



1
00:00:01,520 --> 00:00:04,350
TODAY WE
SEEK TO MOVE BEYOND THE

2
00:00:04,350 --> 00:00:08,530
ACCOMPLISHMENTS OF THE PASSED.

3
00:00:08,530 --> 00:00:14,170
TO ESTABLISH THE PRINCIPALS THAT
ALL THE PEOPLE ARE ENTITLED

4
00:00:14,170 --> 00:00:17,880
TO A DECENT WAY OF LIFE.

5
00:00:17,880 --> 00:00:20,850
THIS IS THE MOST DEMANDING GOAL
OF ALL.

6
00:00:20,850 --> 00:00:27,330
WE HAVE MADE A GOOD START.

7
00:00:27,330 --> 00:00:42,670
BUT WE HAVE STILL A LONG WAY TO
GO.

8
00:00:42,670 --> 00:00:44,460
THE CONQUEST OF POVERTY IS AS
DIFFICULT IF NOT MORE DIFFICULT

9
00:00:44,460 --> 00:00:46,720
THAN THE CONQUEST OF OUTER
SPACE.

10
00:00:46,720 --> 00:00:48,989
AND WE SHOULD EXPECT MORE,
FRUSTRATION THAN DISAPPOINTMENT

11
00:00:48,989 --> 00:00:56,480
BUT WE HAVE NO DOUBT.

12

00:00:56,480 --> 00:01:05,229

ALL HISTORY SHOWS THAT THE
EFFORT TO WIN PROGRESS

13

00:01:05,229 --> 00:01:09,399

REPRESENTS THE MOST DETERMINED
AND STEADFAST ASPIRATIONS OF

14

00:01:09,399 --> 00:01:11,670

MAN.

15

00:01:11,670 --> 00:01:14,689

OUR PROBLEMS ARE MAN MADE.

16

00:01:14,689 --> 00:01:16,569

THEREFORE, THEY CAN BE SOLVED BY
MAN.

17

00:01:16,569 --> 00:01:17,983

ON THE FINAL ANALYSIS OUR MOST

18

00:01:17,983 --> 00:01:18,983

BASIC WE ALL INHABIT THIS SMALL
PLANET.

19

00:01:18,983 --> 00:01:26,549

WE ALL BREATHE THE SAME AIR.

20

00:01:26,549 --> 00:01:52,100

WE ALL CHERISH OUR CHILDREN'S
FUTURES.

21

00:01:52,100 --> 00:02:13,400

AND WE ARE ALL MORTAL.

22

00:02:13,400 --> 00:02:22,450

>> HERE IS A JOINT NASA AND U.S.
PROGRAM WORKING WITH DEVELOPING

23
00:02:22,450 --> 00:02:26,220
COUNTRIES AROUND THE WORLD AND
STRENGTHING THEIR ABILITY TO USE

24
00:02:26,220 --> 00:02:29,810
SATELLITE TO ADDRESS THE MANY
PROBLEMS THAT THEY HAVE

25
00:02:29,810 --> 00:02:33,920
INCLUDING FLOODS, FIRES, HARMFUL
AND OTHER TYPES OF EVENS THEY

26
00:02:33,920 --> 00:02:39,340
HAVE WHERE THEY CAN USE
SATELLITE TO REALLY MAKE BETTER

27
00:02:39,340 --> 00:02:40,730
DECISIONS.

28
00:02:40,730 --> 00:02:43,810
>> USING SPACE INFORMATION
[INAUDIBLE]

29
00:02:43,810 --> 00:02:46,820
>> WHEN THERE IS A MAJOR
DISASTER GOVERNMENTS AROUND THE

30
00:02:46,820 --> 00:02:48,600
WORLD COME TOGETHER.

31
00:02:48,600 --> 00:02:53,370
AND THEY PROVIDE ALL OF THE
SATELLITE DATA BASICALLY THAT

32
00:02:53,370 --> 00:02:55,270
THE WORLD HAS TO OFFER.

33
00:02:55,270 --> 00:02:59,530

BUT SMALLER DISASTERS THAT OCCUR
IN THE COUNTRIES THAT WE WORK IN

34
00:02:59,530 --> 00:03:02,570
THAT MAY NOT MAKE THE FRONT PAGE
OF THE NEW YORK TIMES BUT IN

35
00:03:02,570 --> 00:03:04,720
THAT COUNTRY IT'S A BIG DEAL.

36
00:03:04,720 --> 00:03:08,250
WE ASK OURSELVES COULD WE MAKE A
DIFFERENCE IF WE HAD A

37
00:03:08,250 --> 00:03:14,570
DEDICATEED IMAGE ER.

38
00:03:14,570 --> 00:03:17,180
TO BE ABLE TO PROVIDE THE
IMAGERY BACK TO THE COULDN'TS

39
00:03:17,180 --> 00:03:18,200
THAT NEED THEM.

40
00:03:18,200 --> 00:03:22,240
THAT HAVE REAL DECISIONS THAT
NEED TO BE MADE WITH VERY QUICK

41
00:03:22,240 --> 00:03:23,460
TURN AROUND.

42
00:03:23,460 --> 00:03:27,660
NASA WE LOOKED IN OUR OWN
BACKYARD AND STARTED THINKING

43
00:03:27,660 --> 00:03:34,430
COULD WE USE THE INTERNATIONAL
SPACE STATION.

44

00:03:34,430 --> 00:03:37,260
>> THE INTERNATIONAL SPACE
STATION WAS REALLY FANTASTIC

45
00:03:37,260 --> 00:03:41,060
ASSET TO TAKE ADVANTAGE OF
BECAUSE IT PASSES OVER % OF

46
00:03:41,060 --> 00:03:44,240
THE EARTH POPULATED AREA EVERY
HOURS.

47
00:03:44,240 --> 00:03:46,069
WE DEVELOPED IMAGING SYSTEM AND

48
00:03:46,069 --> 00:03:50,370
WE CALLED IT WHICH BASICALLY IS
CAMERA AND A TELL SCOPE SYSTEM

49
00:03:50,370 --> 00:03:53,740
THAT SITTING INSIDE THE
INTERNATIONAL SPACE STATION AND

50
00:03:53,740 --> 00:03:57,490
CAN COLLECT IMAGERY WHEN IT
PASSES OVER NATURAL DISASTERS OR

51
00:03:57,490 --> 00:04:00,350
OTHER EVENTS WE NEED TO COLLECT
IMAGERY.

52
00:04:00,350 --> 00:04:03,190
WE WERE PLANNING TO TAKE A FEW
PICTURES PER DAY.

53
00:04:03,190 --> 00:04:08,410
[INAUDIBLE]
AROUND THE WORLD AND WE HAVE

54
00:04:08,410 --> 00:04:15,100

MORE THAN COMING FOR PEOPLE
WHO NEED IMAGES.

55

00:04:15,100 --> 00:04:18,079
>> WE MOVED TO LIKE , EDGES
A DAY.

56

00:04:18,079 --> 00:04:23,090
WE PROVIDED IMAGERY FOR MANY
NATURAL DISASTERS, FLOODS,

57

00:04:23,090 --> 00:04:24,090
FIRES.

58

00:04:24,090 --> 00:04:27,279
VOLCANIC U ERUPTIONS,
EARTHQUAKES.

59

00:04:27,279 --> 00:04:34,050
IT WAS A FANTASTIC EXAMPLE
SHOWING HOW IMAGERY COULD BE

60

00:04:34,050 --> 00:04:37,449
USED IN THESE TIMES OF DIRE
NEED.

61

00:04:37,449 --> 00:04:42,289
>> NOW WE HAVE THE USE OF IMAGES
AROUND THE WORLD.

62

00:04:42,289 --> 00:04:47,279
THIS IS SOMETHING THAT.

63

00:04:47,279 --> 00:04:51,830
>> I SERVE AS EXAMPLE OF IN
ESSENCE MAKING THE INTERNATIONAL

64

00:04:51,830 --> 00:04:55,010
SPACE STATION EVEN MORE
INTERNATIONAL.

65
00:04:55,010 --> 00:04:58,879
AND CONNECTING SPACE TO VILLAGE
TO BETTER UNDERSTAND AND PROTECT

66
00:04:58,879 --> 00:05:04,129
OUR OWN PLANET.

67
00:05:04,129 --> 00:05:18,330
>> LADIES AND GENTLEMEN, PLEASE
WELCOME TO THE STAGE ASSOCIATED

68
00:05:18,330 --> 00:05:19,330
ADMINISTRATOR ERIC.

69
00:05:19,330 --> 00:05:20,330
>> GOOD MORNING.

70
00:05:20,330 --> 00:05:21,330
WELCOME.

71
00:05:21,330 --> 00:05:22,330
HOW ARE YOU ALL DOING.

72
00:05:22,330 --> 00:05:23,330
GOOD.

73
00:05:23,330 --> 00:05:25,480
I WANT TO WELCOME OUR GUEST FROM
OTHER U.S. GOVERNMENT AGENCIES

74
00:05:25,480 --> 00:05:26,960
THAT ARE HERE TODAY.

75
00:05:26,960 --> 00:05:31,879
AS WELL AS OUR STAFF SYVERS WHO
ARE PARTICIPATES VIA THE

76

00:05:31,879 --> 00:05:33,889

INTERNET.

77

00:05:33,889 --> 00:05:37,460

>> SOME MIGHT ASK WHAT DOES AN
AGENCY FOCUSING ON PEOPLE

78

00:05:37,460 --> 00:05:41,479

EARNING LESS THAN A DOLLAR A
DAY HAVE IN COMMON WITH AN

79

00:05:41,479 --> 00:05:44,789

AGENCY THAT JUST FLEW BY PLUTO.

80

00:05:44,789 --> 00:05:48,680

MY ANSWER IS MORE THAN YOU
THINK.

81

00:05:48,680 --> 00:05:55,870

FIRST, IN MY VIEW OF THIS BOTH
NASA HAVE STAFF SUCH AS ALL OF

82

00:05:55,870 --> 00:06:01,419

YOU WHO ARE INCREDIBLY COMMITTED
TO OUR RESPECTIVE MISSIONS.

83

00:06:01,419 --> 00:06:06,559

SECONDLY, WE ARE BOTH CONSTANTLY
ASKED TO JUSTIFY TO ALL OF OUR

84

00:06:06,559 --> 00:06:10,009

FELLOW CITIZENS IN THE UNITED
STATES WHO CAN FUND MANY

85

00:06:10,009 --> 00:06:14,319

CHALLENGES IN THEIR OWN LIVES
AND THEIR COMMUNITIES WHY SCARS

86

00:06:14,319 --> 00:06:18,029

TAX DOLLARS SHOULD BE DEVOTED TO

OUR MISSION.

87
00:06:18,029 --> 00:06:25,229
LASTLY, BOTH AGENCIES CAN ONLY
SUCCEED WITH TEAM WORK, SCIENCE,

88
00:06:25,229 --> 00:06:26,780
TECHNOLOGY AND INNOVATION.

89
00:06:26,780 --> 00:06:31,389
THAT IS WHY WE ARE THRILLED TO
HOST TODAY'S EVENT.

90
00:06:31,389 --> 00:06:36,169
WHICH HIGHLIGHTS JUST PART OF
OUR UNIQUE PARTNERSHIP WITH NASA

91
00:06:36,169 --> 00:06:40,960
TO ENHANCE THE IMPACT BY
HARNESSING THE POWER OF SCIENCE

92
00:06:40,960 --> 00:06:43,139
AND TECHNOLOGY.

93
00:06:43,139 --> 00:06:47,800
THE SATURDAY LIGHT IMAGERY THAT
IS GOING TO BE UP HERE ON THE

94
00:06:47,800 --> 00:06:52,100
SCREEN BEHIND ME PRETTY SOON IS
A LIVE FEED FROM THE

95
00:06:52,100 --> 00:06:54,319
INTERNATIONAL SPACE STATION.

96
00:06:54,319 --> 00:06:57,419
AT THE MOMENT THIS VERY MOMENT
IT'S PASSING OVER THE SOUTH

97

00:06:57,419 --> 00:07:02,499
ATLANTIC AT , MILES PER
HOUR.

98
00:07:02,499 --> 00:07:05,330
MAKING A COMPLETE ROTATION
AROUND THE EARTH ROUGHLY EVERY

99
00:07:05,330 --> 00:07:06,539
MINUTES.

100
00:07:06,539 --> 00:07:10,330
SO BY THE END OF THIS ONE EVENT
THAT SATELLITE WILL HAVE PASSED

101
00:07:10,330 --> 00:07:18,339
OVER DIFFERENT COUNTRIES
WHERE WE HAVE USAID OPERATIONS.

102
00:07:18,339 --> 00:07:21,759
>> FOR MORE THAN YEARS NASA
HAS SPARKED NATION CURIOSITY

103
00:07:21,759 --> 00:07:25,300
ABOUT OUR PLANET AND THE
UNIVERSE BEYOND IT.

104
00:07:25,300 --> 00:07:28,919
IT'S INCREDIBLE IMAGES SUCH AS
THE ONES WE ARE GOING TO SEE

105
00:07:28,919 --> 00:07:30,729
REMIND US OF WHAT WE SHARE AND

106
00:07:30,729 --> 00:07:34,300
STRESS THE URGENCY OF PROTECTING
IT.

107
00:07:34,300 --> 00:07:39,099
FROM THE VANTAGE POINT OF SPACE

I'M TOLD NASA MONITORS OUR

108

00:07:39,099 --> 00:07:44,059

OCEANS AND ATMOSPHERE AND LAND
AND HAS THE INCREDIBLE VISTAS OF

109

00:07:44,059 --> 00:07:49,150

OUR PLANET AND THEY MAKE THIS
DATA AVAILABLE FREE AND OPEN TO

110

00:07:49,150 --> 00:07:50,879

THE PUBLIC.

111

00:07:50,879 --> 00:07:54,830

THIS IS CLEARLY AN INCREDIBLE
RESOURCE FOR SCIENCE.

112

00:07:54,830 --> 00:07:59,009

PLAYS A KEY ROLE IN ADVANCING
OUR DEVELOPMENT GOALS.

113

00:07:59,009 --> 00:08:04,409

WE ARE PROUD TO PARTNER WITH
NASA ON A WHOLE VARIETY OF

114

00:08:04,409 --> 00:08:05,409

PROGRAMS.

115

00:08:05,409 --> 00:08:08,159

ONE EXAMPLE IS THIS PROGRAM THAT
ARE YOU GOING, YOU STARTED TO

116

00:08:08,159 --> 00:08:12,009

HEAR ABOUT AND YOU WILL HEAR
MORE ABOUT WHICH IS THE SEVERE

117

00:08:12,009 --> 00:08:13,009

PROGRAM.

118

00:08:13,009 --> 00:08:15,409
WHICH WORKS IN COLLABORATION
WITH ORGANIZATIONS AROUND THE

119
00:08:15,409 --> 00:08:19,809
WORLD TO HELP DEVELOPING
COUNTRIES MAKE USE OF THE

120
00:08:19,809 --> 00:08:24,339
INFORMATION COMING FROM THESE
EARTH OBSERVING SATELLITES.

121
00:08:24,339 --> 00:08:28,009
BY WORKING TOGETHER WE HAVE
IMPROVED THE WARNING TIMES ABOUT

122
00:08:28,009 --> 00:08:29,520
FLOODS.

123
00:08:29,520 --> 00:08:34,600
WE PROVIDED INDUSTRY GROWERS IN
KENYA A TOOL TO PREDICT FROST

124
00:08:34,600 --> 00:08:37,380
BEFORE IT DAMAGES THEIR VALUABLE
CROP.

125
00:08:37,380 --> 00:08:41,750
AND YOU KNOW WHAT A DIFFERENCE
THAT CAN MAKE TO INCOMES IN POOR

126
00:08:41,750 --> 00:08:43,000
FAMILIES.

127
00:08:43,000 --> 00:08:46,720
HELP CENTRAL AMERICA REDUCE THE
PUBLIC HEALTH IMPACTS OF HARMFUL

128
00:08:46,720 --> 00:08:52,670
ALGAE BLOOM.

129

00:08:52,670 --> 00:08:58,390

>> EASTERN AND SOUTHERN AFRICA
JUST TWO WEEKS AGO U.S. AID AND

130

00:08:58,390 --> 00:09:04,850

NASA LAUNCHED A SEVERE MACON
OPERATION TO HELP ASIA LOWER MAY

131

00:09:04,850 --> 00:09:15,940

ON CON REEM BETTER ADAPT TO THE
CHANGING CLIMATE.

132

00:09:15,940 --> 00:09:18,950

HARNESS THE POWER OF SCIENCE,
DATA AND TECHNOLOGY.

133

00:09:18,950 --> 00:09:24,650

THERE THE PARTNERSHIP FOR
ENHANCED ENGAGEMENT IN RESEARCH.

134

00:09:24,650 --> 00:09:30,610

WHICH HELPS BUILD LOCAL CAPACITY
BY LINKING SCIENTISTS WITH NASA

135

00:09:30,610 --> 00:09:33,110

AND OTHER SCIENTISTS IN THE
UNITED STATES.

136

00:09:33,110 --> 00:09:38,440

OUR MIDDLE EAST BUREAU ALONE HAS
THREE DIFFERENT CO LIBERATIONS

137

00:09:38,440 --> 00:09:46,710

INCLUDING WORKING WITH ITS WATER
INFORMATION SYSTEMS PLATFORM.

138

00:09:46,710 --> 00:09:51,980

THROUGH THESE PROGRAMS WORKING
HAND IN HAND TO PROTECT THE

139

00:09:51,980 --> 00:09:55,580

WORLD'S MOST VULNERABLE PEOPLE
AND TO BUILD A WORLD THAT IS

140

00:09:55,580 --> 00:09:59,640

SAFER, CLEANER AND MORE
PROSPEROUS FOR EVERYONE.

141

00:09:59,640 --> 00:10:02,310

WITH THAT I WOULD LIKE TO
WELCOME NASA ADMINISTRATOR

142

00:10:02,310 --> 00:10:04,030

CHARLIE BOLDEN.

143

00:10:04,030 --> 00:10:08,260

SINCE CRONIN HE HAD LED THE
U.S. SPACE PROGRAM.

144

00:10:08,260 --> 00:10:13,370

OVERSEEING AN INURE RA OF
SCIENTIFIC EXPLORATION.

145

00:10:13,370 --> 00:10:19,540

HE SERVED OUR COUNTRY FOR MORE
THAN YEARS IN THE U.S. MARINE

146

00:10:19,540 --> 00:10:28,560

CORPS BEFORE RETIRING IN .
THAT'S ANOTHER COMMONALITY.

147

00:10:28,560 --> 00:10:35,580

>> DURING HIS SERVICE HE SPENT
YEARS AS A MEMBER OF NASA

148

00:10:35,580 --> 00:10:40,050

ASTRONAUT OFFICE TRAVELING TO
SPACE FOUR TIMES ON BOARD THE

149

00:10:40,050 --> 00:10:41,300

SPACE SHUTTLE.

