

GNSS Authentication, Version: 202405-R005 Build: 20240531

Lat: 35.90304467 GPS Week: 2316 TTFF: -
 Lon: 139.93930950 GPS TOW: 485940 Active Time 0d 1h 7m 35s 35ms
 Elv: 93.990 GAL Week: 1292
 Device ID: 00 00 00 00 00 GAL TOW: 485935

Receiver Connection
 RX: NTRIP 3UB
 DX: OFF
 Reset every 300 s

Receiver: Septentrio PolaRx5 (L1/L2/L5/L6)
 Satellites: QZSS & GPS (L1C/A, L5), Galileo (E1b/E5a)
 Authentication Signals: LNAV, CNAV, INAV, FNAV

Show All Satellites

Debug

Setup RX Setup DX Reset Stop

GPS Authentication Status

SV	MT	TOW	AZ	EL	CNO	Status
GP10	LNAV	485406	247	52	47	OK
GP10	CNAV	485406	247	52	47	OK
GP12	LNAV	485406	64	59	47	OK
GP15	LNAV	485406	129	6	35	OK
GP19	LNAV	485406	34	0	23	OK
GP23	LNAV	485406	198	35	44	OK
GP23	CNAV	485406	198	35	44	OK
GP24	LNAV	485406	68	26	40	OK
GP24	CNAV	485406	68	26	40	OK
GP25	LNAV	485406	153	76	47	OK
GP25	CNAV	485406	153	76	47	OK
GP29	LNAV	485406	153	7	38	OK
GP32	LNAV	485406	320	52	48	OK
GP32	CNAV	485406	320	52	48	OK

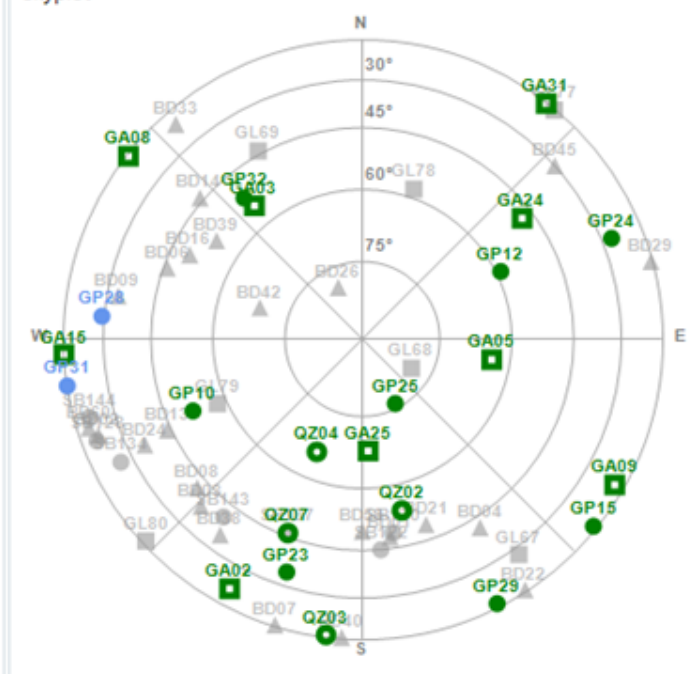
GALILEO Authentication Status

SV	MT	TOW	AZ	EL	CNO	Status
GA02	FNAV	485430	208	19	41	OK
GA02	INAV	485425	208	19	41	OK
GA03	FNAV	485430	321	55	45	OK
GA03	INAV	485425	321	55	45	OK
GA05	FNAV	485430	99	64	46	OK
GA05	INAV	485425	99	64	46	OK
GA08	FNAV	485430	308	7	35	OK
GA08	INAV	485425	308	7	35	OK
GA09	FNAV	485430	120	13	38	OK
GA09	INAV	485425	120	13	38	OK
GA13	FNAV	485430	315	0	35	OK
GA13	INAV	485425	315	0	35	OK
GA15	FNAV	485430	267	2	37	OK
GA15	INAV	485425	267	2	37	OK
GA24	FNAV	485430	53	48	45	OK
GA24	INAV	485425	53	48	45	OK
GA25	FNAV	485430	177	68	48	OK
GA25	INAV	485425	177	68	48	OK
GA31	FNAV	485430	38	2	34	OK
GA31	INAV	485425	38	2	34	OK

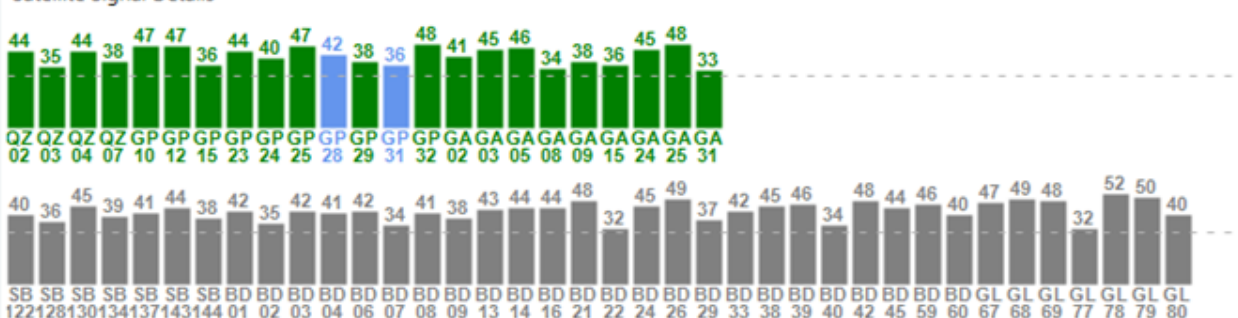
QZSS Authentication Status

SV	MT	TOW	AZ	EL	CNO	Status
QZ02	LNAV	485706	167	54	44	OK
QZ02	CNAV	485886	167	54	44	OK
QZ03	LNAV	485706	187	5	35	OK
QZ03	CNAV	485886	187	5	35	OK
QZ04	LNAV	485706	202	66	44	OK
QZ04	CNAV	485886	202	66	44	OK
QZ07	LNAV	485706	201	46	38	OK
QZ07	CNAV	485886	201	46	38	OK

