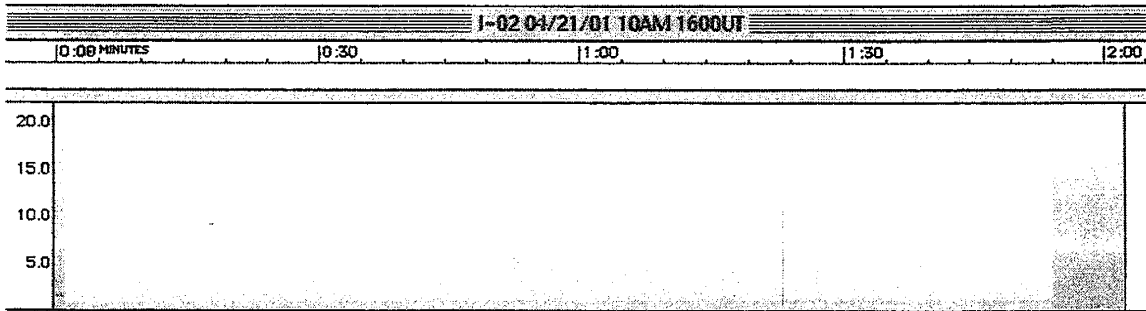
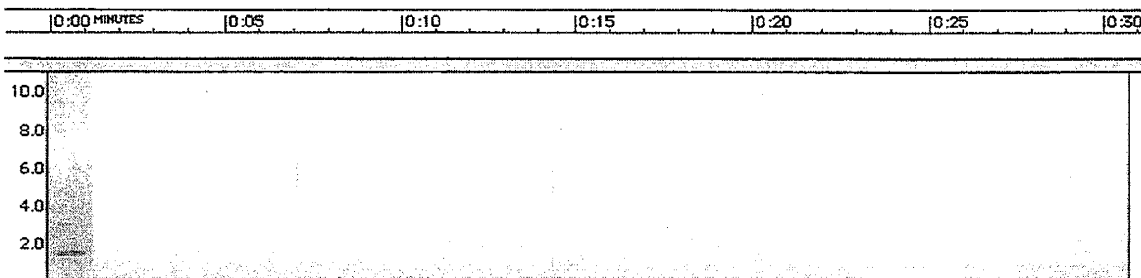
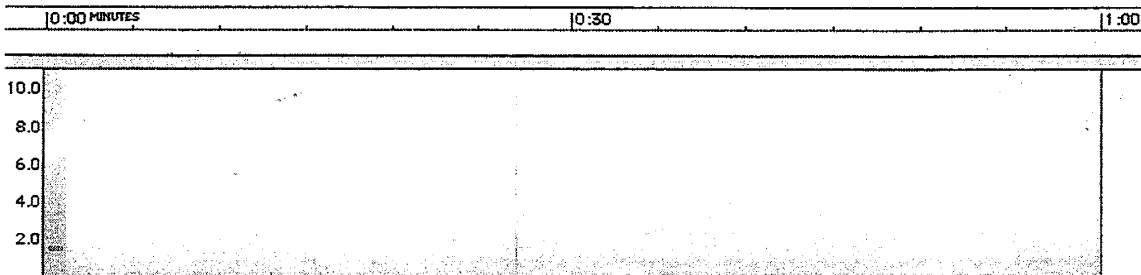
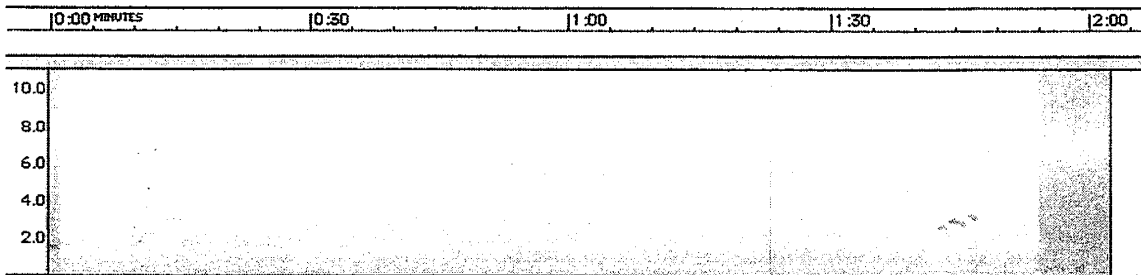


4/21/01 1600 UT

We finish April 21 back in Canada with Linden Lundback and Brian Cowan.

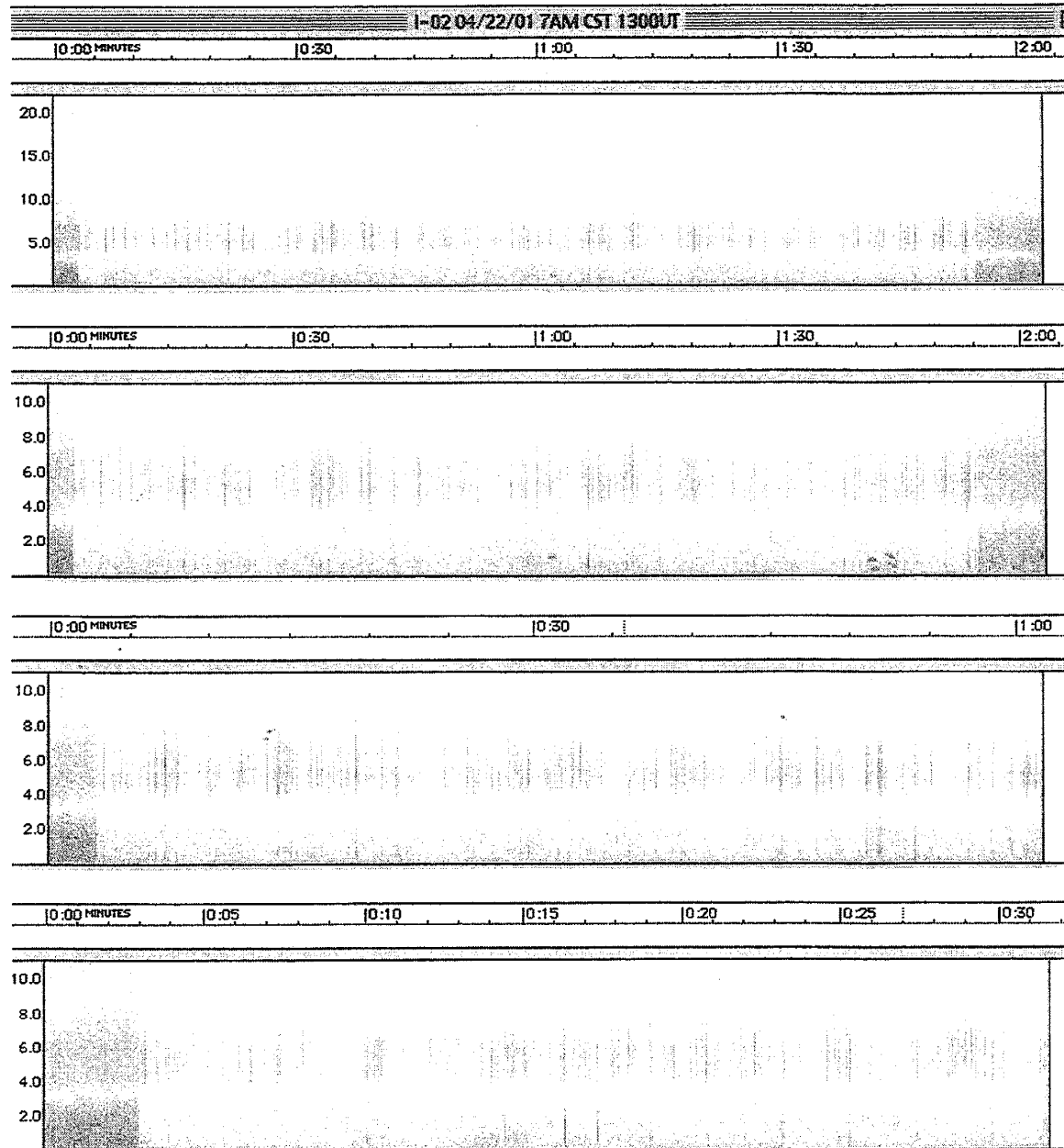


Activity has quieted down significantly from earlier in the day.



