



## **The building of the catalogue of a craters lunar libration zone**

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The libration zone of the Moon represents rather unknown region. Nowadays there is a large heliometric and photometric observational series and occultations for measuring of a profiles lunar marginal zone . It is known Watts's maps are more correctly (Watts G.B., 1963). However, the coordination system of this map is not coincide with fundamental star's system, therefore the maps of lunar marginal zone "Kazan" has been create in Engelhardt Astronomical Observatory (EAO). In contrast to other previ-ous maps, which were created in a practice, the physical surface within maps "Kazan" (Rachimov L.I., 1992) is treated to the fundamental sky's coordination system, to ephemeris center of the moon masses and main axis of inertia. So, the method of creating of the selenodesic catalogue for the objects in libration zone consists of the main steps: reduction of the Watts's maps with Morrison's correction (Morrison L.V., 1979) to the map's system "Kazan"; authentication of craters on a marginal zone's map with the Total moon map (Lipsky Yu.N., 1979), created by SAI MSU and Survey service of USSR under the guidance of Lipsky, and their reduction to the coordination system of Watts's maps accor-dance with the maps "Kazan". The selenocentric net of the libration moon's zone was obtained by EAO. This catalogue will be used to attach the seleno-centric dates of the lunar far side to the selenodesic catalogue system KSK -1162. The reference selenocentric network is created now, which contains the co-ordinates of 48 objects of the lunar libration zone. This networks is widely - spread relative the Moon limb, and it is built in the center of mass system of the Moon. It is necessary to note the investigations in this direction is continued now.