Skyplot



Satellite Signal Details



GNSS Authentication, Version: 202405-R005 Build: 20240531

Lat: 35.90305730 GPS Week: 2316 TTFF: -
 Lon: 139.93931807 GPS TOW: 485946 Active Time 0d 0h 31m 37s 59ms
 Elv: 94.917 GAL Week: 1292
 Device ID: 00 00 00 00 00 GAL TOW: 485947

Receiver Connection

RX: NTRIP 1 iUB
 DX: NTRIP 1 UB

Receiver: F9P (L1/L5)+ D9C (L6D/L6E)
 Satellites: QZSS & GPS (L1C/A, L5), Galileo (E1b/E5a)
 Authentication Signals: LNAV, CNAV, INAV, FNAV

Show All Satellites Debug Reset every 300 s

Setup RX Setup DX Reset Stop

GPS Authentication Status

SV	MT	TOW	AZ	EL	CNO	Status
GP10	LNAV	485406	247	52	46	OK
GP10	CNAV	485406	247	52	46	OK
GP12	LNAV	485406	64	59	47	OK
GP15	LNAV	485406	129	6	36	OK
GP19	LNAV	485406	32	0	21	OK
GP23	LNAV	485406	198	35	44	OK
GP23	CNAV	485406	198	35	44	OK
GP24	LNAV	485406	67	26	40	OK
GP24	CNAV	485406	67	26	40	OK
GP25	LNAV	485406	153	76	47	OK
GP25	CNAV	485406	153	76	47	OK
GP29	LNAV	485406	153	7	37	OK
GP32	LNAV	485406	320	52	47	OK
GP32	CNAV	485406	320	52	47	OK

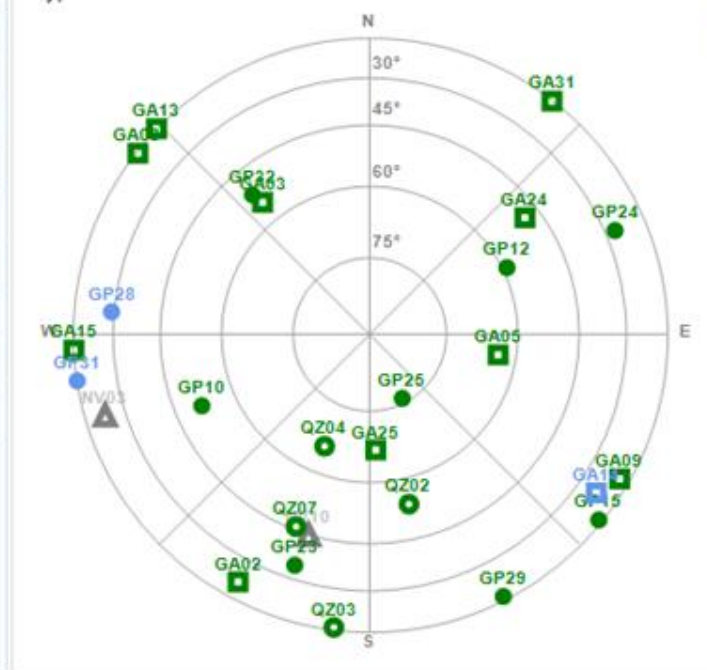
GALILEO Authentication Status

SV	MT	TOW	AZ	EL	CNO	Status
GA02	FNAV	485430	208	19	40	OK
GA02	INAV	485425	208	19	40	OK
GA03	FNAV	485430	321	55	44	OK
GA03	INAV	485425	321	55	44	OK
GA05	FNAV	485430	99	64	45	OK
GA05	INAV	485425	99	64	45	OK
GA08	FNAV	485430	308	7	36	OK
GA08	INAV	485425	308	7	36	OK
GA09	FNAV	485430	120	13	37	OK
GA09	INAV	485425	120	13	37	OK
GA13	FNAV	485430	314	0	20	OK
GA13	INAV	485425	314	0	20	OK
GA15	FNAV	485430	267	2	36	OK
GA15	INAV	485425	267	2	36	OK
GA24	FNAV	485430	53	49	44	OK
GA24	INAV	485425	53	49	44	OK
GA25	FNAV	485430	177	67	47	OK
GA25	INAV	485425	177	67	47	OK
GA31	FNAV	485130	38	2	36	OK
GA31	INAV	485425	38	2	36	OK