150

00:10:41,300 --> 00:10:45,030

WE ARE VERY FORTUNATE TO HAVE
ADMINISTRATOR BOLDEN AND TWO

151

00:10:45,030 --> 00:10:48,100

OTHER ASTRONAUTS FROM HIS TEAM
WITH US HERE TODAY.

152

00:10:48,100 --> 00:10:53,600

WE ARE VERY FORTUNATE TO COUNT
THEM AND THEIR INCREDIBLE TEAM

153

00:10:53,600 --> 00:10:58,760

AS OUR VALUED PARTNER IN OUR
WORK AND ADMINISTRATOR LEN HEART

154

00:10:58,760 --> 00:11:04,020

WHO WANTED TO BE HERE TODAY BUT
HAS ANOTHER BOARD MEETING TO BE

155

00:11:04,020 --> 00:11:05,020

AT.

156

00:11:05,020 --> 00:11:08,560

HE JUST A FEW MINUTES AGO SAID
HOW MUCH HE WANTS TO DEEPEN AND

157

00:11:08,560 --> 00:11:11,110

EXPAND THIS PARTNERSHIP.

158

00:11:11,110 --> 00:11:19,310

PLEASE JOIN ME IN WELCOMING
ADMINISTRATOR BOLDEN FROM NASA.

159

00:11:19,310 --> 00:11:24,472

[APPLAUSE]

>> THANK YOU.

160

00:11:24,472 --> 00:11:25,480

>> THANK YOU VERY MUCH.

161

00:11:25,480 --> 00:11:28,070

FOR THE VERY WARM WELCOME AND

162

00:11:28,070 --> 00:11:29,110

INTRODUCTION.

163

00:11:29,110 --> 00:11:31,700

I HAD AN OPPORTUNITY TO MEET
WITH YOUR ADMINISTRATOR A LITTLE

164

00:11:31,700 --> 00:11:36,340

BIT EARLIER AND I THINK HE AND I
ARE LIKE MINDS WHEN IT COMES TO

165

00:11:36,340 --> 00:11:39,650

STRENGTHENING THE RELATIONSHIPS
BETWEEN OUR AGENCIES.

166

00:11:39,650 --> 00:11:41,940

WE ARE EXCITED ABOUT IT.

167

00:11:41,940 --> 00:11:44,090

I WILL SAY A COUPLE OF THINGS.

168

00:11:44,090 --> 00:11:47,151

I DO HAVE PREPARED REMARKS BUT I
GENERALLY FOR THOSE OF YOU WHO

169

00:11:47,151 --> 00:11:49,730

HAVE SEEN ME BEFORE I HAVE HARD
TIME GOING TO MY PREPARED

170

00:11:49,730 --> 00:11:50,820

REMARKS.

171

00:11:50,820 --> 00:11:56,540

AS I WAS SITTING THERE AND HE
SAID HOW IS EVERYTHING GOING.

172

00:11:56,540 --> 00:11:58,820

GOING PRETTY WELL.

173

00:11:58,820 --> 00:12:03,880

KNOWING WHAT HE IS TALKING ABOUT
THIS BEING BUDGET TIME.

174

00:12:03,880 --> 00:12:07,730

YOU KNOW, YOU MUST GET WORN DOWN
WITH ALL THE STUFF THAT IS GOING

175

00:12:07,730 --> 00:12:08,730

ON.

176

00:12:08,730 --> 00:12:10,970

I DIDN'T GET AN OPPORTUNITY TO
RESPOND TO HIM BUT I WAS GOING

177

00:12:10,970 --> 00:12:12,550

TO SAY I GET FIRED UP.

178

00:12:12,550 --> 00:12:17,450

I GETTIN' EXPIRED BY WATCHING
ALL OF YOU DO WHAT YOU DO.

179

00:12:17,450 --> 00:12:18,980

NASA IS LIKE U.S. AID.

180

00:12:18,980 --> 00:12:23,010

WE ARE A PEOPLE ORGANIZATION.

181

00:12:23,010 --> 00:12:26,880

PEOPLE ALWAYS THINK ABOUT ROCKET
SHIPS AND MACHINES AND STUFF

182

00:12:26,880 --> 00:12:27,880

LIKE THAT.

183

00:12:27,880 --> 00:12:31,880

BUT WE ARE ON AN ORGANIZATION OF
, CIVIL SERVANTS AND WE HAD

184

00:12:31,880 --> 00:12:34,690

THIS DISCUSSION THIS MORNING IN
OUR STAFF MEETING HOW MANY

185

00:12:34,690 --> 00:12:35,690

CONTRACTORS.

186

00:12:35,690 --> 00:12:38,060

IT DEPENDS ON HOW YOU COULDN'T.

187

00:12:38,060 --> 00:12:42,850

ABOUT , CONTRACTORS AROUND
THE WORLD ACTUALLY WHEN YOU GET

188

00:12:42,850 --> 00:12:44,230

DOWN TO IT.

189

00:12:44,230 --> 00:12:45,661

AND THAT'S WHO WE ARE.

190

00:12:45,661 --> 00:12:46,760

WE ARE THE PEOPLE.

191

00:12:46,760 --> 00:12:50,010

WE ARE NOT THE MACHINE.

192

00:12:50,010 --> 00:12:54,130

JOHN WHO HEADS OUR SCIENCE
MISSION WHO IS ALSO ASTRONAUT A

193

00:12:54,130 --> 00:12:57,250
BIG TIME HUBBLE REPAIRMAN.

194

00:12:57,250 --> 00:13:04,290
WE WERE AT THE JET PROPULSION
LAB AND JOHN AS WE WERE

195

00:13:04,290 --> 00:13:05,370
CELEBRATING AND HAVING OUR

196

00:13:05,370 --> 00:13:08,700
SESSION LIKE THIS WITH ALL THE
FOLKS AND THE PRESS CONFERENCE

197

00:13:08,700 --> 00:13:10,900
JOHN SAID I WANT TO MAKE A
PREDICTION.

198

00:13:10,900 --> 00:13:14,200
I WENT OWE MY GOODNESS THIS IS
REALLY BAD.

199

00:13:14,200 --> 00:13:18,350
LET'S NOT MAKE PREDICTS
ESPECIALLY THE SCIENCE MISSION

200

00:13:18,350 --> 00:13:19,350
DIRECTOR.

201

00:13:19,350 --> 00:13:22,260
AND I'M SITTING THERE JUST
HOLDING MY BREATH.

202

00:13:22,260 --> 00:13:26,700
I PREDICT CURIOSITY WILL
DISCOVER NOTHING.

203

00:13:26,700 --> 00:13:29,310
MY HEART SANK.

204

00:13:29,310 --> 00:13:34,100

JOHN, HE SAID CURIOSITY WILL
DISCOVER NOTHING BECAUSE IT'S A

205

00:13:34,100 --> 00:13:35,730

ROBOT.

206

00:13:35,730 --> 00:13:38,670

THE DISCOVERIES WILL BE MADE BY
THE THOUSANDS OF PEOPLE DOWN

207

00:13:38,670 --> 00:13:42,500

HERE ON EARTH WHO WILL TAKE THE
DATA THAT COMES FROM CURIOSITY

208

00:13:42,500 --> 00:13:46,780

INTERPRET IT AND PUT IT TO USE
FOR PEOPLE ON EARTH.

209

00:13:46,780 --> 00:13:51,250

I WENT, I THINK I CAN LIVE WITH
THAT.

210

00:13:51,250 --> 00:13:54,090

SO THE THINGS THAT ERIC TALKED
ABOUT AND THE THINGS YOU WILL

211

00:13:54,090 --> 00:13:58,510

HEAR ME TALK ABOUT, THEY ARE
MOSTLY ROBOT.

212

00:13:58,510 --> 00:14:01,260

IT'S ALL OF YOU IN THIS
ORGANIZATION AND OUR

213

00:14:01,260 --> 00:14:05,450

ORGANIZATION OVER AT NASA AND
OTHER SISTER ORGANIZATIONS WHO

214

00:14:05,450 --> 00:14:08,030
REALLY MAKE A DIFFERS AND MAKE
THINGS HAPPEN.

215
00:14:08,030 --> 00:14:10,370
WITH THAT EVERYTHING STARTS WITH
A DREAM.

216
00:14:10,370 --> 00:14:13,590
NOT SURE HOW MANY OF YOU KNOW
ABOUT SOME OF YOU IN FRONT KNOW

217
00:14:13,590 --> 00:14:15,830
WHERE I AM GOING.

218
00:14:15,830 --> 00:14:17,800
EVERYTHING STARTS WITH A DREAM.

219
00:14:17,800 --> 00:14:22,230
STARTED WITH A DREAM IN THE MIND
OF A GUY SITTING DOWN HERE IN

220
00:14:22,230 --> 00:14:24,350
THE FRONT ROW.

221
00:14:24,350 --> 00:14:26,610
DAN IRWIN WHO IS NASA EMPLOYEE.

222
00:14:26,610 --> 00:14:31,670
EVERY TIME I THINK ABOUT THIS I
GET GOOSE PUMPS.

223
00:14:31,670 --> 00:14:34,820
HE IS A CIVILIAN.

224
00:14:34,820 --> 00:14:39,560
DOING VOLUNTEER WORK AND HE
ESSENTIALLY TOLD YOU ABOUT IT ON

225

00:14:39,560 --> 00:14:40,560
THE SCREEN THERE.

226
00:14:40,560 --> 00:14:45,020
BUT HE MET THIS YOUNG LADY BY
THE NAME OF CARRIE STOKES WHO

227
00:14:45,020 --> 00:14:47,260
BELONGS TO YOU.

228
00:14:47,260 --> 00:14:50,981
>> I DON'T KNOW THE WHOLE STORY
BUT WHAT I DO KNOW TWO PEOPLE

229
00:14:50,981 --> 00:14:55,090
FROM TWO DIFFERENT ORGANIZATIONS
WERE DRAWN TOGETHER AND FROM

230
00:14:55,090 --> 00:14:57,680
THAT WAS BORN WHAT IS NOW
SEVERE.

231
00:14:57,680 --> 00:15:04,040
IT IS IN MY ESTIMATION ONE OF
THE MOST POWERFUL JUST AWESOME

232
00:15:04,040 --> 00:15:11,140
TOOLS THAT OUR TWO ORGANIZATIONS
ARE ABLE TO GIVE TO HUMANITY.

233
00:15:11,140 --> 00:15:13,920
WITH THAT HOPEFULLY YOU
UNDERSTAND WHAT A GREAT

234
00:15:13,920 --> 00:15:16,420
PRIVILEGE IT IS FOR ME TO BE
HERE WITH ALL OF YOU.

235
00:15:16,420 --> 00:15:20,610
WITH MY COLLEAGUES.

236

00:15:20,610 --> 00:15:25,360

AND OTHERS WHO MAY BE FROM OTHER
GOVERNMENT ORGANIZATIONS.

237

00:15:25,360 --> 00:15:27,940

IT'S A PLEASURE TO BE HERE WITH
ALL OF YOU WHOSE DEDICATION TO

238

00:15:27,940 --> 00:15:34,040

IMPROVING CONDITIONS WORLDWIDE
IS DRIVING SO MUCH POSITIVE

239

00:15:34,040 --> 00:15:35,210

CHANGE.

240

00:15:35,210 --> 00:15:39,021

IT'S ALSO WONDERFUL TO SHARE
THIS EVENT WITH ALL OF YOU WHO

241

00:15:39,021 --> 00:15:42,940

ARE SO INTERESTED IN THE FUTURE
OF OUR PLANET.

242

00:15:42,940 --> 00:15:44,110

AND WITH ASTRONAUTS.

243

00:15:44,110 --> 00:15:48,580

EVERYBODY LOVES ASTRONAUTS.

244

00:15:48,580 --> 00:15:52,240

EXCEPT FOR WHO?

245

00:15:52,240 --> 00:15:53,240

COME ON.

246

00:15:53,240 --> 00:15:57,760

YOU DIDN'T HEAR THAT BUT UNDER
HIS BREATH EXCEPT FOR OUR

247

00:15:57,760 --> 00:15:58,780

BOSSSES.

248

00:15:58,780 --> 00:16:04,320

HAVING BEEN ONE WE ARE HARD TO
HANDLE WHILE WE ARE THERE.

249

00:16:04,320 --> 00:16:06,560

ANY WAY.

250

00:16:06,560 --> 00:16:12,300

TERRY, YOU ARE DISTRACTING ME.

251

00:16:12,300 --> 00:16:16,820

>> BUT WE DO HAVE TODAY WITH US
ASTRONAUTS TERRY VIRTS AND

252

00:16:16,820 --> 00:16:20,760

SAMANTHA CRISTOFORETTI WHO
RECENTLY RETURNED FROM SPACE AND

253

00:16:20,760 --> 00:16:23,960

ARE HELPING US MAKE RESEARCH AND
TECHNOLOGY BREAK THROUGHHS

254

00:16:23,960 --> 00:16:25,770

BENEFIT PEOPLE WORLDWIDE.

255

00:16:25,770 --> 00:16:28,450

I KNOW YOU WANT ME TO SIT DOWN
SO I CAN HAND IT OVER TO THEM

256

00:16:28,450 --> 00:16:30,380

AND I'M GOING TO DO THAT.

257

00:16:30,380 --> 00:16:33,120

>> I WANT TO CONGRATULATE THE
MEMBERS OF THE SEVERE TEAM MANY

258

00:16:33,120 --> 00:16:35,570

OF WHOM ARE WITH US TODAY.

259

00:16:35,570 --> 00:16:38,990

ON THE LAUNCH OF THE NETWORK
NEWEST HUB.

260

00:16:38,990 --> 00:16:42,660

IT WAS AN INCREDIBLE PLEASURE
FOR ME TO BE THERE IN BANK COK

261

00:16:42,660 --> 00:16:45,210

AND HAVE AN OPPORTUNITY TO
PARTICIPATE IN THE RIBBON

262

00:16:45,210 --> 00:16:50,950

CUTTING WHICH SYMBOLIC FOR ME
WAS JUST SOMETHING VERY, VERY

263

00:16:50,950 --> 00:16:53,460

SPECIAL.

264

00:16:53,460 --> 00:16:57,670

BRINGING THE CAPABILITY OF
SEVERE TO THAT PART OF THE WORLD

265

00:16:57,670 --> 00:17:00,550

WHERE AS ERIC TALKED ABOUT WE
ARE MAKING IT POSSIBLE FOR

266

00:17:00,550 --> 00:17:03,910

PEOPLE TO MAKE FORECASTS ON
FLOODS AND OTHER KINDS OF THINGS

267

00:17:03,910 --> 00:17:08,900

THAT WILL RESULT IN THE SAVING
OF MANY, MANY LIVES.

268

00:17:08,900 --> 00:17:12,290
IT WAS A GREAT PLEASURE TO BE
THERE TOGETHER WITH THE REGIONAL

269
00:17:12,290 --> 00:17:14,390
DEVELOPMENT COMMISSION FOR ASIA.

270
00:17:14,390 --> 00:17:17,590
COMMISSION DIRECTOR BETH PAGE
AND FOR THOSE THOSE OF YOU WHO

271
00:17:17,590 --> 00:17:24,880
MAY KNOW HER THAT WAS HER FIRST
DAY OF WORK.

272
00:17:24,880 --> 00:17:26,740
QUITE A BIG FIRST DAY FOR HER.

273
00:17:26,740 --> 00:17:30,340
WE HAD FLOWN OVER TOGETHER AND
GOTTEN TO KNOW EACH OTHER ON THE

274
00:17:30,340 --> 00:17:31,340
FLIGHT.

275
00:17:31,340 --> 00:17:33,470
SEVERE IS MAKING A HUGE
DIFFERENCE IN THE LIVES OF

276
00:17:33,470 --> 00:17:38,980
PEOPLE WITH A WEALTH OF DATA AND
TOOLS DERIVED FROM OUR

277
00:17:38,980 --> 00:17:40,810
OBSERVATION SATELLITES.

278
00:17:40,810 --> 00:17:44,700
IT'S TRULY CONNECTING SPACE TO
VILLAGE AND I KNOW IT TOOK A LOT

279

00:17:44,700 --> 00:17:46,990

OF PEOPLE TO MAKE THAT HAPPEN.

280

00:17:46,990 --> 00:17:50,570

SO THANK YOU TO UASID FOR YOUR
FRIENDSHIP.

281

00:17:50,570 --> 00:17:53,270

ACCOMPLISHING A LOT TOGETHER.

282

00:17:53,270 --> 00:17:57,170

THE FACT WE HAVE BEENABLE TO
LAUNCH THIS IMPORTANT NEW HUB IN

283

00:17:57,170 --> 00:18:01,030

THE SEVERE NETWORK INCLUDES
HIMALAYA.

284

00:18:01,030 --> 00:18:03,700

EASTERN AND SOUTHERN AFRICA.

285

00:18:03,700 --> 00:18:09,770

IT'S CERTAINLY TANGIBLE PROOF
WHAT WE ARE DOING IS WORKING.

286

00:18:09,770 --> 00:18:12,210

>> WE GET A LOT OF QUESTIONS
ABOUT OUR EARTH OBSERVATION WORK

287

00:18:12,210 --> 00:18:15,160

AT IN A TAKE.

288

00:18:15,160 --> 00:18:16,730

CONGRESS.

289

00:18:16,730 --> 00:18:18,670

YOU KNOW WHY.

290

00:18:18,670 --> 00:18:21,760
IN FACT A LOT OF PEOPLE AREN'T
EVEN AWARE THAT IT'S SUCH A CORE

291
00:18:21,760 --> 00:18:24,540
FUNCTION OF OUR AGENCY.

292
00:18:24,540 --> 00:18:25,610
BUT MAKE NO MISTAKE.

293
00:18:25,610 --> 00:18:29,690
NASA DEEPLY COMMITTED AND THE
VALUE IT PROVIDES TO PEOPLE

294
00:18:29,690 --> 00:18:31,330
AROUND THE GLOBE.

295
00:18:31,330 --> 00:18:34,030
WE HAVE BEEN SINCE OUR FOUNDING.

296
00:18:34,030 --> 00:18:36,620
>> THE MORE THE SEVERE NETWORK
AND OUR OTHER PARTNERSHIPS

297
00:18:36,620 --> 00:18:40,710
EXPAND THE MORE OPPORTUNITIES WE
HAVE TO TEST AND SHOWCASE OUR

298
00:18:40,710 --> 00:18:43,630
NEWEST EARTH OBSERVATION
SATELLITES.

299
00:18:43,630 --> 00:18:46,640
MISSIONS LIKE GLOBAL
PRECIPITATION MEASUREMENT.

300
00:18:46,640 --> 00:18:50,840
OR THE SOIL MOISTURE SNAP AS WE
LIKE TO CALL IT.

301
00:18:50,840 --> 00:18:53,980
AND OTHERS ARE NOW RETURNING
MASSIVE AMOUNTS OF DATA AND MORE

302
00:18:53,980 --> 00:18:57,070
EARTH SCIENCE MISSIONS ARE ON
THE WAY.

