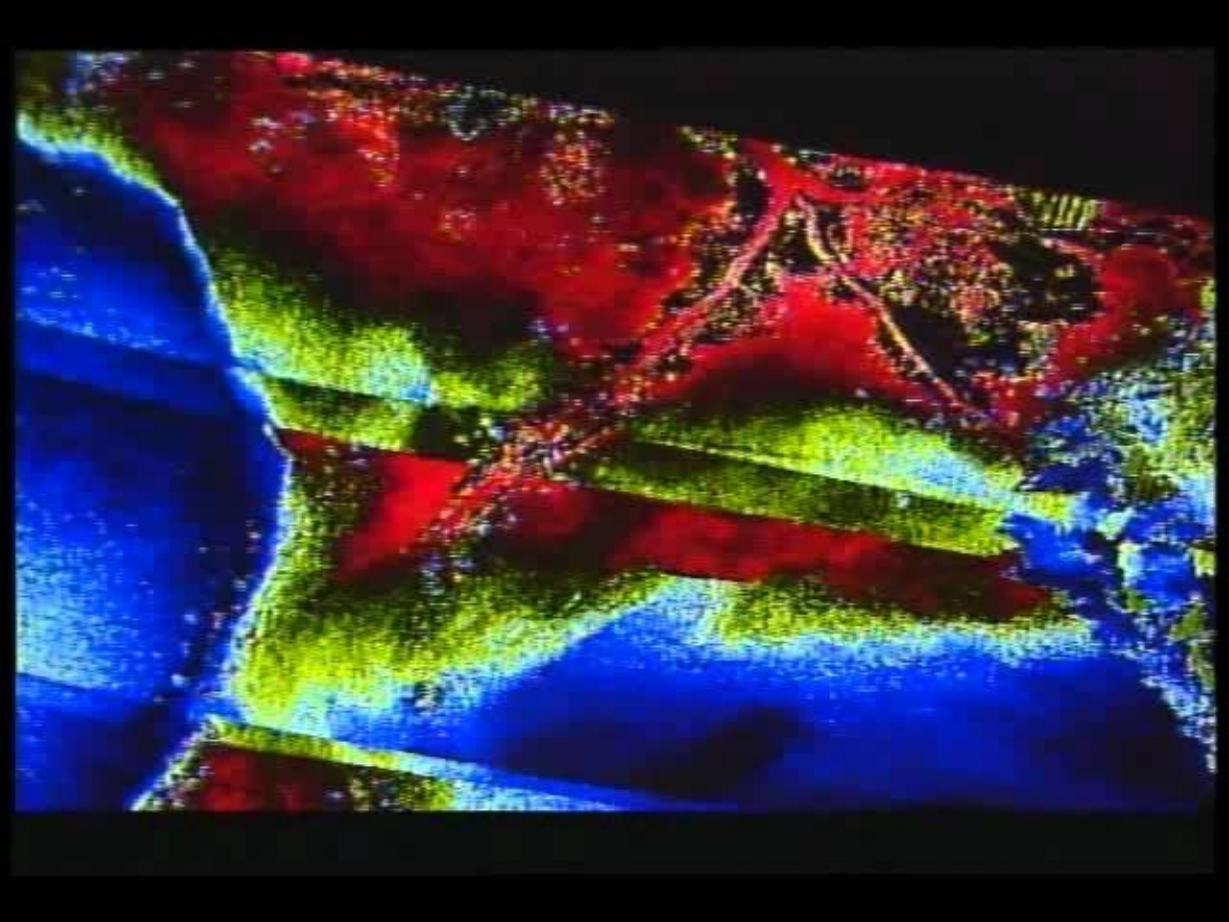

1
00:00:22,250 --> 00:00:19,940
for years researchers have been using

2
00:00:24,890 --> 00:00:22,260
aircraft and satellites to produce

3
00:00:27,529 --> 00:00:24,900
information rich views of our planet

4
00:00:30,560 --> 00:00:27,539
it's called remote sensing and although

5
00:00:33,650 --> 00:00:30,570
the science is not new its applications

6
00:00:37,279 --> 00:00:33,660
continue to grow image processing

7
00:00:39,709 --> 00:00:37,289
software called alas developed at NASA's

8
00:00:41,990 --> 00:00:39,719
Stennis Space Center in Mississippi is

9
00:00:45,020 --> 00:00:42,000
now being used to manage and conserve

10
00:00:47,840 --> 00:00:45,030
fish populations in the Gulf of Mexico

11
00:00:50,240 --> 00:00:47,850
these maps of sea surface temperatures

12
00:00:52,939 --> 00:00:50,250
allow researchers at the National Marine

13
00:00:55,990 --> 00:00:52,949

fishery service to predict where certain

14
00:00:59,240 --> 00:00:56,000
species of fish should be on a given day

15
00:01:01,369 --> 00:00:59,250
this capability is a much-needed tool

16
00:01:04,549 --> 00:01:01,379
for scientists working aboard NOAA

17
00:01:06,500 --> 00:01:04,559
vessels like the Chapman fishing is a

18
00:01:08,420 --> 00:01:06,510
major industry

19
00:01:10,580 --> 00:01:08,430
and information collected during these

20
00:01:13,430 --> 00:01:10,590
research missions is used to set

21
00:01:15,920 --> 00:01:13,440
critical catch limits the temperature

22
00:01:18,620 --> 00:01:15,930
maps accessible with a standard personal

23
00:01:21,220 --> 00:01:18,630
computer on the ship make it easier to

24
00:01:24,470 --> 00:01:21,230
locate and sample fish being studied

25
00:01:27,020 --> 00:01:24,480
reducing search time saves man-hours and

26
00:01:29,480 --> 00:01:27,030
fuel and being able to gather data

27
00:01:33,950 --> 00:01:29,490
faster make setting catch limits more

28
00:01:36,170 --> 00:01:33,960
precise when changes in surface

29
00:01:40,910 --> 00:01:36,180
temperatures are too subtle to be manned

30
00:01:43,790 --> 00:01:40,920
