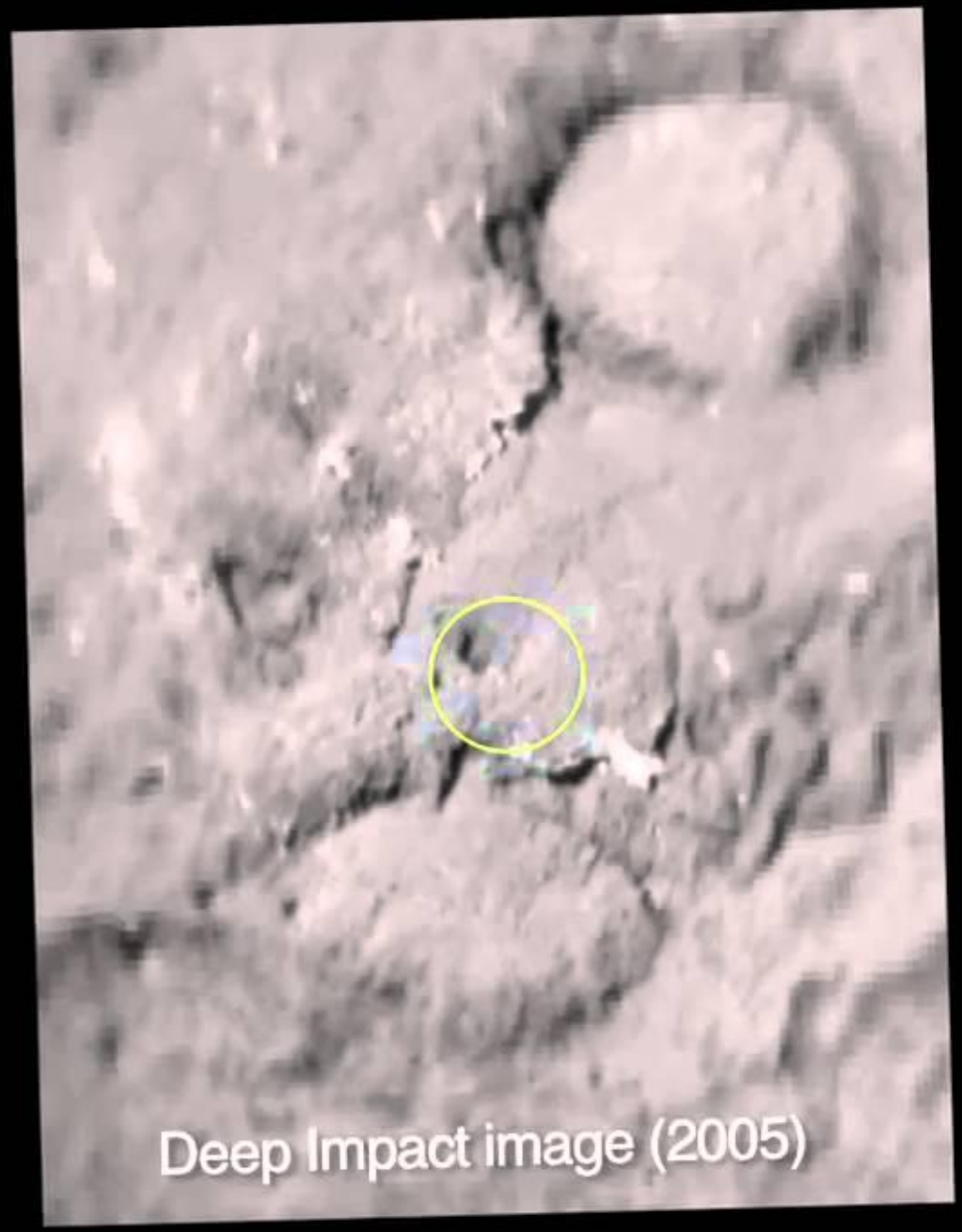
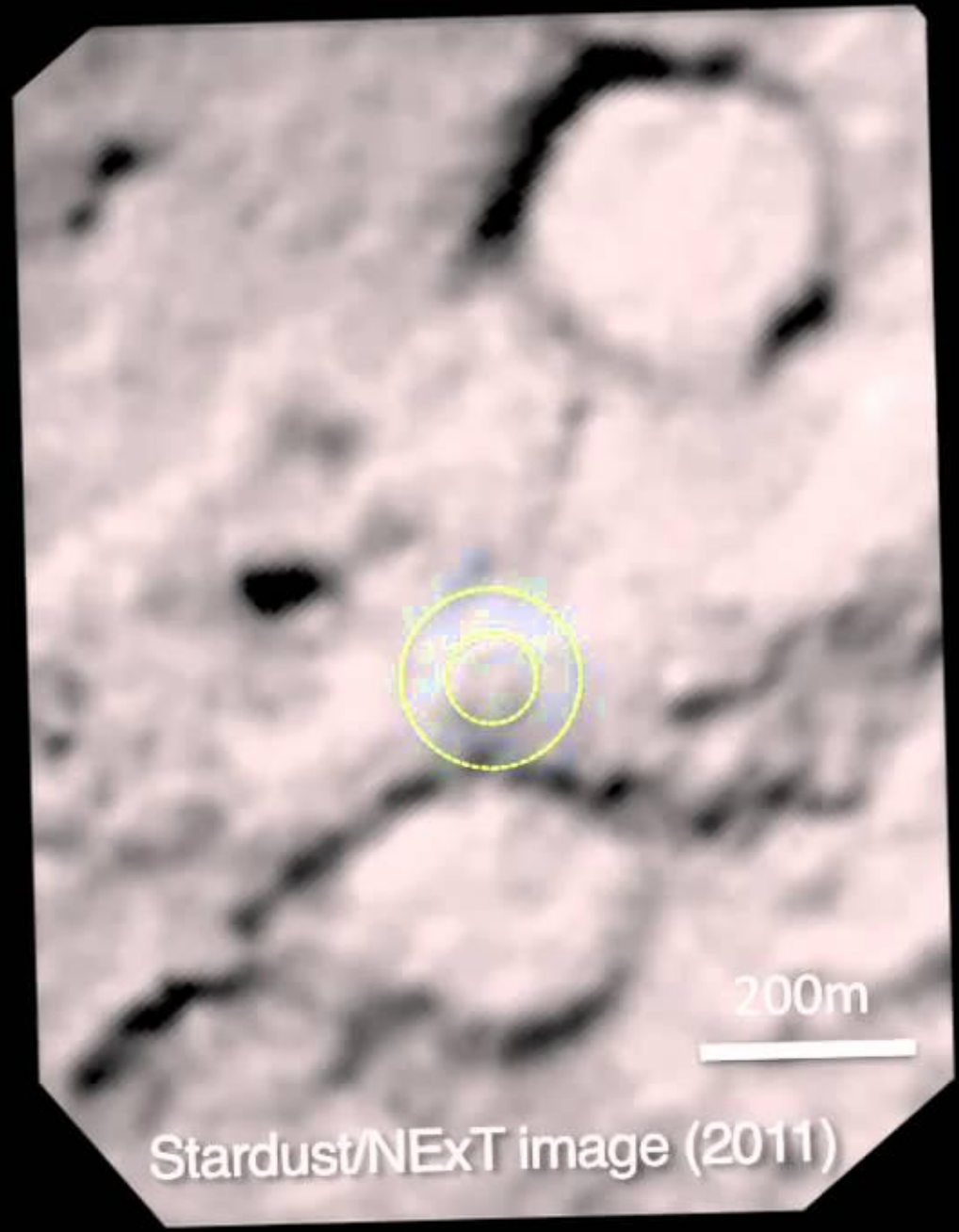

