

Transmission of Signals Between Earth and Mars

Sir Hrishi Mukherjee I

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1 Introduction

This document presents a table illustrating the transmission of signals between Earth and Mars, considering both proper time and relative time.

2 Signal Transmission Table

Event	Earth Time	Mars Time (Relative to Earth)
Signal Sent from Earth	12:00 PM	12:10 PM
Signal Received on Mars	12:10 PM	12:10 PM
Response Sent from Mars	12:10 PM	12:20 PM
Response Received on Earth	12:20 PM	12:20 PM
Signal Sent from Earth	12:20 PM	12:30 PM
Signal Received on Mars	12:30 PM	12:30 PM
Response Sent from Mars	12:30 PM	12:40 PM
Response Received on Earth	12:40 PM	12:40 PM
Signal Sent from Earth	12:40 PM	12:50 PM
Signal Received on Mars	12:50 PM	12:50 PM
Response Sent from Mars	12:50 PM	1:00 PM
Response Received on Earth	1:00 PM	1:00 PM

Table 1: Transmission of signals between Earth and Mars

In this table, the events represent the sending and receiving of signals and responses between Earth and Mars. The Mars time is calculated by adding the time delay $\Delta t = 10$ minutes to the Earth time for events occurring on Mars.