

1
00:00:00,490 --> 00:00:08,529
[Music]

2
00:00:16,089 --> 00:00:23,059
[Music]

3
00:00:20,050 --> 00:00:24,769
so this is a kind of a narrow

4
00:00:23,059 --> 00:00:28,130
presentation from those stuff we're into

5
00:00:24,769 --> 00:00:30,199
at heart math related to the global

6
00:00:28,129 --> 00:00:32,359
coherence initiative work I think I

7
00:00:30,199 --> 00:00:37,058
spoke was it three years ago and was a

8
00:00:32,359 --> 00:00:39,019
three years ago we were in Boulder yeah

9
00:00:37,058 --> 00:00:42,259
some of our collaborators on this

10
00:00:39,020 --> 00:00:44,170
particular work Mike Atkinson who's our

11
00:00:42,259 --> 00:00:48,079
lab manager at the in-situ heart math

12
00:00:44,170 --> 00:00:50,090
Heather Connery a dr abdullah al Bueller

13
00:00:48,079 --> 00:00:53,780
who's a head of our cardiac Hospital in

14
00:00:50,090 --> 00:00:54,980
Saudi Arabia and New York which we all

15
00:00:53,780 --> 00:00:58,429
know from here is one of our

16
00:00:54,979 --> 00:01:01,009
collaborators on this as well helping us

17
00:00:58,429 --> 00:01:03,350
with a lot of the analysis just kind of

18
00:01:01,009 --> 00:01:05,658
a high-level background of what this

19
00:01:03,350 --> 00:01:09,109
project is about our kind of guiding

20
00:01:05,659 --> 00:01:11,810
hypotheses are first of all that human

21
00:01:09,109 --> 00:01:13,810
and animal health our cognitive

22
00:01:11,810 --> 00:01:16,759
functions mental capacities and so on

23
00:01:13,810 --> 00:01:19,280
emotionality and behaviors are affected

24
00:01:16,759 --> 00:01:22,700
by different changes in the planetary

25
00:01:19,280 --> 00:01:24,138
magnetic energetic fields that's a sure

26
00:01:22,700 --> 00:01:27,859
that's really a hypothesis that's quite

27
00:01:24,138 --> 00:01:30,048
well established actually and number two

28
00:01:27,858 --> 00:01:32,059
the Earth's magnetic fields act as

29

00:01:30,049 --> 00:01:34,579
carriers of biologically relevant

30
00:01:32,060 --> 00:01:36,409
information that interconnects all

31
00:01:34,578 --> 00:01:40,368
living systems kind of a you know

32
00:01:36,409 --> 00:01:42,009
connects the ecosystem and it would thus

33
00:01:40,368 --> 00:01:45,638
we're all coupled to and affect the

34
00:01:42,009 --> 00:01:48,319
system of the global field environment

35
00:01:45,638 --> 00:01:50,539
some support for that I've shown this

36
00:01:48,319 --> 00:01:52,759
before but I think it's a rather

37
00:01:50,539 --> 00:01:55,700
profound set of data this was from

38
00:01:52,759 --> 00:01:58,968
Alexander Tchaikovsky a fairly famous

39
00:01:55,700 --> 00:02:01,969
Russian astrophysicist who after World

40
00:01:58,968 --> 00:02:03,379
War one noticed that what during World

41
00:02:01,968 --> 00:02:06,528
War none when he was drafted into the

42
00:02:03,379 --> 00:02:09,740
war that it seemed that during high

43
00:02:06,528 --> 00:02:12,039

solar activity that people just were do

44

00:02:09,740 --> 00:02:17,140

did more stupid things

45

00:02:12,039 --> 00:02:19,328

uh-huh basically and we're so after that

46

00:02:17,139 --> 00:02:21,669

he did an exhaustive study of human

47

00:02:19,329 --> 00:02:23,110

history quite impressive actually what

48

00:02:21,669 --> 00:02:25,389

these guys did before we had Internet's

49

00:02:23,110 --> 00:02:27,480

right I thought he was offered a Nobel

50

00:02:25,389 --> 00:02:29,708

Prize for this work but it was not

51

00:02:27,479 --> 00:02:32,768

couldn't get out of Siberia to do it but

52

00:02:29,709 --> 00:02:36,039

anyway long story short what we started

53

00:02:32,769 --> 00:02:37,689

at 1749 on the left side of the top

54

00:02:36,039 --> 00:02:40,298

graph and blue and then wrap around the

55

00:02:37,689 --> 00:02:42,759

1926 when this was published what's

56

00:02:40,299 --> 00:02:44,739

