



Instituto Brasileiro de Geografia e Estatística

## **Atividades do Centro de Processamento IBGE**

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*Reunião do SIRGAS, 2005  
Caracas, Venezuela, 17 e 18 de novembro*

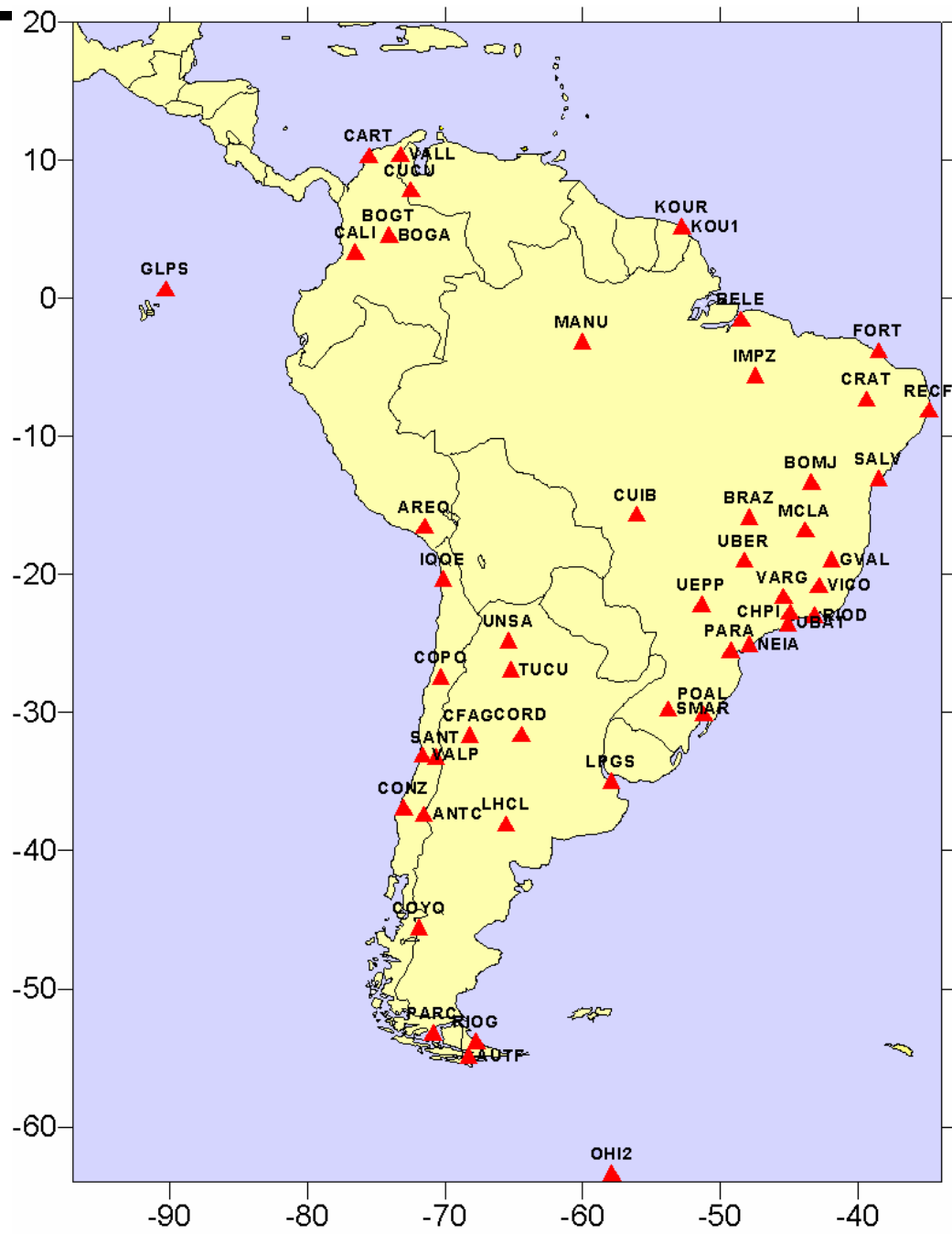
## Overview

- Data processed from january 2003 to october 2005 – 1199 to 1343 GPS week
- 47 stations
- Software: bernese 5.0 – BPE
- Data download and uncompression: automatic by ftp script

## Preliminary report:

- Map of network
- Receivers and antennae of gps stations
- Main characteristics of ibge processing
- PCF file used on daily processing
- PCF file used on week processing
- Data processing collection
- Residual analysis (IBGE X IGS00 X DGFI X SIRGAS2000)
- Time series

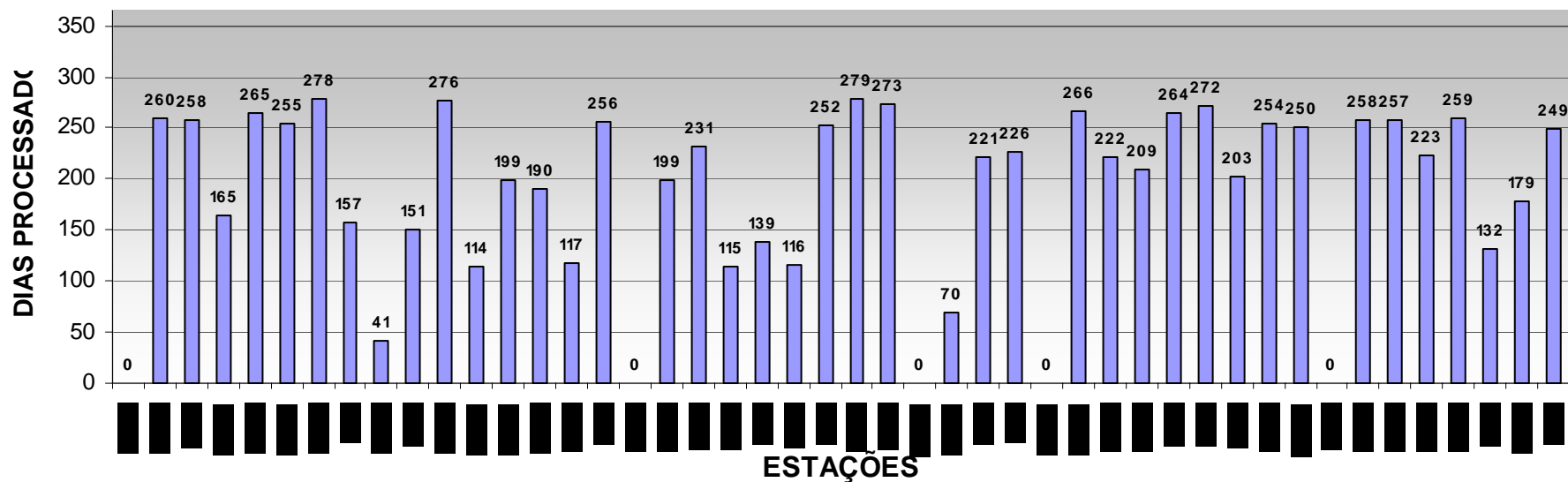
# MAP OF IBGE NETWORK



<b>Start of processing</b>	<b>January 2003</b>
<b>Software used</b>	<b>Bernese 5.0 ( BPE mode)</b>
<b>Sampling rate</b>	<b>30 sec for 1 day solution</b>
<b>Elevation cutoff</b>	<b>10 °</b>
<b>Baselines strategy</b>	<b>SHORTEST</b>
<b>Observations weighting</b>	<b>Cos(zenithal)</b>
<b>Orbits/EOP</b>	<b>IGS final referred to IGS00</b>
<b>A priori Troposphere model</b>	<b>Niell dry component</b>
<b>Troposphere</b>	<b>Zenith delay estimated each 2 hours(12 daily corrections p/station) A priori sigmas applied with respect to prediction model Niell(wet component) -first parameter +/- 5 m absolute and +/- 5 cm relative</b>
<b>Ambiguities</b>	<b>QIF strategy with Ionosphere maps from IGS</b>
<b>Ocean tide model</b>	<b>GOT00.2</b>
<b>Daily solution</b>	<b>NEQ files, minimum constraint solution BRAZ (ITRF2000 coordinates) OUTPUT: SINEX files Troposphere maps</b>
<b>Week solution</b>	<b>SINEX files and NEQ accumulated from daily solutions to create week solutions. Constrained in all stations(0.001) without troposphere parameters.</b>

