Russian Lunar Landers Luna-25 and Lna-27: goals of the missions and scientific investigations at Moon Polar Regions

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Scientific goals, current status and nearest plans for Russian Landers missions with Luna-25 (project Luna-Glob) and Luna-27 (project Luna-Resource) will be presented. Both projects aimed on search for volatiles and water ice in upper layer of regolith, study structure and content of regolith and investigate of Moon's near-surface dust and plasma exosphere at lunar polar regions.

The scientific experiments which were selected in accordance to the main goals of these missions, will be described. Main and spare landing sites for Luna-25 will be presented selected on the base both of engineering suitability (flatness and roughness of surface, radio visibility, solar irradiation and so on) and of scientific motivation. Criteria for landing sites selection for Luna-27 will be described shortly too. The plan of surface operations during the first lunar days for Luna-25 and Luna-27 will be presented and discussed.

The content of international cooperation for Luna-25 and Luna-27 missions will be described.

It will be shown that Luna-25 and Luna-27 shell provide the necessary scientific and technological ground for future long life-time Landers at the Moon polar regions.