being plotted or shown in the blue it's

57

00:02:42,759 --> 00:02:47,739

just a dot for each year the number of

58
00:02:44,739 --> 00:02:50,139
major human events that occurred a

59
00:02:47,739 --> 00:02:52,509
globally important major human events

60
00:02:50,139 --> 00:02:57,189
that's lost being plotted there from

61
00:02:52,509 --> 00:02:59,798
1749 to 1926 okay revolution start of a

62
00:02:57,189 --> 00:03:02,348
war you know big major things new

63
00:02:59,799 --> 00:03:04,329
discoveries global impact type things

64
00:03:02,348 --> 00:03:11,738
the red line on the bottom is the solar

65
00:03:04,329 --> 00:03:13,810
cycle during the same period okay so I

66
00:03:11,739 --> 00:03:15,939
think we have a and this is been a force

67
00:03:13,810 --> 00:03:18,280
confirmed and extended into modern times

68
00:03:15,939 --> 00:03:21,340
by many different offers and it's a very

69
00:03:18,280 --> 00:03:23,500
real very strong kind of relationship so

70
00:03:21,340 --> 00:03:25,719
since then many this is just a very

71
00:03:23,500 --> 00:03:29,289
brief summary a lot of different studies

72
00:03:25,719 --> 00:03:31,509
hundreds actually have shown that there

73
00:03:29,289 --> 00:03:33,818
are many correlations some are actually

74
00:03:31,509 --> 00:03:36,068
that are looking at causes causality as

75
00:03:33,818 --> 00:03:37,388
well involved in it between changes and

76
00:03:36,068 --> 00:03:39,458
the rhythms and the frequencies in the

77
00:03:37,389 --> 00:03:41,169
Earth's magnetic field things like our

78
00:03:39,459 --> 00:03:43,709
brain and nervous system activity you

79
00:03:41,169 --> 00:03:45,540
know EEG measures these kinds of things

80
00:03:43,709 --> 00:03:49,049
performance of tasks

81
00:03:45,539 --> 00:03:51,818
it's everything from bowling scores to

82
00:03:49,049 --> 00:03:54,129
size studies to remote viewing studies

83
00:03:51,818 --> 00:03:55,689
have all been shown to be less effective

84
00:03:54,128 --> 00:03:58,408
when though basically the Earth's field

85
00:03:55,689 --> 00:04:02,560
is disturbed or we've reformed us well

86

00:03:58,408 --> 00:04:04,628
blood pressure heart rate hormones dr.

87
00:04:02,560 --> 00:04:07,180
Franz Hallberg done a lot on this guy

88
00:04:04,628 --> 00:04:08,439
who coined the term circadian rhythm in

89
00:04:07,180 --> 00:04:09,729
fact our heart rate and blood pressure

90
00:04:08,439 --> 00:04:12,340
rhythms can actually literally

91
00:04:09,729 --> 00:04:14,650
synchronize to some of the the rhythms

92
00:04:12,340 --> 00:04:18,250
in the planetary fields at certain times

93
00:04:14,650 --> 00:04:19,569
certain cases traffic number of traffic

94
00:04:18,250 --> 00:04:22,620
violations number of tickets that are

95
00:04:19,569 --> 00:04:24,209
written by cops

96
00:04:22,620 --> 00:04:26,610
number of actually accidents that happen

97
00:04:24,209 --> 00:04:29,549
all kind of ride this same frequency and

98
00:04:26,610 --> 00:04:31,830
rhythm hospital missions a lot of works

99
00:04:29,550 --> 00:04:33,569
been done on this it's not just heart

100
00:04:31,829 --> 00:04:37,740

disease and strokes it's a really quite

101

00:04:33,569 --> 00:04:40,079

a wide range of health issues in fact

102

00:04:37,740 --> 00:04:41,728

just hearted heart attack admissions to

103

00:04:40,079 --> 00:04:43,859

hospitals at least in North America

104

00:04:41,728 --> 00:04:47,009

increased by about eight percent during

105

00:04:43,860 --> 00:04:48,180

magnetic field storm disturbance is the

106

00:04:47,009 --> 00:04:51,560

magnetic field it's quite a bit eight

107

00:04:48,180 --> 00:04:54,978

percent it's not a trivial number right

108

00:04:51,560 --> 00:04:57,089

okay anyway criminal activity the bottom

109

00:04:54,978 --> 00:04:59,819

comment there this is actually from dr.

