1
00:00:05,930 --> 00:00:03,409
thank you and good morning or as Bob

2
00:00:09,549 --> 00:00:05,940
says whatever it is are these are

3
00:00:14,379 --> 00:00:09,559
wonderful long days I want to talk about

4
00:00:18,230 --> 00:00:14,389
basically the what amounts to hard edge

5
00:00:21,800 --> 00:00:18,240
scientific statistically based material

6
00:00:26,150 --> 00:00:21,810
but I would like to start by mentioning

7
00:00:28,490 --> 00:00:26,160
that this project began because we were

8
00:00:30,320 --> 00:00:28,500
interested in consciousness we were

9
00:00:32,840 --> 00:00:30,330
interested in the possibility that there

10
00:00:34,520 --> 00:00:32,850
is interconnection among people that

11
00:00:36,560 --> 00:00:34,530
there might even be something that could

12
00:00:39,170 --> 00:00:36,570
be construed as a global consciousness I

13
00:00:41,150 --> 00:00:39,180

won't prove or demonstrate that

14
00:00:44,930 --> 00:00:41,160
necessarily but we have some very

15
00:00:47,900 --> 00:00:44,940
interesting results over time I guess

16
00:00:51,020 --> 00:00:47,910
most importantly I think we're able to

17
00:00:54,760 --> 00:00:51,030
show with clarity that there really is

18
00:00:59,200 --> 00:00:54,770
as Gertrude Stein said some there there

19
00:01:03,560 --> 00:00:59,210
the odds are of this being just chances

20
00:01:05,299 --> 00:01:03,570
million to one or ten million to one we

21
00:01:07,450 --> 00:01:05,309
have independent measures and they're

22
00:01:11,179 --> 00:01:07,460
correlated they have correlated response

23
00:01:13,160 --> 00:01:11,189
to these events there's some structure

24
00:01:16,940 --> 00:01:13,170
in terms of distance in terms of time

25
00:01:18,530 --> 00:01:16,950
and also in terms of what you might

26
00:01:21,649 --> 00:01:18,540
think of as psychological qualities

27
00:01:24,700 --> 00:01:21,659
there's a lot of structure where there

28
00:01:27,770 --> 00:01:24,710
shouldn't be any this is what the

29
00:01:29,210 --> 00:01:27,780
network looks like interpret out over

30
00:01:31,880 --> 00:01:29,220
the world you'll see a lot of

31
00:01:33,649 --> 00:01:31,890
concentration in the US and Europe but

32
00:01:35,270 --> 00:01:33,659
we have tried to get a distribution that

33
00:01:40,999 --> 00:01:35,280
was big enough so we could ask questions

34
00:01:43,520 --> 00:01:41,009
about distance the data flow through the

35
00:01:44,840 --> 00:01:43,530
internet to Princeton and that's what

36
00:01:46,940 --> 00:01:44,850
the data looked like when they are

37
00:01:51,649 --> 00:01:46,950
coming in so we have to do a lot of

38
00:01:54,469 --> 00:01:51,659

processing to make sense or make find

39
00:01:58,280 --> 00:01:54,479
out whether there in indeed is in any

40
00:02:01,249 --> 00:01:58,290
kind of structure in the data the we

41
00:02:04,880 --> 00:02:01,259
look at each of the devices which we

42
00:02:07,310 --> 00:02:04,890
often call eggs there that's a node in

43
00:02:10,460 --> 00:02:07,320
the network it's a random event

44
00:02:11,839 --> 00:02:10,470
generator with custom software and if we

45
00:02:13,670 --> 00:02:11,849
look at them separately and then

46
00:02:16,680 --> 00:02:13,680
calculate an average

47
00:02:18,630 --> 00:02:16,690
they're accumulating deviation over time

48
00:02:23,789 --> 00:02:18,640
it will look something like this

49
00:02:27,899 --> 00:02:23,799
black summary trace and it may look like

50
00:02:33,119 --> 00:02:27,909
this in our formal experiments we first

51
00:02:34,309 --> 00:02:33,129
define the event we figure out we decide

52
00:02:37,160 --> 00:02:34,319
that there's an interesting event

53
00:02:39,839 --> 00:02:37,170
something it might possibly affect

54
00:02:42,089 --> 00:02:39,849
global consciousness if you will by

55
00:02:45,000 --> 00:02:42,099
because it makes an awful lot of people

56
00:02:48,119 --> 00:02:45,010
