBITAL PERIOD IN HOURSAND	IN THE SYSTEM THEN TOT EXAMPLE
	FRACTIONS OF HOURS IN DECIMAL,	REM04
	THE NUMBER OF SATELLITES IN THE	*ORB,98.0IN00510AP00510PE001.58H01NRT01,
	SVCTEM	AND FOR SPACE-TO-SPACE
	,	COMMUNICATIONS WITH ANOTHER
		NONGEOSTATIONARY SATELLITE ADD AN
	ORB,97.4IN00516AP00436PE001.57H01NR	ADDITIONAL
		*ORB FOR IT ENDING IN R01, EXAMPLE, REM05
		*ORB,72.9IN03209AP00655PE013.46H01NRR01

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,
		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 = 00G180B000-360A00871H000	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
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 EC = EARTH COVERAGE
Dimension (RAD)	ANTENNA GAIN BEAMWIDTH RAD = 37G002B	(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 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,97.4IN00516AP00436PE001.57H01NR	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

Transmit Frequency:	: 400.15-401 MHz/437-438 MHz	
State (XSC)	XSC = TX	
City Name (XAL)	XAL = Midland	
Latitude	Lat = 315549N	
(DDMMSS)		
Longitude	Lon = 1021231W	
(DDDMMSS)		
Antenna	XAP = J	POLARIZATIONS INCLUDE :
Polarization (XAP)		V = VERTICAL,
		S = HORIZONTAL AND VERTICAL,
		R = RIGHT HAND CIRCULAR,
		T = RIGHT AND LEFT HAND CIRCULAR,
Antenna Azimuth	XA7 = V45	THE EARTH STATION Transmitter ANTENNA
(XA7)	//// = V+3	AZIMUTH (XAZ), THE MINIMUM ANGLE OF
(//////////////////////////////////////		ELEVATION, VOU TO V90, EXAMPLE, XAZ01 V00
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 = 13G037B000-360A00871H000	
Satellite Receive Spe	ecifications	
Polarization (PAP)		POLARIZATIONS INCLUDE :
FOIDTIZATION (NAF)		H = HORIZONTAL,
		V = VERTICAL, S = HORIZONTAL AND VERTICAL
		L = LEFT HAND CIRCULAR,
		R = RIGHT HAND CIRCULAR,
		J = LINEAR POLARIZATION
Azimuth (RAZ)	RAZ = EC	NB= NARROWBEAM
Dimension (PAD)		EC = EARTH COVERAGE (NTIA format (RAD), EXAMPLE, RAD01 16G030B)
Dimension (RAD)		
	BAD = 00G180B	
Type of satellite	Type = Nongeostationary	Choose either:
(State = SP)	Type – Nongeostational y	Geostationary or
City = G/No		Nongeostationary
For Geostationary	Longitude =	IF ANY SATELLITES ARE GEOSTATIONARY,
· · · · · · ,	0	REPORT ITS LATITUDE AS 000000N (XLA AND/OR
		RLG).
For	INCLINATION ANGLE,	IF ANY SATELLITES ARE NONGEOSTATIONARY,
Nongeostationary	APOGEE IN KILOMETERS,	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,97.4IN00516AP00436PE001.57H01NR	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