303
00:18:57,070 --> 00:19:01,080
THE INTERNATIONAL SPACE STATION
ALSO IS BECOMING A PLATFORM.

304
00:19:01,080 --> 00:19:07,220
ASTER RY AND SAMANTHA CAN AGREE.

305
00:19:07,220 --> 00:19:10,940
CAMERA USED BY SEVERE THAT YOU
HEARD DESCRIBED A LITTLE BIT IN

306
00:19:10,940 --> 00:19:13,600
THE VIDEO THAT YOU SAW.

307
00:19:13,600 --> 00:19:16,140
IT'S FOR SEVERE END USERS.

308
00:19:16,140 --> 00:19:22,160
IT HAS EYE INQUIRED MORE THAN
, IMAGES ACROSS SIX

309
00:19:22,160 --> 00:19:23,430
CONTINENTS.

310
00:19:23,430 --> 00:19:28,700
RESPONSE TO FLOODS, FIRES AND
OTHER EXTREME WEATHER EVENTS

311
00:19:28,700 --> 00:19:30,380
AROUND THE WORLD.

312

00:19:30,380 --> 00:19:35,770

OTHER INSTRUMENTS RAPID SCAN TO
MONITOR OCEAN WINDS AND THE

313

00:19:35,770 --> 00:19:38,640

TRANS IMPORTANT SYSTEM.

314

00:19:38,640 --> 00:19:40,820

TO MEASURE CLOUDS AND POLLUTION.

315

00:19:40,820 --> 00:19:44,280

ALSO CONTRIBUTING TO THE WEALTH
OF EARTH SCIENCE DATA AVAILABLE

316

00:19:44,280 --> 00:19:49,260

TO THE PUBLIC AND TO DECISION
MAKERS LIKE THOSE SEVERE SERVES.

317

00:19:49,260 --> 00:19:53,860

ASTRONAUTS ALSO TAKE A LOT OF
GREAT PICTURES THAT THEY SHARE

318

00:19:53,860 --> 00:19:56,680

WITH MILLIONS VIA SOCIAL MEDIA.

319

00:19:56,680 --> 00:19:59,950

WE LIKE TO SAY ABOUT STATION
THAT WE ARE WORKING OFF THE

320

00:19:59,950 --> 00:20:01,830

PLANET FOR THE PLANET.

321

00:20:01,830 --> 00:20:05,450

AND I THINK THAT EQUALLY APPLIES
TO SEVERE.

322

00:20:05,450 --> 00:20:08,720

TOGETHER WE ARE CONTRIBUTING TO
THE EFFORT TO HELP BRING OUR

323

00:20:08,720 --> 00:20:12,400

SPAS BASED SCIENCE DOWN TO EARTH
FOR REAL TIME, REAL WORLD

324

00:20:12,400 --> 00:20:16,230

APPLICATIONS THAT ARE CHANGING
THE LIVES OF PEOPLE WHERE THEY

325

00:20:16,230 --> 00:20:17,280

LIVE.

326

00:20:17,280 --> 00:20:20,080

I'M ALSO PLEASED THAT WE ARE
FINDING WAYS TO BRING NASA

327

00:20:20,080 --> 00:20:24,440

SCIENCE TO MEET USAID
DEVELOPMENT OBJECTIVES.

328

00:20:24,440 --> 00:20:26,380

EXCITED THAT OUR SCIENTISTS ARE
BEING CONNECTED WITH

329

00:20:26,380 --> 00:20:30,200

INTERNATIONAL SCIENTISTS TO
COMBINE THOSE PEOPLE'S LOCAL

330

00:20:30,200 --> 00:20:35,250

KNOWLEDGE WITH NASA EARTH SYSTEM
SCIENCE STUDIES THROUGH

331

00:20:35,250 --> 00:20:41,030

PARTNERSHIP AS ERIC TALKED
ABOUT.

332

00:20:41,030 --> 00:20:47,090

>> OF OUR SCIENTISTS NOW WORK
WITH TO HARNESS THAT COLLECTIVE

333

00:20:47,090 --> 00:20:49,750

KNOWLEDGE FOR THE BENEFIT OF
DEVELOPMENT.

334

00:20:49,750 --> 00:20:55,100

OUR PARTNERSHIP ALLOWS US TO
WORK TOGETHER TO BRING SPACE TO

335

00:20:55,100 --> 00:20:56,100

VILLAGE.

336

00:20:56,100 --> 00:21:00,440

MORE OVER IT ALSO NOW IS BRINGING
VILLAGE TO SPACE.

337

00:21:00,440 --> 00:21:06,420

AS NASA HAS LEARNED NEW
TERMINOLOGY.

338

00:21:06,420 --> 00:21:14,750

INDICATORS AND CHEER THEORY OF
CHANGE.

339

00:21:14,750 --> 00:21:18,460

ENSURE THE SUCCESSFUL OUT COME
OF OUR ACTIVITIES.

340

00:21:18,460 --> 00:21:21,360

TOGETHER OUR AGENCIES HAVE
WORKED IN FOUR REGIONS AND

341

00:21:21,360 --> 00:21:23,670

COUNTRIES.

342

00:21:23,670 --> 00:21:27,850

DEVELOP TAILORED SUPPORT
TOOLS WITH EARTH OBSERVATIONS

343

00:21:27,850 --> 00:21:32,890

INCREASE THE CAPACITY OF OVER
INSTITUTIONS AND ABLE

344

00:21:32,890 --> 00:21:37,560
UNIVERSITY FELLOWS FROM
COUNTRIES AND TRAINED OVER

345

00:21:37,560 --> 00:21:39,690
PEOPLE.

346

00:21:39,690 --> 00:21:42,220
JUST AS THE SPACE STATION HAS
BECOME A MODEL OF INTERNATIONAL

347

00:21:42,220 --> 00:21:47,300
COOPERATION AMONG NATIONS WHO
HAVE MANY DIFFERENCE, BECOME THE

348

00:21:47,300 --> 00:21:51,990
NETWORK OF REGIONS AND PEOPLE.

349

00:21:51,990 --> 00:21:55,010
>> I CAN'T THINK OF ANYTHING
MORE GRATIFYING TO DEMONSTRATE

350

00:21:55,010 --> 00:21:59,330
WHY OUR SPACE PROGRAM IS VITAL
TO EVERYONE ON THIS PLANET.

351

00:21:59,330 --> 00:22:02,800
I COULDN'T BE HAPPIER TO JOIN
ALL OF YOU TODAY AS WE CELEBRATE

352

00:22:02,800 --> 00:22:07,330
THE PARTNERSHIP NASA THROUGH THE
USE OF SCIENCE FROM OUR

353

00:22:07,330 --> 00:22:10,220
SATELLITES AS WELL AS
INSTRUMENTS AND ASTRONAUTS ON

354

00:22:10,220 --> 00:22:15,110

THE INTERNATIONAL SPAS STATION
AND LOOK TO THE FUTURE.

355

00:22:15,110 --> 00:22:16,570

THERE ARE CHALLENGES AHEAD.

356

00:22:16,570 --> 00:22:19,670

OUR PLANET IS CHANGING AND WE
HAVE A LOT OF WORK TO DO.

357

00:22:19,670 --> 00:22:23,300

THE GOOD NEWS IS WE HAVE A LOT
OF INFORMATION COMING IN.

358

00:22:23,300 --> 00:22:27,210

MORE EARTH SCIENCE MISSIONS ON
THE WAY AND A LOT OF PASSION,

359

00:22:27,210 --> 00:22:30,590

DEDICATION AND EXPERTISE ON THE
PART OF ALL OF YOU.

360

00:22:30,590 --> 00:22:34,090

IN FACT RIGHT HERE IN THIS ROOM
AND AROUND THE WORLD BY YOUR

361

00:22:34,090 --> 00:22:37,720

COLLEAGUES TO HELP US FACE THE
FUTURE AND MAKE IT BRIGHTER FOR

362

00:22:37,720 --> 00:22:39,250

EVERYONE.

363

00:22:39,250 --> 00:22:42,700

EARTH IS AFTER ALL IN MY MIND
THE MOST IMPORTANT PLANET FOR

364

00:22:42,700 --> 00:22:44,480
EVERY ONE OF US.

365
00:22:44,480 --> 00:22:49,760
WITH NETWORKS LIKE SEVERE THE
SCIENCE PARTNERSHIPS AND THE

366
00:22:49,760 --> 00:22:54,010
INNOVATION I SEE ALL OVER THE
WORLD I'M CONFIDENT THAT THE

367
00:22:54,010 --> 00:22:56,550
BEST IS YET TO COME.

368
00:22:56,550 --> 00:22:57,720
DON'T TAKE HER OUT.

369
00:22:57,720 --> 00:23:02,810
SHE IS PROBABLY THE ONLY ONE WHO
WAS LISTENING.

370
00:23:02,810 --> 00:23:08,980
>> I LOVE IT.

371
00:23:08,980 --> 00:23:15,160
I'M A GRANDPA.

372
00:23:15,160 --> 00:23:18,960
IT'S NOW MY PLEASURE TO
INTRODUCE ASTRONAUT TERRY VIRTS

373
00:23:18,960 --> 00:23:22,400
AND SAMANTHA CRISTOFORRETTI.

374
00:23:22,400 --> 00:23:26,700
TWO FELLOW PILOTS WHO CAME FROM
THEIR COUNTRIES AIR FORCES.

375
00:23:26,700 --> 00:23:28,360

TOGETHER THEY RECENTLY HELPED US

376

00:23:28,360 --> 00:23:32,180

CONCLUDE A SUCCESSFUL
EXPEDITION.

377

00:23:32,180 --> 00:23:40,460

>> HER CAREER IS HELPING TO MAKE
THE SCIENCE FICTION SHE LOVES

378

00:23:40,460 --> 00:23:42,340

BECOME SCIENCE FACT.

379

00:23:42,340 --> 00:23:48,400

TOGETHER THESE ASTRONAUTS WORK,
TOOK US ONE STEP CLOSER TO

380

00:23:48,400 --> 00:23:52,840

EXPANDING OUR HUMAN EXPERIENCE
THROUGHOUT THE SOLAR SYSTEM.

381

00:23:52,840 --> 00:23:56,760

BOTH INTREPID EXPLORERS.

382

00:23:56,760 --> 00:24:05,930

JOIN ME IN A WARM WELCOME.

383

00:24:05,930 --> 00:24:24,549

[APPLAUSE]

>> I APPRECIATE THAT AND I LOVE

384

00:24:24,549 --> 00:24:27,730

THE MISSION AND I KNOW SAMANTHA
DOES TOO.

385

00:24:27,730 --> 00:24:31,520

IT'S A WONDERFUL THING TO SEE
PEOPLE DOING WORK AROUND THE

386

00:24:31,520 --> 00:24:32,590
WORLD.

387
00:24:32,590 --> 00:24:35,330
WE HAD THE PRIVILEGE OF SEEING
THE WORLD FROM A UNIQUE

388
00:24:35,330 --> 00:24:36,770
PERSPECTIVE.

389
00:24:36,770 --> 00:24:39,620
AND I KNOW THAT YOU HEAR THIS
AND YOU'VE HEARD OTHER PEOPLE

390
00:24:39,620 --> 00:24:42,500
SAY IT IN THE PAST.

391
00:24:42,500 --> 00:24:44,330
I WILL SAY IT AGAIN.

392
00:24:44,330 --> 00:24:45,330
IT'S TRUE.

393
00:24:45,330 --> 00:24:48,520
WHEN YOU LOOK DOWN ON EARTH FROM
SPACE YOU USUALLY DON'T SEE

394
00:24:48,520 --> 00:24:49,520
BORDERS.

395
00:24:49,520 --> 00:24:51,570
>> OCCASIONALLY YOU DO I WILL
TALK ABOUT IN A SECOND.

396
00:24:51,570 --> 00:24:55,450
>> WE DO SHARE THE SAME PLANET
AND YOU LOOK AT THE EARTH IT'S

397
00:24:55,450 --> 00:24:59,790

BEAUTIFUL FROM SPACE AND OFTEN
TIMES WE LOOK DOWN AND MY BUCKET

398

00:24:59,790 --> 00:25:02,860

LIST OF PLACES TO GO HAS GROWN A
LOT SINCE I GOT A CHANCE TO SEE

399

00:25:02,860 --> 00:25:04,170

THE EARTH.

400

00:25:04,170 --> 00:25:07,960

BUT WE TALK ABOUT THIS IS A
BEAUTIFUL PLACE BUT WE KNEW WHAT

401

00:25:07,960 --> 00:25:09,060

WAS HAPPENING.

402

00:25:09,060 --> 00:25:14,720

NOT GOOD AT ALL FOR THE PEOPLE
LIVING DOWN THERE AND LOOK DOWN

403

00:25:14,720 --> 00:25:17,280

ON CREATION.

404

00:25:17,280 --> 00:25:20,190

ALSO REALIZE THE CHALLENGES THAT
PEOPLE HAD ON EARTH.

405

00:25:20,190 --> 00:25:21,450

I TALK ABOUT BORDERS.

406

00:25:21,450 --> 00:25:22,450

USUALLY YOU CAN'T SEE THAT.

407

00:25:22,450 --> 00:25:26,620

IN EUROPE IT'S KIND OF A
CONTINUOUS STREAM OF THE

408

00:25:26,620 --> 00:25:27,620

CONTINENT.

409

00:25:27,620 --> 00:25:30,320

MILLIONS OF LITTLE BORDERS YOU
CAN'T TELL FROM SPACE.

410

00:25:30,320 --> 00:25:32,260

SAME THING ACROSS AFRICA.

411

00:25:32,260 --> 00:25:35,360

MAN MADE BORDERS THAT DON'T
EXIST FOR REASON THEY GOT PUT

412

00:25:35,360 --> 00:25:38,250

THERE ON A MAP BY PEOPLE.

413

00:25:38,250 --> 00:25:40,070

A FEW PLACES THAT YOU CAN SEE
BORDERS.

414

00:25:40,070 --> 00:25:45,140

TWO THAT STICK OUT WAS THE
PAKISTAN INDIAN BORDER AND I

415

00:25:45,140 --> 00:25:47,929

THINK BY FAR THE MOST YES I
BELIEVE ONE FROM SPACE THE NORTH

416

00:25:47,929 --> 00:25:53,450

KOREAN AND SOUTH KOREAN BORDER.

417

00:25:53,450 --> 00:25:58,130

WHAT IS TOTAL DISASTER THAT IS
FOR THOSE POOR PEOPLE LIVING AT

418

00:25:58,130 --> 00:26:02,929

NIGHTTIME IT'S REAL DARK THERE
AND NIGHT, DURING THE DAYTIME

419

00:26:02,929 --> 00:26:06,740
YOU CAN'T SEE THAT MUCH HUMAN
ACTIVITY.

420
00:26:06,740 --> 00:26:11,000
YOU CAN SEE THE LARGE CITIES BUT
LARGELY HUMAN EXISTENCE AND

421
00:26:11,000 --> 00:26:13,720
ACTIVITIES IF ALIENS CAME BY
THEY MIGHT NOT NOTICE US DURING

422
00:26:13,720 --> 00:26:15,280
THE DAY.

423
00:26:15,280 --> 00:26:21,150
AT NIGHT WHAT YOU SEE IS NOT
POPULATION YOU SEE WEALTH.

424
00:26:21,150 --> 00:26:24,820
OBVIOUSLY AMERICA IS SUPER
BRIGHT AND ASIA IS INCREDIBLY

425
00:26:24,820 --> 00:26:25,820
BRIGHT.

426
00:26:25,820 --> 00:26:29,100
EUROPE IS VERY BRIGHT BUT OTHER
PLACES ON EARTH BILLIONS OF

427
00:26:29,100 --> 00:26:30,610
PEOPLE LIVING PRETTY DARK.

428
00:26:30,610 --> 00:26:33,860
THAT WAS AN INTERESTING
PERSPECTIVE TO SEE NIGHT NOT

429
00:26:33,860 --> 00:26:37,280
NECESSARILY A POPULATION
INDICATOR BUT MORE OF A WEALTH

430

00:26:37,280 --> 00:26:38,510

INDICATE ER.

431

00:26:38,510 --> 00:26:41,740

WHICH IS UNIQUE PERSPECTIVE FROM
LIVING IN SPACE.

432

00:26:41,740 --> 00:26:47,080

TALK ABOUT THE INSTRUMENT AND
RAPID SCAN AND OTHER CAMERAS

433

00:26:47,080 --> 00:26:50,420

THAT WE HAVE ON THE STATION LIKE
THE GENERAL TALKED ABOUT THE

434

00:26:50,420 --> 00:26:54,049

ROBOTS BUT ONE OF THE REALLY
COOL THINGS ABOUT BEING AN

435

00:26:54,049 --> 00:26:59,150

ASTRONAUT WE GOT TO BE HUMAN
ASPECT OF TAKING PICTURES.

436

00:26:59,150 --> 00:27:03,020

NATURAL DISASTERS WE SAW SEVERAL
TYPHOONS APPROACHING THE

437

00:27:03,020 --> 00:27:04,020

PHILIPPINES.

438

00:27:04,020 --> 00:27:07,050

I GOT TO TAKE PICTURES OF THAT
AND ALTHOUGH CERTAINLY WEATHER

439

00:27:07,050 --> 00:27:10,500

SATELLITES AND OFFICIAL WAYS TO
MONITOR CYCLONES.

440

00:27:10,500 --> 00:27:14,760
HUMAN HUMAN ASPECT THIS IS
DANGEROUS STORM YOU SHOULD BE

441
00:27:14,760 --> 00:27:18,230
CAREFUL THAT GETS PUT OUT ON THE
LOCAL NEWS.

442
00:27:18,230 --> 00:27:22,620
IF EVEN ONE PERSON GOT WARNED TO
TAKE SHELTER THAT WAS A REALLY

443
00:27:22,620 --> 00:27:25,470
UNIQUE WAY THAT TO USE THE SPACE
STATION TO WARN PEOPLE OF

444
00:27:25,470 --> 00:27:27,130
IMPENDING NATURAL DISASTERS.

445
00:27:27,130 --> 00:27:30,830
A BAD STORM IN THE NORTH
ATLANTIC THIS PASSED WINTER THAT

446
00:27:30,830 --> 00:27:32,850
HIT ENGLAND.

447
00:27:32,850 --> 00:27:35,500
>> IT WAS ALL OVER THE BRITISH
PRESS PICTURES WE TOOK AT

448
00:27:35,500 --> 00:27:38,630
NIGHTTIME OF THIS MOON LIT.

449
00:27:38,630 --> 00:27:41,950
TERRIBLE HURRICANE GOING OVER
ENGLAND THAT HAD A BIG EFFECT.

450
00:27:41,950 --> 00:27:45,610
THIS SPRING IN AMERICA WE HAD
BAD STORMS IN TEXAS.

451

00:27:45,610 --> 00:27:48,240

WE GOT A CHANCE TO TAKE TIME
LAPSE PICTURES OF THIS LIGHTNING

452

00:27:48,240 --> 00:27:51,050

GOING OFF ONE OF THE MOST
AMAZING THINGS.