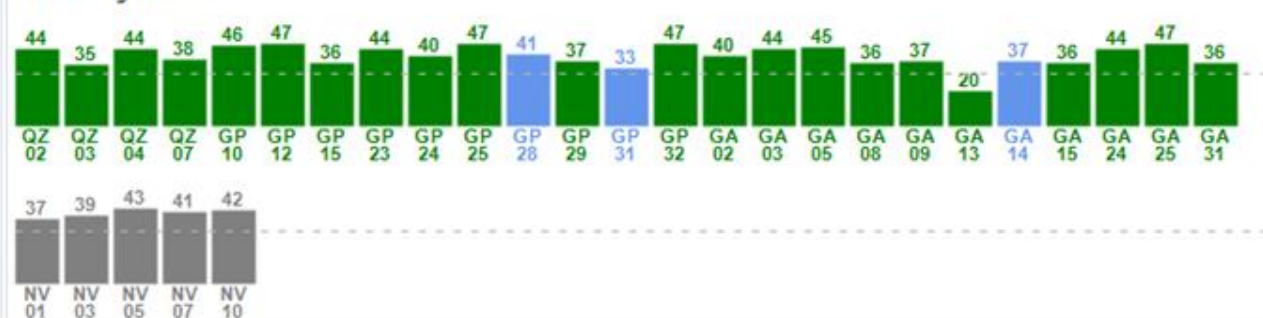
QZSS Authentication Status

SV	MT	TOW	AZ	EL	CNO	Status
QZ02	LNAV	485706	167	54	44	OK
QZ02	CNAV	485886	167	54	44	OK
QZ03	LNAV	485706	187	5	35	OK
QZ03	CNAV	485886	187	5	35	OK
QZ04	LNAV	485706	202	66	44	OK
