导航卫星信号和频段

各卫星系统官网

系统网址GPShttps://www.gps.gov/GLONASShttps://www.glonass-iac.ru/en/Galileohttps://www.gsc-europa.eu/
https://ec.europa.eu/growth/sectors/space/galileo
http://www.esa.int/Applications/Navigation/Galileo/What_is_GalileoBeiDouhttp://www.beidou.gov.cn/QZSShttps://qzss.go.jp/en/IRNSShttps://www.isro.gov.in/

各卫星系统信号和频段

System	Signal	Frequency(MHz)	多址技术	编号
GPS	L1 L2 L5	1575.42 1227.6 1176.45	码分多址	1-32
Glonass	L1 L2	1598.0625~1609.3125 1242.9375~1251.6875	频分多址	65-96
Galileo	E1 E5	1575.42 1176.45	码分多址	301-336
BeiDou	B1 B2	1575.42 1176.45	码分多址	201-261
QZSS	L1 L5	1575.42 1176.45	码分多址	183-200
NAVIC/IRNSS	L5	1176.45	码分多址	901-918
SBAS	L1 L5	1575.42 1176.45	码分多址	

图一

GNSS Frequencies and Signals

System	Signal	Frequency (MHz)
GPS	L1 C/A	1575.42
	L1C	1575.42
	L2 C	1227.6
	L2 P	1227.6
	L5	1176.45
GLONASS	L1 C/A	1598.0625-1609.3125
	L2 C	1242.9375-1251.6875
	L2 P	1242.9375-1251.6875
	L3 OC	1202.025
Galileo	E1	1575.42
	E5a	1176.45
	E5b	1207.14
	E5 AltBOC	1191.795
	E6	1278.75
BeiDou	B1I	1561.098
	B2I	1207.14
	B3I	1268.52
	B1C	1575.42
	B2a	1176.45
	B2b	1207.14
NAVIC	L5	1176.45
SBAS	L1	1575.42
	L5	1176.45
QZSS	L1 C/A	1575.42
	L1 C	1575.42
	L1S	1575.42
	L2C	1227.6
	L5	1176.45
	L6	1278.75

Frequency reference table:

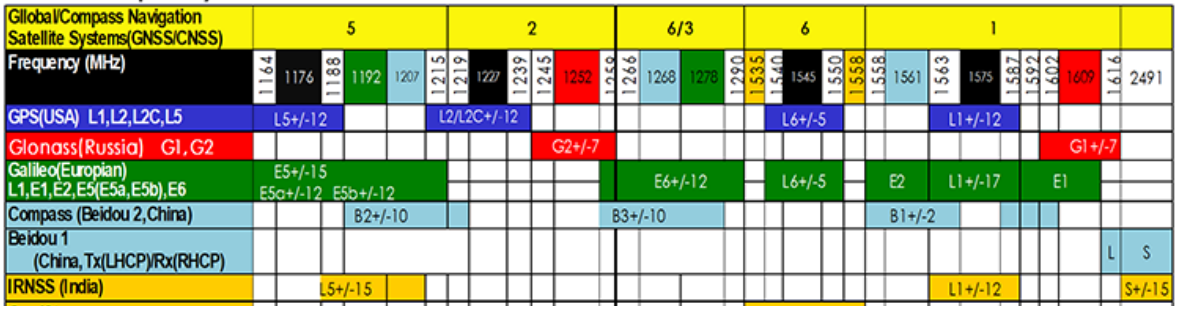

图2

导航系统	频段	工作频率
GPS	L1	1575.42MHZ ± 1.023MHZ
	L2	1227.6MHZ ± 1.023MHZ
	L5	1176.45MHZ ± 1.023MHZ
GLONASS	L1	1602.5625MHZ ± 4MHZ
	L2	1246.4375MHZ ± 4MHZ
BD1	S	2491.75MHZ ± 4.08MHZ
	L	1615.68MHZ±4.08MHZ（左旋圆极化）
BD2	B1	1561.098MHZ ± 2.046MHZ
	B2	1207.52MHZ ± 2.046MHZ
	B3	1268.52MHZ ± 10.23MHZ
Galileo	L1	1575.42MHZ ± 1.023MHZ
	E5b	1207.140MHZ ± 1.023MHZ
	E5a	1176.45MHZ ± 1.023MHZ

图3

以图3来看，各卫星系统载波信号的工作频率实际上是一个范围，而不是只在某一个频率

我们通常所说的如图1、图2的单个频率实际上是中心频率

参考

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