110

00:04:57,089 --> 00:05:03,978

hall Berg's work I originally found that

111

00:04:59,819 --> 00:05:06,089

of all these in things we can measure

112

00:05:03,978 --> 00:05:09,439

physiologically the most sensitive that

113

00:05:06,089 --> 00:05:12,478

appears to reflecting least human

114

00:05:09,439 --> 00:05:13,918

responses to these changing magnetic

115
00:05:12,478 --> 00:05:17,189
field just actually heart rate

116
00:05:13,918 --> 00:05:18,719
variability I'll just play a little bit

117
00:05:17,189 --> 00:05:20,969
more about if you don't know what that

118
00:05:18,720 --> 00:05:22,470
is in a second so if we're gonna do

119
00:05:20,970 --> 00:05:24,419
science around this the science of

120
00:05:22,470 --> 00:05:28,889
interconnectivity get a major things

121
00:05:24,418 --> 00:05:31,829
obviously so we're measuring the Earth's

122
00:05:28,889 --> 00:05:33,629
magnetic fields and to do that we're

123
00:05:31,829 --> 00:05:36,089
installing and what we call the global

124
00:05:33,629 --> 00:05:37,709
coherence monitoring system and

125
00:05:36,089 --> 00:05:40,409
unfortunately we have to do with this

126
00:05:37,709 --> 00:05:41,969
ourselves because the NOAA and the other

127
00:05:40,410 --> 00:05:43,710
type magnetometers are out there do not

128
00:05:41,970 --> 00:05:46,979
measure the things that we think are

129
00:05:43,709 --> 00:05:48,629
important they're currently out of this

130
00:05:46,978 --> 00:05:50,699
global map that we would like to see

131
00:05:48,629 --> 00:05:53,370
there are five current monitoring

132
00:05:50,699 --> 00:05:54,719
systems installed here in California

133
00:05:53,370 --> 00:05:56,430
about an hour and house south of here

134
00:05:54,720 --> 00:06:02,550
actually in Boulder Creek area at our

135
00:05:56,430 --> 00:06:04,530
facility Canada Lithuania Saudi Arabia

136
00:06:02,550 --> 00:06:06,720
and New Zealand are the ones that are

137
00:06:04,529 --> 00:06:10,019
installed and currently operating and

138
00:06:06,720 --> 00:06:11,400
hopefully will fill the map out more so

139
00:06:10,019 --> 00:06:14,490
what the site looks like in Boulder

140
00:06:11,399 --> 00:06:15,359
Creek and the magnetometers themselves

141
00:06:14,490 --> 00:06:17,610
these are extremely sensitive

142
00:06:15,360 --> 00:06:20,009
magnetometers or about the most

143

00:06:17,610 --> 00:06:21,569
sensitive we can find they're three or

144
00:06:20,009 --> 00:06:23,969
three axes you know north-south

145
00:06:21,569 --> 00:06:27,300
east-west and vertical a very long to

146
00:06:23,970 --> 00:06:29,310
you know device is buried about a meter

147
00:06:27,300 --> 00:06:32,668
underground it's the one in Saudi Arabia

148
00:06:29,310 --> 00:06:33,810
it's projector something do very well -

149
00:06:32,668 --> 00:06:36,089
dr. Abdullah

150
00:06:33,810 --> 00:06:38,069
there so what are we measuring anyway

151
00:06:36,089 --> 00:06:41,369
and why do we have to create our own

152
00:06:38,069 --> 00:06:45,269
systems to do this this GPS time lock

153
00:06:41,370 --> 00:06:48,149
systems so when we look at the

154
00:06:45,269 --> 00:06:50,819
geomagnetic field that's a static or a

155
00:06:48,149 --> 00:06:52,289
stationary field right I mean it's if in

156
00:06:50,819 --> 00:06:55,560
terms of our day-to-day life it really

157
00:06:52,290 --> 00:06:56,910

isn't changing it is you know it

158

00:06:55,560 --> 00:06:59,129
reported to be decreasing in magnitude

159

00:06:56,910 --> 00:07:01,680
by about 15 percent over the last 200

160

00:06:59,129 --> 00:07:06,329
years but for our day-to-day lives it's

161

00:07:01,680 --> 00:07:09,300
really pretty stationary so what is

162

00:07:06,329 --> 00:07:10,439
relevant though the geomagnetic field of

163

00:07:09,300 --> 00:07:13,530
course that's what our compasses tune

164

00:07:10,439 --> 00:07:15,899
into your anchor is that if you think of

165

00:07:13,529 --> 00:07:17,638
these flux lines and they're really our

166

00:07:15,899 --> 00:07:19,109
flux lines and they get heightened each

167

00:07:17,639 --> 00:07:24,090
particle spinning them around them and

168

00:07:19,110 --> 00:07:25,740
all these things like guitar strings all

169

00:07:24,089 --> 00:07:29,069
right and when you pluck a guitar string

170

00:07:25,740 --> 00:07:30,540
what hey obviously it vibrates right and

171

00:07:29,069 --> 00:07:32,310
dependent upon the tension of the string

172
00:07:30,540 --> 00:07:34,710
it vibrates at a different frequency

173
00:07:32,310 --> 00:07:36,300
so what's plucking the strings of

174
00:07:34,709 --> 00:07:39,750
Earth's net geomagnetic field as the

175
00:07:36,300 --> 00:07:41,960
solar wind the solar wind on average

176
00:07:39,750 --> 00:07:44,310
travels about a million miles per hour

177
00:07:41,959 --> 00:07:46,079
during a coronal mass ejection or a

178
00:07:44,310 --> 00:07:48,750
solar flare can actually jump up to

179
00:07:46,079 --> 00:07:50,668
about five million miles per hour pretty

180
00:07:48,750 --> 00:07:52,709
dramatic changes so the beginning here

181
00:07:50,668 --> 00:07:54,689
the earth is turning right in the solar

182
00:07:52,709 --> 00:07:56,399
wind which is strong enough pressure it

