



CABLE ADDRESS "RESEARCH"

IN YOUR REPLY PLEASE QUOTE

FILE NO. 15-2-136

NATIONAL RESEARCH COUNCIL  
CANADA

RADIO AND ELECTRICAL  
ENGINEERING DIVISION

OTTAWA, 13 November, 1948

Mr. Grote Reber,  
P.O. Box 4868,  
Cleveland Park Station,  
WASHINGTON, D.C.

Dear Reber,

The slides arrived safely and many thanks for your kind offer. I hope I will be able to give a good talk. Our work is progressing as usual, and I am sending you some of our latest results. We have moved our equipment away from the main field station, so that we are no longer bothered by interference from the local ten centimetre radar sets. In looking over our past records, on some days the interference was nearly continuous -- a break now and then to enable us to get a reading of the solar radiation for that day. I have enclosed a graph of the solar readings taken morning (10.00 to 11.00) and afternoon (3.00 to 4.00) on certain days in October. This is another attempt to see how the radiation varies during the course of the day. So far the level is very constant,--within the experimental error. I expect one could detect a difference when the quiet background radiation is changing rapidly when the spots are disappearing.

We are still observing bursts and in general they coincide quite well with the flares which produce sudden ionosphere disturbances. Our source of solar information is the Quarterly Bulletin of Solar Activity. One solar noise burst occurred a good five minutes before the sudden ionospheric disturbance. We have just lately started recording the noise at a fast tape speed (1.5 inches/minute) and reduced time constant. The few bursts we have recorded show very irregular fluctuations.

We were sorry you were unable to come to Cornell. No doubt you heard that Hagen is to gather material to make a report on some terminology to be used in classifying bursts. As yet I have not turned in any suggestions. Have you or Denise turned in any from the data gathered at 480 megacycles? I have in my mind a scheme of classification for the ten centimetre bursts, and will send you a copy as soon as I get it into shape.