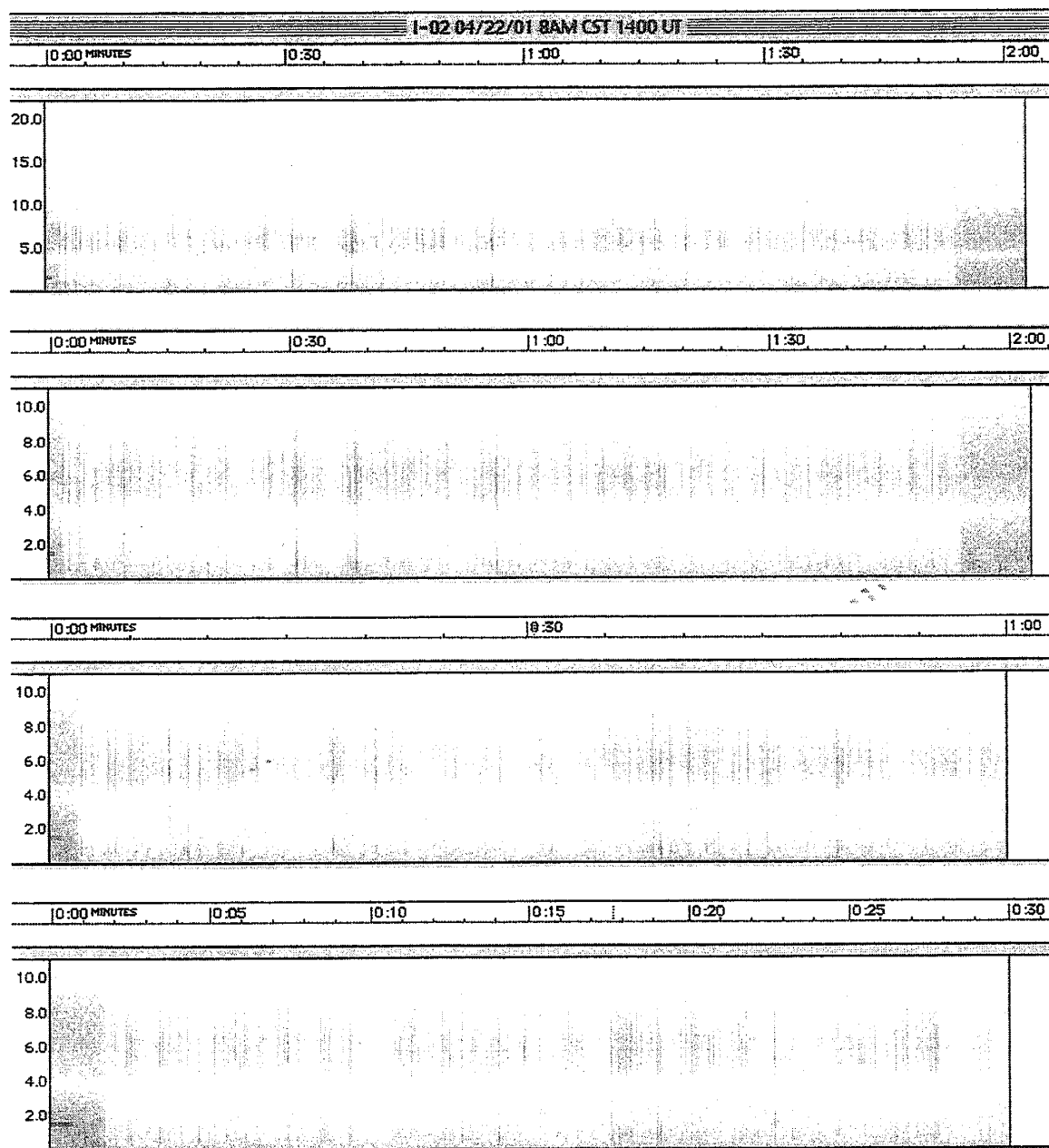
4/22/01 1300 UT

We start April 22 in Canada with Linden Lundback and Brian Cowan. Strong, dense sferics predominate.



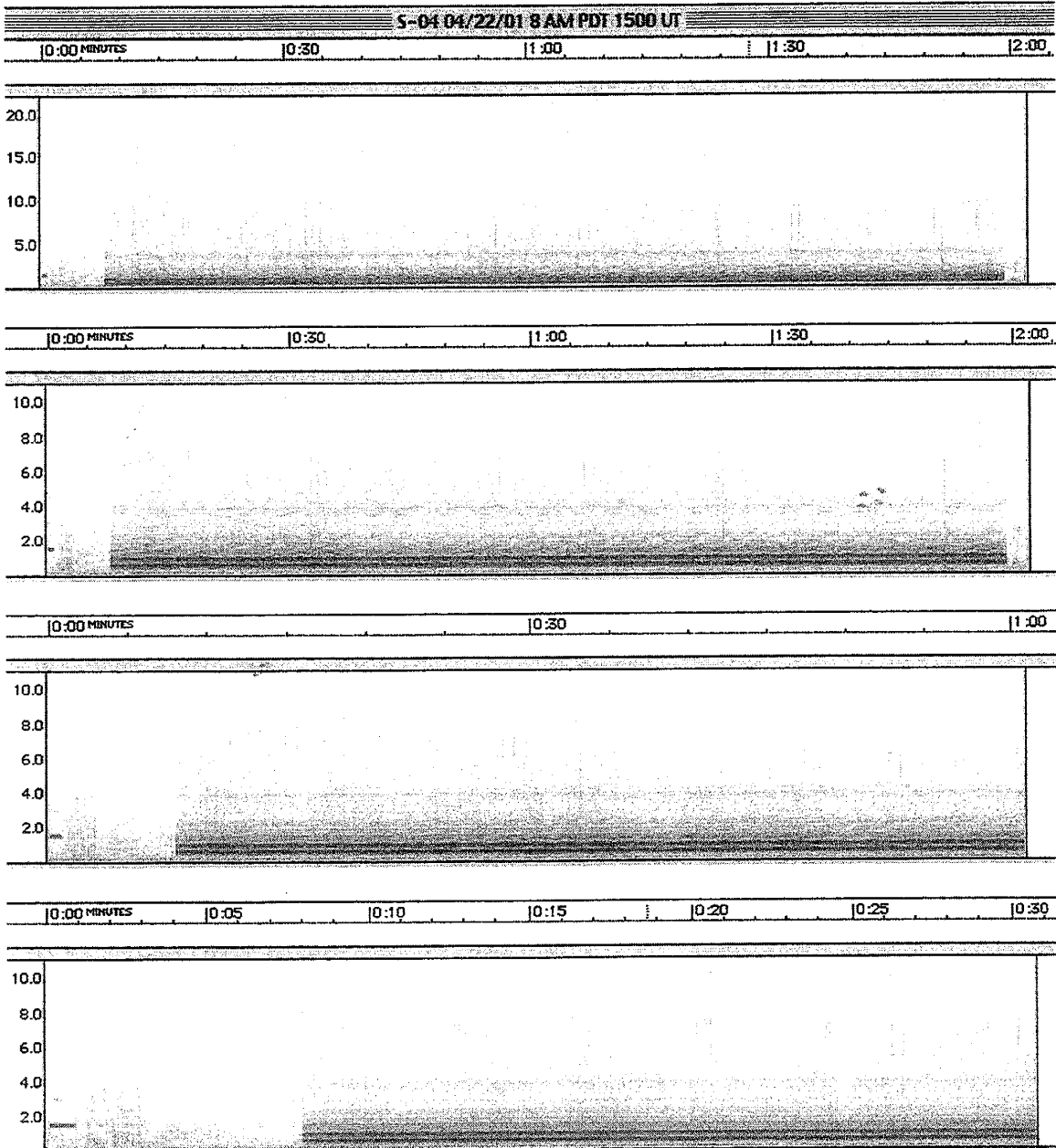
4/22/01 1400 UT

Still in Saskatchewan, Canada, conditions have not changed.



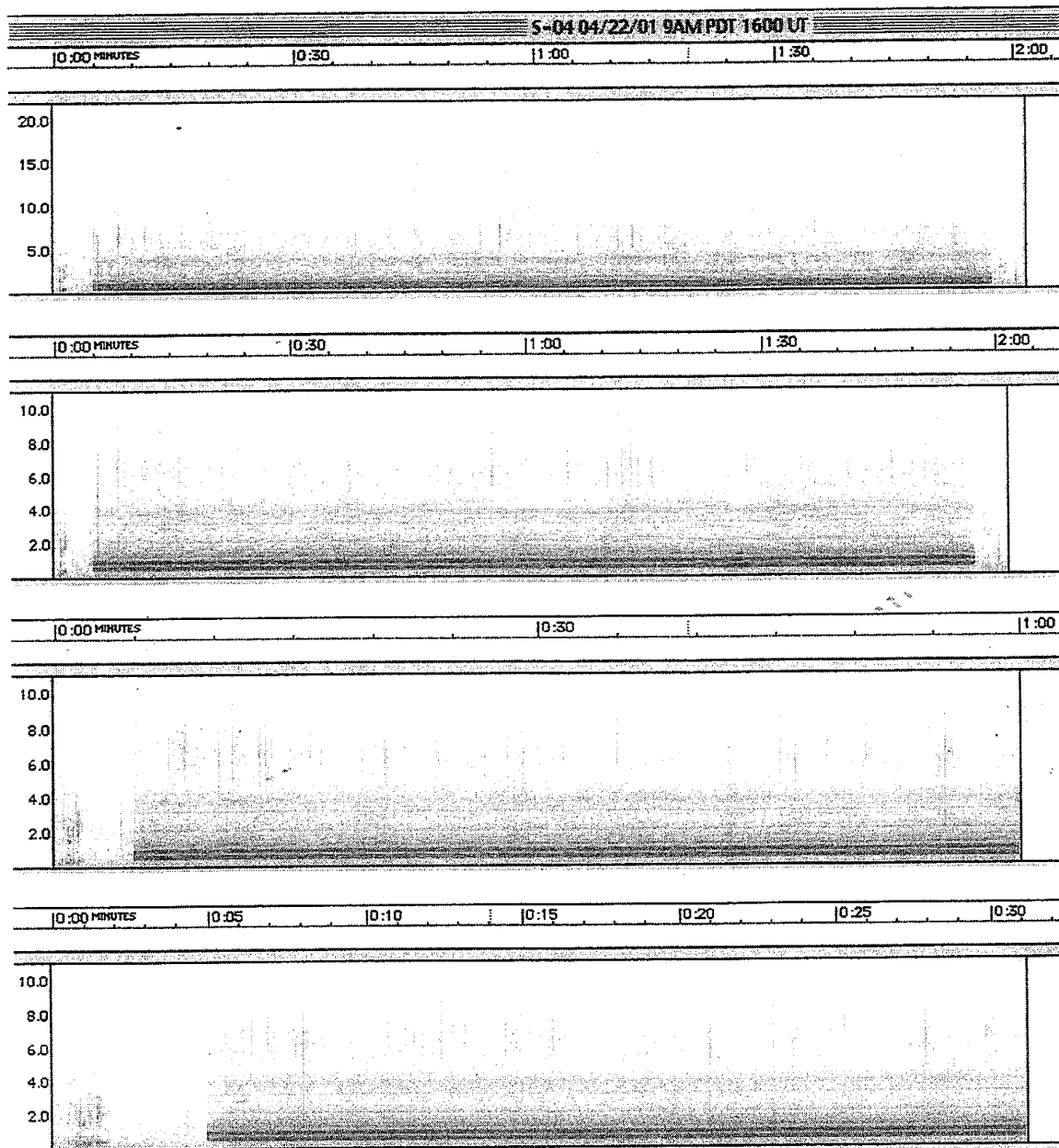
4/22/01 1500 UT

The Chaffey High School team in Ontario, California, made the following observations. The dark bars running horizontally across the bottom are from 60 Hz power line signals. Even though the 60 Hz hum is strong, sferics are still audible on the tape and visible as vertical lines on the spectrograms.



