Multi-Event Sensor App (MESA 3.0)

Brian Laythe

SOCIETY
FOR
SCIENTIFIC
EXPLORATION

1
00:00:09,270 --> 00:00:06,309
[Music]

2
00:00:10,950 --> 00:00:09,280
so folks um i'm led auerbach i just uh

3
00:00:12,709 --> 00:00:10,960
let you know that i'm more or less

4
00:00:14,150 --> 00:00:12,719
hosting this so i will be taking care of

5
00:00:16,710 --> 00:00:14,160
your questions

6
00:00:18,470 --> 00:00:16,720
repeating them to brian at the very end

7
00:00:20,710 --> 00:00:18,480
of this after 40 minutes of his

8
00:00:23,429 --> 00:00:20,720
presentation so

9
00:00:25,589 --> 00:00:23,439
um please go ahead and put your

10
00:00:28,310 --> 00:00:25,599
questions or comments

11
00:00:29,669 --> 00:00:28,320
into the chat i'll monitor them if it's

12
00:00:31,269 --> 00:00:29,679
something i can answer right off the bat

13
00:00:32,950 --> 00:00:31,279

just as administrative or something i'll

14
00:00:35,190 --> 00:00:32,960
take care of that but otherwise

15
00:00:37,270 --> 00:00:35,200
i will keep track and be asking brian

16
00:00:38,549 --> 00:00:37,280
the questions later

17
00:00:41,430 --> 00:00:38,559
so brian you want to take it away

18
00:00:44,869 --> 00:00:41,440
introduce yourself and your topic

19
00:00:46,549 --> 00:00:44,879
um yeah my name is brian laid and today

20
00:00:49,830 --> 00:00:46,559
we're going to do a little bit of show

21
00:00:52,389 --> 00:00:49,840
and tell um on an application we've been

22
00:00:55,029 --> 00:00:52,399
developing uh the multi-event sensor app

23
00:00:57,990 --> 00:00:55,039
mesa 3. uh for basically doing field

24
00:00:59,990 --> 00:00:58,000
work on exceptional human experiences or

25
00:01:01,670 --> 00:01:00,000
entity encounter experiences whatever

26
00:01:04,070 --> 00:01:01,680
term you prefer to use

27
00:01:06,310 --> 00:01:04,080
um before i get into the details of

28
00:01:08,710 --> 00:01:06,320
course i want to thank thank james varan

29
00:01:11,429 --> 00:01:08,720
and muhammad ali

30
00:01:12,630 --> 00:01:11,439
who was an incredibly patient coder as i

31
00:01:14,710 --> 00:01:12,640
sent him

32
00:01:16,390 --> 00:01:14,720
many many outlines of coding

33
00:01:20,149 --> 00:01:16,400
expectations

34
00:01:22,149 --> 00:01:20,159
so um before we get into the details uh

35
00:01:23,030 --> 00:01:22,159
let's do a little bit of context and

36
00:01:26,469 --> 00:01:23,040
theory

37
00:01:28,630 --> 00:01:26,479
um the idea of mesa 3 is

38
00:01:30,469 --> 00:01:28,640

documenting ghostly episodes exceptional

39
00:01:31,990 --> 00:01:30,479
human experiences

40
00:01:34,950 --> 00:01:32,000
in the field

41
00:01:36,789 --> 00:01:34,960
and one of the things that we have

42
00:01:38,550 --> 00:01:36,799
kind of discovered over the last several

43
00:01:41,670 --> 00:01:38,560
years of doing research

44
00:01:44,310 --> 00:01:41,680
is a recognition of a necessity of a

45
00:01:46,310 --> 00:01:44,320
systems theory or interactionist

46
00:01:47,749 --> 00:01:46,320
framework when we're dealing with you

47
00:01:49,990 --> 00:01:47,759
know strange occurrences high

48
00:01:50,870 --> 00:01:50,000
strangeness out in the field

49
00:01:52,950 --> 00:01:50,880
um

50
00:01:56,389 --> 00:01:52,960
i think at this point it's it's fairly

51
00:01:59,429 --> 00:01:56,399
accepted that we have to deal with the

52
00:02:01,910 --> 00:01:59,439
idea of dealing with the psychology the

53
00:02:04,469 --> 00:02:01,920
person and the environment

54
00:02:07,109 --> 00:02:04,479
interpreting various phenomena that

55
00:02:09,109 --> 00:02:07,119
eventually gets interpreted as

56
00:02:11,510 --> 00:02:09,119
um you know high strangeness or

57
00:02:13,589 --> 00:02:11,520
paranormal phenomena um

58
00:02:15,350 --> 00:02:13,599
one of you know one of the things that

59
00:02:19,589 --> 00:02:15,360
we're trying to do here by introducing

60
00:02:23,030 --> 00:02:19,599
mesa 3 is to start to tackle um the

61
00:02:25,270 --> 00:02:23,040
issue of environmental field controls

62
00:02:26,630 --> 00:02:25,280
um when it really comes down to it um

63
00:02:29,190 --> 00:02:26,640

you know there's been kind of sparse

64
00:02:30,790 --> 00:02:29,200
research over the last 20 years uh but

65
00:02:32,550 --> 00:02:30,800
if we're going to go into the field and

66
00:02:35,509 --> 00:02:32,560
we're going to try and document the

67
00:02:37,030 --> 00:02:35,519
cultural context in the environment

68
00:02:38,070 --> 00:02:37,040
you know paranormal phenomena so to

69
00:02:41,190 --> 00:02:38,080
speak

70
00:02:45,270 --> 00:02:41,200
we need a good experimental data tools

71
00:02:46,150 --> 00:02:45,280
to collect the range of compounds if you

72
00:02:47,509 --> 00:02:46,160
will

73
00:02:48,710 --> 00:02:47,519
that can be occurring in that kind of

74
00:02:50,229 --> 00:02:48,720
environment

75
00:02:51,830 --> 00:02:50,239
and we would also pause it and we've

76
00:02:53,350 --> 00:02:51,840
also been kind of pushing for the last

77
00:02:57,509 --> 00:02:53,360
several years

78
00:02:59,190 --> 00:02:57,519
um a need for big data lots of people um

79
00:03:01,670 --> 00:02:59,200
contributing

80
00:03:02,550 --> 00:03:01,680
to um you know environmental data field

81
00:03:04,309 --> 00:03:02,560
sets

82
00:03:06,710 --> 00:03:04,319
um you know in other words reaching out

83
00:03:09,110 --> 00:03:06,720
to the community of lay people citizen

84
00:03:11,430 --> 00:03:09,120
scientists um and it's our hope over

85
00:03:13,990 --> 00:03:11,440
time this tool will be the beginning

86
00:03:15,750 --> 00:03:14,000
of uh further collaboration with that

87
00:03:17,589 --> 00:03:15,760
you know group of

88
00:03:19,589 --> 00:03:17,599

people in the investigation community

89
00:03:21,030 --> 00:03:19,599
that have a hunger and a thirst for

90
00:03:23,589 --> 00:03:21,040
science um

91
00:03:26,550 --> 00:03:23,599
you know we may all watch the television

92
00:03:30,070 --> 00:03:26,560
shows and lose hope but there are a

93
00:03:32,070 --> 00:03:30,080
chunk of these millions of people who

94
00:03:33,030 --> 00:03:32,080
um you know are very interested in the

95
00:03:35,030 --> 00:03:33,040
science

96
00:03:36,550 --> 00:03:35,040
um and so we're kind of creating a tool

97
00:03:39,190 --> 00:03:36,560
that would hopefully make

98
00:03:41,350 --> 00:03:39,200
both experimenters and eventually lay

99
00:03:43,110 --> 00:03:41,360
people um happy

100
00:03:46,550 --> 00:03:43,120
for lack of better words so

101
00:03:49,030 --> 00:03:46,560
this is uh the mesa 3 application and

102
00:03:51,030 --> 00:03:49,040
you can see on the picture that i took

103
00:03:51,910 --> 00:03:51,040
that this is my child's haunted play

104
00:03:52,869 --> 00:03:51,920
area

105
00:03:55,750 --> 00:03:52,879
um

106
00:03:57,830 --> 00:03:55,760
mesa 3 is an android phone application

107
00:03:59,589 --> 00:03:57,840
for collecting analyzable data in

108
00:04:00,789 --> 00:03:59,599
various quote unquote anomalous

109
00:04:03,910 --> 00:04:00,799
locations

110
00:04:07,030 --> 00:04:03,920
it is um it is built off of a lot of

111
00:04:09,509 --> 00:04:07,040
previous data loggers um in fact this is

112
00:04:11,110 --> 00:04:09,519
uh my personal third iteration

113
00:04:13,190 --> 00:04:11,120

um i remember originally when doing this

114
00:04:15,030 --> 00:04:13,200
10 years ago we'd have an entire truck

115
00:04:16,550 --> 00:04:15,040
bed of equipment

116
00:04:19,110 --> 00:04:16,560
that we'd have to you know put out in

117
00:04:21,830 --> 00:04:19,120
various positions to

118
00:04:24,550 --> 00:04:21,840
try and collect environmental data

119
00:04:27,030 --> 00:04:24,560
but after building a my own set of data

120
00:04:28,710 --> 00:04:27,040
loggers with auto arena components

121
00:04:31,189 --> 00:04:28,720
we eventually a couple of years ago

122
00:04:33,830 --> 00:04:31,199
started working on an application

123
00:04:36,629 --> 00:04:33,840
so the neat thing about mesa 3 is that

124
00:04:39,030 --> 00:04:36,639
it mandates procedures for quality data

125
00:04:40,790 --> 00:04:39,040
collection so we were thinking about lay

126
00:04:43,909 --> 00:04:40,800
people when we built this

127
00:04:47,350 --> 00:04:43,919
in the sense of how can we make

128
00:04:49,590 --> 00:04:47,360
a process of collecting a full range of

129
00:04:50,710 --> 00:04:49,600
you know analyzable environmental data

130
00:04:53,189 --> 00:04:50,720
easy

131
00:04:55,189 --> 00:04:53,199
uh for you know people who may not have

132
00:04:57,510 --> 00:04:55,199
a full background in science

133
00:04:58,950 --> 00:04:57,520
um i'm going to talk more about it

134
00:05:01,590 --> 00:04:58,960
collecting data in a distributional

135
00:05:03,909 --> 00:05:01,600
format in just a second but again the

136
00:05:06,710 --> 00:05:03,919
goal of mesa was

137
00:05:09,670 --> 00:05:06,720
to create a handheld app

138
00:05:11,430 --> 00:05:09,680

that would basically guide lay people

139
00:05:14,230 --> 00:05:11,440
through the process of collecting

140
00:05:16,230 --> 00:05:14,240
quality environmental data for in theory

141
00:05:19,189 --> 00:05:16,240
a collaboration with a scientist who

142
00:05:26,230 --> 00:05:22,870
so one of the key features of mesa 3 is

143
00:05:30,150 --> 00:05:26,240
that when you use it it integrates all

144
00:05:33,430 --> 00:05:30,160
