

Original Paper

Research on Time Keeping at NIM

Aimin Zhang¹ , Yuan Gao¹, Kun Liang¹, Zhiqiang Yang¹, Weibo Wang¹, Dayu Ning¹, Kejia Zhao¹, Yue Zhang¹, Yan Huang², Han Zhang² and Xiaoxun Gao¹

(1) National Institute of Metrology, No. 18, Beisanhuan Dong Lu, Beijing, China

(2) Beijing Institute of Metrology, Beijing, China

 **Aimin Zhang**

Email: zhangam@nim.ac.cn

Received: 3 January 2012 **Accepted:** 28 February 2012 **Published online:** 18 April 2012

Abstract

UTC(NIM), which is developed and maintained by NIM, is the time and frequency primary standard in China. UTC(NIM) is generated originally by a clock ensemble, and is traced to UTC by participating in TAI cooperation with GNSS time and frequency transfer methods. TWSTFT earth station has been established at NIM new campus to join the Europe–Asia link. In this paper, the new development on the realization of UTC(NIM), the GNSS time and frequency transfer and TWSTFT and our briefly future plan are introduced.

Keywords

Time keeping – TA(NIM) – UTC(NIM) – GNSS – TWSTFT