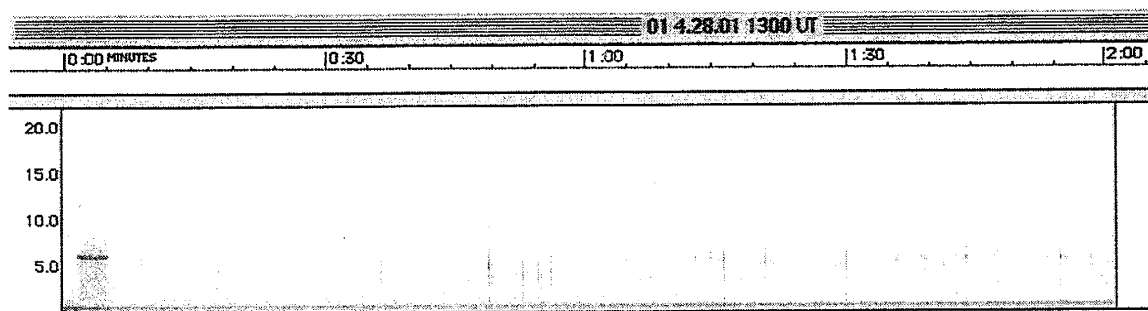
4/22/01 1600 UT

Conditions remain the same in California as April 22 comes to a close.

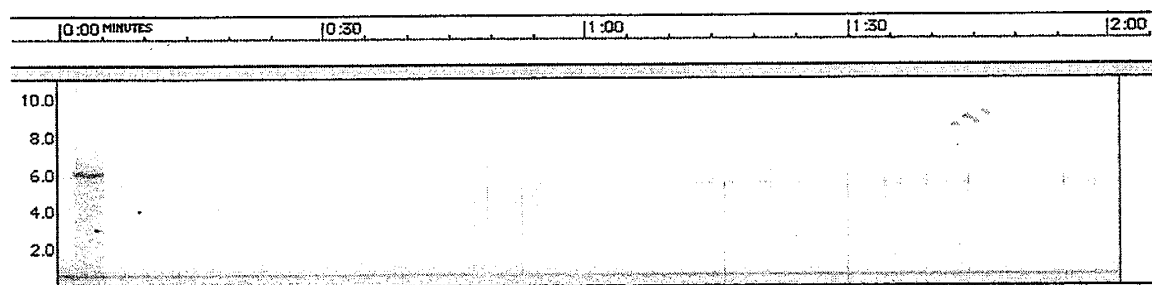


4/28/01 1200 UT

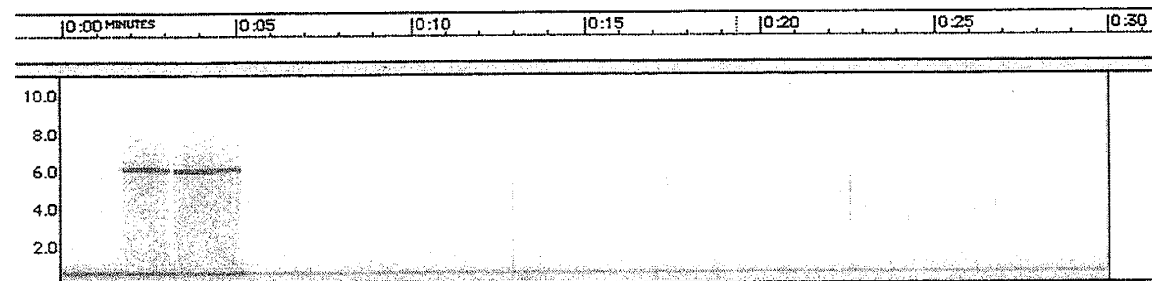
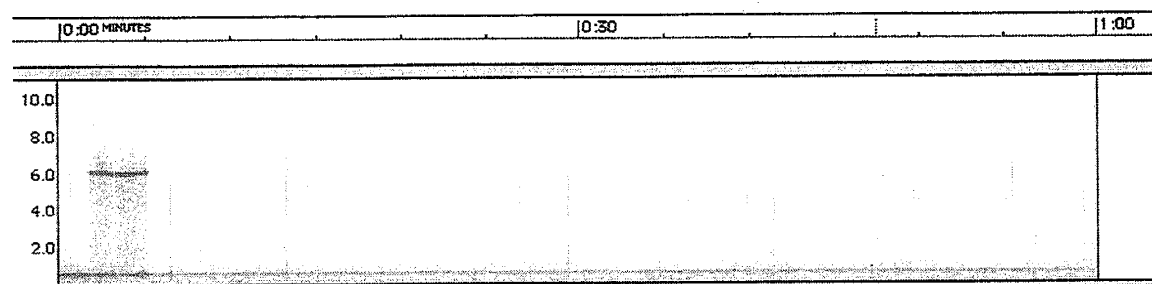
April 28 opens in Helotes, Texas, near San Antonio. Kathryn Robinson, Physics teacher at Sandra Day O'Conno High School, is joined by Justin Hammond on a "deserted hill top" 10 miles northwest of San Antonio. This team also experienced difficulties with commercial radio stations. If the antenna was kept low to the ground the radio station was not strong, but if the antenna was raised the radio station predominated.



The horizontal line at about 6 kHz is feedback while the receiver was adjusted.

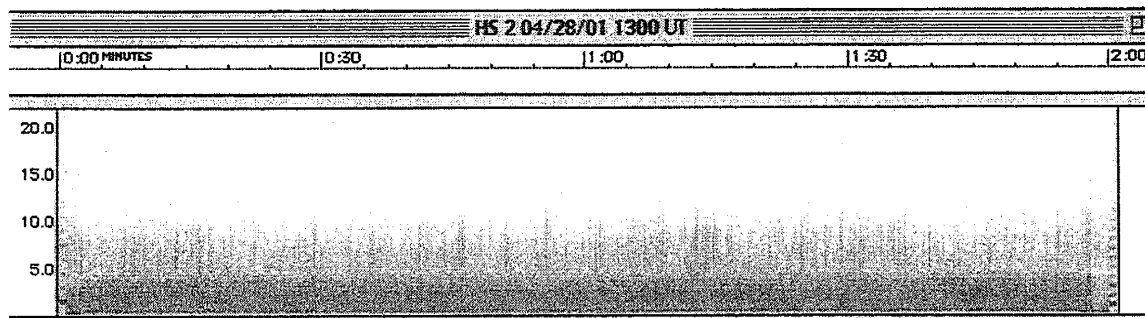


Sferics and bursts of sferics show up clearly just as they are easily heard on the tape. Some power line hum is present below 1 kHz.

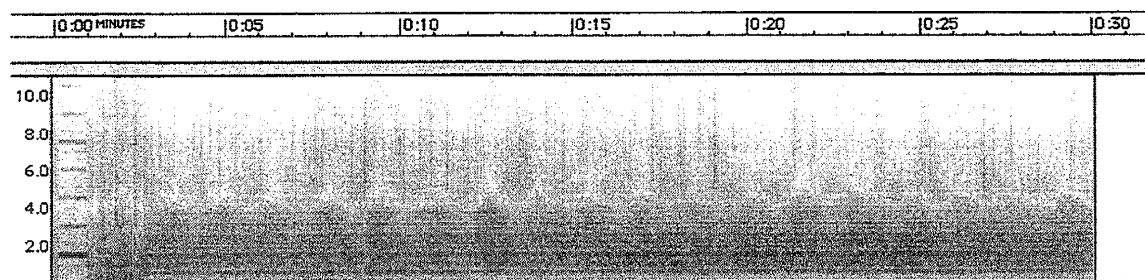
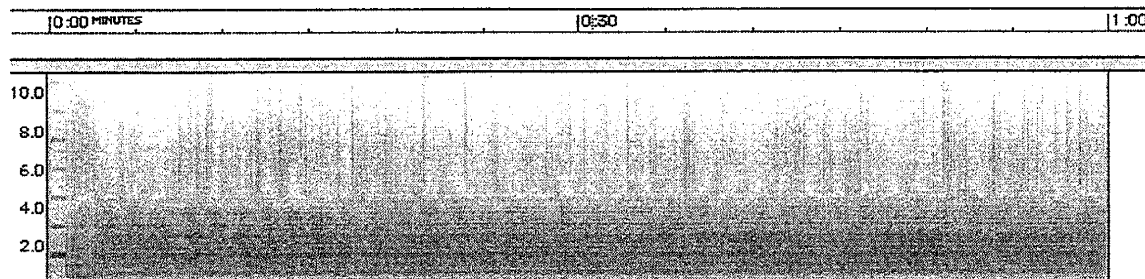
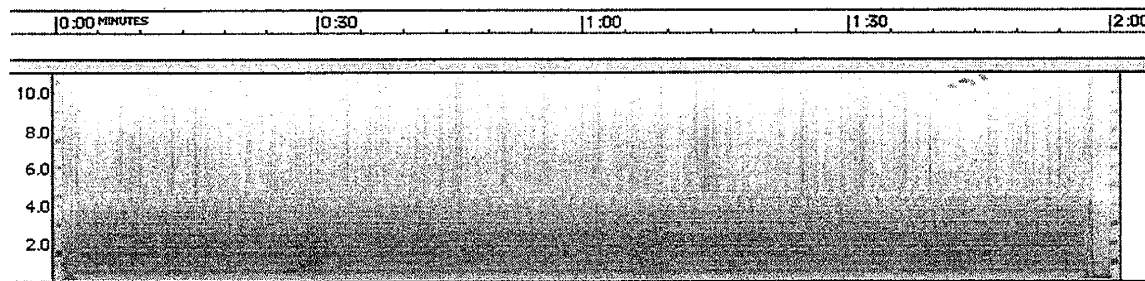


4/28/01 1300 UT

Mark Mueller, Physics teacher at Brown Deer High School in Brown Deer, Wisconsin, was joined by David Quosig and Jin Domencich in an “open field near the high school” for these observations. Apparently the proximity of the school contributed a large amount of power line hum.

