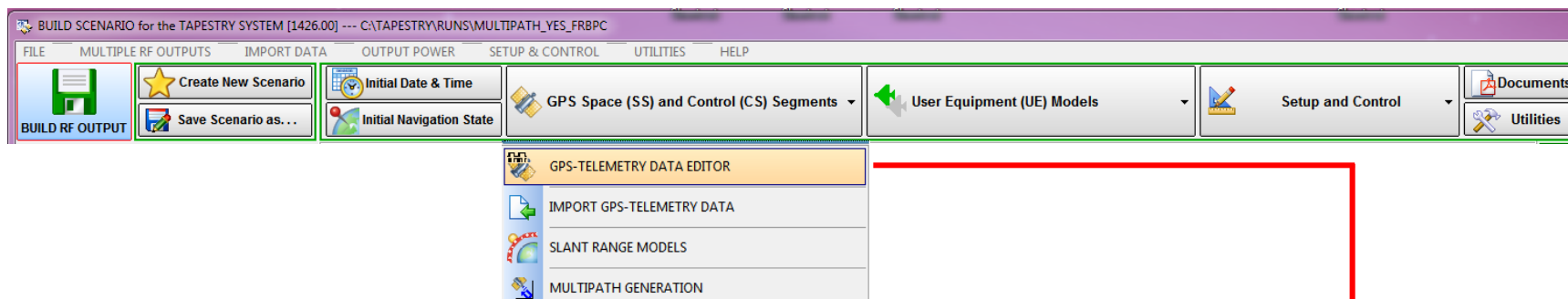


USING RESERVED DATA IN SUBFRAME 4



EXAMPLE.

