

by the University of Michigan astronomer, came from the same radiant and with the same velocity. The 140 reports collected by Professor Chant are sufficient for a reasonably good path of the detonating meteor, but the report of the astronomer is the only one giving the coordinates for even a single meteor.

THE PROJECTED PATH OF THE DETONATING METEOR

To determine the projected path, let us consider the Ontario reports stating that the meteor (or meteors) passed to the one side or the other of the zenith. We find the following:

Berlin — east
 Brampton — little west of point overhead
 Caledon East — toward Orion (southwest)
 Campbellville — *directly* overhead
 Dunnville — directly overhead (one report), 10° southwest of zenith (other report)
 Elora — right overhead
 Georgetown — little to west
 Guelph — slightly to northeast of zenith
 Hespeler — overhead, or little to north
 Jackson — nearly overhead but a little to the southeast (*i.e.*, east rather than west)
 Mt. Charles — directly overhead
 Sheridan — southwest
 Toronto — southwest, or west
 Waterloo — east.

For many of these, the report indicates that the detonating meteor was seen. It is a safe assumption that it was seen by most of the others, as its light would have caused most persons outdoors to look up. Such persons would notice the shooting stars in the same general region as the path of the detonating meteor, and very few others would notice any shooting stars. We can assume that in nearly all cases, the reported direction from the zenith is that of the detonating meteor.

A projected path was drawn* passing a little east of Jackson and exactly over Campbellville, in perfect agreement with those reports and in general agreement with all others given above except Dunnville. The Dunnville reports are brief, and one of them is "second-hand." There is nothing in either report to indicate that the detonating meteor was seen by the observer. Reports from other communities indicate that the detonating meteor did not go as far south and east as Dunnville. Presumably the Dunnville reports refer to smaller meteors which passed through, or near, the zenith.

* The direction in which an observer guesses a meteor is travelling cannot be used in drawing the projected path unless the meteor passes practically overhead. The Campbellville observer saw the meteor directly overhead, but he gives only the general direction "northwest to southeast." There is only one apparently careful estimate of direction from overhead meteors, the Dunnville report, which we used in determining the approximate position of the apparent radiant. The azimuth of the adopted path is in good agreement with this report.

We have
 meteor. The
 the real height
 As Mr. No
 barn, the br
 west corner
 and 50 feet
 have been th
 we assume
 the head of
 on a level w
 The other
 that the hea
 pole. He
 measured the
 ments deter
 at each of

In fixing
 in mind that
 travel rather
 many of the
 ating meteor
 path. We
 to fix the d
 appearance

Bolt
 Metr
 Tor

To these
 in the north
 of Jackson
 point of app

For most
 is fixed mu
 unexpected
 in its motio
 tract his at
 tario detona
 disappeared
 meteors con
 the big met
 bursting, bu
 the south