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? WHY THE WEATHER ? Mailed February 11, 1932

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DUSK AND DAWN

Says Dr. C.C. Smith, of the Dominion Observatory, Ottawa:

"Dawn is usually defined as the time when daylight first appears in the morning sky. Morning twilight is the interval of time between dawn and sunrise. Evening twilight is the interval between sunset and dusk; dusk being defined as the last appearance of daylight in the evening sky.

"The illumination of the sky during twilight is due to the rays of the sun that strike the upper layers of the earth's atmosphere; the duration of twilight is hence due to the rate at which the sun sinks below the horizon and also to the condition of the atmosphere.

"It would, however, be quite impossible to predict or to calculate the moment of dusk or dawn defined as above. Hence astronomers use ordinarily an arbitrary definition, and define astronomical twilight as the time between sunset or sunrise and the moment when the sun's center is eighteen degrees below the horizon.

"At dawn and dusk as thus defined, however, it may be and usually is too dark to carry on ordinary work, as, for example, to drive an automobile without lights, and in France and elsewhere a civil twilight is used, by which dusk and dawn are defined as occurring when the sun's center is six degrees below the horizon."

Concerning which it should be remarked that "dawn" sometimes and "dusk" usually denote a period of time of some minutes' duration rather than a single moment, as above defined; also that "dusk" is occasionally applied to the first part of the morning twilight as well as to the latter part of the evening twilight.

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