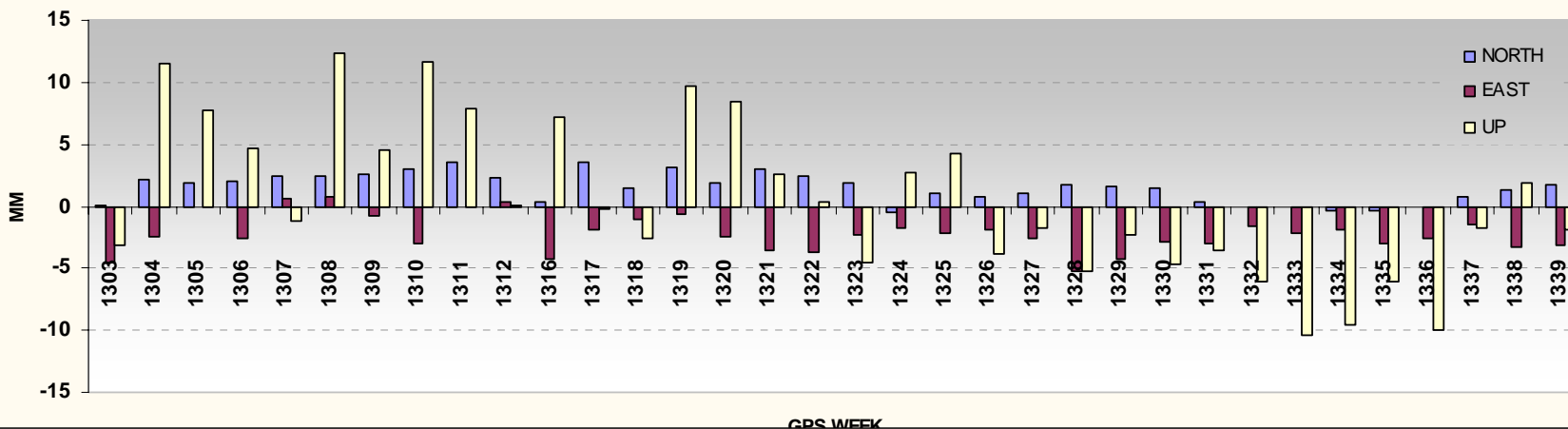
# DATA PROCESSING COLLECTION

**DADOS PROCESSADOS EM 2005( SEMANAS 1303 A 1343)**

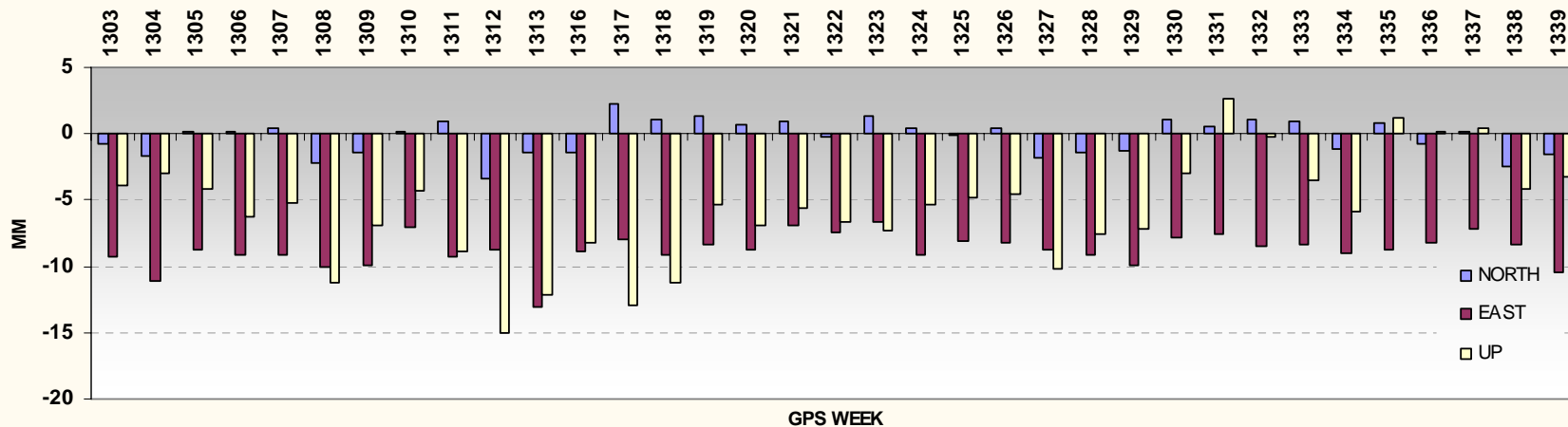


## RESIDUALS at STATION CUIB

CUIB - RESIDUALS BETWEEN IBGE AND DGFI SOLUTIONS YEAR 2005

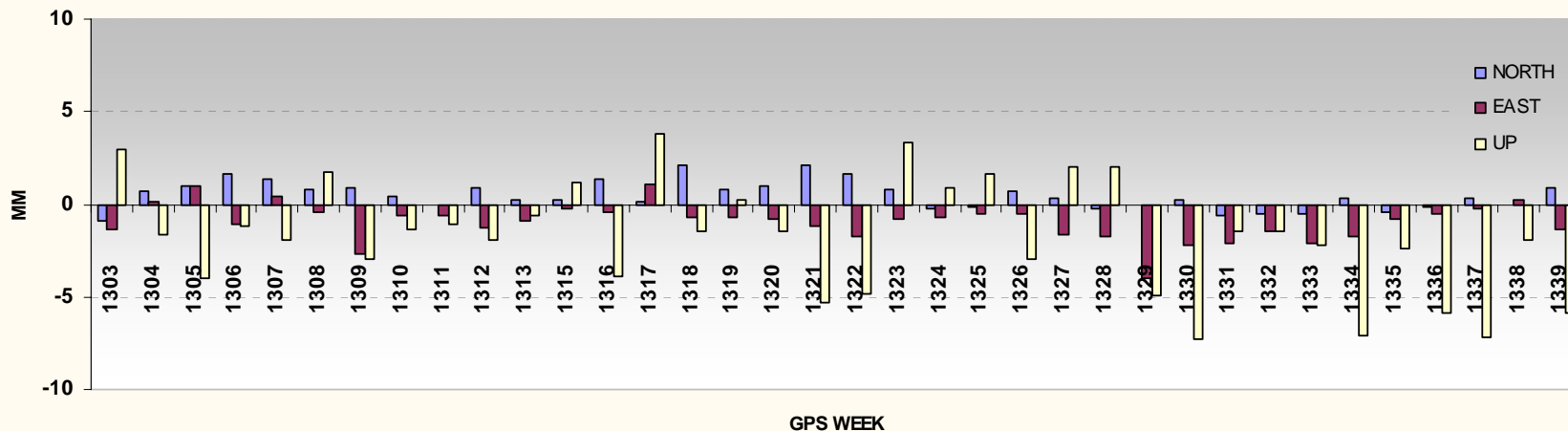