of the variables to time right um so you

145
00:05:35,909 --> 00:05:33,440
end up with a common timestamp where

146
00:05:38,469 --> 00:05:35,919
you can look at you know any sort of

147
00:05:40,310 --> 00:05:38,479
phenomena going on and sync that up

148
00:05:42,390 --> 00:05:40,320
through time so it allows us kind of

149
00:05:44,230 --> 00:05:42,400
post talk to analyze data if necessary

150
00:05:45,670 --> 00:05:44,240
because we know when and where something

151
00:05:47,189 --> 00:05:45,680
occurred at all time including the

152
00:05:49,990 --> 00:05:47,199
readings

153
00:05:53,270 --> 00:05:50,000
we've also integrated within the app

154
00:05:56,469 --> 00:05:53,280
um the survey of strange events um

155
00:05:58,390 --> 00:05:56,479
which is a 32 item rashfield measure um

156
00:06:02,070 --> 00:05:58,400
of subjective and objective haunting

157
00:06:04,550 --> 00:06:02,080
phenomena um we have a comments button

158
00:06:05,909 --> 00:06:04,560
where individuals can just add anything

159
00:06:07,590 --> 00:06:05,919
they need to that might be relevant

160
00:06:09,510 --> 00:06:07,600
whether they're moving

161
00:06:10,309 --> 00:06:09,520
or whether something odd happened to

162
00:06:12,790 --> 00:06:10,319
them

163
00:06:17,909 --> 00:06:12,800

but it also works with the audio

164
00:06:22,790 --> 00:06:19,110
so

165
00:06:26,550 --> 00:06:22,800
for you apple fans um i apologize uh but

166
00:06:29,189 --> 00:06:26,560
cross coding is uh incredibly incredibly

167
00:06:33,029 --> 00:06:29,199
difficult across platforms so for right

168
00:06:34,469 --> 00:06:33,039
now mesa 3 is um only available on

169
00:06:37,670 --> 00:06:34,479
android

170
00:06:40,710 --> 00:06:37,680
aka the whole google platform

171
00:06:43,350 --> 00:06:40,720
and in fact it uses uh google apps as

172
00:06:44,390 --> 00:06:43,360
kind of part of its system

173
00:06:45,830 --> 00:06:44,400
one

174
00:06:47,270 --> 00:06:45,840
upfront

175
00:06:49,670 --> 00:06:47,280
point is that

176
00:06:51,510 --> 00:06:49,680
mesa works but it is dependent on the

177
00:06:53,749 --> 00:06:51,520
hardware in the phone

178
00:06:56,469 --> 00:06:53,759
which means you have to have a phone

179
00:06:59,110 --> 00:06:56,479
that has the embedded hardware sensors

180
00:07:00,830 --> 00:06:59,120
in it for mesa to utilize those sensors

181
00:07:03,430 --> 00:07:00,840
and produce data for you

182
00:07:05,749 --> 00:07:03,440
um near the end of the presentation we

183
00:07:06,629 --> 00:07:05,759
can talk about that we've managed to

184
00:07:08,230 --> 00:07:06,639
find

185
00:07:10,629 --> 00:07:08,240
over the last year a couple of very

186
00:07:13,510 --> 00:07:10,639
affordable cheap smartphones uh that

187
00:07:15,909 --> 00:07:13,520
will run most of the variables uh that

188
00:07:17,990 --> 00:07:15,919

mesa 3 can address

189
00:07:21,110 --> 00:07:18,000
it's capable of

190
00:07:23,510 --> 00:07:21,120
data logging emf on all three axes

191
00:07:26,230 --> 00:07:23,520
temperature barometric pressure

192
00:07:27,749 --> 00:07:26,240
acceleration slash gravity if you're

193
00:07:31,830 --> 00:07:27,759
keeping it still

194
00:07:37,029 --> 00:07:34,550
um probably worth a side note to talk

195
00:07:39,189 --> 00:07:37,039
about the distributional approach to

196
00:07:41,350 --> 00:07:39,199
data collection

197
00:07:42,710 --> 00:07:41,360
i know that in previous research a lot

198
00:07:44,790 --> 00:07:42,720
of people will look at just the

199
00:07:47,510 --> 00:07:44,800
magnitude of emf

200
00:07:50,869 --> 00:07:47,520
um but after 10 years of field

201
00:07:54,309 --> 00:07:50,879
experience and trying to measure emf in

202
00:07:56,710 --> 00:07:54,319
a you know scientifically honest way

203
00:07:59,110 --> 00:07:56,720
magnitude doesn't tend to cut it because

204
00:08:01,990 --> 00:07:59,120
meters are receptive

205
00:08:04,469 --> 00:08:02,000
and what i mean by that is that

206
00:08:06,629 --> 00:08:04,479
emf in particular right you're not

207
00:08:09,270 --> 00:08:06,639
sending out a beam of energy to measure

208
00:08:11,749 --> 00:08:09,280
electromagnetic fields you're receiving

209
00:08:12,790 --> 00:08:11,759
the electromagnetic fields wherever the

210
00:08:14,550 --> 00:08:12,800
um

211
00:08:16,390 --> 00:08:14,560
the meter happens to be

212
00:08:17,909 --> 00:08:16,400
uh the problem with that is as a

213
00:08:21,670 --> 00:08:17,919

function of the inverse power law and

214
00:08:23,270 --> 00:08:21,680
various other issues if you move a meter

215
00:08:24,790 --> 00:08:23,280
maybe one to five feet you're going to

216
00:08:26,869 --> 00:08:24,800
get a completely different reading so

217
00:08:29,670 --> 00:08:26,879
significance test just looking at the

218
00:08:31,589 --> 00:08:29,680
magnitude of electromagnetic fields or

219
00:08:33,829 --> 00:08:31,599
light or acceleration

220
00:08:36,310 --> 00:08:33,839
isn't super honest in a field

221
00:08:39,269 --> 00:08:36,320
environment where there's a lot of

222
00:08:41,110 --> 00:08:39,279
compounds and complex factors going on

223
00:08:42,550 --> 00:08:41,120
our way around this is to use a

224
00:08:44,310 --> 00:08:42,560
distributional approach to data

225
00:08:47,430 --> 00:08:44,320
collection so

226
00:08:49,910 --> 00:08:47,440
mesa collects data in five five second

227
00:08:53,350 --> 00:08:49,920
intervals for each variable

228
00:08:55,750 --> 00:08:53,360
um where it does five samples for per

229
00:08:57,110 --> 00:08:55,760
second so each data packet you can see

230
00:08:59,030 --> 00:08:57,120
on the screen

231
00:09:01,269 --> 00:08:59,040
up with the mesa output

232
00:09:03,110 --> 00:09:01,279
that you get the median

233
00:09:05,590 --> 00:09:03,120
and the mean

234
00:09:09,670 --> 00:09:05,600
as well as the standard deviation and

235
00:09:12,389 --> 00:09:09,680
then hs and ls are high spikes and low

236
00:09:14,389 --> 00:09:12,399
spikes and what we mean by this is the

237
00:09:16,230 --> 00:09:14,399
number of readings

238
00:09:18,630 --> 00:09:16,240

that have fallen outside of a two

239
00:09:19,750 --> 00:09:18,640
standard deviation confidence interval

240
00:09:21,350 --> 00:09:19,760
so

241
00:09:23,430 --> 00:09:21,360
two standard deviation high spikes of

242
00:09:25,750 --> 00:09:23,440
course are two are readings that are

243
00:09:27,670 --> 00:09:25,760
above those two standard deviations and

244
00:09:29,670 --> 00:09:27,680
low spikes of course are below

245
00:09:32,150 --> 00:09:29,680
um but you'll note here on the output

246
00:09:33,910 --> 00:09:32,160
that all of this is provided um it's not

247
00:09:35,190 --> 00:09:33,920
only provided in the spreadsheet format

248
00:09:37,509 --> 00:09:35,200
in terms of its outputs but it's

249
00:09:40,310 --> 00:09:37,519
actually provided on the dashboard every

250
00:09:42,389 --> 00:09:40,320
five seconds when it updates um we put

251
00:09:44,070 --> 00:09:42,399
the median up there so that in terms of

252
00:09:46,550 --> 00:09:44,080
looking at a distribution for those of

253
00:09:49,110 --> 00:09:46,560
you that are mathematically savvy um you

254
00:09:50,630 --> 00:09:49,120
can see if there is inherent skew going

255
00:09:54,470 --> 00:09:50,640
on in a particular five second

256
00:09:59,269 --> 00:09:57,509
from that we developed uh four different

257
00:10:00,870 --> 00:09:59,279
user modes

258
00:10:03,110 --> 00:10:00,880
that are designed to guide lay people

259
00:10:04,870 --> 00:10:03,120
through a procedure to ensure quality

260
00:10:06,550 --> 00:10:04,880
data collection so we have four of these

261
00:10:09,590 --> 00:10:06,560
we have baseline mode

262
00:10:11,190 --> 00:10:09,600
freestyle mode edp knock mode which

263
00:10:14,870 --> 00:10:11,200

we'll get to and what i call sentinel

264
00:10:19,350 --> 00:10:17,269
uh baseline mode is a

265
00:10:21,910 --> 00:10:19,360
highly structured mode for collecting

266
00:10:24,069 --> 00:10:21,920
control samples and photo documentation

267
00:10:25,990 --> 00:10:24,079
with locations so

268
00:10:29,190 --> 00:10:26,000
when you enter into baseline mode with

269
00:10:30,790 --> 00:10:29,200
mesa 3 it makes you follow a standard

270
00:10:33,269 --> 00:10:30,800
procedure

271
00:10:35,910 --> 00:10:33,279
so it mandates inside and outside

272
00:10:38,069 --> 00:10:35,920
collections of environmental data um at

273
00:10:40,710 --> 00:10:38,079
a 90 second interval for each place that

274
00:10:43,509 --> 00:10:40,720
you're taking a baseline it also

275
00:10:46,630 --> 00:10:43,519
mandates photo documentation uh outside

276
00:10:48,630 --> 00:10:46,640
uh including uh power lines

277
00:10:49,590 --> 00:10:48,640
including distance of one house to

278
00:10:51,590 --> 00:10:49,600
another

279
00:10:54,150 --> 00:10:51,600
um and of course the inside baselines

280
00:10:57,430 --> 00:10:54,160
provide the same and you can document as

281
00:11:01,190 --> 00:10:57,440
many areas as you need to

282
00:11:03,030 --> 00:11:01,200
so uh pretty pictures right uh this is

283
00:11:05,269 --> 00:11:03,040
uh part of

284
00:11:07,110 --> 00:11:05,279
uh the outside baseline mode

285
00:11:08,790 --> 00:11:07,120
where uh this is the whispers and

286
00:11:10,550 --> 00:11:08,800
mitchell's mitchell indiana so if you

287
00:11:13,750 --> 00:11:10,560
guys may have heard of it it's uh pretty