CREATE 3 SUBFRAME 4'S. THE FIRST SENDING ALL 0XA, THE SECOND ALL 0XF, THE THIRD 0X0. THREE DATA SET CUT-INS ARE REQUIRED

Satellite Telemetry Data Setup and Configuration Editor

DISPLAYED SVID 2 **IMPORT LEGACY DATA** Users Guide IS-GPS-2000 DO-261_L5 ICD-GPS 700

LEGACY SUBFRAMES 1,2,3 **LEGACY SUBFRAMES 4,5** **L2C & L5 DATA / MESSAGING** **MNAV DATA / MESSAGING**

SUBFRAME 4/5 DATA SET 1 **Make Another DATASET**

Almanac Reference Week W_{na}	1745 ?	UTC Model Coefficient A_0	0.0000000000e+00 ? sec	RES 4.57.1	aaaa
Almanac Reference Time T_{oa}	299008 ? sec	UTC Model Coefficient A_1	0.0000000000e+00 ? s/s	RES 4.57.2:1	aaaaaaaa :2 aaaaaaaa :3 aaaaaaaa
Time of Transmission T_{ot}	1.000000 ? sec	UTC Delta Time due to Leap Seconds ΔT_{ls}	15 ? sec	:4 aaaaaaaa :5 aaaaaaaa	4.57.3 aa
Mean Anomaly M_o	9.37118172646e-01 ? sc	UTC Reference Time for Data T_{ot}	0 ? sec	4.57.4	aa
Eccentricity e	9.03558731079e-03 ?	UTC Reference Week W_{nt}	1745 ?	RES 4.58.1	aaaa
Square root Semi Major Axis \sqrt{A}	5.15359472656e+03 ? m	UTC Leap Second Effectivity Week $W_{N_{lsf}}$	1745 ?	RES 4.58.2:1	aaaaaaaa :2 aaaaaaaa :3 aaaaaaaa
Long of Ascending Node at Ref Time Ω_o	-5.76708912849e-01 ? sc	UTC Leap Second Effectivity Day DN	1 ?	:4 aaaaaaaa :5 aaaaaaaa	4.58.3 aa
Inclination Angle Correction δ_i	-1.52587890625e-04 ? sc	UTC Past Delta Time Leap Seconds ΔT_{lsf}	15 ? sec	RES 4.59.1	aaaa
Argument of Perigee ω	8.83193492889e-01 ? sc	Iono Model Parameter α_0	1.30385160446e-08 ? sec	RES 4.59.2:1	aaaaaaaa :2 aaaaaaaa :3 aaaaaaaa
Rate of Right Ascension $\dot{\alpha}$	-2.50292941928e-09 ? sc/sec	Iono Model Parameter α_1	-7.45058059632e-09 ? sec/sc	:4 aaaaaaaa :5 aaaaaaaa	4.59.3 aa
Clock Model a_{fo}	1.53541564941e-04 ? sec	Iono Model Parameter α_2	0.0000000000e+00 ? sec/sc	RES 4.60.1	aaaa
Clock Model a_{fl}	0.0000000000e+00 ? sec/sec	Iono Model Parameter α_3	0.0000000000e+00 ? sec/sc	RES 4.60.2:1	aaaaaaaa :2 aaaaaaaa :3 aaaaaaaa
NAV Health	All Data OK	Iono Model Parameter β_0	116736.00000 ? sec	:4 aaaaaaaa :5 aaaaaaaa	4.60.3 aa
Signal Health	All signals OK	Iono Model Parameter β_1	-81920.00000 ? sec/sc	RES 4.61.1	aaaa
AS Configuration	Anti Spoof Off	Iono Model Parameter β_2	0.00000 ? sec/sc	RES 4.61.2:1	aaaaaaaa :2 aaaaaaaa :3 aaaaaaaa
Sv Configuration	Block IIIA/IIIR	Iono Model Parameter β_3	0.00000 ? sec/sc	:4 aaaaaaaa :5 aaaaaaaa	4.61.3 aa
	<input checked="" type="checkbox"/> ALL			RES 4.62.1	aaaa
				RES 4.62.2:1	aaaaaaaa :2 aaaaaaaa :3 aaaaaaaa
				:4 aaaaaaaa :5 aaaaaaaa	4.62.3 aa

MSG 4.55.17 NavLabs

 **Make Another DATASET**

PRESS TO CREATE ANOTHER SUBFRAME 4 DATA SET

EPOCH FOR SUBFRAME 4/5 UPLOAD

Almanac Cut-In Time of Transmission WEEK SECONDS INTO WEEK

THIS IS THE TIME THAT THE DATA SET IS TRANSMITTED BY THE SIMULATOR. IN EXAMPLE, DATA SET 2 WILL BE BROADCAST 720 SECONDS INTO THE SIMULATION. [NOTE: DATA SET 1 MUST BE TRANSMITTED @ SIMULATION START TIME

DON'T CONFUSE TIME OF TRANSMISSION WITH THE TIME OF ALMANAC. TIME OF TRANSMISSION IS WHEN THE DATA SET IS BROADCAST, TIME OF ALMANAC REFERENCES THE PARAMETERS WITHIN THE ALMANAC. IN THIS EXAMPLE THE TOA FOR ALL 3 DATA SETS IS THE SAME, DATA SET 1 TRANSMITTED @0 SECONDS, #2 @ 720 SECONDS, AND #3 @1500 SECONDS INTO THE SIMULATION

