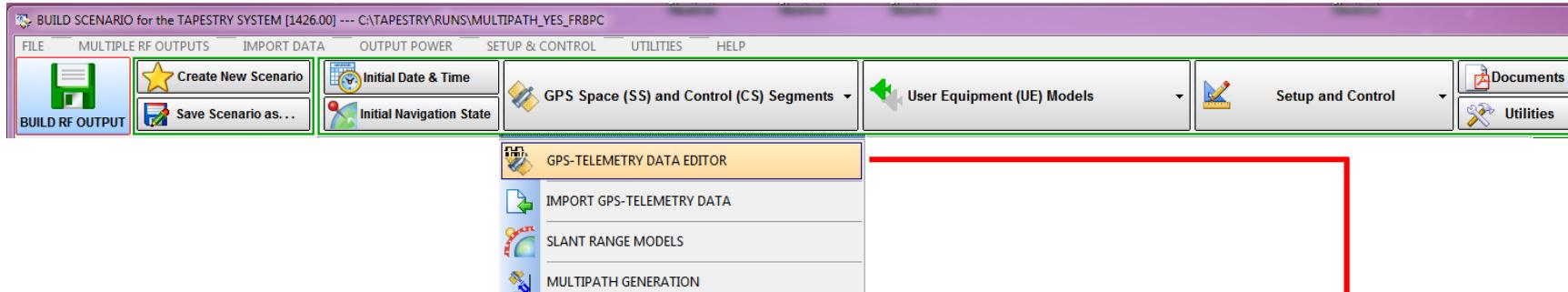




USING RESERVED DATA IN SUBFRAME 4

**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-200D** **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	Wna	1745	UTC Model Coefficient A ₀	0.0000000000e+00	sec	
Almanac Reference Time	Toa	299008	UTC Model Coefficient A ₁	0.0000000000e+00	s/s	
Time of Transmission	Tot	1.000000	UTC Delta Time due to Leap Seconds	ΔT _{ts}	15	sec
Mean Anomaly	Mo	9.37118172646e-01	UTC Reference Time for Data	T _{ot}	0	sec
Eccentricity	e	9.03558731079e-03	UTC Reference Week	W _{nt}	1745	?
Square root Semi Major Axis	A ₀	5.15359472656e+03	UTC Leap Second Effectivity Week	WN _{sf}	1745	?
Long of Ascending Node at Ref Time	Ω	-5.6708912849e-01	UTC Leap Second Effectivity Day	DN	1	?
Inclination Angle Correction	δ	-1.52587890625e-04	UTC Past Delta Time Leap Seconds	ΔT _{sf}	15	sec
Argument of Perigee	ω	8.83193492889e-01	Iono Model Parameter α ₀	1.30385160446e-08	sec	
Rate of Right Ascension	Ω	2.50292941928e-09	Iono Model Parameter α ₁	7.45058059692e-09	sec/sec	
Clock Model	a _{f0}	1.53541564941e-04	Iono Model Parameter α ₂	0.0000000000e+00	sec/sec	
Clock Model	a _{f1}	0.0000000000e+00	Iono Model Parameter α ₃	0.0000000000e+00	sec/sec	
NAV Health	All Data OK		Iono Model Parameter β ₀	116736.00000	sec	
Signal Health	All signals OK		Iono Model Parameter β ₁	-81920.00000	sec/sec	
AS Configuration	Anti Spoof Off		Iono Model Parameter β ₂	0.00000	sec/sec	
Sv Configuration	Block IIIA/IIR		Iono Model Parameter β ₃	0.00000	sec/sec	

RES 4.57.1 aaaa
RES 4.57.2:1 aaaaaaaaaa:2 aaaaaaaaaa:3 aaaaaaaaa
:4 aaaaaaaaaa:5 aaaaaaaaaa 4.57.3 aa
4.57.4 aa

RES 4.58.1 aaaa
RES 4.58.2:1 aaaaaaaaaa:2 aaaaaaaaaa:3 aaaaaaaaa
:4 aaaaaaaaaa:5 aaaaaaaaaa 4.58.3 aa