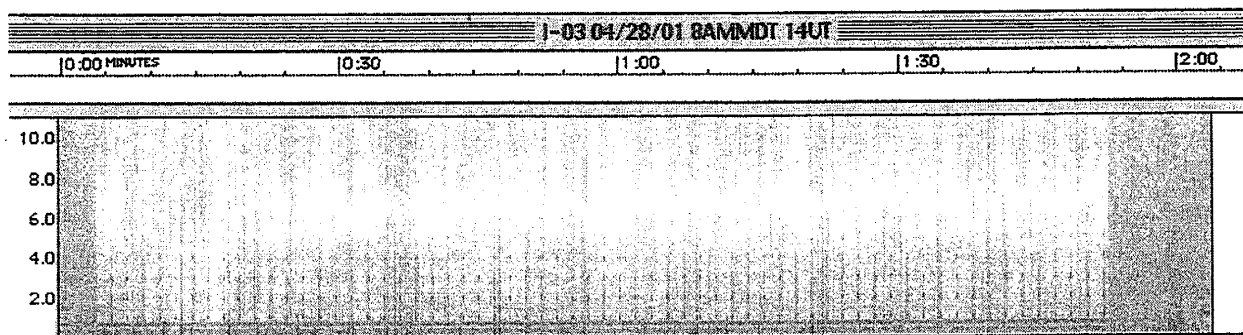


There is an enormous amount of manmade signal filling the region below 4 kHz. Sferics are easily heard and seen above the hum. This does not sound like Mark's usual quiet site!

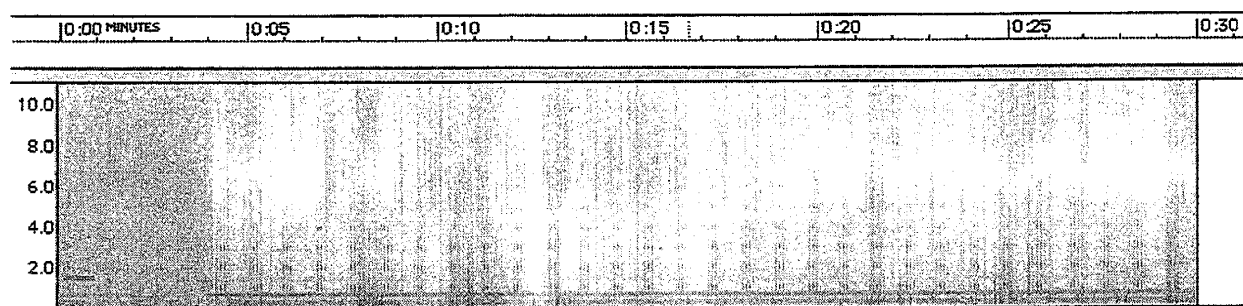
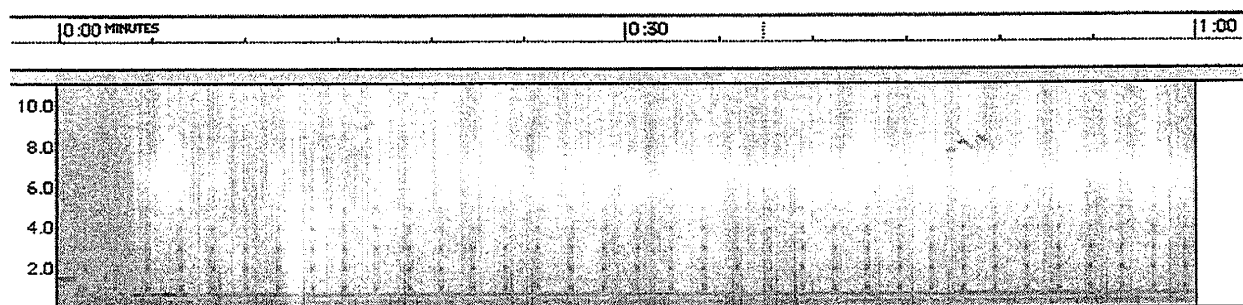


4/28/01 1400 UT

Robert Bennett in Las Cruces, New Mexico provides the following data. Note the strong power line hum even though Robert's observing site is quite remote. Many whistlers were heard this morning.

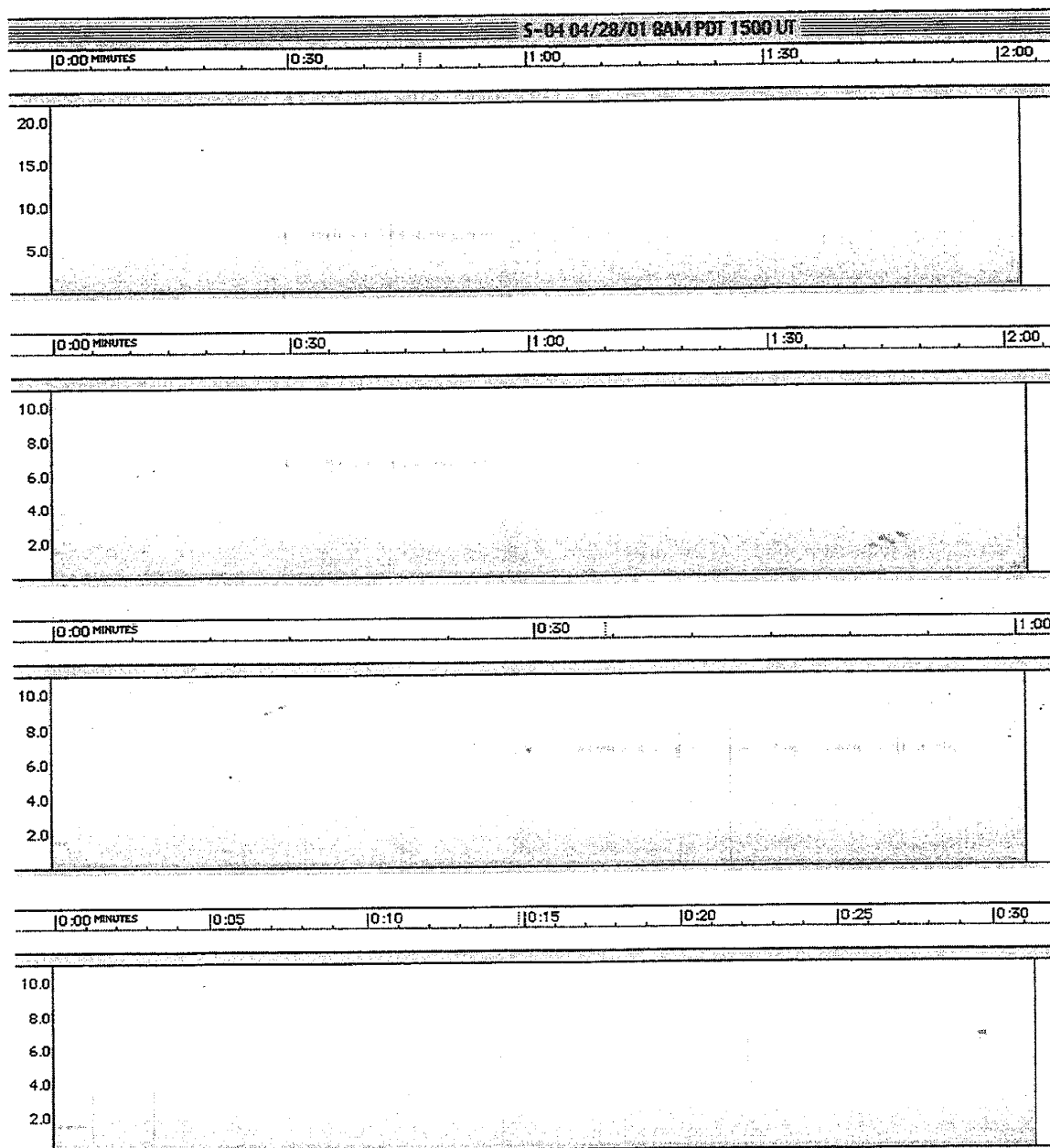


Power line hum is present as is the LORAN navigation signal.



