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**GLOBAL POSITIONING SYSTEMS DIRECTORATE  
SYSTEMS ENGINEERING & INTEGRATION  
INTERFACE SPECIFICATION  
IS-GPS-200**

**NAVSTAR GPS Space Segment/Navigation User Segment Interfaces**



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Date

8 JAN 18

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**IS200-1650 :**

Insertion after object IS200-236

**Section Number :**

6.3.8

**WAS :**

N/A

**Redlines :**

[P-Code Verification Material](#)

**IS :**

**P-Code Verification Material**

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**IS200-1651 :**

Insertion below object IS200-1650

**Section Number :**

6.3.8.1

**WAS :**

N/A

**Redlines :**

[Table 6-III and Table 6-IV provide samples of the P-code that may be used as part of the verification of specific implementations of the P-code. Table 6-III provides the first 256 chips of the P-code for selected PRNs. Table 6-IV provides the last 1024 P-code chips of the week for selected PRNs.](#)

**IS :**

Table 6-III and Table 6-IV provide samples of the P-code that may be used as part of the verification of specific implementations of the P-code. Table 6-III provides the first 256 chips of the P-code for selected PRNs. Table 6-IV provides the last 1024 P-code chips of the week for selected PRNs.

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**IS200-1652 :**

Insertion below object IS200-1651

**Section Number :**

6.3.8.1.1

**WAS :**

N/A

**Redlines :**

[Table 6-III. First 256 P-code Chips of the Week for Selected Code Phase Assignments](#)

IS :

Table 6-III. First 256 P-code Chips of the Week for Selected Code Phase Assignments

IS200-1653 :

Insertion after object IS200-1652

Section Number :

6.3.8.1.2

WAS :

N/A

Redlines :

<u>PRN Signal No.</u>	<u>P-code Relative Advance (Hours)*</u>	<u>P-Code, Left-to-right from beginning of GPS Week (hexadecimal)</u>
<u>001</u>	<u><math>P_1(t)</math></u>	<u>924110552BD74E7FC62D21CD7F83B3F9A4CC77E4C4A5DF081E90B013D5D49F81</u>
<u>002</u>	<u><math>P_2(t)</math></u>	<u>800D9D1EB5EF85CA7B25290C95BF1C92131D6DB1793B8630F4D8D69D8D1C481B</u>
<u>037</u>	<u><math>P_{37}(t)</math></u>	<u>8E3619D83E3F4C3E3E9FD99E5ECB86BC956F1726C018501EC071B2054E630122</u>
<u>038</u>	<u><math>P_1(t+24)</math></u>	<u>6FBA7C64D4EE0839FF5EB0B376D8B5A1BCBDDDCF191940183BFE36A24FE6DE4B</u>
<u>074</u>	<u><math>P_{37}(t+24)</math></u>	<u>2A7CBF6621E0FAFD216C4DFA3D5CBFAB75FAA743419F4ABC7DA A7BF44C35E949</u>
<u>075</u>	<u><math>P_1(t+48)</math></u>	<u>3DECDF76407FFF921FA4515FAF512A586C2530BA5633B04C2F8CA38CFFBE7562</u>
<u>111</u>	<u><math>P_{37}(t+48)</math></u>	<u>AB1BE13E44C590CC08255280835311B5B8623EBCDC96C46B2958D4F10D72C01B</u>
<u>112</u>	<u><math>P_1(t+72)</math></u>	<u>DEAB62046E05324EAD7498317CA46457BE5F06BC689EA4207AD66250BA3A9F35</u>
<u>148</u>	<u><math>P_{37}(t+72)</math></u>	<u>0CA62C7F9AF1EB1B2AC2FE5D487E1D23555D6A5C21B1670B4AB205B7C8276C06</u>
<u>149</u>	<u><math>P_1(t+96)</math></u>	<u>555CE90F7396574DF1632E26F61B55C70612A415035DE606C04BE275F5AD9320</u>
<u>185</u>	<u><math>P_{37}(t+96)</math></u>	<u>29C54899D24E93AB9B1BC80D7DBF66422DF699452A35BD21DC0E3195A38EB404</u>
<u>186</u>	<u><math>P_1(t+120)</math></u>	<u>237775707E0FDBE2308A496DA3886DC4E15B41B0CD214F6E29812ABCCFB618E8</u>
<u>210</u>	<u><math>P_{25}(t+120)</math></u>	<u>2735B1757E9494E7183A6A6C9B335824A2B9EBE2E4947C07C21EBD9CDB7A5E18</u>

\*  $P_i(t+N)$ : P-code sequence of PRN number i shifted by N hours. See Sections 3.3.2.1, 6.3.6.2.1.

