

Development of Digital ATC for Shinkansen using Non-insulated Track Circuit

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We have been developing digital ATC for Shinkansen using non-insulated track circuit. To adapt this system to the northern snowy area of Japan, we calculated characteristic of track circuit by computer simulations. We made the ground equipment of this system experimentally according to the results of the simulations, and tested the equipment on the commercial line. In this paper, we introduce the outline of this system and report the result of the tests.