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RUSSIA'S CONTRIBUTION TO REGIONAL GEOLOGIC MAPPING OF VENUS: 1992 PROGRESS REPORT; G.A.Burba, N.N.Bobina, V.P.Shashkina, Vernadsky Institute, Moscow, 117975, Russia

26 sheets of geologic map in Magellan C1-formate were produced by 6 geologists and 3 cartographers in Russia during 1992. 45 more sheets are in progress. The work is coordinated by Vernadsky Institute.

The Magellan SAR images in form of C1-formate photomaps were used as a base for geologic-geomorphic regional mapping of Venus at ~1:8,000,000 scale. This work took place in Russia at Vernadsky Institute and at the Department of Geology, Lomonosov Moscow University. The work is going on since January 1992 after the initiative of Magellan Project Scientist Dr.R.S.Saunders. The aim is to produce a preliminary geologic survey of Venus with the new high resolution images obtained by Magellan. The coordination of Russia's efforts is under responsibility of this abstract authors. It took place at the cartografic division, Laboratory of comparative planetology and meteoritics, Vernadsky Institute, Russsia's Academy of Sciences.

By this time six geologists are involved in the project. Four of them are from Vernadsky Institute (VI), and two - from Moscow University (MU). By December 1992 there are 26 sheets compiled and 19 sheets more are in progress. So far 45 C1-formate. geologic map sheets are planning to be produced in Russia (there are 181 C1-formate sheets to cover the whole surface of Venus). The number of sheets to be produced could be increased.

The listing of C1 sheets by the authors is given here. Both compiled sheets and those in progress (in parenthesis) are shown. The numbers before the authors' name are the same as inside the circles on fig.1 (see next page) to label the blocks of sheets.

- 75N164, 75N254, 60N180, 60N208, 60N236. 1. V.P.Kryuchkov (VI)
- 2. A.A. Pronin (VI) - 75N299, 75N338, 60N319, 60N348.
- 3. I.V.Shalimov 75N254, 60N263, 45N244, 45N265, 30N243, (MU) (30N261, 15N232, 15N249, 15N266).
- 4. E.N.Slyuta 15N180, 00N180, 15S180. (VI) -
- 5. A.M.Nikishin 30N279, 15N197, 15N283, 00N283, (30N171, (MU) 30N189, 30N297, 15N215, 15N300, 00N197, OON215, OON300, OON317, OON352, 15S197, 15S215, 15S283, 15S300, 15S317).
- 6. M.A. Ivanov 15S009, 15S335, 15S352, 30S009, 30S351. (VI)

The maps exist now in individual author's legends. They should come through the cartographic editing to be incorporated together into the continuous map. Their legends should became one common legend. All authors have used morphology as the main principle of

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their legends: terrain types and structures of geologic significance are shown on the maps. In some cases different authors follow different ways to show the structures of the same type. Most of the authors have outlined coronae only within the ring of topographically high ridges. But one of the authors (MAI) consider coronae and lava flows going outwards from coronae as the same unit. Two of the authors have shown age consequency of terrain types in the legends. Such way is considering to make the maps more meaningful. It resembles more or less the usual terrestrial geologic maps, based on stratigraphic principle. Accompaining abstracts in this volume present short descriptions of legends and/or geologic setting for some sheets (1-3).

References: 1. A.M.Nikishin, N.N.Bobina, V.K.Borozdin, G.A.Burba (1993). Beta Regio rift system ...(This vol.). 2. A.M.Nikishin, V.K.Borozdin, N.N.Bobina, G.A.Burba (1993). Beta Regio - Phoebe Regio ...(This vol.). 3. A.M.Nikishin, G.A.Burba(1993). Geologic mapping of Northern Atla Regio ... (This vol.).

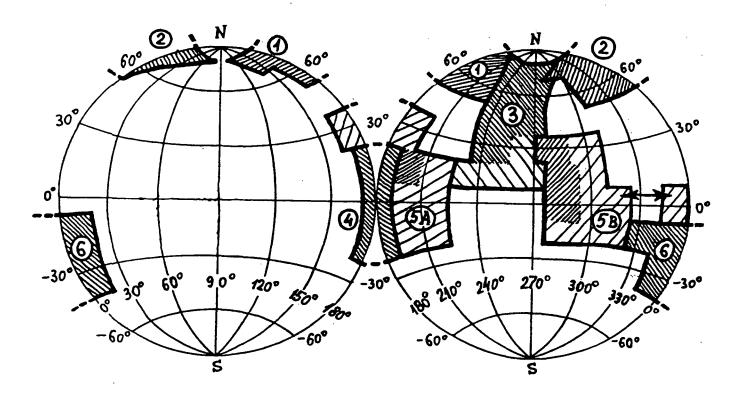


Fig. 1. Locator map of C1 sheets under consideration

Close lineation - compiled geologic maps Sparse lineation - geologic maps in progress

Numbers of the blocks of map sheets (encircled) are the same as in the list of authors on the preceding page