Deep-space exploration is the branch of astronomy, astronautics, and space technology that is involved with exploring the distant regions of outer space. However, little consensus has been reached on the meaning of "distant" regions. In some contexts, it is used to refer to interstellar space. The International Telecommunication Union defines deep space to start at a distance of 2 million km (1.2 million mi) (about 0.01 AU) from Earth's surface. NASA's Deep Space Network has variously used criteria of 16,000–32,000 km (9,900–19,900 mi) from Earth. Physical exploration of space is conducted both by human spaceflights (deep-space astronautics) and by robotic spacecraft.[1]

In the present book, nine typical literatures about deep-space exploration published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on deep-space exploration. We hope this book can demonstrate advances in deep-space exploration as well as give references to the researchers, students and other related people.

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[1] https://en.wikipedia.org/wiki/Deep_space_exploration