

Research on Methods for Properties Evaluation of the Bei Dou Real Time Product

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Abstract [U+FF1A] At present, the Bei Dou wide area differential positioning is a cutting-edge issues for application of satellite navigation system, which can provide sub-meter even cm level precision real-time positioning, and the comprehensive evaluation of the products is critical for users. In this paper, a Bei Dou real-time product evaluation scheme is designed, based on the precision orbit, clock, and ionospheric product of the Bei Dou wide area differential system. The scheme solved the key problems for Bei Dou real-time product quantitative evaluation, and realized the automatic monitoring for the product continuity, timeliness, effectiveness and real-time positioning, as well as the automatic post analysis of the product accuracy. The paper provided quantitative reference index of real-time product properties for the Bei Dou wide area differential users.

Keywords: Bei Dou products properties; Index design; real-time monitoring; Accuracy analysis