288
00:11:14,790 --> 00:11:13,760

good for producing sensible pk phenomena

289
00:11:16,150 --> 00:11:14,800
um

290
00:11:17,750 --> 00:11:16,160
but you can see that we have the front

291
00:11:19,910 --> 00:11:17,760
the back the sides

292
00:11:22,389 --> 00:11:19,920
what's not shown here is that we also

293
00:11:23,910 --> 00:11:22,399
mandate pictures showing the distance

294
00:11:25,910 --> 00:11:23,920
between houses

295
00:11:27,829 --> 00:11:25,920
so the distance of the house to the left

296
00:11:30,470 --> 00:11:27,839
and the right of the location a picture

297
00:11:33,110 --> 00:11:30,480
of the backyard it mandates photos be uh

298
00:11:34,790 --> 00:11:33,120
taken of where the power lines are so

299
00:11:38,790 --> 00:11:34,800
you know about potential emf

300
00:11:40,150 --> 00:11:38,800
interference as well as photos um this

301
00:11:42,790 --> 00:11:40,160
one center down

302
00:11:44,230 --> 00:11:42,800
uh showing the distance of the road from

303
00:11:45,829 --> 00:11:44,240
the house so you at least can account

304
00:11:52,870 --> 00:11:45,839
for potential light or audio

305
00:11:58,550 --> 00:11:56,389
so um here we have uh big tables i know

306
00:12:01,350 --> 00:11:58,560
everybody loves tables

307
00:12:04,150 --> 00:12:01,360
but here we see kind of a

308
00:12:06,470 --> 00:12:04,160
truncated um output of what mesa

309
00:12:08,550 --> 00:12:06,480
produces from baseline mode so you'll

310
00:12:09,590 --> 00:12:08,560
notice here i took out the median from

311
00:12:10,870 --> 00:12:09,600
space

312
00:12:12,949 --> 00:12:10,880
but you'll notice that you get an

313
00:12:15,750 --> 00:12:12,959

average of all three emf

314
00:12:17,910 --> 00:12:15,760
um and you also get an average of a

315
00:12:22,470 --> 00:12:17,920
barometric pressure in this case

316
00:12:26,389 --> 00:12:22,480
and then spx spy spz and spb

317
00:12:29,269 --> 00:12:26,399
are the sum of the high and low readings

318
00:12:31,670 --> 00:12:29,279
that we got from that 90 seconds

319
00:12:34,870 --> 00:12:31,680
um so in this in this sense right we're

320
00:12:36,829 --> 00:12:34,880
looking kind of at a very basic map of

321
00:12:39,750 --> 00:12:36,839
what is the emf

322
00:12:41,990 --> 00:12:39,760
variability um as well as barometric

323
00:12:43,829 --> 00:12:42,000
pressure variability occurring outside

324
00:12:45,829 --> 00:12:43,839
two locations right the first one is the

325
00:12:48,629 --> 00:12:45,839
whispers that i just showed you and the

326
00:12:50,870 --> 00:12:48,639
second one is a uh residential case in

327
00:12:55,750 --> 00:12:50,880
texas that jim haran and i are currently

328
00:12:59,990 --> 00:12:57,990
also another big data table to the right

329
00:13:02,230 --> 00:13:00,000
you can see

330
00:13:04,949 --> 00:13:02,240
again in baseline mode

331
00:13:07,509 --> 00:13:04,959
you are mandated to take six pictures in

332
00:13:10,310 --> 00:13:07,519
every area that you baseline

333
00:13:12,790 --> 00:13:10,320
which is all four walls uh the ceiling

334
00:13:15,509 --> 00:13:12,800
and the floor um so to the right we have

335
00:13:19,269 --> 00:13:15,519
two examples of that for two rooms

336
00:13:22,389 --> 00:13:19,279
and you can see basically the same table

337
00:13:24,710 --> 00:13:22,399
truncated again uh showing all of the

338
00:13:26,629 --> 00:13:24,720

amount of spikes uh that were occurring

339
00:13:27,590 --> 00:13:26,639
in each one of these locations in each

340
00:13:28,870 --> 00:13:27,600
room

341
00:13:31,509 --> 00:13:28,880
um

342
00:13:32,310 --> 00:13:31,519
as well as a barometric pressure and

343
00:13:33,590 --> 00:13:32,320
light

344
00:13:35,670 --> 00:13:33,600
in this sense

345
00:13:37,350 --> 00:13:35,680
so um obviously i know there's a whole

346
00:13:39,670 --> 00:13:37,360
lot of data to look at and and the

347
00:13:40,790 --> 00:13:39,680
reason i'm showing it is is more of a

348
00:13:43,590 --> 00:13:40,800
issue of

349
00:13:45,509 --> 00:13:43,600
showing you guys the the capacity um of

350
00:13:47,189 --> 00:13:45,519
data that actually can come out of mesa

351
00:13:49,750 --> 00:13:47,199
obviously for users we're going to have

352
00:13:52,310 --> 00:13:49,760
to for layperson users we may have to

353
00:13:53,670 --> 00:13:52,320
truncate this a little bit

354
00:13:57,189 --> 00:13:53,680
um

355
00:14:00,230 --> 00:13:57,199
freestyle mode is a flexible mobile

356
00:14:02,230 --> 00:14:00,240
reading long term data collection mode

357
00:14:04,949 --> 00:14:02,240
it features the availability if you're

358
00:14:06,870 --> 00:14:04,959
going to use it as a mobile reader uh to

359
00:14:09,590 --> 00:14:06,880
enter phenomena using the survey of

360
00:14:11,509 --> 00:14:09,600
strange events uh comments it also

361
00:14:13,829 --> 00:14:11,519
allows you to take a photo and we'll

362
00:14:15,269 --> 00:14:13,839
instantly time stamp that and collect it

363
00:14:17,750 --> 00:14:15,279

with data

364
00:14:19,269 --> 00:14:17,760
so this can be used as a handheld mobile

365
00:14:21,350 --> 00:14:19,279
device

366
00:14:23,430 --> 00:14:21,360
where you can use the comment button to

367
00:14:26,470 --> 00:14:23,440
indicate hey i'm going from room one to

368
00:14:27,990 --> 00:14:26,480
room two or hey i moved my my phone

369
00:14:29,110 --> 00:14:28,000
around very quickly and messed up these

370
00:14:30,310 --> 00:14:29,120
readings

371
00:14:33,110 --> 00:14:30,320
which is another reason we have

372
00:14:35,750 --> 00:14:33,120
acceleration as a variable we collect

373
00:14:39,030 --> 00:14:35,760
because that can help us throw out

374
00:14:41,509 --> 00:14:39,040
data sets where perhaps a user move very

375
00:14:42,470 --> 00:14:41,519
quickly and through off the readings

376
00:14:45,829 --> 00:14:42,480
but it's

377
00:14:47,350 --> 00:14:45,839
also usable as a long-term data logger

378
00:14:49,430 --> 00:14:47,360
uh so in other words you put this in

379
00:14:50,310 --> 00:14:49,440
freestyle mode you can stick it in a

380
00:14:52,069 --> 00:14:50,320
room

381
00:14:54,230 --> 00:14:52,079
um and if you're just interested in

382
00:14:56,949 --> 00:14:54,240
environmental data it will happily chug

383
00:14:58,710 --> 00:14:56,959
away as long as the battery will run and

384
00:15:01,030 --> 00:14:58,720
if it's plugged into a wall outlet it

385
00:15:02,870 --> 00:15:01,040
will keep collecting data

386
00:15:03,670 --> 00:15:02,880
until you turn it off

387
00:15:05,509 --> 00:15:03,680
um

388
00:15:07,030 --> 00:15:05,519

when freestyle mode is being used and

389
00:15:09,350 --> 00:15:07,040
you're actually

390
00:15:11,350 --> 00:15:09,360
using the app to document stuff mobily

391
00:15:14,790 --> 00:15:11,360
so you're moving around with it

392
00:15:17,110 --> 00:15:14,800
photos are linked to pre-during and post

393
00:15:18,710 --> 00:15:17,120
environmental data output

394
00:15:26,230 --> 00:15:18,720
and i'll show you an example of that in

395
00:15:33,030 --> 00:15:29,829
so um as an example of a freestyle mode

396
00:15:35,110 --> 00:15:33,040
uh we went on a san antonio ghost tour a

397
00:15:37,670 --> 00:15:35,120
few months back and this was a kind of a

398
00:15:40,069 --> 00:15:37,680
neat opportunity for us to collect uh

399
00:15:44,310 --> 00:15:40,079
what i would call control z so we were

400
00:15:49,189 --> 00:15:46,230
fairly fairly dense

401
00:15:50,230 --> 00:15:49,199
uh populated area we did a tour over

402
00:15:51,910 --> 00:15:50,240
probably

403
00:15:53,910 --> 00:15:51,920
four square miles

404
00:15:57,269 --> 00:15:53,920
um and what you can see here from this

405
00:15:58,790 --> 00:15:57,279
table is that i was able to take the 90

406
00:16:00,550 --> 00:15:58,800
second average

407
00:16:04,710 --> 00:16:00,560
of spikes

408
00:16:07,670 --> 00:16:04,720
um that occurred with um x y and z emf

409
00:16:09,910 --> 00:16:07,680
as well as barometric pressure um so

410
00:16:11,509 --> 00:16:09,920
this is you know about 90 minutes 90

411
00:16:13,829 --> 00:16:11,519
minutes to two hours of walking around

412
00:16:15,829 --> 00:16:13,839
downtown um and you end up of course

413
00:16:17,509 --> 00:16:15,839

with a very large data set at five

414
00:16:20,310 --> 00:16:17,519
samples per second

415
00:16:22,150 --> 00:16:20,320
um neat interesting trick or something

416
00:16:24,949 --> 00:16:22,160
interesting that we found with this i

417
00:16:27,990 --> 00:16:24,959
was just talking about it this morning

418
00:16:30,389 --> 00:16:28,000
is the when we look at the amount of

419
00:16:33,189 --> 00:16:30,399
high and low readings

420
00:16:35,990 --> 00:16:33,199
and we look at the whispers and the

421
00:16:38,870 --> 00:16:36,000
texas outside baselines we have kind of

422
00:16:41,110 --> 00:16:38,880
an odd anomaly here um you know the

423
00:16:45,110 --> 00:16:41,120
freestyle san antonio tour

424
00:16:48,629 --> 00:16:45,120
uh you know shows us approximately 19 19

425
00:16:50,790 --> 00:16:48,639
15 to 19 spikes or you know outside of

426
00:16:52,470 --> 00:16:50,800
two sd readings

427
00:16:54,710 --> 00:16:52,480
for emf that occurred and very much

428
00:16:57,590 --> 00:16:54,720
pressure that occurred but when you look

429
00:17:00,710 --> 00:16:57,600
at the outside baselines for both of

430
00:17:03,509 --> 00:17:00,720