Satellite Telemetry Data Setup and Configuration Editor

DISPLAYED SVID

LEGACY SUBFRAMES 1,2,3 **LEGACY SUBFRAMES 4,5** **L2C & L5 DATA / MESSAGING** **MNAV DATA / MESSAGING**

SUBFRAME 4/5 DATA SET

Almanac Reference Week W_{na}	<input type="text" value="1698"/>	UTC Model Coefficient A_0	<input type="text" value="0.00000000000e+00"/>	sec
Almanac Reference Time T_{oa}	<input type="text" value="299008"/>	UTC Model Coefficient A_1	<input type="text" value="0.00000000000e+00"/>	s/s
Time of Transmission T_{ot}	<input type="text" value="720.000000"/>	UTC Delta Time due to Leap Seconds ΔT_{ls}	<input type="text" value="15"/>	sec
Mean Anomaly M_o	<input type="text" value="-8.31806421280e-01"/>	UTC Reference Time for Data T_{ot}	<input type="text" value="0"/>	sec
Eccentricity e	<input type="text" value="9.03558731079e-03"/>	UTC Reference Week W_{nt}	<input type="text" value="1698"/>	
Square root Semi Major Axis \sqrt{A}	<input type="text" value="5.15359472656e+03"/>	UTC Leap Second Effectivity Week $W_{N_{lsf}}$	<input type="text" value="1698"/>	

RES 4.57.1

RES 4.57.2:1 :2 :3

:4 :5 4.57.3

4.57.4

RES 4.58.1

RES 4.58.2:1 :2 :3

:4 :5 4.58.3

ENTER 0XF INTO THE RESERVED VALUES

 **Make Another DATASET**

PRESS TO CREATE ANOTHER SUBFRAME 4 DATA SET

EPOCH FOR SUBFRAME 4/5 UPLOAD

Almanac Cut-In Time of Transmission WEEK SECONDS INTO WEEK

Satellite Telemetry Data Setup and Configuration Editor

DISPLAYED SVID

LEGACY SUBFRAMES 1,2,3 LEGACY SUBFRAMES 4,5 L2C & L5 DATA / MESSAGING MNAV DATA / MESSAGING

SUBFRAME 4/5 DATA SET

Almanac Reference Week W_{na}	<input type="text" value="1698"/>	UTC Model Coefficient A_0	<input type="text" value="0.0000000000e+00"/>	sec	RES 4.57.1	<input type="text" value="0"/>
Almanac Reference Time T_{oa}	<input type="text" value="299008"/>	UTC Model Coefficient A_1	<input type="text" value="0.0000000000e+00"/>	s/s	RES 4.57.2.1	<input type="text" value="0"/> :2 <input type="text" value="0"/> :3 <input type="text" value="0"/>
Time of Transmission T_{ot}	<input type="text" value="1440.000000"/>	UTC Delta Time due to Leap Seconds ΔT_{ls}	<input type="text" value="15"/>	sec	:4	<input type="text" value="0"/> :5 <input type="text" value="0"/> 4.57.3 <input type="text" value="0"/>
Mean Anomaly M_o	<input type="text" value="-8.31806421280e-01"/>	UTC Reference Time for Data T_{ot}	<input type="text" value="0"/>	sec	4.57.4	<input type="text" value="0"/>
Eccentricity e	<input type="text" value="9.03558731079e-03"/>	UTC Reference Week W_{nt}	<input type="text" value="1698"/>		RES 4.58.1	<input type="text" value="AAAA"/>
Square root Semi Major Axis \sqrt{A}	<input type="text" value="5.15359472656e+03"/>	UTC Leap Second Effectivity Week $W_{N_{lsf}}$	<input type="text" value="1698"/>		RES 4.58.2.1	<input type="text" value="AAAAAAA"/> :2 <input type="text" value="AAAAAAA"/> :3 <input type="text" value="AAAAAAA"/>
Long of Ascending Node at Ref Time Ω	<input type="text" value="-7.04061746597e-01"/>	UTC Leap Second Effectivity Day DN	<input type="text" value="1"/>		:4	<input type="text" value="AAAAAAA"/> :5 <input type="text" value="AAAAAAA"/> 4.58.3 <input type="text" value="AA"/>

ENTER 0X0 INTO THE RESERVED VALUES



BUILD THE SIMULATION. YOUR RECEIVER WILL CAPTURE 3 SUBFRAME 4 DATASETS @ 0, 720, 1500 SECONDS INTO THE SIMULATION. THE GATHERED DATA WILL REFLECT WHAT YOU ENTERED. USE THIS TECHNIQUE TO MANIPULATE SUBFRAME 4 RESERVED DATA