183
00:07:54,689 --> 00:07:58,439
pushes in the magnetic field on a

184
00:07:56,399 --> 00:08:00,810
daytime side and stretches out the tail

185
00:07:58,439 --> 00:08:03,660
right I mean this is all basic high

186
00:08:00,810 --> 00:08:05,069
school stuff but well we didn't learn at

187
00:08:03,660 --> 00:08:07,139
least I didn't learn back then is that

188
00:08:05,069 --> 00:08:08,610
the solar wind is plucking the strings

189
00:08:07,139 --> 00:08:11,250
of the earth of the Earth's magnetic

190
00:08:08,610 --> 00:08:13,110
field and the technical term is called

191
00:08:11,250 --> 00:08:17,430
structural field line resonances for

192
00:08:13,110 --> 00:08:19,199
that and when we measure them this is

193
00:08:17,430 --> 00:08:23,160
what the frequency range they tend to be

194
00:08:19,199 --> 00:08:24,360
and they're fairly strong in terms of

195
00:08:23,160 --> 00:08:25,650
magnetic field strengths are quite

196
00:08:24,360 --> 00:08:27,060
strong and are much stronger than the

197
00:08:25,649 --> 00:08:30,089
Schumann resonances which we'll talk

198
00:08:27,060 --> 00:08:31,918
about in a second and so one of the

199
00:08:30,089 --> 00:08:36,149
common modes we'll see here is this

200

00:08:31,918 --> 00:08:38,069
around 0.1 Hertz 10-second rhythm as it

201
00:08:36,149 --> 00:08:39,929
turns out that's exactly the same rhythm

202
00:08:38,070 --> 00:08:44,490
as the resonant frequency of the human

203
00:08:39,929 --> 00:08:45,899
cardiovascular system like other

204
00:08:44,490 --> 00:08:47,399
presentations I talked about heart

205
00:08:45,899 --> 00:08:50,759
coherence and all that

206
00:08:47,399 --> 00:08:53,669
exactly a point 1 Hertz rhythm so earth

207
00:08:50,759 --> 00:08:57,000
is basically vibrating away at the same

208
00:08:53,669 --> 00:08:59,819
resonant frequency as our core resonant

209
00:08:57,000 --> 00:09:02,789
cardiovascular system frequency all

210
00:08:59,820 --> 00:09:05,100
these frequencies in this range overlap

211
00:09:02,789 --> 00:09:08,159
human and animal cardiovascular system

212
00:09:05,100 --> 00:09:09,870
frequencies and rhythms okay

213
00:09:08,159 --> 00:09:12,000
then we also have the Schumann

214
00:09:09,870 --> 00:09:15,330

resonances which well I'm most of you

215

00:09:12,000 --> 00:09:18,990

here are probably familiar with eight

216

00:09:15,330 --> 00:09:21,300

primary Schumann frequencies and these

217

00:09:18,990 --> 00:09:22,529

are the magnetic wave that gets created

218

00:09:21,299 --> 00:09:25,949

that's resonate with the earth

219

00:09:22,529 --> 00:09:30,480

ionospheric chamber and when we measure

220

00:09:25,950 --> 00:09:32,340

those 7.8 Hertz is the fundamental one

221

00:09:30,480 --> 00:09:34,050

and we can say it's seven point eight

222

00:09:32,340 --> 00:09:36,000

two but in reality there's a half Hertz

223

00:09:34,049 --> 00:09:39,000

variation every day you know so it's

224

00:09:36,000 --> 00:09:41,190

around that all of these overlap human

225

00:09:39,000 --> 00:09:45,090

brainwave rhythms and frequencies as

226

00:09:41,190 --> 00:09:47,540

well alright is why we think this is

227

00:09:45,090 --> 00:09:49,850

important we've got two different

228

00:09:47,539 --> 00:09:51,419

resonant frequencies occurring

229

00:09:49,850 --> 00:09:55,019
consistently in the Earth's field

230

00:09:51,419 --> 00:09:58,049
environment that overlap us our core

231

00:09:55,019 --> 00:09:59,370
biological rhythms so the magnetometers

232

00:09:58,049 --> 00:10:01,649
that know and different ones have around

233

00:09:59,370 --> 00:10:03,740
you report KP and all that then I'll

234

00:10:01,649 --> 00:10:06,000
measure this stuff I don't see it

235

00:10:03,740 --> 00:10:06,659
alright so I wish we didn't have to do

236

00:10:06,000 --> 00:10:08,940
this ourselves

237

00:10:06,659 --> 00:10:11,219
so our perspective is is that the

238

00:10:08,940 --> 00:10:13,470
interface that explains so many of those

239

00:10:11,220 --> 00:10:15,840
other studies I kind of summarized at

240

00:10:13,470 --> 00:10:18,720
the beginning is because we are resonant

241

00:10:15,840 --> 00:10:20,970
with these frequencies and that the

242

00:10:18,720 --> 00:10:23,129
nervous system actually is the interface

243
00:10:20,970 --> 00:10:25,590
like Freedman you kind of alluded to

244
00:10:23,129 --> 00:10:29,909
that as well oh it's right I tend to

245
00:10:25,590 --> 00:10:33,149
agree with this is what some of the

246
00:10:29,909 --> 00:10:37,019
rhythms look like why this dejected is

247
00:10:33,149 --> 00:10:38,970
not very good one of the line of work

248
00:10:37,019 --> 00:10:40,740
got done on human resonances an

249
00:10:38,970 --> 00:10:44,279
ionospheric modeling and all this back

250
00:10:40,740 --> 00:10:45,690
in between 1960 and 70 so the Schumann

251
00:10:44,279 --> 00:10:48,629
resonances weren't first experimentally

252
00:10:45,690 --> 00:10:50,250
measured until about 1960 and there was

253
00:10:48,629 --> 00:10:53,309
a lot of funding for ten years and boom

254
00:10:50,250 --> 00:10:55,799
it right up nothing since right and one

255
00:10:53,309 --> 00:10:57,829
of the we have a lot better equipment

256