Best regards,

A. E. Covington

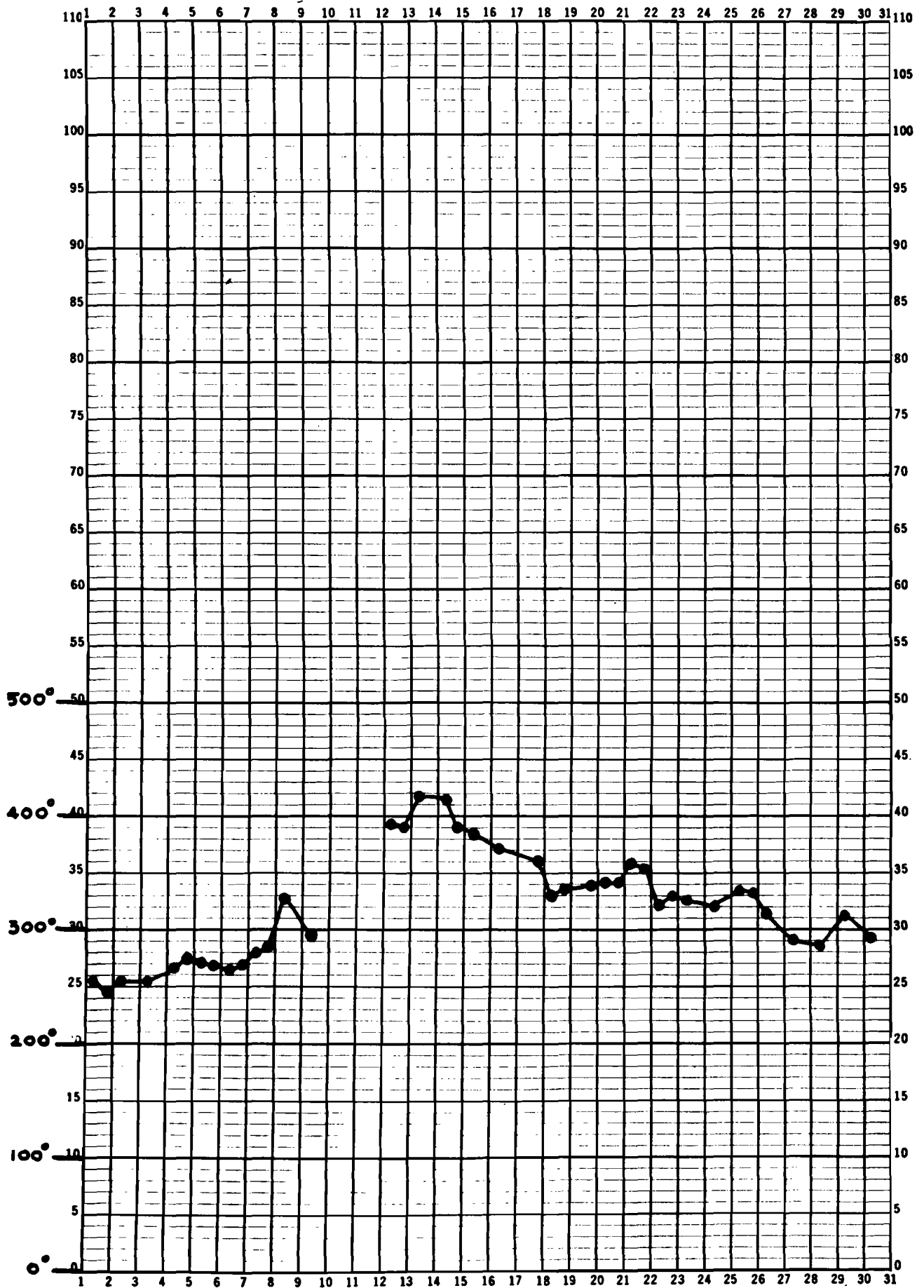
AEC:HP

SOLAR NOISE MEASUREMENTS - 1948

Antenna Temperature (°K)

DAY	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1		255	265	340	395	400	405	415	300	255	280	
2	410	260	265	365		380	390	390	285	255	280	
3	355	270	240	390	355	395	385	410	280	255	300	
4		265	235	395	405	400	350	440		265	315	
5	340	270	230	380	455	410	330	410	270	270	315	
6	350	245	245	390	530		305	370	275	265	315	
7	355	255		370	590	365	300	370	255	285		
8	340	240	270	370	630	400	295	365	270	330	380	
9	305	260	275	365		385	325	305	265	295	345	
10	290	285	300	385	665	370	330	295	275			
11	280	280	310		635	345		310	295			
12	295	265	325	410	610	340	355	325	330	395		
13	290	260	305	450	580		350	280	355	420		
14	290		300	490	560	325	355	305	370	400		
15	280		290	430	490	315	370	310	380	385		
16	290	280	270	420		320	370	320	400	370		
17	280	270	265		435	365	370	335	400	360		
18	285	280	250	420	380	390		350	450	335		
19	295	300	250	465	365	390	345	395	470	340		
20	315	300	265	430	345		380	405	445	340		
21	295	285	260	450	370	390	365	365		360		
22	320	290	250	455	325	395	385			325		
23	310	285	230	445		440	365	375		325		
24	300	255	230	465	345	460		310		320		
25		265	240	460	350	440	400	310		335		
26	300	255		435	345	430	365	330		315		
27	300	250		450	375		395	325	335	290		
28	270			410	390	435	415		390	285		
29		240		380	385	420	410	320	270	310		
30	310		310	365		415	415	295	255	295		
31			335		395		400	295		270		

KEUFFEL & ESSER CO., N. Y. NO. 388-134  
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Month OCTOBER 19 48

TEMPERATURE OF SUN'S RADIATION - MORNING AND AFTERNOON READINGS  
ON CERTAIN DAYS.