453

00:27:51,050 --> 00:27:54,590

WE ARE LOOKING AT THIS FROM
SPACE.

454

00:27:54,590 --> 00:27:59,660

IT CAN REACH PEOPLE IN A
DIFFERENT WAY EN THE TECHNICAL

455

00:27:59,660 --> 00:28:00,800

DATA.

456

00:28:00,800 --> 00:28:02,590

VERY IMPORTANT.

457

00:28:02,590 --> 00:28:04,950

WE NEED THOSE INSTRUMENTS TO SEE
IT BUT THAT'S ONE WAY THESE

458

00:28:04,950 --> 00:28:09,350

ASTRONAUTS GOT TO IMPACT EARTH
AND HOPEFULLY A FEW PEOPLE TO

459

00:28:09,350 --> 00:28:16,570

SEE THE WEATHER PATTERNS AND
OTHER THINGS THAT CAN AFFECT

460

00:28:16,570 --> 00:28:17,570

THEIR LIVES.

461

00:28:17,570 --> 00:28:20,500

>> I SECOND ON THAT.

462

00:28:20,500 --> 00:28:25,480

>> BUT WHAT I WOULD LIKE TO
SHARE I HAVE HAD AN INCREDIBLE

463

00:28:25,480 --> 00:28:28,960

PRIVILEGE WHICH IS TO BE PART OF
THE CREW OF THE INTERNATIONAL

464

00:28:28,960 --> 00:28:31,790

SPACE STATION.

465

00:28:31,790 --> 00:28:36,020

[INAUDIBLE]

IT'S AN INCREDIBLE FACILITY.

466

00:28:36,020 --> 00:28:38,030

FOR ME LIKE SCIENCE FICTION.

467

00:28:38,030 --> 00:28:39,290

TAKE OFF IN A ROCKET.

468

00:28:39,290 --> 00:28:42,200

YOU ARE SHIPPED MAGICALLY.

469

00:28:42,200 --> 00:28:44,350

IT FINDS THE DESTINATION.

470

00:28:44,350 --> 00:28:47,290

THE HUMAN DESTINATION IN OUTER
SPACE.

471

00:28:47,290 --> 00:28:48,730

THEY OPEN THE HATCH FOR YOU.

472

00:28:48,730 --> 00:28:50,580

FRIENDS WHO WELCOME YOU.

473

00:28:50,580 --> 00:28:52,170

FOOD, WATER.

474

00:28:52,170 --> 00:28:53,179

A BED SORT OF.

475

00:28:53,179 --> 00:28:56,820

A SLEEPING BAG WHERE YOU CAN
FLOAT AND SLEEP.

476

00:28:56,820 --> 00:28:59,210

TO ME IT'S AMAZING.

477

00:28:59,210 --> 00:29:03,630

TESTAMENT TO WHAT WE AS HUMAN AX
WE CAN DO.

478

00:29:03,630 --> 00:29:07,550

IF WE HAVE SOMETHING BIG WE WANT
TO ACHIEVE LIKE PUTTING

479

00:29:07,550 --> 00:29:10,680

SOMETHING AMAZING LIKE THE
INTERNATIONAL SPACE STATION IN

480

00:29:10,680 --> 00:29:11,680

SPACE.

481

00:29:11,680 --> 00:29:15,190

IT'S A PRODUCT OF PLUS YEARS.

482

00:29:15,190 --> 00:29:20,600

TOOK YEARS TO BUILD AND NOW
WE ARE DOING AMAZING THINGS.

483

00:29:20,600 --> 00:29:23,970

INCREDIBLE RESEARCH IN THE MOST
DIVERSE FIELDS.

484

00:29:23,970 --> 00:29:25,049

COMBUSTION.

485

00:29:25,049 --> 00:29:28,309

EXPANDING HUMAN KNOWLEDGE.

486

00:29:28,309 --> 00:29:31,860

ALSO IMPROVE THE LIVES OF THE
PEOPLE ON EARTH AND THE PEOPLE

487

00:29:31,860 --> 00:29:37,070

THAT YOU TRY TO HELP WITH YOUR
WORK EVERYDAY.

488

00:29:37,070 --> 00:29:40,549

ONE OF THE THINGS WHEN YOU ARE
UP THERE.

489

00:29:40,549 --> 00:29:42,360

INTERNATIONAL CREW.

490

00:29:42,360 --> 00:29:47,700

THE TWO OF US AND ANOTHER
AMERICAN AND LATER SCOTT KELLY

491

00:29:47,700 --> 00:29:50,200

AND THREE RUSSIANS.

492

00:29:50,200 --> 00:29:55,049

YOU ARE IN THIS PIECE OF
HUMANITY OUT THERE.

493

00:29:55,049 --> 00:29:58,920

YOU HAVE TO TAKE CARE OF EACH
OTHER.

494

00:29:58,920 --> 00:30:01,530

WHEN IT'S THE SIX OF YOU UP
THERE AS A CREW YOU HAVE TO TAKE

495

00:30:01,530 --> 00:30:02,530

CARE OF EACH OTHER.

496

00:30:02,530 --> 00:30:05,620

IT'S ABSOLUTELY IMPORTANT
EVERYBODY IS DOING WELL.

497

00:30:05,620 --> 00:30:08,400

IT'S EVERYONE'S RESPONSIBILITY
TO MAKE SURE EVERYBODY ELSE IS

498

00:30:08,400 --> 00:30:09,420

DOING WELL.

499

00:30:09,420 --> 00:30:13,510

OTHERWISE THINGS WILL GO VERY
WRONG.

500

00:30:13,510 --> 00:30:19,660

SO THEN YOU LOOK OUT THE WINDOW,
ANY WAY YOU LOOK OUT THE WINDOW

501

00:30:19,660 --> 00:30:21,860

AND YOU SEE EARTH.

502

00:30:21,860 --> 00:30:26,260

IT'S SO OBVIOUS WHEN YOU LOOK
FROM OUTSIDE EARTH IS JUST LIKE

503

00:30:26,260 --> 00:30:28,030

OUR INTERNATIONAL SPACE STATION.

504

00:30:28,030 --> 00:30:32,320

A LOT BIGGER.

505

00:30:32,320 --> 00:30:35,310

TAKES US ON A JOURNEY THROUGH
SPACE.

506

00:30:35,310 --> 00:30:44,770

AND SO THE BILLIONS OF HUMAN
BEINGS ON THE PLANET.

507

00:30:44,770 --> 00:30:46,250

CREW OF THE SPACE STATION.

508

00:30:46,250 --> 00:30:50,500

JUST LIKE ON THE SPACE STATION
WE HAVE TO TAKE CARE OF EACH

509

00:30:50,500 --> 00:30:51,500

OTHER.

510

00:30:51,500 --> 00:30:56,870

WE HAVE TO SEE RIGHT AWAY WE
TAKE CARE OF EACH OTHER ON THE

511

00:30:56,870 --> 00:30:57,870

PLANET, TOO.

512

00:30:57,870 --> 00:31:01,010

IT'S HARDER WITH IT'S BILLION.

513

00:31:01,010 --> 00:31:05,370

PREACHING TO THE CRIER THAT IS
WHAT YOU DO.

514

00:31:05,370 --> 00:31:11,470

YOU WORK EVERYDAY TO TRY TO TAKE
CARE OF THE CREW, THE PLANET.

515

00:31:11,470 --> 00:31:14,850

I THANK YOU FOR THAT.

516

00:31:14,850 --> 00:31:17,080

I HOPE WE CAN DO MORE AND MORE
OF THIS.

517

00:31:17,080 --> 00:31:21,770

I'M PROUD OF THE LITTLE THAT
MAYBE I COULD DO AS CREW MEMBER

518

00:31:21,770 --> 00:31:23,000

OF THE INTERNATIONAL SPACE
STATION.

519

00:31:23,000 --> 00:31:26,310

MAYBE I DID TAKE A COUPLE OF
PICTURES.

520

00:31:26,310 --> 00:31:29,309

IT WAS PUT ON A SCHEDULE.

521

00:31:29,309 --> 00:31:32,061

INTERNATIONAL DISASTER CHARTER
THAT YOU PROBABLY KNOW MORE

522

00:31:32,061 --> 00:31:34,539

ABOUT THAN I EVER WILL.

523

00:31:34,539 --> 00:31:36,970

WE WERE WARNED.

524

00:31:36,970 --> 00:31:41,940

THERE IS A VOLCANO ERUPTION.

525

00:31:41,940 --> 00:31:42,940

TAKE PICTURES.

526

00:31:42,940 --> 00:31:45,480

WE DID OUR BEST.

527

00:31:45,480 --> 00:31:49,450

HOPEFULLY WE COULD CONTRIBUTE A
LITTLE BIT TO THE AMAZING WORK

528
00:31:49,450 --> 00:31:50,910
THAT YOU GUYS DO.

529
00:31:50,910 --> 00:31:55,780
BUT MY MAIN MESSAGE THANK YOU
FOR EVERYTHING YOU DO FOR THE

530
00:31:55,780 --> 00:31:59,000
CREW OF THIS PLANET.

531
00:31:59,000 --> 00:32:01,740
>> AMEN.

532
00:32:01,740 --> 00:32:07,220
THANK YOU.

533
00:32:07,220 --> 00:32:09,960
>> OKAY.

534
00:32:09,960 --> 00:32:15,820
ARE WE DOING QUESTIONS NOW?

535
00:32:15,820 --> 00:32:20,670
I'M HAPPY TO TAKE QUESTIONS.

536
00:32:20,670 --> 00:32:26,559
>> OVER HERE.

537
00:32:26,559 --> 00:32:41,200
>> A FARMER IN KENYA WHOSE DROP
IS THREATENED BY FROST DAMAGE

538
00:32:41,200 --> 00:32:46,240
MANY BEING AN OFFICER IN NEPAL
WHO WON'T DISCOVER THE FIRE FOR

539
00:32:46,240 --> 00:32:49,020
HOURS OR EVEN DAYS.

540

00:32:49,020 --> 00:32:53,080

A FISHERMAN IN EL SALVADOR
WORKING IN WATERS MADE UNSAFE BY

541

00:32:53,080 --> 00:32:55,710

OUTBREAKS OF ALGAE.

542

00:32:55,710 --> 00:32:58,900

THREE GROUPS OF PEOPLE FROM
ACROSS THE GLOBE WITH THREE

543

00:32:58,900 --> 00:33:01,160

DIFFICULT PROBLEMS.

544

00:33:01,160 --> 00:33:03,200

WHAT DO THEY ALL HAVE IN COMMON.

545

00:33:03,200 --> 00:33:06,130

THEY ALL LACK KEY INFORMATION.

546

00:33:06,130 --> 00:33:09,240

INFORMATION THAT WOULD EMPOWER
THEM TO ADDRESS LOCAL

547

00:33:09,240 --> 00:33:10,429

CHALLENGES.

548

00:33:10,429 --> 00:33:14,670

IN ORDER TO SOLVE THESE PROBLEMS
WE MUST LOOK TO SCIENCE AND

549

00:33:14,670 --> 00:33:15,720

TECHNOLOGY.

550

00:33:15,720 --> 00:33:19,169

EXTRAORDINARY WORK IS BEING DONE
IN SPACE TO COLLECT INFORMATION

551
00:33:19,169 --> 00:33:20,550
ABOUT THE EARTH.

552
00:33:20,550 --> 00:33:26,289
AND SEVERE A JOINT INITIATIVE
WORKS TO CONNECT THE SPACE TO

553
00:33:26,289 --> 00:33:27,720
VILLAGE.

554
00:33:27,720 --> 00:33:34,160
THE NETWORK OF HUB STREAMLINES
ACCESS TO DATA AND IMAGERY SO

555
00:33:34,160 --> 00:33:37,080
ANALYSTS CAN INTEGRATE THIS
INFORMATION IN TO TOOLS AND

556
00:33:37,080 --> 00:33:41,330
MODELS THAT ARE ACCESSIBLE TO
THOSE WHO NEED IT MOST.

557
00:33:41,330 --> 00:33:44,830
IN KENYA SATELLITE MAPPING
PREDICTING POTENTIAL FROST

558
00:33:44,830 --> 00:33:48,020
AREAS.

559
00:33:48,020 --> 00:33:53,850
IN NEPAL REAL TIME FIRE ALERTS
ARE SENT E-MAIL SO FOREST

560
00:33:53,850 --> 00:33:57,100
MANAGERS LEARN MORE QUICKLY
ABOUT FIRES BURNING IN THEIR

561
00:33:57,100 --> 00:33:58,200
DISTRICT.

562

00:33:58,200 --> 00:34:03,270

IN EL SALVADOR SAT LIE IMAGERY
HELPS LOCATE ALGAE ALLOWING

563

00:34:03,270 --> 00:34:06,090

FISHERMEN TO AVOID THESE AREAS.

564

00:34:06,090 --> 00:34:09,929

AROUND THE WORLD SEVERE IS
IMPROVING AWARENESS ABOUT THESE

565

00:34:09,929 --> 00:34:11,369

TOOLS AND DATA.

566

00:34:11,369 --> 00:34:14,869

INCREASING ACCESS TO INFORMATION
AND SUPPORTING TARGETED

567

00:34:14,869 --> 00:34:15,869

ANALYSIS.

568

00:34:15,869 --> 00:34:19,760

ALL TO HELP PEOPLE MANAGE
CHALLENGES MADE MORE DIFFICULT

569

00:34:19,760 --> 00:34:21,659

BY CHANGING CLIMATE.

570

00:34:21,659 --> 00:34:23,740

FOOD SECURITY.

571

00:34:23,740 --> 00:34:25,210

WATER RESOURCES.

572

00:34:25,210 --> 00:34:29,210

LAND USE CHANGE AND NATURAL
DISASTERS.

573

00:34:29,210 --> 00:34:31,800

>> PARTNERING WITH LEADING
ORGANIZATIONS AROUND THE WORLD

574

00:34:31,800 --> 00:34:35,700

SEVERE OPERATES IN FOUR REGIONS
WITH ACTIVITIES IN MORE THAN

575

00:34:35,700 --> 00:34:37,230

COUNTRIES AND COUNTING.

576

00:34:37,230 --> 00:34:40,550

SEVERE GIVES LOCAL USERS THE
TOOLS AND SKILLS THEY NEED TO

577

00:34:40,550 --> 00:34:44,909

MANAGE RISK AND MAKE MORE
INFORMED DECISIONS.

578

00:34:44,909 --> 00:34:47,240

DECISIONS THAT IMPROVE THE
EVERYDAY LIVES OF PEOPLE

579

00:34:47,240 --> 00:34:48,240

EVERYWHERE.

580

00:34:48,240 --> 00:34:52,119

CHECK OUT WHAT SEVERE IS DOING
TO CONNECT EARTH OBSERVATION

581

00:34:52,119 --> 00:34:55,980

TECHNOLOGY TO IMPROVE
DEVELOPMENT AND HELP US CONTINUE

582

00:34:55,980 --> 00:34:59,210

FINDING NEW WAYS I HAVE
WAYS TO CONNECT SPACE TO

583

00:34:59,210 --> 00:35:10,760

VILLAGE.

584

00:35:10,760 --> 00:35:12,060

>> THANK YOU ALL FOR COMING.

585

00:35:12,060 --> 00:35:17,440

I WANT TO THANK OUR NASA GUESTS
FOR BEING HERE AS WELL AS OUR

586

00:35:17,440 --> 00:35:21,240

INTERAGENCY COLLEAGUES AND OF
COURSE THE STAFF HERE IN

587

00:35:21,240 --> 00:35:24,400

WASHINGTON AND MISSIONS AROUND
THE WORLD.

588

00:35:24,400 --> 00:35:25,849

MY NAME IS CHARLES NORTH.

589

00:35:25,849 --> 00:35:28,710

I'M THE DEPUTY ASSISTANT
ADMINISTRATOR AND THE BUREAU FOR

590

00:35:28,710 --> 00:35:29,790

ECONOMIC GROWTH.

591

00:35:29,790 --> 00:35:32,710

EDUCATION AND ENVIRONMENT.

592

00:35:32,710 --> 00:35:36,680

SO WE HAVE A PANEL HERE TO TALK
ABOUT THE SEVERE PROJECT WHICH

593

00:35:36,680 --> 00:35:41,480

HAVE BEEN HEARING ABOUT.

594

00:35:41,480 --> 00:35:45,910

TO APPLY SATELLITE IMAGERY.

595

00:35:45,910 --> 00:35:51,170

WITH ME ON THE PANEL DAN IRWIN
WHO IS THE DIRECTOR OF NASA

596

00:35:51,170 --> 00:35:55,050

COORDINATION OFFICE.

597

00:35:55,050 --> 00:35:58,600

WHO IS THE SENIOR CLIMATE CHANGE
SPECIALIST.

598

00:35:58,600 --> 00:36:07,710

CAREY STOKES THE CHIEF AND THE
DIRECTOR OF THE CENTER.

599

00:36:07,710 --> 00:36:10,320

>> SO LET ME JUST SAY VERY PROUD

600

00:36:10,320 --> 00:36:14,700

TO BE THE HOME OF THE
COORDINATION FROM THE SIDE OF

601

00:36:14,700 --> 00:36:17,190

THE PROJECT.

602

00:36:17,190 --> 00:36:21,550

FOR US DEMONSTRATION OF HOW WE
CAN USE INNOVATE I HAVE

603

00:36:21,550 --> 00:36:26,980

PARTNERSHIPS TO HAVE IMPACT ON
DEVELOPMENT AROUND THE WORLD.

604

00:36:26,980 --> 00:36:31,660

>> I WAS AT NASA HEADQUARTERS
EARLIER THIS YEAR AND WE WERE

605

00:36:31,660 --> 00:36:35,750

TALKING ABOUT THE PROGRESS OF
THE PROJECT AND I LET IT SLIP

606

00:36:35,750 --> 00:36:42,070

THAT MY FIRST ASSIGNMENT WAS IN
KENYA I WAS MANAGING A PROJECT

607

00:36:42,070 --> 00:36:47,369

TO SUPPORT WHAT IS NOW ONE OF
THE HUBS.

608

00:36:47,369 --> 00:36:52,770

AND I NOTE IN MY TALKING POINTS
THAT WAS DECADES AGO.

609

00:36:52,770 --> 00:37:01,240

WHEN
WE THINK ABOUT S EVE IR WE

610

00:37:01,240 --> 00:37:05,170

TEND TO THINK ABOUT THE REALLY
COOL TECHNOLOGY.

611

00:37:05,170 --> 00:37:07,830

AND THE BEAUTIFUL IMAGES.

612

00:37:07,830 --> 00:37:12,150

BUT FROM MY EXPERIENCE AND WHAT
WE HAVE TALKED ABOUT IT'S VERY

613

00:37:12,150 --> 00:37:14,060

MUCH ABOUT BUILDING CAPACITY.

