



A product by



## IBPL REPORT

Username: rpiriz  
Scenario: GAP2 M  
Start Date: 2010/07/20 (10201)  
End Date: 2010/07/26 (10207)  
Run Time: 2010/08/04-14:01:33 UTC

All times are GPS Time unless otherwise stated

QUALITY DATA, ALGORITHMS AND PRODUCTS  
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# 1. CONFIGURATION SUMMARY

Station	gap2
Minimum Elevation Angle	0 deg
GNSS Constellation	GPS+GLONASS

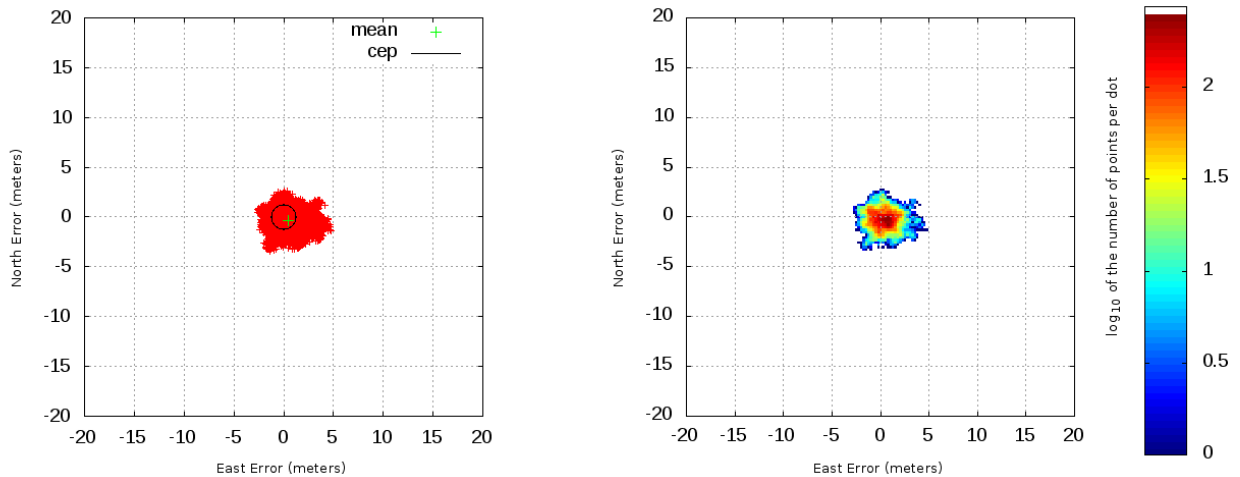
**Table 1. Settings**

# 2. POSITION ERROR STATISTICS

The position error is the difference between the code-based user position and the precise position (considered as truth). The precise position comes from PPP.

	North	East	Up
MEAN	-0.380	0.472	-0.081
STD	0.866	1.059	1.922
RMS	0.946	1.160	1.924
CEP	1.229		

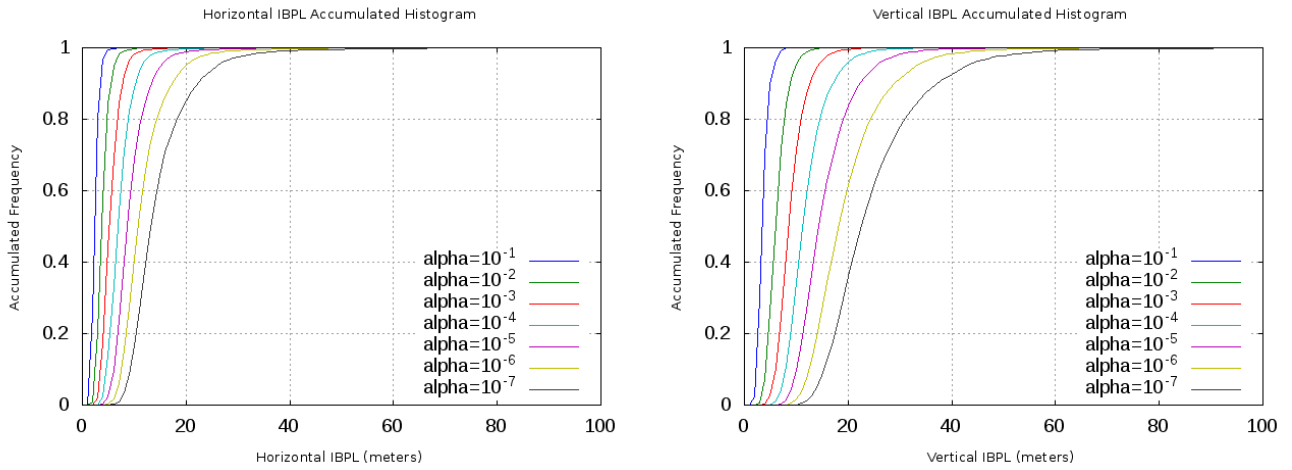
**Table 2. Position Error Statistics (meters)**