00:10:55,799 --> 00:11:00,049
now than they had in 1960 obvious

257

00:10:57,830 --> 00:11:01,910
right the but one of the perspectives

258
00:11:00,049 --> 00:11:04,879
back then was that if you have one of

259
00:11:01,909 --> 00:11:06,379
these magnetic monitoring sites it's

260
00:11:04,879 --> 00:11:09,439
gonna be the same everywhere it's a

261
00:11:06,379 --> 00:11:14,649
global wave right so you got one site

262
00:11:09,440 --> 00:11:18,500
same everywhere well I don't think so

263
00:11:14,649 --> 00:11:20,110
this is looking here at here in

264
00:11:18,500 --> 00:11:22,639
California and New Zealand and Canada

265
00:11:20,110 --> 00:11:25,519
pretty obviously different signals from

266
00:11:22,639 --> 00:11:29,350
those different sites there are global

267
00:11:25,519 --> 00:11:33,799
there is a global coherence if you will

268
00:11:29,350 --> 00:11:36,320
but significant local differences in

269
00:11:33,799 --> 00:11:37,579
fact what we see from the the other

270
00:11:36,320 --> 00:11:40,129
study I'm not going to talk about today

271
00:11:37,580 --> 00:11:42,290

but is that the populations that we look

272

00:11:40,129 --> 00:11:43,970

at it around a certain local site we get

273

00:11:42,289 --> 00:11:45,889

significant correlations but not to the

274

00:11:43,970 --> 00:11:47,600

other sites so these local differences

275

00:11:45,889 --> 00:11:51,470

are clearly important in terms of how

276

00:11:47,600 --> 00:11:55,460

they affect us and humanity alright this

277

00:11:51,470 --> 00:11:57,440

is just another look this or the Fremem

278

00:11:55,460 --> 00:11:59,660

also referred to PC ones this is what

279

00:11:57,440 --> 00:12:03,230

they actually look like so this is a

280

00:11:59,659 --> 00:12:04,699

lower low frequency rhythm with the

281

00:12:03,230 --> 00:12:07,090

period of about one and a half seconds

282

00:12:04,700 --> 00:12:09,470

they're pretty fast rhythms but still

283

00:12:07,090 --> 00:12:12,290

not what caught up well what I would

284

00:12:09,470 --> 00:12:14,389

call ultra low but very low rhythms and

285

00:12:12,289 --> 00:12:17,089

then we have lower of the pcs that go on

286
00:12:14,389 --> 00:12:21,740
down now here's a bit of a mystery to me

287
00:12:17,090 --> 00:12:25,250
I hope you can see these we have always

288
00:12:21,740 --> 00:12:28,490
observed these very rapid high magnitude

289
00:12:25,250 --> 00:12:30,019
pulses and the data these are like less

290
00:12:28,490 --> 00:12:34,340
than a quarter of a second wide they're

291
00:12:30,019 --> 00:12:36,980
really fast the so we you know when you

292
00:12:34,340 --> 00:12:40,430
only have one site you can kind of go

293
00:12:36,980 --> 00:12:42,800
okay this might be some noisy source an

294
00:12:40,429 --> 00:12:45,709
airplane flew over or something we

295
00:12:42,799 --> 00:12:48,490
really don't know now that we have time

296
00:12:45,710 --> 00:12:52,670
linked multiple sites around the planet

297
00:12:48,490 --> 00:12:57,289
lo and behold these things are global

298
00:12:52,669 --> 00:12:58,729
and they're exactly in time right it's

299
00:12:57,289 --> 00:13:00,110
not like you have a wave going around

300
00:12:58,730 --> 00:13:02,509
the planet where you would expect the

301
00:13:00,110 --> 00:13:06,110
light delays that you can measure their

302
00:13:02,509 --> 00:13:09,159
exact and their global so the local

303
00:13:06,110 --> 00:13:11,360
noise hypothesis is out the window

304
00:13:09,159 --> 00:13:14,208
hopefully somebody in this room can

305
00:13:11,360 --> 00:13:15,680
me what these are I don't know I really

306
00:13:14,208 --> 00:13:16,939
don't know and I've looked I've done a

307
00:13:15,679 --> 00:13:18,828
lot of searching in the litter and I've

308
00:13:16,940 --> 00:13:22,070
asked a lot of people about this that

309
00:13:18,828 --> 00:13:24,319
are supposed to be experts just a fun

310
00:13:22,070 --> 00:13:26,170
story true story I tracked down the

311
00:13:24,320 --> 00:13:28,879
person that no and Boulder Colorado who

312
00:13:26,169 --> 00:13:31,370
monitors the data that calculates kpe

313
00:13:28,879 --> 00:13:33,620
what's called KP index and all that who

314

00:13:31,370 --> 00:13:35,690
confirm oh yeah we see these and I

315
00:13:33,620 --> 00:13:38,179
literally talk to the person to the lady

316
00:13:35,690 --> 00:13:44,959
whose full-time job is removing these

317
00:13:38,179 --> 00:13:47,028
from the data absolute truth story if we

318
00:13:44,958 --> 00:13:52,429
don't know what they are that we got it

319
00:13:47,028 --> 00:13:54,169
you know I swear to god we are paying

320
00:13:52,429 --> 00:13:57,439
for how this removes them potato I

321
00:13:54,169 --> 00:14:00,259
suspect they're important the fact that

322
00:13:57,440 --> 00:14:02,540
they're global it's really interesting

323
00:14:00,259 --> 00:14:04,220
so I'm just I'm serious if anybody in

324
00:14:02,539 --> 00:14:06,679
here might know what these things are

325
00:14:04,220 --> 00:14:10,160
the real source or know somebody who

326
00:14:06,679 --> 00:14:11,389
might know I'd love to talk to you ok so

327
00:14:10,159 --> 00:14:13,360
the study I wanted to tell you about

328
