Development on the Evaluation Method of Track Support Stiffness of the Ballasted Track

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In the maintenance work of the ballasted tracks, track irregularity is measured just after the repair to manage the finished state. Although the method of mechanically evaluating the supporting state of track has not been sufficiently studied, high quality of the finished state can be expected by managing the track support stiffness. In this report, we investigated the relationship between track support stiffness and track irregularity by field test using handy-type FWD and confirmed that the correlation can be obtained between the track support stiffness immediately after track maintenance and track irregularity progress after track maintenance. In addition, we have developed a device (RFWD) that enable us to perform measurement of the track support stiffness easily and quickly.