these sites which have fairly

431
00:17:05,270 --> 00:17:03,519
well documented phenomena they are two

432
00:17:07,909 --> 00:17:05,280
to three times

433
00:17:10,150 --> 00:17:07,919
uh greater outside now we're not talking

434
00:17:12,390 --> 00:17:10,160
about inside we're talking about outside

435
00:17:14,069 --> 00:17:12,400
um and this is a little bit

436
00:17:15,669 --> 00:17:14,079
contrary to what you might expect

437
00:17:17,590 --> 00:17:15,679
because if you were thinking about

438
00:17:18,870 --> 00:17:17,600

electromagnetic field interference for

439
00:17:20,470 --> 00:17:18,880
instance

440
00:17:23,029 --> 00:17:20,480
a downtown

441
00:17:26,390 --> 00:17:23,039
uh crowded building environment would be

442
00:17:28,710 --> 00:17:26,400
much more likely to have emf bleed than

443
00:17:31,190 --> 00:17:28,720
two small suburbs in which we took the

444
00:17:34,070 --> 00:17:31,200
samples for both the whispers

445
00:17:36,230 --> 00:17:34,080
and this texas residence and yet

446
00:17:39,190 --> 00:17:36,240
we see a large amount of variability

447
00:17:41,029 --> 00:17:39,200
here um and very significant variability

448
00:17:42,710 --> 00:17:41,039
in fact a lot of these actually were

449
00:17:44,870 --> 00:17:42,720
better than one in a million

450
00:17:46,710 --> 00:17:44,880
uh probability odds

451
00:17:49,029 --> 00:17:46,720
um

452
00:17:50,470 --> 00:17:49,039
what this means is not really clear i

453
00:17:53,190 --> 00:17:50,480
gotta think about it this is actually

454
00:17:54,230 --> 00:17:53,200
some some fresh data off the presses

455
00:17:57,830 --> 00:17:54,240
um

456
00:17:58,630 --> 00:17:57,840
but it does kind of uh run contrary to

457
00:18:03,830 --> 00:17:58,640
what

458
00:18:06,789 --> 00:18:05,909
um evp knock mode

459
00:18:09,510 --> 00:18:06,799
um

460
00:18:11,430 --> 00:18:09,520
so this is our third mode and uh we're

461
00:18:13,350 --> 00:18:11,440
going to be elaborating on this

462
00:18:16,470 --> 00:18:13,360
down the road with the institute but

463
00:18:19,830 --> 00:18:16,480

this is a structured mode for uh

464
00:18:22,710 --> 00:18:19,840
collecting evp and noc data so the idea

465
00:18:25,190 --> 00:18:22,720
in mesa 3 is that it's

466
00:18:27,590 --> 00:18:25,200
it's a forced structure you are required

467
00:18:30,070 --> 00:18:27,600
to type the question first

468
00:18:32,310 --> 00:18:30,080
then state the question

469
00:18:34,549 --> 00:18:32,320
and then you hit then there will be a

470
00:18:36,950 --> 00:18:34,559
five second record period and then you

471
00:18:39,430 --> 00:18:36,960
can enter your next your enter your next

472
00:18:41,909 --> 00:18:39,440
question so the idea was to put like an

473
00:18:45,270 --> 00:18:41,919
evp question session or spirit box

474
00:18:47,909 --> 00:18:45,280
session etc etc into a structured time

475
00:18:50,470 --> 00:18:47,919
format where the time is constant

476
00:18:53,909 --> 00:18:50,480
and also of course uh provides the

477
00:18:56,470 --> 00:18:53,919
environmental data that revolves around

478
00:18:58,470 --> 00:18:56,480
uh the evp session so

479
00:19:01,350 --> 00:18:58,480
if you look at this table right you'll

480
00:19:02,630 --> 00:19:01,360
see um in the label column pre-current

481
00:19:05,430 --> 00:19:02,640
and post

482
00:19:08,150 --> 00:19:05,440
in the question area um you can see

483
00:19:09,990 --> 00:19:08,160
right um is there anyone with us and the

484
00:19:11,430 --> 00:19:10,000
readings that are associated with that

485
00:19:13,430 --> 00:19:11,440
period

486
00:19:16,230 --> 00:19:13,440
as well as the audio file that it's

487
00:19:18,470 --> 00:19:16,240
linked to at the end of the table

488
00:19:20,789 --> 00:19:18,480

but also note that it's giving readings

489
00:19:22,630 --> 00:19:20,799
five seconds before you ask the question

490
00:19:24,630 --> 00:19:22,640
and five seconds later so if you're

491
00:19:26,710 --> 00:19:24,640
looking for a delayed response or a

492
00:19:28,390 --> 00:19:26,720
response that occurs afterwards in terms

493
00:19:29,830 --> 00:19:28,400
of the environment

494
00:19:35,830 --> 00:19:29,840
a researcher is able to look at that

495
00:19:41,830 --> 00:19:38,950
and then we also have um sentinel mode

496
00:19:43,190 --> 00:19:41,840
which works a lot like those deer

497
00:19:45,830 --> 00:19:43,200
cameras

498
00:19:47,590 --> 00:19:45,840
that people may have seen years ago

499
00:19:50,070 --> 00:19:47,600
this is a mode for monitoring a

500
00:19:52,310 --> 00:19:50,080
particular area over time

501
00:19:54,070 --> 00:19:52,320
beyond what freestyle mode would do in

502
00:19:54,870 --> 00:19:54,080
just terms of collecting environmental

503
00:19:57,909 --> 00:19:54,880
data

504
00:19:59,990 --> 00:19:57,919
so what simple mode does is it uses the

505
00:20:02,310 --> 00:20:00,000
front camera on the phone

506
00:20:04,549 --> 00:20:02,320
and it will trigger both a photo and

507
00:20:06,870 --> 00:20:04,559
audio recording of five seconds

508
00:20:08,149 --> 00:20:06,880
based on the environmental reading

509
00:20:10,950 --> 00:20:08,159
levels

510
00:20:13,590 --> 00:20:10,960
um the way the app does that is it takes

511
00:20:16,630 --> 00:20:13,600
a 90 second baseline to determine what

512
00:20:18,710 --> 00:20:16,640
the mean and the standard deviation is

513
00:20:21,029 --> 00:20:18,720

and then you can preset

514
00:20:24,070 --> 00:20:21,039
um sentinel mode

515
00:20:25,430 --> 00:20:24,080
by increments of 0.2 to 2 standard

516
00:20:28,470 --> 00:20:25,440
deviations

517
00:20:31,750 --> 00:20:28,480
uh where you want something to where you

518
00:20:35,029 --> 00:20:31,760
want basically mesa to trigger

519
00:20:36,310 --> 00:20:35,039
photo and audio collection um so if you

520
00:20:38,630 --> 00:20:36,320
wanted to make this thing super

521
00:20:40,310 --> 00:20:38,640
sensitive you can set all of the presets

522
00:20:42,470 --> 00:20:40,320
for the environmental variables so set

523
00:20:45,190 --> 00:20:42,480
emf x y and z at

524
00:20:47,590 --> 00:20:45,200
one in other words point two um and same

525
00:20:49,510 --> 00:20:47,600
thing with light and the same thing with

526
00:20:51,430 --> 00:20:49,520
any of the other variables and this

527
00:20:53,750 --> 00:20:51,440
thing will go off endlessly

528
00:20:55,909 --> 00:20:53,760
collecting photo and audio recordings

529
00:20:57,029 --> 00:20:55,919
that are also synced to environmental

530
00:20:58,950 --> 00:20:57,039
data

531
00:21:00,870 --> 00:20:58,960
um we don't recommend that we found

532
00:21:03,750 --> 00:21:00,880
we've found some certain settings that

533
00:21:05,270 --> 00:21:03,760
tend to work best in terms of capturing

534
00:21:07,750 --> 00:21:05,280
um

535
00:21:09,270 --> 00:21:07,760
basically good photos and audio uh but

536
00:21:11,350 --> 00:21:09,280
it's worth noting at the current time

537
00:21:14,630 --> 00:21:11,360
that we're using the light sensor

538
00:21:16,630 --> 00:21:14,640

as a proxy motion detector right so

539
00:21:17,990 --> 00:21:16,640
anytime you move in front of a phone um

540
00:21:19,750 --> 00:21:18,000
or if you've ever looked at your phone

541
00:21:21,590 --> 00:21:19,760
and it gets dimmer or it gets brighter

542
00:21:23,430 --> 00:21:21,600
as a function of having your

543
00:21:25,750 --> 00:21:23,440
face close to it that's that's the light

544
00:21:28,549 --> 00:21:25,760
sensor going off so we're using the

545
00:21:29,909 --> 00:21:28,559
light sensor uh to detect changes to a

546
00:21:31,510 --> 00:21:29,919
certain degree which would occur if

547
00:21:33,750 --> 00:21:31,520
somebody stood in front

548
00:21:35,750 --> 00:21:33,760
of the phone or if

549
00:21:37,350 --> 00:21:35,760
you saw some sort of light anomaly or

550
00:21:40,230 --> 00:21:37,360
something else

551
00:21:44,390 --> 00:21:40,240
to in theory trigger right the um the

552
00:21:49,270 --> 00:21:46,870
um here again we have kind of a two two

553
00:21:50,470 --> 00:21:49,280
screenshots or two snaps from a phone in

554
00:21:53,110 --> 00:21:50,480
signal mode

555
00:21:55,270 --> 00:21:53,120
where you can see again right the date

556
00:21:58,950 --> 00:21:55,280
um the exact period of time that's

557
00:22:00,630 --> 00:21:58,960
covering um the current which represents

558
00:22:02,870 --> 00:22:00,640
the data that was collected when the

559
00:22:05,990 --> 00:22:02,880
phone uh phone took the pictures and the

560
00:22:07,430 --> 00:22:06,000
audio but also the previous readings and

561
00:22:09,029 --> 00:22:07,440
the post readings again if you want to

562
00:22:15,909 --> 00:22:09,039
look for a time lag effect in

563
00:22:19,909 --> 00:22:17,669

so um

564
00:22:21,590 --> 00:22:19,919
notes and caveats and here's where i may

565
00:22:23,270 --> 00:22:21,600
ramble on for a little bit

566
00:22:26,870 --> 00:22:23,280
um

567
00:22:28,950 --> 00:22:26,880
mesa 3 is meant to be a flexible uh tool

568
00:22:31,110 --> 00:22:28,960
kind of a laboratory-grade environment

569
00:22:32,950 --> 00:22:31,120
data logger

570
00:22:35,190 --> 00:22:32,960
it's uh something i didn't bring up

571
00:22:37,190 --> 00:22:35,200
earlier but every time you use mesa part

572
00:22:39,350 --> 00:22:37,200
of the output also provides the

573
00:22:42,870 --> 00:22:39,360
