FOR REFERENCE ONLY

As required by the Commission, the following technical parameters are provided for Cesium Mission 1 (CM1) spacecraft communications with S-band Earth stations operated outside the United States, its territories, and possessions. CM1 spacecraft have already received authorization to operate through the Leaf Space TT&C ground stations at the following locations:

1. Blönduós, Iceland
2. Awarua, New Zealand
3. Villa Do Porto, Santa Maria, Azores, Portugal

CM1 spacecraft are pending authorization to access the Leaf Space TT&C ground stations in the following locations, and will receive an approved ground station license prior to commencing operations:

1. Plana, Bulgaria
2. Vimercate, Italy
3. Kandy, Sri Lanka
4. Unst, Shetland, United Kingdom

This information is provided in the NTIA Space Record Data Form format below which gives the full picture of both ends of the transmit receive links.

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

S-band Satellite Transmitter Data

Transmit Frequency: 2215 MHz		
Satellite Name: Cesium Satellite 1 (CS1), Cesium Satellite 2 (CS2)		
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 EC	NB= NARROWBEAM EC = EARTH COVERAGE
Antenna Dimension (XAD)	ANTENNA GAIN = 7 dBi BEAMWIDTH = 80 degrees XAD = XAD01 07G080B	(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____97.6 deg___, APOGEE IN KILOMETERS_____550_____, PERIGEE IN KILOMETERS_____550_____, ORBITAL PERIOD IN HOURS___1___ AND FRACTIONS OF HOURS IN DECIMAL___0.59___, THE NUMBER OF SATELLITES IN THE SYSTEM_____2_____, ORB = *ORB,97.6IN00550AP00550PE001.59H02NRT01	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 = Bulgaria	
City Name (RAL)	RAL = Plana	
Latitude (DDMMSS)	Lat = 42° 28’ 56” N	
Longitude (DDDMMSS)	Lon = 023° 26’ 43” E	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN_____35.8 dBi_____, BEAMWIDTH_____2.2 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____1106_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____4_____ RAD = RAD01 36G002B000-360A01106H004	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

Earth Station Data (Receiver)		
State (RSC)	RSC = Iceland	
City Name (RAL)	RAL = Blönduós	
Latitude (DDMMSS)	Lat = 65° 38’ 50” N	
Longitude (DDDMMSS)	Lon = 020° 14’ 40” W	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00

Antenna Dimensions (RAD)	ANTENNA GAIN_____36.1 dBi_____, BEAMWIDTH_____2.4 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____53_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ RAD = RAD01 36G003B000-360A00053H002	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

Earth Station Data (Receiver)		
State (RSC)	RSC = Italy	
City Name (RAL)	RAL = Vimercate	
Latitude (DDMMSS)	Lat = 45° 35’ 36” N	
Longitude (DDDMMSS)	Lon = 009° 21’ 44” E	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN_____35 dBi_____, BEAMWIDTH_____3.1 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____177_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____13_____ RAD = RAD01 35G003B000-360A00177H013	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

Earth Station Data (Receiver)

State (RSC)	RSC = New Zealand	
City Name (RAL)	RAL = Awarua	
Latitude (DDMMSS)	Lat = 46° 31’ 41” S	
Longitude (DDDMMSS)	Lon = 168° 22’ 44” E	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN_____36.1 dBi_____, BEAMWIDTH_____2.4 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____10_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ RAD = RAD01 36G002B000-360A00010H002	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

Earth Station Data (Receiver)		
State (RSC)	RSC = Portugal	
City Name (RAL)	RAL = Villa Do Porto, Santa Maria Island, Azores	
Latitude (DDMMSS)	Lat = 36° 59’ 51” N	
Longitude (DDDMMSS)	Lon = 025° 08’ 14” W	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00

Antenna Dimensions (RAD)	ANTENNA GAIN_____36.1 dBi_____, BEAMWIDTH_____2.4 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____200_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ RAD = RAD01 36G002B000-360A00200H002	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

Earth Station Data (Receiver)		
State (RSC)	RSC = Sri Lanka	
City Name (RAL)	RAL = Kandy	
Latitude (DDMMSS)	Lat = 07° 16’ 29” N	
Longitude (DDDMMSS)	Lon = 080° 43’ 30” E	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN_____36.1 dBi_____, BEAMWIDTH_____2.4 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____434_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ RAD = RAD01 36G002B000-360A00434H002	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

Earth Station Data (Receiver)