QZ04	CNAV	485886	202	66	44	OK
QZ07	LNAV	485706	201	46	38	OK
QZ07	CNAV	485886	201	46	38	OK

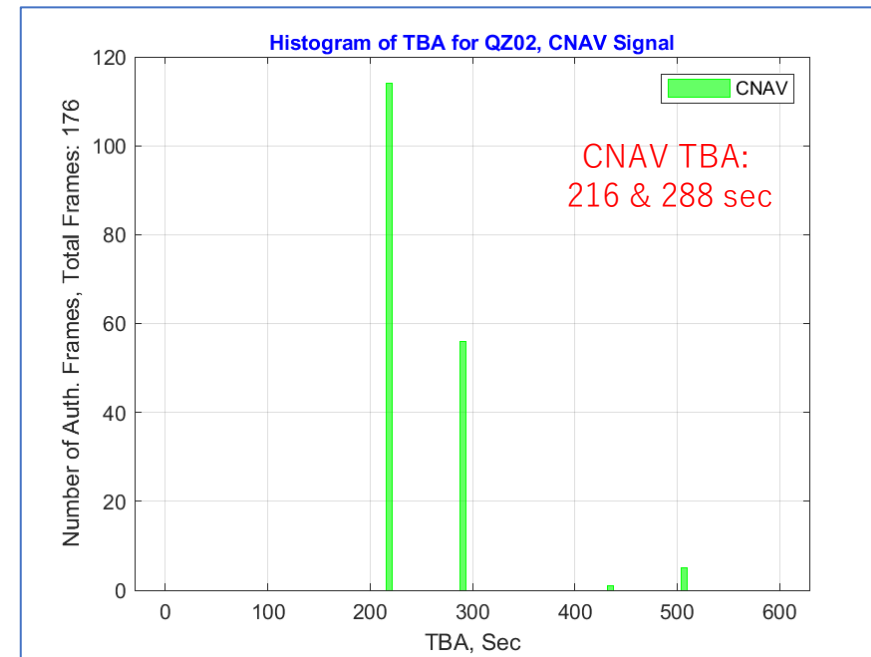
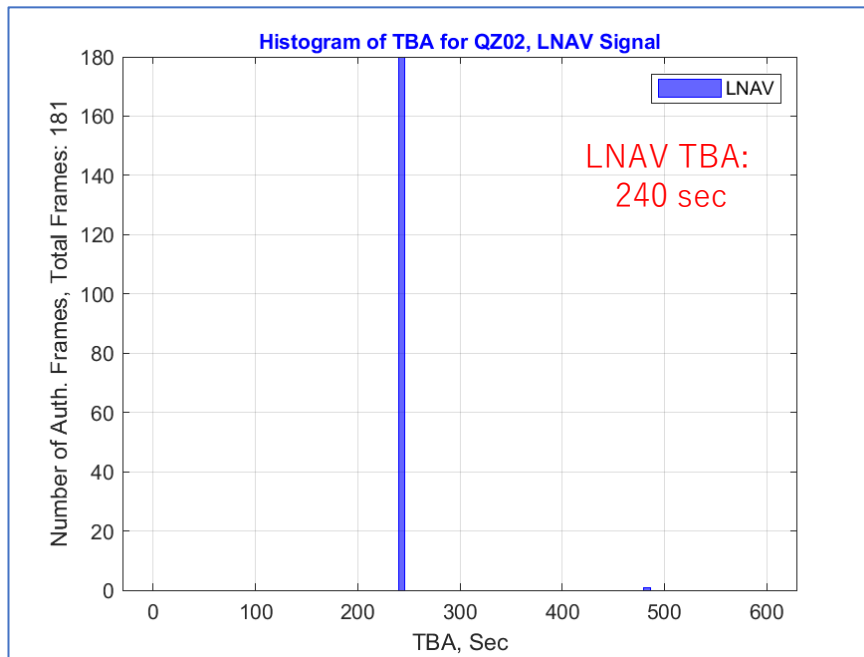
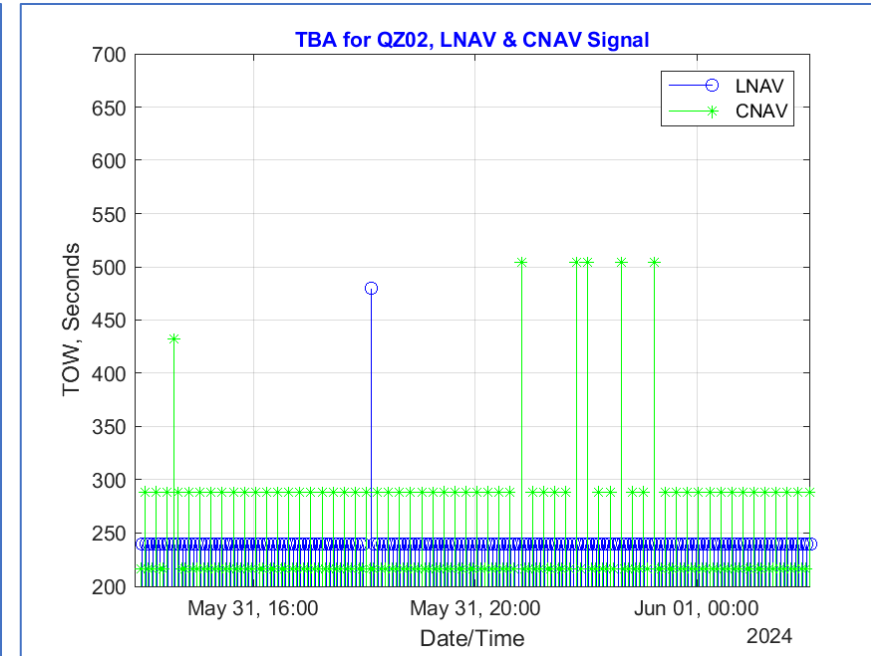
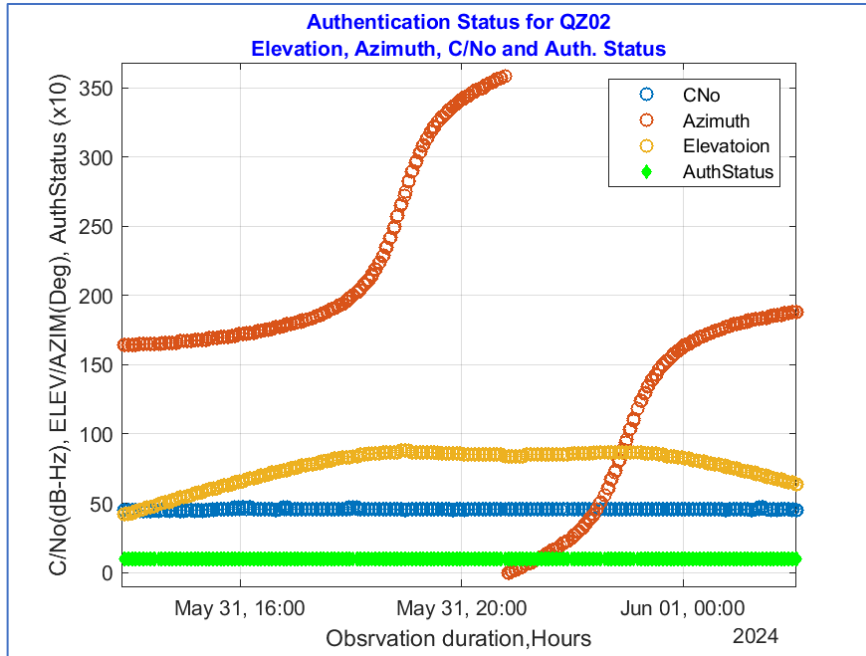
Skyplot



