Taos HUM

Evidence of noise immission

low frequency noise / very low frequency noise

Infrasound

emitted by company XYZ, Switzerland

with

Audio fingerprint
59 km/37 m linear distance

and

personal condition
416 km/258 m linear distance

Albeit the method as applied herein of using fingerprint technique regarding sound measurements for identification of a sound source is unusual, the results are nevertheless of sufficient significance in order to lead to objective official investigations.

This, of course, should only be carried out at a time when according emissions are present.

The author can provide information on this at any time.

Inhaltsverzeichnis

Preface

The author herself massively suffers from the Hum phenomenon. Listing the manifold physical and mental symptoms would be inappropriate here.
Just insomnia because of hearing a low frequency sound, the tingling feeling as if being under electric current, the feel of body vibrations, and the feel of pressure on ears, head, and torso shall be mentioned here.

Her unperturbed awareness regarding the reality of her irritations, her knowledge - amongst others, from Internet forums - that hers is not a singular case, but that many persons are concerned, her power and determination, as well as her years of professional expertise in the field of material trace analysis, method developing and documentation, have led to this report.

Her motivation for this is to live again a dignified and self-determined life.

1. Declaration

This report was prepared with the same competence, care and reliability with which the author carried out e.g. the annual obligatory VOC measurement (volatile organic compounds) for official institutions during her years of professional life, as well as the multitude of methods developed in the years before.
Amongst others, one of these methods was published at the WHO (World Health Organization), another at the DFG (Deutsche Forschungsgemeinschaft).

2. Result

By means of the presented report, using the audio-fingerprint method, it could be achieved to clearly detect noise immissions as being noise emissions from a full-conti industrial plant, 365 days per year – 24 hours per day, in a linear distance of 59 km/37 m.

The author's brief personal condition log recorded in a linear distance of 416 km/258 m during the measurements correlates with the sound events recorded at the source.

Beforehand, the sound source could be located by the "method for the visualization of infrasound-pressure waves" developed by the author specifically for this purpose.

3. Possible effects

The author knows from previous comparative acoustic measurements with simultaneous visualization of the pressure waves using the method developed by her, that a multitude of the cracking or rumbling noises which can be heard in audio recordings are the audible and measurable result of pressure waves.
The signal height, the high range of frequency and intensity of the noises in the audio recordings analyzed at hand imply very strong pressure waves.

The author referred to this effect “minor sound barrier effect”

As a result, the further propagation over even much greater distances must be assumed.

- The intensity of the pressure waves gives reason to suspect that, if certain prerequisites regarding weather conditions apply, even avalaches can be triggered by them.
- Regarding buildings, damages due to self resonance resulting from the pressure wave / acoustic load, can not be ruled out.
- An effect on delicate electronic equipment can not be ruled out.
- An effect on animal life is given in any case.
  Often, e.g. cows awake because of more intense pressure waves.

Thus one, if not the THE, source for the mysterious Hum phenomenon is clearly identified which handicaps lives of people by most diverse (physical) symptoms in wide areas across borders.

4. Measures

Now, the prompt taking of measures lies with the national and/or international officials.

5. Method of acoustic recordings

The consideration, analysis and interpretation of the acoustic recordings in this method differs from the common evaluation and analysis methods of sound recordings by mainstream acoustic laboratories. It is qualitative and does not valuate levels.

Here, the comparative measurements were interpreted following the method of fingerprinting which is commonly and widely used in material analytics (e.g. in forensics).
Characteristic signal patterns develop during the simultaneous comparative acoustic recording of sound events at the sound source and the immission/detection location, which can present themselves e.g. by signal level, patterns of signal groupings, as well as patterns of frequencies, all appearing simultaneously on the synchronized timelines.
The unambiguous identification of the sound source is therefore ensured.

Due to the positioning of the recording device in approx. 150 m distance to the sound source, as well as due to the limited frequency range of the recording device, the signals captured in the audio recordings can show only delimited inaudible sound/low frequency sound, and can not show infrasound at all.

Also frequencies in the range of inaudible sound generate harmonic waves. Besides the emitted audible sound, a number of the detected sound events must therefore be the result of infrasound.

This assumption seems to be confirmed by comparative acoustic recordings. Herein, sequences are often visible where, for few measurable sound events at the sound source, many sound events at the measuring location take place, and, for many measurable sound events at the sound source, few sound events at the measuring location take place.

No representation of frequency analyses is given since these have only little significance regarding the method.

6. Technical equipment/software

Sound recording devices H2next Handy Recorder, Brand ZOOM, Stereo, no filters,
sample frequency: 44100 Hz
sample format: 16 bit
recording format: .wav

software: Audacity, freeware

7. Time log

Date of measurement		**From Sunday June 09 to Monday June 10**	
Number of recording devices:		**2**	
Zoom 1 **Zoom 2**		**Start time:** **12h35min** announcement after 18 " **12h35min** announcement after 26"	**Recording location:** **Pos 1, source measurement location**
procedure		Simultaneous start of both devices Zoom 1 and Zoom 2 at around 12h35 at source. Zoom 1 positioned at source, pos 1. Drive to measurement location with one short brake. Positioning of Zoom 2 at parking space inside car on center console.	
Distances linear dicection		Source/measurement location = 59 km = 178 seconds = 2'58" measurement location/hotel = 384 km = 1163 seconds = 19'23"	
approx. weather conditions:		Not chilly, sunny, cloudy, no/little wind.	
12.35		During drive heart pressure in XYZ. Moderately at the company site, usual operating noises well audible. Recording device placed.	
		During the drive heart pressure, as usual particularly on bridges - comes and goes. On the parking space at the measurement location strong buzzing in the car, heart pressure. Also, several times pressure also on the body.	
		Drive on to the **location of personal condition**	
Approx. 18.30h		Arrival at the hotel, location of personal condition. Slight feeling as of being under electric current, more below the skin, but also inside body.	
		Laid down for sleep, several times a bang in the ear. Slept until 22.55h.	
22.55 awake		Woke up from electrical current, strong, buzzing, not too far inside body, more under the skin. No further precise notes.	

Personal condition		
0.25		Again stronger feel as if being under electrical current.
1.08 **1.16** **1.24**		Pressure waves on body.
		Vibrations as if of electrical current in bed.
1.40 **1.48**		rising again strong
1.50		Strong, also inside body, but different, more under the skin. When moving the eyeballs rise/fall of the feeling as of being under electrical current, at the reversal point of the eyeballs. These are fractions of a second.
2.06		Pressure inside ear
2.07		strong
2.24		Strong, Strong reaction upon movement of the eyeballs
2.28		Pressure ear, body, inside
		No further notes, fell asleep eventually
5.35 awake		Awake from feeling as if being under electrical current, strong
Length of the recordings		
Zoom 1		**23h25min**
Zoom 2		**25h04min**

8. Selection figures audio recordings, waveforms, spectra

Detailed analysis was performed on the recordings of
June 09, 2013, from 13h48 until 15h57 (audio recording no. 1)

Less detailed analysis was performed on the recordings of
June 09 to June 10, 2013, from 22h44 until 2h06 (audio recording no. 4)
This representation is related to the personal condition.

For all figures of the stereo tracks:

top: **measuring location/immission location**
recoding location 59 km/37 m linear distance to source, airport

below: **sound source**
Recording location company XYZ, pos 1, approx. distance 150 m

8.1. Calculation of the synchronization time for the fingerprint:

Approx. 59 km linear distance source / measuring location.
propagation speed of sound = 330 m/sek = 178,79 seconds = 2'59"
until arrival of the sound at the measurement location.
Aligned/synchronized to several common sound events.
Arrival of the sound at the measurement location after 3'01''58/100 seconds.

8.2. Calculation of the synchronization time for the personal condition:

Approx. 384 km linear distance measurement location / location of personal condition
propagation speed of sound = 330 m/sek = 1163 seconds = 19'23"
Arrival of the sound at the location of personal condition after approx. 20 minutes.

9. Figures after synchronization of the timeline

9.1. Complete analysed audio recordings

Complete analyzed recording from 12.35h until 15.58h, including drive to measurement location. Different scaling. Waveform

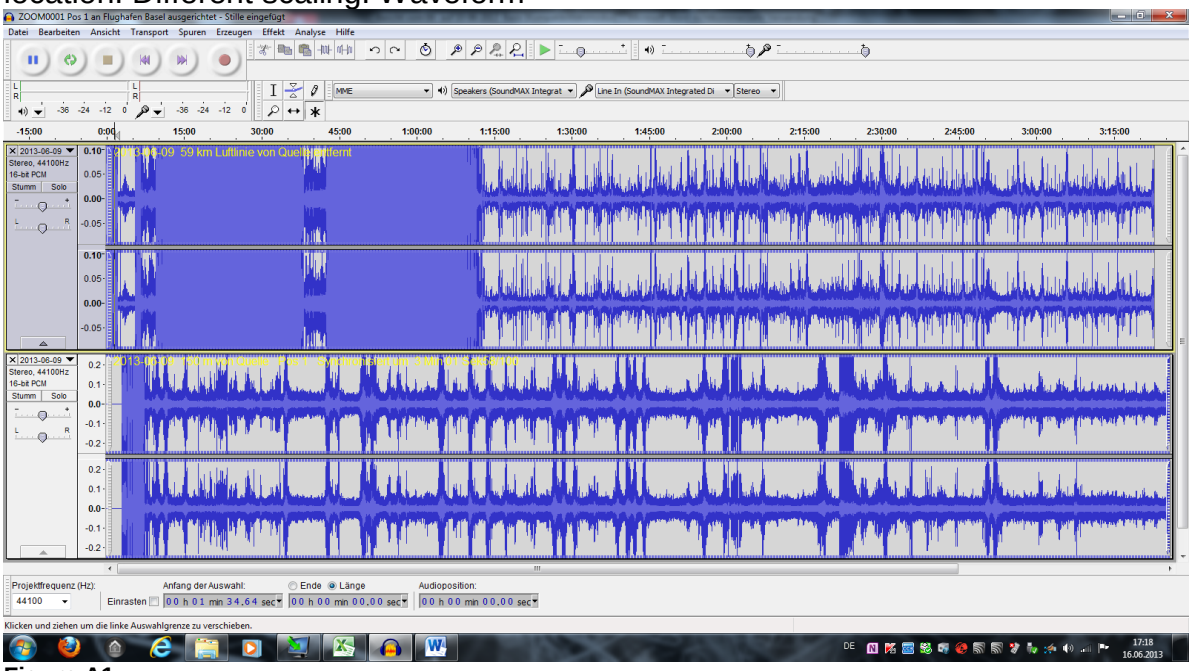

Figure A1

Complete analyzed recording from 12.35h until 15.58h, including drive to measurement location. Same scaling. Waveform

