

2251 Mohala Way
Honolulu 14, T.H.

Dear Grotz:-

Thanks for your two letters of the past month. The difference you find between the Kolo Kolo and saddle instruments is very interesting, but I can't give any definite explanation for it. I shouldn't think there should be that much difference between stations so close, unless the saddle instrument is in some way shielded from the wind so that it lies in a pocket of air which heats up much more than the air over the peak. The pressure of course is nothing more than the weight of the air column extending to the top of the atmosphere. I should certainly think that ~~the~~ above several hundred feet above the ground, the air columns above the two instruments must be the same. So if the differences in amplitude are real, it must result from differences in weight of the air very near the ground, and this would require very ~~much~~ great difference in the daily temperature cycles at the two stations. Have you noticed

any great differences in the temperature at the two sites? If not, then I can hardly see how the difference between the amplitudes at the two stations could be real. I would then suspect some sort of instrumental error, such as we found at station 83 in our project in 1954. The report I sent to you has a full discussion in the Appendix about our difficulties with the instrument at station 83, and this might give you some ideas.

I shall be very interested in seeing your harmonic diads when they are completed.

I have finished up my work at the U. of Wash, and we just arrived in Honolulu for a short visit with my wife's family. We'll be here until about August 18, but as of now it doesn't look like we'll be able to get to Maui, unfortunately.

I didn't have time to get copies made of the Kolo Kolo barograms for June ^{July} '54 before I left, but will get copies made ^{for you} when we get back.

Hope all is going well with you, and let me hear from you when you have a chance to write -

July 31, 1958

Best wishes,
Bob Pyle