

26th June 1958
General Delivery
Wailuku, Maui, Hawaii

Mr. Robert Pyle
6117 Radford Drive
Seattle 15, Washington

Dear Bob:

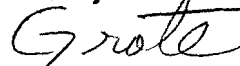
Many thanks for your good letter of 28th February plus the reprint which arrived about a month later. During my absence, two television stations were installed in the saddle between Kole Kole and Red Hill. One of these operates some apparatus for the W.B. The saddle station is about 100 ft. lower and 1000 ft east of Kole Kole. Since November we have duplicate barometric observations on similar instruments. All these have been analysed month by month. The Original intention was to see how much random scatter in the results are due to instrumental and scaling errors. The 24 and 12 hour harmonics are tabulated on the attached sheet. As you can see, the 12 hour component is much the same on both instruments. However the 24 hour component on the saddle instrument is consistently much larger in amplitude than the Kole Kole instrument. It seems to be real. Have you any idea how this can be?

In regard to the fourth paragraph of your letter, there are some errors in plotting the phase of the 6 hour and perhaps the 8 hour components. These are due to the ambiguity you mention. I am having my man examine all this data and try to bring it into better order.

I went over the remains at PRI and tried to find the missing microbarograph charts for period 7 June to 5 July 1954. No luck. The place is a shambles. A lot of good equipment is just being broken by ignorant and uninterested people, moving it around helter-skelter. Its a good thing that Mordy doesn't have to see whats being done to all his efforts. The Hygrothermograph charts for same period I picked up from Saul Price. He didn't have the microbarograph charts either. Perhaps you could have some prints made of your fotostats and send them out here to complete my file.

My work here will continue for several more months, so I may not be able to see you in Seattle. However, I would like to keep in touch with you. Please let me know what your next move is after the thesis is finished. I'll send you some more reprints in a few days.

Aloha,


Grote Reber

Year	Month	24 Hour		12 Hour	
		Phase Degrees Kole	Amplitude Thousandths Kole Instrument	Phase Degrees	Amplitude Thousandths
1957	November	26	4.0	180	15.0
	December	113	3.2	175	21.5
1958	January	10	2.2	176	20.9
	February	331	1.4	165	15.5
	March	210	2.6	164	21.4
	April	289	1.8	162	19.8

		Saddle	Instrument		
1957	November	341	10.2	182	18.2
	December	347	7.2	182	20.9
1958	January	321	9.4	172	21.2
	February	327	9.4	162	17.1
	March	288	8.5	167	22.0
	April	322	11.0	168	23.0

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We have been using the method of analysis described by Conrad. The individual components come out separately and independently as a phase angle and an amplitude. My understanding is that the phase angle tells where the positive maximum is. This phase angle goes from 0° at MN, thru 180° at N to 360° at MN with 90° at 6A and 270° at 6P.

In the case of the 24hr and 12hr components, it is impossible to make a mistake. However on the 8hr and 6hr components, the phase angle often comes out between 90° and 270° . Just why it should come out there when the first positive maximum occurs near 0° seems a mystery. It is not clear at what place one full cycle (120° for 8hr and 90° for 6hr) should be subtracted, from the computed values. Perhaps you could look in Conrad and see what he says about this.

G.R.