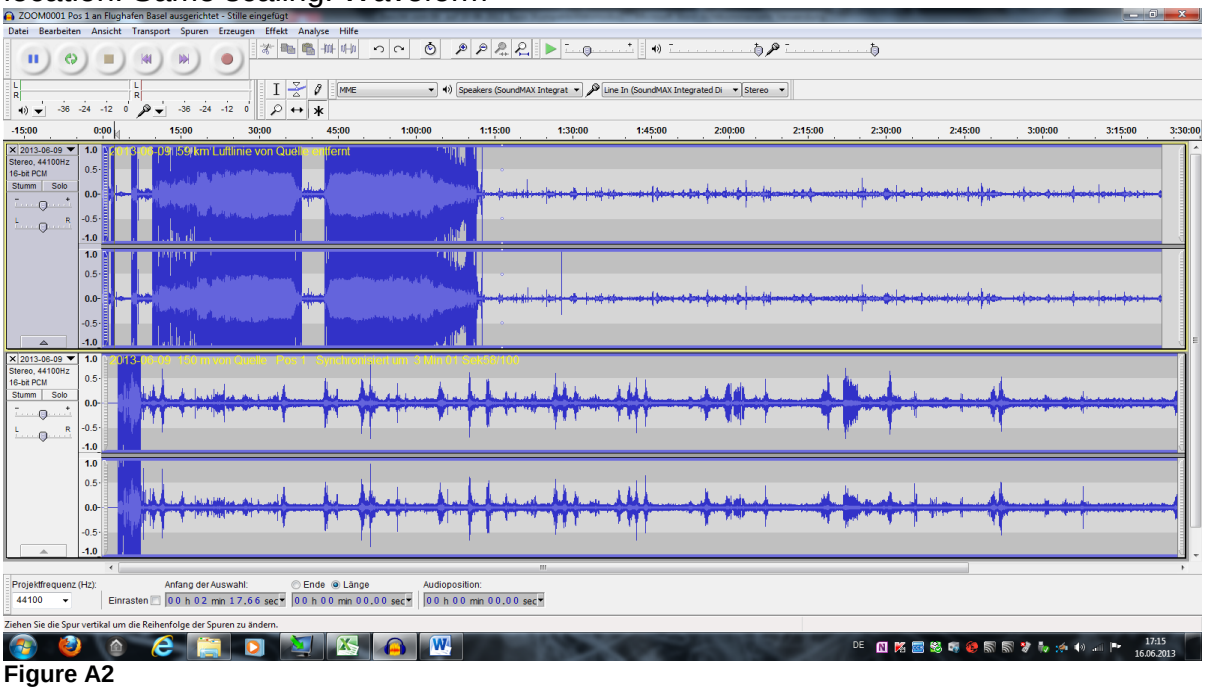

Figure A2

9.2. Analysed audio recordings after corretion regarding the drive to measurement location

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Different scaling, waveform

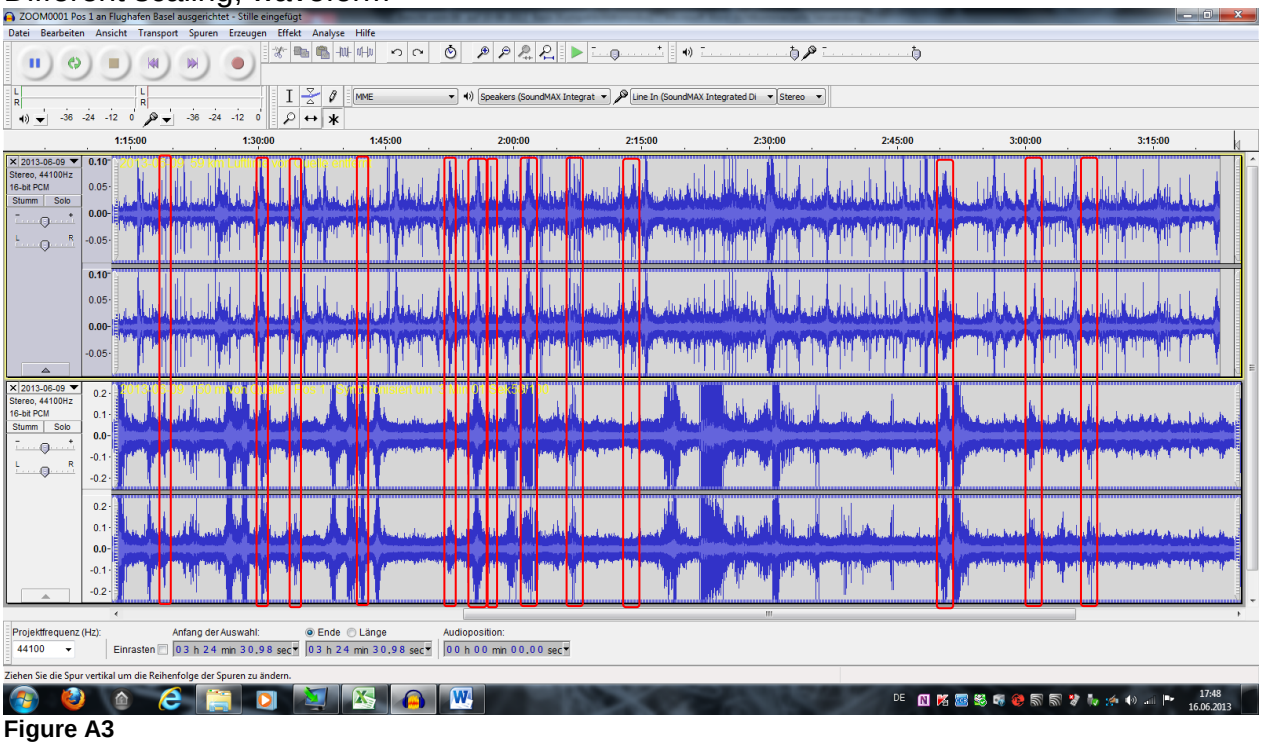

Figure A3

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 2700 Hz

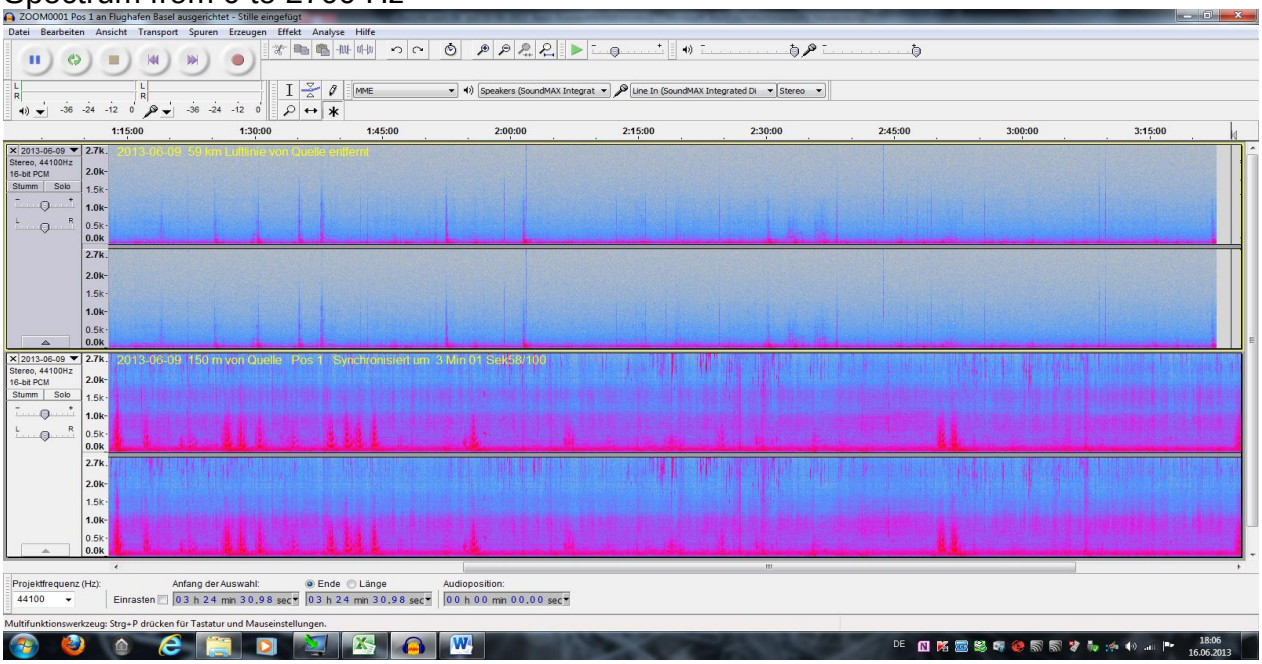

Figure A4

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 1352 Hz

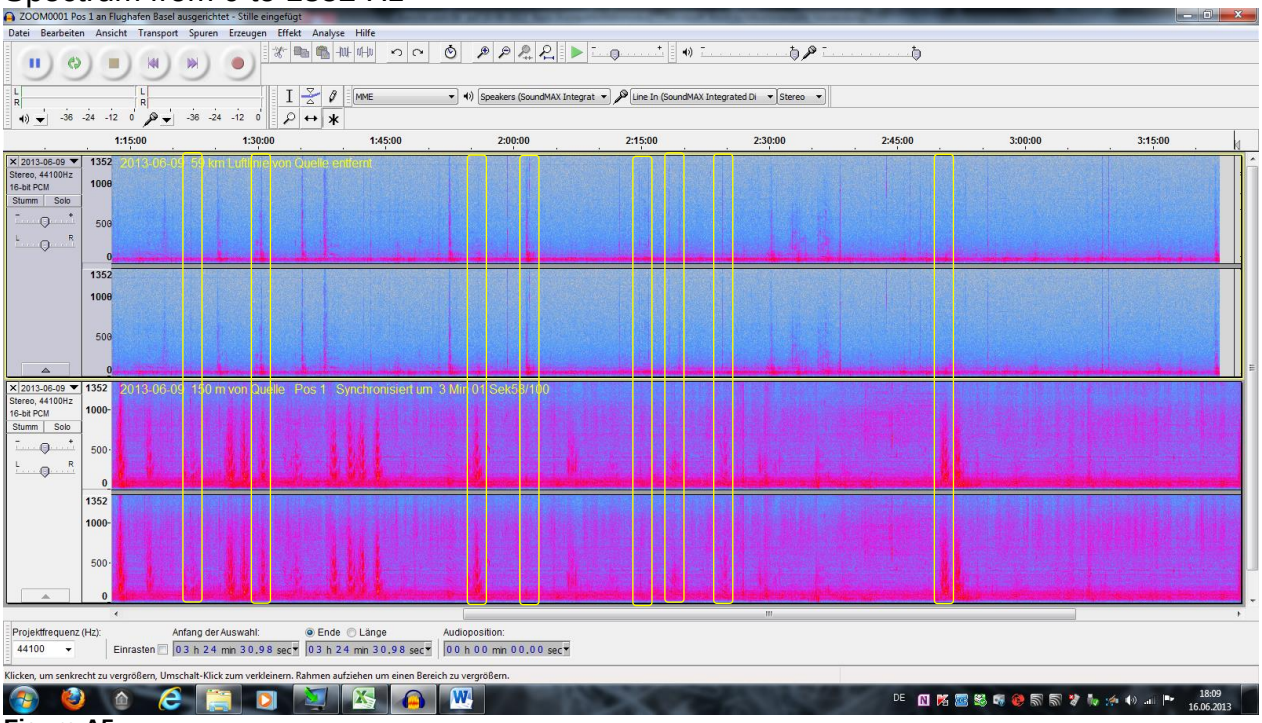

Figure A5

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 676 Hz

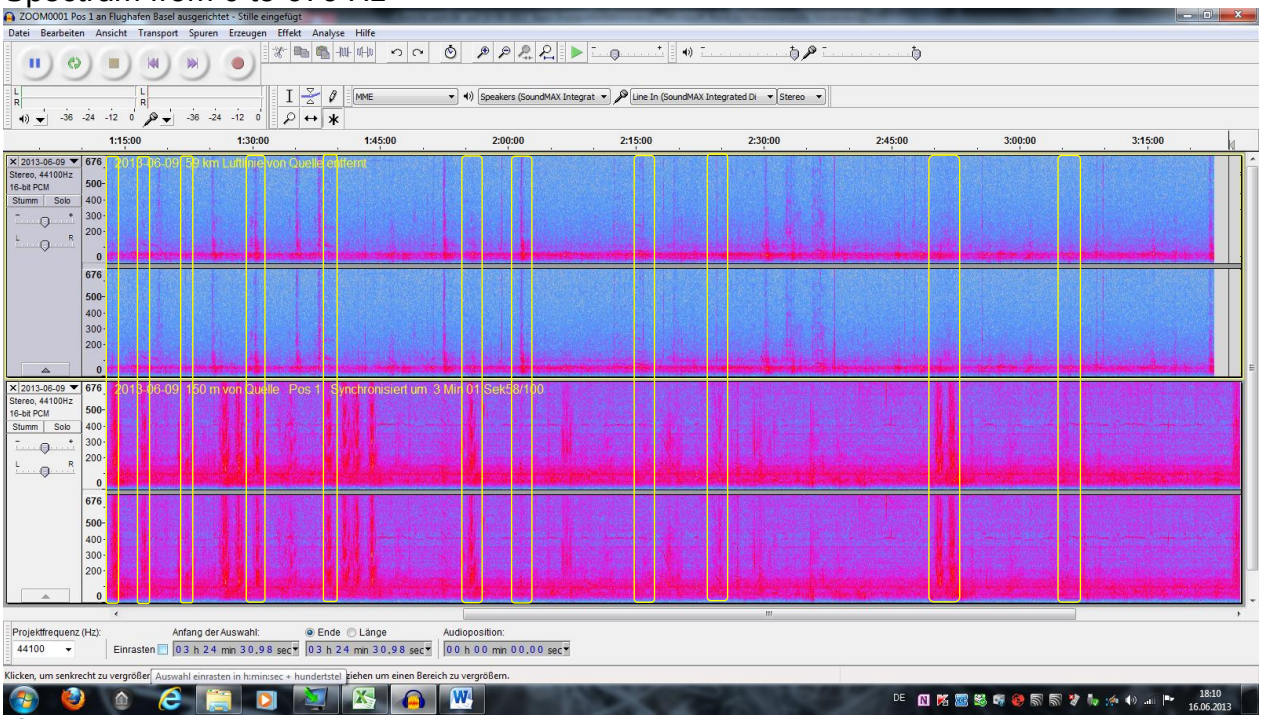

Figure A6

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 338 Hz

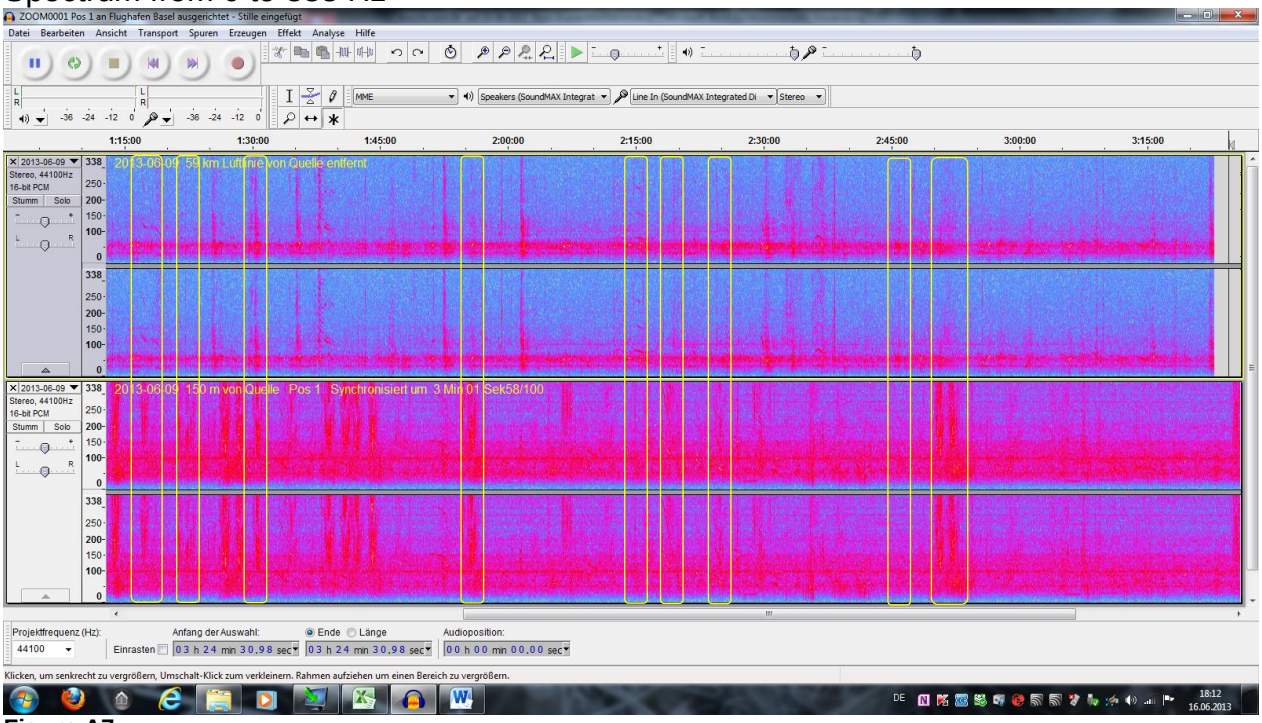

Figure A7

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 168 Hz

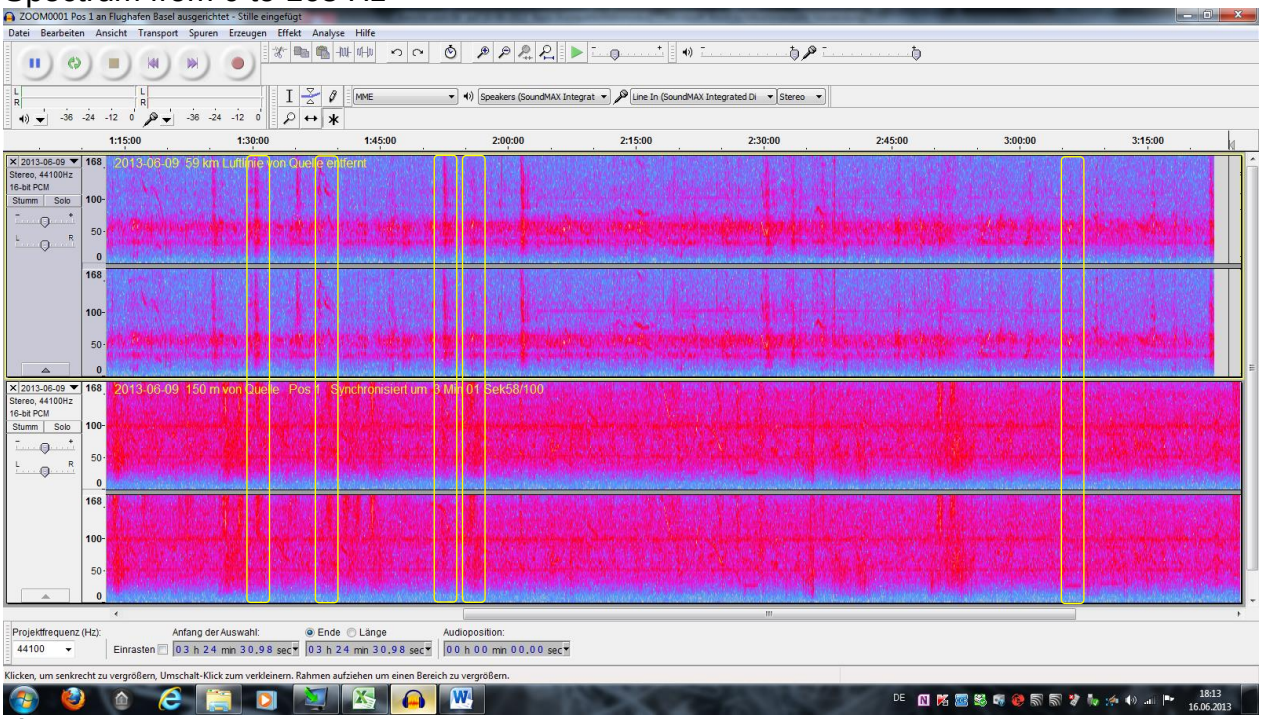

Figure A8

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 67 Hz

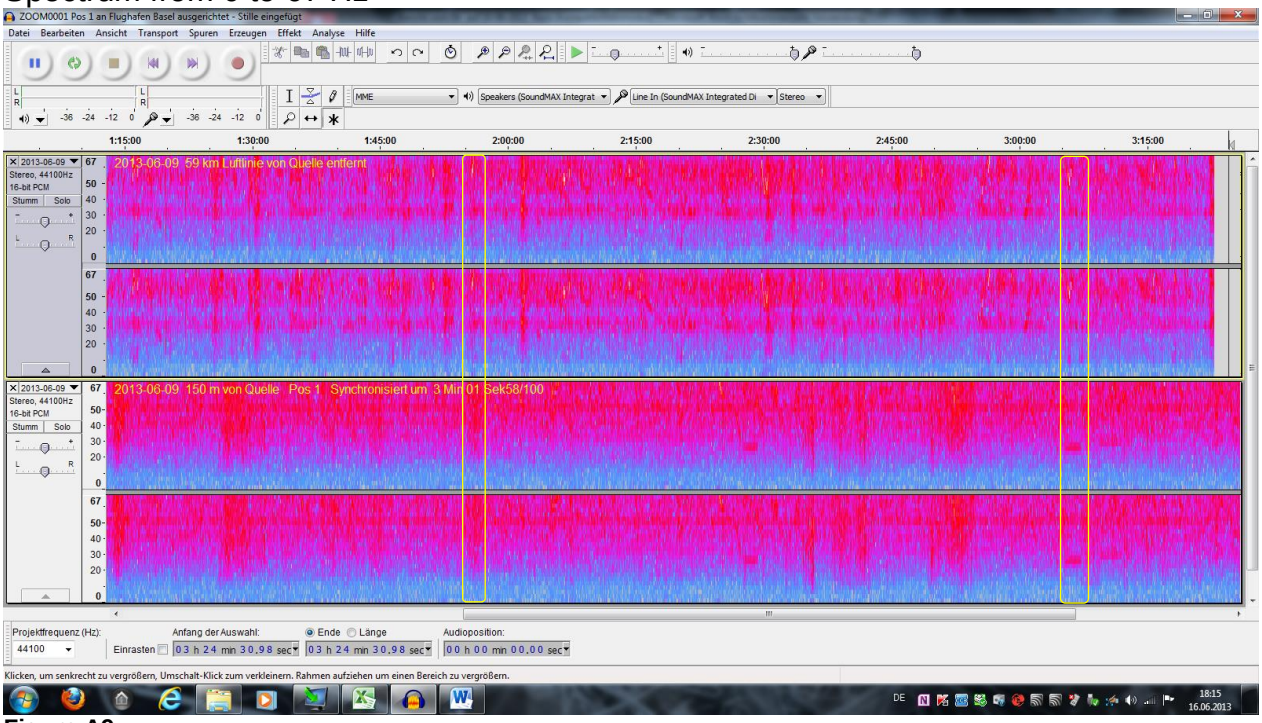

Figure A9

Analysed recording from RT 1h13 until 3h24, without drive to measurement location.
Spectrum from 0 to 26 Hz