sensitivity and resolution

574
00:22:45,029 --> 00:22:42,880
of the actual hardware or sensors in the

575
00:22:47,110 --> 00:22:45,039
phone that you're using so

576
00:22:48,710 --> 00:22:47,120
if any of you guys are are thinking well

577
00:22:49,909 --> 00:22:48,720
what if we're using different phones or

578
00:22:51,190 --> 00:22:49,919
what if the sensors are different

579
00:22:53,510 --> 00:22:51,200
quality

580
00:22:55,750 --> 00:22:53,520
you can standardize that because mesa

581
00:22:57,750 --> 00:22:55,760
will grab that information for you

582
00:22:59,590 --> 00:22:57,760
and and tell you what the sensitivity

583
00:23:02,310 --> 00:22:59,600
and resolution of each of the sensors in

584
00:23:03,110 --> 00:23:02,320
your phone um actually are

585
00:23:05,270 --> 00:23:03,120
um

586
00:23:07,750 --> 00:23:05,280
it works as a participant level

587
00:23:11,029 --> 00:23:07,760
documentation unit either through using

588
00:23:13,190 --> 00:23:11,039

the comments or the sse scale it works

589
00:23:15,430 --> 00:23:13,200
good as just a general data logger for

590
00:23:17,350 --> 00:23:15,440
long-term observation

591
00:23:19,990 --> 00:23:17,360
if any of you guys are doing laboratory

592
00:23:21,750 --> 00:23:20,000
studies where you just want good

593
00:23:23,669 --> 00:23:21,760
environmental data over the period that

594
00:23:26,070 --> 00:23:23,679
you're doing lab work

595
00:23:27,430 --> 00:23:26,080
you can put four of these phones

596
00:23:29,430 --> 00:23:27,440
in the room

597
00:23:31,590 --> 00:23:29,440
and let them run and you have your your

598
00:23:33,669 --> 00:23:31,600
time synced environmental data and then

599
00:23:37,350 --> 00:23:33,679
of course we want to build upon the idea

600
00:23:40,070 --> 00:23:37,360
of an evp knock experiment series

601
00:23:42,470 --> 00:23:40,080
for several reasons

602
00:23:43,750 --> 00:23:42,480
which i'm going to get to

603
00:23:47,029 --> 00:23:43,760
so again

604
00:23:49,669 --> 00:23:47,039
mesa is hardware sensor dependent

605
00:23:52,149 --> 00:23:49,679
so the phone has to have the appropriate

606
00:23:53,909 --> 00:23:52,159
sensors installed to fully use as a data

607
00:23:55,990 --> 00:23:53,919
logger

608
00:23:59,430 --> 00:23:56,000
that can be a very tricky process i

609
00:24:02,149 --> 00:23:59,440
think i spent somewhere upwards of 15

610
00:24:04,870 --> 00:24:02,159
hours digging around websites

611
00:24:06,630 --> 00:24:04,880
to try and find um a list of sensors

612
00:24:08,950 --> 00:24:06,640
that are installed in various phones and

613
00:24:10,630 --> 00:24:08,960

there's a lot of them um but if you

614
00:24:12,789 --> 00:24:10,640
email us we can help you out with some

615
00:24:16,390 --> 00:24:12,799
recommendations if you're interested

616
00:24:19,110 --> 00:24:16,400
um and to be fully honest this is still

617
00:24:20,789 --> 00:24:19,120
an application in development

618
00:24:22,710 --> 00:24:20,799
we've been working on it for about 18

619
00:24:25,269 --> 00:24:22,720
months but any of you with coding

620
00:24:27,269 --> 00:24:25,279
experience knows that there are all

621
00:24:30,149 --> 00:24:27,279
sorts of little bugs

622
00:24:30,950 --> 00:24:30,159
that you have to put up with

623
00:24:34,070 --> 00:24:30,960
which

624
00:24:35,590 --> 00:24:34,080
cindy little who helped us a lot in um

625
00:24:37,669 --> 00:24:35,600
early versions of this went through a

626
00:24:39,110 --> 00:24:37,679
fair amount of frustration trying to

627
00:24:41,430 --> 00:24:39,120
trying to help us

628
00:24:43,750 --> 00:24:41,440
um we also need to make it more

629
00:24:44,789 --> 00:24:43,760
user-friendly there is

630
00:24:47,110 --> 00:24:44,799
um

631
00:24:48,070 --> 00:24:47,120
you know kind of a gap between wanting

632
00:24:50,390 --> 00:24:48,080
to make

633
00:24:52,470 --> 00:24:50,400
uh the scientists in our organization

634
00:24:55,830 --> 00:24:52,480
happy and provide really really rich and

635
00:24:57,830 --> 00:24:55,840
full data uh but also make it usable by

636
00:25:01,190 --> 00:24:57,840
people who aren't necessarily super

637
00:25:05,430 --> 00:25:01,200
mathematically savvy um we do still have

638
00:25:07,190 --> 00:25:05,440

some bugs uh notably uh some other apps

639
00:25:11,430 --> 00:25:07,200
or notifications will interrupt basic

640
00:25:15,110 --> 00:25:11,440
three's use and we are still working on

641
00:25:17,669 --> 00:25:15,120
kind of a standardized data report form

642
00:25:20,950 --> 00:25:17,679
uh that we can get mesa to produce uh

643
00:25:23,190 --> 00:25:20,960
for people who don't want to dig into

644
00:25:26,070 --> 00:25:23,200
endless endless data sets

645
00:25:28,870 --> 00:25:26,080
um we're projecting a full version of a

646
00:25:31,269 --> 00:25:28,880
full workable version uh for everyone to

647
00:25:33,669 --> 00:25:31,279
use probably in six months it may be as

648
00:25:39,029 --> 00:25:33,679
much as 12 depending on

649
00:25:42,870 --> 00:25:41,190
in terms of why we made

650
00:25:44,470 --> 00:25:42,880
mesa you know as i said at the beginning

651
00:25:45,750 --> 00:25:44,480
of the presentation

652
00:25:48,230 --> 00:25:45,760
um

653
00:25:49,990 --> 00:25:48,240
you know we are really really uh really

654
00:25:52,789 --> 00:25:50,000
really believe in

655
00:25:55,669 --> 00:25:52,799
you know the popularity um and the large

656
00:25:57,029 --> 00:25:55,679
body of people who are interested in

657
00:25:59,750 --> 00:25:57,039
field phenomena

658
00:26:02,630 --> 00:25:59,760
and so um we are

659
00:26:05,430 --> 00:26:02,640
going to be producing uh training

660
00:26:07,830 --> 00:26:05,440
education and hopefully some recruitment

661
00:26:09,750 --> 00:26:07,840
uh from the institute cindy little is

662
00:26:11,029 --> 00:26:09,760
going to be helping me with that

663
00:26:12,789 --> 00:26:11,039

and we're going to use a two-pronged

664
00:26:15,510 --> 00:26:12,799
attack we're hoping

665
00:26:17,350 --> 00:26:15,520
to first create a series of hands-on

666
00:26:20,310 --> 00:26:17,360
mini experiments

667
00:26:22,630 --> 00:26:20,320
for basic lay person science training

668
00:26:25,590 --> 00:26:22,640
revolving around ipc communication

669
00:26:27,750 --> 00:26:25,600
control data um you know instrumental

670
00:26:29,190 --> 00:26:27,760
trans communication and even though

671
00:26:30,470 --> 00:26:29,200
there's not a lot of research that's

672
00:26:32,149 --> 00:26:30,480
been done out there formally in

673
00:26:36,310 --> 00:26:32,159
peer-reviewed journals

674
00:26:38,149 --> 00:26:36,320
we as parapsychologists are left with

675
00:26:41,750 --> 00:26:38,159
a simple fact that many of these

676
00:26:43,110 --> 00:26:41,760
layperson groups regularly use evp

677
00:26:45,990 --> 00:26:43,120
spirit box

678
00:26:49,909 --> 00:26:46,000
knock responses or even flashlight

679
00:26:52,549 --> 00:26:49,919
responses as evidence of the paranormal

680
00:26:53,669 --> 00:26:52,559
yet we have absolutely

681
00:26:56,470 --> 00:26:53,679
no

682
00:26:58,470 --> 00:26:56,480
data in terms of

683
00:27:01,590 --> 00:26:58,480
you know having uh control data sets for

684
00:27:02,870 --> 00:27:01,600
these these type of responses how many

685
00:27:05,510 --> 00:27:02,880
for instance

686
00:27:07,830 --> 00:27:05,520
random knocks would you expect in a set

687
00:27:09,750 --> 00:27:07,840
of 30 questions

688
00:27:12,950 --> 00:27:09,760

um you know how likely you know what's

689
00:27:15,190 --> 00:27:12,960
the with the random uh odds

690
00:27:16,470 --> 00:27:15,200
uh through a data set of you know

691
00:27:18,789 --> 00:27:16,480
getting some random knocks and the

692
00:27:21,430 --> 00:27:18,799
answer is surely we would get some uh

693
00:27:24,310 --> 00:27:21,440
same thing with not so much interpreting

694
00:27:27,190 --> 00:27:24,320
evp but how often will you get an odd

695
00:27:29,269 --> 00:27:27,200
noise in a five second period just by

696
00:27:31,269 --> 00:27:29,279
chance um

697
00:27:33,750 --> 00:27:31,279
the issues of peridolia aside and

698
00:27:36,870 --> 00:27:33,760
interpretation of an evp we don't even

699
00:27:38,870 --> 00:27:36,880
have basic response acceptances for any

700
00:27:42,070 --> 00:27:38,880
of these um and they wouldn't be that

701
00:27:43,909 --> 00:27:42,080
hard to create um and i'm going to kind

702
00:27:45,510 --> 00:27:43,919
of stick a neck out and say we should be

703
00:27:47,750 --> 00:27:45,520
doing it because

704
00:27:50,789 --> 00:27:47,760
um if we can debunk it we should debunk

705
00:27:53,430 --> 00:27:50,799
it if we find some validity in it um if

706
00:27:55,110 --> 00:27:53,440
nothing else we can create controls that

707
00:27:57,830 --> 00:27:55,120
people can easily compare their

708
00:27:58,630 --> 00:27:57,840
responses against

709
00:28:04,389 --> 00:27:58,640
um

710
00:28:06,070 --> 00:28:04,399
as maybe kind of a training method for

711
00:28:07,430 --> 00:28:06,080
lay people and we're probably going to

712
00:28:09,350 --> 00:28:07,440
put that on

713
00:28:11,110 --> 00:28:09,360

the institute's website and maybe even

714
00:28:12,070 --> 00:28:11,120
start a patreon campaign along those

715
00:28:13,430 --> 00:28:12,080
lines

716
00:28:17,029 --> 00:28:13,440
uh we're going to create a fairly

717