614

00:37:14,060 --> 00:37:18,090

IT'S ABOUT BUILDING CAPACITY IN
THESE HUBS THAT ARE TO CRITICAL

615

00:37:18,090 --> 00:37:21,670

TO MAKING THIS PROJECT
SUCCESSFUL BUT ALSO FOR

616

00:37:21,670 --> 00:37:26,050

SUSTAINABILITY FOR OUR
INVESTMENT IN THIS SATURDAY

617

00:37:26,050 --> 00:37:31,070

LIGHT IMAGERY BRINGING IT TO THE
VILLAGES.

618

00:37:31,070 --> 00:37:34,010

SO LET ME TURN TO THE PANEL.

619

00:37:34,010 --> 00:37:37,450

THIS COLLABORATION THIS
PARTNERSHIP HAS BEEN GOING ON

620

00:37:37,450 --> 00:37:38,570

FOR A LONG TIME.

621

00:37:38,570 --> 00:37:42,840

PERHAPS YOU CAN GIVE US A BIT
MORE SENSE OF HOW IT HAS EVOLVED

622

00:37:42,840 --> 00:37:44,660

AND WHERE IT STARTED.

623

00:37:44,660 --> 00:37:45,660

>> THANK YOU.

624

00:37:45,660 --> 00:37:47,500

I WILL GO WAY BACK.

625

00:37:47,500 --> 00:37:51,160

IN WAY BEFORE WORKING WITH
NASA I WAS WORKING FOR A

626

00:37:51,160 --> 00:37:58,890

CONSERVATION NONPROFIT AND MY
JOB WAS TO HELP A NEW PROTECTED

627

00:37:58,890 --> 00:38:01,300
AREA.

628

00:38:01,300 --> 00:38:04,210
AND MY JOB WAS WALKING THROUGH
THE JUNGLE.

629

00:38:04,210 --> 00:38:08,960
WITH SURVEY EQUIPMENT DAY AFTER
DAY, MONTH AFTER MONTH TO MAP

630

00:38:08,960 --> 00:38:10,080
OUT THIS RESERVE.

631

00:38:10,080 --> 00:38:12,460
ABOUT A YEAR AFTER DOING THIS.

632

00:38:12,460 --> 00:38:14,810
I WAS IN THE BEST SHAPE I HAD
EVER BEEN IN.

633

00:38:14,810 --> 00:38:16,180
IT WAS REALLY EXHAUSTING.

634

00:38:16,180 --> 00:38:19,750
BASICALLY A YEAR LATER A NASA
SCIENTIST CAME DOWN TO DO

635

00:38:19,750 --> 00:38:20,930
RESEARCH IN GUATEMALA.

636

00:38:20,930 --> 00:38:25,940
I MET UP WITH HIM AND HE ROLLS
OUT ALL OF THE SATELLITE EDGES.

637

00:38:25,940 --> 00:38:30,040
I WAS BLOWN AWAY BECAUSE
LITERALLY I SPENT THE LAST YEAR

638

00:38:30,040 --> 00:38:34,020

WALKING AND I SAW EVERYTHING
RIGHT THERE IN FRONT OF ME.

639

00:38:34,020 --> 00:38:39,071

IT REALLY, IT CHANGED MY LIFE
AND NOT ONLY RECOGNIZING HOW IT

640

00:38:39,071 --> 00:38:42,740

CAN BENEFIT THE WORK I WAS DOING
BUT WORKING WITH VILLAGES AND

641

00:38:42,740 --> 00:38:46,370

UNDERSTANDING THE ABILITY TO
SHOW THE ADVANCE OF THE

642

00:38:46,370 --> 00:38:51,180

AGRICULTURAL FRONTIER AND OTHER
THINGS THAT WERE AFFECTING THEM.

643

00:38:51,180 --> 00:38:57,160

FAST FORD ABOUT YEARS LATER I
JOINED NASA AND STILL HAD THAT

644

00:38:57,160 --> 00:39:01,320

NOTION IN MIND THE VALUE OF
SATELLITE IMAGERY AND DATA FOR

645

00:39:01,320 --> 00:39:05,310

DEVELOPMENT PURPOSES AND I WAS
AT A MEETING WITH ENVIRONMENTAL

646

00:39:05,310 --> 00:39:08,630

MINISTER OF CENTRAL AMERICA AND
THEY WERE TALKING ABOUT ALL OF

647

00:39:08,630 --> 00:39:10,660

THESE BIG ISSUES.

648

00:39:10,660 --> 00:39:13,790

DEFOREST STATION, AIR QUALITY.

649

00:39:13,790 --> 00:39:17,950

TRANS BOUNDARY ISSUES AND
DEVELOPMENT CONCERNS.

650

00:39:17,950 --> 00:39:22,500

THAT'S WHERE I STARTED THINKING
COULD WE DEVELOP SOME SORT OF

651

00:39:22,500 --> 00:39:28,849

REGIONAL PLATFORM TO HELP THE
COUNTRIES.

652

00:39:28,849 --> 00:39:34,230

RECOGNIZING NASA WE HAVE THAT
UNIQUE VANTAGE POINT OF SPACE

653

00:39:34,230 --> 00:39:36,460

REALLY TO MAKE IT SUCCESSFUL.

654

00:39:36,460 --> 00:39:42,490

I KEPT HEARING ABOUT THIS WOMAN
KERRY STOKES.

655

00:39:42,490 --> 00:39:46,830

I CALLED HER SAID HI.

656

00:39:46,830 --> 00:39:50,260

IT'S REALLY FUNNY BECAUSE BACK
STORY IS THAT I'M FROM

657

00:39:50,260 --> 00:39:51,260

WASHINGTON, D.C.

658

00:39:51,260 --> 00:39:53,480

AREA LIVING IN
HUNTSVILLE, ALABAMA.

659

00:39:53,480 --> 00:39:59,910

SHE IS FROM HUNTSVILLE HER
FATHER WORKING IN WASHINGTON,

660

00:39:59,910 --> 00:40:00,910

D.C.

661

00:40:00,910 --> 00:40:05,609

IT WAS ALMOST A MAGICAL SYNERGY
THAT HAPPENED THERE.

662

00:40:05,609 --> 00:40:12,050

AND WE REALLY RECOGNIZE THE
UNBELIEVABLE.

663

00:40:12,050 --> 00:40:17,240

REALLY THAT'S HOW IT WAS BORN.

664

00:40:17,240 --> 00:40:21,310

AND WE OPENED UP OUR FIRST HUB
IN CENTRAL AMERICA IN .

665

00:40:21,310 --> 00:40:23,150

EASTERN AND SOUTHERN AFRICA IN

.

666

00:40:23,150 --> 00:40:31,609

AND JUST TWO WEEKS AGO BANGKOK

667

00:40:31,609 --> 00:40:35,930

AND REALLY THE EXCITEMENT
CONTINUES BECAUSE AS NASA

668

00:40:35,930 --> 00:40:46,190

DEVELOPS NEW CAP BUILTS WHETHER
IT BE GPM SATELLITE OR WORKING

669

00:40:46,190 --> 00:40:51,580

WITH THEM AND TRYING TO ADVANCE
SECURITY AND OTHER RELATED

670

00:40:51,580 --> 00:40:56,089

ISSUES IT'S REALLY BRINGING TO
BEAR.

671

00:40:56,089 --> 00:41:00,230

IT IS THE UNBELIEVABLE VALUE OF
TEAMING WITH OTHER PHENOMENAL

672

00:41:00,230 --> 00:41:05,040

U.S. GOVERNMENT AGENCIES
DEPARTMENT OF ENTER ENGINEER,

673

00:41:05,040 --> 00:41:06,349

REALLY MAKE IT POSSIBLE.

674

00:41:06,349 --> 00:41:07,839

>> THANK YOU.

675

00:41:07,839 --> 00:41:08,839

>> FANTASTIC.

676

00:41:08,839 --> 00:41:11,350

MAYBE CAN YOU GIVE US A SENSE OF
HOW COUNTRIES ARE USING THE

677

00:41:11,350 --> 00:41:17,150

TECHNOLOGY AX THE IMAGERY, EVEN
THE CHALLENGES WE FACE.

678

00:41:17,150 --> 00:41:18,250

>> GREAT.

679

00:41:18,250 --> 00:41:22,610

>> WE HEARD THE STATISTICS BUT
WE ALWAYS ASK SO WHAT.

680

00:41:22,610 --> 00:41:26,140
A LOT OF MY COLLEAGUES HATE WHEN
I ASK THAT.

681
00:41:26,140 --> 00:41:30,560
BUT I WILL SHARE A FEW EXAMPLES
BECAUSE WE ARE VERY HOLDING

682
00:41:30,560 --> 00:41:33,270
OURSELVES ACCOUNTABLE TO THAT.

683
00:41:33,270 --> 00:41:36,490
ONE EXAMPLE THE FIRST ONE BREAKS
THROUGH BARRIERS OF DATA

684
00:41:36,490 --> 00:41:39,050
AVAILABILITY AND DATA SHARING.

685
00:41:39,050 --> 00:41:45,260
AND IN BANG LY DESH THE FLOOD
WATER COME FROM COUNTRIES

686
00:41:45,260 --> 00:41:48,170
OUTSIDE THEIR BORED EARTH'S.

687
00:41:48,170 --> 00:41:52,840
THEIR ABILITY TO GET THE MORE
ADVANCED EARLY WARNING DEPENDS

688
00:41:52,840 --> 00:41:58,270
ON GETTING A READ OF THE RIVER
FLOW HUNDREDS OF MILES OUTSIDE

689
00:41:58,270 --> 00:42:00,520
OF THEIR BOUNDARY.

690
00:42:00,520 --> 00:42:04,910
REALLY INNOVATIVE NASA FUNDED
SCIENTISTS WANTED TO TEST

691

00:42:04,910 --> 00:42:09,830

WHETHER RIVER HEIGHT DATA
GATHERED FROM THE SATELLITE

692

00:42:09,830 --> 00:42:13,280

COULD IMPROVE THE LEAD TIME FOR
THE FLOOD FORECASTING AND

693

00:42:13,280 --> 00:42:14,800

WARNING CENTER IN BANG LY DESH.

694

00:42:14,800 --> 00:42:21,619

IT HAS PROFFER EN ACCURATE AND
EFFECTIVE.

695

00:42:21,619 --> 00:42:26,410

FOR MOST PARTS HIGHLY FLOOD
PRONE HAS UP TO EIGHT DAYS LEAD

696

00:42:26,410 --> 00:42:31,310

TIME AND WHAT WE HAVE SEEN IN
THE LAST MONTH A FLOOD THAT

697

00:42:31,310 --> 00:42:36,040

TYPICALLY WOULD HAVE TAKEN A
COUPLE THOUSAND LIVES, TOOK .

698

00:42:36,040 --> 00:42:39,540

SO THAT IS EXTREMELY EXCITING.

699

00:42:39,540 --> 00:42:44,740

THE SECOND EXAMPLE OF SUCCESS
RELATES TO USING THESE TOOLS TO

700

00:42:44,740 --> 00:42:48,550

MORE EFFICIENTLY USE SCARCE
GOVERNMENT RESOURCES.

701

00:42:48,550 --> 00:42:54,860

EXAMPLE THE FLOOD, I'M SORRY,
THE RED TIDE TOOL WE HEARD

702

00:42:54,860 --> 00:42:55,920
ABOUT.

703

00:42:55,920 --> 00:42:58,180
THOUSANDS OF PEOPLE WERE GETTING
SICK AND SOME PEOPLE WERE DYING

704

00:42:58,180 --> 00:43:01,830
BEFORE THIS PUBLIC HEALTH SYSTEM
WAS PUT IN TO PLACE.

705

00:43:01,830 --> 00:43:05,619
HAVING THAT MAP ALLOWS THE
GOVERNMENTS OF CENTRAL AMERICA

706

00:43:05,619 --> 00:43:10,890
TO MORE EFFICIENTLY TARGET WHERE
THEY SAMPLE SHELLFISH.

707

00:43:10,890 --> 00:43:12,060
SAVING GOVERNMENT RESOURCES.

708

00:43:12,060 --> 00:43:14,260
HELPING THEM TO TARGET WHERE
THEY WORK.

709

00:43:14,260 --> 00:43:17,060
SINCE THE PROGRAM HAS BEEN
DEVELOPED NO ILLNESSES OR DEATHS

710

00:43:17,060 --> 00:43:21,720
HAVE BEEN ASSOCIATED WITH
CONTAMINATED SEAFOOD.

711

00:43:21,720 --> 00:43:24,500
BUILDING LOCAL CAPACITY.

712

00:43:24,500 --> 00:43:28,490

LIKE CHARLES SAID WE DON'T WANT
TO BE THE PROVIDERS OF THIS KIND

713

00:43:28,490 --> 00:43:29,990

OF ANALYST IN THE FUTURE.

714

00:43:29,990 --> 00:43:32,119

WE WANT TO HELP OUR PARTNERS.

715

00:43:32,119 --> 00:43:36,310

>> A TOOL WAS DEVELOPED
INTEGRATED SATELLITE RAINFALL

716

00:43:36,310 --> 00:43:40,660

DATA IN TO THE MODEL FOR EAST
AFRICA.

717

00:43:40,660 --> 00:43:43,460

AND THE OBJECTIVE WAS TO PREDICT
FLOODS.

718

00:43:43,460 --> 00:43:44,650

NOW WE HAVE WORKING GROUPS

719

00:43:44,650 --> 00:43:51,270

FORMED IN RWANDA, KENYA, UGANDA
THAT ARE WORKING ON WHAT MORE

720

00:43:51,270 --> 00:43:53,859

CAN BE DONE WITH THAT
CAPABILITY.

721

00:43:53,859 --> 00:43:57,550

HYDRO POWER COMPANIES THAT ARE
COMING TO ASK ABOUT WHAT THE

722

00:43:57,550 --> 00:44:06,610

GOVERNMENT KNOWS ABOUT RIVER

FLWS ARE USING THAT MODEL.

723

00:44:06,610 --> 00:44:08,760

THE DATA IS ABLE TO FILL THAT
GAP.

724

00:44:08,760 --> 00:44:12,010

ABLE TO IDENTIFY LOW FLOW
PERIODS AND TO FORM THE

725

00:44:12,010 --> 00:44:14,360

ALLOCATION OF WATER FOR
IRRIGATION AND OTHER USES.

726

00:44:14,360 --> 00:44:17,510

THAT IS COMING FROM THE HUB.

727

00:44:17,510 --> 00:44:19,200

COMING FROM OUR PARTNER.

728

00:44:19,200 --> 00:44:23,280

NOT NECESSARILY EVEN FROM NASA
NOW THAT THAT DATA IS BEING

729

00:44:23,280 --> 00:44:24,830

INTEGRATED.

730

00:44:24,830 --> 00:44:27,340

SO ON CHALLENGES.

731

00:44:27,340 --> 00:44:32,099

THERE ARE A LOT BUT THE ONE I
WANT TO POINT OUT IS RELEVANT TO

732

00:44:32,099 --> 00:44:35,300

ALL OF US.

733

00:44:35,300 --> 00:44:38,580

WHICH IS THERE ARE LIMITS TO

WHAT REGIONAL INSTITUTIONS CAN

734

00:44:38,580 --> 00:44:41,089

DO TO GO BEYOND THE NATIONAL
LEVEL.

735

00:44:41,089 --> 00:44:44,640

TO GET THIS INFORMATION ACTUALLY
INTO THE HANDS OF INDIVIDUALS.

736

00:44:44,640 --> 00:44:47,710

AT THE LOCAL LEVEL.

737

00:44:47,710 --> 00:44:51,480

IF WE ARE ABLE TO PROVIDE FIRE
ALERTS OR ANALYZE FIRE PATTERNS

738

00:44:51,480 --> 00:44:55,150

WE NEED A PROGRAM WORKING WITH
COMMUNITY FOREST MANAGERS TO

739

00:44:55,150 --> 00:44:56,880

TAKE THAT DATA FURTHER.

740

00:44:56,880 --> 00:45:01,369

IF WE ARE ABLE TO IDENTIFY CROP
ANOMALIES WE NEED PROGRAM

741

00:45:01,369 --> 00:45:02,930

WORKING WITH FARMERS.

742

00:45:02,930 --> 00:45:06,460

WE ARE WORKING VERY HARD TO
CREATE STRONGER CONNECTIONS

743

00:45:06,460 --> 00:45:11,240

BETWEEN OUR FIELD PROGRAMS AND
OUR CAPABILITIES SO ONCE THESE

744

00:45:11,240 --> 00:45:15,980
TOOLS AND CAPABILITIES ARE
DEVELOPED WE HAVE ALL OF OUR

745

00:45:15,980 --> 00:45:18,490
PROGRAMS ALL AROUND THE WORLD
THAT CAN TAKE THEM UP AND REALLY

746

00:45:18,490 --> 00:45:22,050
BRING THEM DOWN TO LOCAL LEVEL.

747

00:45:22,050 --> 00:45:24,150
>> THANKS.

748

00:45:24,150 --> 00:45:29,150
LOOKING BEYOND THE HUBS AS JENNY
WAS TALKING ABOUT I UNDERSTAND

749

00:45:29,150 --> 00:45:31,430
WE ARE REACHING OUT TO
UNIVERSITIES AND TO YOUTH.

750

00:45:31,430 --> 00:45:35,069
MAYBE YOU CAN GIVE US SOME SENSE
OF WHAT IS HAPPENING THERE.

751

00:45:35,069 --> 00:45:36,240
>> THANKS.

752

00:45:36,240 --> 00:45:41,190
I THINK PROBABLY NOTHING MORE
EXCITING THAN WORKING WITH YOUTH

753

00:45:41,190 --> 00:45:44,050
AND UNIVERSITY STUDENTS AROUND
THE WORLD.

754

00:45:44,050 --> 00:45:47,050
SEVERAL EXAMPLES.

755

00:45:47,050 --> 00:45:57,000

THE FELLOWSHIPS WE HAD
FELLOWSHIPS IN COUNTRIES.

756

00:45:57,000 --> 00:46:03,540

TOP NOTCH STUDENTS WERE SELECTED
TO DEVELOP A PROJECT USING NASA

757

00:46:03,540 --> 00:46:09,170

DATA, TECHNOLOGY TO ADDRESS A
REAL WORLD PROBLEM IN THEIR

758

00:46:09,170 --> 00:46:14,820

COUNTRY.

759

00:46:14,820 --> 00:46:20,089

WE HAVE THAT EXAMPLE ALL OF OUR
HUBS WORK VERY CLOSELY WITH

760

00:46:20,089 --> 00:46:25,410

UNIVERSITIES, HAS AN UNIVERSITY
NETWORK.

761

00:46:25,410 --> 00:46:30,349

THE GOVERNMENT OF NEPAL WE HAVE
LEARNED RELIES ON THE KNOWLEDGE

762

00:46:30,349 --> 00:46:32,130

OF UNIVERSITIES FOR DECISION
MAKERS.