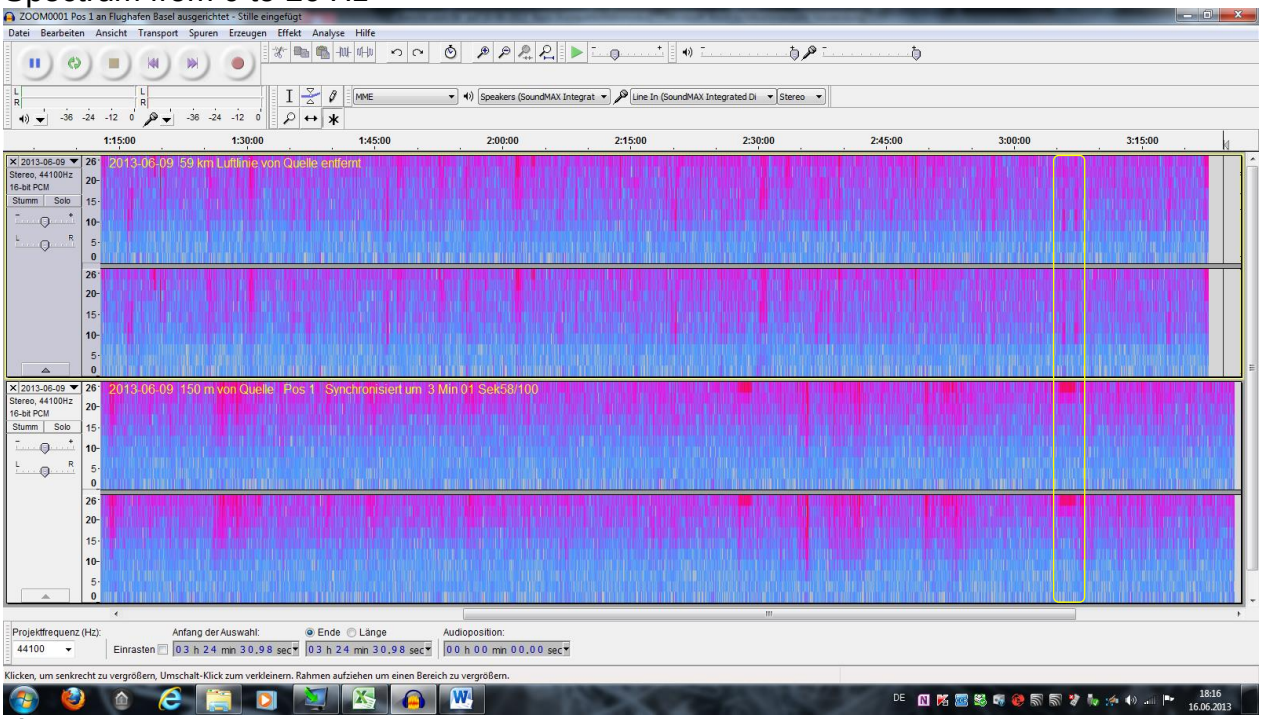

Figure A10

10. Details of analyzed audio recordings 21 minutes, resp.

10.1. Details from RT 1h13 until 1h34

Detail from RT 1h13 until 1h34, waveform

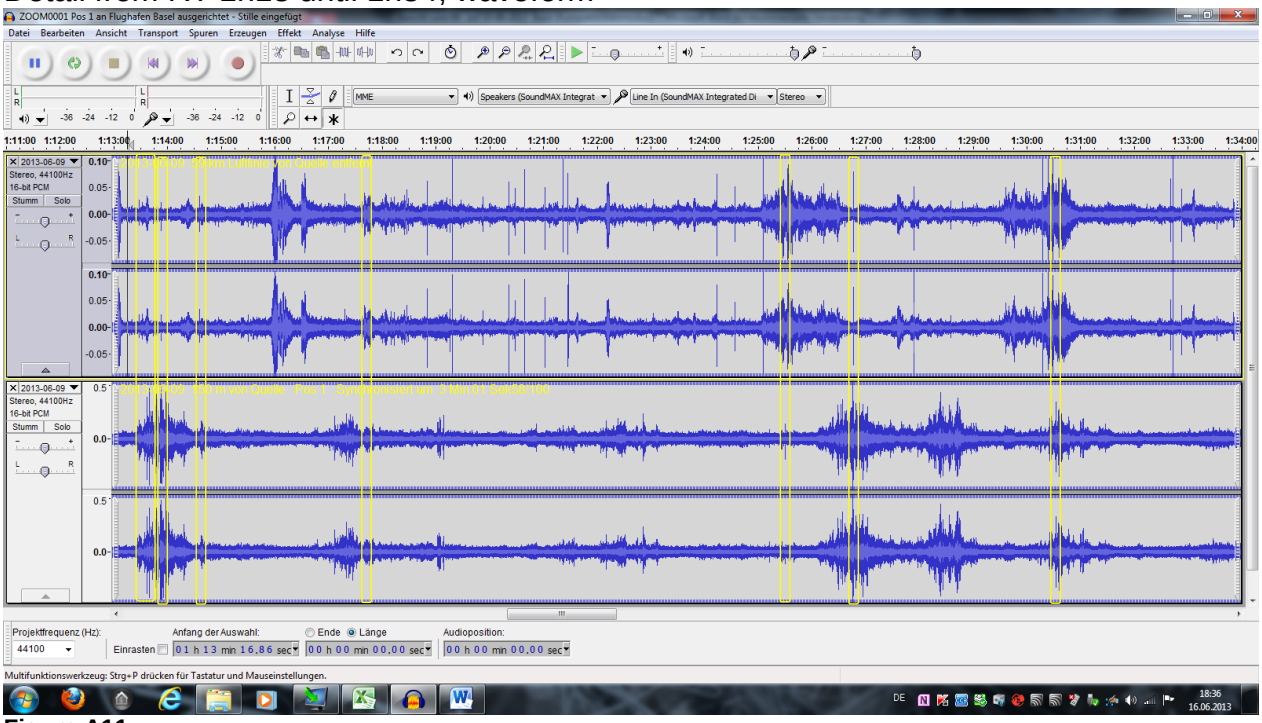

Figure A11

Detail from RT 1h13 until 1h34, Spectrum from 0 to 2600 Hz

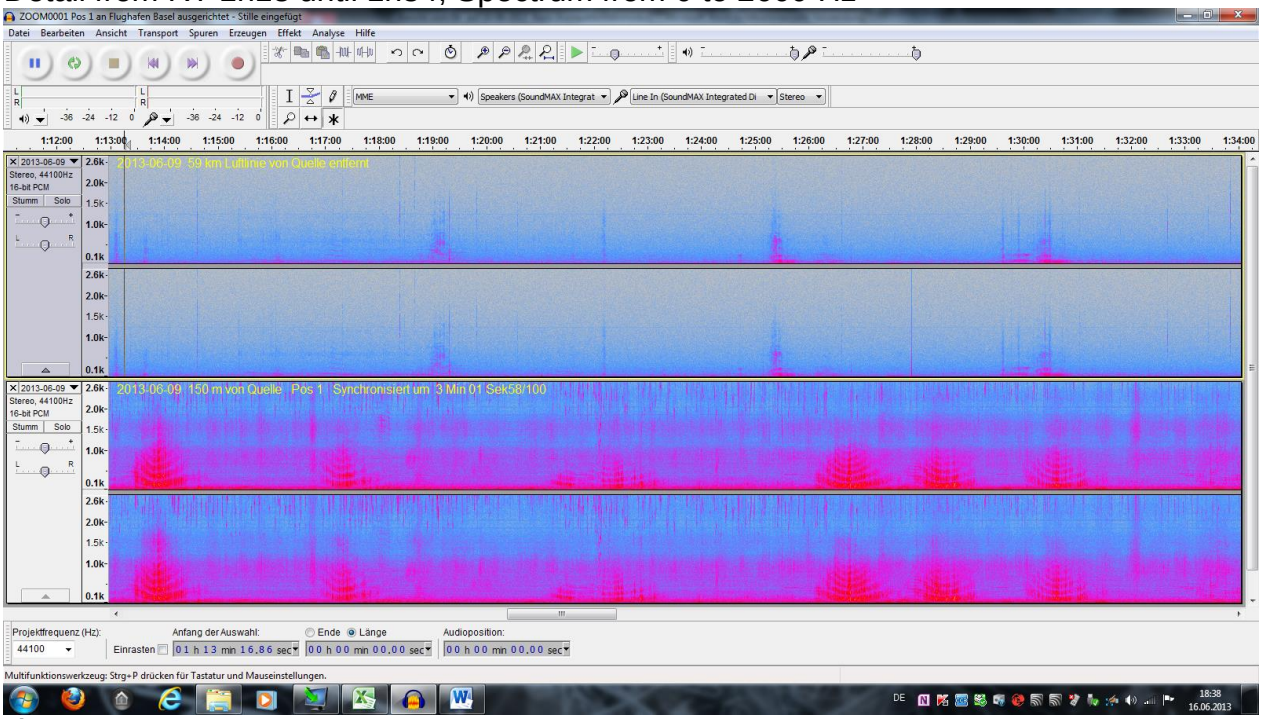

Figure A12

Detail from RT 1h13 until 1h34, Spectrum from 0 to 1322 Hz

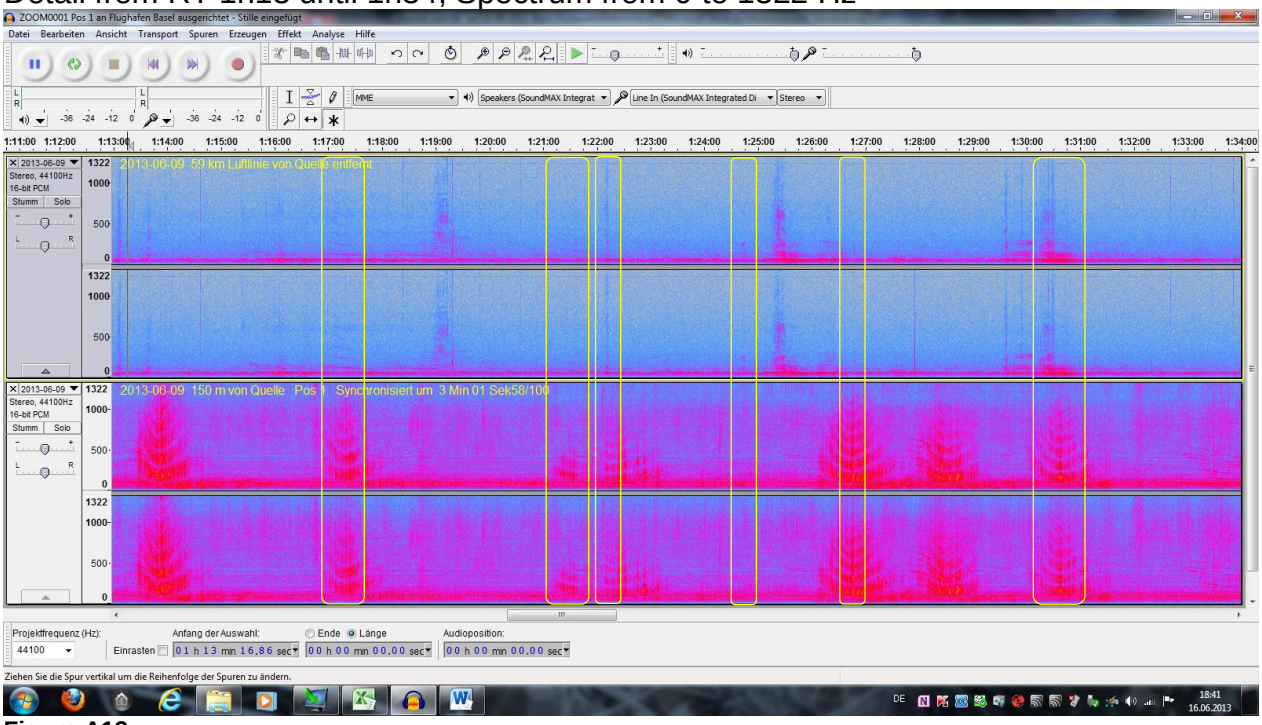

Figure A13

Detail from RT 1h13 until 1h34, Spectrum from 0 to 661 Hz

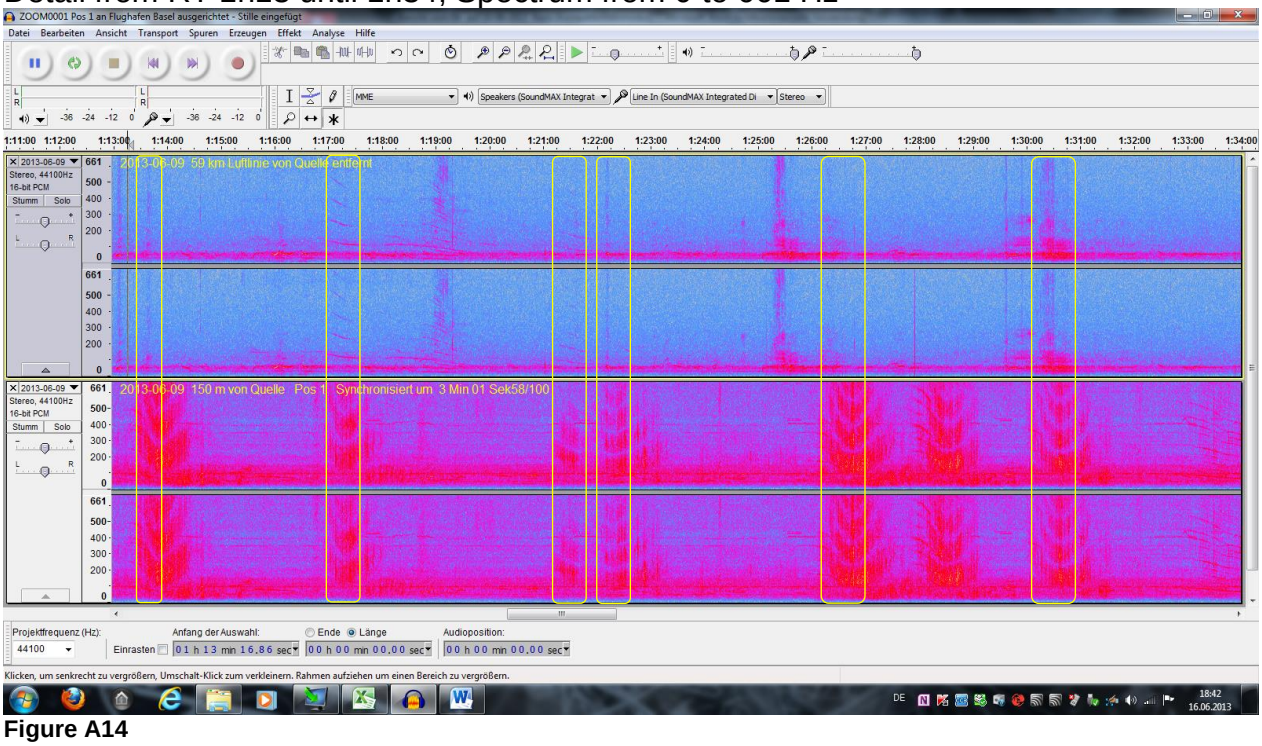

Figure A14

Detail from RT 1h13 until 1h34, Spectrum from 0 to 330 Hz

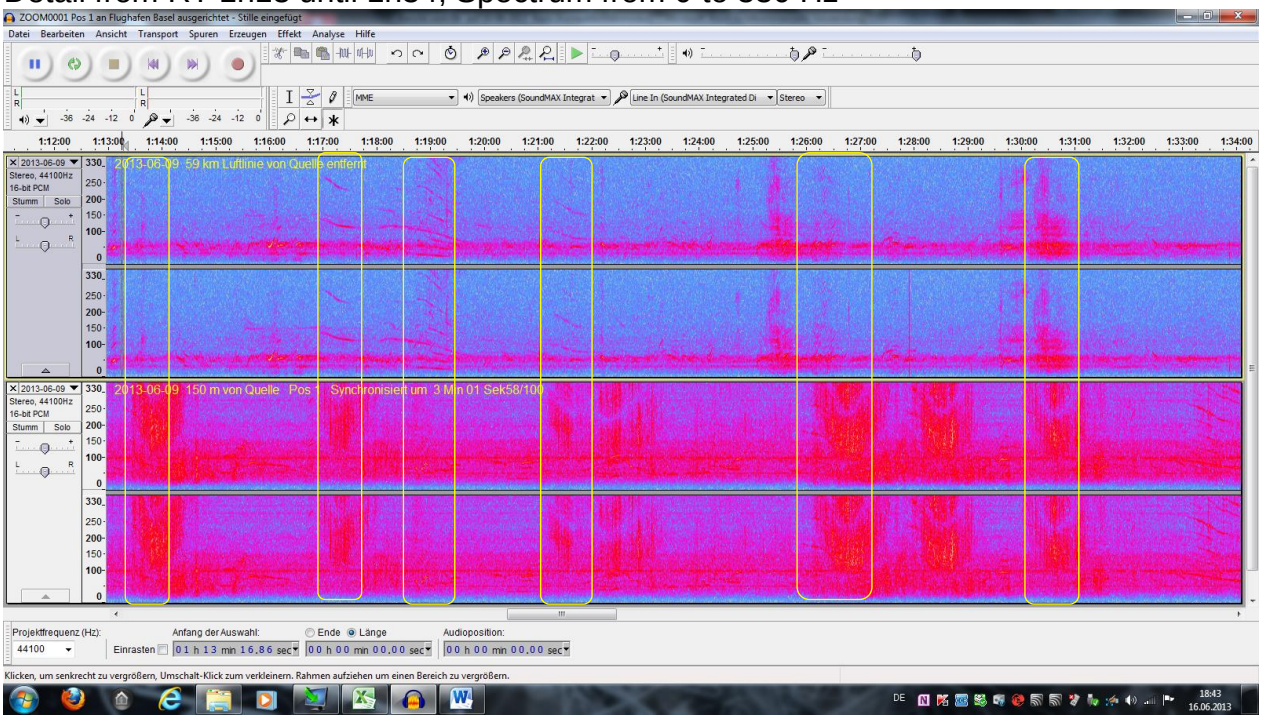

Figure A15

Detail from RT 1h13 until 1h34, Spectrum from 0 to 165 Hz

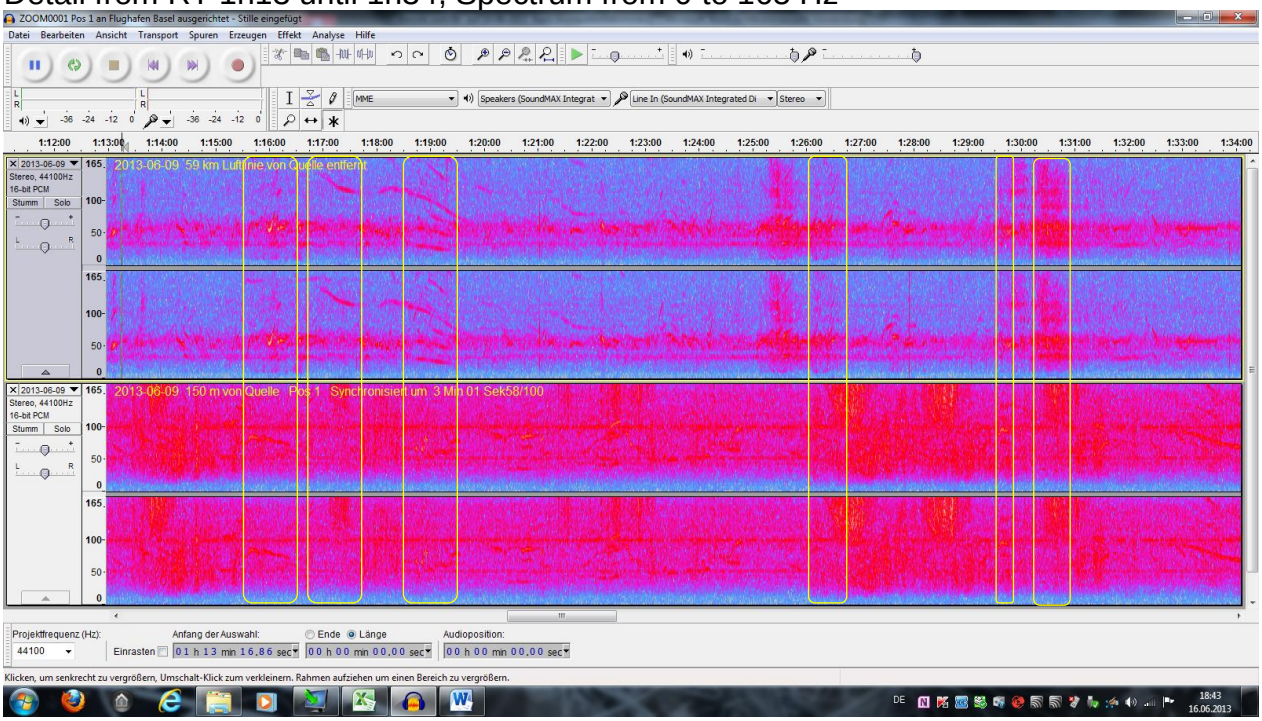

Figure A16

Detail from RT 1h13 until 1h34, Spectrum from 0 to 64 Hz

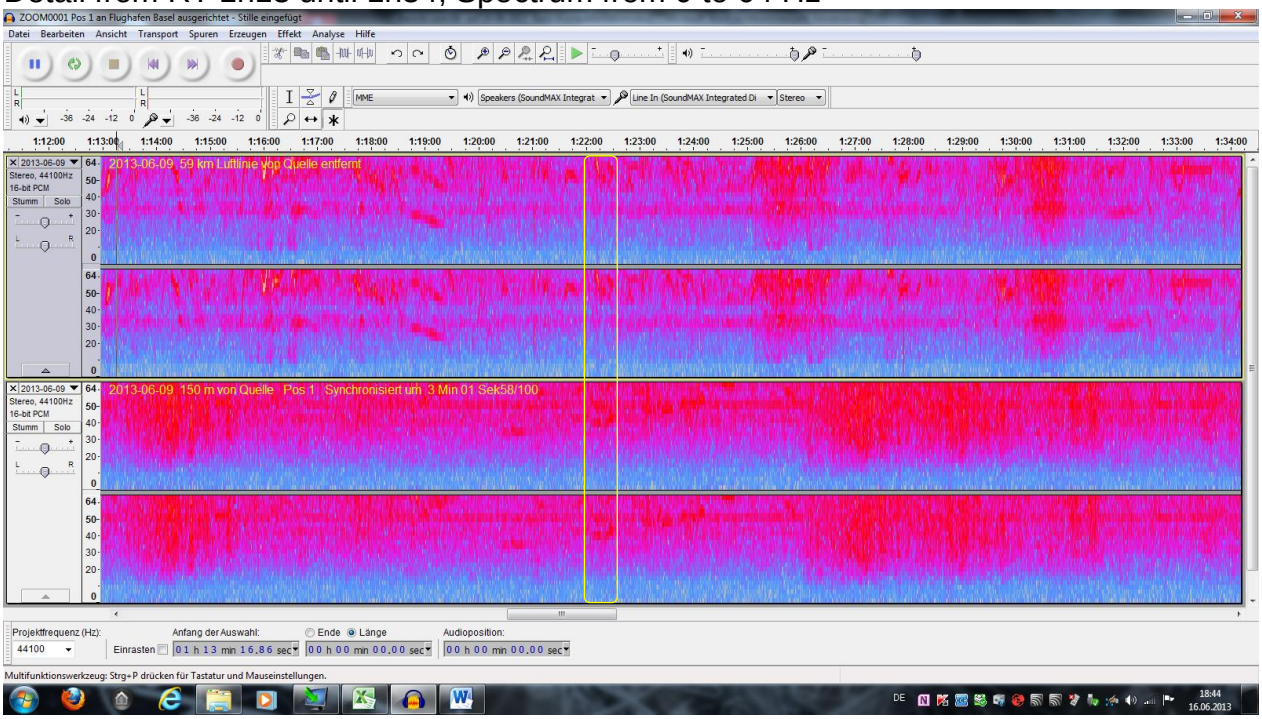

Figure A17

Detail from RT 1h13 until 1h34, Spectrum from 0 to 26 Hz

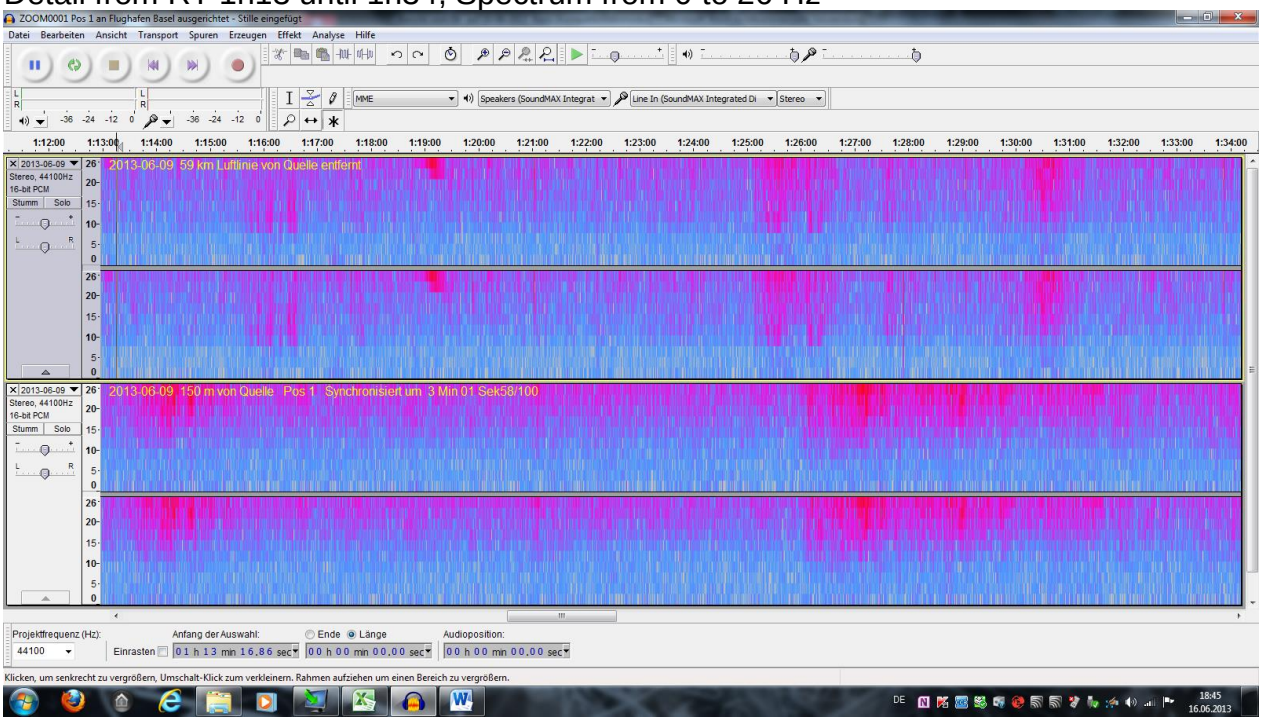

Figure A18

10.2. Details from RT 1h33 until 1h54

Details from RT 1h33 until 1h54, waveform

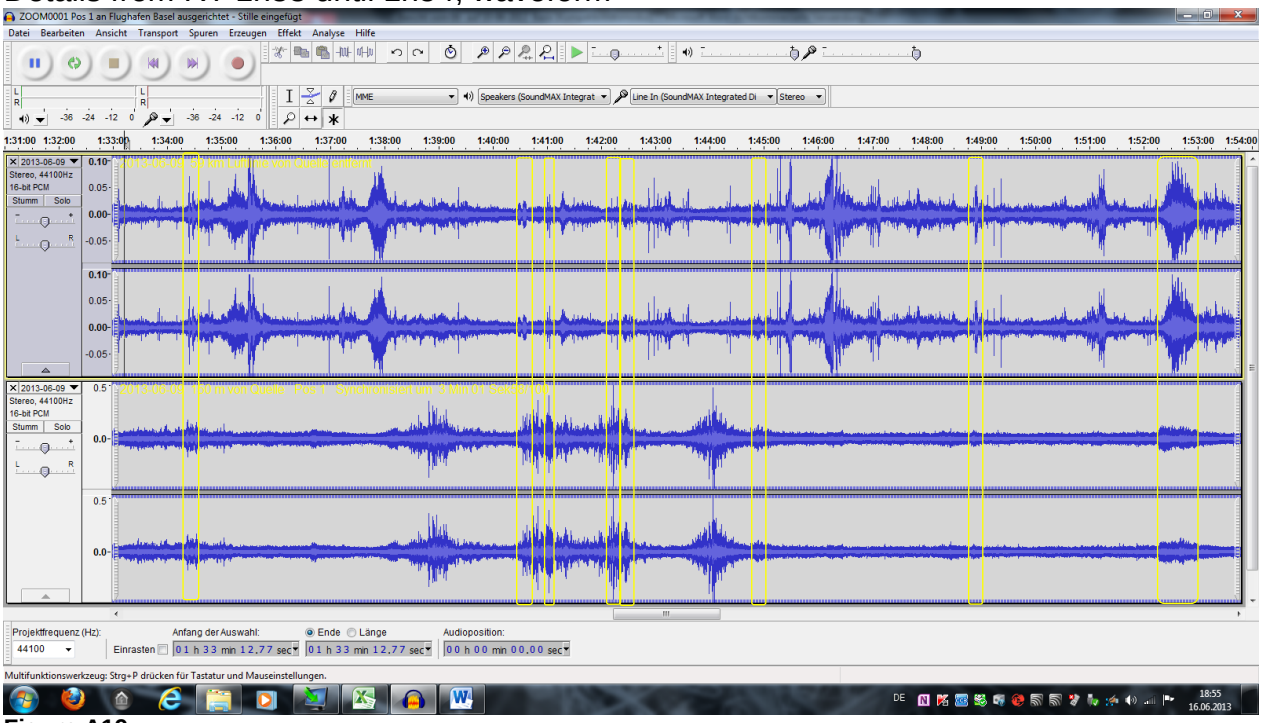

Figure A19

Details from RT 1h33 until 1h54, Spectrum from 0 to 2600 Hz