CUIB - RESIDUALS BETWEEN IBGE AND SIRGAS2000 SOLUTIONS YEAR 2005

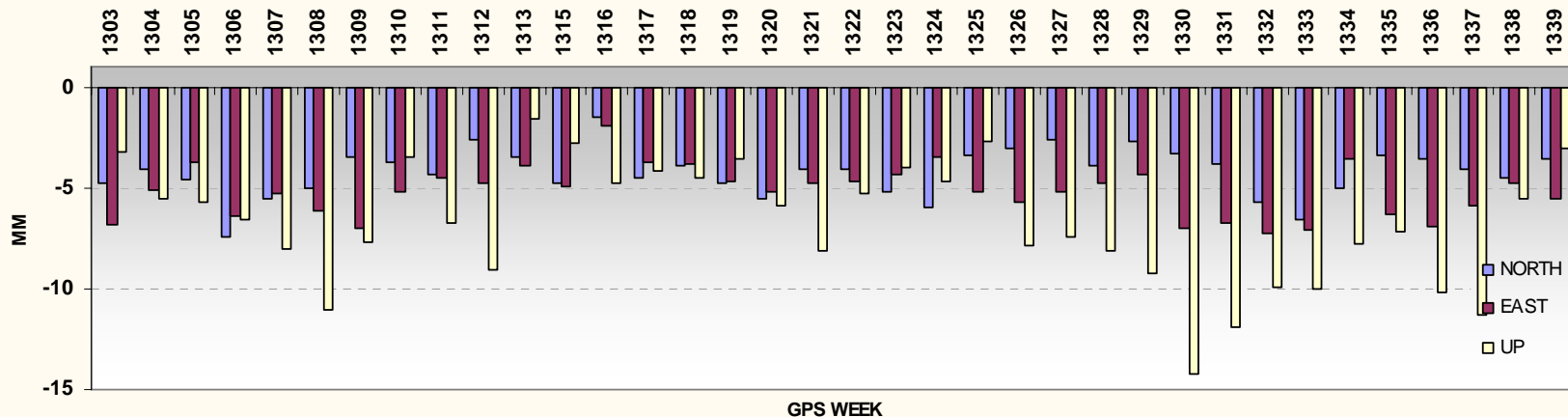


## RESIDUALS at STATION PARA

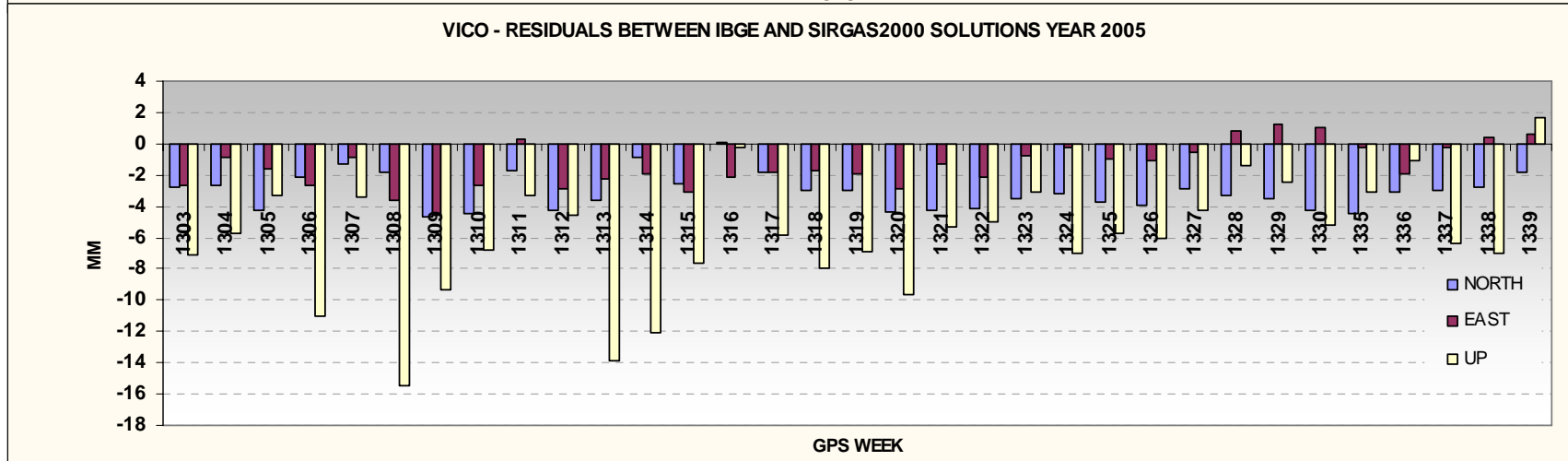
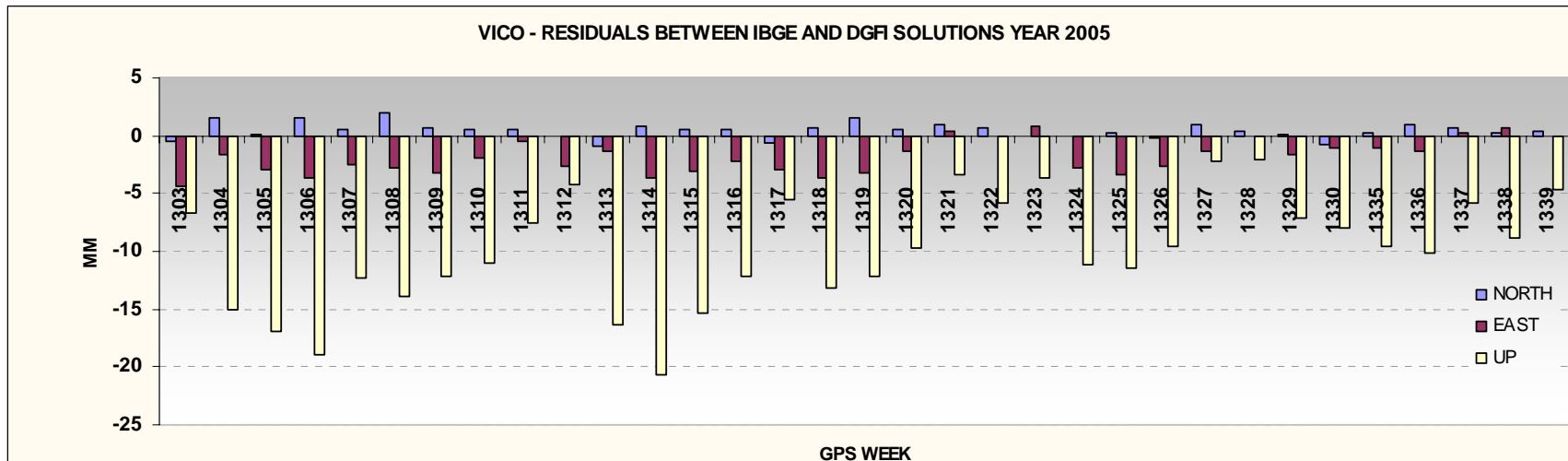
PARA - RESIDUALS BETWEEN IBGE AND DGFI SOLUTIONS YEAR 2005



