

Redhill Observatory. Reigate

1858. Feb 7. 2

Dear Sir

I feel that I have been very negligent in not acknowledging before the receipt of two interesting letters from you during the last year, but until lately I have been very closely occupied and upon work which hardly allowed of my extending my correspondence. The belief that our friend Admiral Beanes was still a correspondent of yours allowed me also to hope that I might for a time defer writing to you. The contents of your letters were duly communicated to our Society, which highly appreciates your favours.

I have lately despatched to you copies, for your Observatory library and for yourself, of my Catalogue of 2725 Circumpolar Stars with 10 charts, which ought to reach you before

long by the booksellers' channels. I shall be

very glad, if I do not ask too much, to

receive from you in return a copy of your own
last volume of Observations, your Memorie del

nuovo Osservatorio del C. R., 1852-1855, containing

your physical observations of the sun in reference
to distillations of heat, researches with which

I desire to be better acquainted.

In writing today I wish to mention to you

that I have been very rigorously observing the
positions of the solar spots in the last 4 years,

taking every opportunity for the purpose which
my climate has afforded and which have not

been lost by absences from home, opportunities

which have averaged about 225 days a year.

My mode of observation* is exactly described in

No 5. Vol XIV of the R. A. S. Monthly Notices, and

my mode of reduction in No 6. Vol XV, with

a detailed specimen of reduction and examples

illustration of precision. This method of

* (which requires rather a large flat field & low power)

treatment I have applied to every observation without
flinching, and with great satisfaction as regards
its practical use, and I am now intending
but wish to discuss the data I have derived
from several points of view, but mainly with
reference to distribution in the body of the Sun, &
period of rotation of the centres of eruption, which
I at least suspect may be different to that of
the surface. Why I mention all this to you
is principally because I foresaw during this
year some interruption to my observations from
perhaps absence from home on foreign travel,
and an anxiety to provide against the
break in the series which may unavoidably
occur if I continued to be the only observer
of this sort. And I want to ask of you,
as having interested yourself in this inquiry,
Living in excellent climate, and a fixed
Observatory, and being well versed with the
important bearings of the subject in question

...and I have by way of a tentative suggestion, can
do me the great favour to try my method, &
inform me if your arrangements would permit
of your adding this class of observations to your
others, at least for a trial. According to
my method, the observations, thrice repeated,
consumes less than 12 minutes, exclusive
of a sketch of the forms of the spots, which requires
4 and 5 minutes more, so that coming in the
day, and being practicable at any reasonable
time of the middle of the day, it would not
probably be found very exacting. I should be
glad to hear about this from you at your
convenience, and will only now add one hint
which might not immediately strike you, namely
that if the spots are numerous, or peculiarly
situated, it is occasionally convenient to
draw the passages on the two sides separately
and alternately. Believe me to remain
with great respect

To Prof. Sechi

Yours faithfully
R. P. Carrington

Carrington R. P.