**Table 3. Horizontal position errors**

# 3. IBPL ACCUMULATED HISTOGRAMS

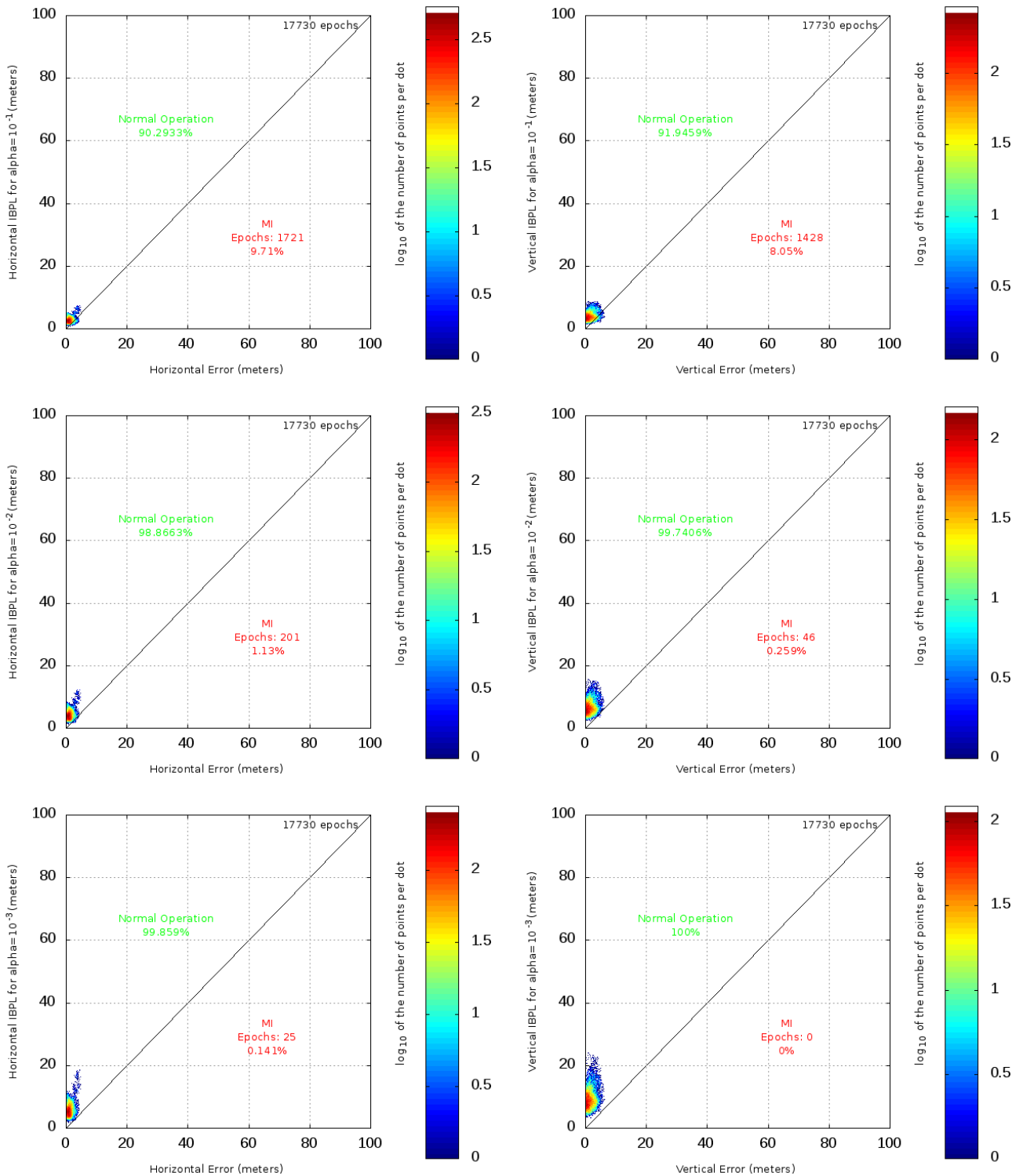
The following figures show the accumulated histograms of the horizontal and vertical Protection Levels from IBPL for the GPS+GLONASS solution. Seven confidence levels (alpha) from  $10^{-1}$  to  $10^{-7}$  are considered.