feel the same emotions think the same

57
00:02:52,099 --> 00:02:48,129
kind of thoughts so we discover the

58
00:02:55,080 --> 00:02:52,109
event in the news perhaps and then we

59
00:02:57,270 --> 00:02:55,090
define the beginning and end and extract

60
00:03:00,449 --> 00:02:57,280
the data and do the calculations so the

61
00:03:04,410 --> 00:03:00,459
experiment is done in a hypothesis

62
00:03:06,839 --> 00:03:04,420
testing since we know it every time

63
00:03:10,800 --> 00:03:06,849

without looking at the data which data

64
00:03:12,750 --> 00:03:10,810
we're interested in and we often show

65
00:03:16,729 --> 00:03:12,760
use these kind of figures to plot the

66
00:03:20,759 --> 00:03:16,739
result they're really just a historical

67
00:03:23,460 --> 00:03:20,769
record of the duration of the event but

68
00:03:26,250 --> 00:03:23,470
this point at the end is the point we're

69
00:03:30,120 --> 00:03:26,260
interested in in terms of a bottom-line

70
00:03:31,800 --> 00:03:30,130
statistic for each of the events here I

71
00:03:34,259 --> 00:03:31,810
will just give you two or three examples

72
00:03:37,770 --> 00:03:34,269
and then get on to the kind of analytic

73
00:03:41,879 --> 00:03:37,780
details this is September 11th in the

74
00:03:43,949 --> 00:03:41,889
context of a week of surrounding days so

75
00:03:46,470 --> 00:03:43,959
we if we look at at the our first

76
00:03:48,629 --> 00:03:46,480
prediction really only encompassed four

77
00:03:51,300 --> 00:03:48,639
hours that's the formal prediction and

78
00:03:53,460 --> 00:03:51,310
it was marginally significant it was at

79
00:03:53,940 --> 00:03:53,470
the point O two level or something like

80
00:03:57,319 --> 00:03:53,950
that

81
00:03:59,580 --> 00:03:57,329
had we realized the magnitude and in

82
00:04:03,900 --> 00:03:59,590
consciousness space we might have said

83
00:04:06,539 --> 00:04:03,910
let's look at two days that effect in

84
00:04:09,119 --> 00:04:06,549
the data data should look like what it

85
00:04:12,000 --> 00:04:09,129
looks like on the left a kind of random

86
00:04:15,180 --> 00:04:12,010
walk with a level trend and and of

87
00:04:17,789 --> 00:04:15,190
course you see when we examine over a

88
00:04:21,360 --> 00:04:17,799

longer period of time there's a

89
00:04:23,550 --> 00:04:21,370
tremendous persistence in the effect a

90
00:04:25,020 --> 00:04:23,560
big deviation that's apparently

91
00:04:27,290 --> 00:04:25,030
associated with the feelings and

92
00:04:29,880 --> 00:04:27,300
thoughts that people had

93
00:04:32,820 --> 00:04:29,890
and this one is a completely different

94
00:04:35,580 --> 00:04:32,830
kind of event this one was a planned and

95
00:04:38,610 --> 00:04:35,590
organized synchronized meditation which

96
00:04:40,400 --> 00:04:38,620
we as best we can tell involved about a

97
00:04:42,990 --> 00:04:40,410
half a million people around the world

98
00:04:45,270 --> 00:04:43,000
that's not a huge number in comparison

99
00:04:48,420 --> 00:04:45,280
of what 9/11 might produce nevertheless

100
00:04:52,500 --> 00:04:48,430
there's a powerful deviation from the

101
00:04:55,290 --> 00:04:52,510
expected level trend another completely

102
00:04:56,970 --> 00:04:55,300
different kind of event New Year's we've

103
00:04:59,820 --> 00:04:56,980
now had ten new years that we could look

104
00:05:02,790 --> 00:04:59,830
at and the question one of the questions

105
00:05:05,460 --> 00:05:02,800
we asked is does the variability of the

106
00:05:08,850 --> 00:05:05,470
data stay constant or does it deep

107
00:05:10,560 --> 00:05:08,860
decrease and as you can see a few

108
00:05:11,460 --> 00:05:10,570
minutes before midnight when people are

109
00:05:14,400 --> 00:05:11,470
beginning to think

110
00:05:17,640 --> 00:05:14,410
Midnight's coming I am I have to find my

111
00:05:19,350 --> 00:05:17,650