763

00:46:32,130 --> 00:46:35,599

WE WORK VERY CLOSELY WITH THE
UNIVERSITIES AND EVEN BROADER

764

00:46:35,599 --> 00:46:41,859

THERE IS THE NASA SPAS CHALLENGE
AN ANNUAL EVENT GLOBAL EVENT

765

00:46:41,859 --> 00:46:46,099
WHERE GROUPS COME TOGETHER
AROUND THE WORLD TO DEVELOP

766
00:46:46,099 --> 00:46:49,380
APPLICATIONS TO MEET VARIOUS
CHALLENGES.

767
00:46:49,380 --> 00:46:54,190
USING NASA DATA AND OTHER
SATELLITE DATA PHENOMENAL EVENT

768
00:46:54,190 --> 00:46:57,000
I PARTICIPATED IN ONE IN NEPAL
TWO YEARS AGO.

769
00:46:57,000 --> 00:47:02,120
TWO DAYS WORKING WITH NO SLEEP
TO REALLY COME UP WITH A PRODUCT

770
00:47:02,120 --> 00:47:03,150
AT THE END.

771
00:47:03,150 --> 00:47:07,640
THEN FINALLY I WANT TO MENTION
SISTER PROGRAM DEVELOP WHICH IS

772
00:47:07,640 --> 00:47:13,280
A PHENOMENAL OPPORTUNITY FOR
STUDENTS IN THE U.S. TO WORK

773
00:47:13,280 --> 00:47:17,609
WEEKS EITHER SPRING, SUMMER OR
FALL SEMESTER WHERE THEY WITH

774
00:47:17,609 --> 00:47:23,140
WORK ON AN APPLICATION PRODUCT
WITH AN END USER IN MIND.

775
00:47:23,140 --> 00:47:26,810

>> GOVERNMENT AGENCY OR A
NONPROFIT HAS A REAL DECISION

776

00:47:26,810 --> 00:47:33,770
THAT NEEDS TO BE MADE.

777

00:47:33,770 --> 00:47:53,300
[TECHNICAL DIFFICULTY]
>> FANTASTIC.

778

00:47:53,300 --> 00:47:59,810
>> SURE.

779

00:47:59,810 --> 00:48:07,060
LEARNING FROM THE WORK THAT
STARTED IN MY COMMUNITY HERE IN

780

00:48:07,060 --> 00:48:11,099
THE GEO CENTER WE HAVE
ESTABLISHED A PROGRAM CALLED

781

00:48:11,099 --> 00:48:14,280
NOTHING IS RESILIENT.

782

00:48:14,280 --> 00:48:18,013
PREPARE UNIVERSITY STUDENTS IN
THE U.S. WITH THE THE UNIVERSITY

783

00:48:18,013 --> 00:48:20,589
STUDENTS IN THE DEVELOPING
COUNTRIES.

784

00:48:20,589 --> 00:48:26,780
WE ARE NOT ONLY CREATING NEW GEO
SPATIAL DATA THAT WILL BE USEFUL

785

00:48:26,780 --> 00:48:32,430
FOR PROGRAMS, WE ARE INVESTING
IN THE NEXT GENERATION.

786

00:48:32,430 --> 00:48:35,690

TRYING TO PROVIDE SKILLS FOR
STUDENTS WHERE THEY LEARN TO MAP

787

00:48:35,690 --> 00:48:37,280

THEIR WORLD.

788

00:48:37,280 --> 00:48:40,190

THAT INFORMATION IS MADE
AVAILABLE IN OPEN PLATFORM FOR

789

00:48:40,190 --> 00:48:44,380

ANYONE TO ACCESS INCLUDING OUR
PARTNERS.

790

00:48:44,380 --> 00:48:48,180

SO WE WOULD LIKE TO THINK OF
THIS PROGRAM AS INVESTING IN THE

791

00:48:48,180 --> 00:48:53,560

NEXT GENERATION OF MAPS AND THE
NEXT GENERATION OF MAPPERS FOR

792

00:48:53,560 --> 00:48:55,609

THE WORLD.

793

00:48:55,609 --> 00:48:58,570

>> MAYBE CAN YOU SPEAK A BIT
MORE ABOUT HOW OUR MISSIONS

794

00:48:58,570 --> 00:49:02,560

AROUND THE WORLD AND FOLKS HERE
IN WASHINGTON CAN ACCESS THE THE

795

00:49:02,560 --> 00:49:06,710

DATA, ACCESS THE TOOLS THAT YOU
HAVE DEVELOPED AND SO FORT.

796

00:49:06,710 --> 00:49:07,710

>> SURE.

797

00:49:07,710 --> 00:49:11,820

I THINK YOU HAVE SEEP QUITE A
BIT AND THE PROGRAM CONTINUES TO

798

00:49:11,820 --> 00:49:12,820

GROW.

799

00:49:12,820 --> 00:49:18,150

PROBABLY THREE PRIMARY WAYS THAT
CAN REALLY TAKE ADVANTAGE OF

800

00:49:18,150 --> 00:49:20,540

WHAT WE HAVE BEENABLE TO CREATE
IN THE LAST YEARS OF THIS

801

00:49:20,540 --> 00:49:21,660

PROGRAM.

802

00:49:21,660 --> 00:49:25,510

FIRST AND FOREMOST TO DIRECTLY
ACCESS THE DATA AND THE THE

803

00:49:25,510 --> 00:49:31,660

PRODUCTS AND THE TOOLS THROUGH
THE PRODUCT CATALOG.

804

00:49:31,660 --> 00:49:33,130

VERY INTU TIFF.

805

00:49:33,130 --> 00:49:35,460

VERY EASY TO BROWS THROUGH.

806

00:49:35,460 --> 00:49:39,070

EVEN FOR STAFF WHO MAY NOT BE
ASTRONAUTS.

807

00:49:39,070 --> 00:49:43,830

MAY NOT HAVE DESIGNED PROGRAMS
TO ANALYZE SATELLITE IMAGERY OR

808

00:49:43,830 --> 00:49:49,670

HAS THE VIEW FROM SPACE BUT WE
ENCOURAGE YOU TO PLEASE TRY THAT

809

00:49:49,670 --> 00:49:54,330

OUT AND FLY AROUND A BIT TO SEE
WHAT YOU CAN GET ACCESS TO.

810

00:49:54,330 --> 00:49:57,650

WE ALSO HAVE AN INCREDIBLE TEAM.

811

00:49:57,650 --> 00:50:02,100

BASED IN WASHINGTON LED BY JENNY
AS WELL AS A TEAM IN THE FIELD

812

00:50:02,100 --> 00:50:04,180

WITH OUR MISSIONS.

813

00:50:04,180 --> 00:50:07,910

THAT'S REALLY BEEN A LEARNING
EXPERIENCE FOR US TO RECOGNIZE

814

00:50:07,910 --> 00:50:11,670

TO HAVE A CONNECTION NOT JUST
FROM SPACE TO VILLAGE BUT FROM

815

00:50:11,670 --> 00:50:14,010

SPACE TO OUR MISSION.

816

00:50:14,010 --> 00:50:17,040

WHERE WE PROGRAM SO MUCH OF OUR
WORK THAT DOES EFFECT PEOPLE ON

817

00:50:17,040 --> 00:50:18,210

THE GROUND.

818

00:50:18,210 --> 00:50:24,310
WE HAVE LIAISONS AND EXPERTS IN
OUR REGIONAL MISSION IN EAST

819
00:50:24,310 --> 00:50:26,050
AFRICA AND NAIROBI.

820
00:50:26,050 --> 00:50:28,329
SOUTHEAST ASIA.

821
00:50:28,329 --> 00:50:33,720
SOON COMING IN WEST AFRICA AND
OF COURSE IN KATHMANDU WITH THE

822
00:50:33,720 --> 00:50:35,599
HINDU REGION.

823
00:50:35,599 --> 00:50:42,000
SO WE HAVE A TEAM THERE WHO CAN
DIRECTLY LINK STAFF TO THE HUB.

824
00:50:42,000 --> 00:50:47,010
THE THIRD WAY IS TO CALL UPON
THE SERVICES OF THE GEO CENTER.

825
00:50:47,010 --> 00:50:52,600
AND THAT IS A TEAM OF DATA
ANALYSTS BASED HERE.

826
00:50:52,600 --> 00:50:57,770
THAT'S THE TEAM THAT IS IN PLACE
SPECIFICALLY TO HELP OUR AGENCY

827
00:50:57,770 --> 00:51:01,210
IMPROVE OUR DECISION MAKING BY
APPLYING GEOGRAPHIC ANALYSIS TO

828
00:51:01,210 --> 00:51:05,130
DEVELOPMENT PROGRAMMING ALL
ASPECTS OF THE PROGRAM CYCLE.

829

00:51:05,130 --> 00:51:14,820

FROM THE DESIGN OF A PROGRAM TO
STRATEGIC PLANNING.

830

00:51:14,820 --> 00:51:16,250

TO MONITORING PROGRAM.

831

00:51:16,250 --> 00:51:17,680

TO EVALUATING PROGRAMS.

832

00:51:17,680 --> 00:51:22,609

WE ARE HERE TO HELP THAT'S WHO
OUR TARGET AUDIENCE IS.

833

00:51:22,609 --> 00:51:24,210

WE WORK IN ANYTHINGS DIRECTLY.

834

00:51:24,210 --> 00:51:26,880

WE WORK HERE IN WASHINGTON
OFFICES.

835

00:51:26,880 --> 00:51:32,670

THE ULTIMATE OBJECTIVE WITH ALL
OF THIS IS TO REALLY TURN DATA

836

00:51:32,670 --> 00:51:35,070

IN TO DECISIONS.

837

00:51:35,070 --> 00:51:37,850

WE AREN'T JUST GENERATING DATA
AND MAKING IT AVAILABLE FOR THE

838

00:51:37,850 --> 00:51:38,850

SAKE OF IT.

839

00:51:38,850 --> 00:51:41,650

WE ARE REALLY TRYING TO EFFECT
AND IMPROVE THE KINDS OF

840

00:51:41,650 --> 00:51:45,530

DECISION MAKING THAT GOES ON IN
THIS AGENCY AND ALL OF THE

841

00:51:45,530 --> 00:51:50,150

SECTORS IN WHICH WE WORK AND ALL
THE COUNTRIES WE WORK.

842

00:51:50,150 --> 00:51:54,720

THIS PARTNERSHIP WE HAVE HAD AND
CONTINUE TO GROW IN TO THE

843

00:51:54,720 --> 00:51:58,500

FUTURE IS HELPING US DO THAT.

844

00:51:58,500 --> 00:52:00,369

>> ESTABLISHED PARTNERSHIP.

845

00:52:00,369 --> 00:52:10,140

BILL INNING -- BUILDING THIS
COLLABORATION.

846

00:52:10,140 --> 00:52:12,849

ALSO WITH COUNTRIES AROUND THE
WORLD.

847

00:52:12,849 --> 00:52:18,040

THIS IS A PARTNERSHIP THAT WE
HAVE TALK BAD NEEDING TO EXPAND.

848

00:52:18,040 --> 00:52:19,300

AND FINDING NEW WAYS.

849

00:52:19,300 --> 00:52:25,680

I INVITE YOU TO ENGAGE WITH THE
TEAM BOTH IN NASA AND TO SEE

850

00:52:25,680 --> 00:52:28,710

WHERE WE CAN TAKE THIS AND HOW
WE CAN FURTHER OUR DEVELOPMENT

851

00:52:28,710 --> 00:52:30,030

OBJECTIVES.

852

00:52:30,030 --> 00:52:45,329

SO WITH THAT PLEASE JOIN ME IN
THANKING THE PANEL.

853

00:52:45,329 --> 00:52:49,050

BEFORE WE GET TO QUESTIONS AND
ANSWERS FROM THE AUDIENCE I

854

00:52:49,050 --> 00:52:54,940

WOULD LIKE TO ASK THE
ADMINISTRATOR BOLDEN, ASSOCIATE

855

00:52:54,940 --> 00:52:57,920

ADMINISTRATOR AND OUR TWO
ASTRONAUTS TO PLEASE JOIN US

856

00:52:57,920 --> 00:53:10,609

HERE ON THE STAGE.

857

00:53:10,609 --> 00:53:14,640

WHILE THEY ARE TAKING THEIR
SEATS LET ME JUST NOTE THAT THIS

858

00:53:14,640 --> 00:53:18,750

EVENT IS OPEN PRESS AND IS CAN
TELL I ADVISED LIVE ON THE

859

00:53:18,750 --> 00:53:19,890

INTERNET.

860

00:53:19,890 --> 00:53:21,730

IT IS ON THE RECORD.

861

00:53:21,730 --> 00:53:30,270

AND

WHILE WE ARE PLEASED TO HAVE

862

00:53:30,270 --> 00:53:33,859

OUR FRIENDS FROM THE MEDIA HERE
IN THE ROOM WITH US.

863

00:53:33,859 --> 00:53:37,660

JUST WANT TO REMIND EVERYONE
THAT THE QUESTIONS AND ANSWERS

864

00:53:37,660 --> 00:53:44,370

ARE RESERVED FOR OUR GUESTS AND
NOT FOR PRESS QUESTIONS.

865

00:53:44,370 --> 00:53:47,330

>> LET ME LEAD OFF WITH THE
FIRST QUESTION.

866

00:53:47,330 --> 00:53:52,160

ADMINISTRATOR BOLDEN, YOU GET
THE FIRST ONE.

867

00:53:52,160 --> 00:53:56,860

LAST YEAR NASA WAS RANKED THE
BEST PLACE TO WORK IN THE

868

00:53:56,860 --> 00:53:59,420

FEDERAL GOVERNMENT.

869

00:53:59,420 --> 00:54:06,299

WHAT IS YOUR SECRET?

870

00:54:06,299 --> 00:54:07,790

>> THAT'S AN EASY ANSWER.

871

00:54:07,790 --> 00:54:09,339

I TALKED ABOUT IT IN THE VERY
BEGINNING.

872

00:54:09,339 --> 00:54:11,160

THE SECRET IS THE PEOPLE.

873

00:54:11,160 --> 00:54:12,220

IT REALLY IS.

874

00:54:12,220 --> 00:54:18,270

WE FOCUS REALLY ON EMPLOYEE
ENGAGEMENT ON TRYING TO -- I

875

00:54:18,270 --> 00:54:20,480

TALK ALL THE TIME ABOUT THE
CRITICAL IMPORTANCE OF DIVERSITY

876

00:54:20,480 --> 00:54:22,530

AND INCLUSION.

877

00:54:22,530 --> 00:54:25,510

DIVERSITY MEANS NUMBERS OF
PEOPLE BUT THAT'S NOT THE MOST

878

00:54:25,510 --> 00:54:26,550

IMPORTANT ONE TO ME.

879

00:54:26,550 --> 00:54:29,079

THE MOST IMPORTANT IS INCLUSION.

880

00:54:29,079 --> 00:54:31,650

DO WE ALLOW PEOPLE TO BE HEARD.

881

00:54:31,650 --> 00:54:33,110

DO WE LISTEN.

882

00:54:33,110 --> 00:54:35,570

THAT'S WHY -- WHAT WAS THE
LITTLE GIRL'S NAME?

883

00:54:35,570 --> 00:54:39,990

WHAT WAS HER NAME?

884

00:54:39,990 --> 00:54:42,160

SHE WAS LISTENING.

885

00:54:42,160 --> 00:54:46,980

WE MAY NOT THINK SO BUT THAT IS
CRITICALLY IMPORTANT TO GIVE

886

00:54:46,980 --> 00:54:49,730

EARN AN OPPORTUNITY TO SPEAK
THEIR PEACE.

887

00:54:49,730 --> 00:54:53,730

I HAPPEN TO BE A PERSON WHO DOES
NOT LIKE TO MAKE DECISIONS UNTIL

888

00:54:53,730 --> 00:54:56,800

I'VE HEARD FROM EVERYBODY
AROUND.

889

00:54:56,800 --> 00:55:00,300

BUT I THINK YOU ALL, YOU
PROBABLY OPERATE MUCH THE SAME

890

00:55:00,300 --> 00:55:02,619

WAY BUT IT'S REALLY THE PEOPLE.

891

00:55:02,619 --> 00:55:03,619

I THINK.

892

00:55:03,619 --> 00:55:04,890

>> THANK YOU.

893

00:55:04,890 --> 00:55:10,310

>> OUR NEXT QUESTION COMES FROM
EL SALVADOR.

894

00:55:10,310 --> 00:55:12,020
COMING IN BY VIDEO.

895
00:55:12,020 --> 00:55:13,710
WE HAVE THE VIDEO.

896
00:55:13,710 --> 00:55:29,020
NASA HELP ALERT GEOGRAPHIC AREAS
THE GREATEST RISK FROM CLIMATE

897
00:55:29,020 --> 00:55:31,040
CHANGE.

898
00:55:31,040 --> 00:55:36,090
>> THE QUESTION WAS THE THE
PRIORITIZATION.

899
00:55:36,090 --> 00:55:38,680
I THINK IT'S A VARIETY OF
ANSWERS.

900
00:55:38,680 --> 00:55:42,560
WHAT WE TRY TO DO FIRST OF ALL
WORKING CLOSELY WITH OUR

901
00:55:42,560 --> 00:55:48,050
DEVELOPMENT PARTNERS IS A KEY IN
THAT PROCESS.

902
00:55:48,050 --> 00:55:51,980
OVER ALL I THINK WHAT MAKES IT
REALLY EXCITING IT'S THE MAN

903
00:55:51,980 --> 00:55:54,460
DRIVEN.

904
00:55:54,460 --> 00:55:59,680
I THINK SOMETIMES THE NOTION THE
OLD SCHOOL WAY OF DOING THINGS

905

00:55:59,680 --> 00:56:02,560

BUILDING SOMETHING AND PUTTING
IT OUT THERE OR SOME PEOPLE

906

00:56:02,560 --> 00:56:03,990

WOULD SAY THROW IT OVER THE
FENCE.

907

00:56:03,990 --> 00:56:07,740

WHAT WE TRY TO DO IS LISTEN,
UNDERSTAND WHAT THE CARES AND

908

00:56:07,740 --> 00:56:12,069

CONCERNS ARE OF THE COUNTRIES
AND THEN TRY TO BRING TO BEAR

909

00:56:12,069 --> 00:56:15,330

AND MAKE THAT MATCH DO WE HAVE
TOOLS.

910

00:56:15,330 --> 00:56:22,030

THAT CAN REALLY HELP WITH THAT
ISSUE THAT THAT COUNTRY HAS.

911

00:56:22,030 --> 00:56:27,210

REACHING BEYOND NASA BUT
REACHING OUT TO OUR PARTNER,

912

00:56:27,210 --> 00:56:31,100

U.S. GOVERNMENT AGENCIES LEARNED
SO MUCH WITH THE DEPARTMENT OF

913

00:56:31,100 --> 00:56:34,710

INTERIOR THROUGH THEIR LAND
COVER WORK.

914

00:56:34,710 --> 00:56:40,300

THROUGH THEIR FUSE NETWORK AND
REALLY PARTNERING AS THE WHOLE

915

00:56:40,300 --> 00:56:44,760

OF GOVERNMENT TO BE ABLE TO
ADDRESS THOSE ISSUES.