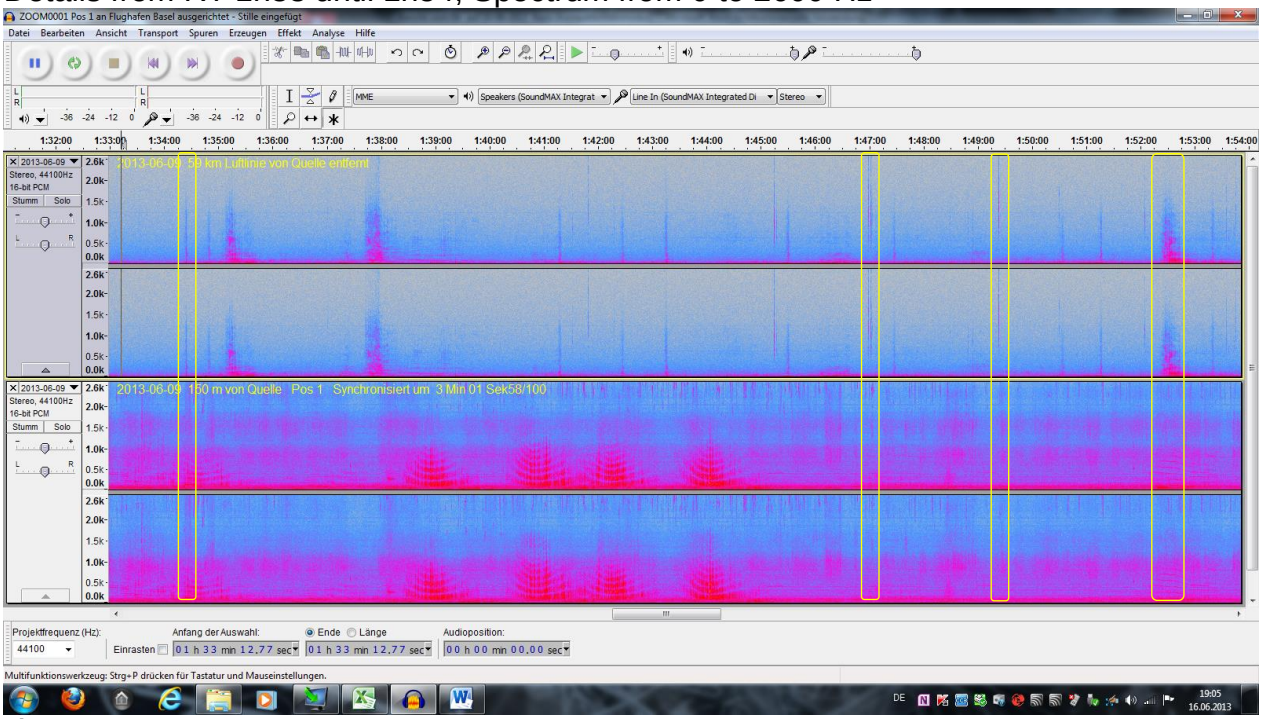

Figure A20

Details from RT 1h33 until 1h54, Spectrum from 0 to 1272 Hz

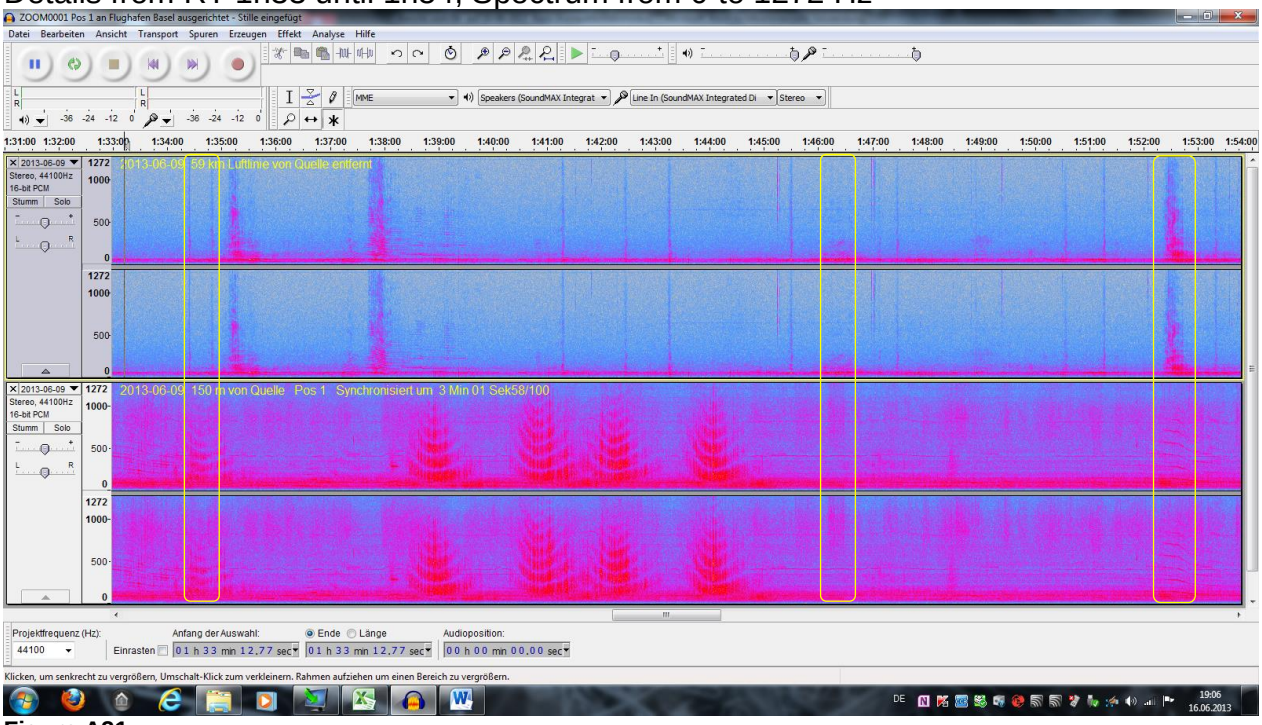

Figure A21

Details from RT 1h33 until 1h54, Spectrum from 0 to 636 Hz

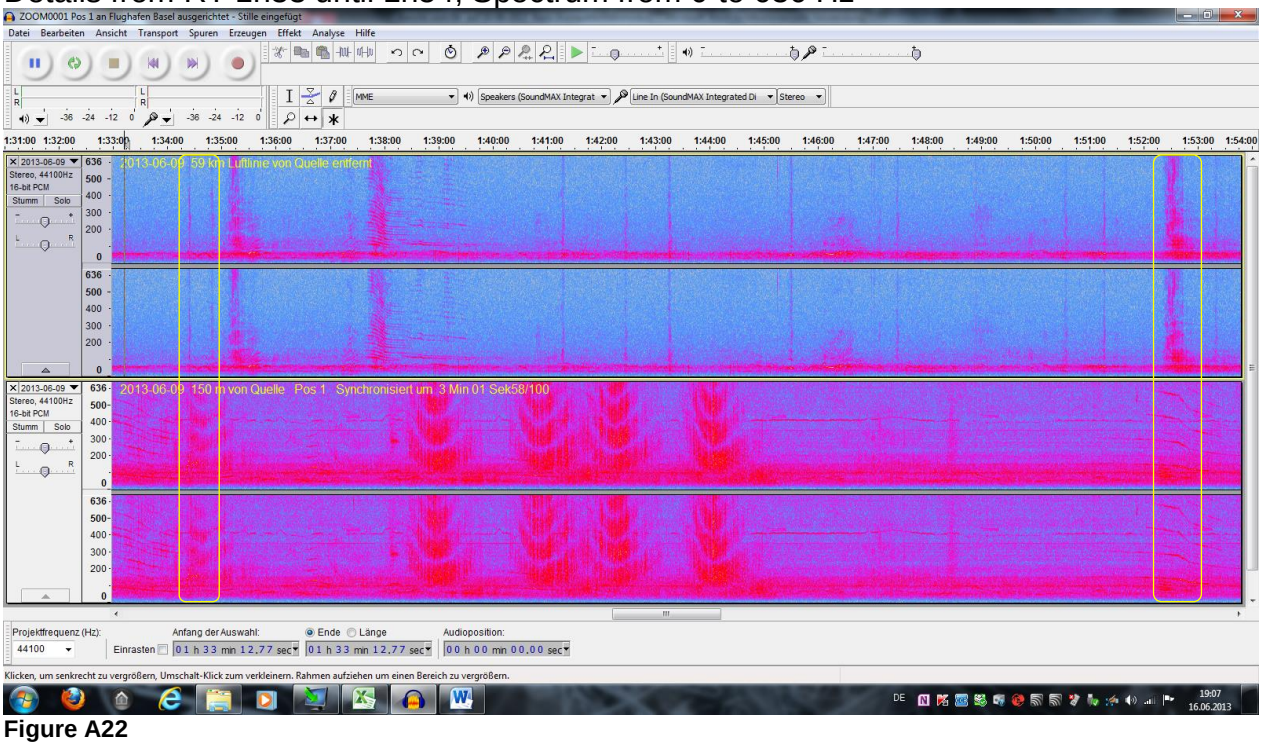

Figure A22

Details from RT 1h33 until 1h54, Spectrum from 0 to 318 Hz

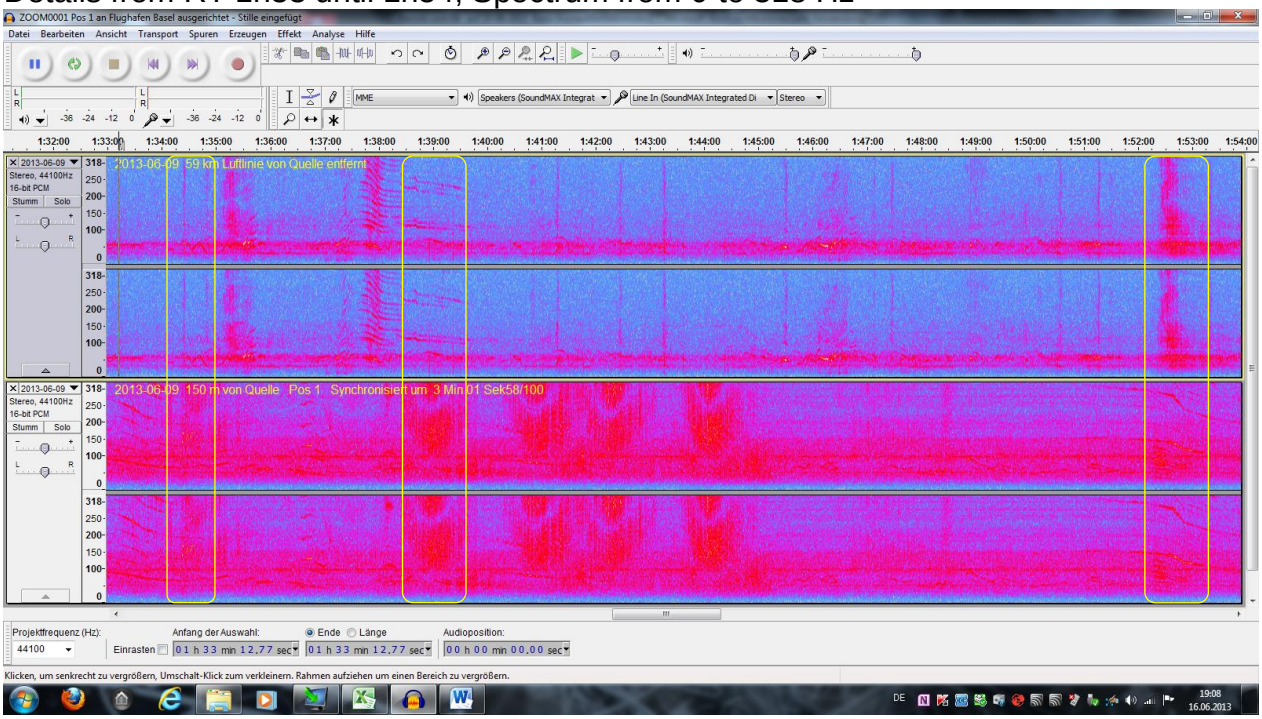

Figure A23

Details from RT 1h33 until 1h54, Spectrum from 0 to 159 Hz

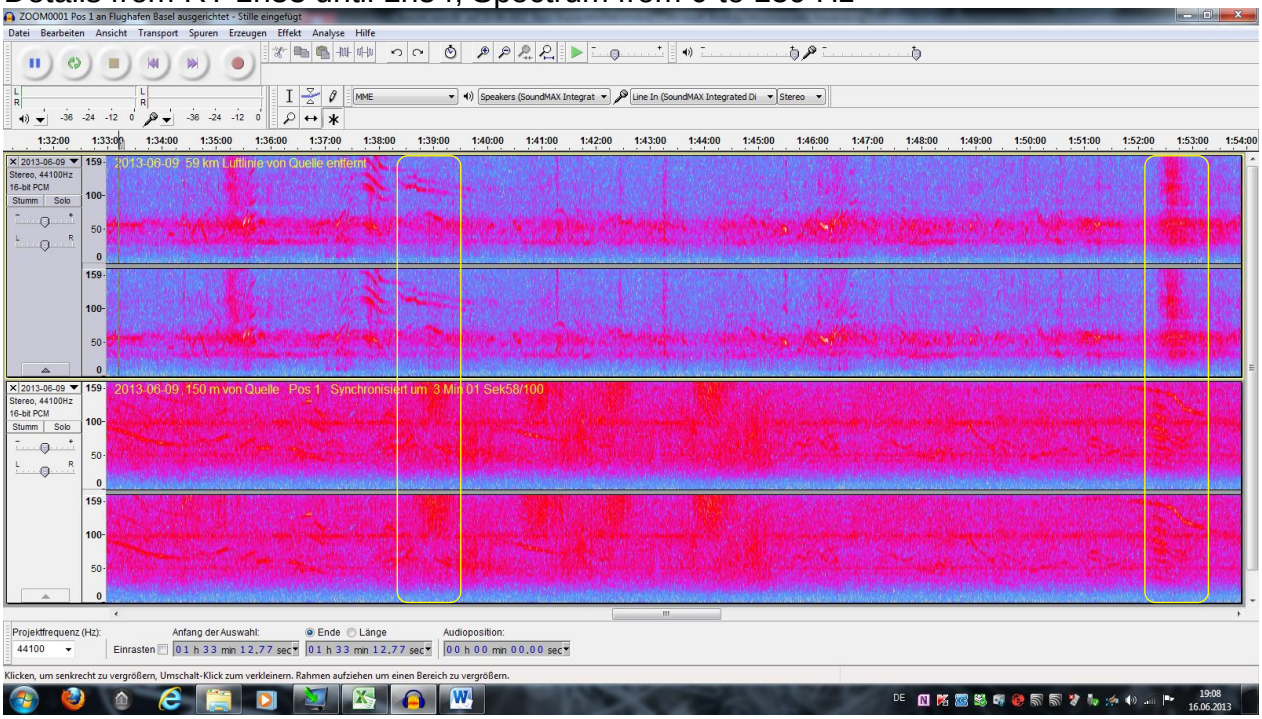

Figure A24

Details from RT 1h33 until 1h54, Spectrum from 0 to 79 Hz

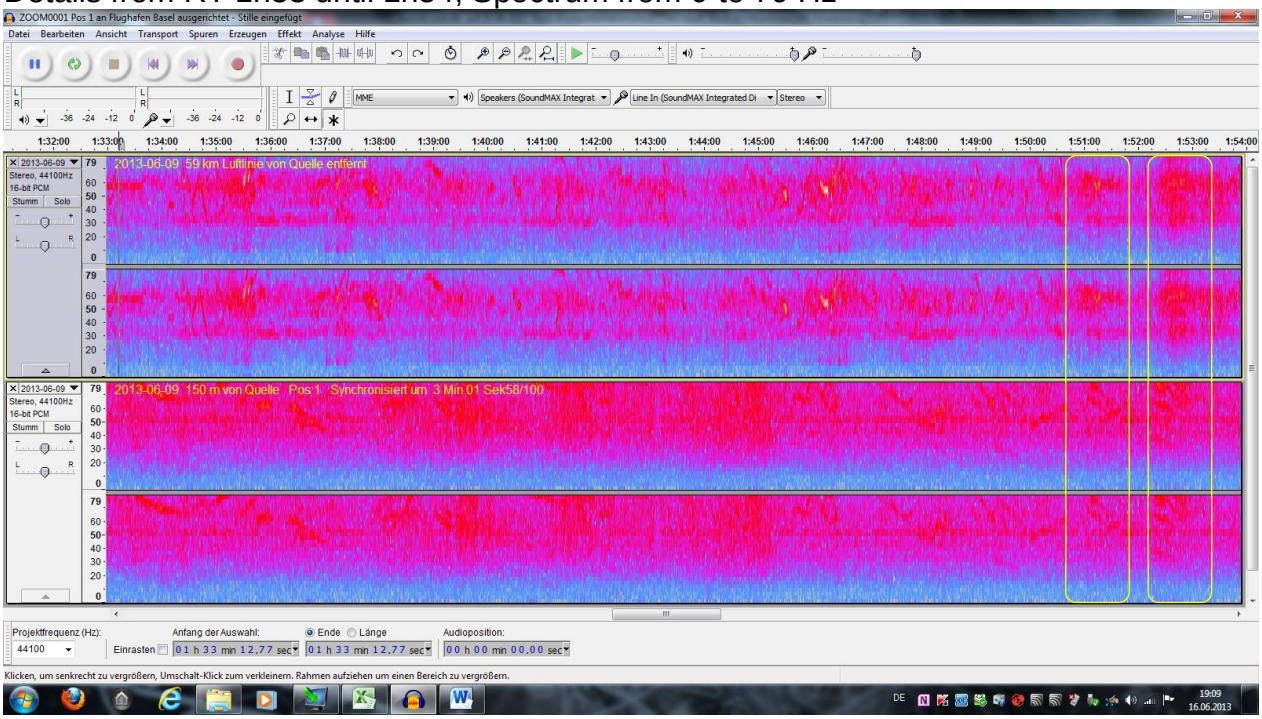

Figure A25

Details from RT 1h33 until 1h54, Spectrum from 0 to 26 Hz

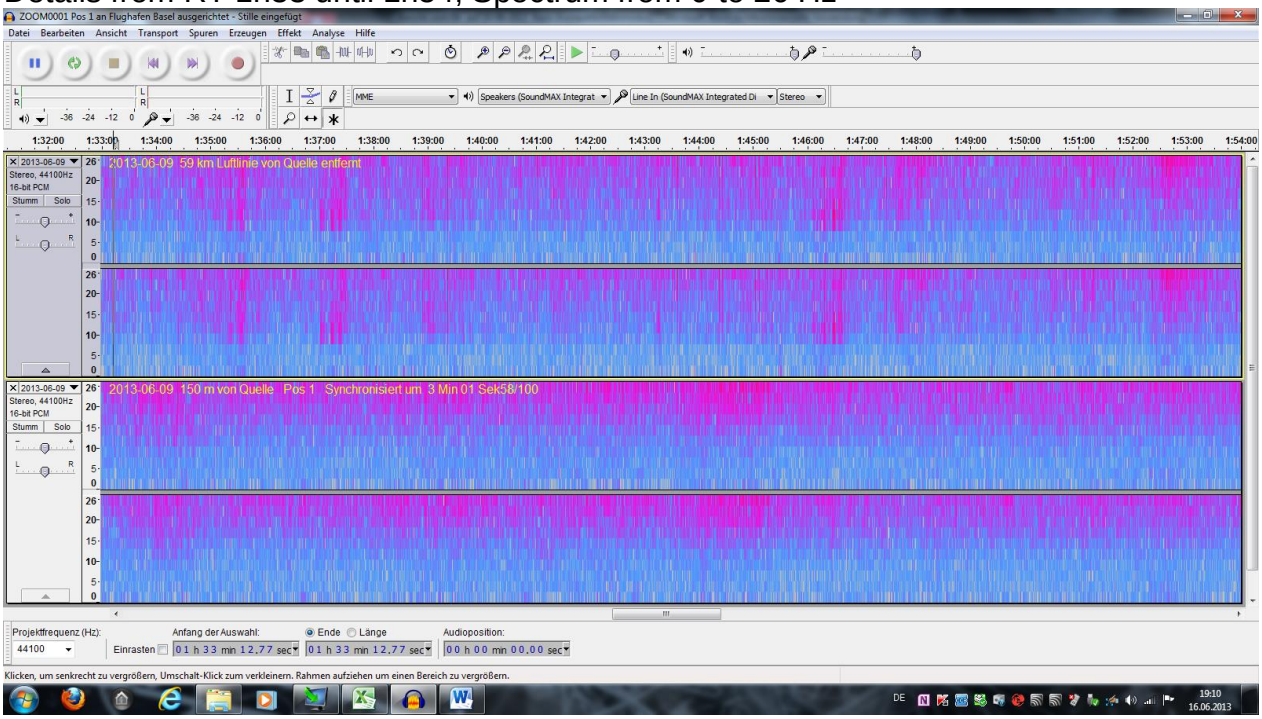

Figure A26

10.3. Details from RT 1h53 until 2h14

Details from RT 1h53 until 2h14, waveform

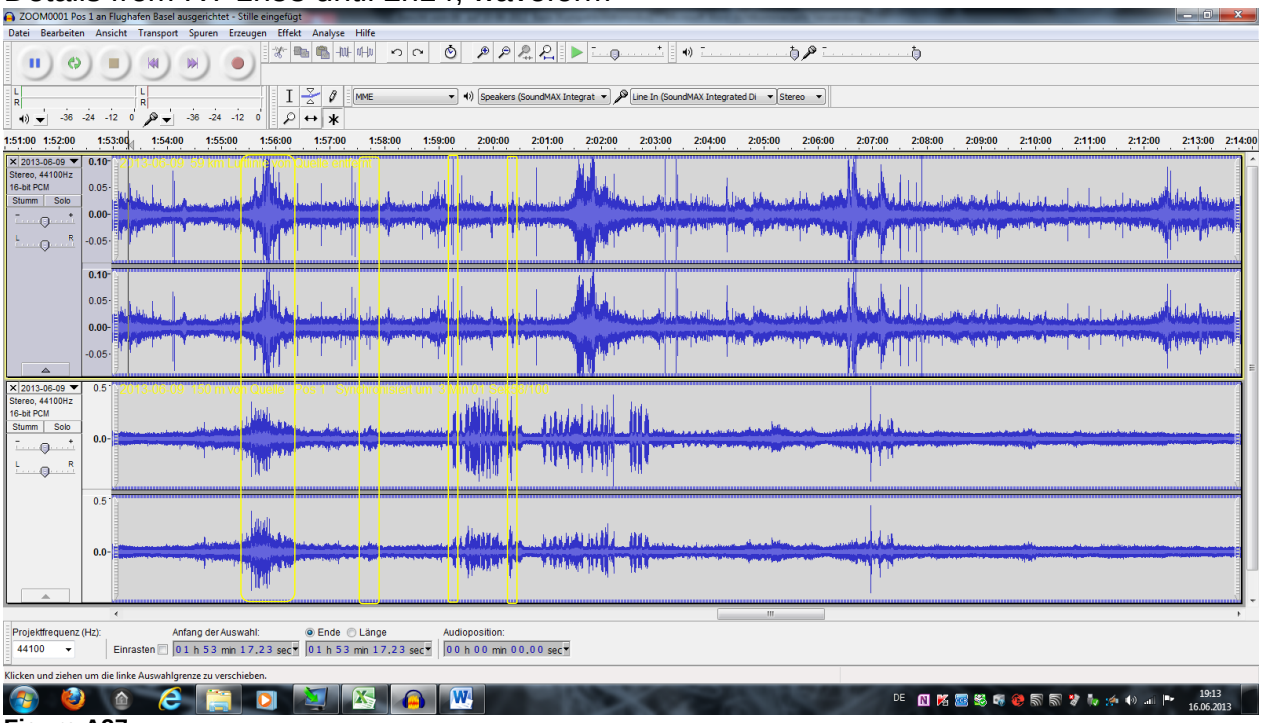

Figure A27

Details from RT 1h53 until 2h14, Spectrum from 0 to 2600 Hz

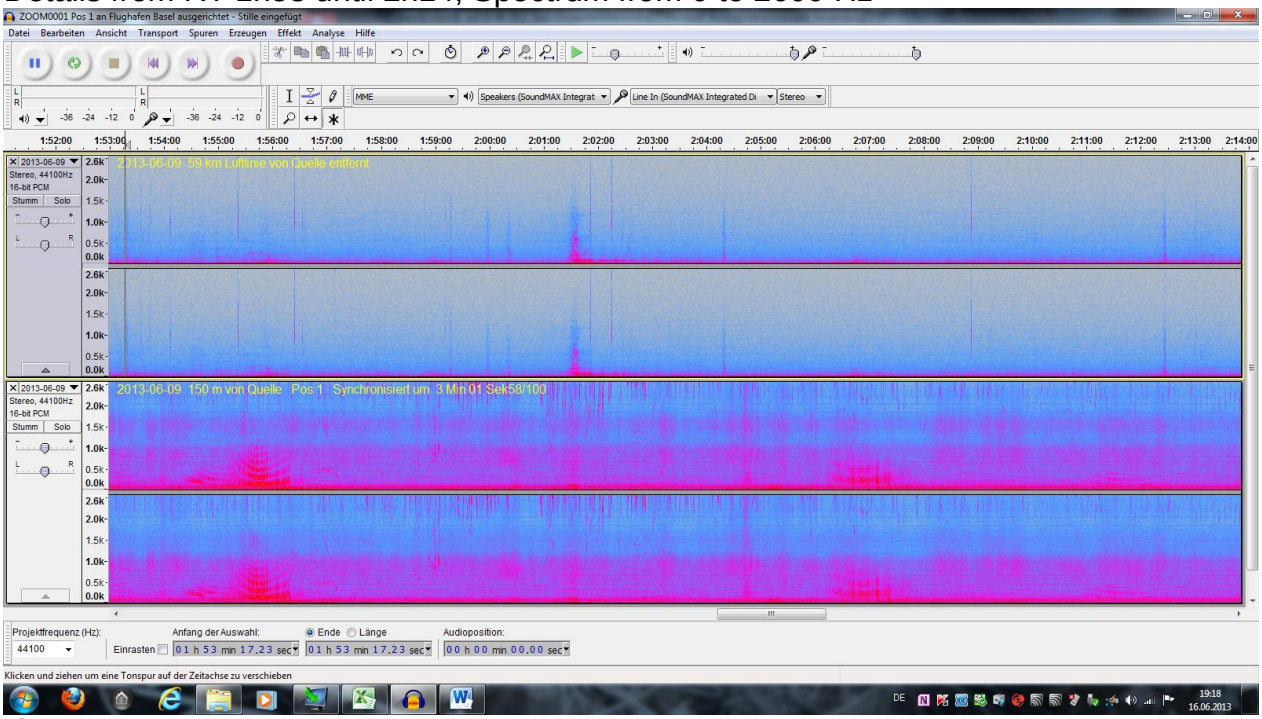

Figure A28

Details from RT 1h53 until 2h14, Spectrum from 0 to 1261 Hz

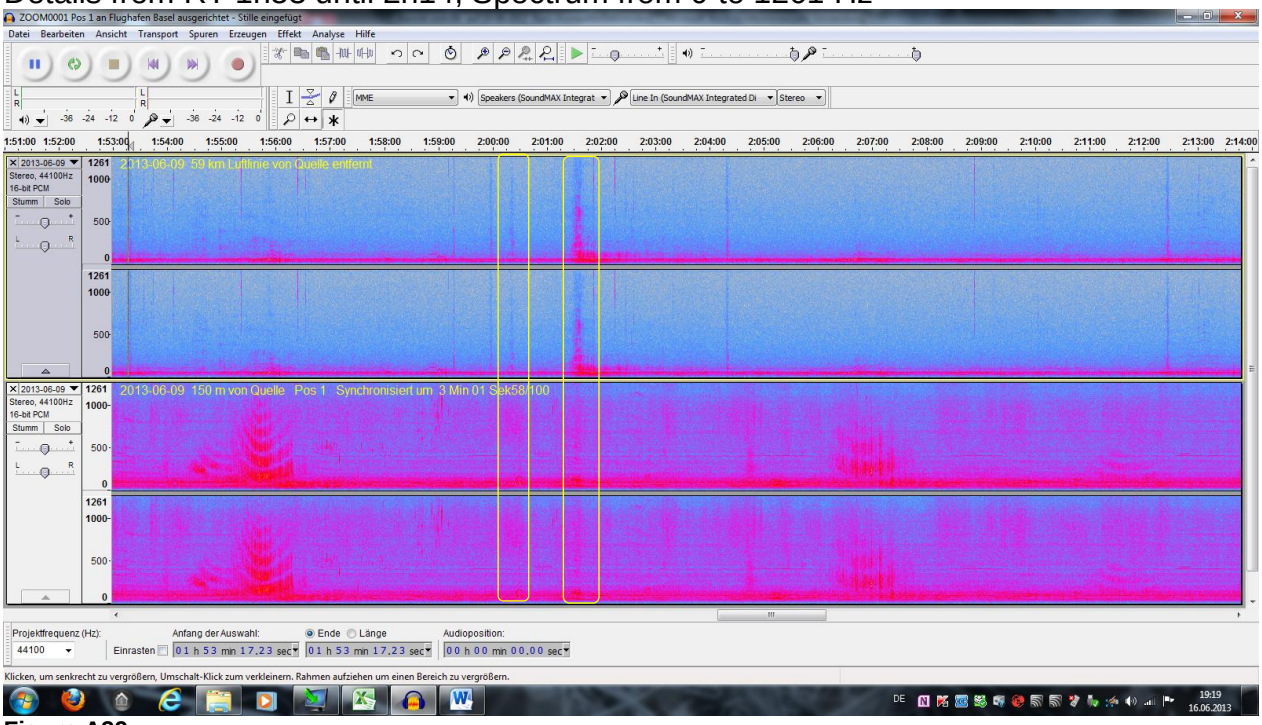

Figure A29

Details from RT 1h53 until 2h14, Spectrum from 0 to 630 Hz