IS :

PRN Signal No.	P-code Relative Advance (Hours)*	P-Code, Left-to-right from beginning of GPS Week (hexadecimal)
001	$P_1(t)$	924110552BD74E7FC62D21CD7F83B3F9A4CC77E4C4A5DF081E90B013D5D49F81
002	$P_2(t)$	800D9D1EB5EF85CA7B25290C95BF1C92131D6DB1793B8630F4D8D69D8D1C481B
037	$P_{37}(t)$	8E3619D83E3F4C3E3E9FD99E5ECB86BC956F1726C018501EC071B2054E630122
038	$P_1(t+24)$	6FBA7C64D4EE0839FF5EB0B376D8B5A1BCBDDDCF191940183BFE36A24FE6DE4B
074	$P_{37}(t+24)$	2A7CBF6621E0FAFD216C4DFA3D5CBFAB75FAA743419F4ABC7DAA7BF44C35E949
075	$P_1(t+48)$	3DECDF76407FFF921FA4515FAF512A586C2530BA5633B04C2F8CA38CFFBE7562
111	$P_{37}(t+48)$	AB1BE13E44C590CC08255280835311B5B8623EBCDC96C46B2958D4F10D72C01B
112	$P_1(t+72)$	DEAB62046E05324EAD7498317CA46457BE5F06BC689EA4207AD66250BA3A9F35
148	$P_{37}(t+72)$	0CA62C7F9AF1EB1B2AC2FE5D487E1D23555D6A5C21B1670B4AB205B7C8276C06
149	$P_1(t+96)$	555CE90F7396574DF1632E26F61B55C70612A415035DE606C04BE275F5AD9320
185	$P_{37}(t+96)$	29C54899D24E93AB9B1BC80D7DBF66422DF699452A35BD21DC0E3195A38EB404
186	$P_1(t+120)$	237775707E0FDBE2308A496DA3886DC4E15B41B0CD214F6E29812ABCCFB618E8
210	$P_{25}(t+120)$	2735B1757E9494E7183A6A6C9B335824A2B9EBE2E4947C07C21EBD9CDB7A5E18

\*  $P_i(t+N)$ : P-code sequence of PRN number i shifted by N hours. See Sections 3.3.2.1, 6.3.6.2.1.

IS200-1654 :

Insertion after object IS200-1653

Section Number :

6.3.8.1.3

WAS :

N/A

Redlines :

[Table 6-IV. Last 1024 P-code Chips of the Week for Selected Code Phase Assignments](#)

IS :

Table 6-IV. Last 1024 P-code Chips of the Week for Selected Code Phase Assignments

IS200-1655 :