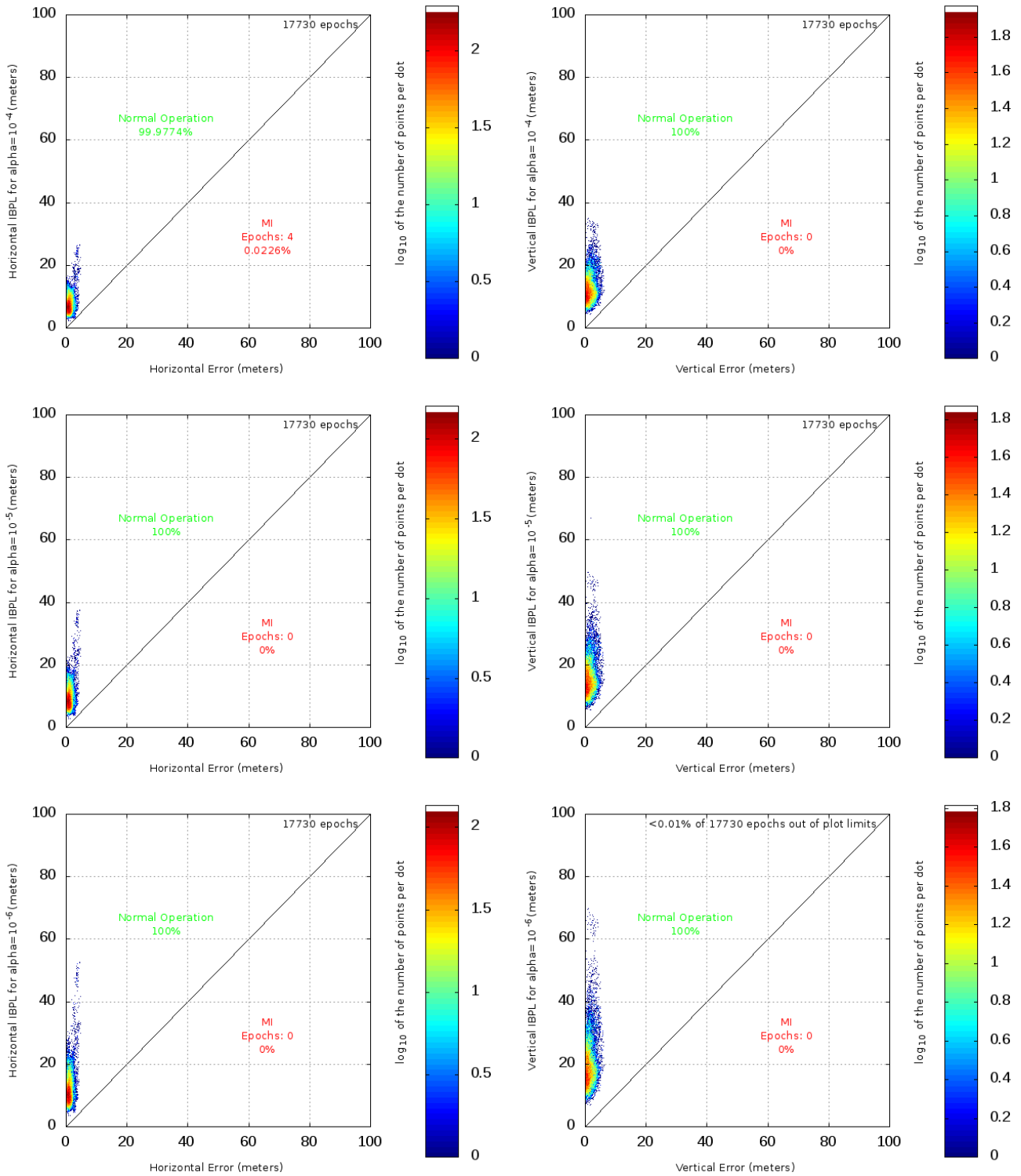


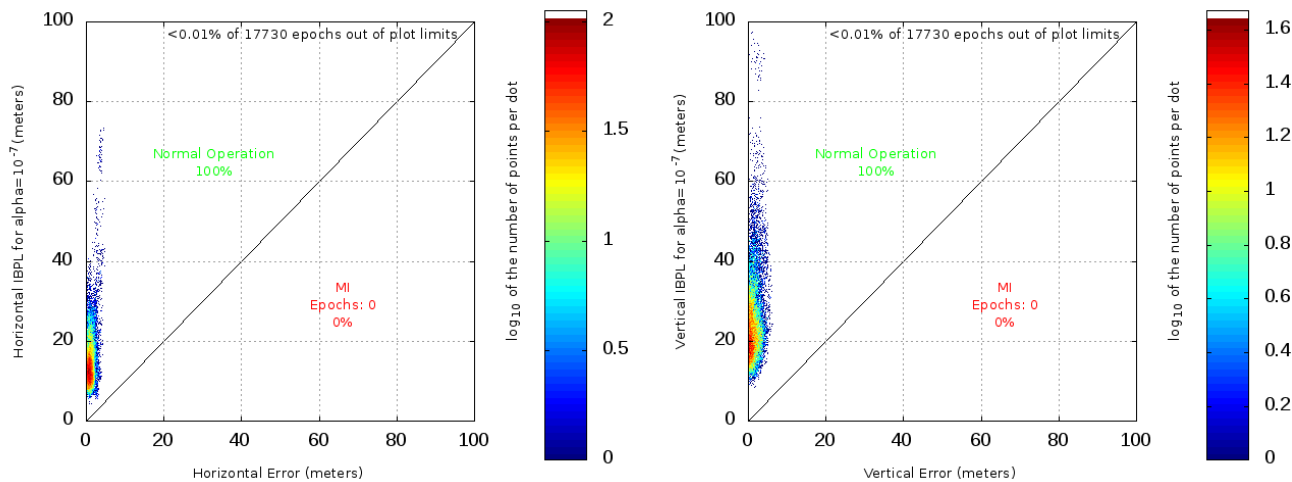
**Table 4. IBPL Accumulated Histograms**

## 4. IBPL PERFORMANCES

The following Stanford diagrams represent the protection level versus the position error for the different confidence levels.

