The Early Years

Thomas J Bogdan

1930-1960
Approaching Dust Storm in Middle West.
SOLAR AND ECONOMIC RELATIONSHIPS: 1
A PRELIMINARY REPORT

SUMMARY


This paper is an outgrowth of an attempt to establish a factual basis for the orthodox viewpoint on Jevons' hypothesis concerning business cycles and sunspots. As the investigation progressed, it was found necessary to widen its scope;

1. The investigation was made with the aid of two grants from the Committee on Research in the Social Sciences of Harvard University. We are indebted to Mr. Edgar Lawrence Smith of New York City for friendly encouragement and wise counsel. Dr. M. J. Fields of Harvard also rendered valuable assistance.

Dr. Mats is responsible for the idea upon which the investigation is based; for the bulk of the research, the charts and the report to the Committee. Dr. Shaffner collaborated in outlining the original project and in the preparation of this paper, which is based on the report.

This article represents a preliminary examination of certain phases of the subject which, along with other aspects of the question, will be treated in greater detail in a forthcoming book by the present writers.
PROPOSAL OF A METHOD OF OBSERVING THE SOLAR CORONA WITHOUT AN ECLIPSE

By A. M. Skellett

Bell Telephone Laboratories and Princeton University

Read before the Academy, Monday, April 23, 1934

A number of times in the past, progress in some science or art has advanced to the state where it becomes useful in some other unrelated field for a purpose different from that for which it was primarily developed. It is the purpose of this paper to suggest that the technique of television has been developed to the point where it apparently can be employed to advantage for a study of the solar corona at times other than those of eclipses. Such a use would take advantage of the means of image discrimination which this technique offers but not the ability to transmit images over appreciable distances. The use of this newly developed technique for image discrimination, particularly to increase contrast, is not, of course, limited to the specific application mentioned here. It might be used advantageously in other fields as well.

The problem of observing or photographing the details of the corona without an eclipse has challenged the efforts of able investigators for the past fifty years, among whom have been such men as Huggins, Hale, Ricco, Deslandres, Wood, Hamsley and, lately, Lyot. The last named was the only one to achieve any degree of success. On a day of remarkable atmospheric transparency with his apparatus at the top of Mt. Pie du Midi, Lyot was able to obtain images which showed several faint irregularities of the light around the sun’s disc. These apparently were coronal features. The excellence of his work and apparatus leaves little to be hoped for in the way of improvement. Furthermore, his method gives no promise for any but the innermost part of the corona. For adequate solution the problem demands a method which will separate adequately the feeble light of the corona not only from the diffuse light in the telescope but also from the brilliant glare of the earth’s atmosphere around the solar disc. We therefore need to attack the problem along entirely new lines.

Enough has been learned by previous investigators so that the factors of the problem seem to be well in hand. Lyot has found that the brightness
Sun-Spot Tornado Disrupts Cables, Phones and Telegraph for 5 Hours

Electrical Disturbance Plays Havoc With the Short-Wave, 1,000,000 Easter Messages and Police and Press Teletypes

Something akin to a "tornado" swept across the surface of the sun yesterday, creating an electrical phenomenon that played strange and devastating tricks on communications systems throughout the United States and disrupted radio and wire service between America and Europe.

There was nothing in the forecast of disturbances during the daytime hours, when the trouble was worst, that could be seen by human eye or felt by human hand, yet scientists in celestial space a brilliant cloud of sun spots had awoken the electricity of the earth, and the same as echoes of sound it sped from the乃是 the end of an unending thing. a great many people had been moved by engineers and astronomers concerning the effects of the sun spots upon the earth. 1,600,000 miles away, William H. Burton, Jr., executive curator of the Hayden Planetarium, said he could not resist the thought that sun spots had caused more serious disturbances, and very often electrical engineers had pronounced it the worst thing he had seen in years.
HAO Personnel in the Dome of Sommers-Bausch Observatory circa 1954

1. Rudy Cook
2. Bob Cooper
3. Kay Virnelson (Shapley)
4. Sabine Schaffner
5. Walter Orr Roberts
6. Gerard Wierick
7. Bob Low
8. Fred Pearson
9. Lee Lacey
10. Don Billings
11. Bill Wright
12. Dorothy Trotter
13. Bob Lee
14. Kay Vollmer
15. Mary Ramspott
16. Eli Myring
17. Jennifer Harris
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