Insertion after object IS200-1654

**Section Number :**

6.3.8.1.4

**WAS :**

N/A

**Redlines :**

<u>PRN Signal No.</u>	<u>P-code Relative Advance (Hours)*</u>	<u>P-Code, Left-to-right to last chip of GPS Week (hexadecimal)</u>
<u>001</u>	<u>P<sub>1</sub>(t)</u>	<u>66297E28E08F71E0F95A694BC576072D32930112D3749C4738D096135E156848B7BC7B4D4FDFB8A7CBEC83ECEF009DDB09DC1E55A969FC2BCD922D0C404A979D34BE6976E7889E6244C51F83854C7BD5CFF3F915FA8C4BD6B42685D59BE159FF5DCB7CA9AF42AB85A4258AB66D8F25593C8536E73686DAF8173783FBAA32E3E1</u>
<u>002</u>	<u>P<sub>2</sub>(t)</u>	<u>D3165186CF86CFA0F95A694BC576072D32930112D3749C4738D096135E156848B7BC7B4D4FDFB8A7CBEC83ECEF009DDB09DC1E55A969FC2BCD922D0C404A979D34BE6976E7889E6244C51F83854C7BD5CFF3F915FA8C4BD6B42685D59BE159FF5DCB7CA9AF42AB85A4258AB66D8F25593C8536E73686DAF8173783FBAA32E3E1</u>
<u>037</u>	<u>P<sub>37</sub>(t)</u>	<u>96778423671CF933BA057BF3C576072D32930112D3749C4738D096135E156848B7BC7B4D4FDFB8A7CBEC83ECEF009DDB09DC1E55A969FC2BCD922D0C404A979D34BE6976E7889E6244C51F83854C7BD5CFF3F915FA8C4BD6B42685D59BE159FF5DCB7CA9AF42AB85A4258AB66D8F25593C8536E73686DAF8173783FBAA32E3E1</u>
<u>038</u>	<u>P<sub>1</sub>(t+24)</u>	<u>F7A4CB846B98ACD06BDD33AFE1DC3C0B35EA2A250E0DC70D959CE3DBA19FB64E2441EB9B2EC5D473EF667E8258AA18DADE37D1A092076F84E33B7DA1748635BEAA94B1DF852CCA25154CB00C34F5D32661F4B5DDCB25FC1C70BD246E4FD531D565624F8FDB3B13C9F9437BA9776B57BCC096E22EC56D2FD11D4C4D61EE988800</u>
<u>074</u>	<u>P<sub>37</sub>(t+24)</u>	<u>C2B55E4A0E04226972B40620CC5E728370D9A2A0B3030EF4450703A7F4C1AF143844D6AD26E061AAADF2521AD48320DE2A6B605B41740D49E24C436B2A00297E7F2A354DE6A33E8D2EF5AC7F054E12D34E8639AC06C3F1A373C1EA937A8E3E4E0883A2B0CC838B7C3621132A8594A48CD2B71C96947E7B488093CA93A955F08</u>
<u>075</u>	<u>P<sub>1</sub>(t+48)</u>	<u>F4FE4A61E668669524717749357D2AC58411FC6A54F18FFC9EC51DB121ED2F6E4ECB856F4FA534D84E6E5BF20296241C7157CBD4437C4D829D5510517CF42AD5D431B302EB207D4616C3C0F831652B3A8935F7DFA517ECADDEACC78AC02DE1EF8419D3483DF897C15C8B56805CC6750CC1BEA98A0DBEC9E66EB98A69F8ED6D86</u>
<u>111</u>	<u>P<sub>37</sub>(t+48)</u>	<u>D9352A5F9E318A772A6B0A8498A4B6CD1D93B3CC581CB390B0A8C728E47430F29043FF3F2048C745EBEB2B2B1758B05AE70575C9DEE14173D3337616D546E448E77582A2698063C5040F91B1C06C162274B16C1B0EE02B3A11DF3FA22D49FDDAA877B728A2DF817BBD0E29722205C89A5F91A3E26955630EC48402CA4DAA0378</u>
<u>112</u>	<u>P<sub>1</sub>(t+72)</u>	<u>2DFE2345638E31C27B7CC27EEF9FF9DC383E98505F5EC50C1F741805A821A451998BDCAF8094C2589F283AF1C9056CA796083A50CF95CB6A5340DDFE9E82C71C2C5A390DC0C8FF6795B3DB8B733E2B991F8B484A3528B8F89BD695404DA2817602828C468E014C7244133F61EC113D121F848671DB0332B578D2EF38331B99B</u>
<u>148</u>	<u>P<sub>37</sub>(t+72)</u>	<u>D623879A83A18CE562356FF1ED546D9E603D9EFD3DE45D310123387EC6F20A9D8DF378CDD3CC2D9E491ECA4CB217DDF36E512E4BE6235F4C7CB270596C0F5900E2442C828EF22CC277D5E9AC69599F67CD400833F6CFF0FA1BB69D00838E7374438CBB72C9C9EC3785FA14245896ECD3BB1D58FB7510D101584ED669E394931</u>
<u>149</u>	<u>P<sub>1</sub>(t+96)</u>	<u>FA28476F17FCF42B2DD127DCFE42250039E03183B21EBFB83544E922469EC9824641BE138193A95EE51A1E57C598C3813FD19805E2676E5D997DC13C358246B521F8FA9D17865FA6B02AD9D1D5D5E46B725D51A52DC20CD3ADA5013E419249B48DC6FCF8933919F24DA4FB3F56BB4154E0BFD5C2300DB9B0040D0F41D507F7FF</u>
<u>185</u>	<u>P<sub>37</sub>(t+96)</u>	<u>5FFAD9744EDCEAA7C57243AF783EB3C44120433003C3AF4E2EC6342CAECC2FBBA634C151E0C064F2270842F37DEFF400BB759BB00A09244EC922C42B2504695E33E2E46466DCF75CFBC5F39FCA0287B0EAF60EE1156A15DB95261A5CA7961B1E06C4DAD12427380B7E2319113173241AF3670A7EB4574CA475F35CF2B014B2A</u>
<u>186</u>	<u>P<sub>1</sub>(t+120)</u>	<u>B279A52DA308C52BDF13565B40C1FEDF33A0E623C55734B7C8F179B9B50E5421F1C8024B8BDEB14079643AB41153FA0E5660ADF78F527584899F4CCB03B47E4AB9214BECEBECF5CF051A5FA049D105D03D945B9085A58C583A392E7CA1FA6B5FF5FF0BB436CEA9C1FD44B0124E42332A03A54AE23A23A82223DB0B43C9BE049</u>
<u>210</u>	<u>P<sub>25</sub>(t+120)</u>	<u>59E2F1EEAF906B168FC5226D6E2A295C488BC1D37A7BECA8193F9A570194E08DF23171E5EF24D150A9BF302095C0DA751C7E65B9137D76FA51495E894B93576D456E10E9CBF556692794213711F602541E9871D9D030E724623596E21EF66BAEA334360B3BCEB9698A20930D9C4E921057835D7B89E493ED33D7F9CEA001AC77</u>