916

00:56:44,760 --> 00:56:46,430

>> I CAN ADD A LITTLE.

917

00:56:46,430 --> 00:56:49,210

>> THIS QUESTION IS ONE THAT WE
ARE GETTING IN THE CONTEXT OF

918

00:56:49,210 --> 00:56:53,330

CLIMATE SERVICES A LOT WHICH IS
THE IDEA OF HOW DO WE USE

919

00:56:53,330 --> 00:56:58,190

INFORMATION ABOUT THE FUTURE
CLIMATE TO HELP US PREPARE AND

920

00:56:58,190 --> 00:57:04,440

WE HAVE RECENTLY ALSO LAUNCHED
CLIMATE SERVICES AND NASA HAS

921

00:57:04,440 --> 00:57:09,940

BROUGHT THIS REALLY INCREDIBLE
DOWN SCALED DATA SET FUTURE

922

00:57:09,940 --> 00:57:11,560

CLIMATE CONDITIONS.

923

00:57:11,560 --> 00:57:14,730

SO WE ARE CHALLENGED NOW TO MAKE
THAT USEFUL.

924

00:57:14,730 --> 00:57:19,740

THE WAY TO DO THAT TO COMBINE
WHERE WE SEE THE LARGEST PERHAPS

925

00:57:19,740 --> 00:57:26,350

CHANGES IN CLIMATE INTERSECTING
WITH SOCIAL VULNERABILITY.

926

00:57:26,350 --> 00:57:29,280

SOUNDS LIKE A GOOD PROJECT TO

927

00:57:29,280 --> 00:57:33,359

TAKE ON TO DEVELOP SOMETHING
LIKE THAT.

928

00:57:33,359 --> 00:57:35,300

>> SO TAKE A QUESTION FROM THE
AUDIENCE.

929

00:57:35,300 --> 00:57:37,609

WE DO HAVE A COUPLE FOLKS WITH
MIKES.

930

00:57:37,609 --> 00:57:40,490

RAISE YOUR HAND.

931

00:57:40,490 --> 00:57:43,320

PLEASE TELL US WHO YOU ARE AND
WHERE YOU WORK.

932

00:57:43,320 --> 00:57:44,480

RIGHT HERE.

933

00:57:44,480 --> 00:57:45,480

>> HI.

934

00:57:45,480 --> 00:57:48,470

I'M SHARON I WORK IN THE
PLANNING AND LEARNING.

935

00:57:48,470 --> 00:57:50,910

I HAVE A QUESTION FOR THE
ASTRONAUTS.

936

00:57:50,910 --> 00:57:54,780
THEY SAY HE WITH WENT TO THE
MOON TO DISCOVER EARTH AND I WAS

937
00:57:54,780 --> 00:57:57,470
JUST WONDERING IN YOUR
EXPERIENCE BEING IN OUTER SPACE

938
00:57:57,470 --> 00:58:02,869
IF YOU DISCOVERED SOMETHING KNEW
ABOUT EARTH.

939
00:58:02,869 --> 00:58:07,430
>> THE FIRST IMPRESSION I HAD OF
EARTH ON MY FIRST FLIGHT FROM

940
00:58:07,430 --> 00:58:10,859
SPACE SHUTTLE WE LAUNCHED AT
NIGHT AND WE WERE GOING OVER

941
00:58:10,859 --> 00:58:14,880
EUROPE AND WAS DAYTIME AND I
THOUGHT, WOW, WHEN I FIRST SAW

942
00:58:14,880 --> 00:58:18,510
THE EARTH IN DAYLIGHT AND I
REMEMBER THINKING THOSE ARE

943
00:58:18,510 --> 00:58:20,390
COLORS I HAVE NEVER SEEN BEFORE.

944
00:58:20,390 --> 00:58:22,150
SHADES OF BLUE I HAVE NEVER SEEN
BEFORE.

945
00:58:22,150 --> 00:58:25,440
THAT'S FROM THE OXYGEN IN THE
WATER.

946
00:58:25,440 --> 00:58:28,480

I'M NOT SURE EXACTLY THE PHYSICS
BUT THAT WAS IMPRESSION THAT I

947

00:58:28,480 --> 00:58:30,260
HAD.

948

00:58:30,260 --> 00:58:33,740
ANOTHER IMPRESSION I TALKED
ABOUT EARLIER WAS HOW AT

949

00:58:33,740 --> 00:58:36,910
NIGHTTIME YOU DON'T NECESSARILY
SEE THE POPULATION ON EARTH.

950

00:58:36,910 --> 00:58:39,530
BUT YOU CAN REALLY SEE WHERE
WEALTH IS.

951

00:58:39,530 --> 00:58:44,210
WE ALL KNOW THAT BUT TO SEE IT,
IT REALLY HIT HOME.

952

00:58:44,210 --> 00:58:48,560
ABOUT HOW FOLKS ON EARTH ARE
LIVING IN DIFFERENT CONDITIONS.

953

00:58:48,560 --> 00:58:52,480
BEING UP IN SPACE IT WAS A
SURREAL EXPERIENCE TO LOOK BACK

954

00:58:52,480 --> 00:58:56,360
ON THE PLANET.

955

00:58:56,360 --> 00:58:57,990
>> SO WE TOOK -- SORRY.

956

00:58:57,990 --> 00:59:04,310
>> I DON'T HAVE ANYTHING
PARTICULARLY TO ADD.

957

00:59:04,310 --> 00:59:06,869

OBVIOUSLY IT'S NOT LIKE I WENT
OUT THERE AND ALL OF A SUDDEN I

958

00:59:06,869 --> 00:59:08,740

MADE A HUGE DISCOVERY.

959

00:59:08,740 --> 00:59:11,720

>> I'M NOT THAT SMART.

960

00:59:11,720 --> 00:59:16,190

YOU JUST DEVELOP YOUR SENSE AS A
PERSON.

961

00:59:16,190 --> 00:59:24,270

A DIFFERENT RELATIONSHIP WITH
THE PLANET.

962

00:59:24,270 --> 00:59:29,380

WHEN YOU FIRST GET UP THERE YOU
ARE TIED TO WE HAVE TO FIGURE

963

00:59:29,380 --> 00:59:30,380

OUT WHERE YOU ARE.

964

00:59:30,380 --> 00:59:33,790

WHEN YOU HAVE BEEN UP THERE FOR
DAYS YOU DON'T HAVE TO LOOK

965

00:59:33,790 --> 00:59:39,390

OUT THE WINDOW, YOU JUST HAVE TO
FLOAT AND YOU START SEEING THE

966

00:59:39,390 --> 00:59:43,349

COLOR OF THE LIGHT THAT SHINES
THROUGH AND YOU GUESS BY THAT

967

00:59:43,349 --> 00:59:48,361

WHETHER YOU ARE OVER AFRICA OR

OVER EUROPE JUST BECAUSE YOU GET

968

00:59:48,361 --> 00:59:52,830

THE SUB CONSCIENCE UNDERSTANDING
OF THE DIFFERENT COLORS OF THE

969

00:59:52,830 --> 00:59:53,830

EARTH.

970

00:59:53,830 --> 00:59:56,579

IT BECOMES A VERY FAMILIAR
PLACE.

971

00:59:56,579 --> 00:59:59,930

IT'S LIKE THE WHOLE PLANET
BECOMES YOUR BACK YARD IN A WAY.

972

00:59:59,930 --> 01:00:07,230

A VERY DIFFERENT PERSONAL
RELATIONSHIP WITH THE PLANET.

973

01:00:07,230 --> 01:00:12,140

>> WE TOOK A POLL OF STAFF OF
WHAT QUESTIONS WE SHOULD BE

974

01:00:12,140 --> 01:00:13,730

ASKING HERE.

975

01:00:13,730 --> 01:00:18,710

AND SO THE TOP QUESTION WAS HOW
CAN THE DATA NASA COLLECTS HELP

976

01:00:18,710 --> 01:00:26,500

TO ACHIEVER MISSION OF ENDING
EXTREME POVERTY ON EARTH.

977

01:00:26,500 --> 01:00:33,750

>> LET ME GO BACK TO SOMETHING
THAT TERRY SAID.

978

01:00:33,750 --> 01:00:37,280

I DON'T KNOW THE ANSWER TO THE
QUESTION BUT I THINK A HINT

979

01:00:37,280 --> 01:00:41,760

MIGHT BE THE FACT THAT THE WAY
YOU VIEW EARTH, YOU VIEW THE

980

01:00:41,760 --> 01:00:46,780

SPACE SHIP ON WHICH WE ALL LIVE
FROM THE VANTAGE POINT OF SPACE.

981

01:00:46,780 --> 01:00:52,430

IT IS A NEW AWAKENING ABOUT
WEALTH VERSUS POVERTY.

982

01:00:52,430 --> 01:00:53,810

IT IS STARK.

983

01:00:53,810 --> 01:00:58,250

ASTER RY PUT IT.

984

01:00:58,250 --> 01:01:01,490

YOU REALLY DON'T SEE BORDERS
EXCEPT THOSE THAT ARE CREATED BY

985

01:01:01,490 --> 01:01:08,859

HUMAN BEINGS AND GENERALLY
BORDERS CREATED BY WARFARE OR BY

986

01:01:08,859 --> 01:01:13,960

ONE GROUP HAVING LOTS OF WEALTH
AND THE OTHER GROUP NOT.

987

01:01:13,960 --> 01:01:17,400

AND I THINK JUST AS WE USE THE
DATA ON FLOODS.

988

01:01:17,400 --> 01:01:21,210

EARLY PROJECTION OF WHERE WE
WILL HAVE A FLOOD AREA AND

989

01:01:21,210 --> 01:01:23,260
EVACUATE PEOPLE.

990

01:01:23,260 --> 01:01:27,700
AT SOME POINT WE HAVE TO PAY
ATTENTION TO THE DATA.

991

01:01:27,700 --> 01:01:32,060
WHAT THE HUMAN EYE SEES ABOUT
WEALTH HERE AND POVERTY THERE

992

01:01:32,060 --> 01:01:35,020
AND DECIDE TO DO SOMETHING.

993

01:01:35,020 --> 01:01:40,410
ONE OF THE REASONS OPPONENTS OF
SCIENCE AND NASA PEOPLE WHO

994

01:01:40,410 --> 01:01:45,980
OPPOSE OUR PROVISION OF DATA ON
CLIMATE CHANGE IS BECAUSE IF YOU

995

01:01:45,980 --> 01:01:49,230
ADMIT THAT IT IS A PROBLEM OR
ISSUE THEN YOU HAVE A MORALE

996

01:01:49,230 --> 01:01:51,380
OBLIGATION TO DO SOMETHING ABOUT
IT.

997

01:01:51,380 --> 01:01:55,240
I WOULD SAY IF -- THE REASON I
WANT MORE PEOPLE TO HAVE

998

01:01:55,240 --> 01:01:58,210
OPPORTUNITY TO FLY IN SPACE
BECAUSE I DON'T BELIEVE CAN YOU

999

01:01:58,210 --> 01:02:00,640

LOOK AT THIS PLANET FROM THAT
VANTAGE POINT AND NOT BE

1000

01:02:00,640 --> 01:02:04,800

BOTHERED BY WHAT YOU SEE.

1001

01:02:04,800 --> 01:02:08,290

KNOWING WHAT REALLY EXISTS.

1002

01:02:08,290 --> 01:02:09,540

KNOWING WHAT IS REALLY GOING ON.

1003

01:02:09,540 --> 01:02:13,180

MY FAVORITE IMAGE ONE OF THE
MIDDLE EAST.

1004

01:02:13,180 --> 01:02:16,730

SO INCREDIBLY PEACEFUL.

1005

01:02:16,730 --> 01:02:21,340

YOU REMIND YOURSELF OF WHAT IS
GOING ON DOWN THERE.

1006

01:02:21,340 --> 01:02:23,690

WHY.

1007

01:02:23,690 --> 01:02:24,690

WHAT CAN I DO.

1008

01:02:24,690 --> 01:02:27,829

WHAT CAN I DO WHEN I GO BACK TO
MAKE A DIFFERENCE.

1009

01:02:27,829 --> 01:02:35,890

I HEAR THAT, ALMOST EVERY
ASTRONAUT.

1010

01:02:35,890 --> 01:02:38,690

>> YOU MENTION HAVING MORE
PEOPLE GO IN TO SPACE.

1011

01:02:38,690 --> 01:02:42,339

MORE IN THE AUDIENCE WOULD LOVE
TO TAKE YOU UP ON THAT.

1012

01:02:42,339 --> 01:02:43,799

>> WE ARE READY.

1013

01:02:43,799 --> 01:02:46,790

>> CAN I ADD SOMETHING?

1014

01:02:46,790 --> 01:02:51,910

FROM MY OWN EXPERIENCE WORKING
AND LIVING IN GUATEMALA AND I

1015

01:02:51,910 --> 01:02:55,560

DID A THE LOT OF WORK WITH
ARCHEOLOGY.

1016

01:02:55,560 --> 01:03:01,119

ONE OF THE MOST ADVANCED
CIVILIZATIONS.

1017

01:03:01,119 --> 01:03:04,930

SCIENCE, MATH, UNDERSTAND THE
MOTION OF PLANETS.

1018

01:03:04,930 --> 01:03:11,090

AROUND AD THE CIVILIZATION
COLLAPSED.

1019

01:03:11,090 --> 01:03:15,440

MOST RESEARCH NOW SAYS THAT IT
WAS A RESULT OF CLIMATE CHANGE.

1020

01:03:15,440 --> 01:03:21,250

AND THE MAYA THEY DID NOT HAVE
ACCESS TO GROUND WATER AND THE

1021

01:03:21,250 --> 01:03:24,430

CIVILIZATION WHICH HAD EXISTED
FOR THOUSANDS OF YEARS SUFFERED

1022

01:03:24,430 --> 01:03:28,920

A NEAR COMPLETE COLLAPSE.

1023

01:03:28,920 --> 01:03:33,710

HAD THE MAYA HAD THE TOOLS, HAD
THEY HAD ABILITY TO LOOK FROM

1024

01:03:33,710 --> 01:03:37,190

SPACE AND UNDERSTAND WHAT WAS
GOING ON, TO BE ABLE TO SEE WHAT

1025

01:03:37,190 --> 01:03:40,200

WAS GOING ON AND UNDERSTAND THE
CHANGE AND WHAT WAS COMING COULD

1026

01:03:40,200 --> 01:03:42,120

THEY HAVE DONE SOMETHING ABOUT
THAT.

1027

01:03:42,120 --> 01:03:44,030

>> I USE THE SAME ANALOGY.

1028

01:03:44,030 --> 01:03:48,940

TODAY WE HAVE THE TOOLS, THE
ABILITY TO UNDERSTAND THROUGH

1029

01:03:48,940 --> 01:03:50,130

CLIMATE MODELS.

1030

01:03:50,130 --> 01:03:51,359

UNDERSTAND FUTURE CLIMATE.

1031

01:03:51,359 --> 01:03:55,250
WE HAVE UNDERSTANDING WHAT IS
HAPPENING RIGHT NOW.

1032
01:03:55,250 --> 01:03:58,891
IT'S SO IMPORTANT TO HAVE OPEN
DATA AND SHARING OF DATA AND THE

1033
01:03:58,891 --> 01:04:02,230
SHARING OF KNOWLEDGE AND WORKING
LIKE WE TALKED ABOUT BEFORE WITH

1034
01:04:02,230 --> 01:04:06,240
UNBELIEVABLE STUDENTS AND THE
YOUTH AROUND THE WORLD TO BE ABLE

1035
01:04:06,240 --> 01:04:10,660
TO TAKE THAT DATA AND CONVERT
THAT DATA IN TO INFORMATION TO

1036
01:04:10,660 --> 01:04:13,000
REALLY MAKE A DIFFERENCE.

1037
01:04:13,000 --> 01:04:16,089
>> I WILL GIVE AN EXAMPLE.

1038
01:04:16,089 --> 01:04:20,411
SOME OF THIS STUFF SOUNDS AND IS
VERY TECHNICAL BUT IT DOES

1039
01:04:20,411 --> 01:04:25,650
TRANSLATE I THINK IN TO A LOT OF
THINGS WE DO DAY-TO-DAY.

1040
01:04:25,650 --> 01:04:27,150
COUPLE QUICK THINGS.

1041
01:04:27,150 --> 01:04:28,680
TALK ABOUT THE FUTURE.

1042

01:04:28,680 --> 01:04:32,830

INVESTING A BILLION DOLLARS A
YEAR IN AGRICULTURE.

1043

01:04:32,830 --> 01:04:37,839

WEATHER HALLS A HUGE IMPACT ON
AGRICULTURE.

1044

01:04:37,839 --> 01:04:42,050

SO AS OUR FANTASTIC TEAMS THINK
ABOUT HOW TO MAXIMIZE THE

1045

01:04:42,050 --> 01:04:46,740

RESULTS FROM THAT AND WORK WITH
PEOPLE IN VILLAGES, IN DOZENS OF

1046

01:04:46,740 --> 01:04:50,990

COUNTRIES AROUND THE WORLD, IT'S
REALLY HELPFUL TO BE ABLE TO OP

1047

01:04:50,990 --> 01:04:56,920

MY TIZE OUR RULES BASED ON
INFORMATION, THE WATER, THE

1048

01:04:56,920 --> 01:05:00,250

VOLUMES ARE CHANGING OR THE
PATHS ARE CHANGING OR THE

1049

01:05:00,250 --> 01:05:01,660

TEMPERATURES ARE CHANGING.

1050

01:05:01,660 --> 01:05:05,430

I DON'T KNOW OF ANYBODY WHO HAS
GOT THAT CRYSTAL BALL WHO KNOWS

1051

01:05:05,430 --> 01:05:09,040

EXACTLY HOW CLIMATE CHANGE IS
GOING TO PLAY OUT.

1052

01:05:09,040 --> 01:05:14,910
SO WE HAVE TO BE IN A CONSTANT
REVISED, LEARN, GET MORE DATA

1053
01:05:14,910 --> 01:05:17,530
KIND OF MODE AND MAKING
ADJUSTMENTS.

1054
01:05:17,530 --> 01:05:19,940
I THINK THIS KIND OF DATA CAN
HELP.

1055
01:05:19,940 --> 01:05:22,210
THERE IS ANOTHER WHOLE THING
SOME OF YOU MAY KNOW ABOUT,

1056
01:05:22,210 --> 01:05:27,319
CALLED FIND IT ON THE WEB GLOBAL
FOREST WATCH.ORG.

1057
01:05:27,319 --> 01:05:30,859
IT IS MIND BLOWING WHAT
TECHNOLOGY CAN DO.

1058
01:05:30,859 --> 01:05:37,770
THEY TAKE ALL THE EARTH IMAGES
OVER THE ENTIRE PLANET.

1059
01:05:37,770 --> 01:05:41,890
AND USING GOOGLE SERVERS.

1060
01:05:41,890 --> 01:05:45,800
WE HAVE MULTIPLE GOVERNMENT, WE
ARE SUPPORTING IT.