Deep Impact image (2005)


200m
Stardust/NExT image (2011)

1
00:00:17,269 --> 00:00:14,549
was this mission a hundred percent

2
00:00:19,590 --> 00:00:17,279
successful in terms of the science

3
00:00:21,670 --> 00:00:19,600
i would have to say no it was a thousand

4
00:00:23,750 --> 00:00:21,680
percent successful

5
00:00:25,830 --> 00:00:23,760
we achieved all of our science

6
00:00:28,390 --> 00:00:25,840
objectives

7
00:00:30,470 --> 00:00:28,400
we do in fact have a comparison of the

8
00:00:32,470 --> 00:00:30,480
deep impact area

9
00:00:35,430 --> 00:00:32,480
and it in fact does show an impact

10
00:00:38,069 --> 00:00:35,440
crater it's about 150 meters across and

11
00:00:40,310 --> 00:00:38,079
has a small central mound in the center

12
00:00:42,229 --> 00:00:40,320
it looks as if from the impact the stuff

13
00:00:43,670 --> 00:00:42,239

went up and came back down

14
00:00:46,549 --> 00:00:43,680
you can barely see this but there's a

15
00:00:48,389 --> 00:00:46,559
little lit area on that side and a dark

16
00:00:50,549 --> 00:00:48,399
area on the other and that's the central

17
00:00:51,590 --> 00:00:50,559
mound where we think the material came

18
00:00:53,750 --> 00:00:51,600
down

19
00:00:55,590 --> 00:00:53,760
comets unlike any other body in the

20
00:00:56,950 --> 00:00:55,600
solar system are unique because when

21
00:00:58,630 --> 00:00:56,960
they're in the inner part of the solar

22
00:01:01,349 --> 00:00:58,640
system where the earth is they're

23
00:01:03,990 --> 00:01:01,359
literally coming apart and sending tons

24
00:01:07,030 --> 00:01:04,000
and tons of gas and rocks and dust out

25
00:01:09,190 --> 00:01:07,040
in space this spacecraft stardust

26
00:01:11,109 --> 00:01:09,200
went through this cloud of dust and

27
00:01:12,070 --> 00:01:11,119
rocks coming off the comet we have

28
00:01:14,469 --> 00:01:12,080
instruments on the front of the

29
00:01:16,230 --> 00:01:14,479
spacecraft called a dust flux monitor

30
00:01:18,789 --> 00:01:16,240
instrument and they have sensor to

31
00:01:22,310 --> 00:01:18,799
detect these impacts a good analogy of

32
00:01:25,990 --> 00:01:22,320
thinking of a like a b17 in world war ii

33
00:01:26,000 --> 00:01:33,109
that's it

34
00:01:35,830 --> 00:01:35,030
i have a message for any school kids out

35
00:01:37,749 --> 00:01:35,840
there

36
00:01:40,069 --> 00:01:37,759
who might be wondering how nasa can send

37
00:01:42,710 --> 00:01:40,079
a spacecraft billions of miles through

38
00:01:45,270 --> 00:01:42,720

the solar system and somehow wind up

39
00:01:47,749 --> 00:01:45,280
flying so close to a tiny comet only a