partner just so I can get a hug or I

112
00:05:22,050 --> 00:05:19,360
have to get my glass ready so I can

113
00:05:26,400 --> 00:05:22,060

toast the New Year and so forth

114
00:05:29,810 --> 00:05:26,410
fairly strong evidence that there's even

115
00:05:32,520 --> 00:05:29,820
in an unimportant event and this

116
00:05:36,440 --> 00:05:32,530
coalescence of large numbers of people

117
00:05:40,340 --> 00:05:36,450
in a similar direction or the same

118
00:05:43,500 --> 00:05:40,350
interest can produce an effect on our

119
00:05:46,430 --> 00:05:43,510
random event generator network this is a

120
00:05:51,170 --> 00:05:46,440
picture of the data over almost 10 years

121
00:05:53,640 --> 00:05:51,180
there are 250 events and the cumulative

122
00:05:55,290 --> 00:05:53,650
even though sometimes it's backwards

123
00:05:58,650 --> 00:05:55,300
sometimes we're flat sometimes there's

124
00:06:00,480 --> 00:05:58,660
no kind of effect the tendency is for

125
00:06:02,880 --> 00:06:00,490
there to be in effect it's relatively

126
00:06:05,790 --> 00:06:02,890
small but the accumulation over such a

127
00:06:09,000 --> 00:06:05,800
large number of formal trials is highly

128
00:06:14,460 --> 00:06:09,010
significant with a z-score equivalent to

129
00:06:18,840 --> 00:06:14,470
5 plus standard deviations million one

130
00:06:22,680 --> 00:06:18,850
odds or smaller the independent

131
00:06:24,480 --> 00:06:22,690
statistics are we have names for them we

132
00:06:28,710 --> 00:06:24,490
call one of them Network variance or

133
00:06:30,659 --> 00:06:28,720
net-net fire and a second one which is

134
00:06:33,750 --> 00:06:30,669
called Cove are they're really pair

135
00:06:36,540 --> 00:06:33,760
products in one case of z-scores and the

136
00:06:40,100 --> 00:06:36,550
other case of squared C scores one is

137
00:06:43,489 --> 00:06:40,110
more responsive to distance

138
00:06:49,439 --> 00:06:43,499

implications and one more responsive to

139
00:06:53,519 --> 00:06:49,449
temporal interconnections in the data if

140
00:06:55,229 --> 00:06:53,529
we plot those over time we see and

141
00:06:58,409 --> 00:06:55,239
compare that with the kind of control

142
00:07:00,779 --> 00:06:58,419
data the gray cloud is a thousand

143
00:07:03,839 --> 00:07:00,789
resampling from the database with the

144
00:07:06,539 --> 00:07:03,849
same kind and the same event definitions

145
00:07:09,479 --> 00:07:06,549
except now they're just randomly pieces

146
00:07:11,879 --> 00:07:09,489
of data randomly extracted that's a kind

147
00:07:15,269 --> 00:07:11,889
of background that we would you expect

148
00:07:16,949 --> 00:07:15,279
from truly random data all three or both

149
00:07:19,079 --> 00:07:16,959
of those measures or a combination of

150
00:07:22,199 --> 00:07:19,089
those independent measures show pretty

151
00:07:25,109 --> 00:07:22,209
strong difference here's another way to

152
00:07:29,129 --> 00:07:25,119
look at the independent measure question

153
00:07:33,299 --> 00:07:29,139
we created a random sample of pseudo

154
00:07:35,339 --> 00:07:33,309
events with a an effect size equivalent

155
00:07:37,769 --> 00:07:35,349
to what we find in a database and that

156
00:07:41,299 --> 00:07:37,779
blue curve shows what happens not

157
00:07:46,199 --> 00:07:41,309
unexpectedly because we've constructed a

158
00:07:49,439 --> 00:07:46,209
powerful large database of small effect

159
00:07:52,499 --> 00:07:49,449
sizes we get a peak z-score of seven or

160
00:07:54,809 --> 00:07:52,509
eight standard deviations now the neck

161
00:07:57,229 --> 00:07:54,819
the question is what happens if we on

162
00:08:00,839 --> 00:07:57,239
these pseudo events calculate the same

163
00:08:03,449 --> 00:08:00,849

kind of the same do the same

164
00:08:05,850 --> 00:08:03,459
calculations but now with our covariance

165
00:08:08,519 --> 00:08:05,860
