

OUTBURST ON SUN MADE RADIO FADE

Pasadena Film Reveals Belatedly Great Gas Eruption

PASADENA, July 12 (Science Service)—A brilliant eruption of hydrogen gas from spots near the center of the sun's disk was revealed for the first time Wednesday upon examination of a roll of motion picture film taken of the atmosphere of the sun at the sun-tower telescope of the Mount Wilson Observatory.

The eruption began to develop about 7:10 A. M., July 3 and attained maximum brightness about 8:30 A. M., after which it slowly declined.

The eruption, which was the most violent recorded during the last two years, was not found sooner because the motion pictures are taken automatically and the reel is developed after each 100 feet of film has been exposed.

It was established five years ago that such outbursts are the cause of sudden fadeouts in short-wave wireless signals which have paralyzed communication over the entire daylight side of the earth. The severe disturbance in communications on July 4 and 5 are typical of effects attributed to sunspot activity.

It is believed that the visible radiation from the outburst, although spectacular, has no effect on radio signals. The fadeouts are caused by invisible ultra-violet radiation, which suddenly produces intense ionization in a layer of the earth's atmosphere at a height of about sixty miles. This layer now absorbs the radio waves instead of allowing them to be reflected on to the receiving station.