00:14:11,389 --> 00:14:15,679

today that's kind of got our attention

329

00:14:13,360 --> 00:14:17,409

we have a couple of different projects

330

00:14:15,679 --> 00:14:21,139

going on that are very similar to this

331

00:14:17,409 --> 00:14:23,360

I'm at this one I want to share the data

332

00:14:21,139 --> 00:14:28,730

with you today some of the data is from

333

00:14:23,360 --> 00:14:32,620

10 people working adults you know in

334

00:14:28,730 --> 00:14:34,970

there so you mean angels 53 we basically

335

00:14:32,620 --> 00:14:37,578

have these little recorders that record

336

00:14:34,970 --> 00:14:38,959

heart rate variability kind of really

337

00:14:37,578 --> 00:14:41,419

lightweight little things you forget

338

00:14:38,958 --> 00:14:44,539

you've got them on that allow us to do

339

00:14:41,419 --> 00:14:46,909

long-term recording so we're doing 24

340

00:14:44,539 --> 00:14:50,659

hour a day recording for 30 consecutive

341

00:14:46,909 --> 00:14:53,689

days so we have a continuous hrb record

342

00:14:50,659 --> 00:14:56,600

for 30 days from 10 people it's pretty

343
00:14:53,690 --> 00:14:58,670
unique data and like dr. harburg study

344
00:14:56,600 --> 00:15:00,139
as I mentioned his longest studies were

345
00:14:58,669 --> 00:15:02,870
like a week you know with some very

346
00:15:00,139 --> 00:15:04,458
small groups of people another data set

347
00:15:02,870 --> 00:15:08,810
that York's been working with us not us

348
00:15:04,458 --> 00:15:12,919
five months worth of data but so we're

349
00:15:08,809 --> 00:15:15,649
looking at the the correlations if you

350
00:15:12,919 --> 00:15:18,169
will between the HRV and the geomagnetic

351
00:15:15,649 --> 00:15:20,318
solar to your magnetic measures so I

352
00:15:18,169 --> 00:15:23,299
don't have time to go through all these

353
00:15:20,318 --> 00:15:25,219
KP index if you're not familiar that's

354
00:15:23,299 --> 00:15:28,068
what you know or the Space Agency know

355
00:15:25,220 --> 00:15:30,620
reports as a measure of magnetic field

356
00:15:28,068 --> 00:15:33,500
disturbance it's basically the ripple on

357
00:15:30,620 --> 00:15:35,839
the DC think of it that way we could hit

358
00:15:33,500 --> 00:15:37,188
with a solar flare criminal mass

359
00:15:35,839 --> 00:15:41,779
ejection it causes more ripple and

360
00:15:37,188 --> 00:15:43,578
that's what KP measures F 10-7 is a

361
00:15:41,778 --> 00:15:45,740
measure of solar radio flux I'll talk a

362
00:15:43,578 --> 00:15:47,359
bit more about that one in a second so a

363
00:15:45,740 --> 00:15:51,549
wind speed is one of the ones I'm going

364
00:15:47,360 --> 00:15:53,750
to talk about and the GCI magnetometers

365
00:15:51,549 --> 00:15:57,078
okay okay five minutes I'm probably good

366
00:15:53,750 --> 00:15:58,759
so that's basically the time varying

367
00:15:57,078 --> 00:16:02,599
magnetic field that includes the

368
00:15:58,759 --> 00:16:06,110
Schumann resonances you know and all the

369
00:16:02,600 --> 00:16:08,180
other stuff in between there that enough

370
00:16:06,110 --> 00:16:09,680
to stay there okay heart rate

371

00:16:08,179 --> 00:16:11,508
variability for those of you aren't

372
00:16:09,679 --> 00:16:14,028
familiar with it it is basically a major

373
00:16:11,509 --> 00:16:15,409
a non-invasive major that allows us to

374
00:16:14,028 --> 00:16:19,549
measure autonomic nervous system

375
00:16:15,409 --> 00:16:21,379
function okay so it's kind of produced

376
00:16:19,549 --> 00:16:23,328
by the activity in the autonomic nervous

377
00:16:21,379 --> 00:16:28,209
system sympathetic parasympathetic and

378
00:16:23,328 --> 00:16:31,159
all that it's fairly robust measure I

379
00:16:28,208 --> 00:16:33,289
can't just do time these are the hrb

380
00:16:31,159 --> 00:16:35,389
measures we're using for the study these

381
00:16:33,289 --> 00:16:38,058
are again these are twenty-four hours a

382
00:16:35,389 --> 00:16:40,188
day for a month so they're we're using

383
00:16:38,058 --> 00:16:43,458
the averages of five-minute segments of

384
00:16:40,188 --> 00:16:45,948
the HRV then the we average those two

385
00:16:43,458 --> 00:16:48,708

hourly measures cuz that's what most of

386

00:16:45,948 --> 00:16:50,899

our environmental measures are okay so

387

00:16:48,708 --> 00:16:52,758

these different HRV things measure

388

00:16:50,899 --> 00:16:54,740

different aspects of nervous system

389

00:16:52,759 --> 00:17:00,019

activity parasympathetic or sympathetic

390

00:16:54,740 --> 00:17:01,759

or these kinds of things okay so the way

391

00:17:00,019 --> 00:17:04,659

the data I'm going to show you was done

392

00:17:01,759 --> 00:17:06,828

so the time series across the 30 days

393

00:17:04,659 --> 00:17:09,770

was all synchronized so all their

394

00:17:06,828 --> 00:17:11,959

subjects was linked synced in time so we

395

00:17:09,769 --> 00:17:15,679

know everybody's lined up well then each

396

00:17:11,959 --> 00:17:17,600

of our subject data was normalized okay

397

00:17:15,679 --> 00:17:19,730

to have a mean of zero and then a plus

398

00:17:17,599 --> 00:17:22,668

mine a little range that gray between

399

00:17:19,730 --> 00:17:25,159

