

Ecuador Energies

Konstantin Korotkov, Christian Bordes

In August 2013 during Ecuadorian expedition we had a chance to measure energy in different places using two BioWell instruments with Sputnik sensor. Data were collected in different time of the day. As every morning we were travelling to new interesting places. We started our trip in Quito at the altitude 2600 m above sea level, and then in two weeks we traveled through all the country from North to the South reaching altitudes up to 5000 m. Our trip ended at Galapagos islands, at sea level. In parallel with Sputnik measurements practically every day we recorded the level of energy from 15 members of our expedition to monitor their level of health. Fig.1 presents the graph of energy in different days together with the graph of the altitudes where data were collected. Fig.2 presents the graph of standard deviation of the Bio-grams area.

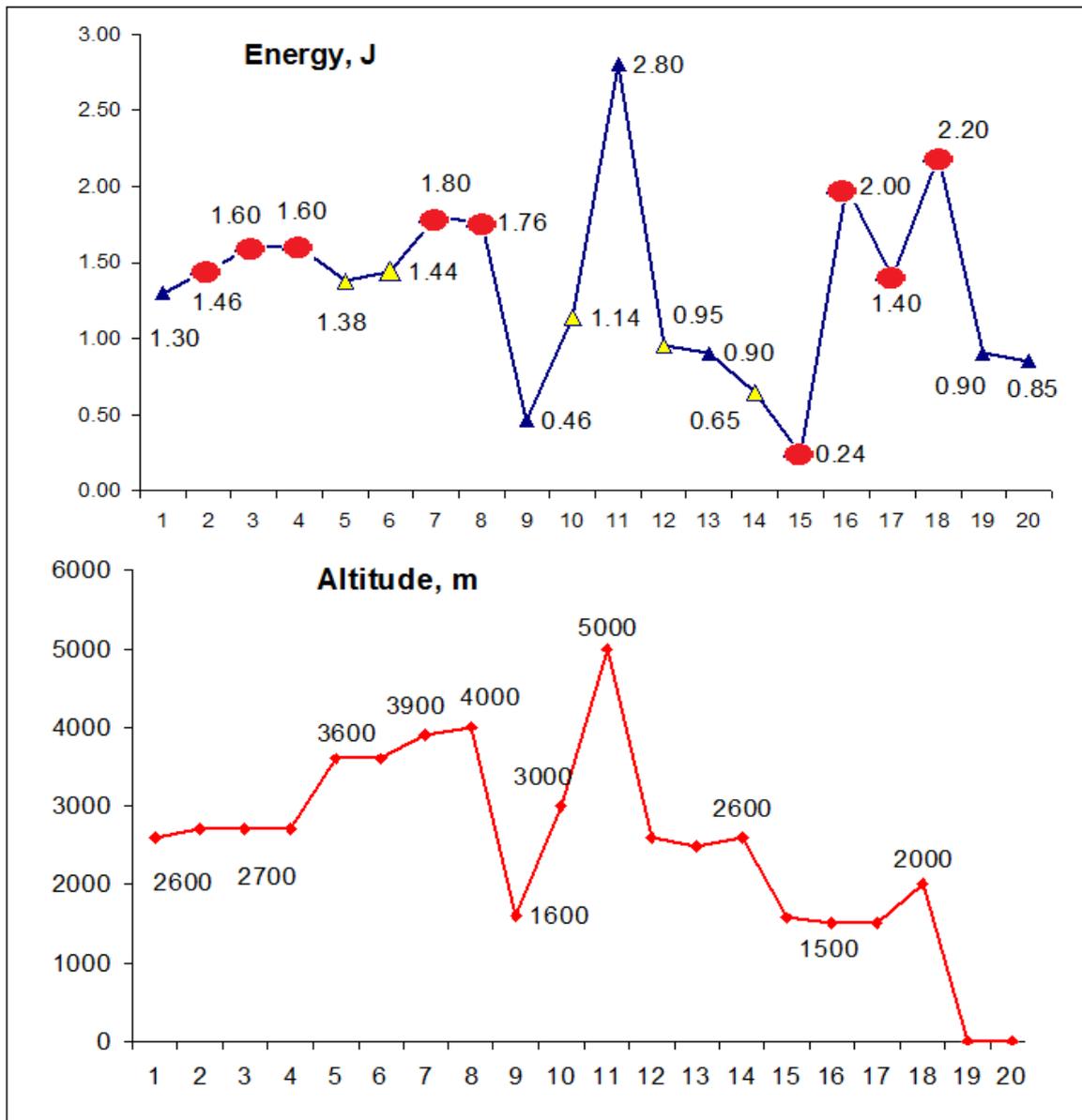


Fig.1. Energy measured in different days together with the graph of the altitudes where data were collected. By the red dots marked data collected in the same area. Numbers correspond to the following conditions:

