SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)

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ANALYSIS AND RESEARCH OF COMPASS SYSTEM NAVIGATION SIGNAL QUALITY

Abstract

With the upgrade of the existing global satellite navigation system and fast construction of the new generation navigation system, the innovation of the navigation signal system has already entered a stage of fast developing. The quality of satellite signals directly impacts the performance of satellite navigation system. Navigation signal quality analysis and research are effective methods to ensure the navigation performance. Therefore, it is of great theoretical and application significance to research the methods for signal quality evaluation. This paper introduced the signal quality assessment parameters and the measurement methods, discussed the power spectrum density, eye diagram, constellation, correlation loss and s-curve bias of COMPASS system navigation signals. Conclusion could be drawn through the comparisons of the test results and ideal values.