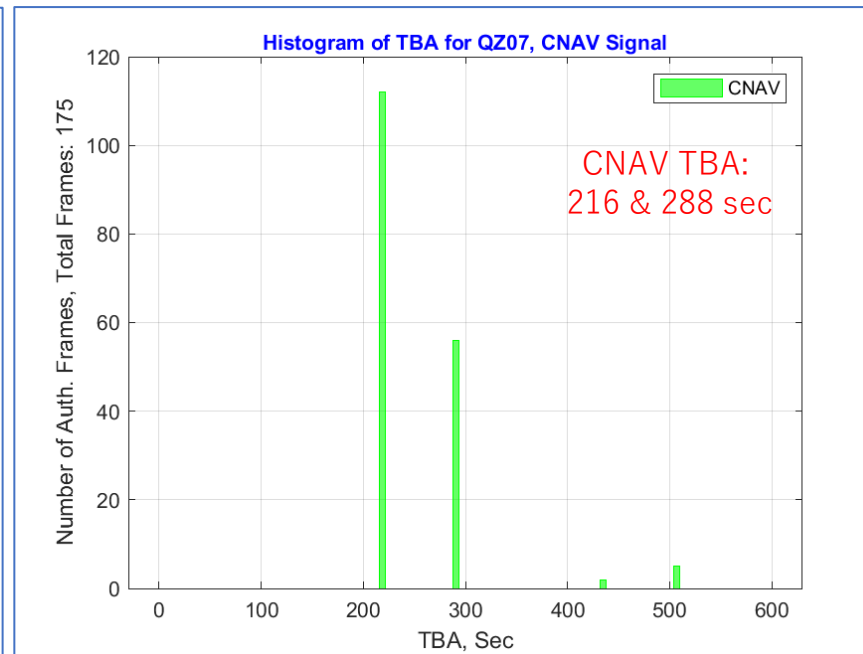
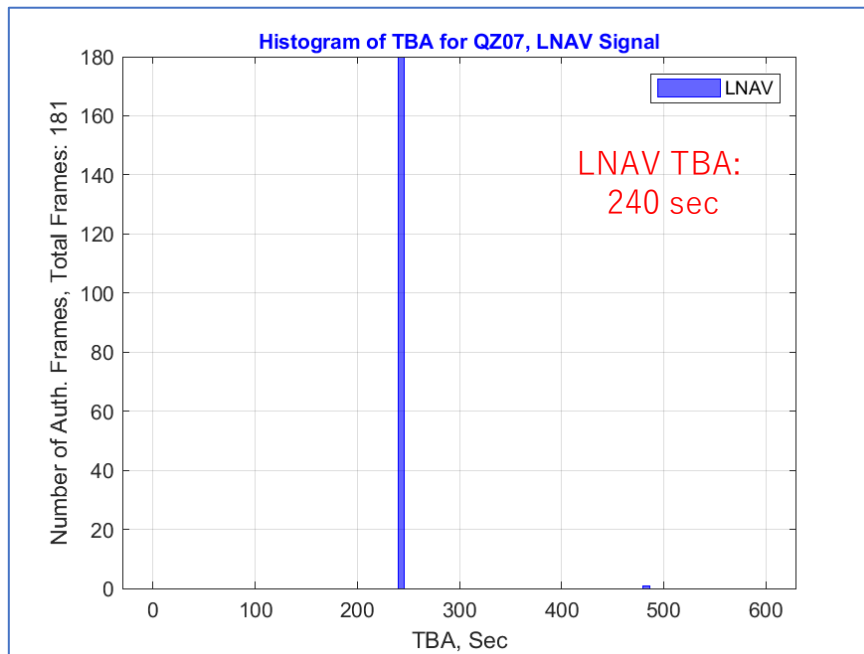
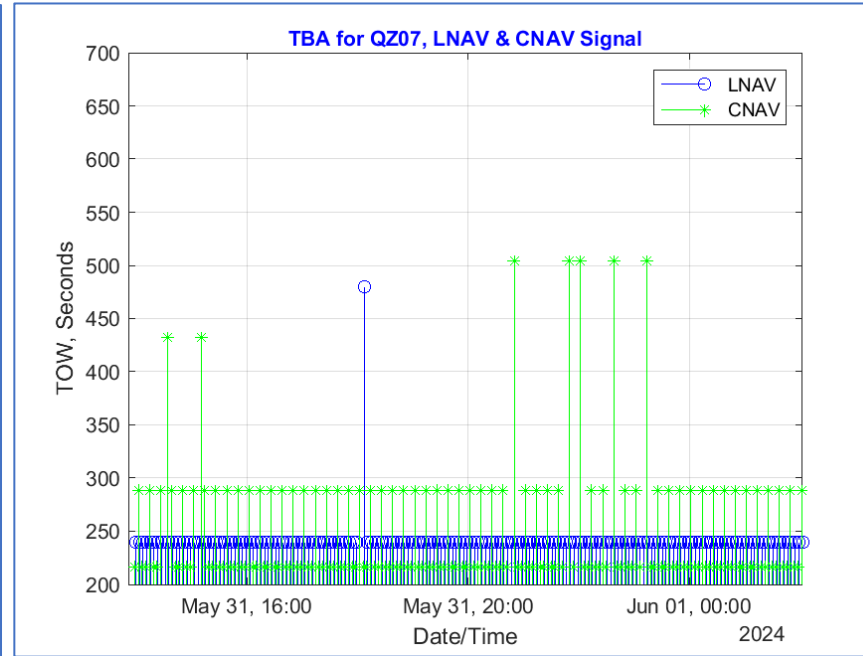
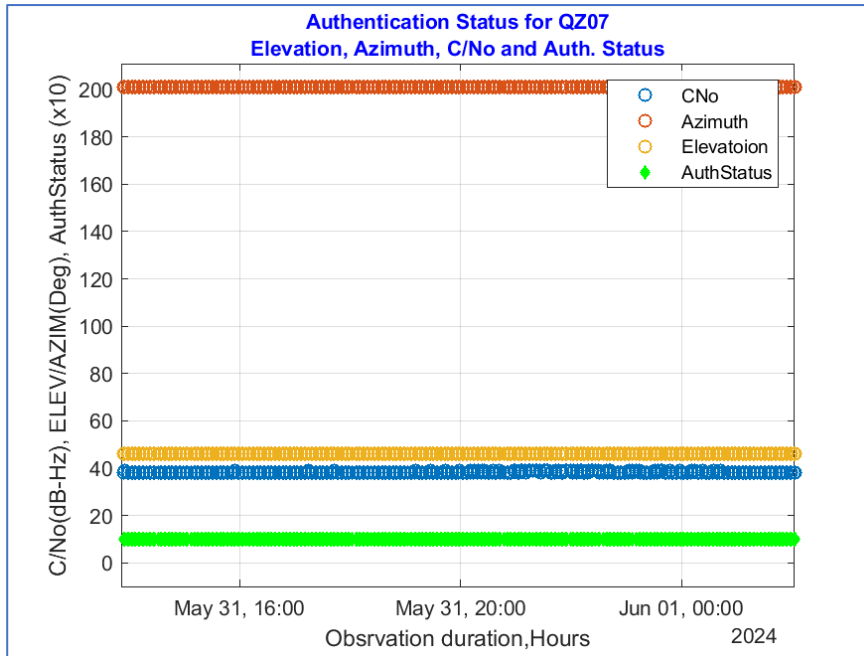
Satellite Signal Details