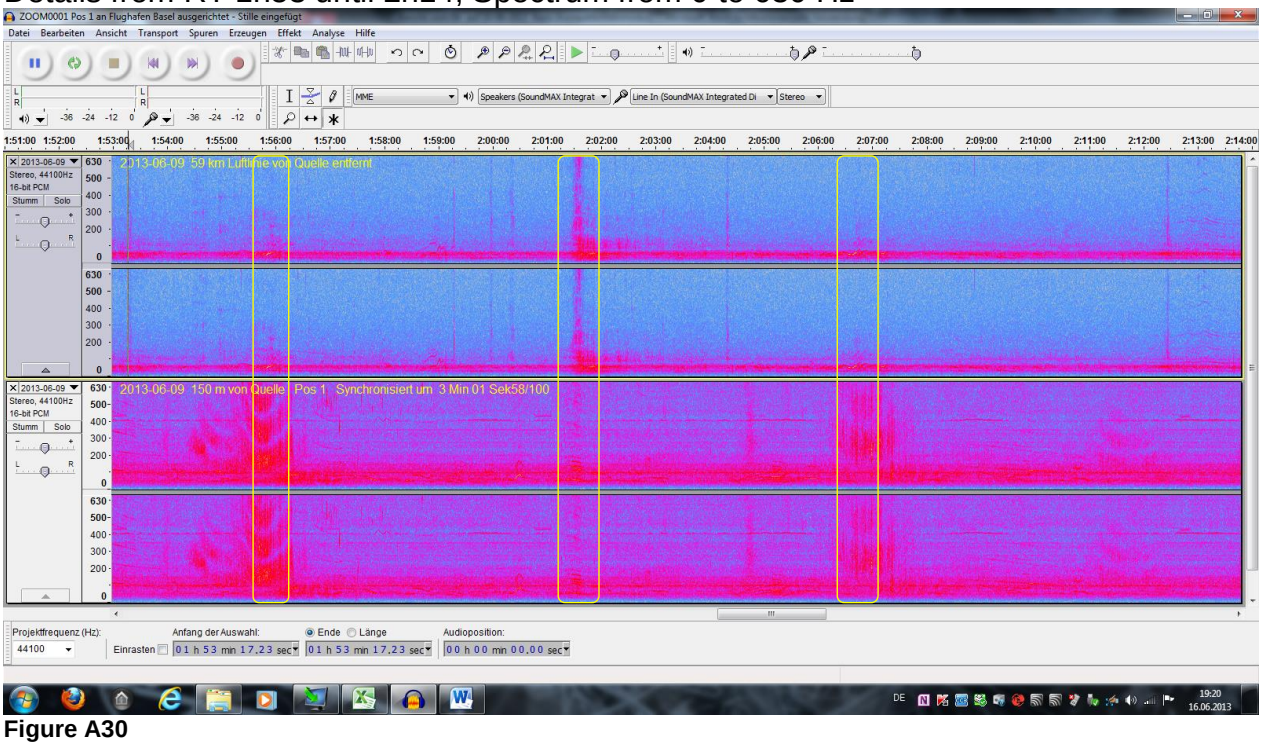

Figure A30

Details from RT 1h53 until 2h14, Spectrum from 0 to 315 Hz

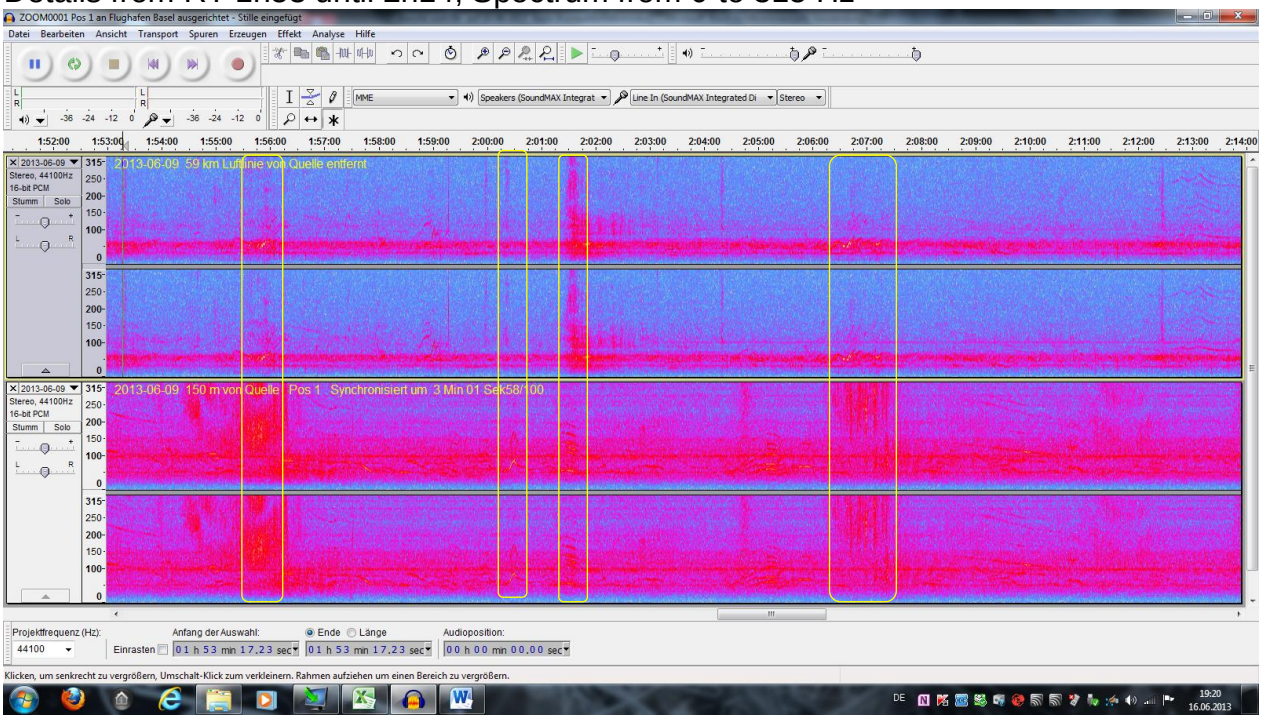

Figure A31

Details from RT 1h53 until 2h14, Spectrum from 0 to 157 Hz

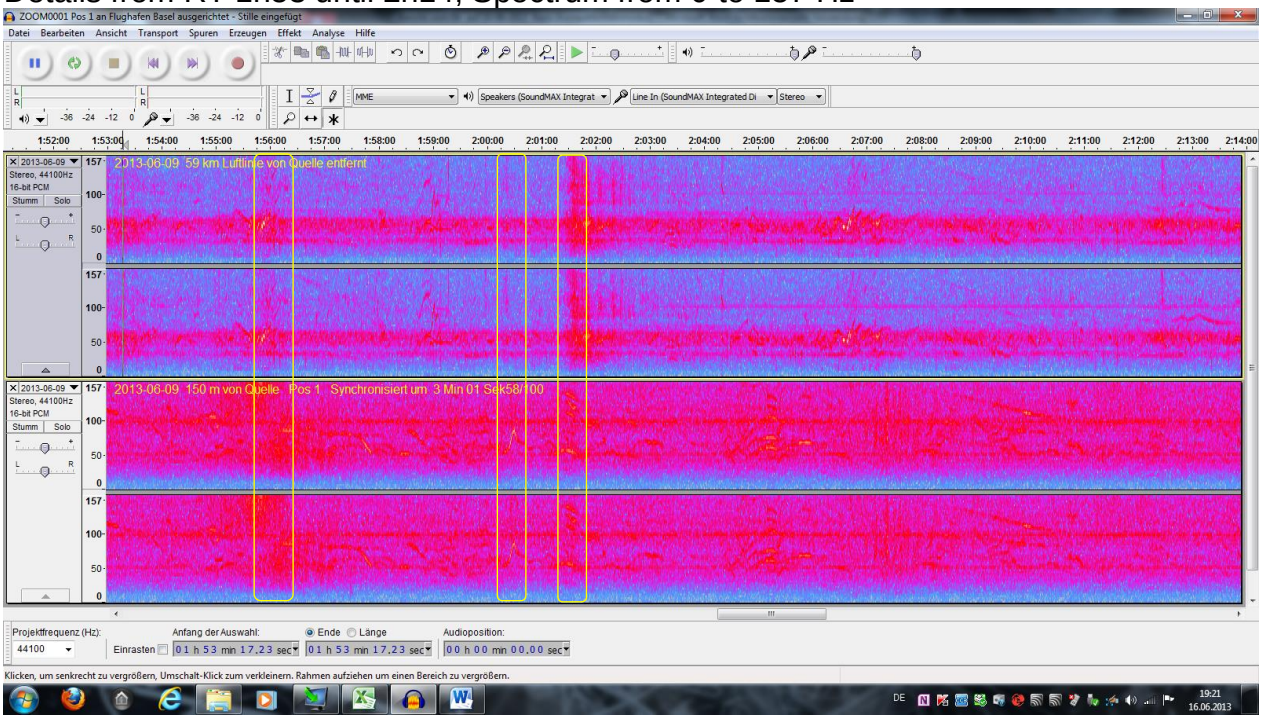

Figure A32

Details from RT 1h53 until 2h14, Spectrum from 0 to 78 Hz

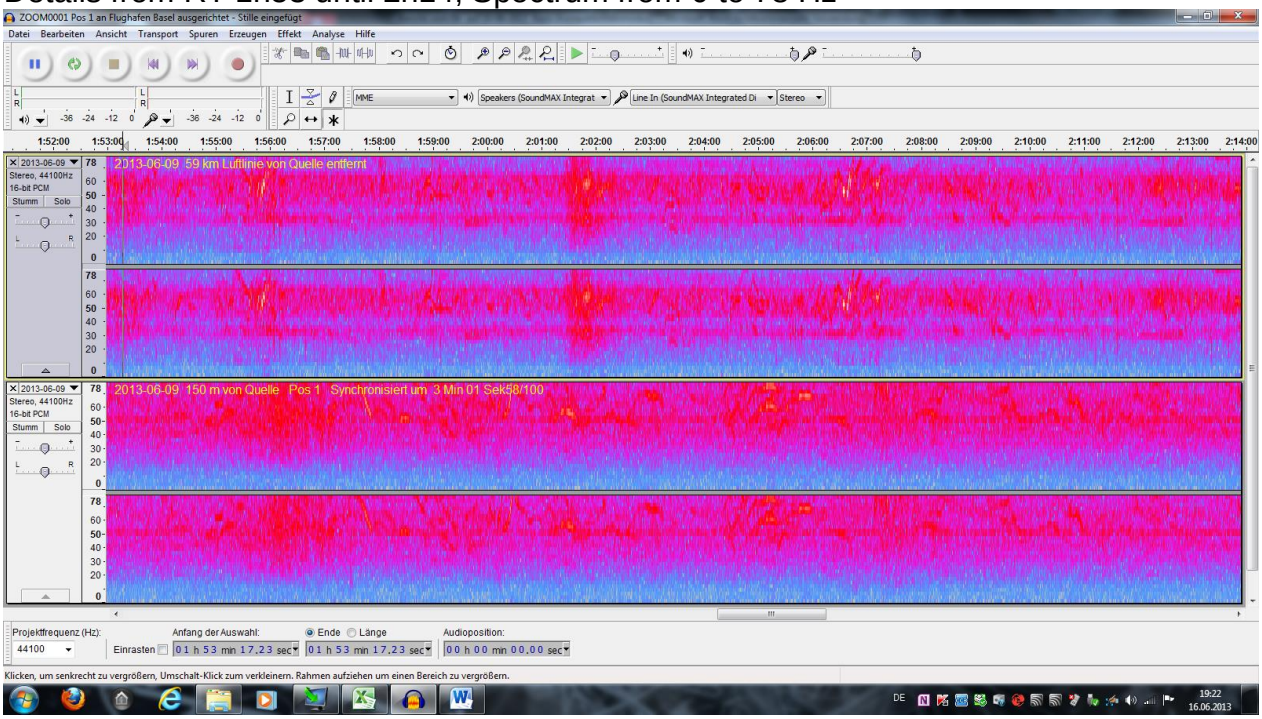

Figure A33

Details from RT 1h53 until 2h14, Spectrum from 0 to 26 Hz

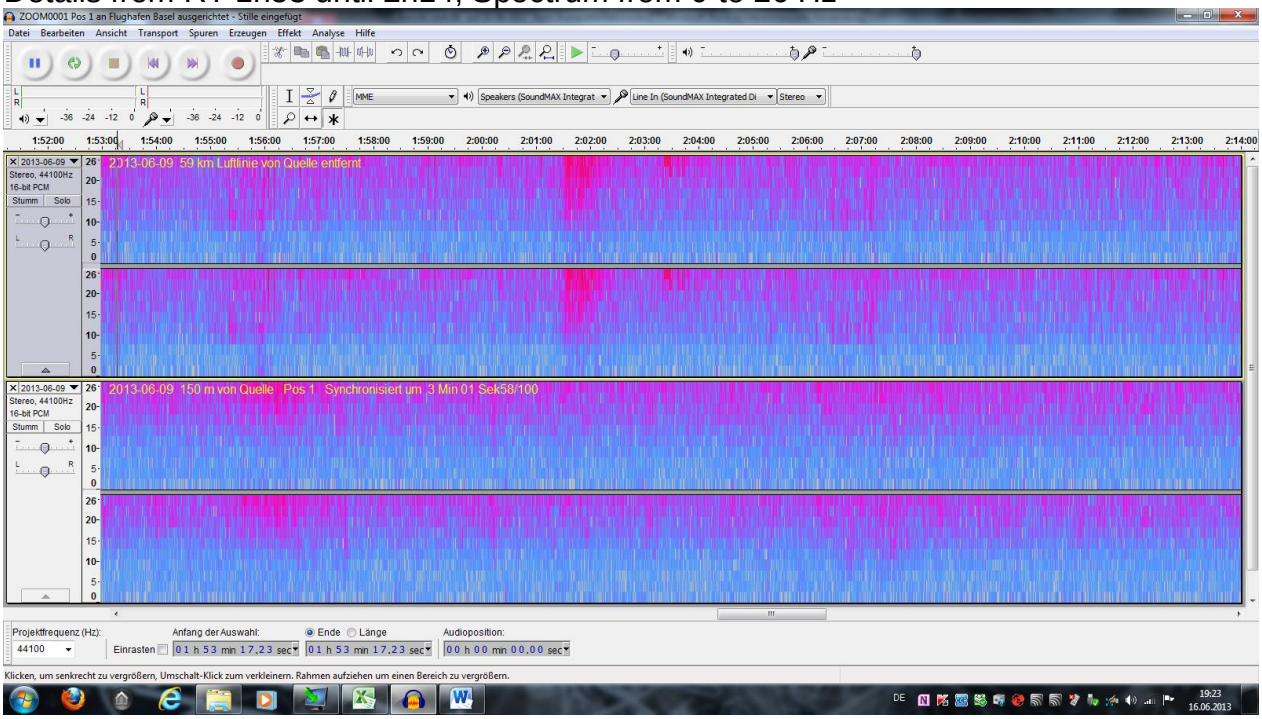

Figure A34

10.4. Details from RT 2h13 until 2h34

Details from RT 2h13 until 2h34, waveform

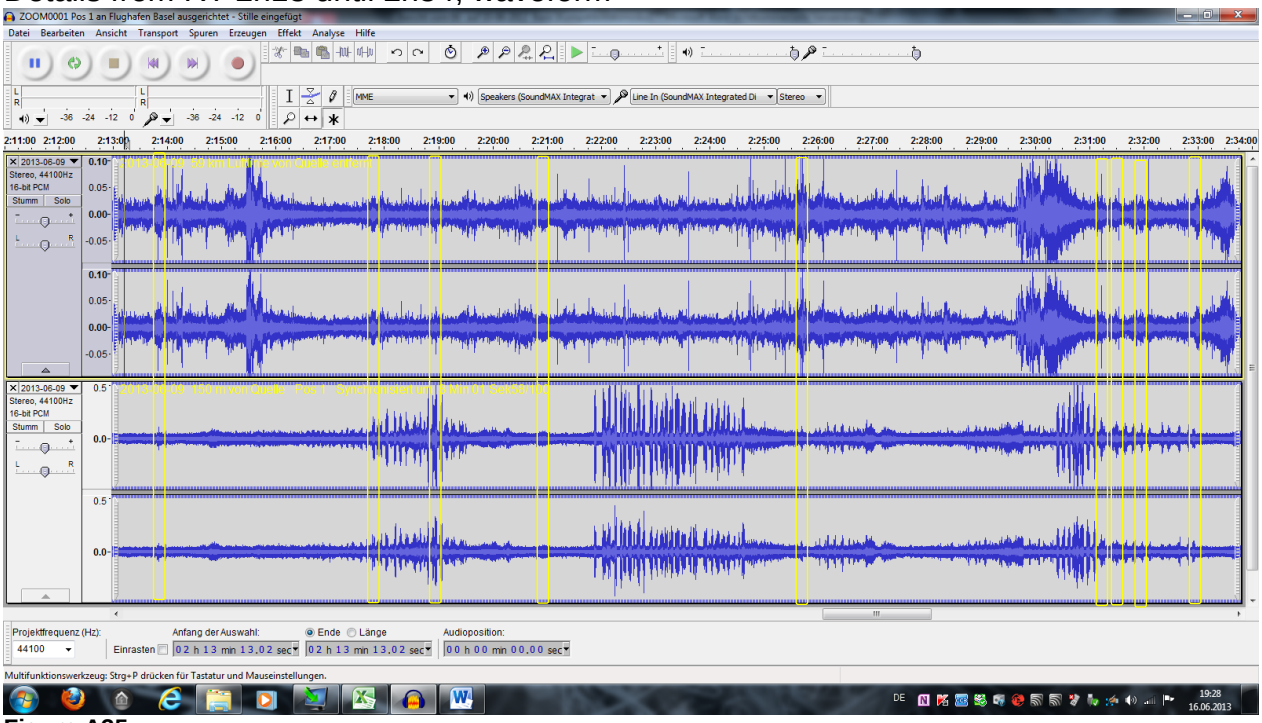

Figure A35

Details from RT 2h13 until 2h34, Spectrum from 0 to 2700 Hz

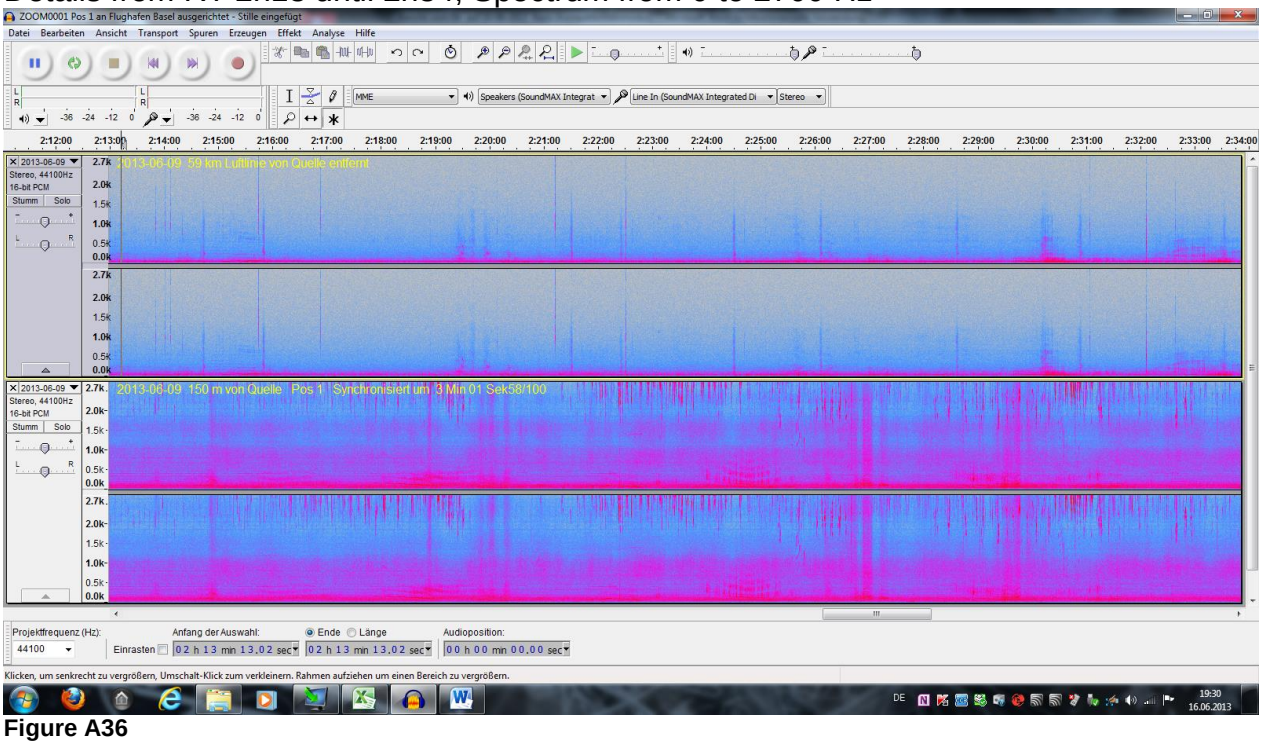

Figure A36

Details from RT 2h13 until 2h34, Spectrum from 0 to 1363 Hz

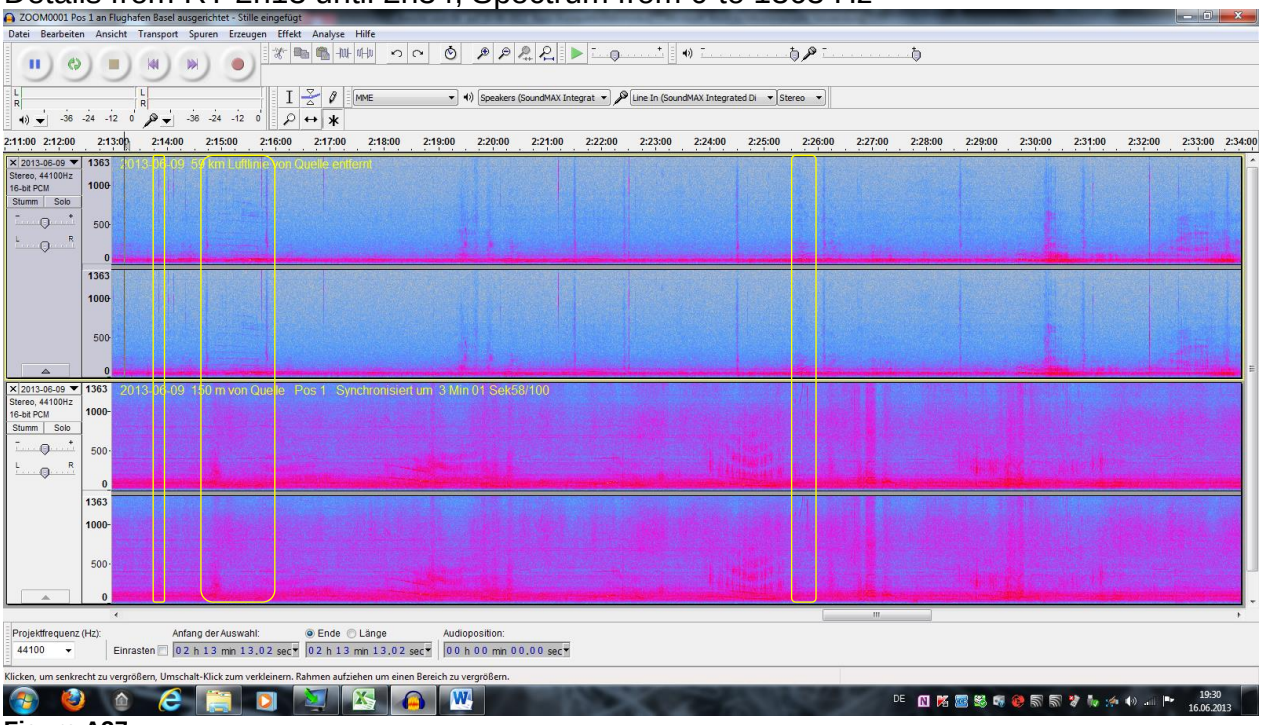

Figure A37

Details from RT 2h13 until 2h34, Spectrum from 0 to 681 Hz

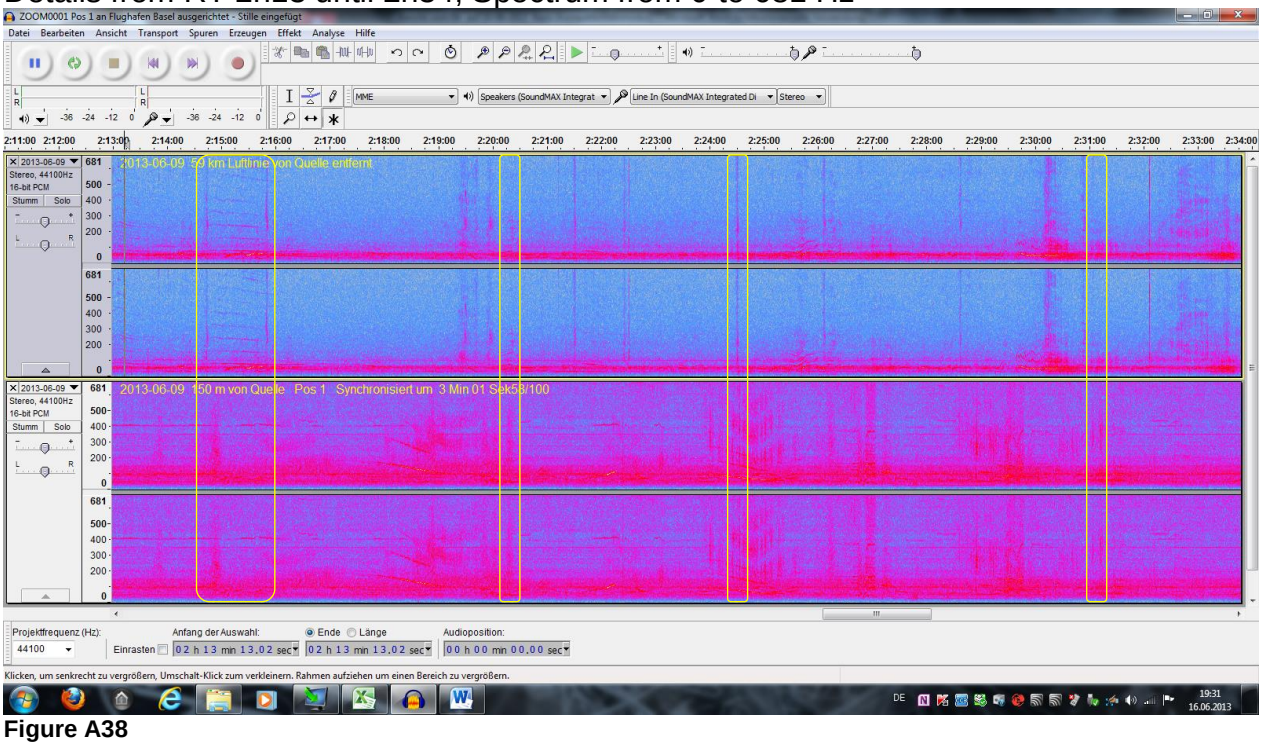

Figure A38

Details from RT 2h13 until 2h34, Spectrum from 0 to 340 Hz

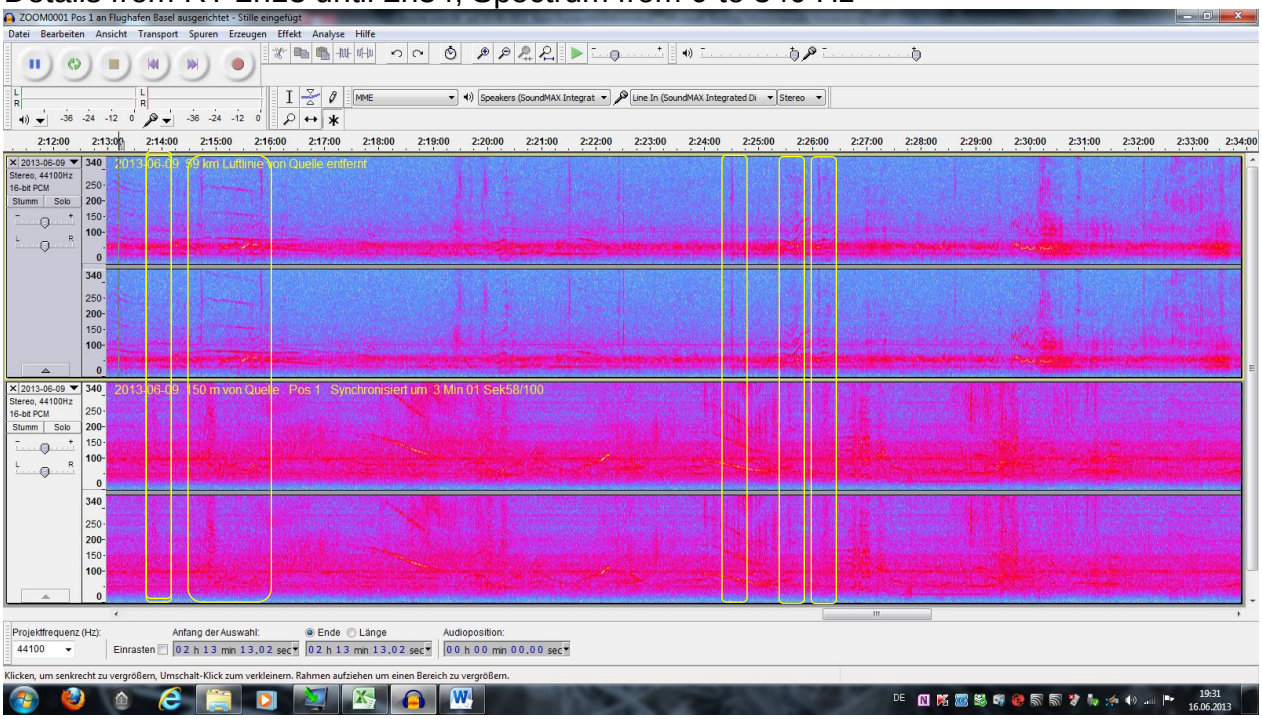

Figure A39

Details from RT 2h13 until 2h34, Spectrum from 0 to 170 Hz

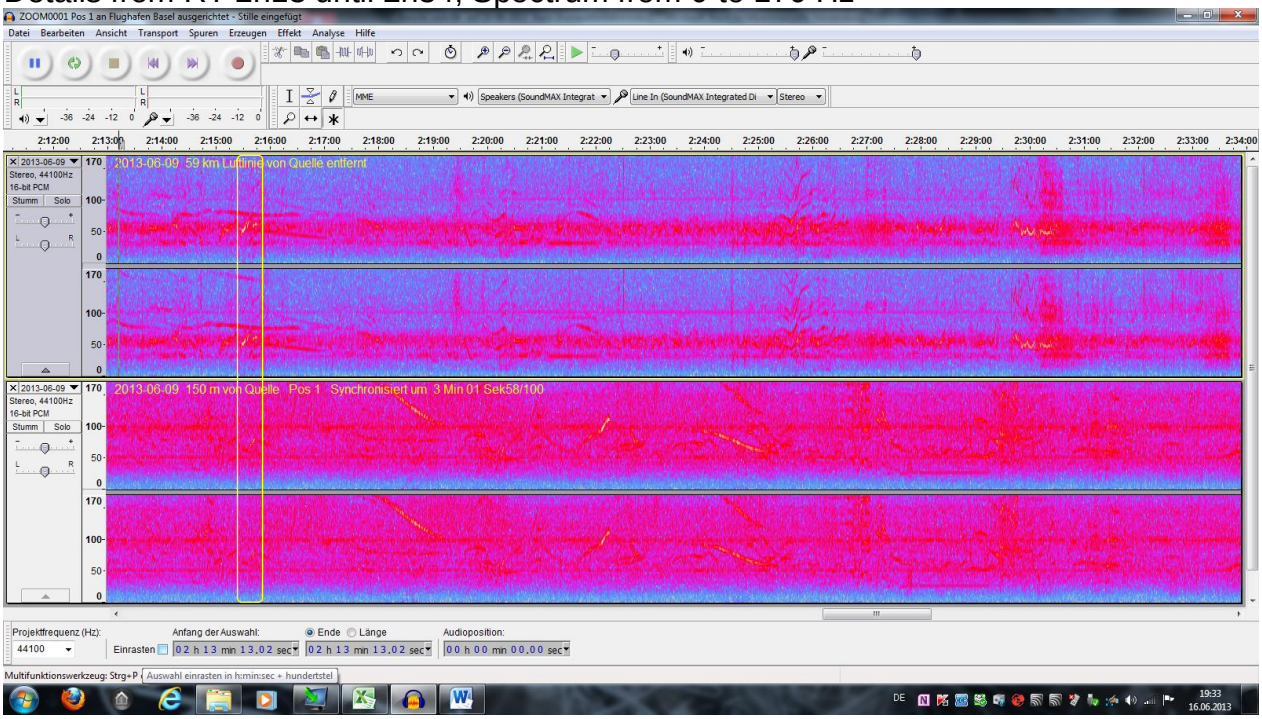

Figure A40

