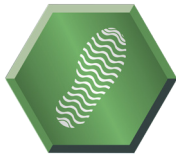


Goal 7: Heritage Protection



Ensure the preservation of heritage sites on the Moon.

Goal 7 seeks to preserve the natural, cultural, and scientific heritage of the Moon, with associated targets and drivers listed in Table 4.8. The natural heritage comprises all-natural features of the lunar surface. The cultural heritage entails the Moon's societal significance and the space objects that were sent to the lunar surface. Areas of scientific interest are mostly natural sites but can also be areas with unique characteristics such as the Shielded Zone of the Moon (SZM). Protecting this heritage could be achieved through the mapping, identification, and recognition of relevant sites. The establishment of guidelines for their preservation could later be applied to other celestial bodies.

- Starting in 1959 with Luna 2, there have been over 25 missions that have landed on the lunar surface. The remnants of these missions can be considered heritage sites due to their historical and cultural value. The localization of these missions is shown in Figure 4.7 (For All Moonkind, 2018).
- In 1972, the member states of the United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted the World Heritage Convention, which supports the identification, protection, and preservation of natural and cultural heritage for its presentation and transmission to future generations.
- To include the Moon heritage sites in the convention, organizations such as “For All Moonkind” have been working to include lunar mission landing sites. In January 2018, a draft resolution with a program concept to identify heritage sites in space was submitted to the Peaceful Uses of Outer Space Science and Technology Subcommittee of the United Nations for consideration. The subcommittee did not reach an agreement, leaving the issue on hold (Hanlon, 2018).
- There are areas of the Moon internationally recognized for their scientific interest, such as the SZM, shown in Figure 4.8. This radio silent zone could be of great benefit for radio astronomy, as described in Section 2.3.1. For this reason, the International Telecommunications Union (ITU) therefore limited the use of active communications in this area (ITU-R, 2003).

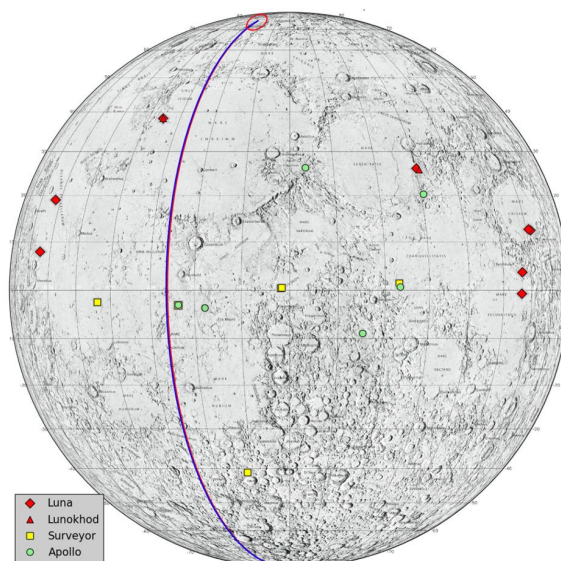


Figure 4.7. Lunar heritage sites (NASA/JPL-Caltech, 2013)

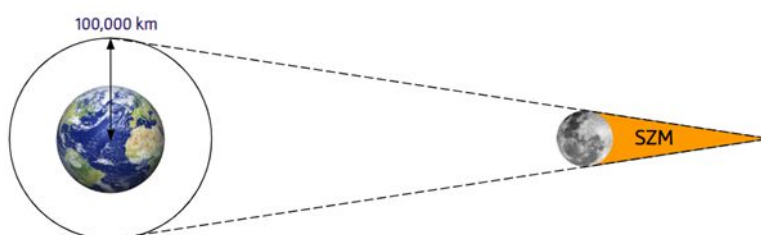


Figure 4.8. Illustration of the Shielded Zone of the Moon, protected from Earth interferences (ITU-R, 2003)

Table 4.8. Targets and drivers for Goal 7: Heritage Protection

| Targets | | Drivers |
|---|------|--|
| 7.1 Preservation of natural and cultural heritage sites on the Moon. | 7.11 | Ensure the preservation of cultural heritage sites on the Moon such as the Apollo, Luna, Surveyor and Chang'e-3 mission landing sites. |
| | 7.12 | Ensure the protection of natural heritage sites on the Moon such as its landscape, splash craters, maria and selenological development milestones. |
| | 7.13 | Promote cooperation between lunar actors to establish guidelines for the protection and classification of sites of scientific interest. |
| | 7.14 | Undertake the mapping identification, recognition, and establishment of procedures acknowledging internationally endorsed sites of cultural, natural and scientific interest with the support of the UNESCO World Heritage Center. |