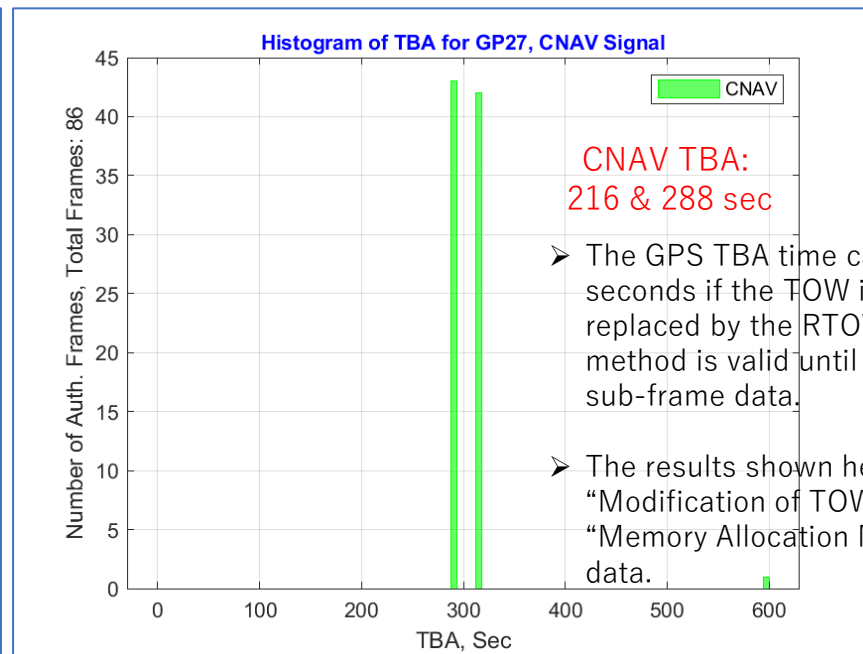
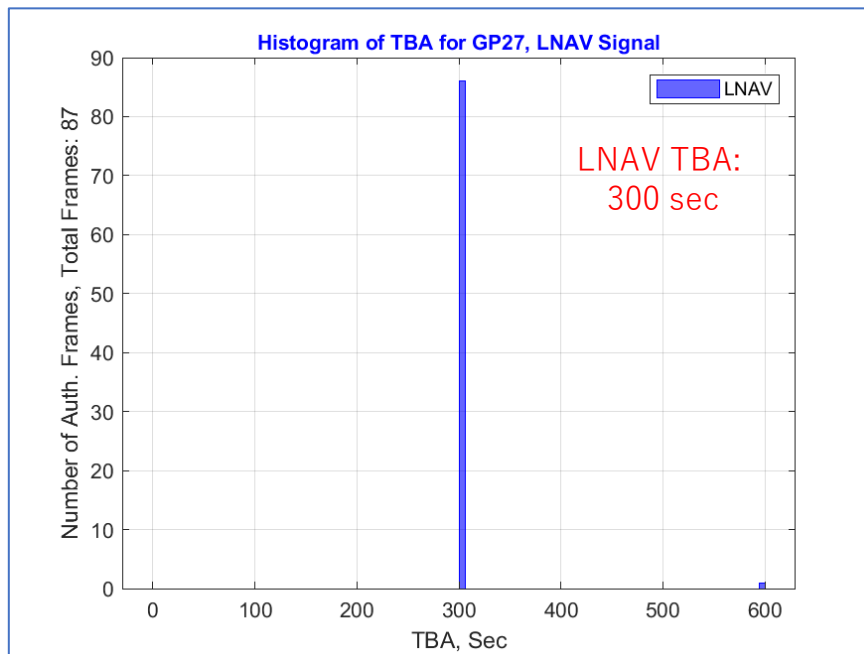
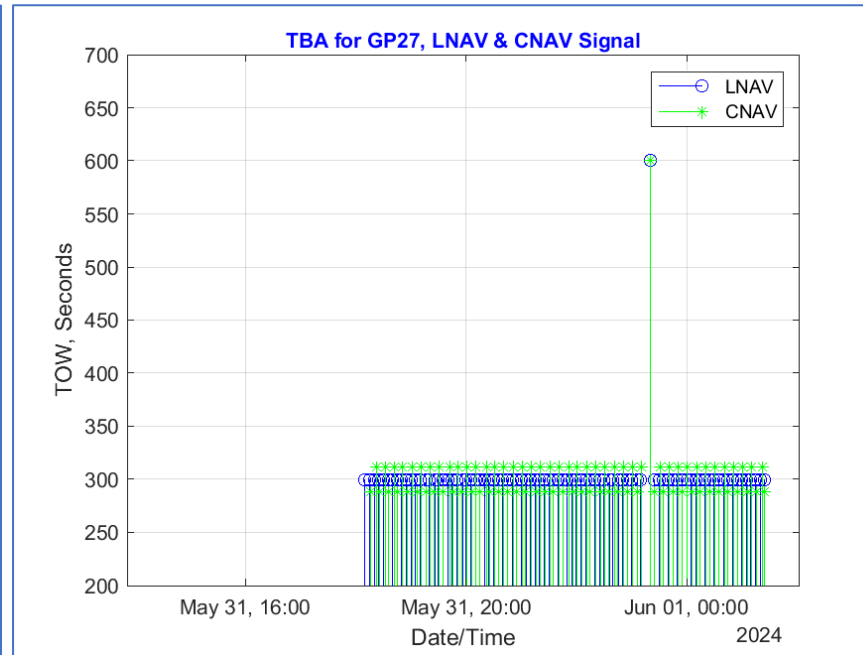
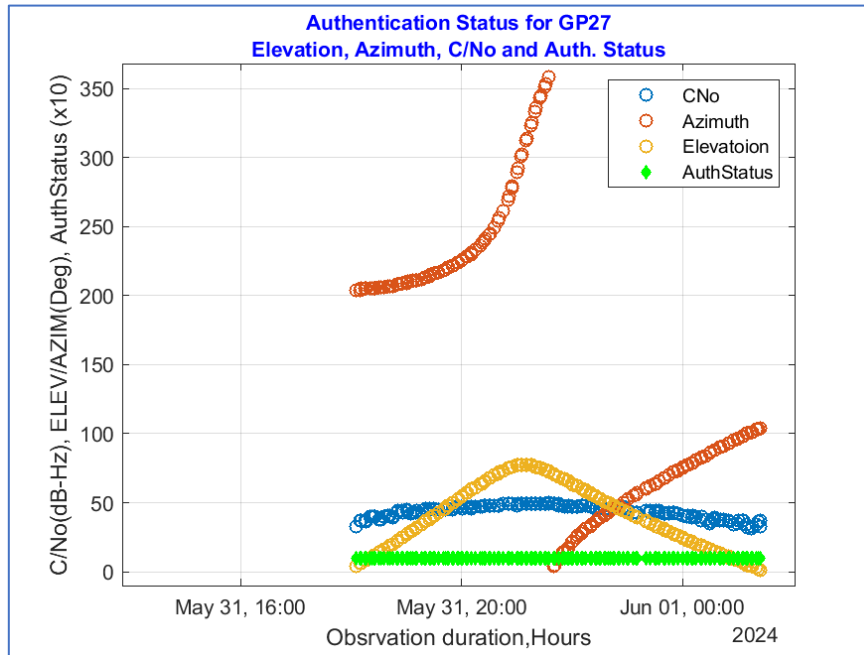
QZSS SAS (Signal Authentication) of QZSS LNAV (L1C/A) & CNAV (L5) Signals



