

Summary

On May 28, 2025, the moon is predicted to be easily visible across most cities in Pakistan. This assessment is based on consistent factors including a high altitude of approximately 19.0° , a 3.3% illumination, a young Moon age of 35 hours and 35 minutes, and a visibility criterion of 'A' (indicating easy visibility). Cities like Dir, Gilgit, Islamabad, Jiwani, Karachi, Lahore, Mansehra, Multan, Muzaffarabad, Peshawar, Quetta, and Swabi all share these favorable visibility conditions at their respective observation times around sunset.

Key Findings

- **High Visibility:** The moon is generally expected to be easily visible throughout Pakistan on May 28, 2025.
- **Consistent Parameters:** Key indicators such as altitude, illumination, and visibility criterion are consistently favorable across different cities.
- **Visibility Criterion 'A':** The 'A' visibility criterion serves as a primary indicator of easy visibility in all analyzed locations.

Differences in Moon Visibility Parameters of Given Cities

While the overall moon visibility is expected to be high across Pakistan on May 28, 2025, minor differences exist in the observation times and altitude. For example, Jiwani has observation time 19:37 while Lahore has 19:00. The other parameters like illumination is 3.3%, a moon altitude of 19.0° , a young Moon age (35 hours and 35 minutes) and the 'A' visibility criterion are same. These differences are not significant enough to impact the overall easy visibility prediction.

Key Factors Affecting Moon Visibility

- **Altitude:** A high moon altitude (around 19.0°) positions the moon well above the horizon, making it easier to spot.
- **Illumination:** A relatively high illumination (3.3%) for a young moon enhances its brightness and visibility.
- **Visibility Criterion:** The 'A' visibility criterion is a direct indicator of easy visibility conditions.
- **Moon Age:** A young moon age (35 hours and 35 minutes) is favorable as the moon has moved away from the sun, and its crescent is becoming more defined.

Conclusion

Based on the provided data, the moon visibility for the potential determination of the Islamic month of Zul-Hijjah 1446 is expected to be high in Pakistan on May 28, 2025.