PARA - RESIDUALS BETWEEN IBGE AND SIRGAS2000 SOLUTIONS YEAR 2005



## RESIDUALS at STATION VICO

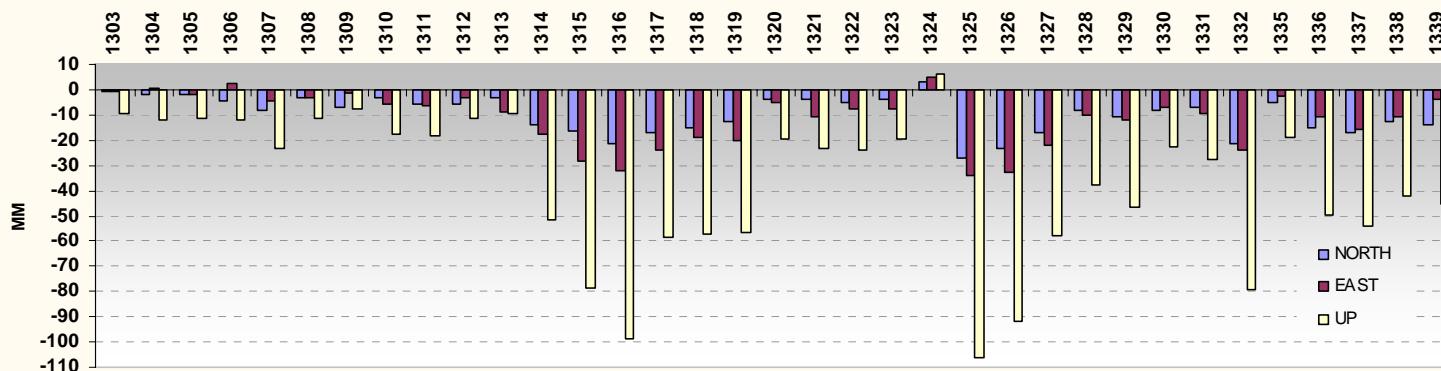




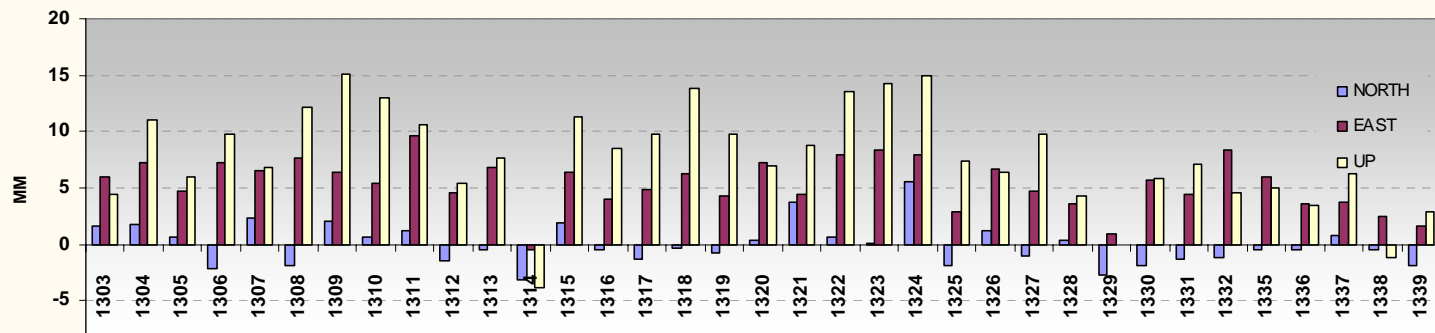
# RESIDUALS at STATION FORT



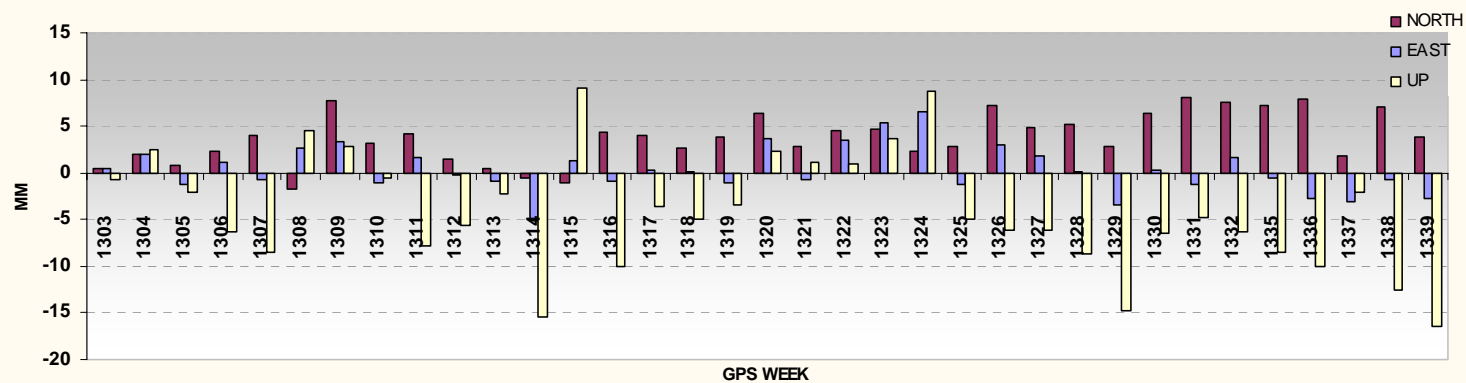
FORT - RESIDUALS BETWEEN IBGE AND DGFI SOLUTIONS YEAR 2005



FORT - RESIDUALS BETWEEN IBGE AND SIRGAS2000 SOLUTIONS YEAR 2005



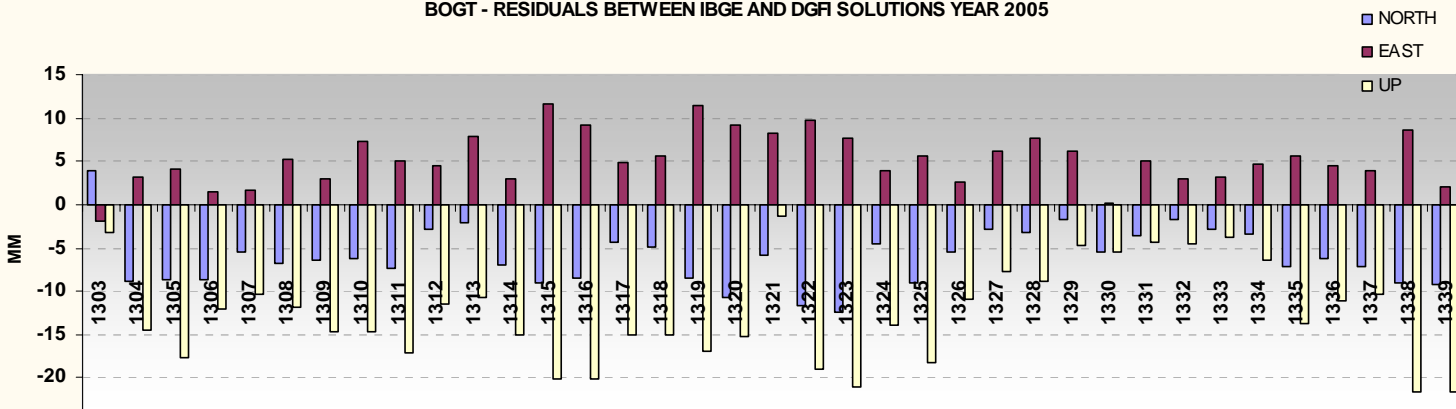
FORT - RESIDUALS BETWEEN IBGE AND IGS SOLUTIONS YEAR 2005



