

Talk with Dr. Whipple at Harvard Observatory 12/16/38

Rather a cordial greeting and much interested in the explanation of what you were doing and in the machine pictures. The fact that you had some actual data on the phenomena was good stuff, and upon an examination of the ~~data~~ sheet, he converted your 160 mega-cycles <sup>1.84 meters</sup> into meters and arrived at a figure of about 2 meters at which you were probably working. He found this hard to reconcile with the size of the can at the focus---and the aperture in the bottom of the can.

The second question in his mind was the accuracy of the resolving power which you seemed to indicate. He wondered whether or not the point sources listed so close together were justifiable on the basis of the resolving power of your machine.

He then called in another man and they plotted your point sources on a Norton chart in order to get an idea of the relative position of the groupings. Then he got out some slides of that portion of the heavens photographed through the telescope and looked for actual evidence of such points. The conclusion he and the other gent arrived at was that there was a definite concentration of these points in dark cloud areas rather than in light areas on the plate. According to him the chance of getting more intense results from these dark areas fitted in with your theorem perfectly because the absorption (opposite process to free-free transition) in the dark areas would not be as great as in the lighter areas and also in the neighborhood of stars where there would be greater ionization of particles. (I'm not sure of the correctness of the underlined statement, but I think it's what he said). The other man---apparently another young research man---seemed to concur with him in his diagnosis of the situation.

At a certain point in the discussion I noticed a change of attitude whereby he mentioned that he had done some work in this field and had decided he didn't have time enough to go on with it. However, he had made some original hypotheses and was about to publish a paper on it, but decided that he would lay himself open to criticism and attack---anyway it was a little bit out of his field. Then as he read farther and saw what work you had done, he repeated this assertion and said he wished he had had the paper written so that he could show me he was telling me the truth. (The crux is apparently a matter of gaining recognition.) Later on he again tried to rationalize or console himself or something by stating that he was the first man to propose the hypothesis that ~~some~~ clouds of stars (nebulae) could be considered as having the same properties as stars and receiving the same consideration in astr-physical research.

Anyhow, he was very solicitous and I left your data sheet with him suggesting that he would probably be better satisfied by writing you because my knowledge of the situation was entirely a cursory one. He burst out at one point that he thought you should have sincere congratulation for the work you had done---and above all encouragement to keep on with it. Later on he said he would write to you, and I hold no brief for what the letter may contain. These notes are jotted down as I recall them about six hours ~~later~~ after my talk with him. I was in his office about an hour and a quarter.