No	Time of data collecting and a place	Energy, J	Altitude, m	Altitude, ft	Pressure, torr
1.	2013-08-01 15_45 Quito	1.30	2600	8500	553
2.	2013-08-02 13_49 00 Meridian	1.46	2700	8860	553
3.	2013-08-02 15_58 00 NORTH	1.60	2700	8860	553
4.	2013-08-02 16_25 00 Meridian South	1.60	2700	8860	553
5.	2013-08-04 18_58 Cotopaxi night	1.38	3600	11800	495
6.	2013-08-05 07_02 Cotopaxi morning	1.44	3600	11800	495
7.	2013-08-06 10_52 Quilotoa lake	1.80	3900	12800	478
8.	2013-08-06 12_33 Quilotoa lake restaurant	1.76	4000	13100	472
9.	2013-08-07 14_19 rio Berde	0.46	1600	5250	632
10.	2013-08-08 13_55 Pueblo	1.14	3000	9850	534
11.	2013-08-08 12_32 GLACIER	2.80	5000	16400	417
12.	2013-08-09 12_07 on the way	0.95	2600	8500	559
13.	2013-08-11 05_22 Cuenca	0.90	2480	8200	559
14.	2013-08-11 13_07 Saraguro	0.65	2600	8500	563
15.	2013-08-12 09_19 Vilcobamba hotel	0.24	1575	5200	634
16.	2013-08-12 11_36 Vilcobamba PODOCARPUS PARK	2.00	1500	5000	634
17.	2013-08-12 15_58 Vilcobamba AGUA DE HIERO	1.40	1500	5000	634
18.	2013-08-13 10_50 Vilcobamba MANDANGO PICK	2.20	2000	6500	600
19.	2013-08-15 11_00 Galapagos TORTUGA BAY	0.90	00	00	760
20.	2013-08-18 15_00 Galapagos river	0.85	00	00	760

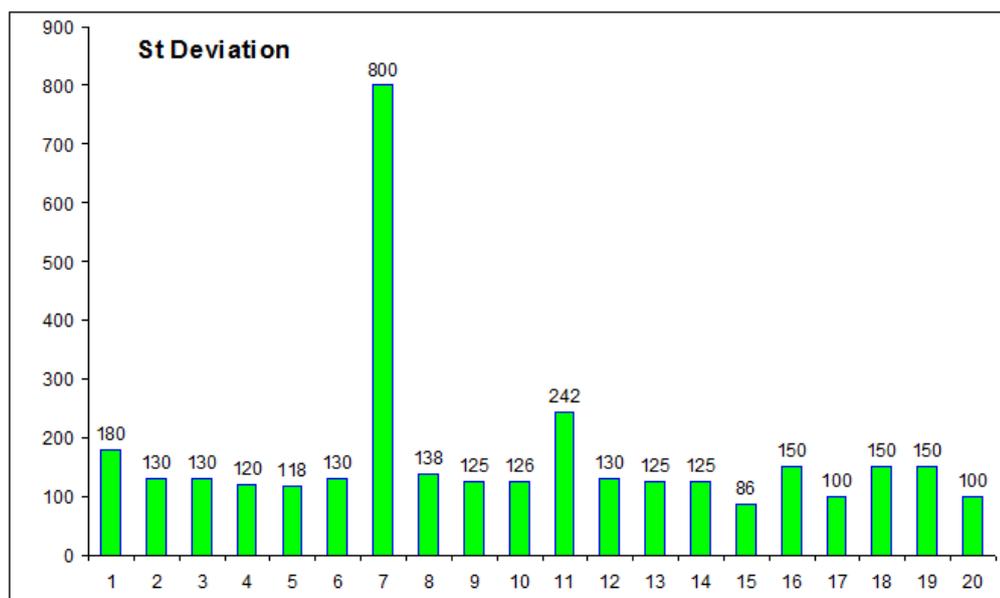


Fig.2. The graph of standard deviation of the Bio-grams area.