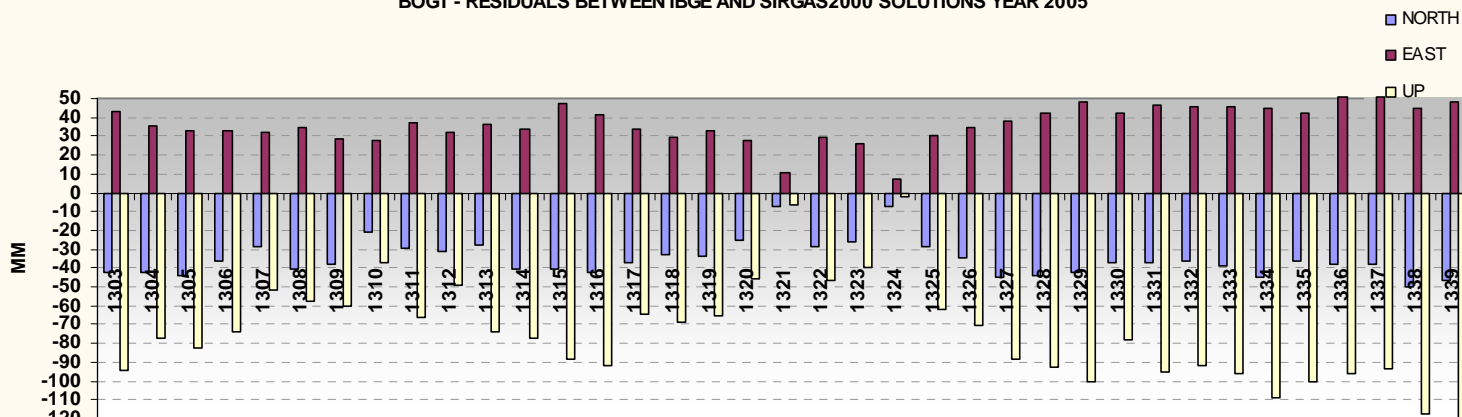
# RESIDUALS at STATION BOGT



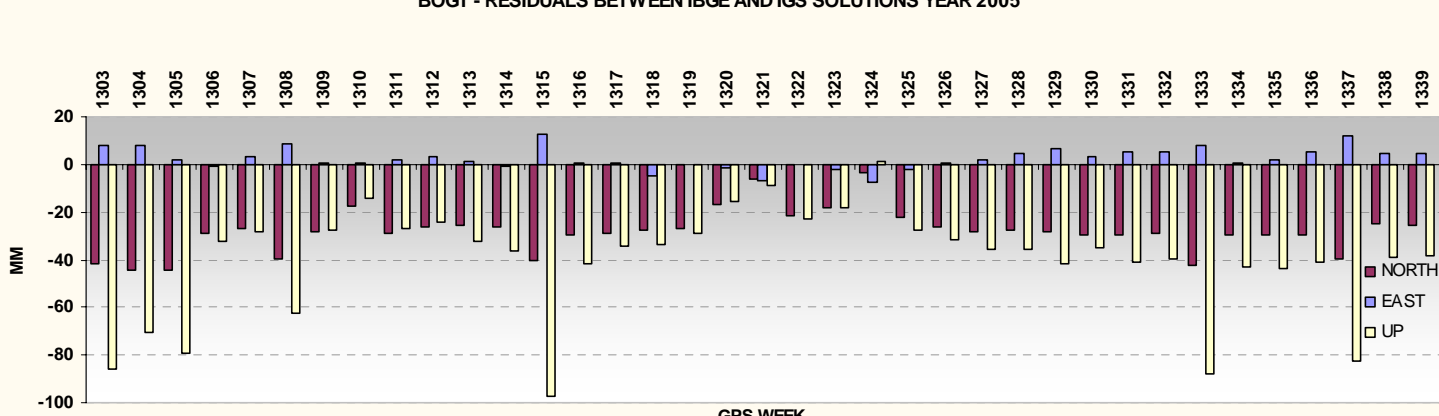
BOGT - RESIDUALS BETWEEN IBGE AND DGF SOLUTIONS YEAR 2005

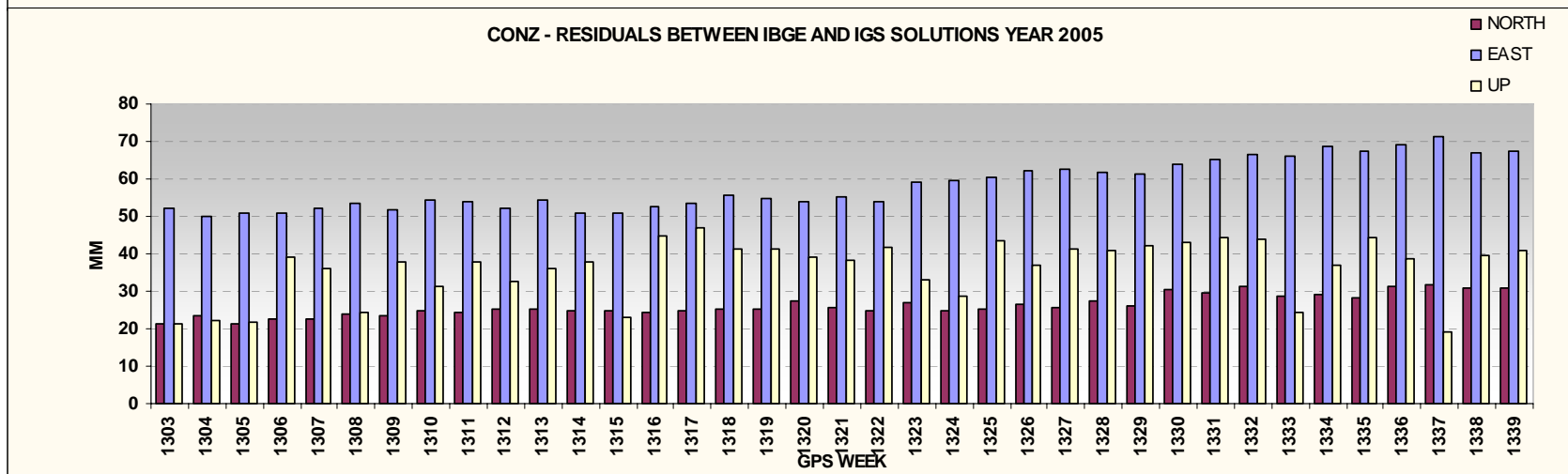
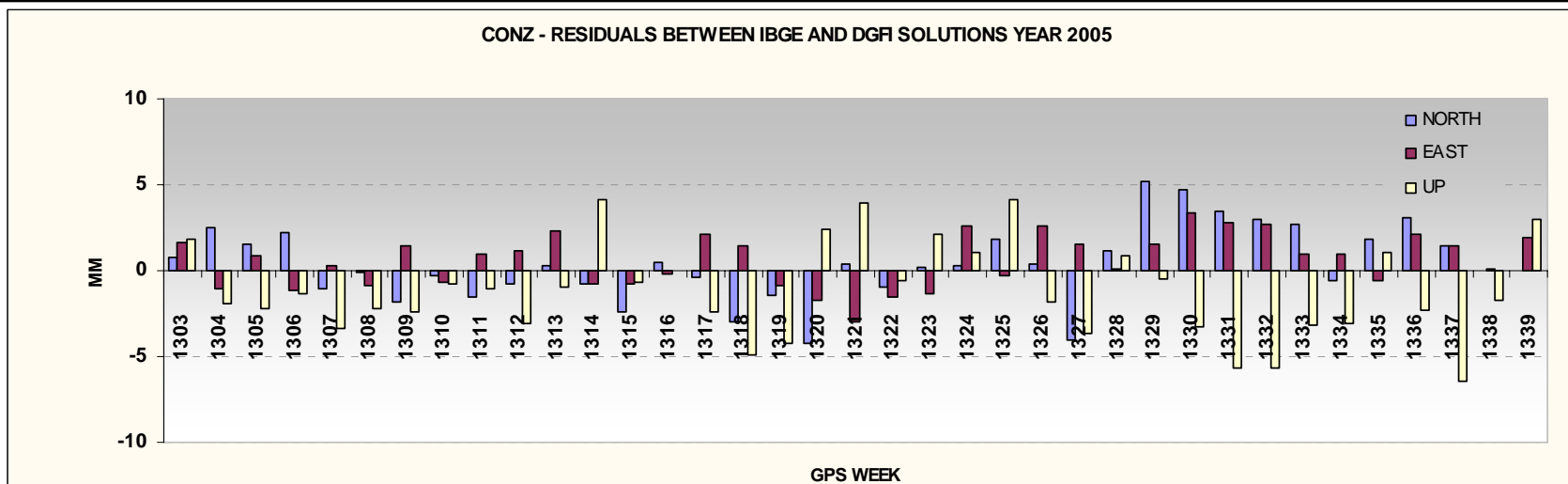


BOGT - RESIDUALS BETWEEN IBGE AND SIRGAS2000 SOLUTIONS YEAR 2005



BOGT - RESIDUALS BETWEEN IBGE AND IGS SOLUTIONS YEAR 2005



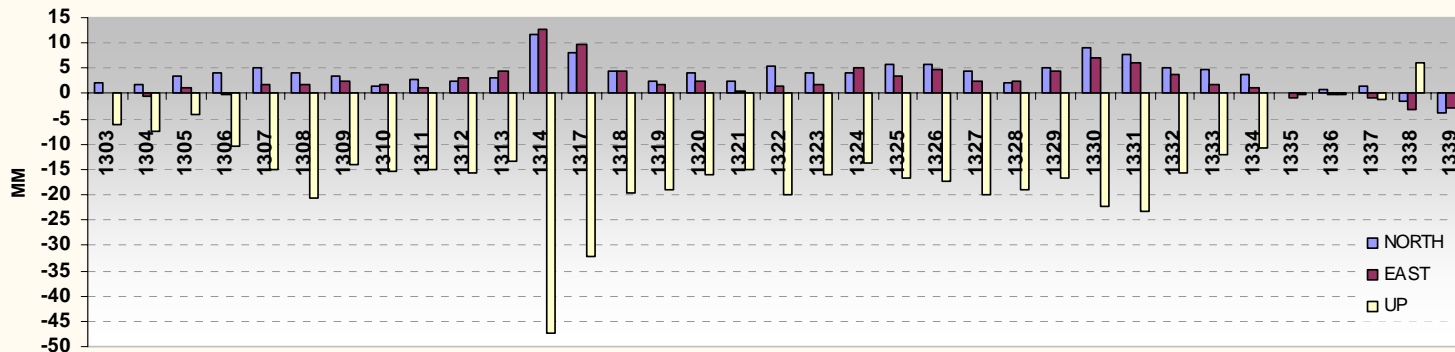


GLPS(25 cm), KOU1(3 cm)