plus and minus one then we averaged all

400
00:17:22,669 --> 00:17:28,339
the data together for nine in this case

401
00:17:25,159 --> 00:17:30,140
nine subjects and so circadian rhythms

402
00:17:28,338 --> 00:17:34,210
were removed so on

403
00:17:30,140 --> 00:17:36,350
now here's what is really surprising

404
00:17:34,210 --> 00:17:38,538
okay so this is

405
00:17:36,349 --> 00:17:41,719
nine people's - twenty four-hour-a-day

406
00:17:38,538 --> 00:17:43,669
hrb data in in there they live within

407
00:17:41,720 --> 00:17:44,808
about a 50-mile radius one of the

408
00:17:43,669 --> 00:17:48,710
subjects was actually in Southern

409
00:17:44,808 --> 00:17:52,250
California right so what we're seeing

410
00:17:48,710 --> 00:17:58,150
here is synchronized activity across our

411
00:17:52,250 --> 00:18:03,140
nine subjects we should not be seen this

412
00:17:58,150 --> 00:18:05,809
this should be kind of noise not only

413
00:18:03,140 --> 00:18:08,230
are we seeing synchronized activity

414
00:18:05,808 --> 00:18:13,579
it's got around a two point three day

415
00:18:08,230 --> 00:18:16,339
rhythm this implies they must all be

416
00:18:13,579 --> 00:18:20,720
synchronizing to some environmental

417
00:18:16,339 --> 00:18:22,970
something or other right this this was

418
00:18:20,720 --> 00:18:25,880
totally unexpected we did not expect to

419
00:18:22,970 --> 00:18:30,850
see this now something over here disturb

420
00:18:25,880 --> 00:18:33,559
it then it sort of came back over here

421
00:18:30,849 --> 00:18:36,439
towards the end of the 30 days well lo

422
00:18:33,558 --> 00:18:40,879
and behold what it is across the 30-day

423
00:18:36,440 --> 00:18:43,279
period that HIV data is significantly

424
00:18:40,880 --> 00:18:48,260
correlated to the time varying magnetic

425
00:18:43,279 --> 00:18:52,700
field which has the same rhythm but got

426
00:18:48,259 --> 00:18:54,440
disturbed right in here and you saw you

427
00:18:52,700 --> 00:18:56,808
see the rhythm get disturbed at two and

428

00:18:54,440 --> 00:18:58,640
a half day rhythm a magnetic field get

429
00:18:56,808 --> 00:19:00,079
disturbed and then it kind of settles to

430
00:18:58,640 --> 00:19:01,759
out settles out and starts coming back

431
00:19:00,079 --> 00:19:06,439
and then we see the HIV sorry

432
00:19:01,759 --> 00:19:09,349
synchronizing so it turns out right

433
00:19:06,440 --> 00:19:13,220
about here was a solar flare a coronal

434
00:19:09,349 --> 00:19:15,529
mass ejection and one of the measures of

435
00:19:13,220 --> 00:19:17,480
that is the F what's called the F 10 7

436
00:19:15,529 --> 00:19:18,859
which is a measure of the two points

437
00:19:17,480 --> 00:19:22,400
basically two point eight gigahertz

438
00:19:18,859 --> 00:19:23,750
radio wave frequency the Sun emits okay

439
00:19:22,400 --> 00:19:29,480
I'm gonna have to go minute overs I'm

440
00:19:23,750 --> 00:19:34,460
sorry and that's preceding this increase

441
00:19:29,480 --> 00:19:36,529
in a NH RV and it's a positive

442
00:19:34,460 --> 00:19:38,240

correlation which in another study we

443

00:19:36,529 --> 00:19:40,519

did a couple of years ago we found when

444

00:19:38,240 --> 00:19:43,909

F 10-7 increases people feel better

445

00:19:40,519 --> 00:19:46,970

they're more cognitively clear less

446

00:19:43,909 --> 00:19:49,460

mental confusion and all that so lo and

447

00:19:46,970 --> 00:19:51,048

behold in the the f10 sevens light is

448

00:19:49,460 --> 00:19:53,600

speed of light it gets here in eight

449

00:19:51,048 --> 00:19:55,548

minutes after a solar flare right the

450

00:19:53,599 --> 00:19:59,449

plasma the solar wind stuff it takes a

451

00:19:55,548 --> 00:20:02,269

few days and here's the solar wind speed

452

00:19:59,450 --> 00:20:07,819

now that we had that showing up a couple

453

00:20:02,269 --> 00:20:11,058

days later okay what a beautiful kind of

454

00:20:07,819 --> 00:20:12,678

I wish we could have I was good as good

455

00:20:11,058 --> 00:20:14,178

as a predicting the results as what we

456

00:20:12,679 --> 00:20:15,409

actually find sometimes you know it

457
00:20:14,179 --> 00:20:17,330
would never could have never guessed

458
00:20:15,409 --> 00:20:20,630
that we would be seen this kind of

459
00:20:17,329 --> 00:20:23,178
correlation so long as I'm out of time

460
00:20:20,630 --> 00:20:26,169
but basically what my summary would be

461
00:20:23,179 --> 00:20:28,490
is that we are far more interconnected

462
00:20:26,169 --> 00:20:31,278
with the Earth's field environment the

463
00:20:28,490 --> 00:20:34,669
magnetic fields then we we even thought

464
00:20:31,278 --> 00:20:36,730
or would have projected so we're it's a

465
00:20:34,669 --> 00:20:40,509
far more interconnected world than what

466
00:20:36,730 --> 00:20:42,649
we might have previously conceived of

467
00:20:40,509 --> 00:20:44,480
anyway then we have some cool new

468
00:20:42,648 --> 00:20:46,489
studies that this is going to generate I

469
00:20:44,480 --> 00:20:48,319
think some some of the things we'll do

470
00:20:46,490 --> 00:20:49,470
thank you rolling I guess we have time

471
00:20:48,319 --> 00:20:55,019
for questions

472
00:20:49,470 --> 00:20:59,649
[Applause]