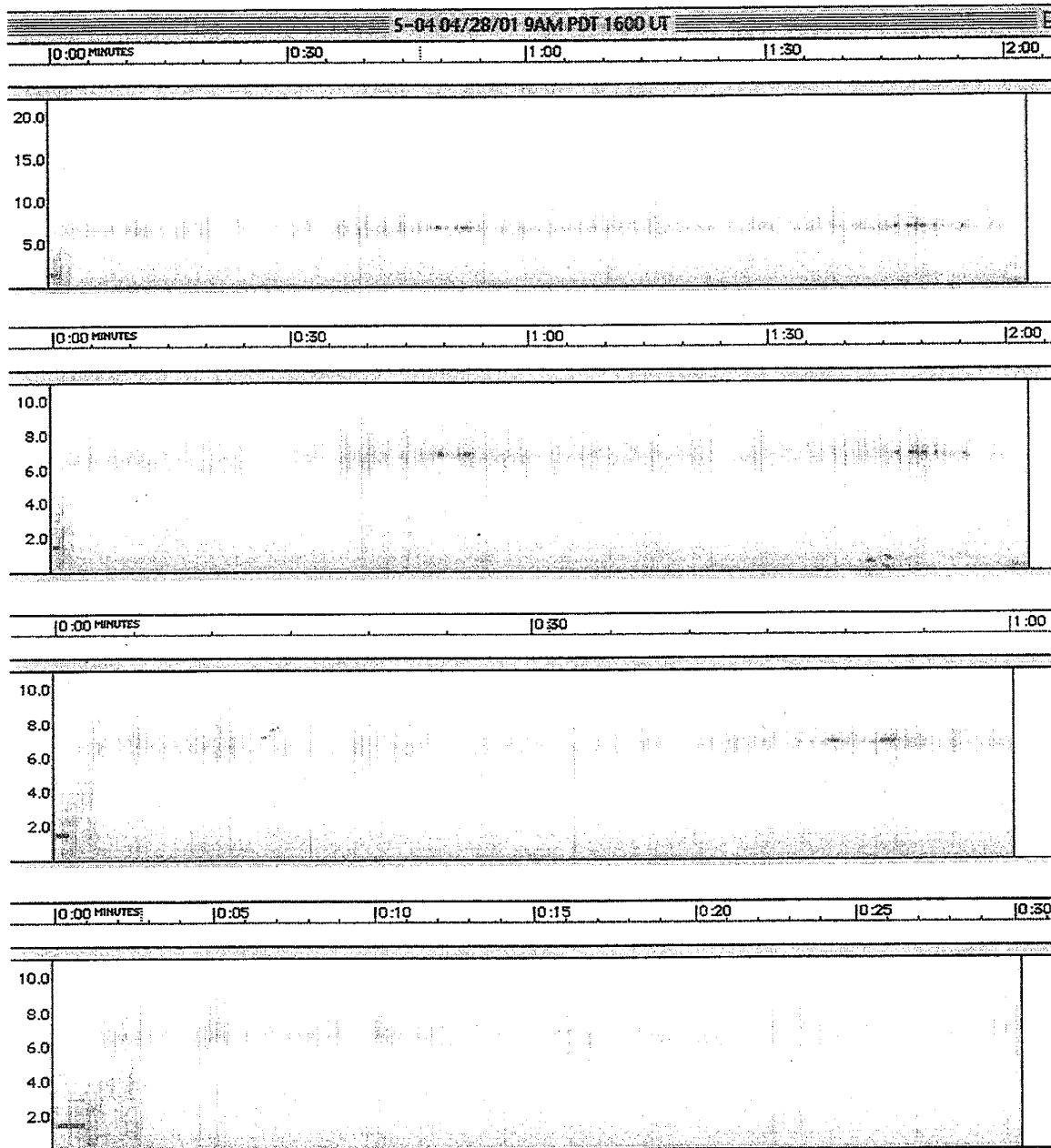
4/28/01 1500 UT

In California, the Chaffey High School team found quiet conditions on April 28. The strong 60 Hz signal from the previous weekend has disappeared. It is possible that someone was operating a portable generator nearby before.



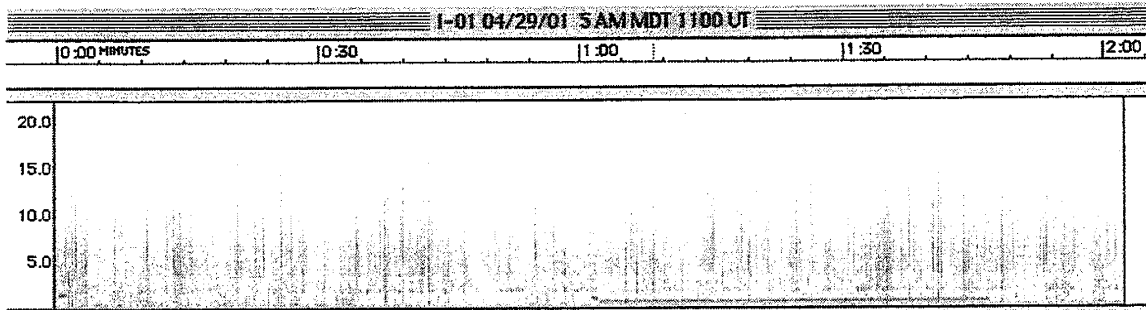
4/28/01 1600 UT

Chaffey High School, Ontario, California. Conditions are similar. A different receiver was used for this hour.

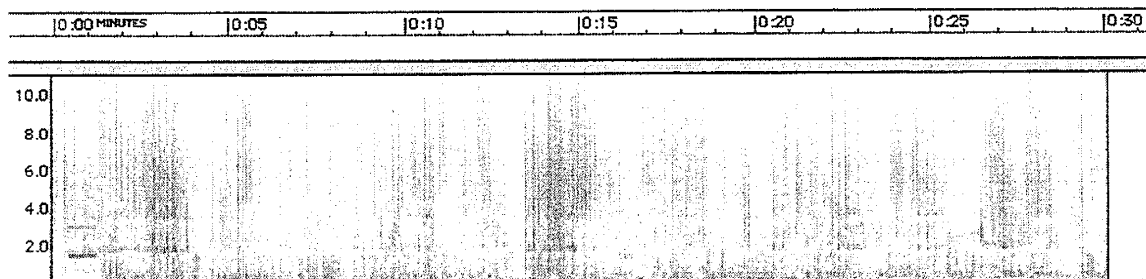
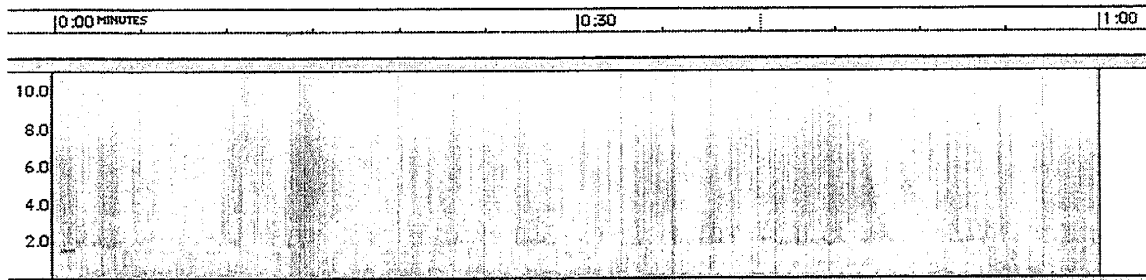
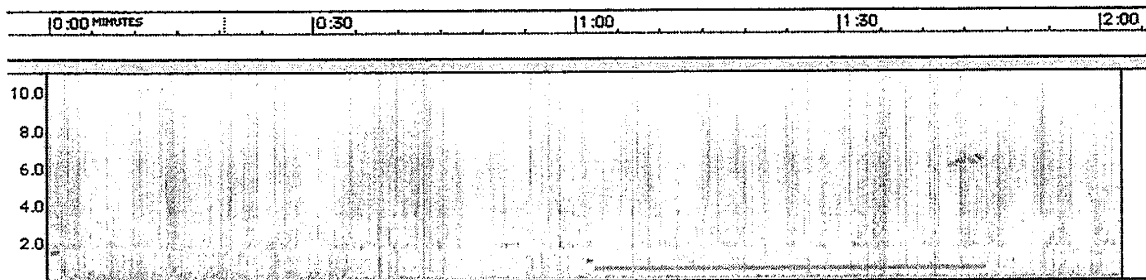


4/29/01 1100 UT

Shawn Korgan, in Gilcrest, Colorado, got an early start at 5 AM MDT (1100 UT).

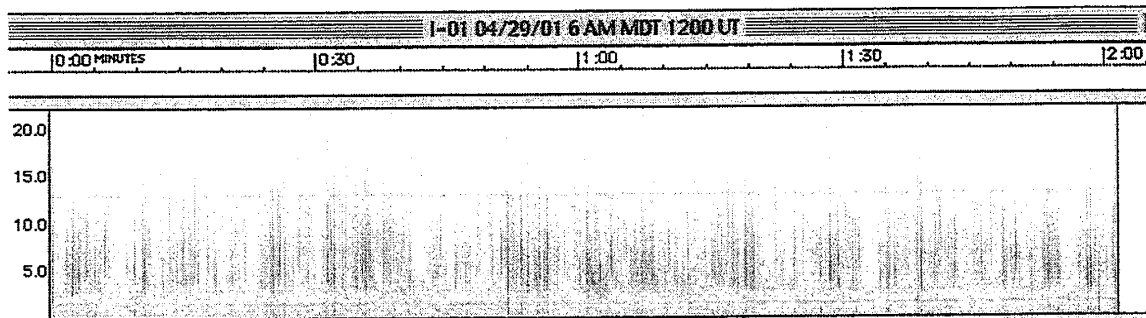


From Shawn: "On this tape, I messed up a software setting and caused the two track to overlay. The solid line at less than 1 kHz is the clock ticking on WWV." This starts just after the one minute point. Strong, dense sferics with tweeks and whistlers are abundant on this tape.

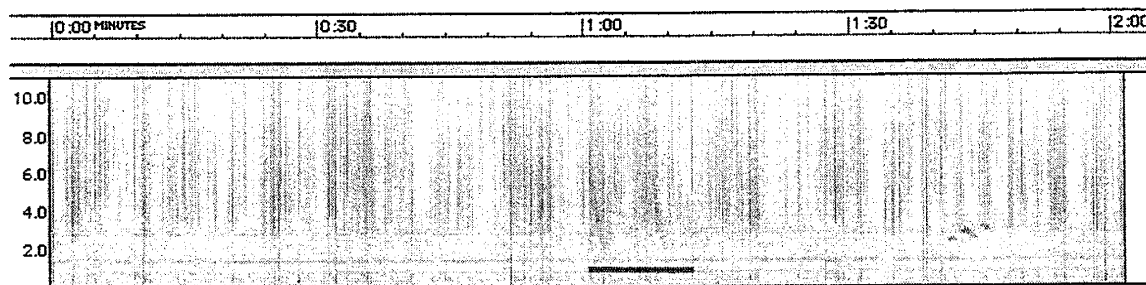


4/29/01 1200 UT

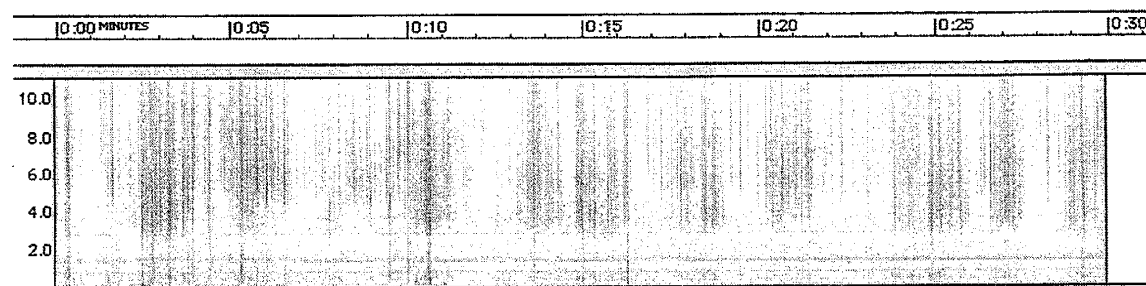
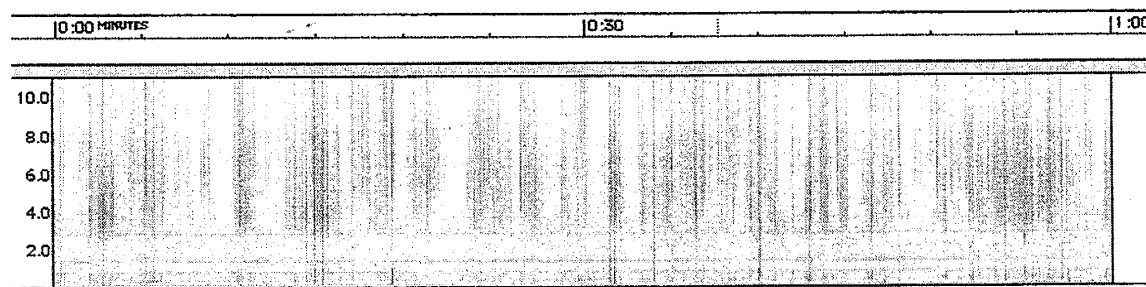
Still in Colorado with Shawn Korgan.

