



Association of Lunar & Planetary Observers

Lunar Topographical Studies Section

Coordinator – Wayne Bailey

Bright Lunar Rays Project: Objectives

In addition to basic mapping of the location, size, and extent of lunar rays there are many things yet to be learned about them. It is the aim of the project to answer the following questions:

DISTRIBUTION OF RAYS:

- Do rays occur mainly in the highlands or marial areas?
- Do rayed craters form any noticeable groups or clusters?
- Are there indications that any of the rays emanate from the Moon's far side?

RAY STRUCTURE:

- Are the rays distributed evenly around their parent crater?
- If rays emanate from a crater do they start from its center, edge, or some way from the rim?
- What is the start and end point of individual rays and ray systems?

APPEARANCE OF RAYS:

- How does the brightness and/or color of a ray change during the lunation?
- Are there brightness and/or color differences between one ray system and another?
- Do the brightness and/or color of a ray change over its length?
- When do individual rays or ray systems first become visible at sunrise or are lost at sunset?
- Are craters always brighter than their rays or do any of the rays exceed the brightness of the parent crater?
- Does the appearance of the ray change with the use of color or polarizing filters?
- Are rays consistently brightest at Full Moon, when the sun is overhead at their location, or at any other time during a lunation?

INTERACTION OF RAYS WITH LOCAL FEATURES:

- Do rays appear to be deflected, interrupted, or obscured by surface features?
- Do the rays of different systems overlap?
- Is there any sign of disruption where systems overlap?
- Is it possible to determine which system is younger?
- Are there local features which mimic rays (rilles, ridges, crater chains, etc.)?
- When a ray is not visible, is there evidence of its presence on the lunar surface?

For additional information about the Bright Lunar Rays Project and how you may participate, contact the Coordinator, Wayne Bailey at – wayne.bailey@alpo-astronomy.org.