473
00:20:55,019 --> 00:21:02,558
Garret okay if that strange magnetic

474
00:20:59,648 --> 00:21:05,079
pulse is genuinely simultaneous

475
00:21:02,558 --> 00:21:07,269
everywhere there's only one choice in

476
00:21:05,079 --> 00:21:08,439
terms of its origin it seems and that

477
00:21:07,269 --> 00:21:11,139
would be from the center of the earth

478
00:21:08,440 --> 00:21:13,269
and so it seems like it may be a good

479
00:21:11,140 --> 00:21:15,120
way to study what's happening at the

480
00:21:13,269 --> 00:21:18,278
earth Center is that being investigated

481
00:21:15,119 --> 00:21:21,879
I don't know buddy but I mean no one's

482
00:21:18,278 --> 00:21:23,710
getting rid of the data right we're here

483
00:21:21,880 --> 00:21:26,169
we have the only system I know of other

484
00:21:23,710 --> 00:21:27,990
than quake finders who dis could care

485

00:21:26,169 --> 00:21:29,740
less about this kind of stuff probably I

486
00:21:27,990 --> 00:21:31,720
actually agree with you

487
00:21:29,740 --> 00:21:33,519
I just didn't want to go there but you

488
00:21:31,720 --> 00:21:35,288
know yeah I do go there it's the only

489
00:21:33,519 --> 00:21:37,869
possible source is center of the earth

490
00:21:35,288 --> 00:21:39,609
to come out like this I agree what the

491
00:21:37,869 --> 00:21:41,528
source of that is there's still got to

492
00:21:39,609 --> 00:21:43,449
be a mechanism somewhere that's creating

493
00:21:41,528 --> 00:21:45,519
these pulses and they're pretty regular

494
00:21:43,450 --> 00:21:46,750
and we're actually creating some

495
00:21:45,519 --> 00:21:48,849
algorithms right now

496
00:21:46,750 --> 00:21:50,589
yeah we have massive amounts of data

497
00:21:48,849 --> 00:21:52,719
from all these sites come in three

498
00:21:50,589 --> 00:21:55,209
accesses so it's not you can't sit there

499
00:21:52,720 --> 00:21:57,730

and go through this stuff by by hand so

500

00:21:55,210 --> 00:21:59,140

we're creating in MATLAB some wavelet

501

00:21:57,730 --> 00:22:02,110

routines to add edit to identify these

502

00:21:59,140 --> 00:22:04,899

pulses so we can start licking it Lexi

503

00:22:02,109 --> 00:22:07,418

looks like they have their own rhythm so

504

00:22:04,898 --> 00:22:13,239

to speak but maybe next year or so we'll

505

00:22:07,419 --> 00:22:14,830

be able to report on the pulses did I

506

00:22:13,240 --> 00:22:17,519

understand you correctly to say that

507

00:22:14,829 --> 00:22:23,288

when you get a CME then it generates

508

00:22:17,519 --> 00:22:26,408

peace and well-being then before the

509

00:22:23,288 --> 00:22:28,240

plasma wave hits right but then how does

510

00:22:26,409 --> 00:22:30,039

that relate or does it relate then to

511

00:22:28,240 --> 00:22:31,960

your first slide that's did this

512

00:22:30,038 --> 00:22:35,288

historical information that seemed to

513

00:22:31,960 --> 00:22:38,130

say that when there was a lot of solar

514
00:22:35,288 --> 00:22:41,379
activity we all did stupid things yeah

515
00:22:38,130 --> 00:22:42,580
yeah there's a I had to truncate so much

516
00:22:41,380 --> 00:22:45,039
of what I would like to have said

517
00:22:42,579 --> 00:22:47,558
because there it is actually is true

518
00:22:45,038 --> 00:22:49,569
what Jeff's oscar's data showed it's

519
00:22:47,558 --> 00:22:51,639
been verified however what I need to add

520
00:22:49,569 --> 00:22:53,439
to it the greatest periods in human

521
00:22:51,640 --> 00:22:58,000
flourishing also correlate with those

522
00:22:53,440 --> 00:23:01,600
same periods okay so in other words it's

523
00:22:58,000 --> 00:23:03,609
an energetic influx right that comes in

524
00:23:01,599 --> 00:23:06,039
wherever it comes from cosmic solar

525
00:23:03,609 --> 00:23:08,449
sources yeah and

526
00:23:06,039 --> 00:23:09,859
yeah it's stupid and smart at the same

527
00:23:08,450 --> 00:23:12,590
time it really gets down to how

528
00:23:09,859 --> 00:23:15,319
self-regulated are we how do we use that

529
00:23:12,589 --> 00:23:17,480
energy we can either use it to create

530
00:23:15,319 --> 00:23:20,419
new collaborations solve problems or we

531
00:23:17,480 --> 00:23:21,890
can use it to go start squabbles and you

532
00:23:20,420 --> 00:23:23,529
know I actually gave a longer

533
00:23:21,890 --> 00:23:25,910
presentation of this in Saudi Arabia

534
00:23:23,529 --> 00:23:27,589
while back I'm one of the guys raises

535
00:23:25,910 --> 00:23:29,360
hands can't we just lock up all the

536
00:23:27,589 --> 00:23:36,649
politicians for that two year period

537
00:23:29,359 --> 00:23:38,990
around that yeah they're just quick

538
00:23:36,650 --> 00:23:43,330
combat there's another time synchronized

539
00:23:38,990 --> 00:23:46,309
event that Simon showed Russian

540
00:23:43,329 --> 00:23:49,039
researchers showed that in Rado

541
00:23:46,309 --> 00:23:51,529
activities and enzymatic reactions

542

00:23:49,039 --> 00:23:54,649
chemical reactions there's a periodic

543
00:23:51,529 --> 00:23:56,210
thing that occurs repeats normally when

544
00:23:54,650 --> 00:23:59,330
you look at data there's scatters of

545
00:23:56,210 --> 00:24:02,000
data and the scatter of data is

546
00:23:59,329 --> 00:24:03,349
reproducible anywhere in the world if

547
00:24:02,000 --> 00:24:07,819
the experiments are done at the same

548
00:24:03,349 --> 00:24:10,250
time and like radioactivity even the

549
00:24:07,819 --> 00:24:14,710
scatter is not random and it has a

550
00:24:10,250 --> 00:24:18,650
periodic occurrence about 24 hours and

551
00:24:14,710 --> 00:24:21,110
about a month and about a year and he's

552
00:24:18,650 --> 00:24:22,519
about 40 years of research and I'm when

553
00:24:21,109 --> 00:24:24,769
I look at your data I'm just wondering

554
00:24:22,519 --> 00:24:27,170
is there any correlation with regard to

555
00:24:24,769 --> 00:24:30,470
that but it's just an observation that

556
00:24:27,170 --> 00:24:34,940

some smells work has this periodic thing

557

00:24:30,470 --> 00:24:38,089

associated worldwide interesting I'm not

558

00:24:34,940 --> 00:24:41,180

I love maybe we can talk afterwards the

559

00:24:38,089 --> 00:24:42,649

researchers Simon snow lost all his work

560

00:24:41,180 --> 00:24:45,590

yeah actually Dean turned me on to him

561

00:24:42,650 --> 00:24:49,880

yeah some it's I think related but

562

00:24:45,589 --> 00:24:51,889

different different me some commonality

563

00:24:49,880 --> 00:24:53,330

that's right yeah the other data set

564

00:24:51,890 --> 00:24:54,920

that York's been working with on has a

565

00:24:53,329 --> 00:24:56,750

whole other kind of neat pitch of it

566

00:24:54,920 --> 00:24:58,039

adds to this but cosmic rays and

567

00:24:56,750 --> 00:25:01,849

different different things too but

568

00:24:58,039 --> 00:25:04,690

that's alright I think it's time to get

569

00:25:01,849 --> 00:25:08,319

onto the next presentation

570

00:25:04,690 --> 00:25:14,009

[Applause]

571

00:25:08,319 --> 00:25:14,009

[Music]

572

00:25:23,740 --> 00:25:25,799

you