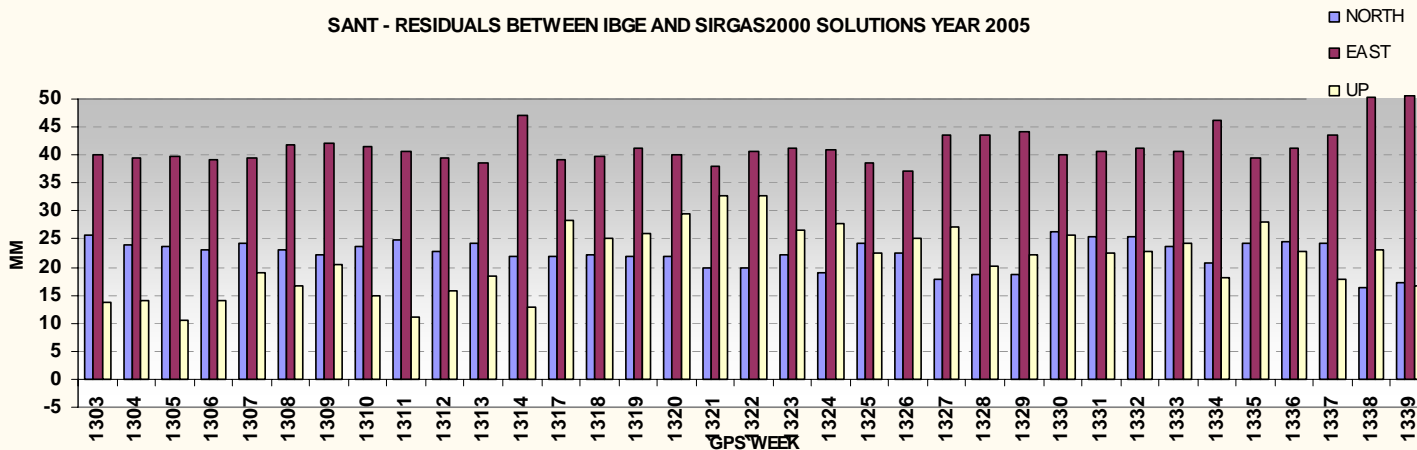
# RESIDUALS at STATION SANT



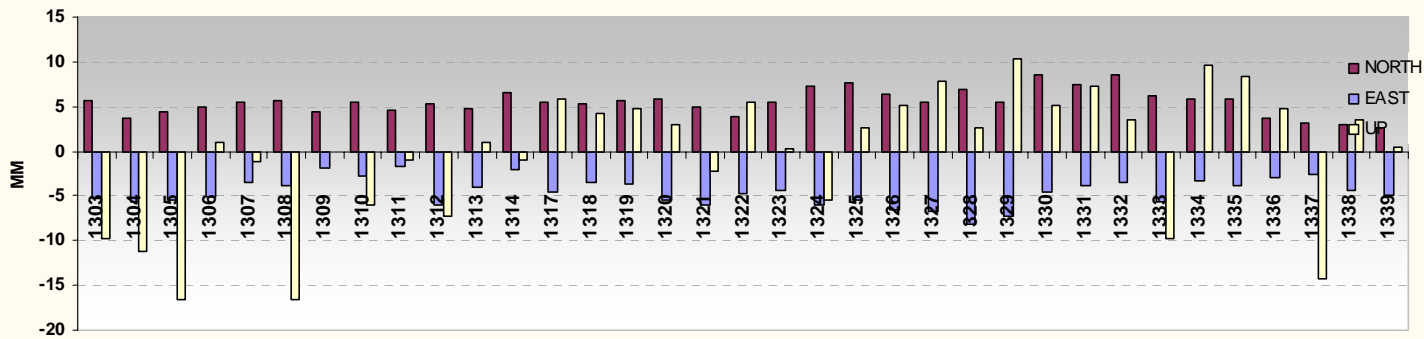
SANT - RESIDUALS BETWEEN IBGE AND DGF SOLUTIONS YEAR 2005



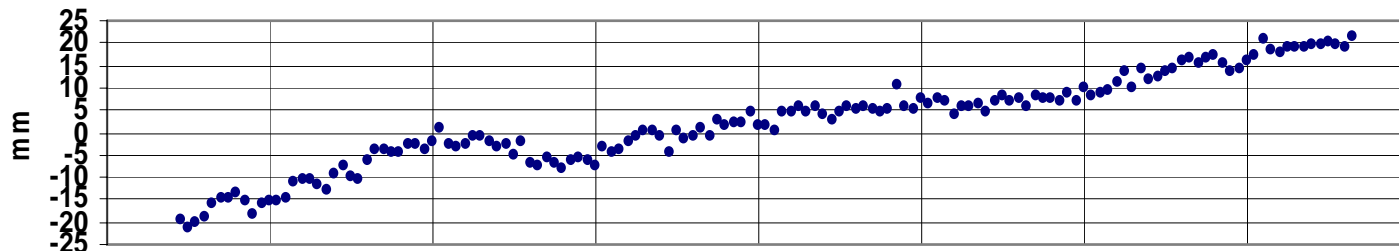
SANT - RESIDUALS BETWEEN IBGE AND SIRGAS2000 SOLUTIONS YEAR 2005



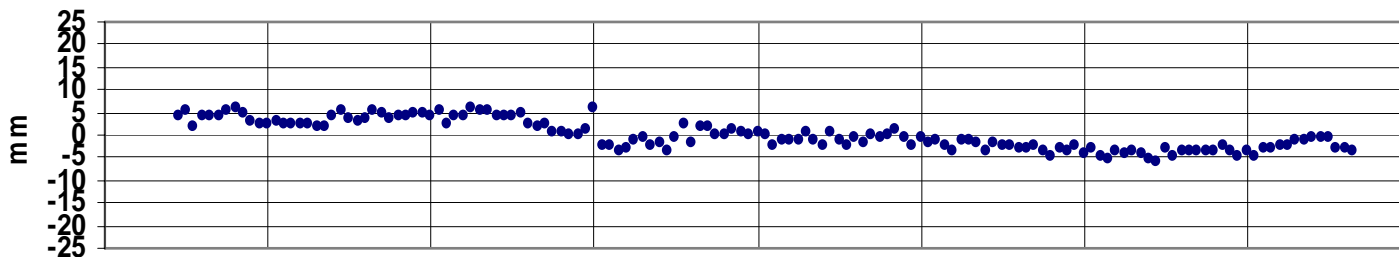
SANT - RESIDUALS BETWEEN IBGE AND IGS SOLUTIONS YEAR 2005