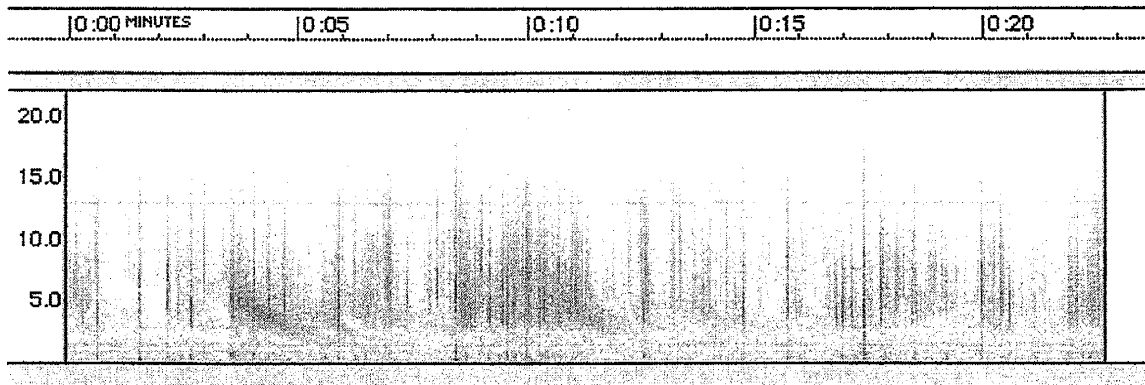


Note the whistlers just after one minute. A separate picture of these was made later.



Whistlers are indicated (———).

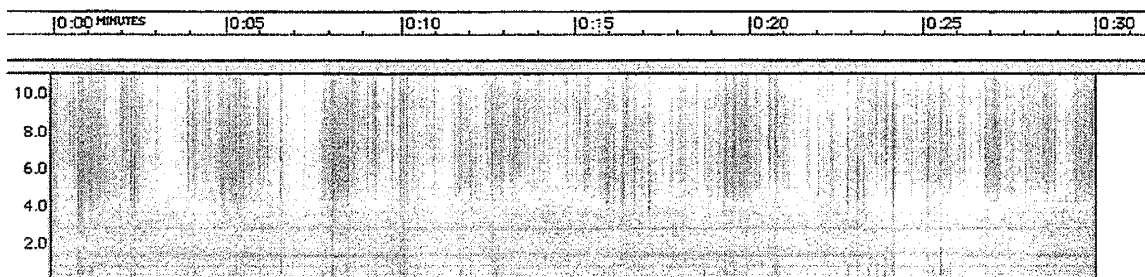
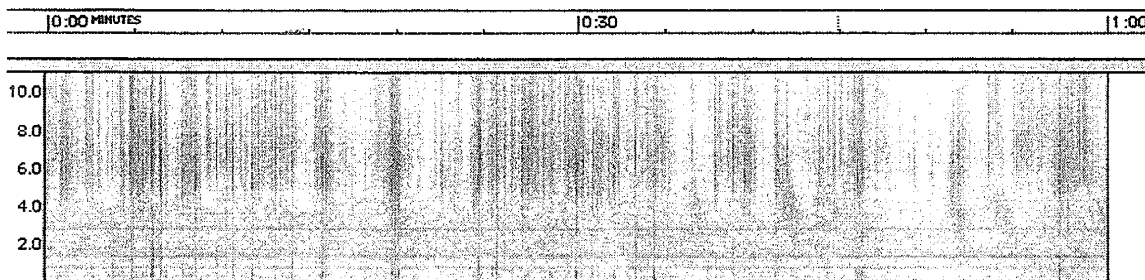
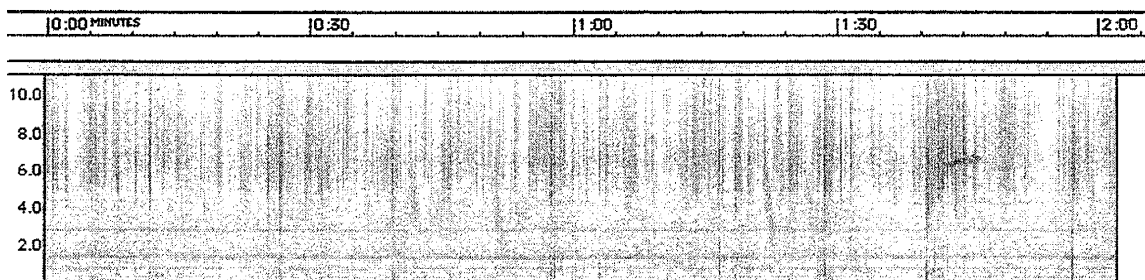




Whistler logged at 120101 UT.

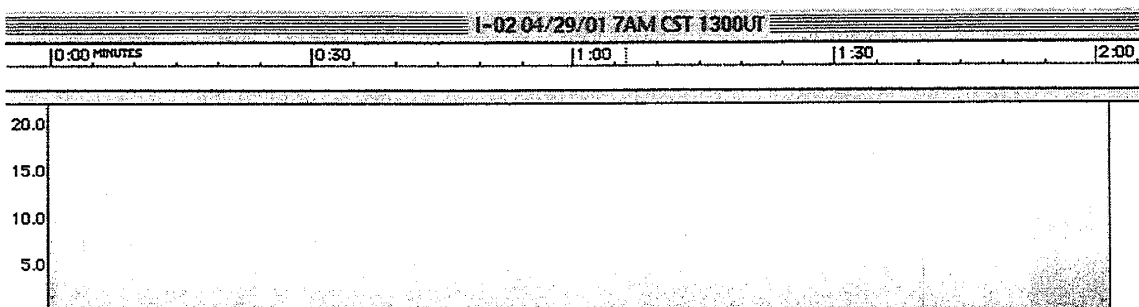
4/29/01 1300 UT

Still more from Shawn Korgan in Colorado. Strong sferics and whistlers.

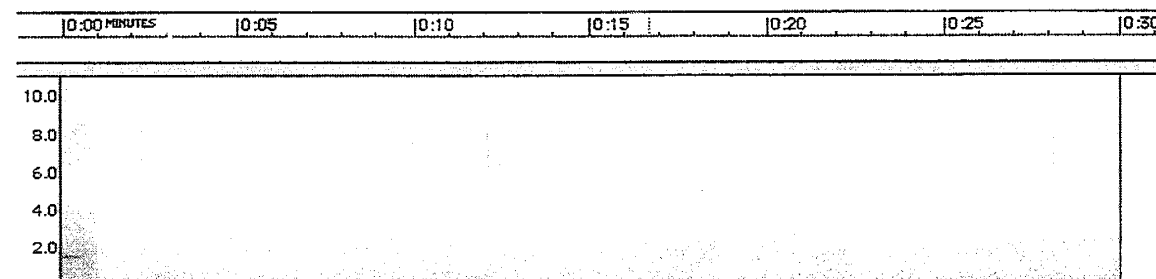
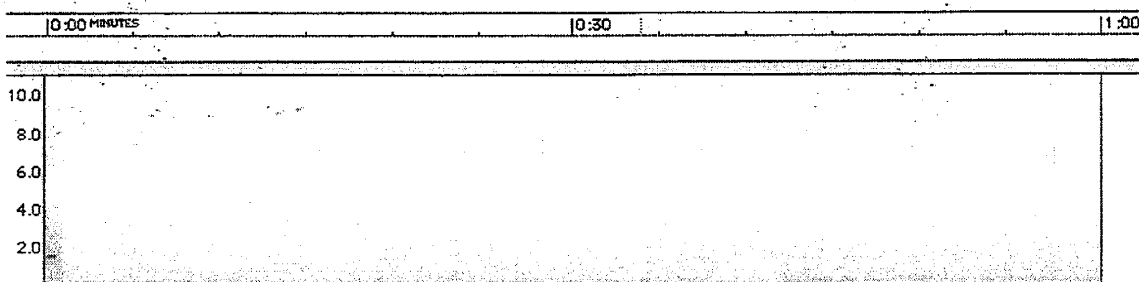
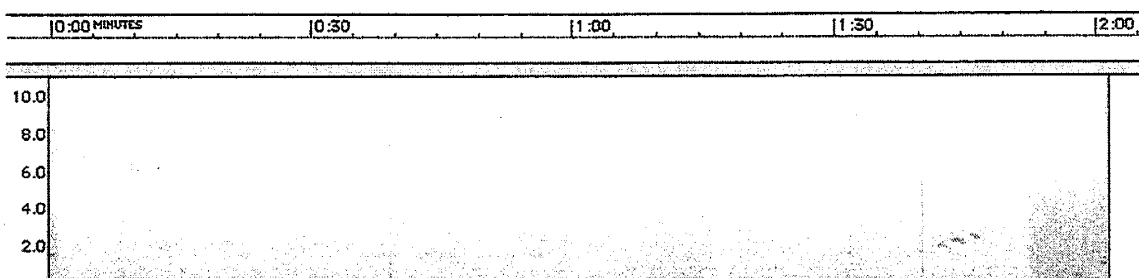


4/29/01 1400 UT

Linden Lundback and Brian Cowan find quiet conditions in Saskatchewan, Canada.