measure and the red trace shows that

166
00:08:11,009 --> 00:08:08,529
there's basically no nothing there this

167
00:08:13,859 --> 00:08:11,019
is a I think a good demonstration of the

168
00:08:15,600 --> 00:08:13,869
true independence of these measures now

169
00:08:20,369 --> 00:08:15,610
going on to some of the other is the

170
00:08:24,059 --> 00:08:20,379
structure we see that if we move the

171
00:08:27,709 --> 00:08:24,069
event from its real time slide it toward

172
00:08:32,189 --> 00:08:27,719
the future toward the past we quickly

173
00:08:35,759 --> 00:08:32,199
lose the high high departure from

174
00:08:37,889 --> 00:08:35,769
expectation and and enter in a kind of

175
00:08:39,899 --> 00:08:37,899
random space this also answers the

176
00:08:41,219 --> 00:08:39,909
question that some people ask aren't

177
00:08:43,799 --> 00:08:41,229
there a lot of other spikes in the

178
00:08:46,079 --> 00:08:43,809
database and this in a sense shows that

179
00:08:48,449 --> 00:08:46,089
the spikes associated with the events

180
00:08:51,150 --> 00:08:48,459
that are predefined are themselves

181
00:08:53,910 --> 00:08:51,160
spectacular the correlation between the

182
00:08:58,199 --> 00:08:53,920
two measures is shown in the right

183
00:09:00,810 --> 00:08:58,209
and figure they both are centered on the

184
00:09:05,190 --> 00:09:00,820
time of the real event and if you move

185
00:09:08,300 --> 00:09:05,200
the event artificially from either to

186
00:09:12,540 --> 00:09:08,310
the future of the past it changes

187
00:09:15,210 --> 00:09:12,550
another version of time structure this

188
00:09:17,490 --> 00:09:15,220

by the way I should I believe was on the

189
00:09:20,939 --> 00:09:17,500
first slide but much of this work is

190
00:09:24,240 --> 00:09:20,949
that is from Peter Bensel who was here

191
00:09:28,530 --> 00:09:24,250
at the SSE meeting and gave a present

192
00:09:30,750 --> 00:09:28,540
presentation last year he in this case

193
00:09:32,730 --> 00:09:30,760
looked at the correlation between our

194
00:09:37,740 --> 00:09:32,740
two independent measures they both

195
00:09:40,889 --> 00:09:37,750
respond to the to the events but that

196
00:09:42,509 --> 00:09:40,899
response has a time course it appears I

197
00:09:44,430 --> 00:09:42,519
mean if you read this graph and

198
00:09:47,250 --> 00:09:44,440
interpret it what it means is that the

199
00:09:49,650 --> 00:09:47,260
real interesting time period is about

200
00:09:53,370 --> 00:09:49,660
one or two hours that means something

201
00:09:55,310 --> 00:09:53,380
like the moment for a global

202
00:09:59,040 --> 00:09:55,320
consciousness that an hour or two long

203
00:10:00,750 --> 00:09:59,050
and in some sense there's interesting

204
00:10:03,810 --> 00:10:00,760
questions about what's happening at the

205
00:10:06,600 --> 00:10:03,820
beginning we think this may mean that

206
00:10:08,939 --> 00:10:06,610
we're in this jog at the beginning of

207
00:10:13,800 --> 00:10:08,949
the graph may mean that the correlation

208
00:10:16,139 --> 00:10:13,810
the covariance measure lags the network

209
00:10:18,480 --> 00:10:16,149
variance measure but we've got a lot

210
00:10:21,360 --> 00:10:18,490
more work to do this is a complicated

211
00:10:23,040 --> 00:10:21,370
slide we do a weighted regression which

212
00:10:27,240 --> 00:10:23,050
you can see in the green straight line

213
00:10:31,860 --> 00:10:27,250

in both graphs it's significant and what

214
00:10:34,350 --> 00:10:31,870
this is means is that the measures which

215
00:10:38,220 --> 00:10:34,360
are driven by this correlation between

216
00:10:39,630 --> 00:10:38,230
our pairs pairs of re G's is stronger

217
00:10:41,880 --> 00:10:39,640
when the pairs are close to each other

218
00:10:45,780 --> 00:10:41,890
than it is when they're far apart so we

219
00:10:49,530 --> 00:10:45,790