State (RSC)	RSC = United Kingdom	
City Name (RAL)	RAL = Unst, Shetland	
Latitude (DDMMSS)	Lat = 60° 44’ 54” N	
Longitude (DDDMMSS)	Lon = 000° 51’ 30” W	
Antenna Polarization (RAP)	RAP = RAP01 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 (RAZ)	RAZ = RAZ01 V05	THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, RAZ01 V00
Antenna Dimensions (RAD)	ANTENNA GAIN_____36.1 dBi_____, BEAMWIDTH_____2.4 degrees_____, AZIMUTHAL RANGE___0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____12_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ RAD = RAD01 36G002B000-360A00012H002	EXAMPLE ASSUMING NONGEOSTATIONARY, RAD01 16G030B000-360A00357H006
FCC notes: 1. Use S-Note S945. 2. REM AGN, Cubesat, (CS1, CS2)		

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

Earth Station Transmitter Data

Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = Bulgaria	
City Name (XAL)	XAL = Plana	
Latitude (DDMMSS)	Lat = 42° 28’ 56” N	
Longitude (DDDMMSS)	Lon = 023° 26’ 43” E	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____35.8 dBi_____, BEAMWIDTH_____2.2_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____1106_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____4.0_____ XAD = XAD01 36G002B000-360A01106H004	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = Iceland	
City Name (XAL)	XAL = Blönduós	
Latitude (DDMMSS)	Lat = 65° 38’ 50” N	
Longitude (DDDMMSS)	Lon = 020° 14’ 40” W	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____35.1 dBi_____, BEAMWIDTH_____2.6_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____53_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ XAD = XAD01 35G003B000-360A00053H002	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = Italy	
City Name (XAL)	XAL = Vimercate	
Latitude (DDMMSS)	Lat = 45° 35’ 36” N	
Longitude (DDDMMSS)	Lon = 009° 21’ 44” E	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____34.3 dBi_____, BEAMWIDTH_____3.2_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____177_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____13_____ XAD = XAD01 34G003B000-360A00177H013	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = New Zealand	
City Name (XAL)	XAL = Awarua	

Latitude (DDMMSS)	Lat = 46° 31’ 41” S	
Longitude (DDDMMSS)	Lon = 168° 22’ 44” E	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____35.1 dBi_____, BEAMWIDTH_____2.6_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____10_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ XAD = XAD01 35G003B000-360A00010H002	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = Portugal	
City Name (XAL)	XAL = Villa Do Porto, Santa Maria Island, Azores	
Latitude (DDMMSS)	Lat = 36° 59’ 51” N	
Longitude (DDDMMSS)	Lon = 025° 08’ 14” W	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____35.1 dBi_____, BEAMWIDTH_____2.6_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____200_____	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

	THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ XAD = XAD01 35G003B000-360A00200H002	
Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = Sri Lanka	
City Name (XAL)	XAL = Kandy	
Latitude (DDMMSS)	Lat = 07° 16’ 29” N	
Longitude (DDDMMSS)	Lon = 080° 43’ 30” E	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____35.1 dBi_____, BEAMWIDTH_____2.6_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____434_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ XAD = XAD01 35G003B000-360A00434H002	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006
Earth Station Data (Transmitter)		
Transmit Frequency: 2061.2 MHz		
State (XSC)	XSC = United Kingdom	
City Name (XAL)	XAL = Unst, Shetland	
Latitude (DDMMSS)	Lat = 60° 44’ 54” N	
Longitude (DDDMMSS)	Lon = 000° 51’ 30” W	
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)	XAZ = XAZ01 V05	THE EARTH STATION Transmitter ANTENNA AZIMUTH (XAZ), THE MINIMUM ANGLE OF ELEVATION, V00 TO V90, EXAMPLE, XAZ01 V00
Antenna Dimensions (XAD)	ANTENNA GAIN_____35.1 dBi_____, BEAMWIDTH_____2.6_____, AZIMUTHAL RANGE____0 to 360_____, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS _____12_____ THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS _____2.2_____ XAD = XAD01 35G003B000-360A00012H002	EXAMPLE ASSUMING NONGEOSTATIONARY, XAD01 16G030B000-360A00357H006

Satellite Receive Specifications		
Polarization (RAP)	RAP = 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 = EC	NB= NARROWBEAM EC = EARTH COVERAGE
Dimension (RAD)	ANTENNA GAIN = 6.8 dBi BEAMWIDTH = 80 degrees RAD = RAD01 07G080B	(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____97.6 deg___, APOGEE IN KILOMETERS_____550_____, PERIGEE IN KILOMETERS_____550_____, ORBITAL PERIOD IN HOURS___1___ AND FRACTIONS OF HOURS IN DECIMAL___0.59___, THE NUMBER OF SATELLITES IN THE SYSTEM_____2_____, ORB = *ORB,97.6IN00550AP00550PE001.59H02NRT01	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