IV CENTENARIO DELLA NASCITA DI GALILEO Giornate Galileiane 8-21 settembre 1964

Arcetri-FIRENZE(621) June 7,1965

Dr. Grote Reber C.S.I.R.O.



Dear Dr. Reber,

", I receive with great pleasure your very interesting letter of May,31,from so far away and knowing well

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your important work on the radio-sun.

SULLE MACCHIE SOLARI most interesting to compare the minima FIRENZE, 9-12 settembre 1964 obtained by radio observations with the relative number of spots which in reality is a poor index of the sun activity. I see in the tables of the relative spots numbers (see for instance my book on the sun or similar ones) that in the last forty years the lowest minimum was in 1954, preceding the great maximum of 1957. But, as I said, relative numbers are a poor index. As a matter of fact here at the Arcetri Observatory has been proved, that the maximum 1957-59 has been not so much greater as the others, if you consider other phenomena of activity, for instance that of the flocculi.

I am always puzzled by the sup osed minimum of 1610,8 compared with the spots at that epoch and soon after by Galileo and others.What confidence can we give to the date 1610,8? I do not know. But you can have a better idea of the situation consulting: WALDMEIER-The sun spot activity in the years 1610-1960 - Zurich,1961 and "The Sunspot Cycle 649 B.C. to 2000 A.D."by J.Schove -Journal Geophysical Research - Vol.60- June 1955,pg.127. For the relative numbers certainly reliable data do not go beyond 1749. The sun is very capricious and although many attempts have been made in order to forecast the rate of the next

cycles with armonic combination of various periods ,nothing is reliable. In my opinion in any case you should develop your

equipment as the comparison of the radio sun with the optical one, is and will be always more interesting.

Probably you know that I am now retired; now the director of this Observatory is prof. G.Righini, who has enlarged its equipment with various radio telescopes exclusively for the observation of the sun. He is now coming back from the sun eclipse in the Pacific Ocean; certainly he will be glad to corresond with you on these matters.

With best regards

yours faithfully

(Giorgio Abetti) Cie vyie Abetti