actually have a distance indication this

220
00:10:51,660 --> 00:10:49,540
is just a picture of that on the left

221
00:10:53,790 --> 00:10:51,670
here we have a short relatively short

222
00:10:56,100 --> 00:10:53,800
distance compared to a long distance

223
00:11:01,199 --> 00:10:56,110
another way to look at the same data the

224
00:11:05,400 --> 00:11:01,209
blue curves show the data in each of

225
00:11:07,530 --> 00:11:05,410
those two measures for pair separations

226
00:11:10,680 --> 00:11:07,540
less than 8,000 kilometers

227
00:11:12,300 --> 00:11:10,690
and the red data for pair separations

228
00:11:15,150 --> 00:11:12,310
greater than 8,000 kilometers

229
00:11:17,850 --> 00:11:15,160
very interesting and to me surprising

230
00:11:21,660 --> 00:11:17,860
because my intuition going in was that

231
00:11:24,720 --> 00:11:21,670
we had a truly non-local phenomenon so

232
00:11:26,730 --> 00:11:24,730
we can easily relatively easily

233
00:11:29,430 --> 00:11:26,740
categorize a lot of the events into

234
00:11:32,879 --> 00:11:29,440
things like terror political events

235
00:11:36,090 --> 00:11:32,889
natural disasters and so on collapsed

236
00:11:38,819 --> 00:11:36,100
this to a smaller set which is makes it

237
00:11:43,499 --> 00:11:38,829
easier to read what's shown here is a

238
00:11:47,670 --> 00:11:43,509

group terror events and partisan events

239
00:11:49,559 --> 00:11:47,680
where the stimulus to have the same

240
00:11:52,470 --> 00:11:49,569
emotions comes from the outside in a

241
00:11:55,680 --> 00:11:52,480
sense and compared with something where

242
00:11:58,110 --> 00:11:55,690
the meditation where the stimulus is

243
00:12:02,009 --> 00:11:58,120
basically kind of internal and what we

244
00:12:07,079 --> 00:12:02,019
see is that the network variants blue

245
00:12:09,180 --> 00:12:07,089
column is much stronger than the then

246
00:12:12,480 --> 00:12:09,190
the response from the and the covariance

247
00:12:14,699 --> 00:12:12,490
covariance measure and for the these

248
00:12:16,889 --> 00:12:14,709
terror and partisan events we have a lot

249
00:12:20,610 --> 00:12:16,899
more work to do to really understand

250
00:12:21,960 --> 00:12:20,620
this but it it looks like well literally

251
00:12:23,490 --> 00:12:21,970
that the two different kinds of

252
00:12:25,350 --> 00:12:23,500
independent measures are actually

253
00:12:27,240 --> 00:12:25,360
responsive to different kinds of things

254
00:12:31,199 --> 00:12:27,250
this is just an analysis of variance

255
00:12:33,150 --> 00:12:31,209
showing the same data that there is an

256
00:12:35,250 --> 00:12:33,160
interaction between the type of

257
00:12:37,319 --> 00:12:35,260
statistic we use in the category that

258
00:12:40,079 --> 00:12:37,329
they're in by in several different

259
00:12:42,300 --> 00:12:40,089
groupings we see this that is there's a

260
00:12:44,879 --> 00:12:42,310
significant outcome so if there is

261
00:12:46,949 --> 00:12:44,889
consciousness driving what our system

262
00:12:49,259 --> 00:12:46,959
does one might ask what happens if

263
00:12:51,059 --> 00:12:49,269

people are awake versus asleep we might

264
00:12:53,280 --> 00:12:51,069
imagine there's a little more tendency

265
00:12:57,179 --> 00:12:53,290
while people are awake what this shows

266
00:13:00,420 --> 00:12:57,189
is in the center the a real 24-hour a

267
00:13:02,309 --> 00:13:00,430
day compared with days there that are

268
00:13:05,550 --> 00:13:02,319
minutes longer or minutes shorter

269
00:13:07,769 --> 00:13:05,560
there's a pretty impressive spike it's

270
00:13:10,860 --> 00:13:07,779
actually only sixteen to one odds but

271
00:13:13,740 --> 00:13:10,870
it's it suggests that there really is a

272
00:13:18,059 --> 00:13:13,750
kind of consciousness pressure on the

273
00:13:20,009 --> 00:13:18,069
data when people are awake the long

274
