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MISSION DESIGN OVERVIEW FOR PROBE SYSTEM OF CHINA MARS EXPLORATION

Abstract

Mars exploration has its unique scientific value and more difficult technology level. China plans to implement mars exploration on 2020. In the mission, there are an orbiter, lander and rover. The Martian global orbiting exploration and the fine region rover exploration will be carried out. This paper is an overview of probe system of china's first Mars exploration mission. In the paper, the technical difficulties and solutions involved have been introduced, focusing on the EDL(Entry, Descent, and Landing) process, the communication mode and the main design details of the rover, etc.