00:28:19,110 --> 00:28:17,039
comprehensive mesa 3 training use

718
00:28:21,830 --> 00:28:19,120
program for people

719
00:28:23,909 --> 00:28:21,840
our hope is to get enough people

720
00:28:25,830 --> 00:28:23,919
interested with this app

721
00:28:27,389 --> 00:28:25,840
and maybe doing citizen science and

722
00:28:28,950 --> 00:28:27,399
working with other

723
00:28:31,750 --> 00:28:28,960
parapsychologists

724
00:28:33,510 --> 00:28:31,760
to um you know get them trained so that

725
00:28:35,590 --> 00:28:33,520
they're comfortable using

726
00:28:37,269 --> 00:28:35,600
uh this sort of application to help

727
00:28:40,549 --> 00:28:37,279
document and collect data in their

728
00:28:43,990 --> 00:28:41,750
um

729
00:28:46,310 --> 00:28:44,000
the other big step that we want to move

730
00:28:47,990 --> 00:28:46,320
into is

731
00:28:49,909 --> 00:28:48,000
aside from lay person collaboration with

732
00:28:53,190 --> 00:28:49,919
big data is some kind of internet

733
00:28:54,549 --> 00:28:53,200
repository for mesa 3 investigations and

734
00:28:56,870 --> 00:28:54,559
data sets

735
00:28:59,510 --> 00:28:56,880
the idea would be that

736
00:29:02,950 --> 00:28:59,520
assuming uh you know either formal

737
00:29:05,190 --> 00:29:02,960
groups or layperson groups used mesa and

738
00:29:07,190 --> 00:29:05,200

met the criteria for following procedure

739
00:29:08,789 --> 00:29:07,200
directions that we can have a public

740
00:29:12,630 --> 00:29:08,799
website where these data sets would be

741
00:29:14,789 --> 00:29:12,640
available for anyone uh to use access

742
00:29:18,070 --> 00:29:14,799
analyze or comment on

743
00:29:19,029 --> 00:29:18,080
um so that's kind of a very kind of wide

744
00:29:22,230 --> 00:29:19,039
open

745
00:29:26,230 --> 00:29:22,240
um public data set for you know haunting

746
00:29:28,070 --> 00:29:26,240
investigations for lack of better words

747
00:29:29,990 --> 00:29:28,080
and that having been said uh this is

748
00:29:32,389 --> 00:29:30,000
where i i offered you a set of kitchen

749
00:29:35,830 --> 00:29:32,399
knives if you just uh

750
00:29:37,669 --> 00:29:35,840
try mesa 3 for 19.95 um actually no it's

751
00:29:39,110 --> 00:29:37,679
free but we do need help with the

752
00:29:40,789 --> 00:29:39,120
project um

753
00:29:42,950 --> 00:29:40,799
we're going to do this on our own one

754
00:29:45,669 --> 00:29:42,960
way or another but we want to emphasize

755
00:29:48,310 --> 00:29:45,679
that open collaboration is wanted if

756
00:29:50,310 --> 00:29:48,320
what you're seeing here uh is is

757
00:29:52,789 --> 00:29:50,320
something you think you can use

758
00:29:55,830 --> 00:29:52,799
uh we absolutely have no problem sharing

759
00:29:57,990 --> 00:29:55,840
it with you we're interested in grabbing

760
00:29:59,750 --> 00:29:58,000
layperson investigative groups for

761
00:30:02,070 --> 00:29:59,760
further beta testing and training

762
00:30:03,830 --> 00:30:02,080
reviews so we can make it better get the

763
00:30:06,149 --> 00:30:03,840

outputs

764
00:30:08,470 --> 00:30:06,159
you know kind of easy to use or

765
00:30:10,870 --> 00:30:08,480
an easy method that you can share with

766
00:30:12,630 --> 00:30:10,880
another group or with

767
00:30:14,230 --> 00:30:12,640
people in a residential location that's

768
00:30:16,630 --> 00:30:14,240
being investigated

769
00:30:19,510 --> 00:30:16,640
we are absolutely interested in other

770
00:30:21,590 --> 00:30:19,520
parapsychologists who want to

771
00:30:22,549 --> 00:30:21,600
collaborate along the lines of field

772
00:30:24,470 --> 00:30:22,559
research

773
00:30:25,750 --> 00:30:24,480
and possibly guide some of these little

774
00:30:27,909 --> 00:30:25,760
person groups

775
00:30:30,310 --> 00:30:27,919
um and if anyone out here has coding

776
00:30:32,149 --> 00:30:30,320
experience and would love to help i am

777
00:30:35,990 --> 00:30:32,159
not prideful and i will

778
00:30:38,630 --> 00:30:36,000
happily happily happily uh let you uh

779
00:30:41,190 --> 00:30:38,640
help with the entire process

780
00:30:43,909 --> 00:30:41,200
um so if anyone's interested um at all

781
00:30:45,990 --> 00:30:43,919
in this project or using the application

782
00:30:48,789 --> 00:30:46,000
um by all means

783
00:30:50,470 --> 00:30:48,799
um if you think uh and honestly with

784
00:30:51,909 --> 00:30:50,480
beta version right now

785
00:30:53,830 --> 00:30:51,919
um if you're

786
00:30:56,470 --> 00:30:53,840
mildly tech savvy

787
00:30:58,470 --> 00:30:56,480
both freestyle mode and baseline mode is

788
00:31:01,110 --> 00:30:58,480

pretty solid and the data is fairly easy

789
00:31:03,269 --> 00:31:01,120
to get to and analyze um but if you have

790
00:31:04,470 --> 00:31:03,279
questions or you'd like to get access to

791
00:31:07,590 --> 00:31:04,480
it because right now we have it on a

792
00:31:10,630 --> 00:31:07,600
restricted google play server

793
00:31:13,669 --> 00:31:10,640
because it's not ready for full polish

794
00:31:16,070 --> 00:31:13,679
you're welcome to contact bridget cotton

795
00:31:19,350 --> 00:31:16,080
at israelnet.org she is our faithful

796
00:31:21,669 --> 00:31:19,360
executive assistant and she will happily

797
00:31:24,070 --> 00:31:21,679
get you in touch with me or someone that

798
00:31:26,149 --> 00:31:24,080
can get you to the app

799
00:31:28,070 --> 00:31:26,159
so i spoke kind of talk i spoke kind of

800
00:31:29,190 --> 00:31:28,080
quickly with this but

801
00:31:30,389 --> 00:31:29,200
um

802
00:31:32,230 --> 00:31:30,399
magical

803
00:31:34,389 --> 00:31:32,240
questions

804
00:31:35,350 --> 00:31:34,399
page

805
00:31:37,830 --> 00:31:35,360
okay

806
00:31:39,590 --> 00:31:37,840
thank you brian that was great and sign

807
00:31:41,590 --> 00:31:39,600
me up

808
00:31:43,509 --> 00:31:41,600
got it

809
00:31:44,789 --> 00:31:43,519
all right so i'm going to go back

810
00:31:46,230 --> 00:31:44,799
to

811
00:31:48,149 --> 00:31:46,240
the beginning here and find these

812
00:31:50,310 --> 00:31:48,159
questions

813
00:31:51,830 --> 00:31:50,320

we're all right so first thing there's

814
00:31:53,430 --> 00:31:51,840
actually this this question actually

815
00:31:54,310 --> 00:31:53,440
does relate to another question to some

816
00:31:57,190 --> 00:31:54,320
extent

817
00:32:00,630 --> 00:31:57,200
so the question was does it collect does

818
00:32:02,149 --> 00:32:00,640
the the app collect gps data with the

819
00:32:05,430 --> 00:32:02,159
photos

820
00:32:08,710 --> 00:32:05,440
i would love if it would um and that is

821
00:32:10,630 --> 00:32:08,720
a possible future

822
00:32:12,630 --> 00:32:10,640
when i say possible i'd love love for it

823
00:32:15,350 --> 00:32:12,640
to do it but you also have to recognize

824
00:32:16,230 --> 00:32:15,360
the gps coordinates only get specific

825
00:32:19,029 --> 00:32:16,240
enough

826
00:32:21,110 --> 00:32:19,039
uh to like mark a location

827
00:32:22,950 --> 00:32:21,120
uh but i'm fairly certain from what i've

828
00:32:23,990 --> 00:32:22,960
been what i've investigated so far with

829
00:32:25,509 --> 00:32:24,000
the tech

830
00:32:28,230 --> 00:32:25,519
that you're not gonna get specific

831
00:32:30,789 --> 00:32:28,240
enough to actually document room level

832
00:32:32,230 --> 00:32:30,799
areas with gps

833
00:32:33,350 --> 00:32:32,240
well and that actually brings up another

834
00:32:35,909 --> 00:32:33,360
question

835
00:32:37,590 --> 00:32:35,919
which is how's the data collected is it

836
00:32:39,350 --> 00:32:37,600
is it a file on the phone is it

837
00:32:41,190 --> 00:32:39,360
encrypted here's your network

838
00:32:43,110 --> 00:32:41,200

infrastructure one question in network

839
00:32:44,549 --> 00:32:43,120
infrastructure possible to automatically

840
00:32:47,909 --> 00:32:44,559
load up the data

841
00:32:50,549 --> 00:32:47,919
to dedicate setup project server but the

842
00:32:51,909 --> 00:32:50,559
question is then related to

843
00:32:54,310 --> 00:32:51,919
in the eu

844
00:32:56,710 --> 00:32:54,320
we have to there are measures for gdpr

845
00:33:00,230 --> 00:32:56,720
compliance and in california as well

846
00:33:02,470 --> 00:33:00,240
for privacy so that the geotag might be

847
00:33:04,310 --> 00:33:02,480
considered an issue with personal data

848
00:33:07,590 --> 00:33:04,320
it could be um

849
00:33:10,389 --> 00:33:07,600
to go back to the to the file access

850
00:33:13,590 --> 00:33:10,399
we originally tried to get the app to

851
00:33:14,789 --> 00:33:13,600
directly upload to a google account a

852
00:33:16,389 --> 00:33:14,799
google email

853
00:33:18,389 --> 00:33:16,399
um but we had some trouble with that

854
00:33:19,590 --> 00:33:18,399
integration so in the current

855
00:33:23,190 --> 00:33:19,600
version

856
00:33:26,070 --> 00:33:23,200
it dumps all of the data into um into

857
00:33:28,149 --> 00:33:26,080
folders into the actual phone and then

858
00:33:29,909 --> 00:33:28,159
you can either manually upload them to

859
00:33:32,549 --> 00:33:29,919
google drive

860
00:33:34,549 --> 00:33:32,559
just by using a thumb and swiping

861
00:33:35,990 --> 00:33:34,559
or you can plug your phone in and pull

862
00:33:38,389 --> 00:33:36,000
the data directly

863
00:33:40,230 --> 00:33:38,399

all of the data is in csv format

864
00:33:43,269 --> 00:33:40,240
