



Contour Legend

Metric: HDOP Max Start Time: 21 May 2010 00:00:00Z
 Production Date: 05/21/2010 11:14:16 End Time: 21 May 2010 23:59:00Z
 Almanac File: current.al4 Altitude: 0 ft HAE
 SOF File: 2010_141_085841_v02 Latitude Increment: 02° 00'
 PSF File: 2010_141_000000_v02 Longitude Increment: 002° 00'

Number of Channels: 4 > 12.0 0.0 - 2.0
 Mask Angle: 5° 9.0 - 12.0
 6.0 - 9.0
 4.0 - 6.0
 2.0 - 4.0

PRN: 1 Outage: 24 Mar 2009 08:34:00 to Until Further Notice PRN: 16 Outage: 21 May 2010 10:23:00 to Until Further Notice
 PRN: 32 Outage: 21 May 2010 08:01:00 to Until Further Notice

Notification of GPS High Horizontal Dilution of Position (HDOP) Event

This is a Situational Advisory Notification for a potential GPS degradation event.

On (Friday/ 21 MAY 10) due to satellite maintenance of PRN 16 and 32.

Area Affected	Time of Event	Duration
South Eastern Pacific Ocean (Baja)	1956Z - 2011Z	(15) MIN
North Eastern Canada	1824Z – 1826Z	(2) MIN
South East Gulf of Mexico	1925Z – 1933Z	(8) MIN
Australia	1357Z - 1416Z	(19) MIN

On average, the U.S. has a HDOP in the range of 2-4, which is excellent to good. An HDOP of 1 is ideal precision. The High HDOP event will increase the inaccuracy of GPS by a factor of >12, representing a brief low level of confidence in GPS accuracy. The degradation could result in greater positional errors if utilizing a GPS device in the affected areas during the time periods listed. Note: All DGPS Sites will cease broadcasting GPS corrections when an HDOP of 6+ is reached.

Please see attached slides for detailed locations and times. For clarification on the colors on the map, colors on the slide represent a multiplier factor depicting estimated GPS precision.

○ White = 0-2.0 ● yellow = 2 – 4 ● light blue = 4-6 ● dark blue= 6-9 ● Red= 9 - 12 ● Black= >12.0

For more information please contact the USCG Navigation Center via email:

tis-pf-nisws@uscg.mil or phone at (703) 313-5900.

These notifications are worst case scenarios. If satellite maintenance is complete before the event times, then the events will not occur.