00:13:21,120 --> 00:13:20,019
there's the blue curve show alarm

275
00:13:23,070 --> 00:13:21,130
long-term trend

276
00:13:27,360 --> 00:13:23,080
our data which is in a way kind of

277
00:13:29,280 --> 00:13:27,370
mysterious why would this happen we look

278
00:13:32,630 --> 00:13:29,290
for some sort of external correlate and

279
00:13:35,610 --> 00:13:32,640
Peter decided to gather all kinds of

280
00:13:37,950 --> 00:13:35,620
presidential all kinds of polling data

281
00:13:40,470 --> 00:13:37,960
and looked in particular at the

282
00:13:42,240 --> 00:13:40,480
presidential approval ratings which as

283
00:13:44,430 --> 00:13:42,250
you can see in the left-hand graph even

284
00:13:48,720 --> 00:13:44,440
in the raw form have a fairly similar

285
00:13:51,960 --> 00:13:48,730
kind of trend when we do a simple model

286
00:13:56,280 --> 00:13:51,970
to fit the presidential approval data to

287
00:14:00,270 --> 00:13:56,290
the to the global consciousness network

288
00:14:04,920 --> 00:14:00,280

variance it's a very striking fit no

289
00:14:11,150 --> 00:14:04,930
proof of a causal result okay this is my

290
00:14:15,180 --> 00:14:11,160
last slide there there is in in the last

291
00:14:17,520 --> 00:14:15,190
ten years or nine years some six hundred

292
00:14:20,220 --> 00:14:17,530
earthquakes in the world or seven

293
00:14:22,320 --> 00:14:20,230
hundred with Richter magnitude seven or

294
00:14:26,640 --> 00:14:22,330
greater in other words damaging quakes

295
00:14:29,220 --> 00:14:26,650
about hundred of those have been on land

296
00:14:32,070 --> 00:14:29,230
where they matter to people and the rest

297
00:14:34,260 --> 00:14:32,080
are in the ocean so this graph shows a

298
00:14:37,560 --> 00:14:34,270
strong pattern when they're on the land

299
00:14:39,030 --> 00:14:37,570
and not much of a pattern at all when

300
00:14:41,310 --> 00:14:39,040
these quakes occur in the ocean

301
00:14:43,410 --> 00:14:41,320
what's perhaps more interesting in a

302
00:14:45,990 --> 00:14:43,420
certain sense and again a temporal

303
00:14:48,660 --> 00:14:46,000
structural kind of thing this central

304
00:14:50,910 --> 00:14:48,670
portion is magnified here and actually

305
00:14:53,610 --> 00:14:50,920
separated into two independent subsets

306
00:14:56,340 --> 00:14:53,620
both of which show the same pattern and

307
00:15:01,170 --> 00:14:56,350
that pattern begins about eight hours

308
00:15:07,710 --> 00:15:01,180
before the minimum point which is at the

309
00:15:11,910 --> 00:15:07,720
time of the quake so okay last point was

310
00:15:14,670 --> 00:15:11,920
oh i this is the button the fact that

311
00:15:18,150 --> 00:15:14,680
only where that the only the quakes

312
00:15:20,640 --> 00:15:18,160
which affect people show any pattern

313
00:15:22,260 --> 00:15:20,650

suggests i think strongly the

314
00:15:24,930 --> 00:15:22,270
consciousness definitely is involved

315
00:15:27,030 --> 00:15:24,940
lots of other things to do there's even

316
00:15:29,490 --> 00:15:27,040
a suggestion of premonition but more

317
00:15:32,460 --> 00:15:29,500
work to do to discover where there's any

318
00:15:33,360 --> 00:15:32,470
reality to that thank you very much this

319
00:15:40,350 --> 00:15:33,370
is the

320
00:15:40,830 --> 00:15:40,360
and part of the group who help Thank You

321
00:15:46,020 --> 00:15:40,840
Roger

322
00:15:48,030 --> 00:15:46,030
I just wanted to ask because I have a

323
00:15:50,400 --> 00:15:48,040
son who lives in Los Angeles could you

324
00:15:55,290 --> 00:15:50,410
please call me if that you can see that

325
00:15:57,840 --> 00:15:55,300
happening one of the suggestions that

326
00:15:59,940 --> 00:15:57,850
the data give is that we could in

327
00:16:03,780 --> 00:15:59,950
principle predict things the trouble is

328
00:16:06,990 --> 00:16:03,790
that if we see a strange change in the

329
