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BRIGHT BOLIDES OVER JAPAN

1. The Kagoshima bolide

A bright bolide was observed at 21^h 25^m of local time (12^h 25^m of Greenwich standard time) on May 19 1957 at Kagoshima district near the southern end of Kyushu Is. It was seen at least 60 places vicinity and the north of Kagoshima City by a large number of the eyewitnesses. The bolide was shaped like a fireball with a tapered tail and flew from south to north over the area of the eastern of Kagoshima. The brightness of the bolide was -14 - *16 magnitude. After a disappearance of the bolide a blows were heard like a sound of eruption of volcano for 3-6 seconds at a radius of some 30 km.

S o u r c e : 1. The Teromor Soho (Astronomical Gazette), v. XI, No. 6, June 1957, pp. 47-48 (in Japanese) and the letter from K. Minomy to E. L. Krinov of June 27, 1958.

2. A bolide over central
Japan

A bright bolide was observed at 17^h 55^m of local time (8^h 55^m of Greenwich Standard time) in November 11, 1957, it flew from the west to the east over the territory almost along the Pacific coast of central Japan the south of Nagoya.

The path of the bolide was determined according to data of witnesses:

1. A projection of a point of the appearance:
 $136.3^{\circ}\text{E} \pm 0.2^{\circ}; + 35.5^{\circ}\text{N} \pm 0.2^{\circ}$
2. A height of the appearance of the bolide: $150 \text{ km} \pm 20 \text{ km}$
3. A projection of a point of the disappearance: $138.3^{\circ}\text{E};$
 $+35.7^{\circ}\text{C}.$
4. A height of the disappearance: about 40 km

5. The length of a projection of the path was about 210 km.
6. The duration of a flight of the bolide was about 5-6 sec
7. Inclination of the real path to the earth's surface is calculated about 33° .
8. The brightness of the bolide was -6 -- - 7 magnitude
9. A few of the observers noticed the red color in the central part of the bolide and yellowish in the external part.
10. The apparent size of the bolide was believed as large as the Moon by some observers, while a few of the others estimated about one half of the Moon in diameter.
11. A sound was heard after disappearance of the bolide 2-3 minutes later.

Source: K.Komaki. Astronomy and Meteorology, v.XMIV, No.6, June 1958, pp.7-9 (in Japanese) and the letter from K.Niinomy to E.L.Krinov of July 18, 1958.

3. A bolide over Tokio

A bolide was observed at $18^{\text{h}}36^{\text{m}}$ of local time ($9^{\text{h}}36^{\text{m}}$ of Greenwich standard time) on March 12, 1958 in Tokio, Iokohama etc (see a table). It was accompanied with a sounds.

Observer	Locality	Long. and lat.	Start	Dissapp.	Brigh.
S.Iizuka	Village Uésa-	$139^{\circ}07'E;$	$161^{\circ} + 20^{\circ}$	$186^{\circ} + 44^{\circ}$	-5^{mag}
	to	$36^{\circ}15'N$			
H.Saida	Omiya	$139^{\circ}37'E;$	$127^{\circ} + 10^{\circ}$	$170^{\circ} + 76^{\circ}$	-2
		$36^{\circ}56'N$			

Source: "Meteoric Stone and Meteoric Iron", v.III, No.1, p.6, 1958 (in Japanese) and the letter from K.Niinomy to E.L.Krinov of July 18, 1958.

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