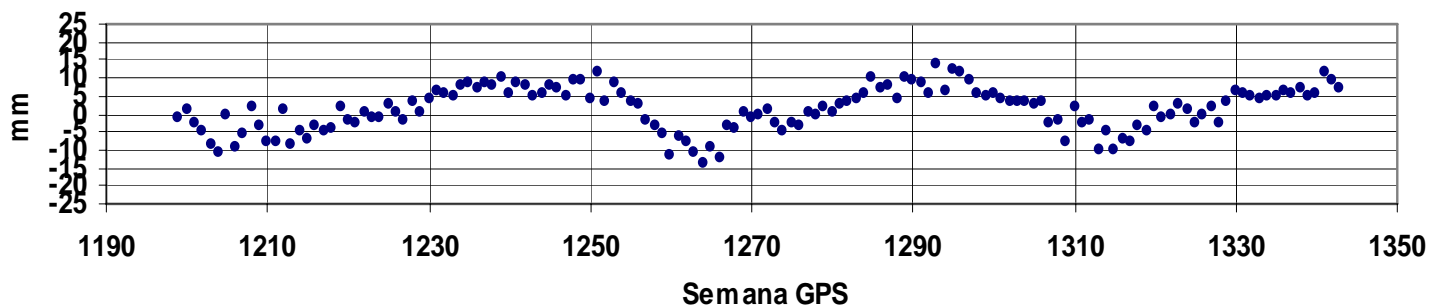
### Norte

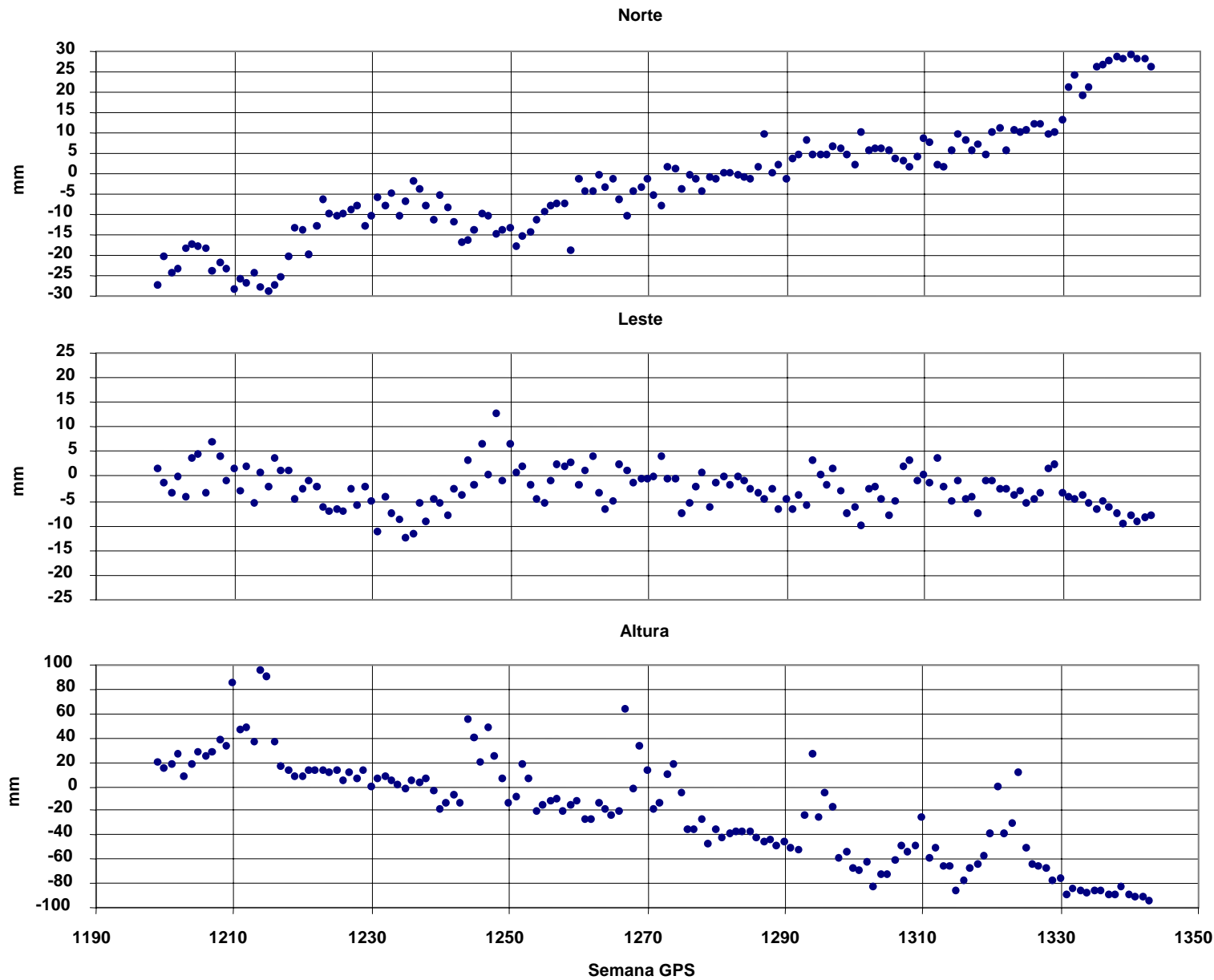


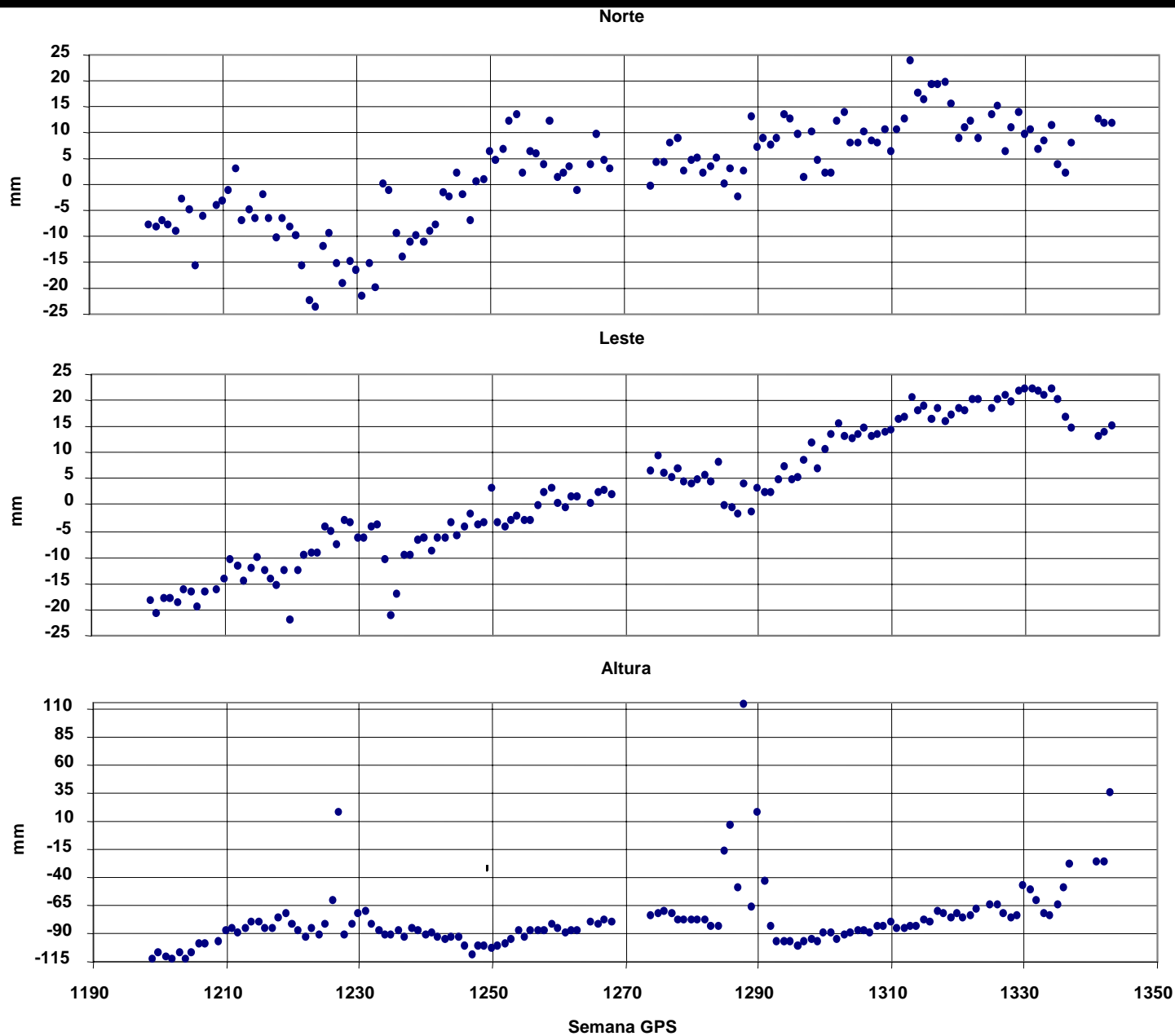
### Leste



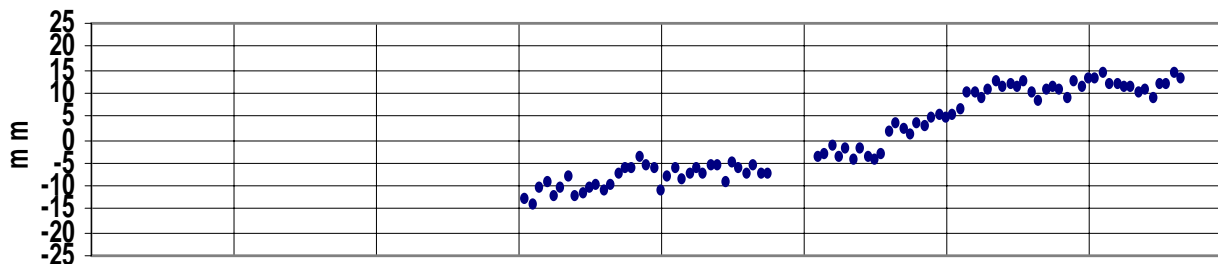
### Altura



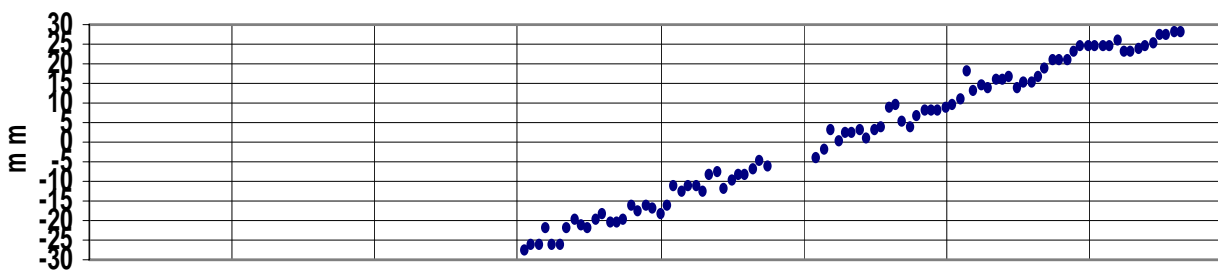




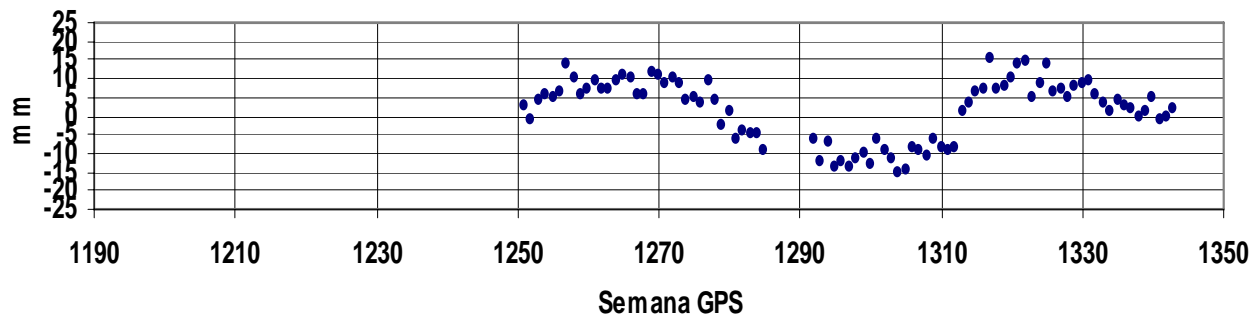
