

6th September 1958
General Delivery
Wailuku, Maui, Hawaii

Dear Bob:

This continues my letter of 11th of August. The cause of the abnormally large 24 hour component in the saddle instrument is quite simple. This instrument is housed in the transmitter room of KMVI-TV. The operating hours are 1pm to MN approximately. The transmitter is air cooled by a blower system which reduces the building pressure when in operation. This blower can maintain about $1/30''$ of water across an open door. Consequently, the pressure is high during the AM and low during the PM hours. The effect also finds its way into the 8 hour component which is about 16% greater amplitude than the Kole Kole instrument. Due to the above circumstance, all the saddle instrument data is quite dubious up to 1st September 1958. I have recently had this microbarograph moved outside into a weather shelter, so it should be OK from now on.

We have completely reworked all the February data from scaling the charts onward. The result is the same as before. February 12 hour amplitude really is low. It is also low on the saddle instrument by the same amount approximately. The above blower difficulty doesn't seem to affect the saddle instrument 12 hour amplitude much because of the symmetrical disposition about noon and midnight.

The 6 hour component of the saddle instrument gives entirely random phase compared to Kole Kole. The average amplitude over 10 months is 0.95 times as great on saddle instrument as compared to Kole Kole. This confirms that the 6 hour component is really just random scaling errors. Also it gives some confidence that the whole analysis is sound.

I have been looking in what bits of literature are available here for a discussion of the 8 hour component. The printed information is close to zero. I'd much like to secure some good references, particularly some which show a harmonic dial that somebody else has worked out to compare it with my Kole Kole dial.

In a couple of weeks I leave for a new job. After about October 15th my address will be

Grote Reber
National Radio Astronomy Observatory
P.O. Box 2
Green Bank, West Virginia

If the fotostats of microbarograph charts don't get here before September 26th, please send them to Green Bank. I hope to keep in touch with you from time to time.

Aloha,

Grote
Grote Reber