

We have selected the following three reports to fix the point of disappearance, which must, of course, lie on the projected path.

Edgar — nearly due south
Falkenburg — south southwest
Campbellville — when half-way to the horizon

From these we adopted a preliminary point about ten miles north, and a little east, of Dunnville, at a height of 17 miles. We deliberately carried the path farther south and east than the reports indicated, to show how the error could be corrected and the endpoint fixed more accurately from the reports on detonations.

THE ENDPOINT FROM DETONATIONS

We assumed 995 feet per second as the velocity of sound. This corresponds to an average temperature of approximately -50° F. On calculating the interval which should have been required for detonations to reach the persons in the various communities we found that for the great majority of observers who reported a time interval, the interval was too great. The result shows a systematic tendency to overestimate the duration of the display. Perhaps the unusually slow motion of the meteors was responsible.

The greatest discordance was for Toronto where the time for the detonating meteor was given as 9:05 and the time for hearing the detonations was given as 9:12. This is an interval of seven minutes whereas a computation of the approximate travel time for the detonations gave $3^m 28^s$. Closer examination of the times for the detonating meteor shows that persons who report looking at a watch give the following 9:04½, 9:05, 9:06, and 9:08.

For the 9:06 and 9:08 times it is stated that the watch usually is correct within a few seconds. No such statement is made for the 9:04½ and 9:05 times, so those should be given less weight. Another consideration is that persons who saw the meteor were outdoors, in general in dark surroundings. No doubt the watch was looked at some time after the fall of the meteor, and an allowance made for the estimated time interval since. This interval was overestimated more than underestimated, as we have said, which would make the watch time, as given, too early. From these considerations we have adopted 9:06½ as the time of fall.

The reports from Toronto show that many persons heard two rolls of thunder separated by an interval of about two minutes, or the time in which one man walked two short blocks on that cold winter night. The time 9:12, which is given twice, refers to the second roll of thunder in both cases. What this second roll of thunder was we cannot say. It was not so loud as the first report, which did come from the meteor. There is a reference to Humber Bay and another reference, not from Toronto, to the thunder sounding like ice cracking. Perhaps, this second roll of thunder was due to ice cracking in the bay; or it may have been an echo of the detonations of the meteor. The wind velocity in

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The reports reached Toronto arrived at about times removed, arrival of the first calculated travel

For a considerable number of detonations arrived at the same time, followed the fact that these communities were computed from

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