QZSS SAS (Signal Authentication) of QZSS LNAV (L1C/A) & CNAV (L5) Signals

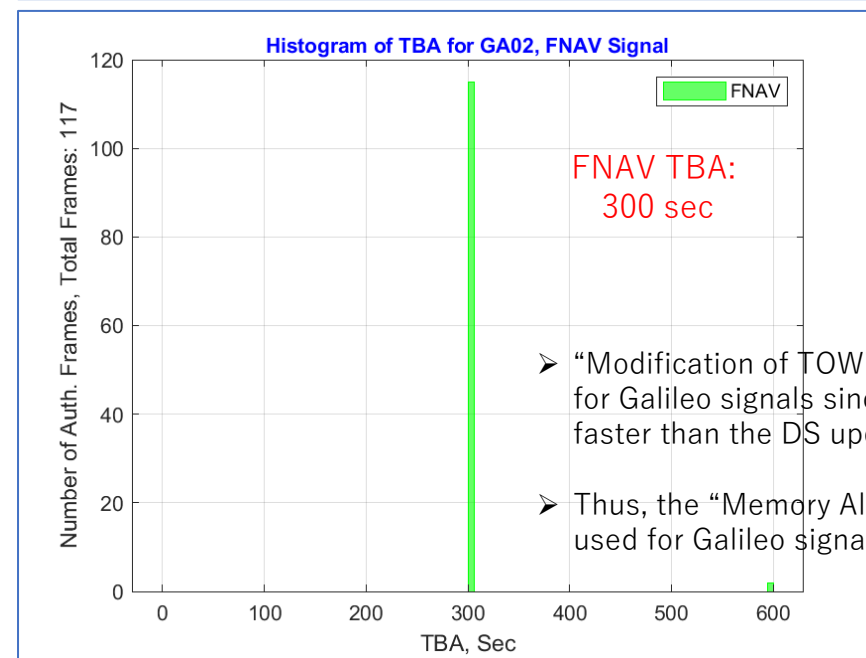
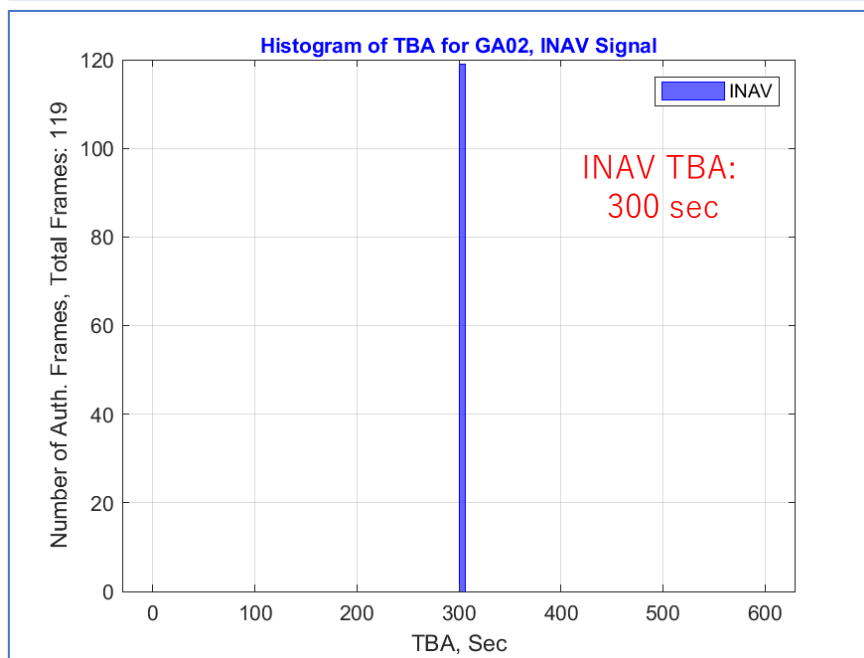
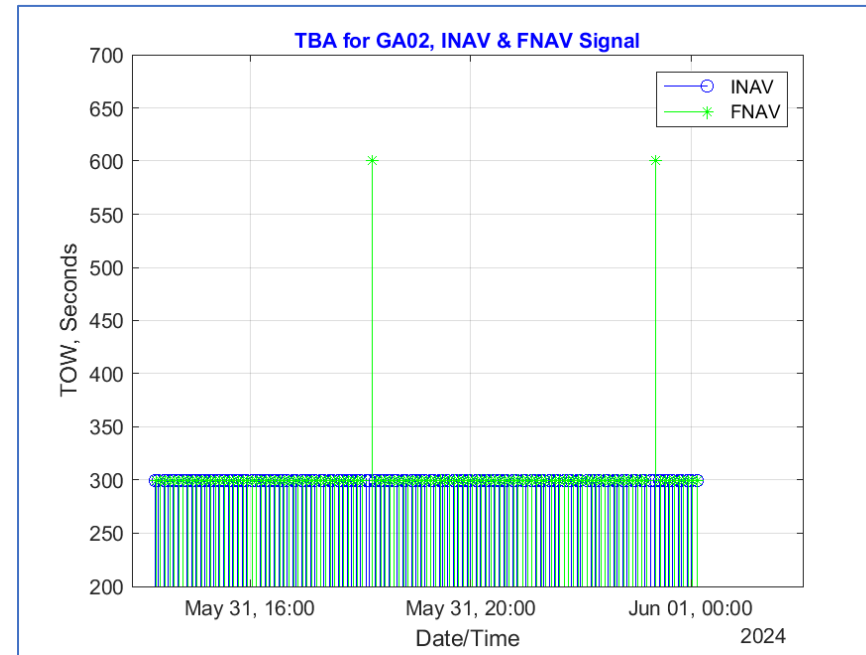
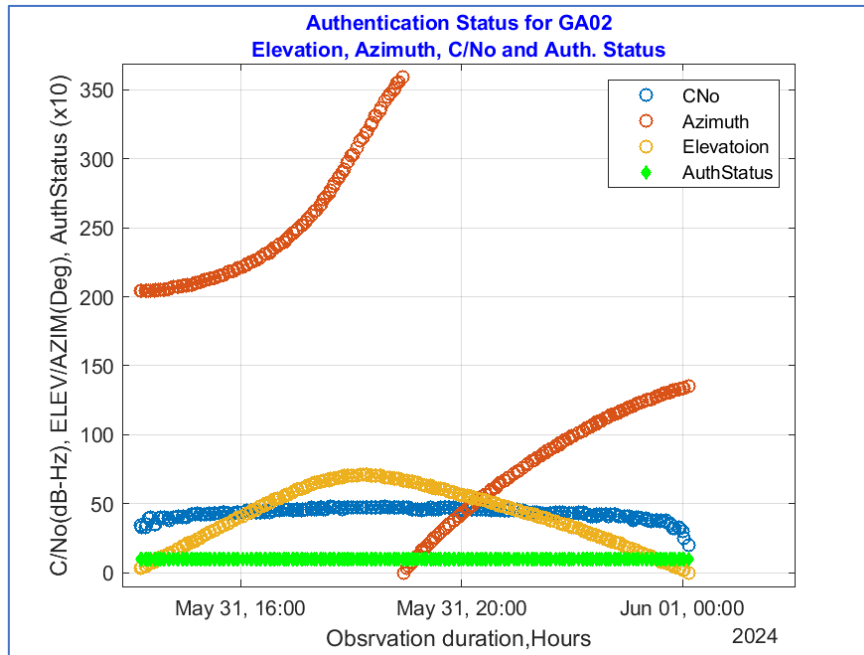


QZSS SAS (Signal Authentication) of GPS LNAV (L1C/A) & CNAV (L5) Signals



- The GPS TBA time can be reduced to 30 seconds if the TOW in the sub-frame data is replaced by the RTOW in the DS data. This method is valid until the IODE changes in the sub-frame data.
- The results shown here do not use the "Modification of TOW" method. It uses the "Memory Allocation Method" for the sub-frame data.

QZSS SAS (Signal Authentication) of Galileo INAV (E1b) & FNAV (E5a) Signals



- “Modification of TOW” method does not work for Galileo signals since the IODE changes faster than the DS update interval.
- Thus, the “Memory Allocation Method” shall be used for Galileo signals