00:16:08,670 --> 00:16:07,000
data we don't know much more than the

330
00:16:10,650 --> 00:16:08,680
data or responding to something we don't

331
00:16:14,250 --> 00:16:10,660
know where whether it's Los Angeles or

332
00:16:16,320 --> 00:16:14,260
maybe China and we don't know when

333
00:16:17,390 --> 00:16:16,330
exactly will be either but it's a good

334
00:16:19,830 --> 00:16:17,400
thought

335
00:16:23,100 --> 00:16:19,840
Roger wonderful update and beautiful

336
00:16:26,910 --> 00:16:23,110
data question about this this possible

337
00:16:29,250 --> 00:16:26,920
distance effect if you for example look

338
00:16:32,010 --> 00:16:29,260

at the earthquake data the earthquakes

339
00:16:33,630 --> 00:16:32,020
are are very physically localized and

340
00:16:35,970 --> 00:16:33,640
you literally because you've got a span

341
00:16:38,340 --> 00:16:35,980
all around the world you have you have

342
00:16:40,770 --> 00:16:38,350
eggs or re G's that are quite some

343
00:16:43,170 --> 00:16:40,780
distance from a given quake if you plot

344
00:16:45,380 --> 00:16:43,180
the data as a function of distance from

345
00:16:47,520 --> 00:16:45,390
a quake averaging over all the quakes

346
00:16:50,100 --> 00:16:47,530
for particularly obviously the ones that

347
00:16:52,620 --> 00:16:50,110
are on land is there a distance affected

348
00:16:54,750 --> 00:16:52,630
there is a small distance effect but the

349
00:16:57,180 --> 00:16:54,760
one that we know most about has to do

350
00:16:59,400 --> 00:16:57,190
with the distance between pairs of re

351
00:17:02,670 --> 00:16:59,410
G's our pair the average pair

352
00:17:05,060 --> 00:17:02,680
correlation is greater for the re G's

353
00:17:09,390 --> 00:17:05,070
that are close to each other we do have

354
00:17:11,340 --> 00:17:09,400
already a suggestion some of an answer

355
00:17:15,330 --> 00:17:11,350
to your question and it is positive

356
00:17:17,250 --> 00:17:15,340
there is a drop-off of effect with

357
00:17:22,800 --> 00:17:17,260
regard with regard to what appears to be

358
00:17:24,770 --> 00:17:22,810
the focal point of the event yes there's

359
00:17:29,070 --> 00:17:24,780
one

360
00:17:33,150 --> 00:17:29,080
is it possible to have a dedicated rag

361
00:17:36,720 --> 00:17:33,160
for a specific area and somehow in the

362
00:17:39,630 --> 00:17:36,730
intentionality says however you level or

363
00:17:42,450 --> 00:17:39,640

think of intentionality you reg will

364
00:17:46,770 --> 00:17:42,460
only ever respond to any saying from

365
00:17:50,010 --> 00:17:46,780
that specific spot or event style or you

366
00:17:51,840 --> 00:17:50,020
like an earthquake and nothing else from

367
00:17:54,890 --> 00:17:51,850
the intentions you want to put on this

368
00:17:58,530 --> 00:17:54,900
you think that's conceptually possible

369
00:18:00,810 --> 00:17:58,540
it given the nature of the meeting and

370
00:18:02,700 --> 00:18:00,820
that the content of the talks we've been

371
00:18:06,840 --> 00:18:02,710
listening to I'm inclined to say

372
00:18:09,480 --> 00:18:06,850
anything is possible but more seriously

373
00:18:11,190 --> 00:18:09,490
I think the in the nature of the

374
00:18:12,900 --> 00:18:11,200
question that we ask is very important

375
00:18:16,710 --> 00:18:12,910
and basically that's what you're talking

376
00:18:20,520 --> 00:18:16,720
about if we specify the task you so to

377
00:18:22,470 --> 00:18:20,530
speak or if we task and our AG it's it's

378
00:18:28,200 --> 00:18:22,480
there is some evidence that they are G

379
00:18:30,750 --> 00:18:28,210
will be responsive to that tasking you

380
00:18:33,240 --> 00:18:30,760
could but it wouldn't we wouldn't be

381
00:18:35,340 --> 00:18:33,250
able to use the same you know material

382
00:18:38,250 --> 00:18:35,350
as we have here because we're talking

383
00:18:42,660 --> 00:18:38,260
about pairwise correlations it really is