um right now we have separate folders

865
00:33:44,310 --> 00:33:43,279
set up for evp mode for baseline mode

866
00:33:49,430 --> 00:33:44,320
um

867
00:33:51,990 --> 00:33:49,440
in the other one but the point is uh

868
00:33:53,750 --> 00:33:52,000
yeah at this point it's all in folders

869
00:33:57,669 --> 00:33:53,760
it's easily uploadable there's no

870
00:33:59,590 --> 00:33:57,679
conversion necessary um all the audio

871
00:34:01,430 --> 00:33:59,600
and all of the photos can be just

872
00:34:04,950 --> 00:34:01,440
directly dumped onto a computer or

873
00:34:06,950 --> 00:34:04,960
directly dumped into a google drive

874
00:34:09,109 --> 00:34:06,960
okay thanks all right so this comes from

875
00:34:10,389 --> 00:34:09,119
roger nelson which will be um they're

876
00:34:12,550 --> 00:34:10,399
pretty obvious from the question from

877
00:34:14,710 --> 00:34:12,560
the comment here it's more of a comment

878
00:34:16,470 --> 00:34:14,720
and i think you two will need to talk

879
00:34:18,550 --> 00:34:16,480
but roger says i'd like to talk about

880
00:34:20,629 --> 00:34:18,560
generalizing the package possibly adding

881
00:34:22,310 --> 00:34:20,639
modules for research on

882
00:34:24,389 --> 00:34:22,320
consciousness for example the global

883
00:34:26,710 --> 00:34:24,399
consciousness project data would be

884
00:34:28,230 --> 00:34:26,720
greatly enhanced by these measurements

885
00:34:31,829 --> 00:34:28,240
mesa can help us learn about

886
00:34:34,069 --> 00:34:31,839
consciousness capacities effects fields

887
00:34:37,510 --> 00:34:34,079
function as a connector across global

888
00:34:38,950 --> 00:34:37,520

distances as a kind of non-local reach

889
00:34:41,109 --> 00:34:38,960
absolutely

890
00:34:43,669 --> 00:34:41,119
yeah get get it please get in contact

891
00:34:45,510 --> 00:34:43,679
with me um we would love to further not

892
00:34:47,510 --> 00:34:45,520
only develop this app

893
00:34:49,669 --> 00:34:47,520
but we are really pushing

894
00:34:52,310 --> 00:34:49,679
to try and grab funding to develop

895
00:34:54,230 --> 00:34:52,320
further applications just for general

896
00:34:55,990 --> 00:34:54,240
scientific research use

897
00:34:58,230 --> 00:34:56,000
i would love to see

898
00:35:00,150 --> 00:34:58,240
a well-encrypted

899
00:35:01,750 --> 00:35:00,160
application collecting environmental

900
00:35:04,710 --> 00:35:01,760
data but also set up to where

901
00:35:07,190 --> 00:35:04,720
researchers could have students or

902
00:35:09,510 --> 00:35:07,200
participants download an app

903
00:35:12,310 --> 00:35:09,520
use it in a longitudinal diary format if

904
00:35:13,829 --> 00:35:12,320
they wanted to do esp tests at random

905
00:35:15,829 --> 00:35:13,839
times

906
00:35:18,390 --> 00:35:15,839
to be honest the coding is not that

907
00:35:19,750 --> 00:35:18,400
difficult we just need enough resources

908
00:35:22,630 --> 00:35:19,760
and time

909
00:35:24,230 --> 00:35:22,640
to put together more phone tools

910
00:35:26,310 --> 00:35:24,240
so this is going to probably be the

911
00:35:27,670 --> 00:35:26,320
first of several applications we want to

912
00:35:29,910 --> 00:35:27,680
develop

913
00:35:31,589 --> 00:35:29,920

and again input from anybody is more

914
00:35:34,390 --> 00:35:31,599
than welcome because we intend to share

915
00:35:35,589 --> 00:35:34,400
these with the community as a whole

916
00:35:37,349 --> 00:35:35,599
that's great

917
00:35:39,510 --> 00:35:37,359
okay um

918
00:35:43,190 --> 00:35:39,520
can you say a few more words about the

919
00:35:45,430 --> 00:35:43,200
three emf measurements

920
00:35:47,589 --> 00:35:45,440
um well of course

921
00:35:49,990 --> 00:35:47,599
by that i i guess

922
00:35:51,750 --> 00:35:50,000
like kind of the background of emf or

923
00:35:53,829 --> 00:35:51,760
i'm assuming you know they had three you

924
00:35:55,190 --> 00:35:53,839
know different axes for the emf i'm

925
00:35:57,270 --> 00:35:55,200
assuming that question is related to

926
00:36:00,230 --> 00:35:57,280
that okay yeah so

927
00:36:03,349 --> 00:36:00,240
normally when you're using emf meters um

928
00:36:06,230 --> 00:36:03,359
they are collecting x y and z data so

929
00:36:08,710 --> 00:36:06,240
right left right um forward backwards

930
00:36:11,349 --> 00:36:08,720
and up down right x y and z

931
00:36:13,109 --> 00:36:11,359
um your trifield meters your k2 meters

932
00:36:14,870 --> 00:36:13,119
all the stuff you see on shows and the

933
00:36:16,550 --> 00:36:14,880
stuff that a lot of people use

934
00:36:18,710 --> 00:36:16,560
um even when they're they say they're

935
00:36:21,510 --> 00:36:18,720
tri-axis which that's what that means

936
00:36:23,829 --> 00:36:21,520
it's collecting emf data in x y and z

937
00:36:25,190 --> 00:36:23,839
axes what it ends up doing is just

938
00:36:26,870 --> 00:36:25,200

averaging

939
00:36:28,710 --> 00:36:26,880
those three readings

940
00:36:30,390 --> 00:36:28,720
um to give you the reading that you see

941
00:36:32,630 --> 00:36:30,400
on your meeting

942
00:36:34,390 --> 00:36:32,640
this is a little bit more broken down so

943
00:36:36,630 --> 00:36:34,400
you can actually see what's going on in

944
00:36:38,870 --> 00:36:36,640
terms of left right up down

945
00:36:40,550 --> 00:36:38,880
and the reason we did that is that we

946
00:36:42,790 --> 00:36:40,560
thought maybe some researchers might be

947
00:36:44,950 --> 00:36:42,800
interested in triangulation

948
00:36:46,069 --> 00:36:44,960
um in the uh

949
00:36:48,710 --> 00:36:46,079
in the paper we published on the

950
00:36:50,710 --> 00:36:48,720
whispers later than around 2019 we were

951
00:36:52,790 --> 00:36:50,720
able to show because we were using x y

952
00:36:55,510 --> 00:36:52,800
and z measurements that

953
00:36:57,430 --> 00:36:55,520
um fields were not coming from another

954
00:36:59,349 --> 00:36:57,440
room and yet we were seeing

955
00:37:01,109 --> 00:36:59,359
um well for lack of better words

956
00:37:03,349 --> 00:37:01,119
spontaneously generated fields or

957
00:37:06,150 --> 00:37:03,359
changes in a small area in a room

958
00:37:09,270 --> 00:37:06,160
where we were actually having uh two

959
00:37:10,870 --> 00:37:09,280
beachball pk trigger objects uh moving

960
00:37:11,829 --> 00:37:10,880
right we were lucky enough to document

961
00:37:14,950 --> 00:37:11,839
like

962
00:37:17,510 --> 00:37:14,960
11 legitimate movements

963
00:37:18,630 --> 00:37:17,520

and there was a significant association

964
00:37:20,790 --> 00:37:18,640
with

965
00:37:22,790 --> 00:37:20,800
basically emf spikes high spikes and low

966
00:37:24,550 --> 00:37:22,800
spikes uh right around the period where

967
00:37:26,310 --> 00:37:24,560
those balls were finding

968
00:37:27,190 --> 00:37:26,320
but we were also able to demonstrate

969
00:37:30,950 --> 00:37:27,200
because

970
00:37:33,589 --> 00:37:30,960
of the x y and z breakdown of emf that

971
00:37:35,910 --> 00:37:33,599
the meter we had 15 feet away in another

972
00:37:37,030 --> 00:37:35,920
room was not showing any of those

973
00:37:39,190 --> 00:37:37,040
changes

974
00:37:41,829 --> 00:37:39,200
and so by that deduction

975
00:37:44,069 --> 00:37:41,839
um we could basically demonstrate from

976
00:37:45,910 --> 00:37:44,079
the other meters that a field was not

977
00:37:47,349 --> 00:37:45,920
being projected into this particular

978
00:37:48,790 --> 00:37:47,359
room because the other meters would have

979
00:37:50,950 --> 00:37:48,800
picked it up

980
00:37:53,670 --> 00:37:50,960
um so yeah the x y and z is actually

981
00:37:54,790 --> 00:37:53,680
very useful um if you're going to try

982
00:37:56,390 --> 00:37:54,800
and

983
00:37:58,230 --> 00:37:56,400
loosely tackle

984
00:37:59,910 --> 00:37:58,240
um

985
00:38:03,589 --> 00:37:59,920
the complex environment of emf that

986
00:38:06,310 --> 00:38:04,710
hopefully that's

987
00:38:08,150 --> 00:38:06,320
yeah i think that makes sense uh

988
00:38:09,589 --> 00:38:08,160

hopefully it makes sense to uh to the

989
00:38:11,510 --> 00:38:09,599
person who asked

990
00:38:14,150 --> 00:38:11,520
um and also a follow-up question on the

991
00:38:17,589 --> 00:38:14,160
temperature is it surface or air temp

992
00:38:19,510 --> 00:38:17,599
that these sensors might use

993
00:38:21,349 --> 00:38:19,520
belief is air temp but i got to be

994
00:38:23,670 --> 00:38:21,359
honest it would probably depend on the

995
00:38:24,950 --> 00:38:23,680
hardware and the phone

996
00:38:26,470 --> 00:38:24,960
um so

997
00:38:28,630 --> 00:38:26,480
that's actually a good point for me to

998
00:38:30,829 --> 00:38:28,640
check into and make sure that details of

999
00:38:32,390 --> 00:38:30,839
the sensors are addressing that

1000
00:38:34,710 --> 00:38:32,400
issue

1001
00:38:37,430 --> 00:38:34,720
okay and then related to the barometric

1002
00:38:40,950 --> 00:38:37,440
sensors will they pick up air motions

1003
00:38:42,390 --> 00:38:40,960
and and deep subsonic sound

1004
00:38:44,790 --> 00:38:42,400
again that's going to be a function of

1005
00:38:46,470 --> 00:38:44,800
the hardware in the phone um

1006
00:38:47,430 --> 00:38:46,480
and and i want to be careful here

1007
00:38:50,310 --> 00:38:47,440
because

1008
00:38:52,390 --> 00:38:50,320
um if you want to buy a eight to nine

1009
00:38:53,430 --> 00:38:52,400