a specially equipped NASA concentrations

31
00:01:46,190 --> 00:01:43,800
of chlorophyll in coastal waters the

32
00:01:48,140 --> 00:01:46,200
same boundaries between water types used

33
00:01:51,110 --> 00:01:48,150
to locate fish can be found with these

34
00:01:53,480 --> 00:01:51,120
displays as well with the help of

35
00:01:55,490 --> 00:01:53,490
businessmen like Mike Frenette the

36
00:01:58,040 --> 00:01:55,500
technology is now being moved into the

37
00:02:00,590 --> 00:01:58,050
marketplace as with all charter bull

38
00:02:02,830 --> 00:02:00,600

donors fur nets livelihood depends upon

39
00:02:05,030 --> 00:02:02,840
finding fish for his customers

40
00:02:07,660 --> 00:02:05,040
information such as what this program

41
00:02:10,970 --> 00:02:07,670
has to offer it gives me more time to

42
00:02:13,640 --> 00:02:10,980
fish versus trial and error trying to

43
00:02:15,740 --> 00:02:13,650
locate the fish reducing search times

44
00:02:18,110 --> 00:02:15,750
would also save larger commercial

45
00:02:20,750 --> 00:02:18,120
fishing operations thousands of dollars

46
00:02:22,910 --> 00:02:20,760
in fuel costs savings which could in

47
00:02:25,760 --> 00:02:22,920
turn be passed on to consumers and

48
00:02:28,370 --> 00:02:25,770
according to oceanographer John Brooks

49
00:02:30,800 --> 00:02:28,380
the danger of overfishing will not be

50
00:02:32,840 --> 00:02:30,810
any greater as long as the demand is

51
00:02:34,940 --> 00:02:32,850
there they are going to spend the time

52
00:02:37,970 --> 00:02:34,950
and the effort in the fuel to find that

53
00:02:40,520 --> 00:02:37,980
fish and their livelihood depends on a

54
00:02:42,530 --> 00:02:40,530
long-term fishery not just to load the

55
00:02:44,000 --> 00:02:42,540
boat today and so it's readily

56
00:02:46,729 --> 00:02:44,010
understood throughout the fish community

57
00:02:48,979 --> 00:02:46,739
we have a beautiful natural resource

58
00:02:50,250 --> 00:02:48,989
here and it's up to us to govern that

59
00:02:53,830 --> 00:02:50,260
resource

60
00:02:56,759 --> 00:02:53,840
locating fish from above using NASA