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AN OVERVIEW OF THE SOLAR CELL SPACE CALIBRATION TECHNIQUE AND STANDARD

**Abstract**

Abstract: Gross power of solar panels used on spacecrafts is increasing rapidly. Meanwhile, new types of solar cells, such as multi-junction GaAs solar cells, have been widely utilized in spacecrafts. Traditional ground-based methods such as sunlight simulator and differential spectral methods and upper air methods such as balloon and airplane are no longer effective for the calibration of new types of solar cells. New calibration methods with higher accuracy are required to fulfill such tasks. Main western space agencies have already established technique systems for upper air calibration methods while their Chinese peers still in the exploration stage. The paper tries to summarize different calibration methods and standards for solar cells, aiming to provide references for the development of Chinese instruments and techniques in solar cell calibration.