\* P<sub>i</sub>(t+N): P-code sequence of PRN number i shifted by N hours. See Sections 3.3.2.1, 6.3.6.2.1.

IS :

PRN Signal No.	P-code Relative Advance (Hours)*	P-Code, Left-to-right to last chip of GPS Week (hexadecimal)
001	P <sub>1</sub> (t)	66297E28E08F71E0F95A694BC576072D32930112D3749C4738D096135E156848B7BC 7B4D4FDFB8A7CBEC83ECEFF009DDB09DC1E55A969FC2BCD922D0C404A979D34BE6976 E7889E6244C51F83854C7BD5CFF3F915FA8C4BD6B42685D59BE159FF5DCB7CA9AF42 AB85A4258AB66D8F25593C8536E73686DAF8173783FBAA32E3E1
002	P <sub>2</sub> (t)	D3165186CF86CFA0F95A694BC576072D32930112D3749C4738D096135E156848B7BC 7B4D4FDFB8A7CBEC83ECEFF009DDB09DC1E55A969FC2BCD922D0C404A979D34BE6976 E7889E6244C51F83854C7BD5CFF3F915FA8C4BD6B42685D59BE159FF5DCB7CA9AF42 AB85A4258AB66D8F25593C8536E73686DAF8173783FBAA32E3E1
037	P <sub>37</sub> (t)	96778423671CF933BA057BF3C576072D32930112D3749C4738D096135E156848B7BC 7B4D4FDFB8A7CBEC83ECEFF009DDB09DC1E55A969FC2BCD922D0C404A979D34BE6976 E7889E6244C51F83854C7BD5CFF3F915FA8C4BD6B42685D59BE159FF5DCB7CA9AF42 AB85A4258AB66D8F25593C8536E73686DAF8173783FBAA32E3E1
038	P <sub>1</sub> (t+24)	F7A4CB846B98ACD06BDD33AFE1DC3C0B35EA2A250E0DC70D959CE3DBA19FB64E2441 EB9B2EC5D473EF667E8258AA18DADE37D1A092076F84E33B7DA1748635BEAA94B1DF 852CCA25154CB00C34F5D32661F4B5DDCB25FC1C70BD246E4FD531D565624F8FDB3B 13C9F9437BA9776B57BCC096E22EC56D2FD11D4C4D61EE988800
074	P <sub>37</sub> (t+24)	C2B55E4A0E04226972B40620CC5E728370D9A2A0B3030EF4450703A7F4C1AF143844 D6AD26E061AAADFD2521AD48320DE2A6B605B41740D49E24C436B2A00297E7F2A354 DE6A33E8D2EF5AC7F054E12D34E8639AC06C3F1A373C1EA937A8E3E4E0883A2B0CC8 38B7C3621132A8594A48CD2B71C96947E7B488093CA93A955F08
075	P <sub>1</sub> (t+48)	F4FE4A61E668669524717749357D2AC58411FC6A54F18FFC9EC51DB121ED2F6E4ECB 856F4FA534D84E6E5BF20296241C7157CBD4437C4D829D5510517CF42AD5D431B302 EB207D4616C3C0F831652B3A8935F7DFA517ECADDEACC78AC02DE1EF8419D3483DF8 97C15C8B56805CC6750CC1BEA98A0DBEC9E66EB98A69F8ED6D86
111	P <sub>37</sub> (t+48)	D9352A5F9E318A772A6B0A8498A4B6CD1D93B3CC581CB390B0A8C728E47430F29043 FF3F2048C745EBEB2B2B1758B05AE70575C9DEE14173D3337616D546E448E77582A2 698063C5040F91B1C06C162274B16C1B0EE02B3A11DF3FA22D49FDDAA877B728A2DF 817BBD0E29722205C89A5F91A3E26955630EC48402CA4DAA0378
112	P <sub>1</sub> (t+72)	2DFF2345638E31C27B7CC27EEF9FF9DC383E98505F5EC50C1F741805A821A451998B DCAFB8094C2589F283AF1C9056CA796083A50CF95CB6A5340DDFE9E82C71C2C5A390 DC0C8FF6795B3DB8B733E2B991F8B484A3528B8F89BD695404DA2817602828C468E0 14C7244133F61EC113D121F848671DB0332B578D2EF38331B99B