### Norte



### Leste

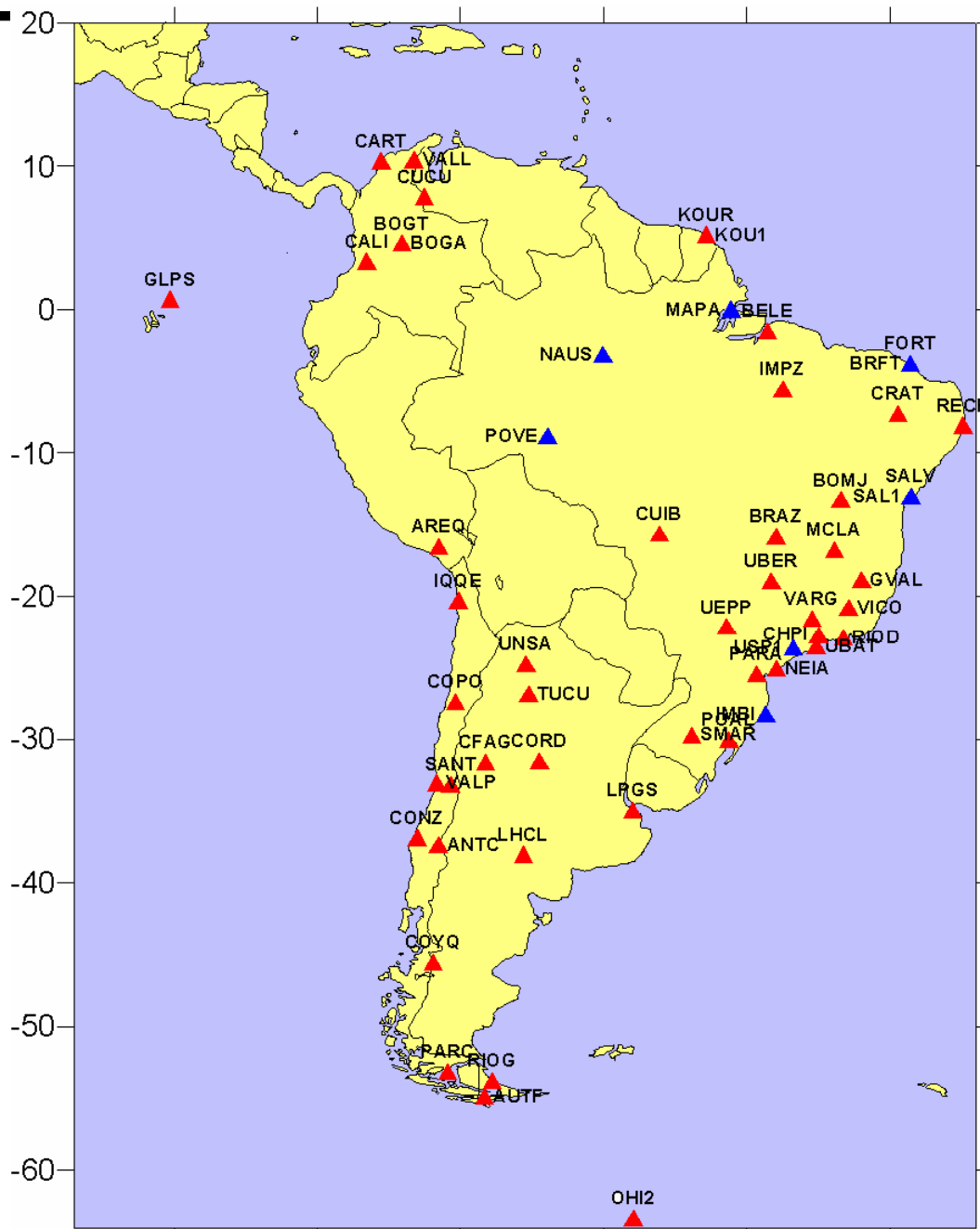


### Altura





# NEW STATIONS FOR 2006



**Will be defined a standard final solution ?**

**Which files ?**

**How these solutions will be analysed ?**

**Will be defined a report structure?**

**Which information is important?**