Details from RT 2h13 until 2h34, Spectrum from 0 to 85 Hz

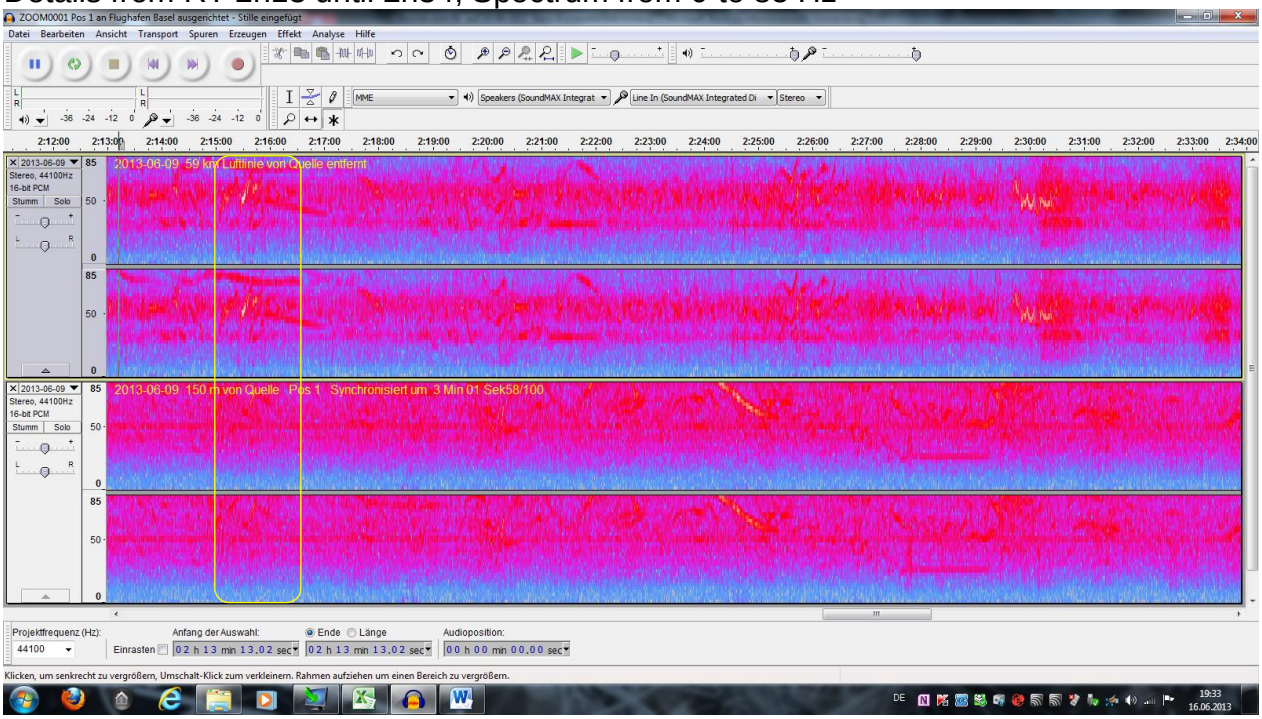

Figure A41

Details from RT 2h13 until 2h34, Spectrum from 0 to 26 Hz

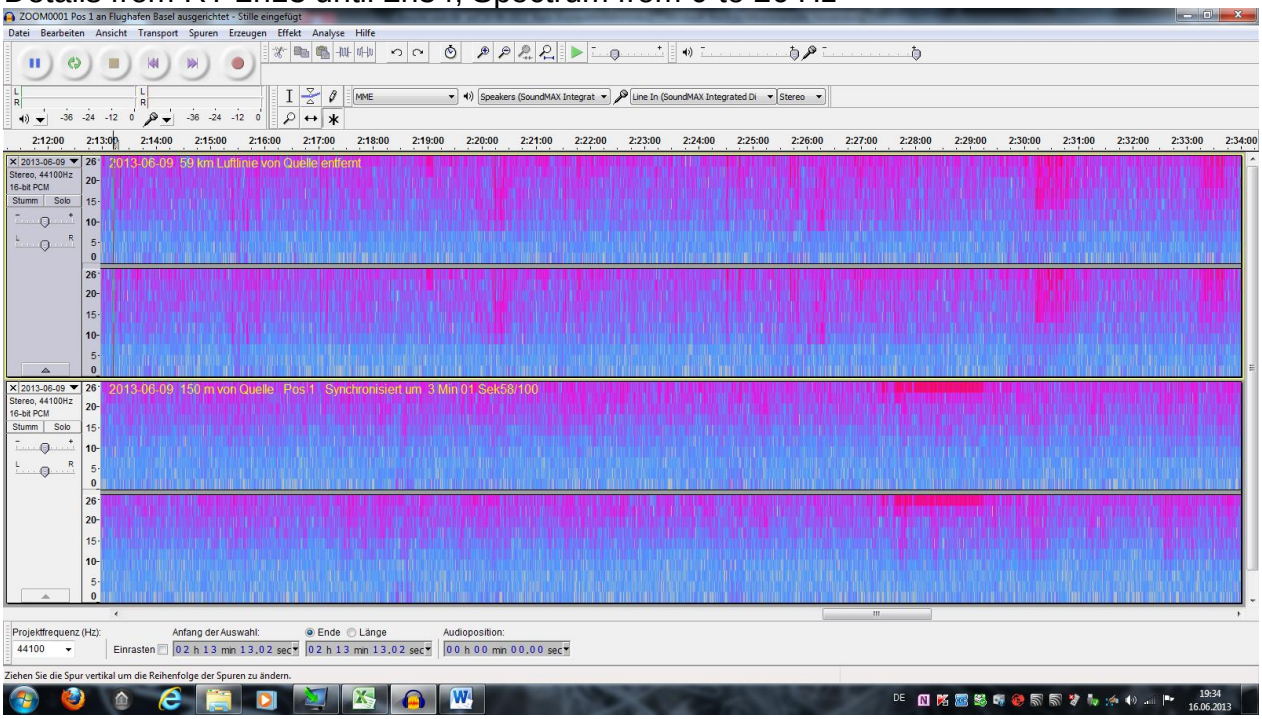

Figure A42

10.5. Details from RT 2h33 until 2h54

Details from RT 2h33 until 2h54, waveform

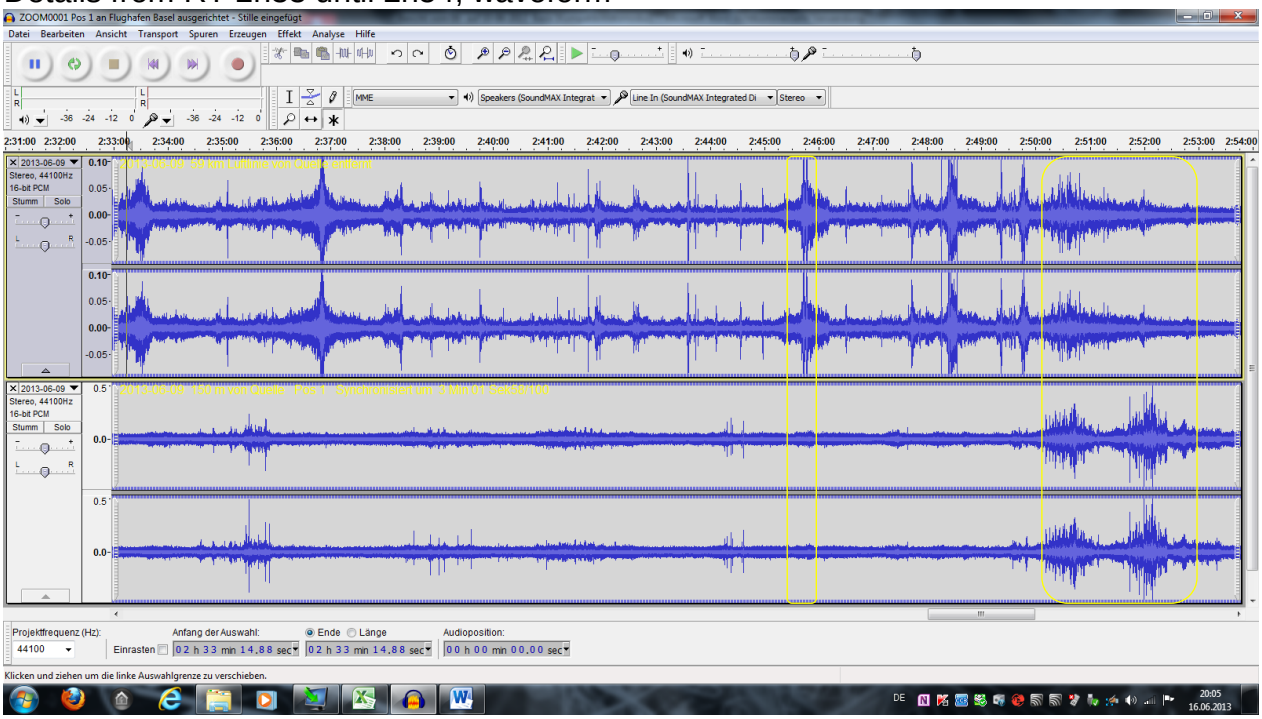

Figure A43

Details from RT 2h33 until 2h54, Spectrum from 0 to 2600 Hz

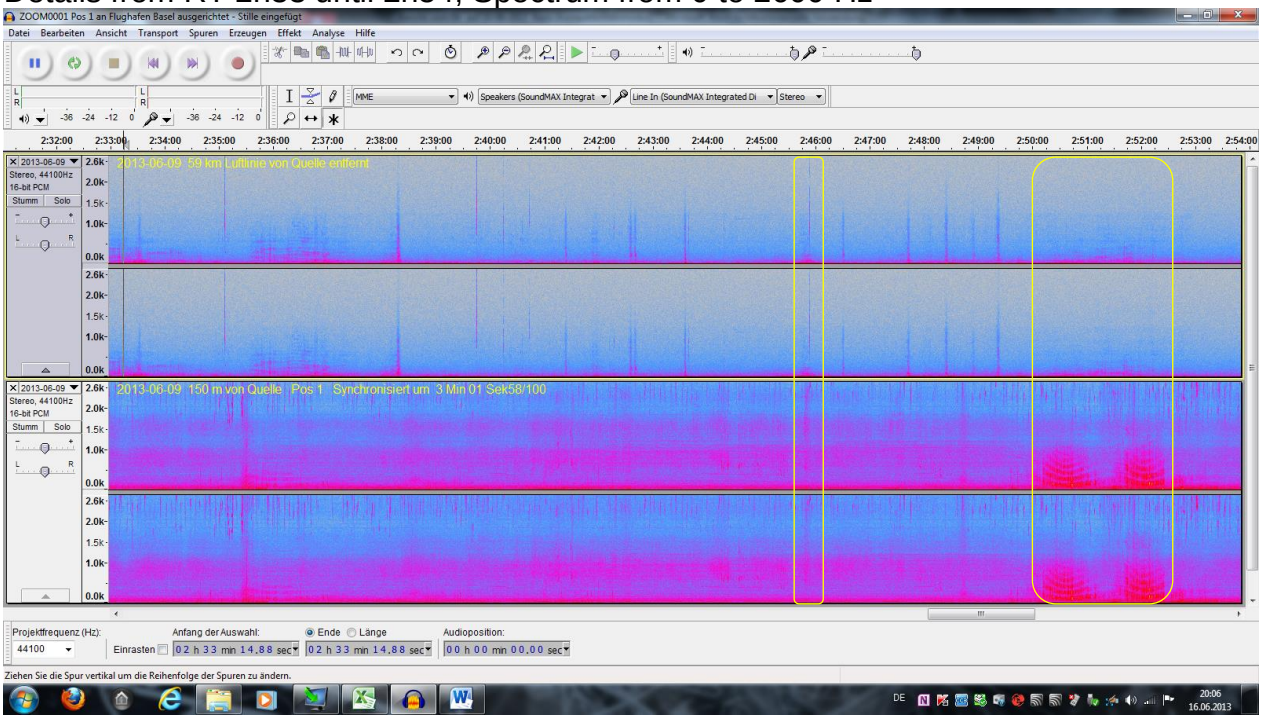

Figure A44

Details from RT 2h33 until 2h54, Spectrum from 0 to 1294 Hz

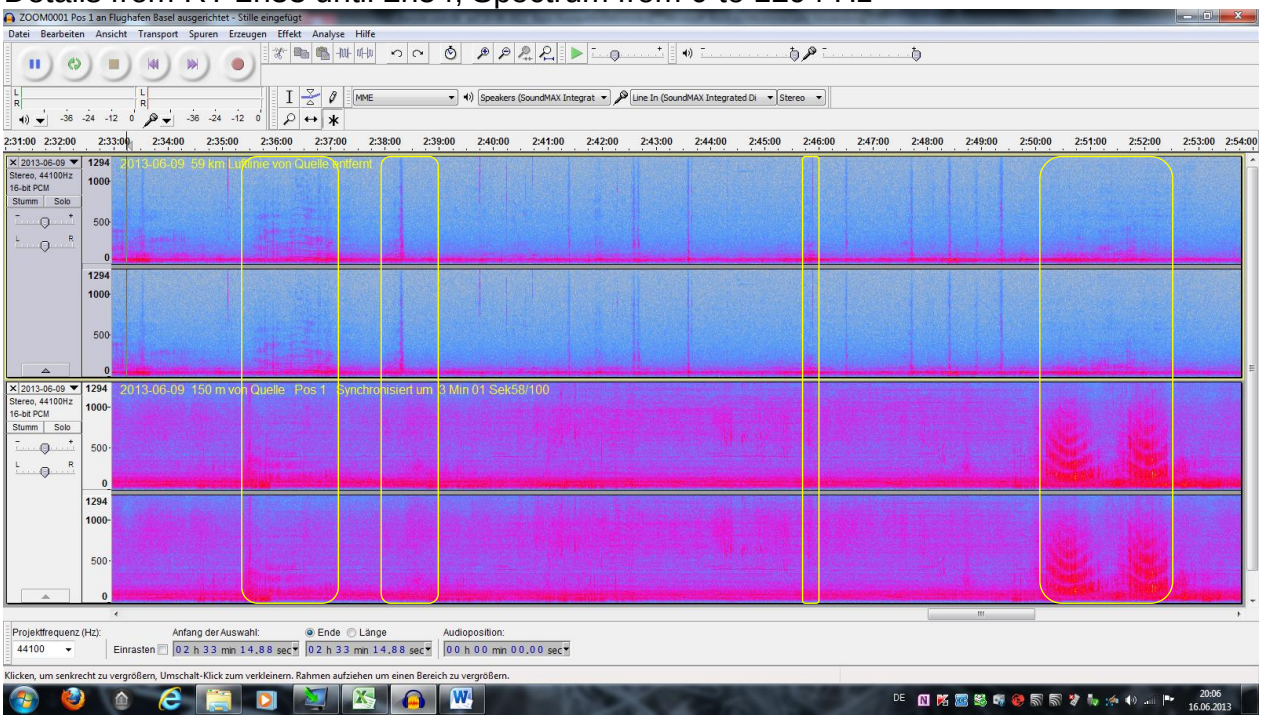

Figure A45

Details from RT 2h33 until 2h54, Spectrum from 0 to 647 Hz

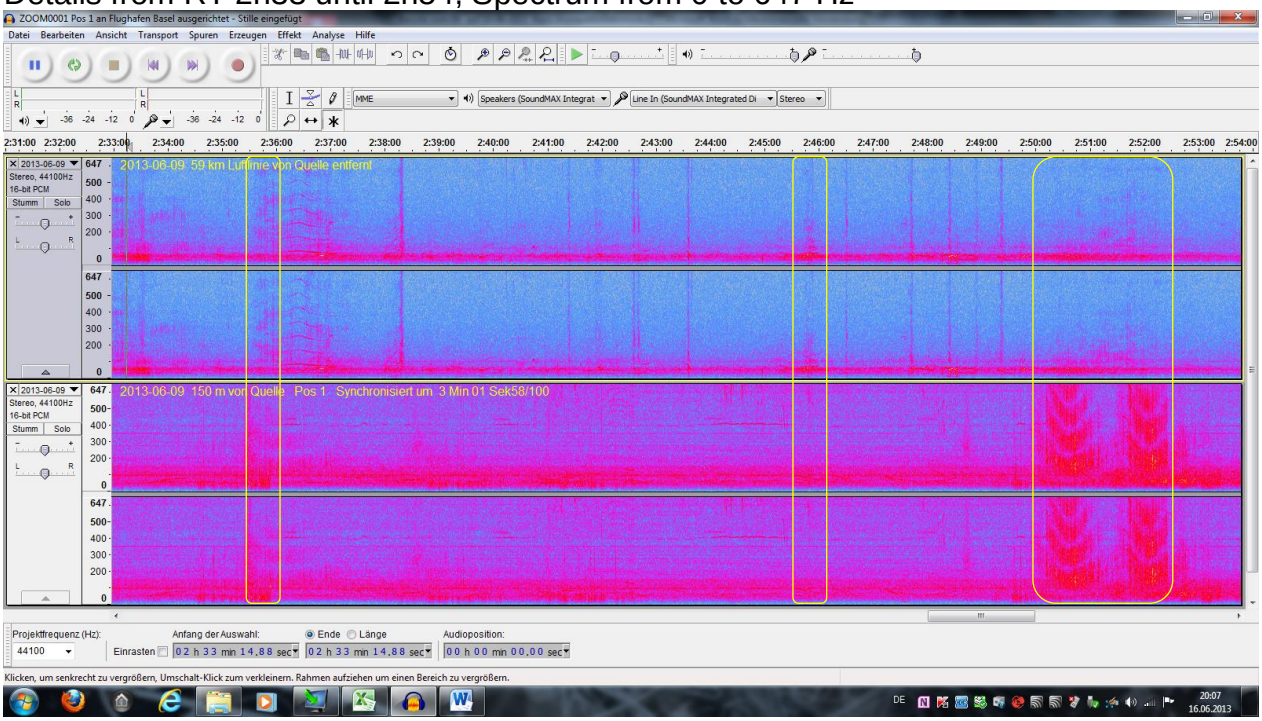

Figure A46

Details from RT 2h33 until 2h54, Spectrum from 0 to 323 Hz

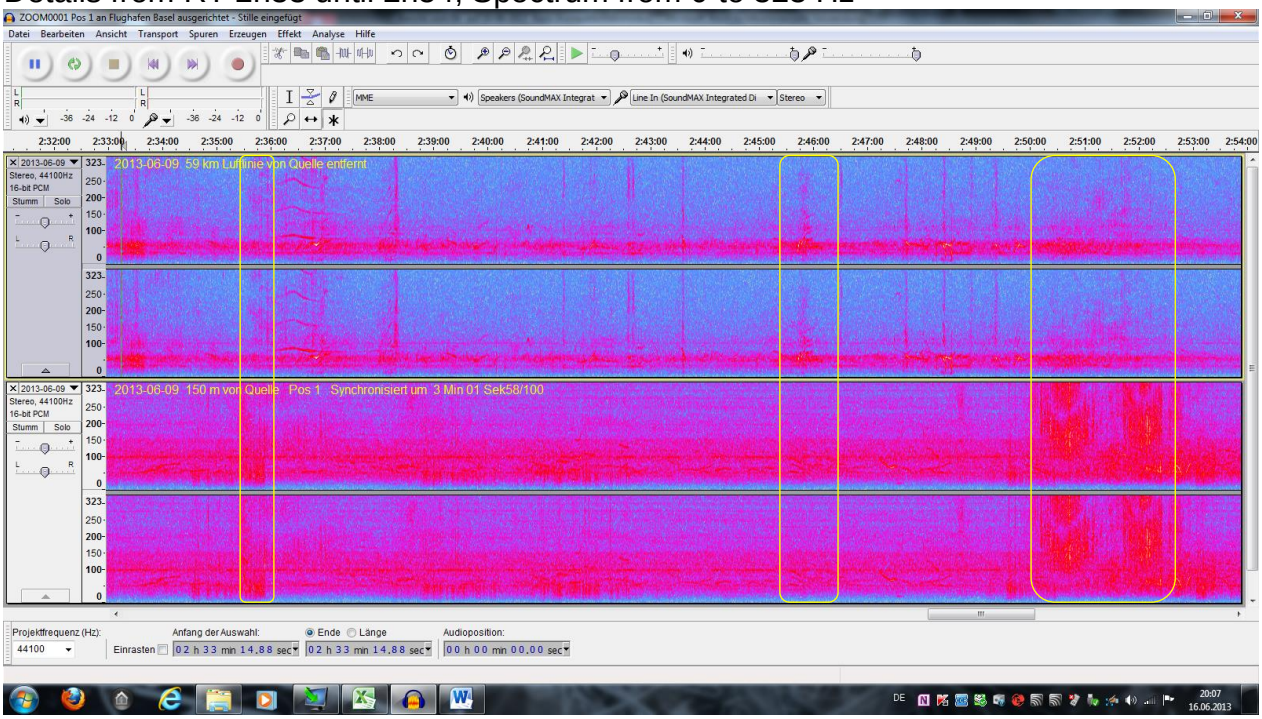

Figure A47

Details from RT 2h33 until 2h54, Spectrum from 0 to 161 Hz

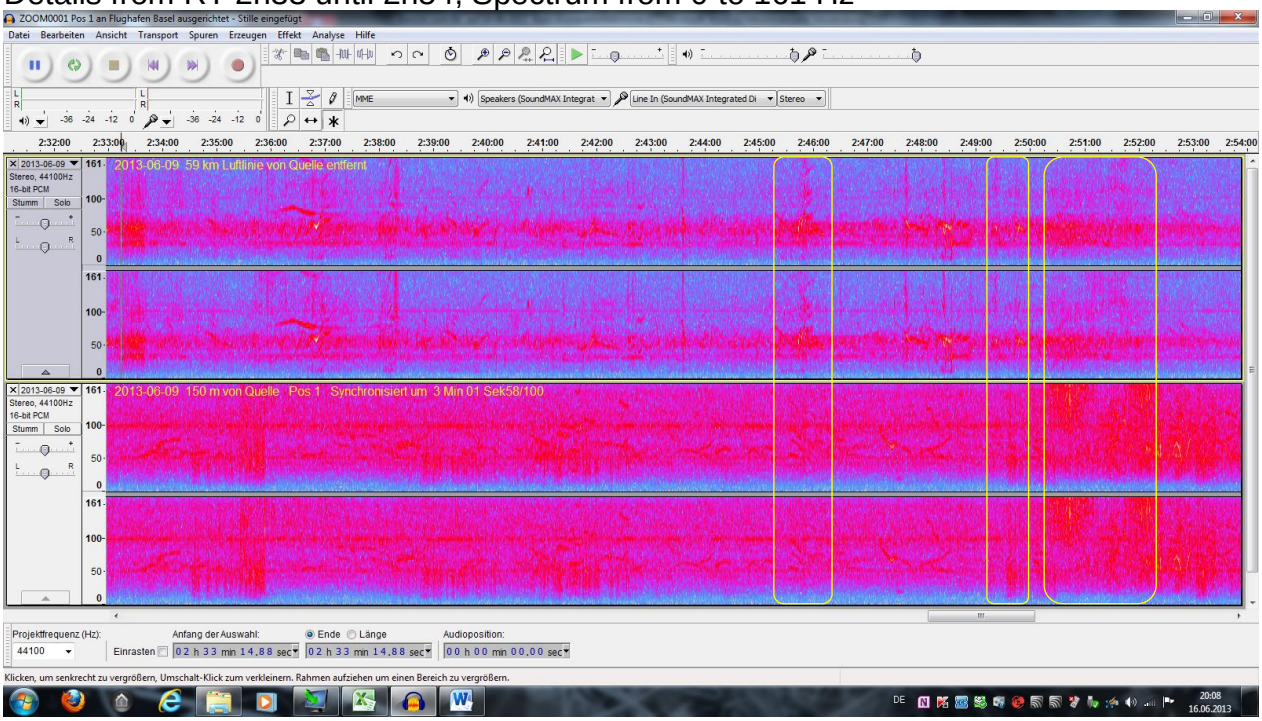

Figure A48

Details from RT 2h33 until 2h54, Spectrum from 0 to 80 Hz

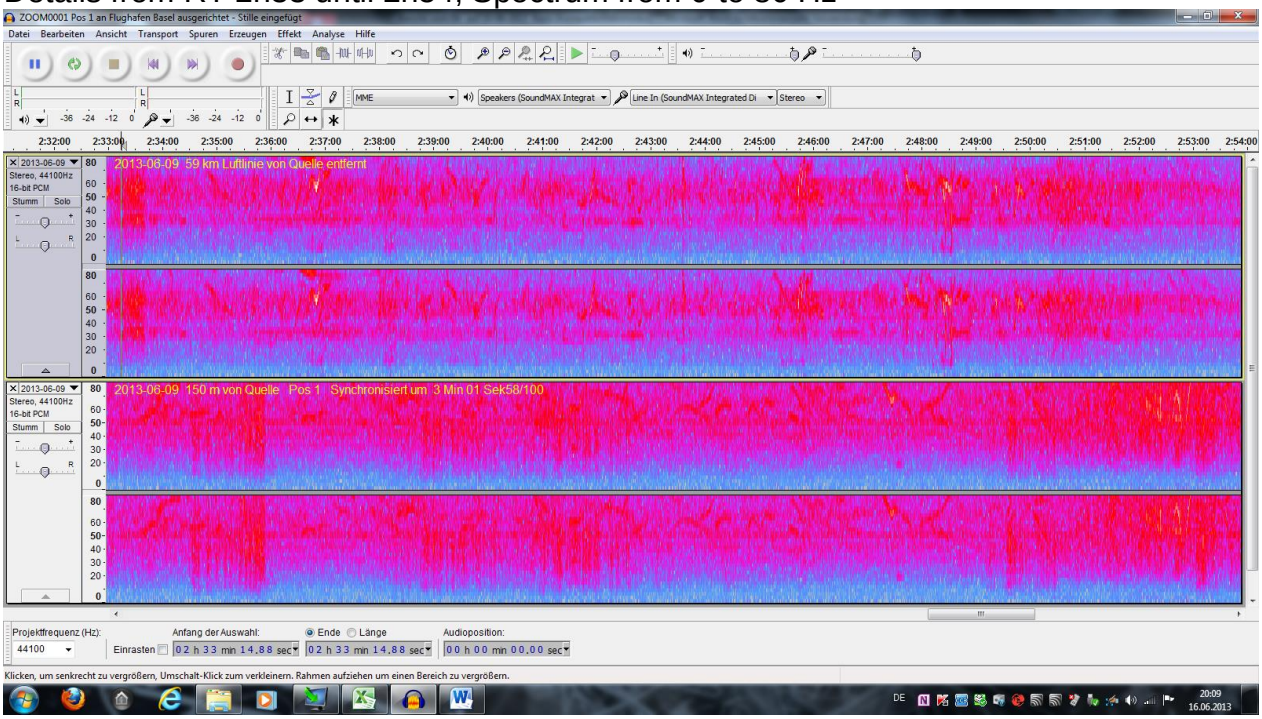

Figure A49

Details from RT 2h33 until 2h54, Spectrum from 0 to 26 Hz

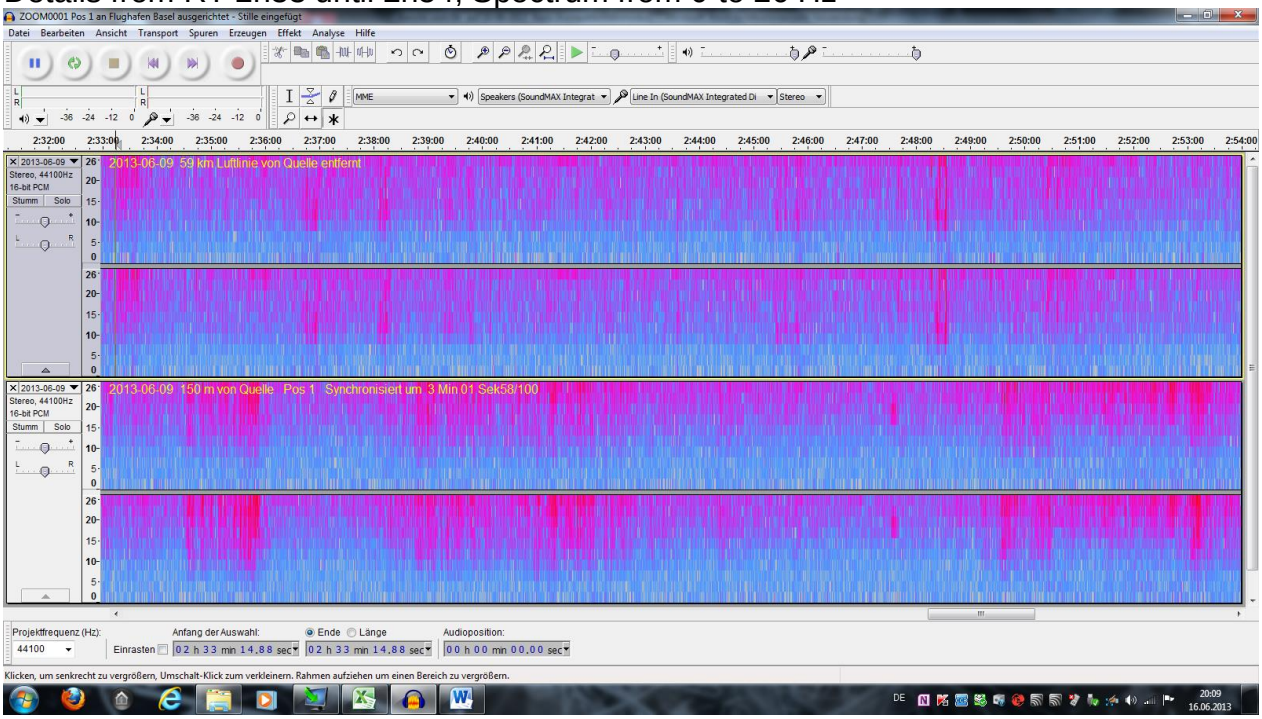

Figure A50

10.6. Details from RT 2h52 bis 3h13

Details from RT 2h52 until 3h13, waveform

