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A METHOD OF NETWORK DATA TRANSFER FROM SPACE TO GROUND BASED ON DYNAMIC FLOW CONTROL

Abstract

Abstract: This paper analyzes the key part to affect the transmission efficiency from space to ground. According to the channel characteristic, a data transmission method based on dynamic flow control is proposed, aiming at the network platform from space to ground. Dynamic flow control network protocol is applied between network terminal and gateway. Gateway adjusts transmission speed dynamically according to the memory area, and insures that the memory area is in the appropriate range. By this way the utilization achieves at a hundred percent. From the simulation result by OPNET, this method is proved.

Keywords: Dynamic flow control; Data transmission; Network platform from space to ground; OPNET