

الشهب والنيازك

د. محمد فراس الصفدي



(1):

() (1).

(meteor)

(meteoroid).

(2) ()



(2):

100

80

10 / 70

(fireball)



(3):

(3) (meteorite).



() ()



:(4)

40
1000

. 180

1250

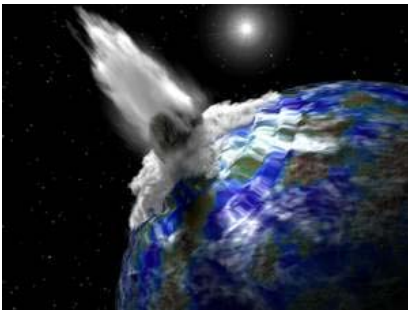
70 30

.(4)

1

4-3

. 10



:(5)

.(5)

(meteor shower)

.(6)

100,000

1833

13

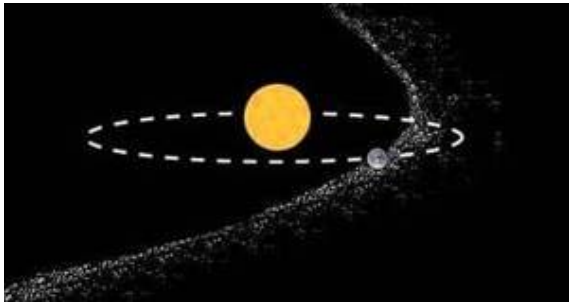
17

.(7)

. 40

100

1966



:(6)



1833

13 :(7)



:(8)

()
.(8)

(perseids)

(orionids)

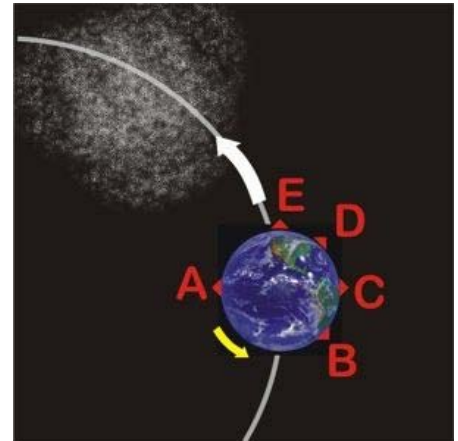
(leonids)

.()

(/)			
100	3		Quadrantids
10	22	Thatcher	Lyrids
35	4	Halley	Eta Aquarids
30	29		Delta Aquarids
80	12	Swift-Tuttle	Perseids
25	21	Halley	Orionids
10	3	Encke	Taurids
20	16	Tempel-Tuttle	Leonids
90	12	Phaethon	Geminids
5	22	Tuttle	Ursids

A
B
C
E
D

(9)



10-5

A (9)
B ()
()

D

C

.(10

.E



:(10

)
)
(
(