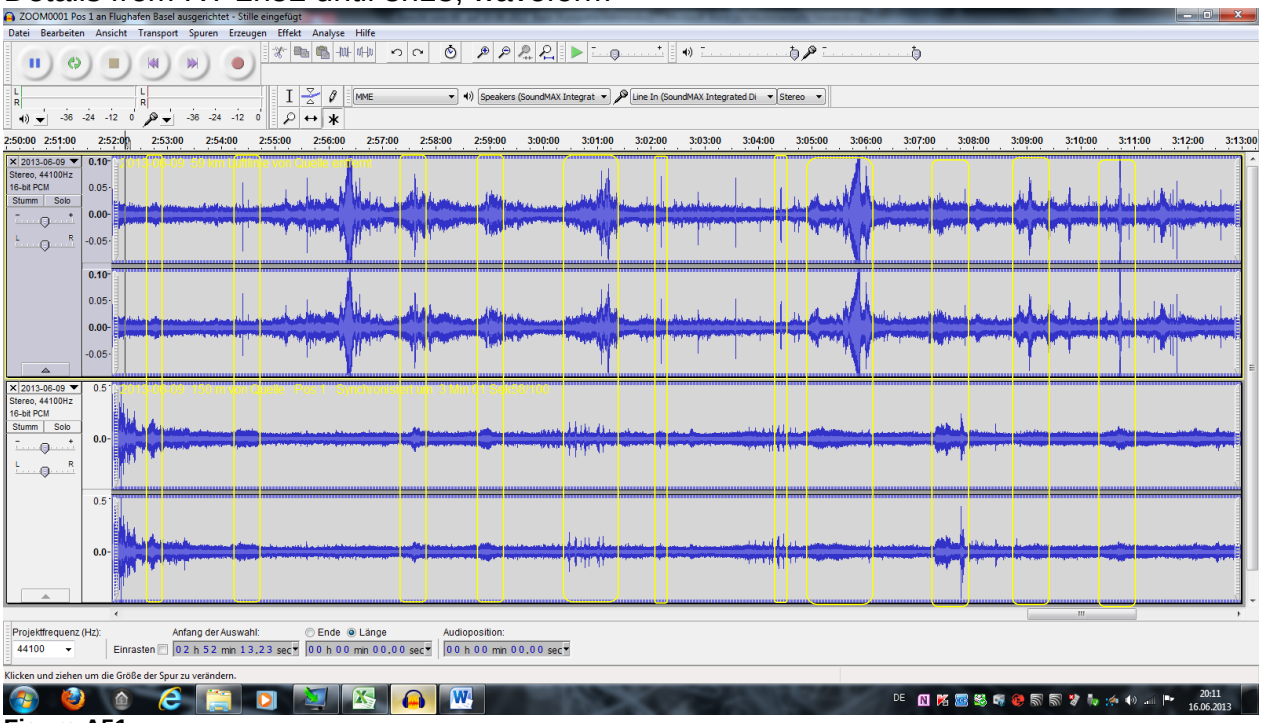

Figure A51

Details from RT 2h52 until 3h13, Spectrum from 0 to 2600 Hz

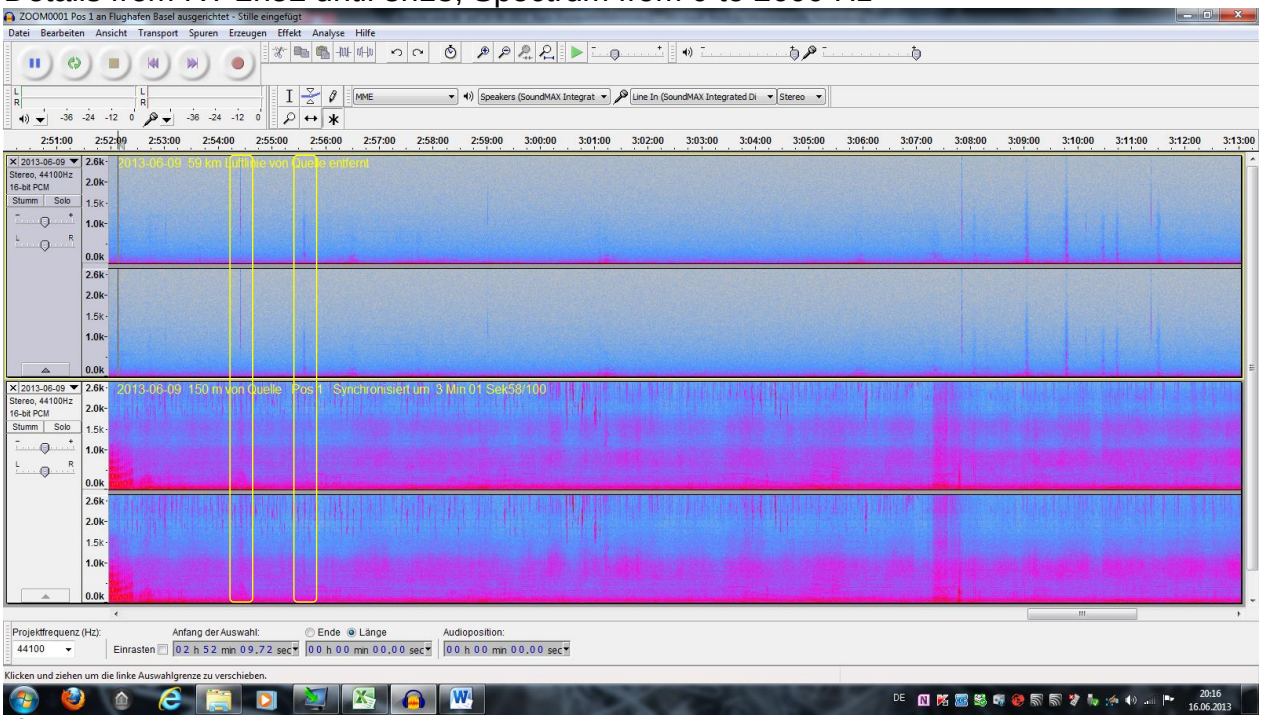

Figure A52

Details from RT 2h52 until 3h13, Spectrum from 0 to 1294 Hz

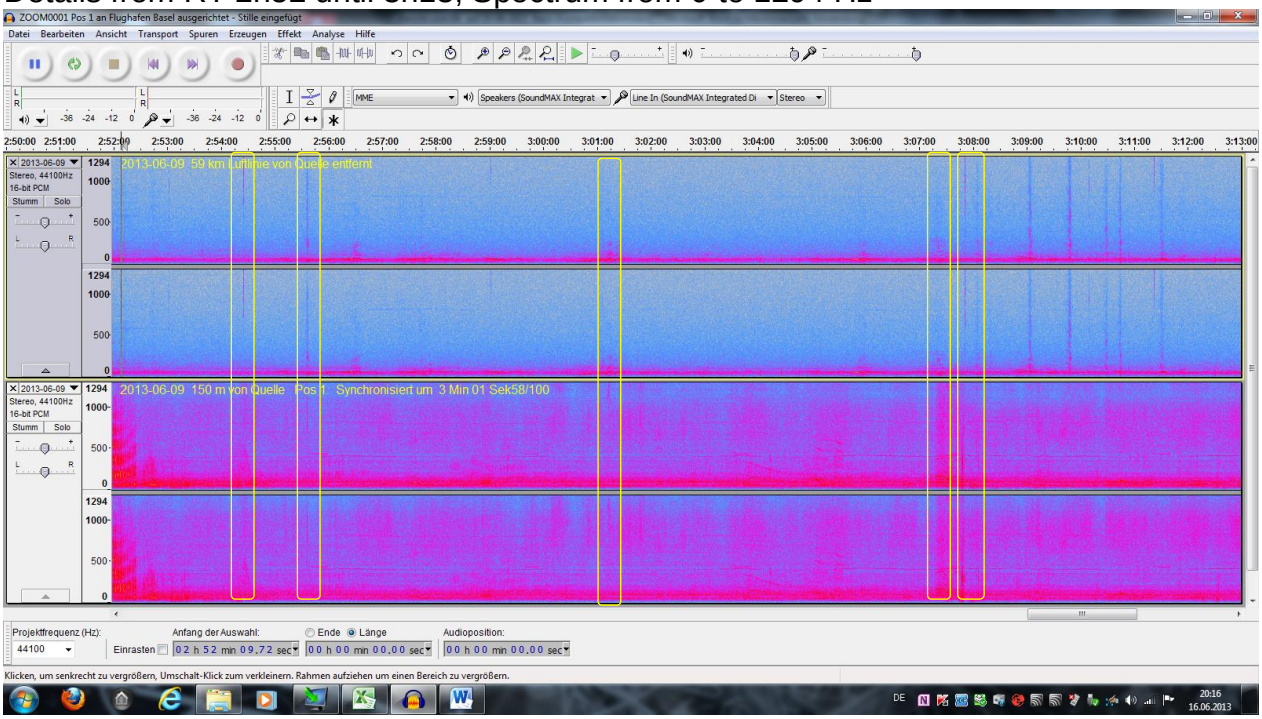

Figure A53

Details from RT 2h52 until 3h13, Spectrum from 0 to 647 Hz

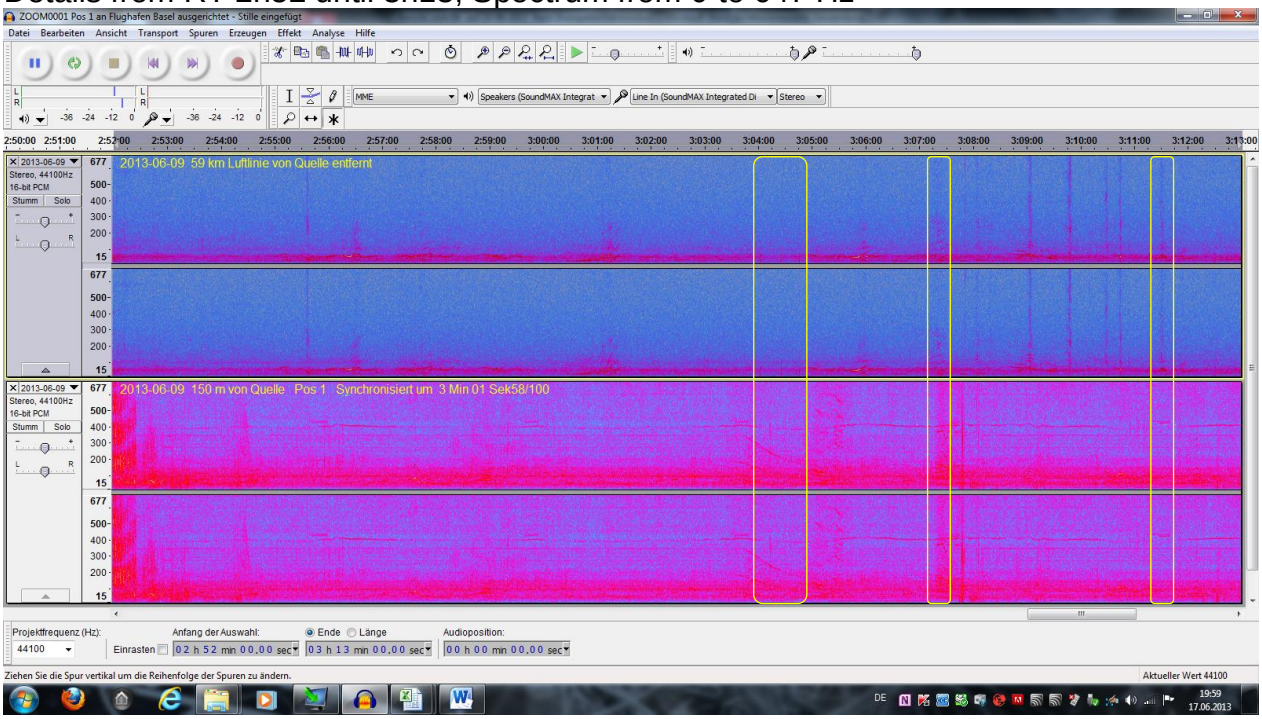

Figure A54

Details from RT 2h52 until 3h13, Spectrum from 0 to 323 Hz

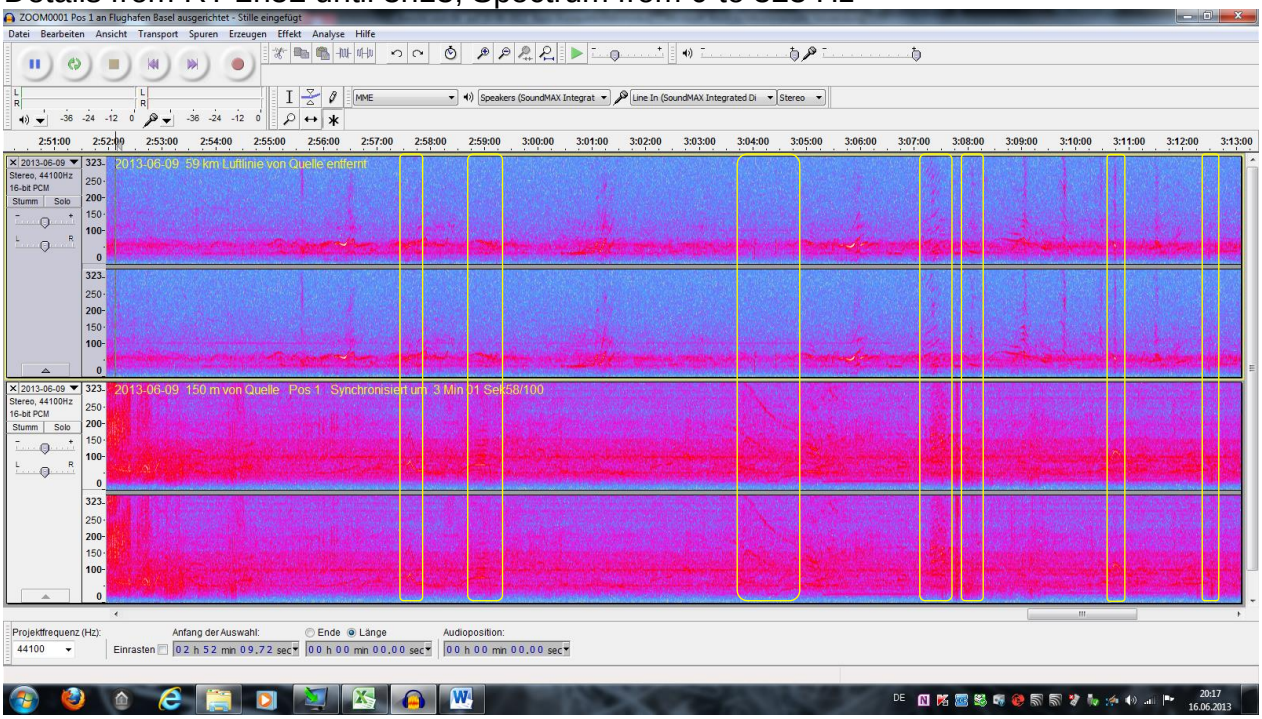

Figure A55

Details from RT 2h52 until 3h13, Spectrum from 0 to 161 Hz

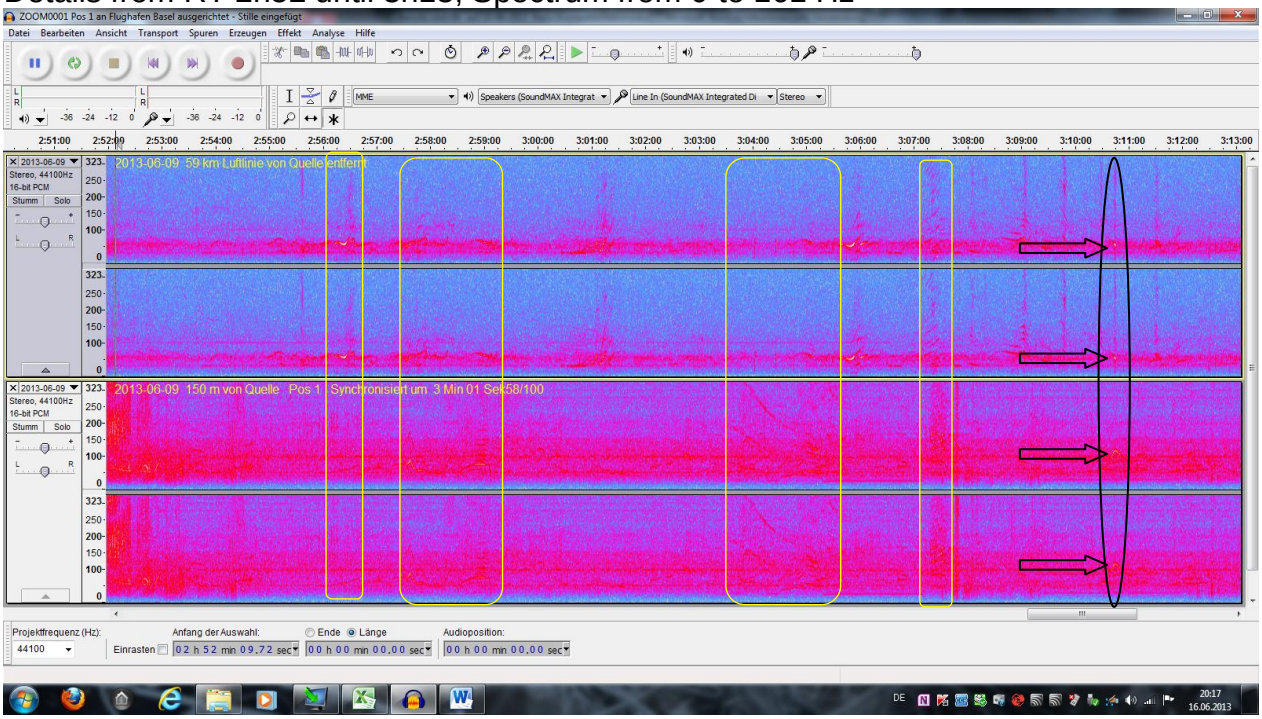

Figure A56

Details from RT 2h52 until 3h13, Spectrum from 0 to 80 Hz

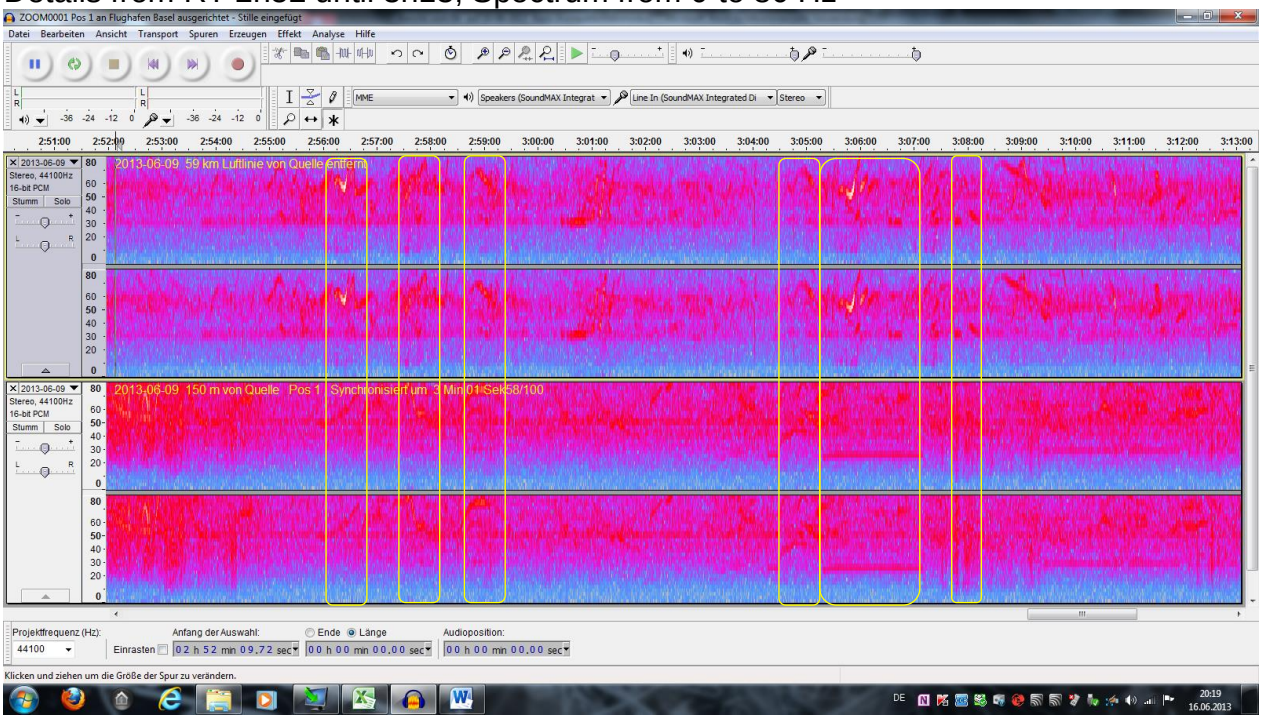

Figure A57

Details from RT 2h52 until 3h13, Spectrum from 0 to 26 Hz

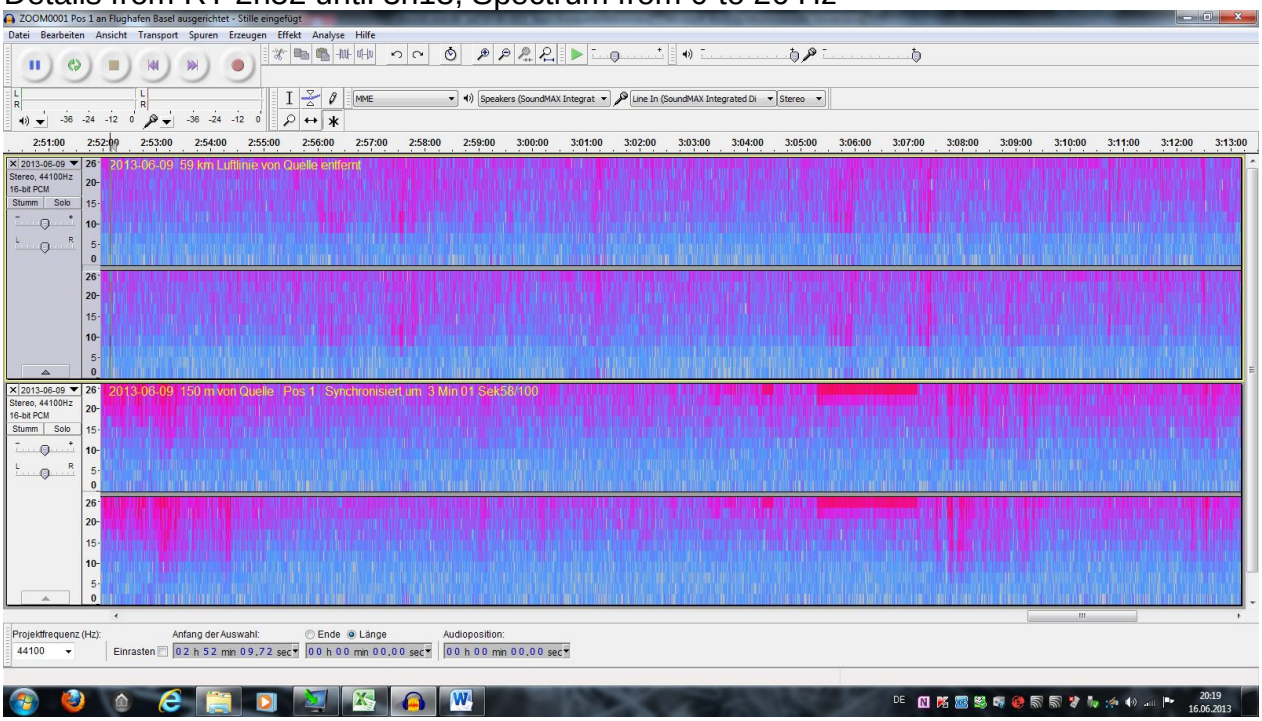

Figure A58

10.7. Details from RT 3h12 bis 3h23

Details from RT 3h12 until 3h23, waveform

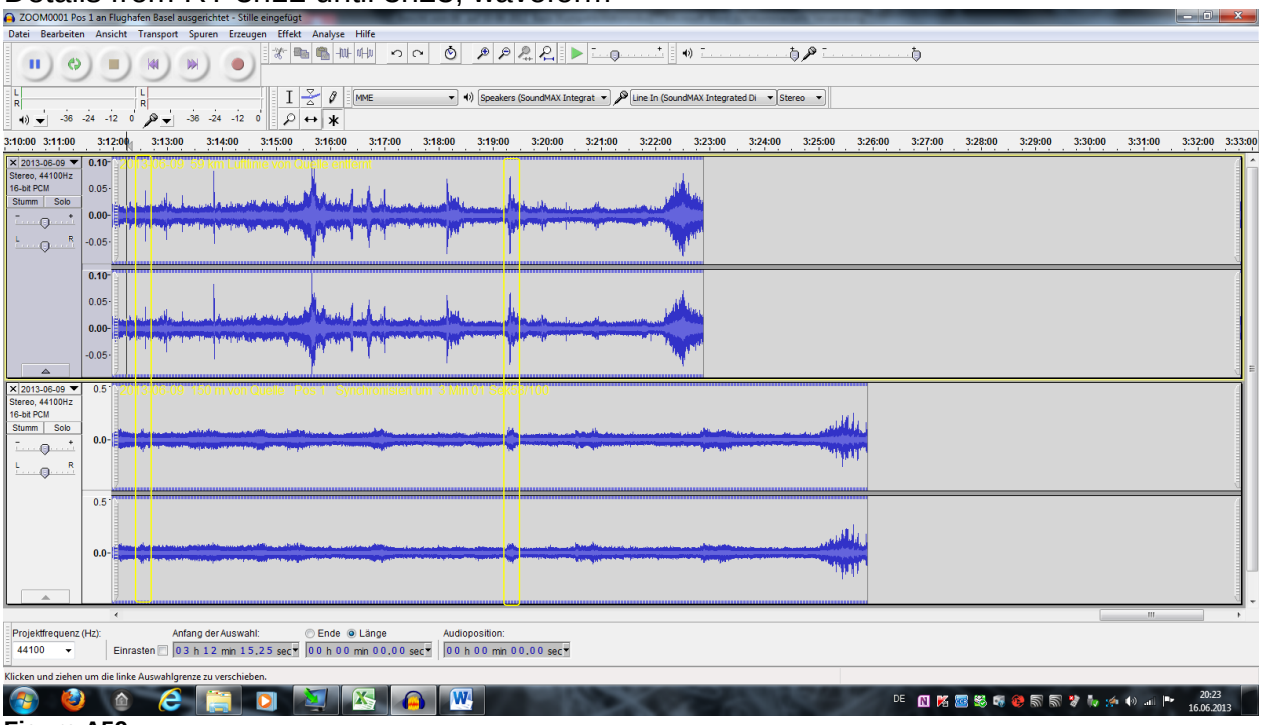

Figure A59

Details from RT 3h12 until 3h23, Spectrum from 0 to 2700 Hz

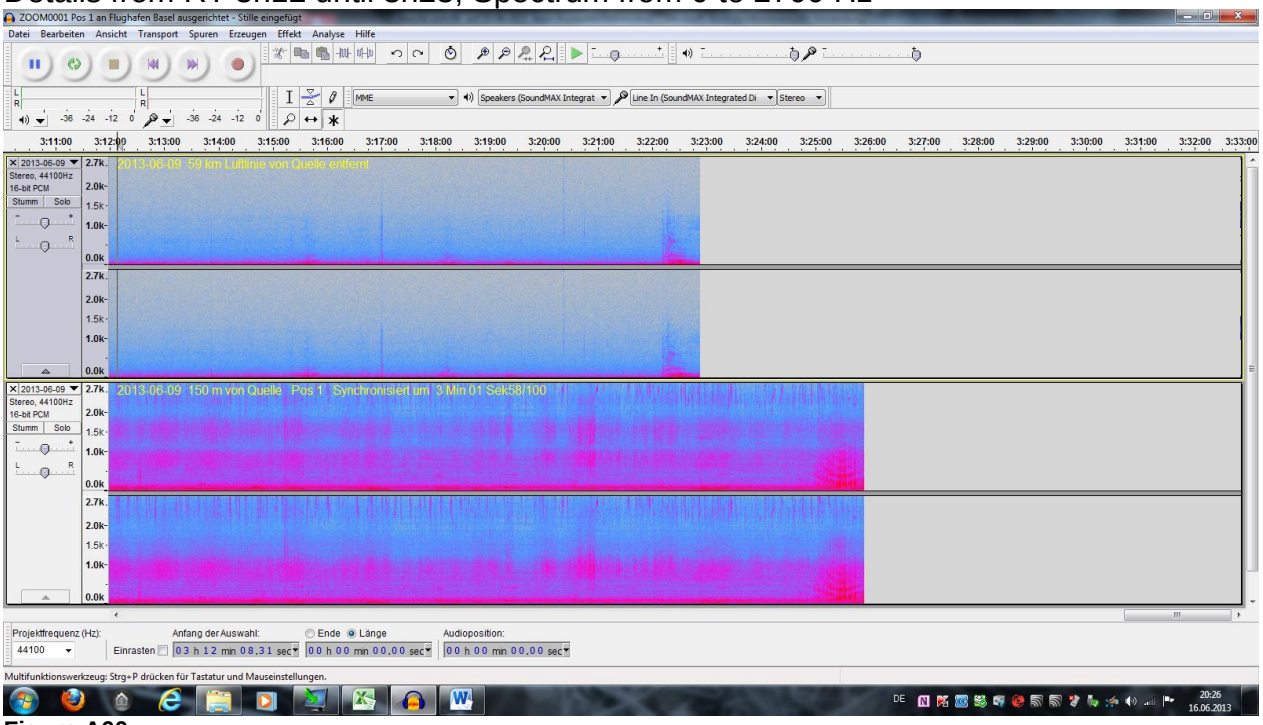

Figure A60

Details from RT 3h12 until 3h23, Spectrum from 0 to 1352 Hz

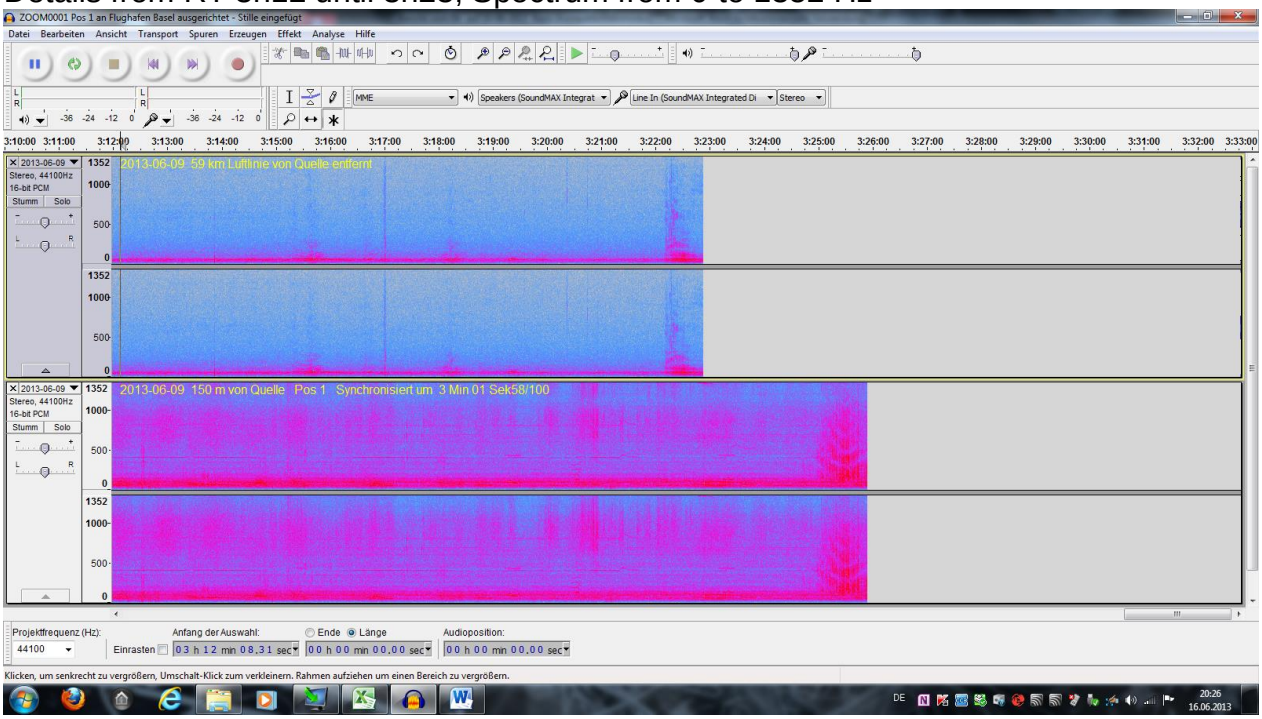

