IRN-IS-800B-001
21-SEP-2011

GLOBAL POSITIONING SYSTEM DIRECTORATE SYSTEMS ENGINEERING & INTEGRATION INTERFACE SPECIFICATION IS-GPS-800

Navstar GPS Space Segment/User Segment L1C Interface

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17APR12
Date

IS-GPS-800, Rev B Publication Error WAS/IS Matrix

Section 3.5.3

WAS

Table 3.5-1. Subframe 2 Parameters (2 of 3)

Parameter		No. of Bits**	Scale Factor (LSB)	Effective Range***	Units
$\Omega_{0\text{-}n}$****	Reference right ascension angle	33*	2^{-32}		semi-circles
$\Delta\dot{\Omega}$***$i_{0\text{-}}$	Rate of right ascension difference	17*	2^{-44}		semi-circles/sec
	Inclination angle at reference time	33*	2^{-32}		semi-circles
$i_{0\text{-}n}$ –DOT	Rate of inclination angle	15*	2^{-44}		semi-circles/sec
$C_{is\text{-}n}$	Amplitude of the sine harmonic correction term to the angle of inclination	16*	2^{-30}		radians
$C_{ic\text{-}n}$	Amplitude of the cosine harmonic correction term to the angle of inclination	16*	2^{-30}		radians
$C_{rs\text{-}n}$	Amplitude of the sine correction term to the orbit radius	24*	2^{-8}		meters
$C_{rc\text{-}n}$	Amplitude of the cosine correction term to the orbit radius	24*	2^{-8}		meters
$C_{us\text{-}n}$	Amplitude of the sine harmonic correction term to the argument of latitude	21*	2^{-30}		radians
$C_{uc\text{-}n}$	Amplitude of the cosine harmonic correction term to the argument of latitude	21*	2^{-30}		radians

* Parameters so indicated are in two's complement notation;
** See Figure 3.5-1 for complete bit allocation in Subframe 2;
*** Unless otherwise indicated in this column, effective range is the maximum range attainable with indicated bit allocation and scale factor.
**** $\Omega_{0\text{-}n}$ is the right ascension angle at the weekly epoch propagated to the reference time at the rate of right ascension $\{\dot{\Omega}_{REF}$ Table 3.5-1$\}$.
***** Relative to $\dot{\Omega}_{REF} = -2.6 \times 10^{-9}$ semi-circles/second.

IS

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