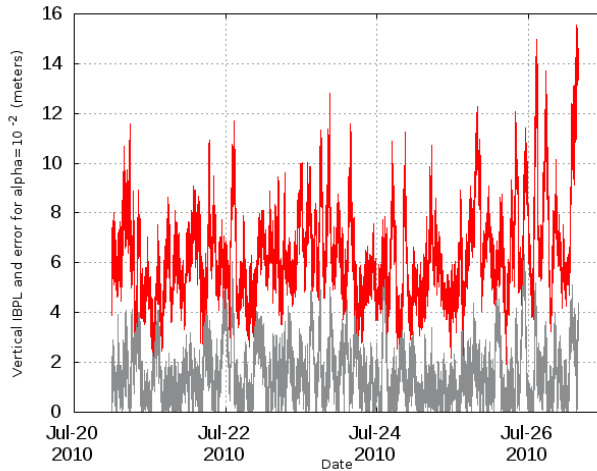
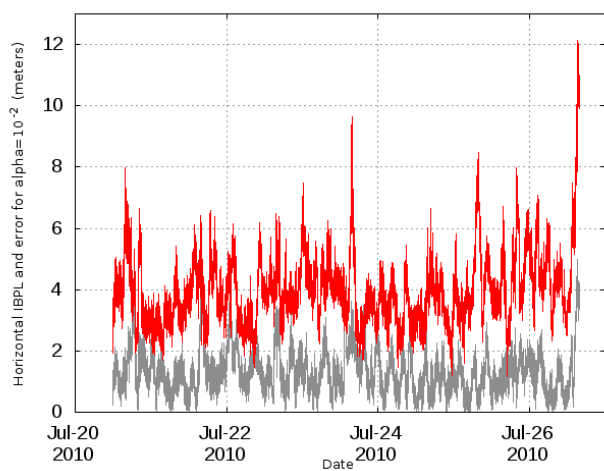
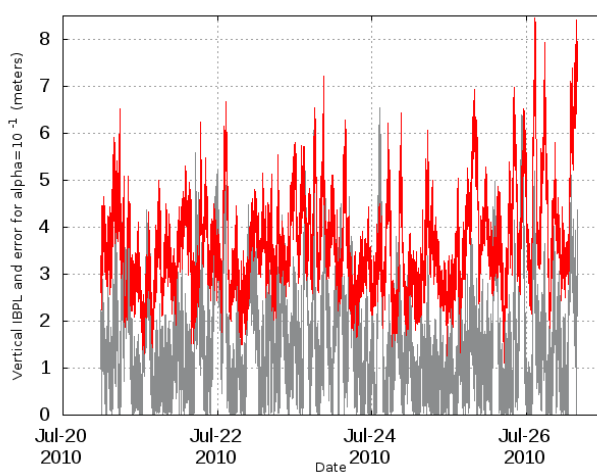
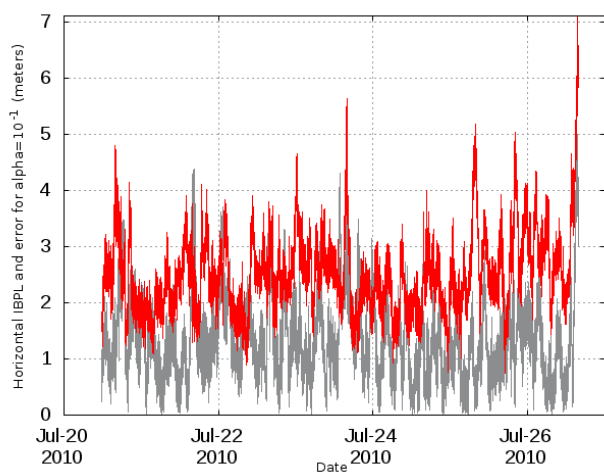