RES 4.59.1 aaaa
RES 4.59.2:1 aaaaaaaaaa:2 aaaaaaaaaa:3 aaaaaaaaa
:4 aaaaaaaaaa:5 aaaaaaaaaa 4.59.3 aa

RES 4.60.1 aaaa
RES 4.60.2:1 aaaaaaaaaa:2 aaaaaaaaaa:3 aaaaaaaaa
:4 aaaaaaaaaa:5 aaaaaaaaaa 4.60.3 aa

RES 4.61.1 aaaa
RES 4.61.2:1 aaaaaaaaaa:2 aaaaaaaaaa:3 aaaaaaaaa
:4 aaaaaaaaaa:5 aaaaaaaaaa 4.61.3 aa

RES 4.62.1 aaaa
RES 4.62.2:1 aaaaaaaaaa:2 aaaaaaaaaa:3 aaaaaaaaa
:4 aaaaaaaaaa:5 aaaaaaaaaa 4.62.3 aa

MSG 4.55.17 NavLabs



PRESS TO CREATE ANOTHER SUBFRAME 4 DATA SET

EPOCH FOR SUBFRAME 4/5 UPLOAD

Almanac Cut-In Time of Transmission	WEEK	1745	SECONDS INTO WEEK	720
QUIT		APPLY		

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 2 IMPORT LEGACY DATA

Users Guide IS-GPS-200D 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 2 Make Another DATASET

Almanac Reference Week Wna	1698	?	
Almanac Reference Time Toa	299008	?	
Time of Transmission Tot	720.000000	?	
Mean Anomaly Mo	-8.31806421280e-01	?	
Eccentricity e	9.03558731079e-03	?	
Square root Semi Major Axis rA	5.15359472656e+03	?	
UTC Model Coefficient A ₀	0.00000000000e+00	?	
UTC Model Coefficient A ₁	0.00000000000e+00	?	
UTC Delta Time due to Leap Seconds ΔTls	15	?	
UTC Reference Time for Data T _{ot}	0	?	
UTC Reference Week Wnt	1698	?	
UTC Leap Second Effectivity Week WN _{lsf}	1698	?	
RES 4.57.1	FFFF		
RES 4.57.2:1	FFFFFF:2	FFFFFF:3	FFFFFF
:4	FFFFFF:5	FFFFFF	4.57.3 FF
4.57.4	FF		
RES 4.58.1	AAAA		
RES 4.58.2:1	AAAAAAA:2	AAAAAAA:3	AAAAAAA
:4	AAAAAAA:5	AAAAAAA	4.58.3 AA

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 1745 SECONDS INTO WEEK 1500

QUIT APPLY

ENTER 1500

Satellite Telemetry Data Setup and Configuration Editor

DISPLAYED SVID 2

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

SUBFRAME 4/5 DATA SET 3

Almanac Reference Week Wna	1698 ?	UTC Model Coefficient A ₀	0.0000000000e+00 ?	sec
Almanac Reference Time Toa	299008 ? sec	UTC Model Coefficient A ₁	0.0000000000e+00 ?	s/s
Time of Transmission Tot	1440.000000 ? sec	UTC Delta Time due to Leap Seconds ΔTls	15 ? sec	
Mean Anomaly Mo	-8.31806421280e-01 ? sec	UTC Reference Time for Data T _{ot}	0 ? sec	
Eccentricity e	9.03558731079e-03 ?	UTC Reference Week Wnt	1698 ?	
Square root Semi Major Axis √A	5.15359472656e+03 ?	UTC Leap Second Effectivity Week W _N _{lsf}	1698 ?	
Long of Ascending Node at Ref Time Ω	-7.04061746597e-01 ? sec	UTC Leap Second Effectivity Day DN	1 ?	

RES 4.57.1 0
RES 4.57.2:1 0:2 0:3 0
:4 0:5 0 4.57.3 0
4.57.4 0

RES 4.58.1 AAAA
RES 4.58.2:1 AAAAAAAA:2 AAAAAAAA:3 AAAAAAAA
:4 AAAAAAAA:5 AAAAAAAA 4.58.3 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