1061
01:05:45,800 --> 01:05:52,270
GOOGLE SERVERS CRANK AWAY FOR
HOURS COMPARE EVERY SINGLE

1062
01:05:52,270 --> 01:05:56,920

COVERING EVERY SINGLE FOREST AND
THEN THEY CAN TELL US EVERY

1063

01:05:56,920 --> 01:06:02,130

DAYS WHERE IS THERE DEFOREST
TATION.

1064

01:06:02,130 --> 01:06:03,230

WHAT IS GOING ON.

1065

01:06:03,230 --> 01:06:07,930

YOU KNOW THAT IN A LOT OF CASES
IT HAS HAD VERY NEGATIVE IMPACTS

1066

01:06:07,930 --> 01:06:11,920

ON LOCAL COMMUNITIES AND PEOPLE
AND A LOT OF FOLKS WITH WHOM WE

1067

01:06:11,920 --> 01:06:12,920

WORK.

1068

01:06:12,920 --> 01:06:16,900

THAT REAL TIME DATA WHICH DAN
WAS TREKKING THROUGH THE JUNGLES

1069

01:06:16,900 --> 01:06:19,599

TO GET.

1070

01:06:19,599 --> 01:06:25,470

SET ALERT IF YOUR FAVORITE

1071

01:06:25,470 --> 01:06:28,580

NATIONAL PARK IS BEING
THREATENED AND IT WILL E-MAIL

1072

01:06:28,580 --> 01:06:30,980

YOU IF THERE ARE CHANGES.

1073

01:06:30,980 --> 01:06:34,790

>> I DON'T THINK OUR
IMAGINATIONS HAVE FULLY TAPPED

1074

01:06:34,790 --> 01:06:39,490
ALL THE POSSIBILITIES WE HAVE IN
WORKING WITH NASA WHETHER THESE

1075

01:06:39,490 --> 01:06:46,900
AREAS AND OTHERS ARE DOING IN
TERMS OF TURNING THIS DATA WE

1076

01:06:46,900 --> 01:06:50,359
WILL MAKE A DIFFERENCE TO THE
DAY-TO-DAY LIVES OF PEOPLE IN

1077

01:06:50,359 --> 01:06:55,029
INCREDIBLY REMOTE VILLAGES OR
EXTREMELY POOR PEOPLE.

1078

01:06:55,029 --> 01:07:00,830
>> WE WILL TAKE A BREAK FROM
THAT BEAUTIFUL IMAGE ON THE

1079

01:07:00,830 --> 01:07:05,119
SCREEN THERE AND ANOTHER
QUESTION FROM THE FIELD.

1080

01:07:05,119 --> 01:07:10,970
FROM ETHIOPIA AND THEN WE WILL
GO TO THE AUDIENCE.

1081

01:07:10,970 --> 01:07:14,490
>> HELLO.

1082

01:07:14,490 --> 01:07:22,130
DEPENDS ON LIVESTOCK FOR THEIR
LIVELIHOOD DEPENDS ON THE

1083

01:07:22,130 --> 01:07:25,180
AVAILABILITY OF PASTURE AND

WATER.

1084

01:07:25,180 --> 01:07:31,220

SO MY QUESTION IS COULD NASA
ASSIST IN PRODUCING WATER

1085

01:07:31,220 --> 01:07:35,440

AVAILABILITY PREDICTIONS THREE
MONTHS IN ADVANCE FOR DRY AND

1086

01:07:35,440 --> 01:07:42,860

PASTURE AREAS.

1087

01:07:42,860 --> 01:07:49,000

>> I THINK, THESE ARE THE TYPES
OF THINGS WE REAL STRIVE TO DO.

1088

01:07:49,000 --> 01:07:55,809

WORKING ON SIMILAR RANGE LAND
MANAGEMENT CAPABILITIES.

1089

01:07:55,809 --> 01:08:01,580

WE TALKED ABOUT DOING IT IN
PLACE INS AFRICA LIKE ETHIOPIA.

1090

01:08:01,580 --> 01:08:10,290

PARTNERING, THE FUSE NET PROJECT
AND OTHERS PARTICIPATE REALLY

1091

01:08:10,290 --> 01:08:12,240

TEAMING WITH GROUPS LIKE THAT.

1092

01:08:12,240 --> 01:08:14,530

I THIS THESE ARE THE TYPE OF
APPLICATIONS AND REALLY

1093

01:08:14,530 --> 01:08:20,960

UNDERSTANDING HOW TO REALLY
BRING.

1094

01:08:20,960 --> 01:08:24,290

THOSE ARE THE TYPES OF THINGS WE
CAN DO AND VERY INTERESTED IN

1095

01:08:24,290 --> 01:08:28,500

SUPPORTING.

1096

01:08:28,500 --> 01:08:32,380

>> WE ALL TALK ABOUT THE WORLD
AND WE ARE CONCERNED ABOUT WHAT

1097

01:08:32,380 --> 01:08:34,049

IS HAPPENING IN OTHER COUNTRIES.

1098

01:08:34,049 --> 01:08:40,069

RIGHT HERE AT HOME WE SUPPORTED
THE FARM FORUM THAT SPEAKER

1099

01:08:40,069 --> 01:08:44,250

BOEHNER SPONSORED IN OHIO
SEVERAL MONTHS AGO.

1100

01:08:44,250 --> 01:08:49,000

MIKE WHO HEADS OUR OUR EARTH
SCIENCE DIVISION WE SENT A TEAM

1101

01:08:49,000 --> 01:08:50,040

OUT THERE.

1102

01:08:50,040 --> 01:08:54,210

WE WERE GIVING BRIEFS ON HOW YOU
USE SATELLITE DATA TO HELP

1103

01:08:54,210 --> 01:08:56,299

FARMERS WITH THEIR CROP
PLANNING.

1104

01:08:56,299 --> 01:08:59,190

THEIR WATER RESOURCES MANAGEMENT

RIGHT HERE IN THE U.S.

1105

01:08:59,190 --> 01:09:04,000

THE SPEAKER SAID I HAD NO IDEA
THAT NASA PROVIDED THIS KIND OF

1106

01:09:04,000 --> 01:09:07,949

INFORMATION AND THEN WANTED TO
KNOW WHAT ELSE IS AVAILABLE.

1107

01:09:07,949 --> 01:09:11,219

THE SAME AS THE YOUNG LADY ASKED
FROM ETHIOPIA.

1108

01:09:11,219 --> 01:09:16,489

NATIONAL FOREST SERVICE EVERY
FIRE SEASON WE TRY TO FEED THEM

1109

01:09:16,489 --> 01:09:21,719

DATA THAT COMES FROM INFRARED
IMAGING SATELLITES ON HOT SPOTS.

1110

01:09:21,719 --> 01:09:27,140

IF THEY CAN FIND ON A HOT SPOT
BEFORE IT BECOMES A FIRE IT'S

1111

01:09:27,140 --> 01:09:29,969

MUCH EASIER TO STICK A HOSE IN
THE GROUND AND TAMP DOWN A HOT

1112

01:09:29,969 --> 01:09:32,140

SPOT BEFORE IT ERUPTS.

1113

01:09:32,140 --> 01:09:38,179

THOSE ARE EXAMPLES OF THINGS
HERE AT HOME AND THEY EXPAND.

1114

01:09:38,179 --> 01:09:39,560

WE SEE THEM UTILIZED HERE.

1115

01:09:39,560 --> 01:09:43,080

WE CAN GET THEM IN TO OTHER
PLACES IN THE WORLD.

1116

01:09:43,080 --> 01:09:48,190

BUT DON'T DISCOUNT THE VALUE OF
WHAT YOU DO EVERY SINGLE DAY IN

1117

01:09:48,190 --> 01:09:52,420

DEVELOPING NEW TOOLS AND NEW
SYSTEMS AND DON'T LET YOUR --

1118

01:09:52,420 --> 01:09:56,140

WHEN I TALKED ABOUT DREAMING,
IT'S IMPORTANT.

1119

01:09:56,140 --> 01:09:58,290

ONE OF THE THINGS THAT I LOVE
ABOUT IN A STA AND I LOVE ABOUT

1120

01:09:58,290 --> 01:10:00,160

BEING IN THE ORGANIZATION.

1121

01:10:00,160 --> 01:10:04,610

WE ARE JUST FULL OF DREAMERS AND
WE PUT OURSELVES AT RISK ALL THE

1122

01:10:04,610 --> 01:10:09,980

TIME BECAUSE AS PEOPLE SAY IT'S
REALLY HARD TO JUST TY FY THE

1123

01:10:09,980 --> 01:10:11,770

FACT THAT YOU ARE PURSUING A
DREAM.

1124

01:10:11,770 --> 01:10:16,090

IT'S HARD TO EXPLAIN THAT TO
PEOPLE BUT THAT'S WHAT YOU DO.

1125

01:10:16,090 --> 01:10:18,699
YOU'VE GOT TO DO MORE OF IT.

1126
01:10:18,699 --> 01:10:20,081
>> I JUST WANTED TO ADD, THANK

1127
01:10:20,081 --> 01:10:26,901
YOU VERY MUCH, THAT RELATED TO
THAT SPECIFIC QUESTION, WE DO

1128
01:10:26,901 --> 01:10:30,510
HAVE ACTIVITY WORKING WITH SOME
OF OUR COLLEAGUES AT JET

1129
01:10:30,510 --> 01:10:34,739
PROPULSION LABORATORY THAT ARE
LOOKING AT CROP YIELD AND

1130
01:10:34,739 --> 01:10:38,250
BUILDING IN SOME OF THE LONGER
TERM FORECASTS.

1131
01:10:38,250 --> 01:10:45,019
THAT'S THE DIRECTION WE ARE
HEADED TO GET AHEAD OF IT.

1132
01:10:45,019 --> 01:10:50,090
>> A LITTLE BIT MORE SPECIFIC
FOR THE QUESTION.

1133
01:10:50,090 --> 01:10:52,880
I THINK MANY PEOPLE MAY KNOW
THIS.

1134
01:10:52,880 --> 01:10:58,340
YOU CAN MEASURE ACTIVITY ON THE
GROUND WHICH IS A MEASURE OF

1135
01:10:58,340 --> 01:10:59,980
ASTRO AREA.

1136

01:10:59,980 --> 01:11:06,270

WE CAN ALSO CORRELATE SEASONAL
WATER FOR PLACES WHERE THE WATER

1137

01:11:06,270 --> 01:11:10,930

BODIES ARE NOT VISIBLE FROM
SATELLITE DATA.

1138

01:11:10,930 --> 01:11:15,460

SO THE QUESTIONS THERE ABOUT
WATER AVAILABILITY AND PASTURE,

1139

01:11:15,460 --> 01:11:17,030

THERE ARE TECHNIQUES TO DO THAT.

1140

01:11:17,030 --> 01:11:20,270

THERE ARE TOOLS THAT DO THAT AND
SOME OF THE TOOLS THAT ARE BEING

1141

01:11:20,270 --> 01:11:25,370

DEVELOPED FOR PAKISTAN AND FOR
OTHER PARTS OF THE WORLD USING

1142

01:11:25,370 --> 01:11:29,869

THOSE DATA BE ADOPTED TO
ETHIOPIA.

1143

01:11:29,869 --> 01:11:33,370

>> THIS IS EXCITING WHEN WE TALK
ABOUT WORKING TOGETHER.

1144

01:11:33,370 --> 01:11:41,199

ANSWER EACH OTHER'S QUESTIONS.

1145

01:11:41,199 --> 01:11:42,199

>> YOU TAUGHT ME.

1146

01:11:42,199 --> 01:11:43,199

>> THAT'S RIGHT.

1147

01:11:43,199 --> 01:11:48,250

>> I JUST NOTE --
[INAUDIBLE]

1148

01:11:48,250 --> 01:11:55,890

>> LET'S TAKE A QUESTION FROM
THE AUDIENCE.

1149

01:11:55,890 --> 01:11:59,270

>> ONE DOWN HERE.

1150

01:11:59,270 --> 01:12:05,070

SECOND ROW.

1151

01:12:05,070 --> 01:12:06,900

>> THANK YOU VERY MUCH FOR YOUR
PRESENTATIONS.

1152

01:12:06,900 --> 01:12:11,960

MY NAME IS VICTOR.

1153

01:12:11,960 --> 01:12:16,199

I NOTICE ON YOUR MAP THAT YOU
ARE MISSING ONE IN SOUTH

1154

01:12:16,199 --> 01:12:17,199

AMERICA.

1155

01:12:17,199 --> 01:12:22,920

I WAS WONDERING IF THERE ARE
PLANS TO DO DEVELOP ONE THERE.

1156

01:12:22,920 --> 01:12:24,570

I'M THINKING OF NOT JUST FOR

1157

01:12:24,570 --> 01:12:36,840

DISASTERS LIKE YESTERDAY'S

EARTHQUAKE IN H ARE CHILE.

1158

01:12:36,840 --> 01:12:40,440

AFFECTED OUR FOOD SECURITY
PROGRAM.

1159

01:12:40,440 --> 01:12:48,090

ALSO FOR THINGS LIKE MONITORING
FLOODED FOREST IN THE AMAZON

1160

01:12:48,090 --> 01:12:49,090

BASIN.

1161

01:12:49,090 --> 01:12:54,449

REALLY IMPORTANT TO PRODUCTION
AREAS AND COULD REALLY HEAP

1162

01:12:54,449 --> 01:12:59,239

PEOPLE MANAGEMENT THOSE ARE JUST
A COUPLE OF THINGS THAT I THINK

1163

01:12:59,239 --> 01:13:02,670

WE COULD REALLY USE.

1164

01:13:02,670 --> 01:13:07,400

>> BEFORE WE GET TO THE ANSWER,
I KNOW HE HE - I WANTED TO THANK

1165

01:13:07,400 --> 01:13:12,880

YOU FOR ALLOWING US BE A PART OF
THIS TOWN HALL.

1166

01:13:12,880 --> 01:13:16,480

HOPEFULLY YOU NOW GET A FEEL FOR
HOW IMPORTANT WE THINK THE

1167

01:13:16,480 --> 01:13:17,610

PARTNERSHIP IS.

1168

01:13:17,610 --> 01:13:19,230
WE THINK IT'S VITAL.

1169
01:13:19,230 --> 01:13:25,860
IDEAS, DREAMS, ALL THAT KIND OF
STUFF LET US KNOW BECAUSE I

1170
01:13:25,860 --> 01:13:28,320
THINK WHAT WE DO TOGETHER IS
JUST IMPORTANT.

1171
01:13:28,320 --> 01:13:31,860
THANKS VERY MUCH FOR ALLOWING ME
TO BE A PART OF IT.

1172
01:13:31,860 --> 01:13:35,199
>> I'M GOING TO LEAVE YOU IN THE
HANDS OF OUR CAPABLE TEAM.

1173
01:13:35,199 --> 01:13:37,440
I APOLOGIZE FOR HAVING TO LEAVE.

1174
01:13:37,440 --> 01:13:41,830
THANK YOU.

1175
01:13:41,830 --> 01:13:51,280
[APPLAUSE]
>> THE QUESTION OF EXPANSION.

1176
01:13:51,280 --> 01:14:07,800
I WILL START WITH WHAT I CAN SAY
GIVEN THIS IS OPEN TO

1177
01:14:07,800 --> 01:14:10,690
THE PRESS.

1178
01:14:10,690 --> 01:14:16,420
>> THIS IS SUCH A LOCAL CAPACITY
BUILDING PROGRAM THE MISSION

1179

01:14:16,420 --> 01:14:20,420

EXPRESS AN INTEREST IN EXPANDING
TO E .

1180

01:14:20,420 --> 01:14:25,170

WE WORK WITH THEM ON ALL OF THE
PREPARATION TO MAKE SURE THAT WE

1181

01:14:25,170 --> 01:14:32,210

HAVE THE LOCAL OWNERSHIP WITHIN
THE REGION.

1182

01:14:32,210 --> 01:14:35,610

PROVIDE ALL THE BACKSTOPPING AND
THE THE ACCESS TO NASA AT THE

1183

01:14:35,610 --> 01:14:36,640

GLOBAL LEVEL.

1184

01:14:36,640 --> 01:14:40,070

SOUTH AMERICA HAS DONE
ASSESSMENT TO SEE IF THIS WOULD

1185

01:14:40,070 --> 01:14:45,090

BE AN USEFUL PROGRAM TO EXPAND
SO WE HAVE TO SEE WHAT THEY

1186

01:14:45,090 --> 01:14:48,460

THINK AND HOW THEY VIEW THIS

1187

01:14:48,460 --> 01:14:51,650

INVESTMENT VERSUS OTHERS BUT
CERTAINLY THEY ARE THINKING

1188

01:14:51,650 --> 01:14:53,840

ABOUT IT.

1189

01:14:53,840 --> 01:14:57,360

>> SO WE ARE OUT OF TIME SO I

KNOW THERE ARE OTHER PEOPLE HAVE

1190

01:14:57,360 --> 01:14:58,360

QUESTIONS.

1191

01:14:58,360 --> 01:15:03,780

I KNOW WE HAVE OTHER WAYS OF
GETTING SOME QUESTIONS POSED TO

1192

01:15:03,780 --> 01:15:10,970

THE PANEL HERE AS WE CAN SHARE
THOSE IDEAS AND SO FORT.

1193

01:15:10,970 --> 01:15:13,920

SO WE WILL FOLLOW UP WITH THAT.

1194

01:15:13,920 --> 01:15:18,590

BEFORE WE CLOSE LET ME JUST SAY
THAT TERRY AND SAMANTHA HAVE

1195

01:15:18,590 --> 01:15:23,000

AGREED TO BE DOWN FRONT IF
ANYBODY WANTS TO COME DOWN TO

1196

01:15:23,000 --> 01:15:24,920

MEET AND GREET THEM.

1197

01:15:24,920 --> 01:15:29,370

HAVE A LITTLE BIT OF A RECEIVING
LINE FOR THEM DOWN HERE.

1198

01:15:29,370 --> 01:15:33,870

WE DO ASK JUST GIVEN THEIR TIME
AND THE NUMBER OF PEOPLE WHO

1199

01:15:33,870 --> 01:15:37,750

WOULD LIKE TO MEET THEM THAT WE
THEY WILL NOT BE SIGNING

1200

01:15:37,750 --> 01:15:42,420
AUTOGRAPHS AND THEY -- PLEASE
REFRAIN FROM TAKING PERSONAL

1201
01:15:42,420 --> 01:15:43,920
PICTURES.

1202
01:15:43,920 --> 01:15:48,230
I NOTE THAT OUR PHOTOGRAPHY TEAM
HERE WILL BE TAKING CANDID

1203
01:15:48,230 --> 01:15:52,690
PHOTOS DURING THE MEET AND GREET
WE WILL BE POSTING THOSE FOR

1204
01:15:52,690 --> 01:15:54,590
ANYBODY WHO WOULD LIKE TO HAVE
THEM.

1205
01:15:54,590 --> 01:15:59,890
WITH THAT LET ME THANK AGAIN OUR
COLLEAGUES FOR JOINING US TODAY