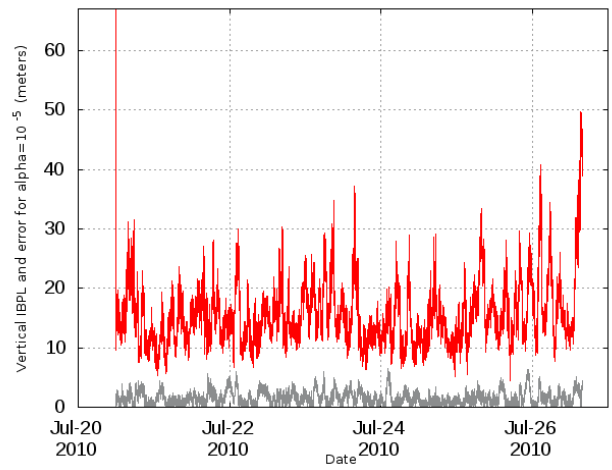
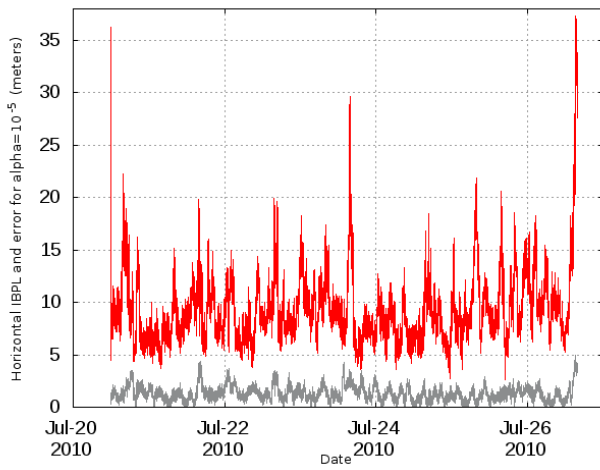
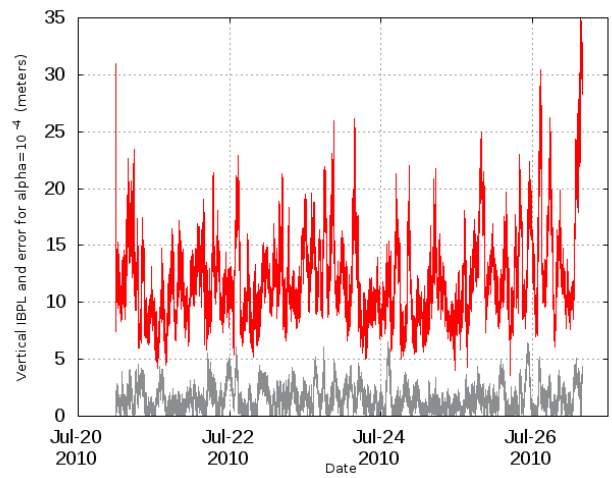
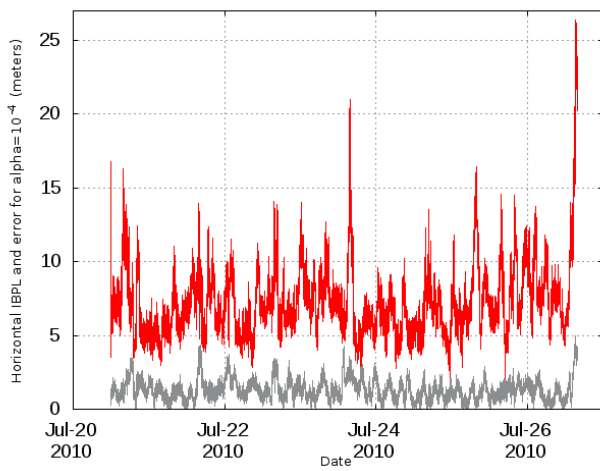
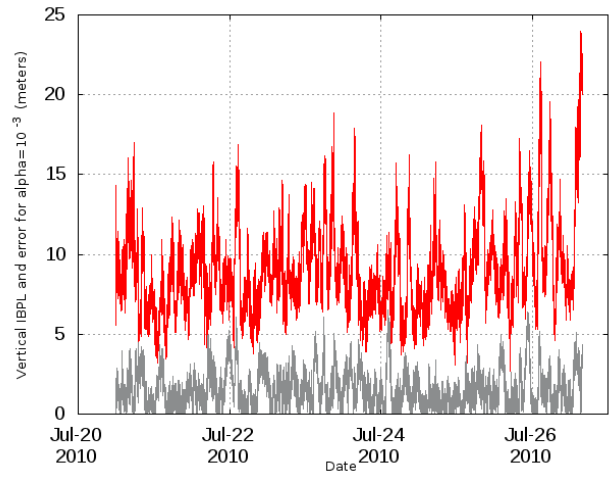
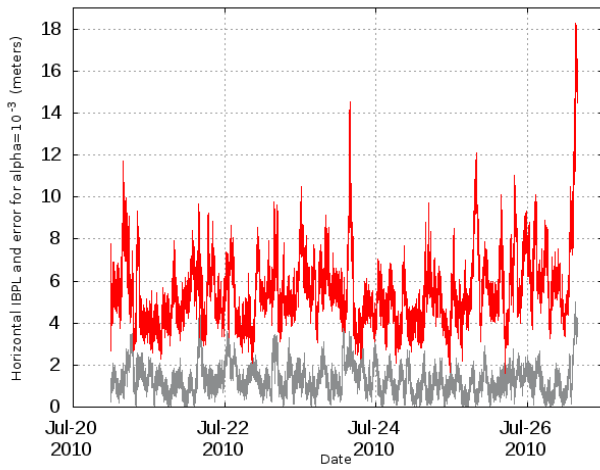