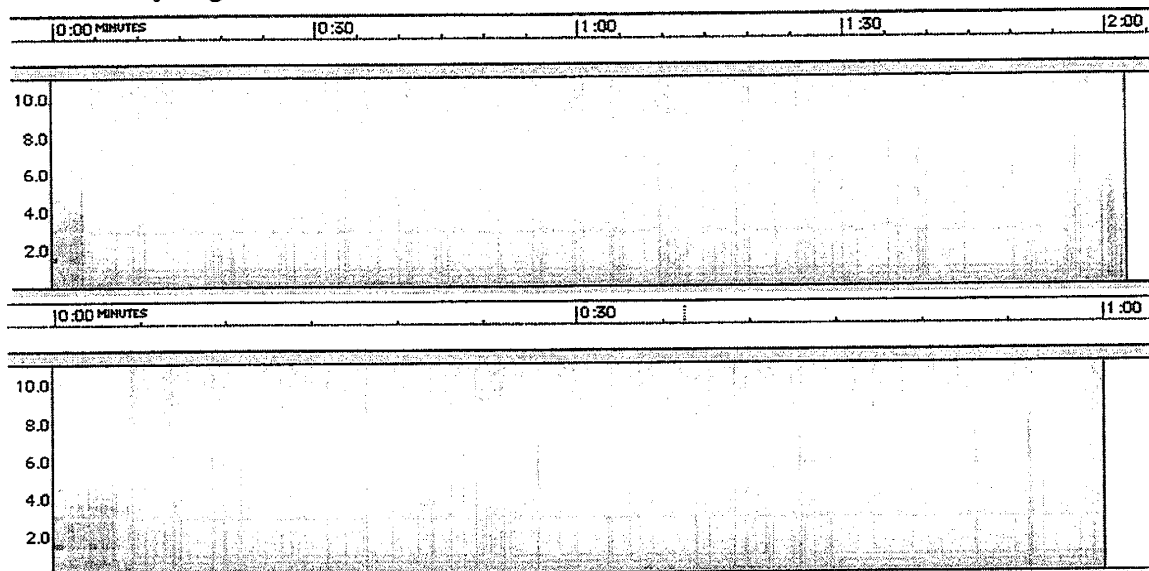


Low density, low intensity sferics.



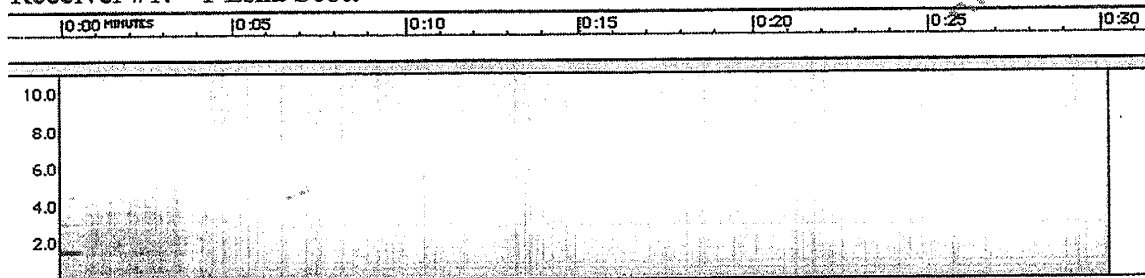
4/29/01 1500 UT

The Chaffey High School Team also found quiet conditions on April 29.

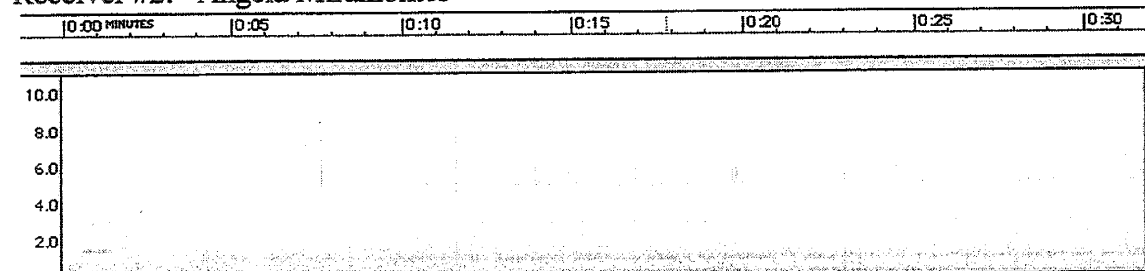


The first 30 seconds from each of the 3 receivers are compared.

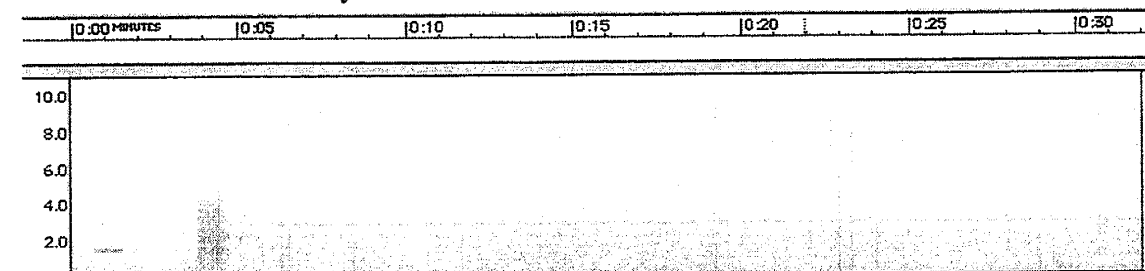
Receiver #1: I-Esha Scott



Receiver #2: Angela Miramontes

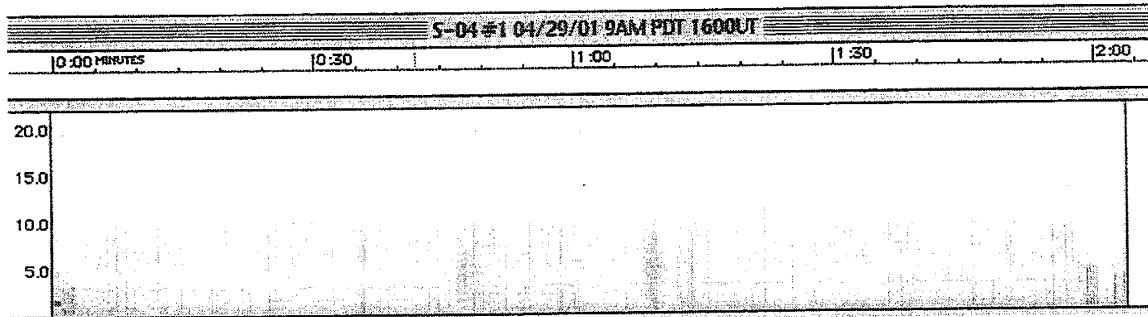


Receiver #3: Jessica Heynen

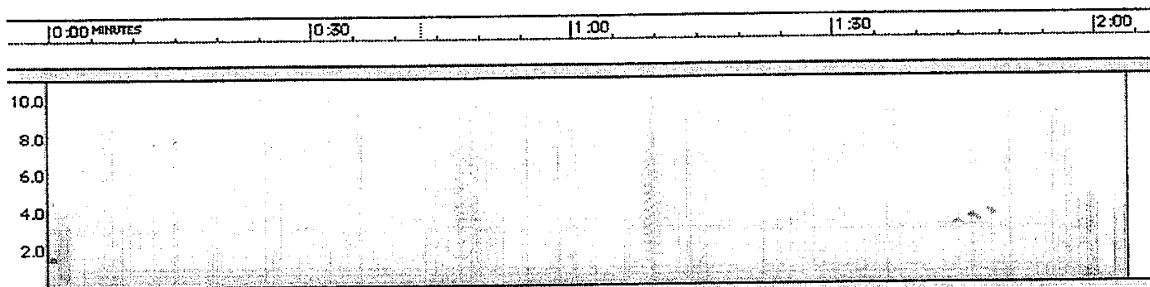


4/29/01 1600 UT

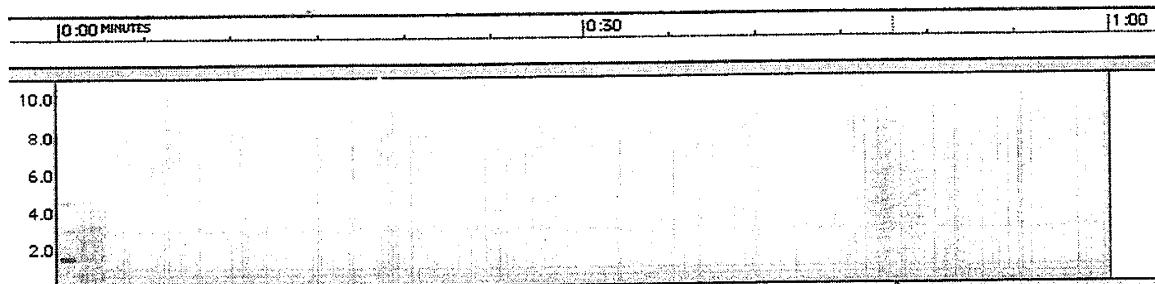
Conditions were so quiet in California, we were looking for any kind of signal.



