

# The TWSTFT Lab report

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# National Time Service Center, the Chinese Academy of Sciences (NTSC)

NTSC is located in Lintong, Xi'an  
where is the geographic center of  
China.

Welcome to China and welcome to  
NTSC.

# Research Group: **Time keeping laboratory**

- TWSTFT group is a part of **Time keeping laboratory**
- **Members:**
- Dong Shaowu, Research Prof. the Head of Time keeping laboratory  
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- Li Huanxin, Research Prof. In charge of TWSTFT in NTSC  
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NTSC 02

NTSC 03

NTSC 01

# NTSC 01 Asia-Asia TWSTFT links equipment

Antenna: 1.8 meters

satellite: IS-8, stop uplink on March 31, 2011.

Change to GE-23, but GE-23 can not cover NTSC,

Now NTSC 01 stopped work

frequencies: Ku-band

modem: NICT modem

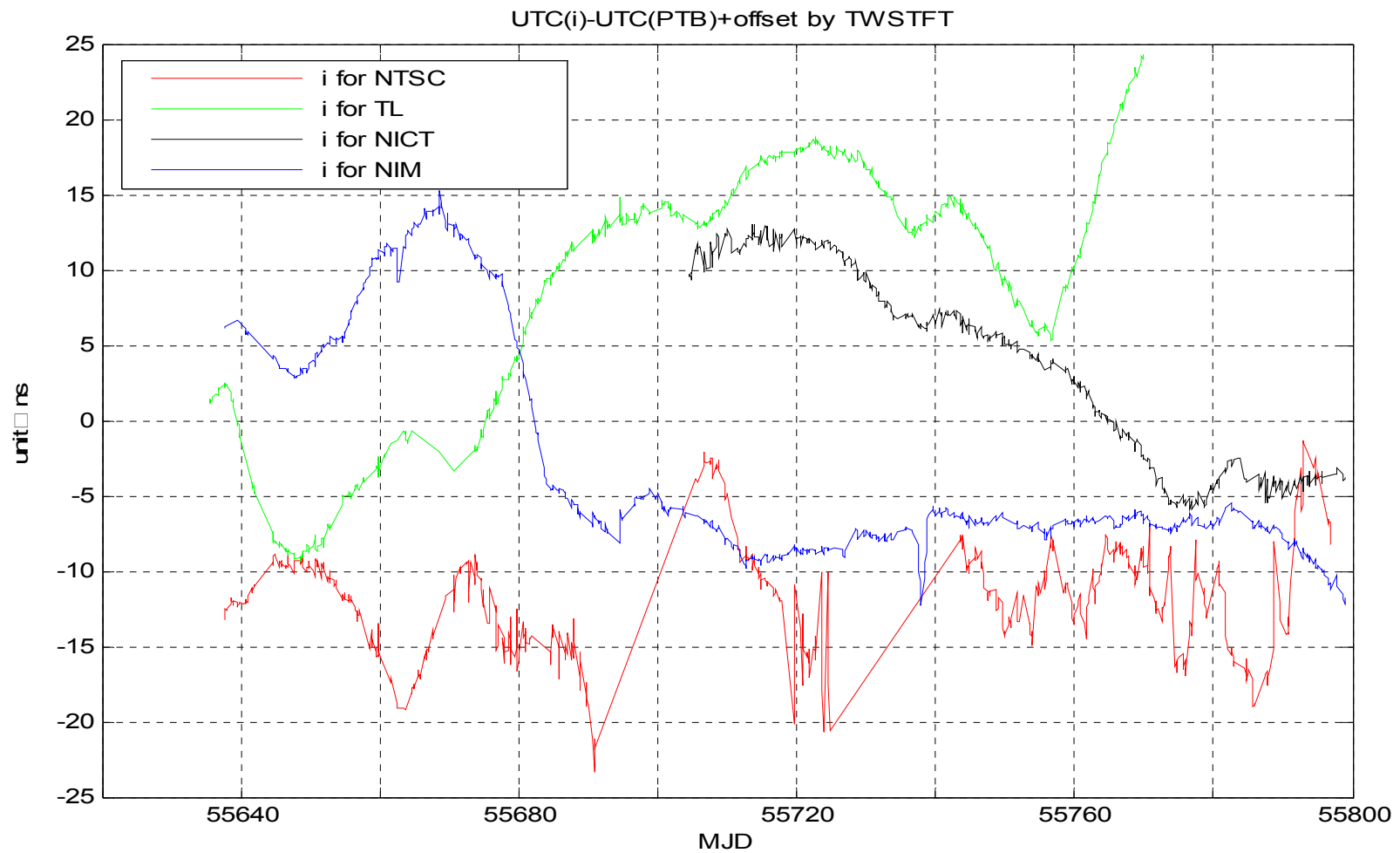
In future, we hope to join Asia-Asia TWSTFT links  
again

# NTSC 02 Asia–Europe TWSTFT links equipment

- *Antenna: 2.4 meters*
- *Satellite AM2, finished AM2 UAT on 12 Nov.,2010*
- *Now, it works regularly*
- *TimeTech SATRE modem with 3 channels*
- *Up and Down converter : Comtech Company*
- *Links with PTB, and Asia stations,time-sharing every hour*

*In NTSC 02, we have changed the band-pass filter with LNA, the old one interdicted the down frequency of AM2, only can pass IS4 or IS8(it is normal standard specification for Chinese antenna) the new one can pass down frequency of AM2.*





The Time difference between UTC(PTB) and UTC(Lab(i)) by TWSTFT via AM2

# ***NTSC 03 Link***

- ***Chinese satellite***
- ***only for domestic with C band***
- ***Improving antenna to automatic tracking , In order to adapt small angle satellite***

# Thank you

- National Time Service Center, the Chinese Academy of Sciences

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