384
00:18:44,910 --> 00:18:42,670
a global response we don't know how deep

385
00:18:48,150 --> 00:18:44,920
that correlation structure goes but at

386
00:18:53,810 --> 00:18:48,160
least the major stuff is driven by inter

387
00:18:56,940 --> 00:18:53,820
re G correlations have you done any

388
00:19:00,090 --> 00:18:56,950

analysis of as opposed to distance

389
00:19:01,560 --> 00:19:00,100
cultural connection like if if a culture

390
00:19:05,760 --> 00:19:01,570
feels more connected to where an event

391
00:19:07,920 --> 00:19:05,770
happens is their response bigger I think

392
00:19:09,690 --> 00:19:07,930
I can answer in the affirmative we

393
00:19:11,100 --> 00:19:09,700
haven't done very much of that but once

394
00:19:13,140 --> 00:19:11,110
in a while there'll be something well

395
00:19:15,920 --> 00:19:13,150
for example we look at political events

396
00:19:20,370 --> 00:19:15,930
which and more often than not they're

397
00:19:23,610 --> 00:19:20,380
us-based political events and we look

398
00:19:25,590 --> 00:19:23,620
this is usually exploratory not formal

399
00:19:27,480 --> 00:19:25,600
the formal is always asking about the

400
00:19:31,170 --> 00:19:27,490
whole network but if we look at the

401
00:19:34,940 --> 00:19:31,180
local re G's for it to that let's say

402
00:19:38,450 --> 00:19:34,950
the US if we limit the subset we see

403
00:19:41,330 --> 00:19:38,460
typically a little bit larger response

404
00:19:46,129 --> 00:19:41,340
and then we do for the whole network is

405
00:19:47,799 --> 00:19:46,139
that answering your question yeah yeah

406
00:19:50,950 --> 00:19:47,809
we don't have that much sophistication

407
00:19:54,200 --> 00:19:50,960
yet we're working on it

408
00:19:55,879 --> 00:19:54,210
Roger a comment about your wrist I think

409
00:19:57,549 --> 00:19:55,889
appropriate response to the question

410
00:20:00,830 --> 00:19:57,559
over here about could you specify

411
00:20:02,810 --> 00:20:00,840
behavior on the rig's I appreciate your

412
00:20:05,539 --> 00:20:02,820
saying well we're in this group we know

413
00:20:09,470 --> 00:20:05,549

anything is possible but more

414
00:20:12,350 --> 00:20:09,480
specifically the question you ask is so

415
00:20:13,730 --> 00:20:12,360
significant it makes me think of bill

416
00:20:16,159 --> 00:20:13,740
tillers work with intentionally

417
00:20:18,549 --> 00:20:16,169
imprinted electronic devices where he

418
00:20:21,289 --> 00:20:18,559
works with specific very very specific

419
00:20:23,389 --> 00:20:21,299
processes and questions so I would say

420
00:20:27,019 --> 00:20:23,399
the tiller work combined with this work

421
00:20:29,659 --> 00:20:27,029
says the answer is yes is I think it is

422
00:20:31,669 --> 00:20:29,669
definitely yes but it's something that

423
00:20:33,950 --> 00:20:31,679
we have only begun to explore I mean

424
00:20:36,980 --> 00:20:33,960
we've formulated the question and it's a

425
00:20:38,419 --> 00:20:36,990
it needs a little more refinement and

426
00:20:41,090 --> 00:20:38,429
then it'll be a good question which will

427
00:20:42,980 --> 00:20:41,100
have the answer embedded in it bill

428
00:20:45,080 --> 00:20:42,990
Roger do you have any results in the

429
00:20:47,860 --> 00:20:45,090
Chinese Chinese earthquakes did you ever

430
00:20:50,840 --> 00:20:47,870
okay yes the Chinese earthquake is

431
00:20:53,330 --> 00:20:50,850
positive deviation it's not itself

432
00:20:57,799 --> 00:20:53,340
highly significant we have learned over

433
00:21:00,529 --> 00:20:57,809
time slowly that major disasters the

434
00:21:02,750 --> 00:21:00,539
effects on human consciousness and the

435
00:21:05,259 --> 00:21:02,760
emotional state of the world develop

436
00:21:09,769 --> 00:21:05,269
over days not in a few hours that

437
00:21:11,690 --> 00:21:09,779
typically are our events so the answer