hundred dollar phone and you double

1010
00:38:54,310 --> 00:38:53,440
checked it

1011
00:38:56,550 --> 00:38:54,320
um

1012
00:38:58,870 --> 00:38:56,560
you might get some very very you know

1013
00:39:00,390 --> 00:38:58,880

sensitive sensors that that mesa can

1014
00:39:01,990 --> 00:39:00,400
utilize but again

1015
00:39:03,510 --> 00:39:02,000
uh the data that you're going to get is

1016
00:39:04,790 --> 00:39:03,520
always going to be a function of the

1017
00:39:07,510 --> 00:39:04,800
quality of the sensors that are

1018
00:39:09,270 --> 00:39:07,520
naturally embedded in the farm

1019
00:39:10,790 --> 00:39:09,280
okay um i think you answered this

1020
00:39:12,230 --> 00:39:10,800
question question already about getting

1021
00:39:13,670 --> 00:39:12,240
involved with the training and education

1022
00:39:15,670 --> 00:39:13,680
program with that

1023
00:39:17,430 --> 00:39:15,680
email you had

1024
00:39:20,230 --> 00:39:17,440
um

1025
00:39:22,550 --> 00:39:20,240
we're asked on what android version is

1026
00:39:26,150 --> 00:39:22,560
it working or being developed

1027
00:39:29,589 --> 00:39:26,160
um i believe it will work on anything

1028
00:39:31,349 --> 00:39:29,599
from version 9 on up

1029
00:39:35,190 --> 00:39:31,359
and i think currently

1030
00:39:38,150 --> 00:39:35,200
i think they're in build 24 or 25 now

1031
00:39:39,990 --> 00:39:38,160
so it will retroactively work on older

1032
00:39:42,470 --> 00:39:40,000
phones in theory

1033
00:39:44,550 --> 00:39:42,480
um but again if anyone has questions

1034
00:39:45,910 --> 00:39:44,560
about the best phones to use for the

1035
00:39:48,390 --> 00:39:45,920
best price

1036
00:39:49,910 --> 00:39:48,400
uh contact me because we could spend an

1037
00:39:51,430 --> 00:39:49,920
hour and a half just discussing that

1038
00:39:53,589 --> 00:39:51,440

because there's a bunch of techy stuff

1039
00:39:56,069 --> 00:39:53,599
that uh frankly i suspect a lot of

1040
00:39:58,390 --> 00:39:56,079
people aren't interested in um if you

1041
00:39:59,829 --> 00:39:58,400
write if you write me or write bridget i

1042
00:40:02,630 --> 00:39:59,839
will point you in the direction of a

1043
00:40:04,390 --> 00:40:02,640
couple of highly affordable phones

1044
00:40:07,430 --> 00:40:04,400
um i can tell you right now we currently

1045
00:40:08,550 --> 00:40:07,440
have them on eight uh eight moto e moto

1046
00:40:11,030 --> 00:40:08,560
6's

1047
00:40:14,470 --> 00:40:11,040
which go for about 45 bucks

1048
00:40:16,790 --> 00:40:14,480
um to 50 so if not very expensive to

1049
00:40:19,349 --> 00:40:16,800
basically set up a a complete

1050
00:40:21,030 --> 00:40:19,359
comprehensive data logging system uh in

1051
00:40:22,390 --> 00:40:21,040
a location

1052
00:40:24,230 --> 00:40:22,400
because we were trying to think about

1053
00:40:25,750 --> 00:40:24,240
price because we want lay people to use

1054
00:40:28,230 --> 00:40:25,760
these too we obviously don't want to

1055
00:40:29,910 --> 00:40:28,240
bury them in mounds of expense

1056
00:40:32,630 --> 00:40:29,920
um that was part of the reason that we

1057
00:40:35,910 --> 00:40:32,640
built these as well uh because i think

1058
00:40:37,030 --> 00:40:35,920
the current try field goes for 185 210

1059
00:40:39,270 --> 00:40:37,040
dollars

1060
00:40:41,190 --> 00:40:39,280
um yeah something like that you can

1061
00:40:43,349 --> 00:40:41,200
actually get a better better device than

1062
00:40:45,349 --> 00:40:43,359
the tri field that that is not designed

1063
00:40:49,750 --> 00:40:45,359

you know it's designed in a different

1064
00:40:51,430 --> 00:40:49,760
way yeah for a lot less than that

1065
00:40:56,309 --> 00:40:51,440
all right um

1066
00:40:58,230 --> 00:40:56,319
device work in a non-broadcast mode

1067
00:41:00,950 --> 00:40:58,240
without uploading i assume

1068
00:41:02,870 --> 00:41:00,960
uh yes um as it stands right now uh the

1069
00:41:04,150 --> 00:41:02,880
data only goes to the cloud if you send

1070
00:41:06,390 --> 00:41:04,160
it to the cloud

1071
00:41:07,670 --> 00:41:06,400
uh and you'd have to do that manually

1072
00:41:08,870 --> 00:41:07,680
right so if you're gonna put it in your

1073
00:41:11,109 --> 00:41:08,880
google drive

1074
00:41:13,430 --> 00:41:11,119
um you'd have to open up your documents

1075
00:41:15,990 --> 00:41:13,440
folder and basically use your thumb to

1076
00:41:18,790 --> 00:41:16,000
shove it up into your drive so to speak

1077
00:41:21,349 --> 00:41:18,800
so now as uh as it currently sits each

1078
00:41:23,910 --> 00:41:21,359
one of these units are basically

1079
00:41:25,990 --> 00:41:23,920
um you know keeping the data on their

1080
00:41:27,910 --> 00:41:26,000
own ssd card

1081
00:41:29,190 --> 00:41:27,920
or

1082
00:41:31,349 --> 00:41:29,200
okay

1083
00:41:32,950 --> 00:41:31,359
um marcus beck mentions that temperature

1084
00:41:36,230 --> 00:41:32,960
sensors can be quite unreliable as

1085
00:41:39,109 --> 00:41:36,240
smartphones can get quite hot

1086
00:41:40,550 --> 00:41:39,119
absolutely yeah that's very true

1087
00:41:41,510 --> 00:41:40,560
yeah sure yep

1088
00:41:44,470 --> 00:41:41,520

okay

1089
00:41:46,710 --> 00:41:44,480
um so how do we determine the projected

1090
00:41:47,750 --> 00:41:46,720
tri-axis direction from the device in

1091
00:41:48,390 --> 00:41:47,760
other words how do you know how to hold

1092
00:41:50,150 --> 00:41:48,400
it

1093
00:41:52,790 --> 00:41:50,160
i assume that'll be training

1094
00:41:54,550 --> 00:41:52,800
yes yeah that that's that's training um

1095
00:41:57,109 --> 00:41:54,560
and it's usually a good idea to set

1096
00:41:59,270 --> 00:41:57,119
these uh set these units uh to a

1097
00:42:02,710 --> 00:41:59,280
north-south orientation or an east-west

1098
00:42:04,390 --> 00:42:02,720
orientation um and keep them that way um

1099
00:42:05,670 --> 00:42:04,400
although depending on what you're

1100
00:42:07,270 --> 00:42:05,680
looking at you know if you're not

1101
00:42:08,630 --> 00:42:07,280
interested in doing triangulation or

1102
00:42:11,430 --> 00:42:08,640
you're trying you're not trying to kind

1103
00:42:13,670 --> 00:42:11,440
of figure out where the fields are

1104
00:42:14,950 --> 00:42:13,680
then that becomes arbitrary um again

1105
00:42:17,510 --> 00:42:14,960
that's one of the reasons i broke the

1106
00:42:20,870 --> 00:42:17,520
data down to the x y and z axis so it

1107
00:42:23,270 --> 00:42:20,880
can be as detailed or not as detailed as

1108
00:42:24,870 --> 00:42:23,280
particular researcher wants it to be i

1109
00:42:26,950 --> 00:42:24,880
wanted i wanted everyone to have the

1110
00:42:28,950 --> 00:42:26,960
availability to go in depth

1111
00:42:30,710 --> 00:42:28,960
um understanding that you know when lay

1112
00:42:32,309 --> 00:42:30,720
people use it they're going to probably

1113
00:42:33,510 --> 00:42:32,319

scream and faint when they look at the

1114
00:42:36,710 --> 00:42:33,520
data sets

1115
00:42:37,750 --> 00:42:36,720
uh so we got all the way around that

1116
00:42:39,349 --> 00:42:37,760
all right i don't see any other

1117
00:42:40,950 --> 00:42:39,359
questions but i'll just make a comment

1118
00:42:42,710 --> 00:42:40,960
that i i think it's great if we can

1119
00:42:44,390 --> 00:42:42,720
actually get

1120
00:42:46,230 --> 00:42:44,400
this out to the ghost hunting groups you

1121
00:42:46,950 --> 00:42:46,240
know it's it's new tech and they tend to

1122
00:42:48,470 --> 00:42:46,960
be

1123
00:42:50,230 --> 00:42:48,480
they tend to like that thing although

1124
00:42:53,430 --> 00:42:50,240
you may have to advertise it as ghost

1125
00:42:56,710 --> 00:42:53,440
mesa yeah yeah yeah spirit mesa or

1126
00:42:58,870 --> 00:42:56,720
something you know branded uh for that

1127
00:43:00,870 --> 00:42:58,880
uh we did get another question here um

1128
00:43:03,589 --> 00:43:00,880
so the data will collect in an airplane

1129
00:43:05,430 --> 00:43:03,599
mode am i understanding that correctly

1130
00:43:08,870 --> 00:43:05,440
i believe so

1131
00:43:11,030 --> 00:43:08,880
um because it's not and this is actually

1132
00:43:14,390 --> 00:43:11,040
another important point the phones do

1133
00:43:16,950 --> 00:43:14,400
not have to be so cellularly connected

1134
00:43:19,270 --> 00:43:16,960
so you can literally buy a tracfone

1135
00:43:22,470 --> 00:43:19,280
never register it with tracfone or any

1136
00:43:24,390 --> 00:43:22,480
of the prepaid phones um as long as you

1137
00:43:27,589 --> 00:43:24,400
can hook it up to an internet

1138
00:43:29,510 --> 00:43:27,599

uh some sort of internet or wireless you

1139
00:43:30,950 --> 00:43:29,520
can still download the app and use it so

1140
00:43:32,550 --> 00:43:30,960
i want to make it clear that these don't

1141
00:43:34,950 --> 00:43:32,560
have to be phones that are actually

1142
00:43:36,710 --> 00:43:34,960
working cell phones they just have to be

1143
00:43:41,190 --> 00:43:36,720
phones that are working uh that can

1144
00:43:45,030 --> 00:43:42,790
that sounds great

1145
00:43:46,630 --> 00:43:45,040
all right anybody else have a question

1146
00:43:50,470 --> 00:43:46,640
we still have a little bit of time right

1147
00:43:54,390 --> 00:43:53,109
all right so brian i think that's it um

1148
00:43:56,630 --> 00:43:54,400
thank you very much for a great