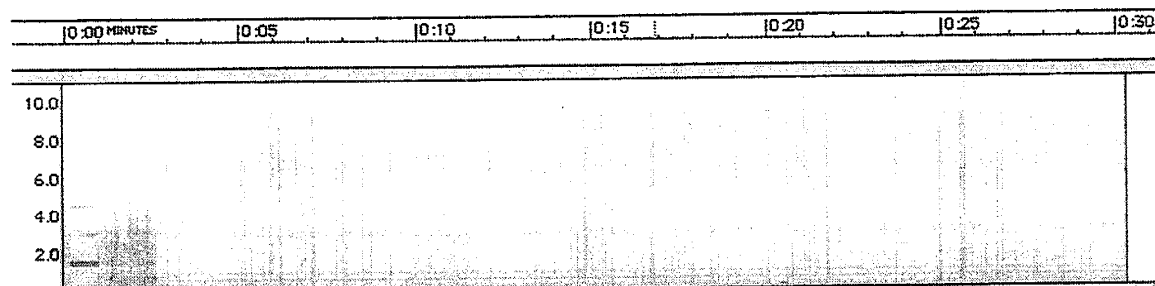
Receiver #1: I-Esha Scott



Motorcycles at 42 s and 1:08. (Radio waves from the ignition system.)

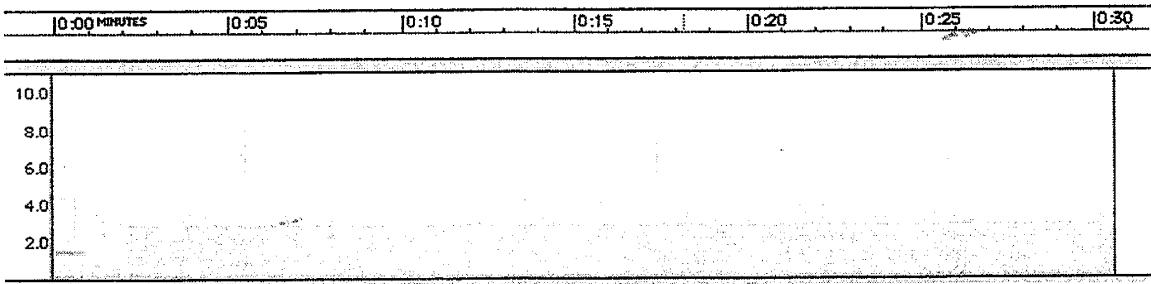
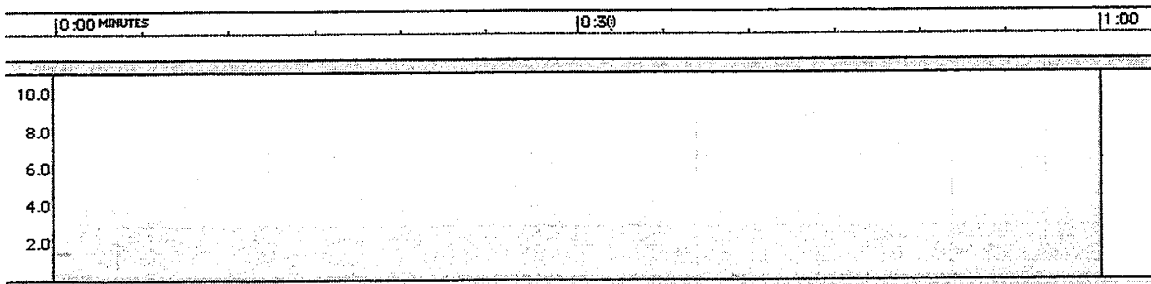
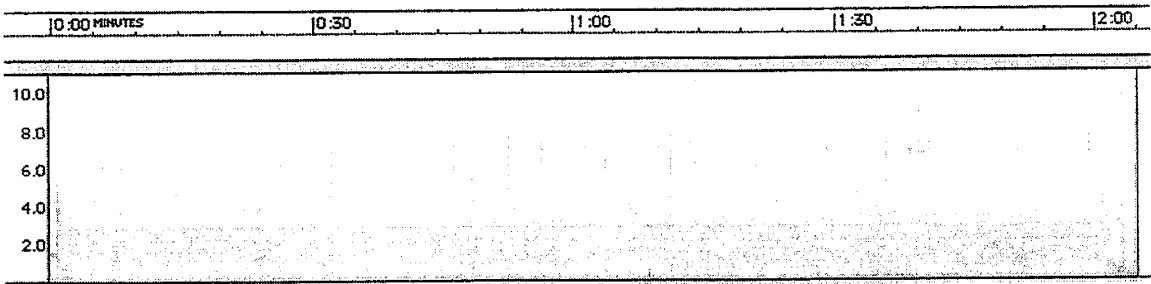


Arrow points to 2 motorcycles.

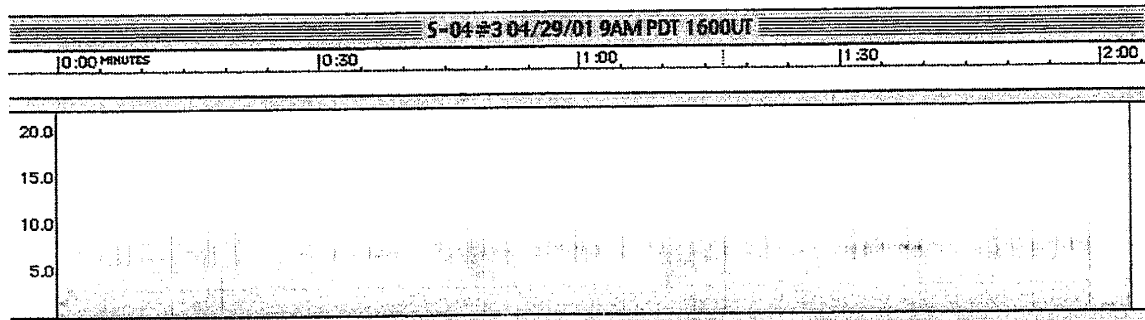


First 30 seconds.

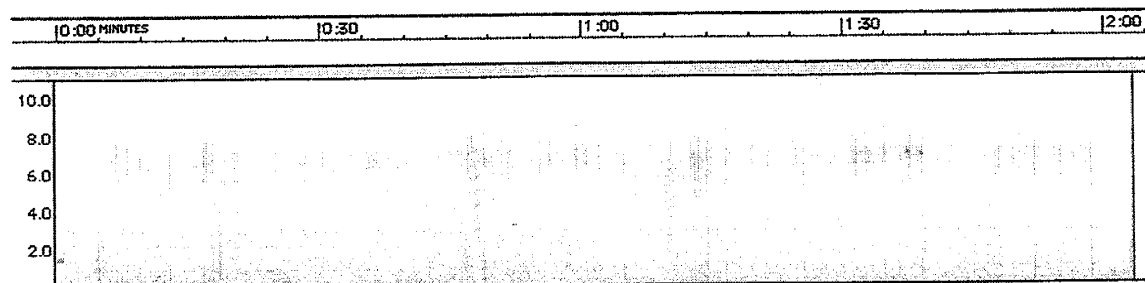
Receiver #2: Angela Miramontes



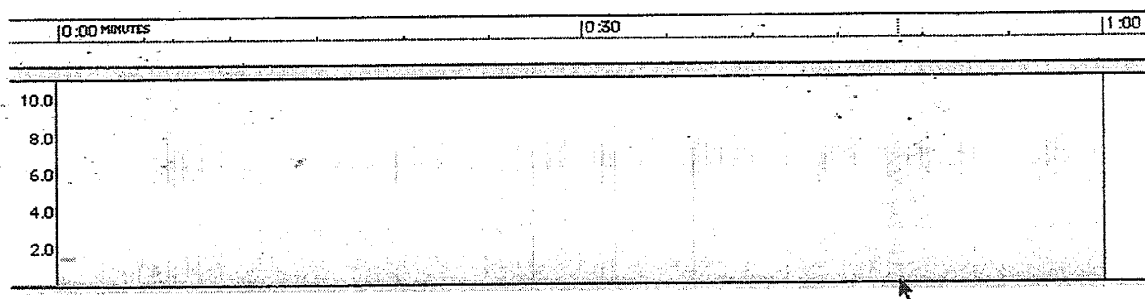
First 30 seconds.



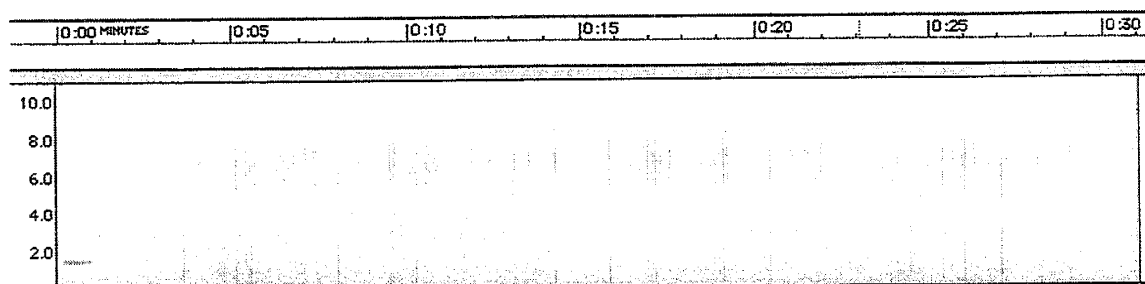
Receiver #3: Jessica Heynen



Motorcycles at 43 seconds and 1:10.



Arrow: Motorcycle



First 30 seconds.

And thus ends the April/2001 Coordinated Observations. Not with a bang, but with some motorcycles!

INSPIRE Observer Team _____

Team Number: _____

Equipment: Receiver _____

Recorder _____

Antenna _____

WWV radio _____

Site description: _____

Longitude: _____° _____' W

Latitude: _____° _____' N

Personnel: _____

Team Leader address: Name _____

Street _____

City, State, Zip, Country _____

email: _____

Local Time to UT Conversion Table

EST + 5 = UT

EDT + 4 = UT

CST + 6 = UT

CDT + 5 = UT

MST + 7 = UT

MDT + 6 = UT

PST + 8 = UT

PDT + 7 = UT

(copy as needed)

Team Number: _____

Receiver _____

Tape Start Time (Local) _____

● 價值觀與環境倫理

Code: M - Mark (WWV or Voice) S - sferics T - tweak W - whistler A - Alpha C - chorus
Sferic Density: D: ____ Scale of 1-5 (1 - Very Low, 3 - Medium, 5 - Very High)

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