Discussion

As we see from the graphs of fig.1, the energy data well correlates with the altitudes. But if we check carefully, we see, that this correlation is quite conditional. Data of measurements at Zero meridian at the altitude 2700 m demonstrated higher values compared with subsequent measurements at the altitudes 3600, 3000 m and 2600 m. At the same time the highest readings were recorded at the altitudes 4000 m and 5000 m. It was important to understand whether it was related with the physical properties of the gaseous discharge, in particular, with dependence of the discharge ignition potential “U” from the atmospheric pressure. This dependence is defined by so named Paschen curve which demonstrate dependence of “U” from the gas pressure “p” and electrode size “d”. Paschen curve for the air is presented at fig.3. As we see from this graph for the range of atmospheric pressure under investigation (417 – 550 - 760 mm.Hg) the change of

the potential “U” is not big, though this factor plays particular role in the development of the discharge. So we may conclude that acquired data really represent the values of energy in the different measured areas. It is important to mention, that the energy values well correlated with physiological condition of the majority of the group.

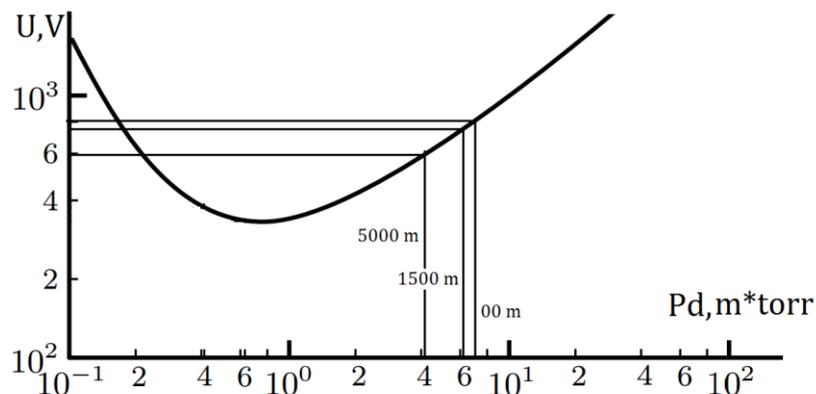


Fig. 3. Paschen curve for the air.

From the analysis of data of fig.1 and 2 we can make the following conclusions:

1. The highest energy was measured at the slopes of **Chimborazo volcano** at the altitude 5000 m (16400 ft), in the crater of the **Quilotoa volcano** at the altitude 4000 m (13100 ft) and in the **Vilcabamba** valley at the altitude 1500 - 2000 m (5000 - 6500 ft) (points 7,8,11, and 15 at the graph).
2. Energy values at Zero meridian at the altitude 2700 m demonstrated higher values compared with subsequent measurements at the higher altitudes, which may tell about particular energy condition of this place (points 3 and 4).
3. Parallel measurements with two BioWell devices on North and South sides from Zero meridian demonstrated practically equal results.
4. In the Vilcabamba valley the energy readings in the hotel were quite low (0.24 J – point 15 at the graph), while measurements at the summit of **Mandago** mountain (2028 m – 6500 ft) demonstrated high values of energy (point 18). This mountain is considered high energy place by the local people. Practically same values were recorded in the Podocarpus National Park (point 16), and some lower values nearby the spring **Agua de Hiero** (point 17) either well respected by the locals. These data support the idea that Vilcabamba valley has beneficial for life conditions which contribute to longevity.
5. At Galapagos islands two measurements were performed at the see level, the values of energy corresponded to the data acquired at the altitudes 2500-2600 m. These readings contribute to the idea that volcanic islands have strong energy due to the joint activity of terra and ocean.
6. Data variability (fig.2) almost everywhere was low – at the level 2-3%. Exception was the readings in in the crater of the **Quilotoa volcano** nearby the lake, where it was quite cold and very windy.

It is interesting to compare these data with human measurements.