

HEAVY PRIMARY SPECTRA OBSERVED BY RUNJOB

T.M. Roganova (1), A.V. Apanasenko (4), V.A.Derbina (5), M. Fujii (1), M. Hareyama (2), M. Higashida (3), Y. Horiuchi (2), V.I.Galkin (5), M. Ichimura (3), N. Inoue (2), E. Kamioka (8), T. Kobayashi (2), V.V. Kopenkin (5), I. Kudo (3), S. Kuramata (3), A.K. Managadze (5), H. Matsutani (3), N.P. Misnikova (4), R.A. Muhamedshin (6), H.Nanjo (3), S.N. Nazarov (5), S.I. Nikolsky (4), M. Nishiura (3), V.I. Osedlo (5), D.S. Osheuev (5), P.A. Publichenko (5), I.V. Rakobolskaya (5), T.M. Roganova (5), G.P. Sazhina (5), T. Shibata (2), V.A. Suhadolskaya (5), L.G. Sveshnikova (5), H. Umino (3), I.V. Yashin (5), E.A. Zamchalova (5), G.T. Zatsepin (6) and I.S. Zayarnaya (4)

(1) D.V.Skobeltsyn Institute of Nuclear Physics of Moscow State University, Moscow 119899, Russia, (1) Aomori University, Aomori 030-0943, Japan, (2) Aoyama Gakuin University 157-8572, Japan, (3) Hirosaki University 036-8561, Japan, (4) P.N. Lebedev Physical Institute 117924, Russia, (5) Moscow State University 119899, Russia, (6) Institute for Nuclear Research 117312, Russia, (7) Institute of Space and Astronautical Science 229-8510, Japan, (8) National Institute of Informatics 101-8430, Japan, (9) Shonan Institute of Technology 251-8511, Japan, (10) Urawa College 337-0974, Japan.

rgn@dec1.sinp.msu.ru/Fax: +7 095 939 35 53

RUssian Nippon JOint Balloon (RUNJOB) has been observing the primary spectra of cosmic ray nuclei since 1995. Data from 6 out of 10 succesful flights will be used to report the spectra of heavy primaries up to iron nucleus with the energy range more than 10^{14} eV/particle.

The details of analysis like charge and energy determinations will be also given.