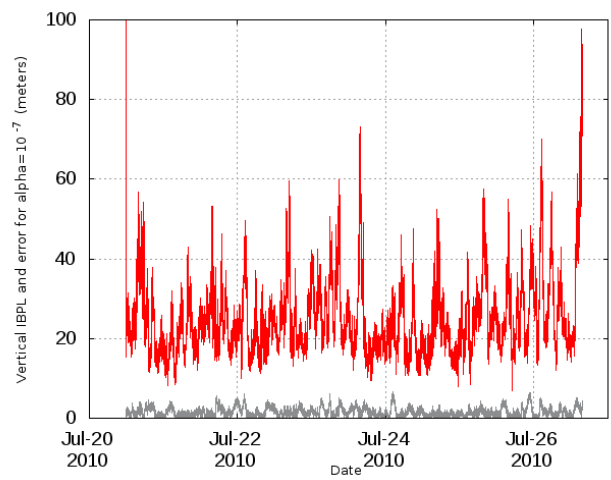
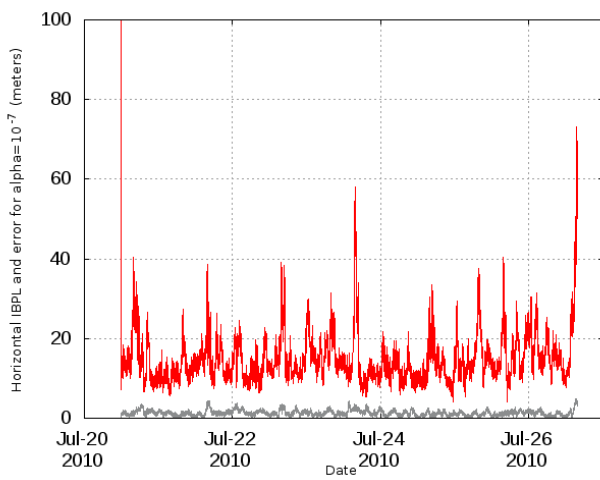
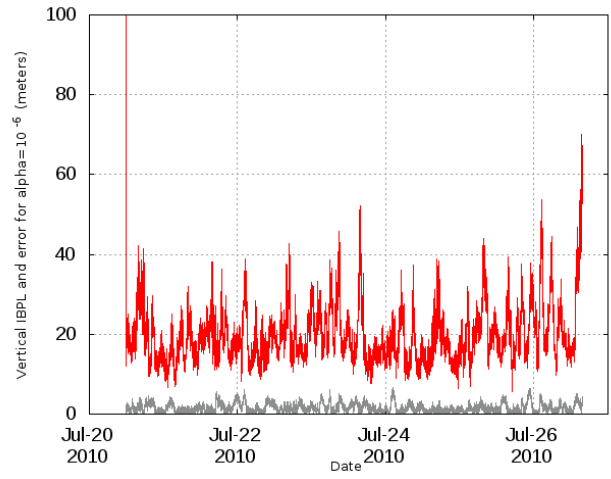
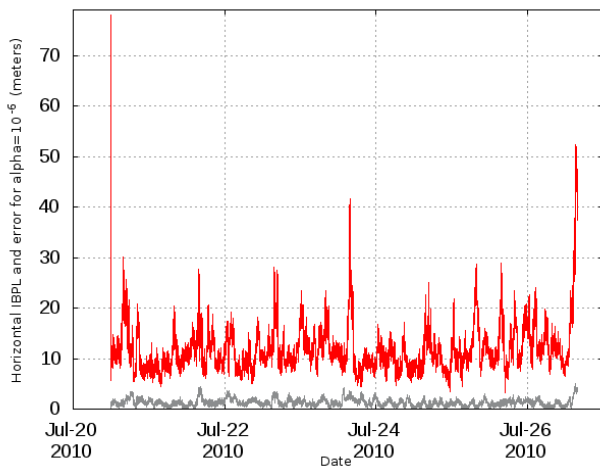
**Table 5. IBPL Integrity and Availability**

The following diagrams represent the position error (in grey) and the IBPL (in red) versus time, for the different confidence levels.









**Table 6. IBPL and position error versus time**

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