148	P <sub>37</sub> (t+72)	D623879A83A18CE562356FF1ED546D9E603D9EFD3DE45D310123387EC6F20A9D8DF 378CDD3CC2D9E491ECA4CB217DDF36E512E4BE6235F4C7CB270596C0F5900E2442C8 28EF22CC277D5E9AC69599F67CD400833F6CFF0FA1BB69D00838E7374438CBB72C9C 9EC3785FA14245896ECD3BB1D58FB7510D101584ED669E394931
149	P <sub>1</sub> (t+96)	FA28476F17FCF42B2DD127DCFE42250039E03183B21EBFB83544E922469EC9824641 BE138193A95EE51A1E57C598C3813FD19805E2676E5D997DC13C358246B521F8FA9D 17865FA6B02AD9D1D5D5E46B725D51A52DC20CD3ADA5013E419249B48DC6FCF89339 19F24DA4FB3F56BB4154E0BFD5C2300DB9B0040D0F41D507F7FF
185	P <sub>37</sub> (t+96)	5FFAD9744EDCEAA7C57243AF783EB3C44120433003C3AF4E2EC6342CAECC2FBBA634 C151E0C064F2270842F37DEFF400BB759BB00A09244EC922C42B2504695E33E2E464 66DCF75CFBC5F39FCA0287B0EAF60EE1156A15DB95261A5CA7961B1E06C4DAD1242 7380B7E2319113173241AF3670A7EB4574CA475F35CF2B014B2A
186	P <sub>1</sub> (t+120)	B279A52DA308C52BDF13565B40C1FEDF33A0E623C55734B7C8F179B9B50E5421F1C 8024B8BDEB14079643AB41153FA0E5660ADF78F527584899F4CCB03B47E4AB9214BE ECEBCF5CF051A5FA049D105D03D945B9085A58C583A392E7CA1FA6B5FF5FF0BB436C AE9C1FD44B0124E42332A03A54AE23A23A82223DB0B43C9BE049
210	P <sub>25</sub> (t+120)	59E2F1EEAF906B168FC5226D6E2A295C488BC1D37A7BECA8193F9A570194E08DF231 71E5EF24D150A9BF302095C0DA751C7E65B9137D76FA51495E894B93576D456E10E9 CBF556692794213711F602541E9871D9D030E724623596E21EF66BAEA334360B3BCE B9698A20930D9C4E921057835D7B89E493ED33D7F9CEA001AC77

\* P<sub>i</sub>(t+N): P-code sequence of PRN number i shifted by N hours. See Sections 3.3.2.1, 6.3.6.2.1.

**IS200-1656 :**

Insertion after object IS200-1379

**Section Number :**

40.3.3.5.1.4.1

**WAS :**

N/A

**Redlines :**

[These four-bit terms shall occupy bits 9 through 24 of word three, the 24 MSBs of words four through seven, and the 12 MSBs of word eight, all in page 25 of subframe 4.](#)

**IS :**

These four-bit terms shall occupy bits 9 through 24 of word three, the 24 MSBs of words four through seven, and the 12 MSBs of word eight, all in page 25 of subframe 4.

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**IS200-1657 :**

Insertion after object IS200-1656

**Section Number :**

40.3.3.5.1.4.2

**WAS :**

N/A

**Redlines :**

[Since the anti-spoof information is updated by the CS at the time of upload, the anti-spoof data may not correspond to the actual anti-spoof status of the transmitting SV or other SVs in the constellation.](#)

**IS :**

Since the anti-spoof information is updated by the CS at the time of upload, the anti-spoof data may not correspond to the actual anti-spoof status of the transmitting SV or other SVs in the constellation.