Figure A61

Details from RT 3h12 until 3h23, Spectrum from 0 to 676 Hz

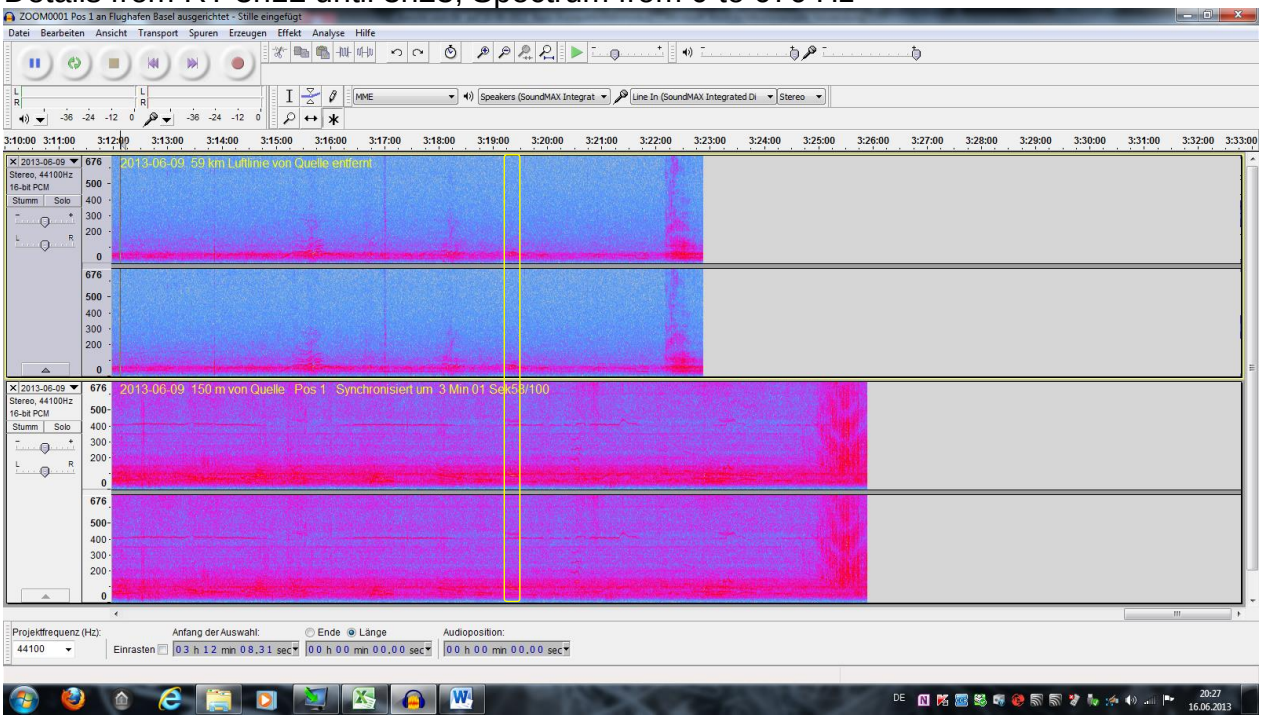

Figure A62

Details from RT 3h12 until 3h23, Spectrum from 0 to 338 Hz

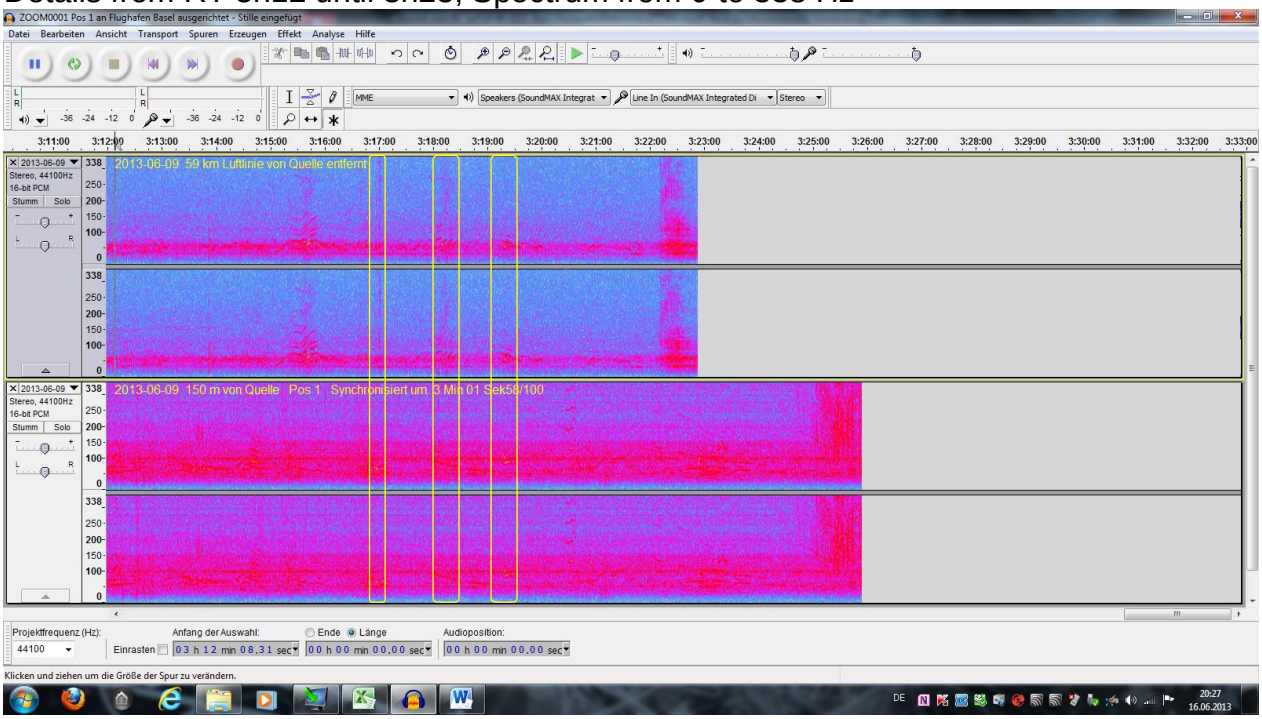

Figure A63

Details from RT 3h12 until 3h23, Spectrum from 0 to 169 Hz

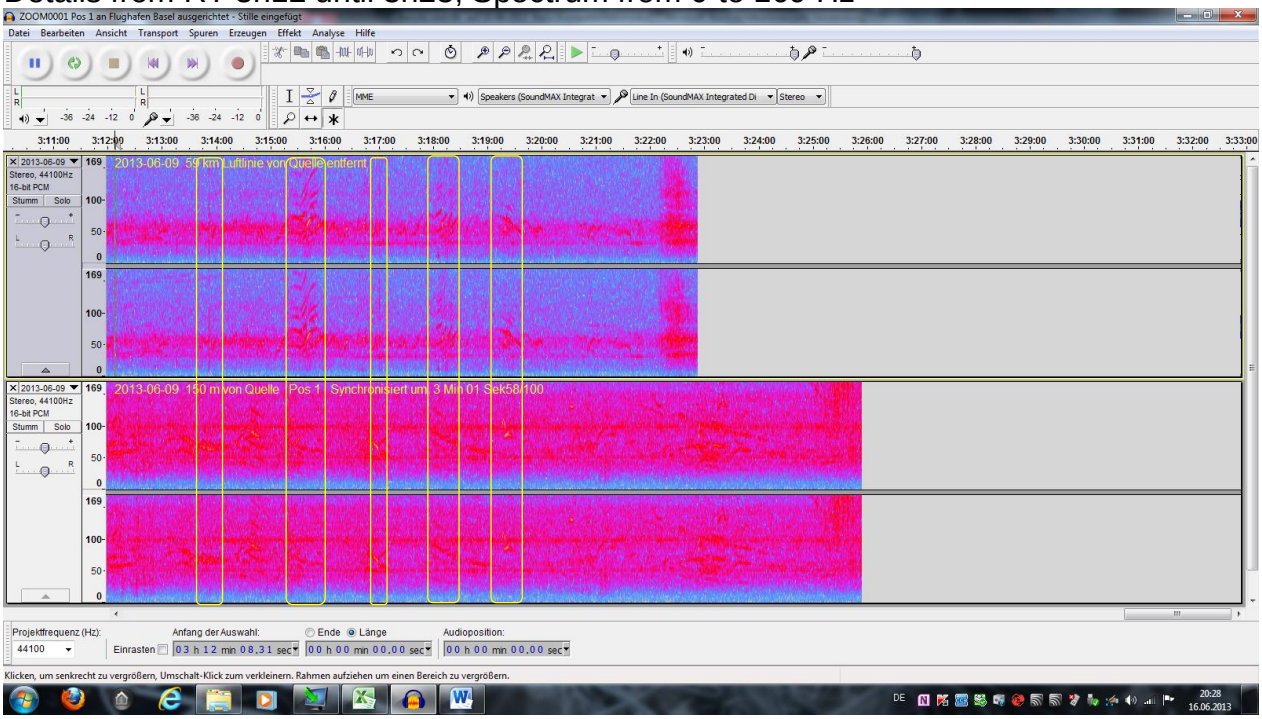

Figure A64

Details from RT 3h12 until 3h23, Spectrum from 0 to 84 Hz

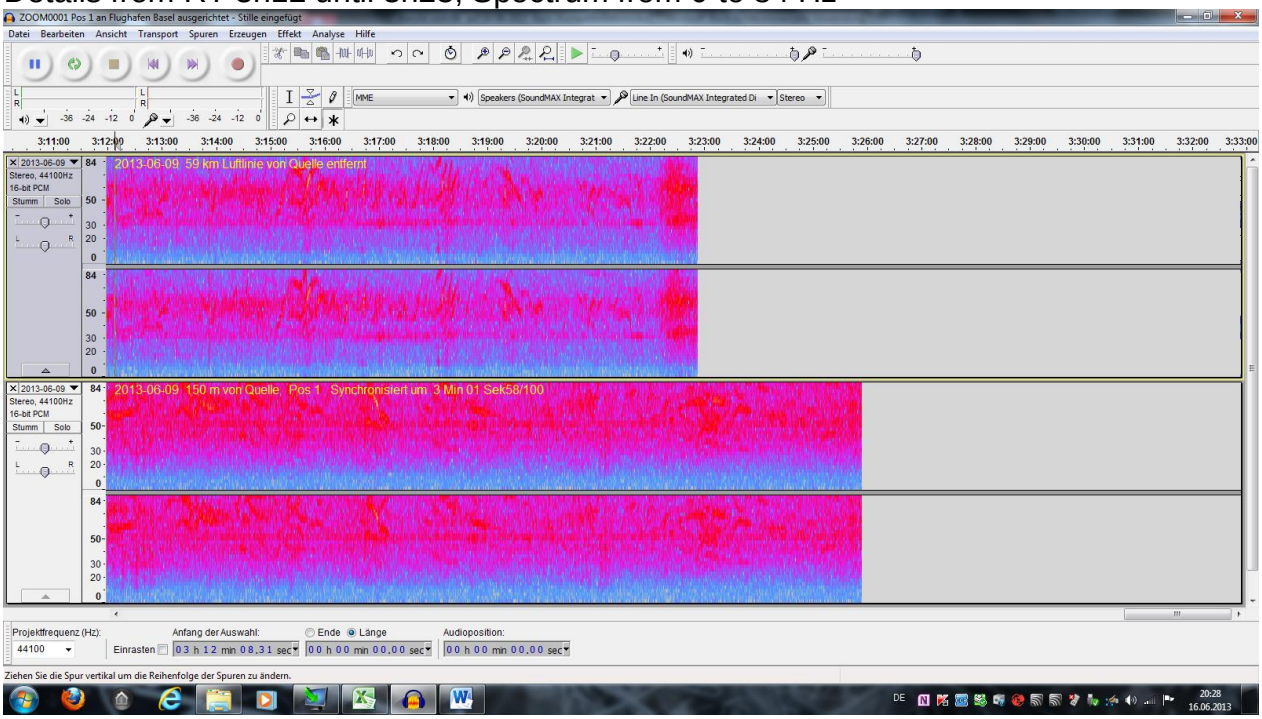

Figure A65

Details from RT 3h12 until 3h23, Spectrum from 0 to 26 Hz

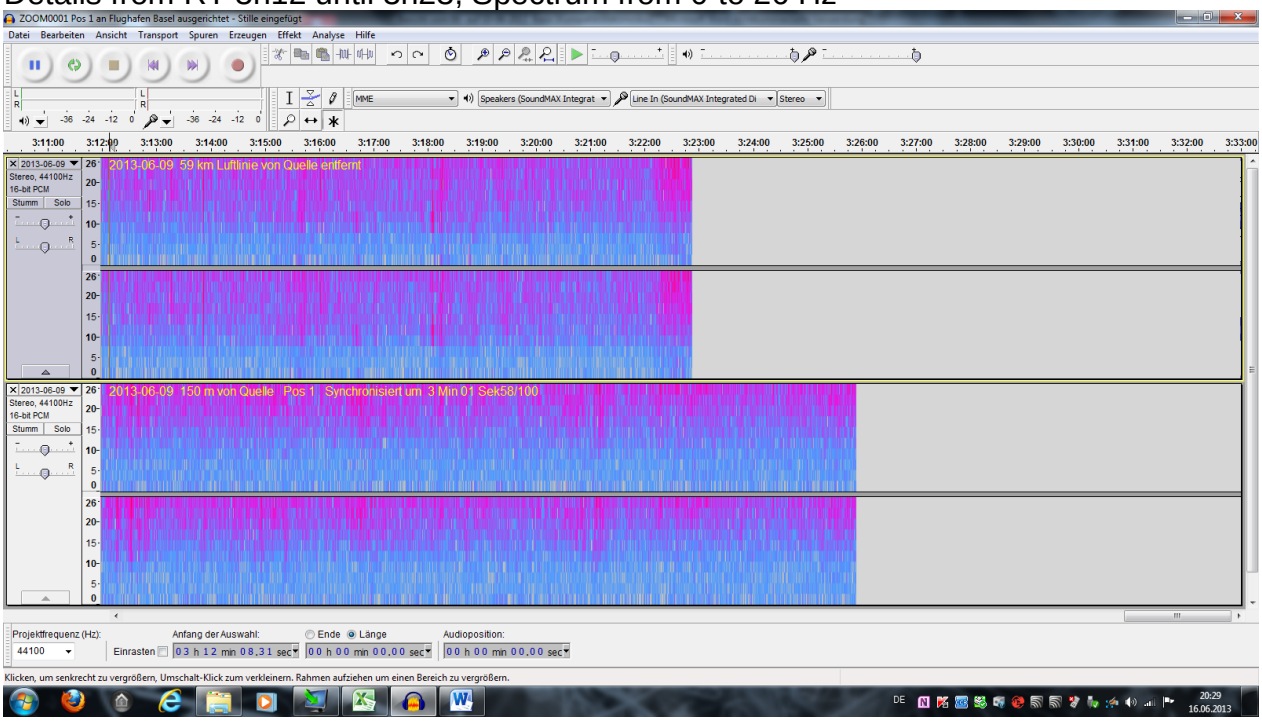

Figure A66

11. Individual sound events

Detail from 1h13‘00“ until 1h18‘00“, Spectrum from 0 to 416 Hz

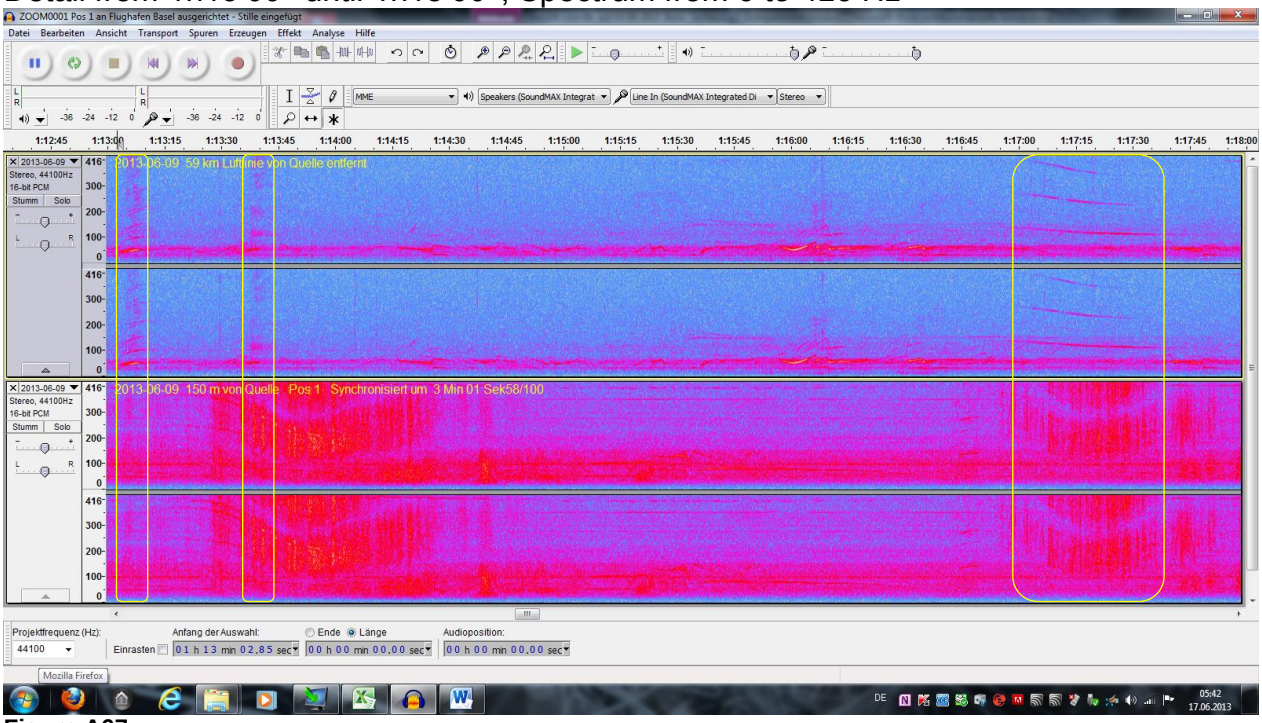

Figure A67

Detail from 1h22‘ to 1h27, Spectrum from 0 to 416 Hz

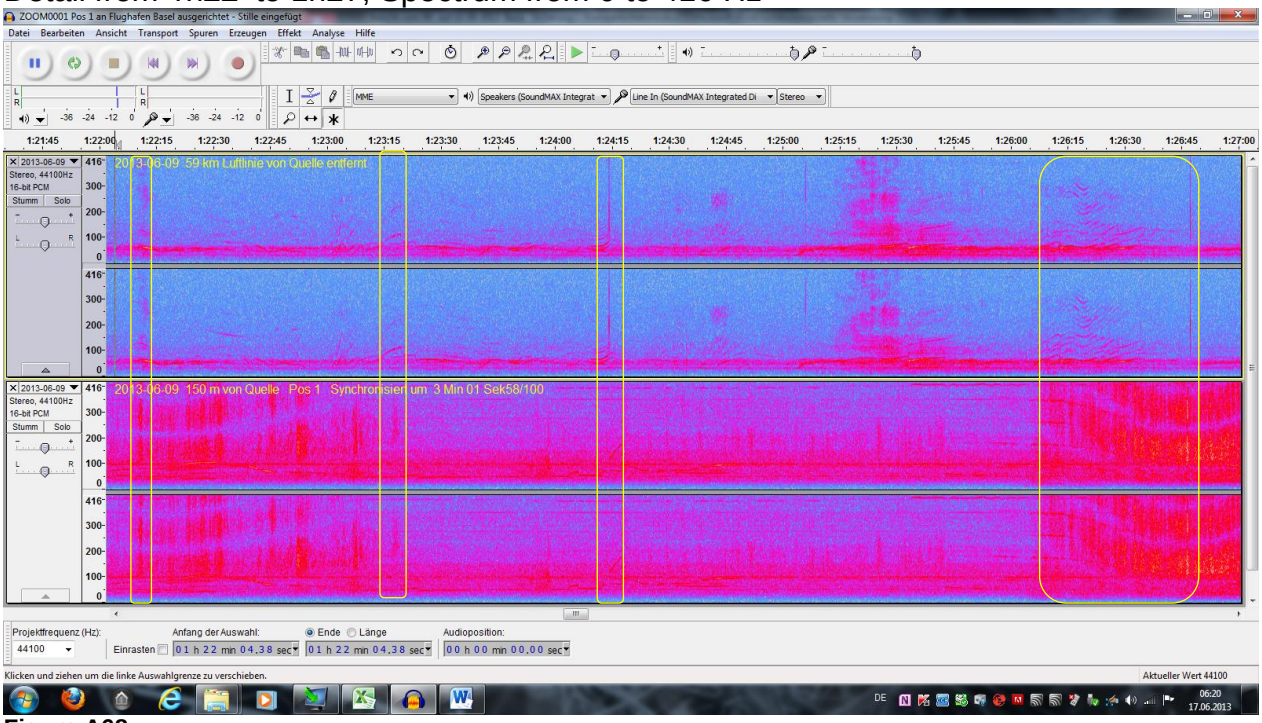

Figure A68

Detail from 1h28‘ until 1h33, Spectrum from 0 to 416 Hz

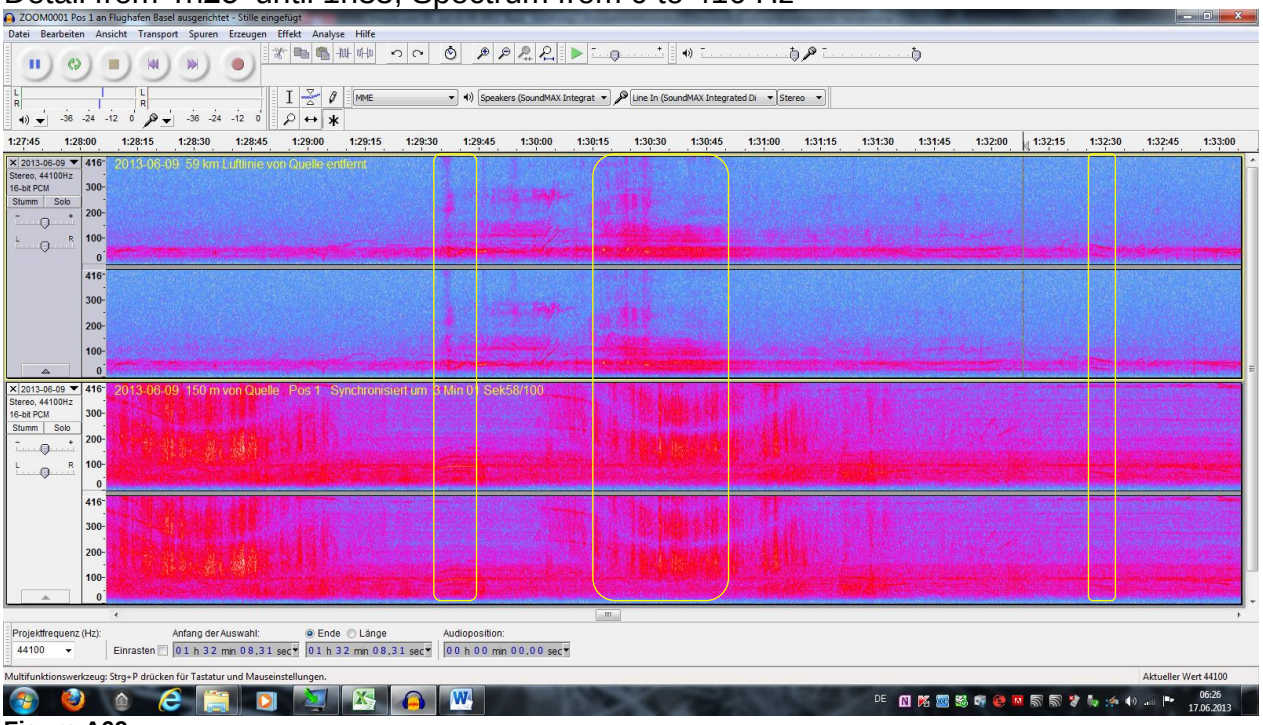

Figure A69

Detail from 1h34‘16 until 1h34‘37, Spectrum from 0 to 208 Hz

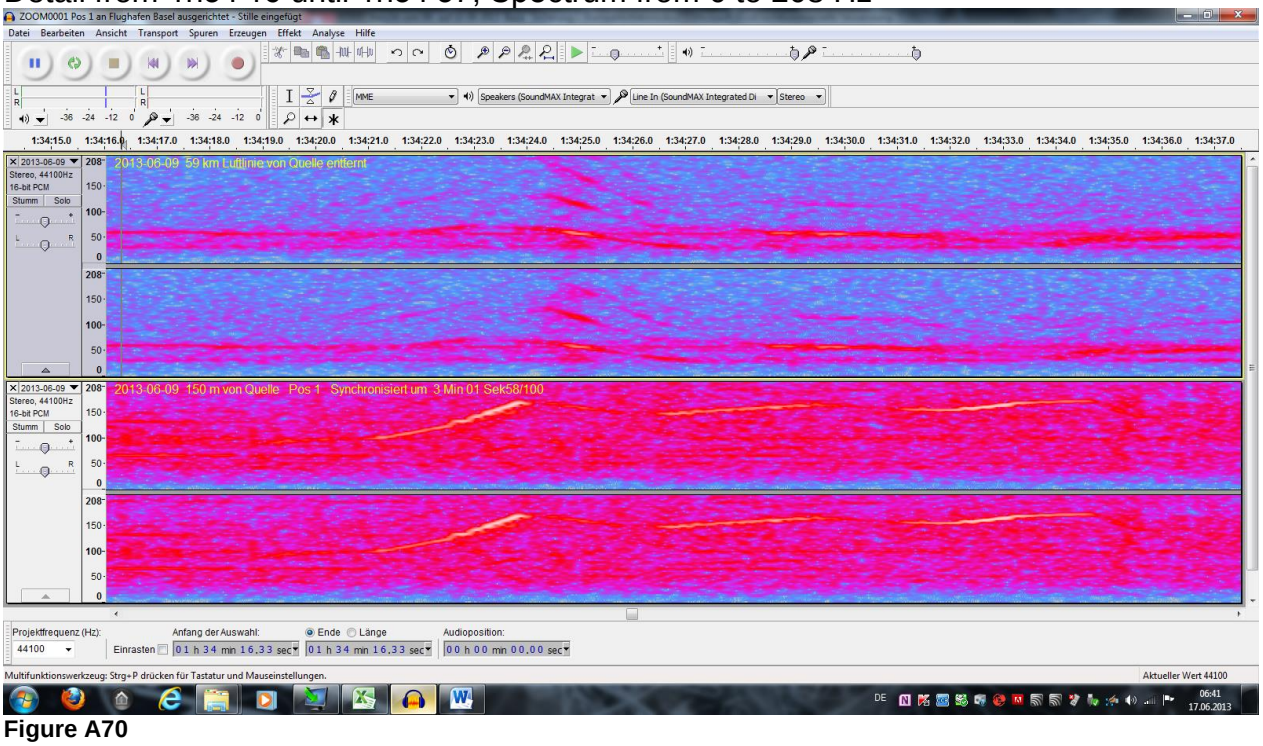

Figure A70

Detail from 1h34‘16 until 1h34‘37, Spectrum from 0 to 1664 Hz

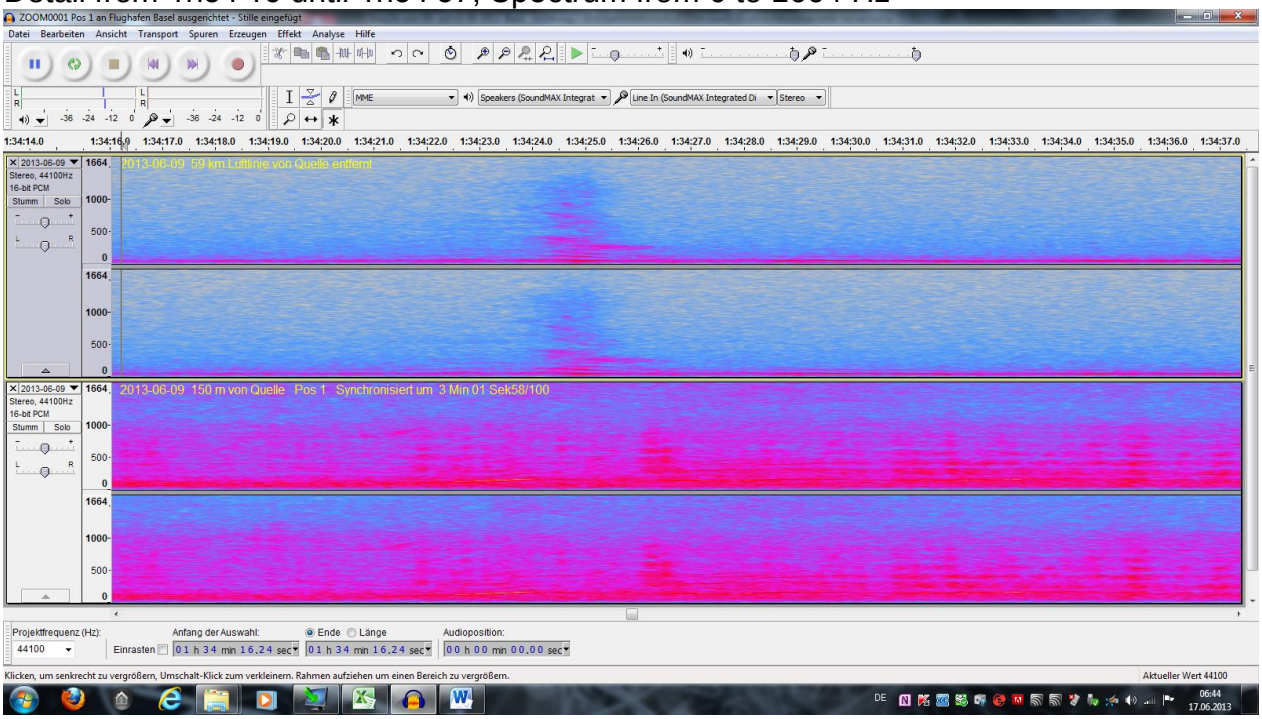

Figure A71

Detail from 1h37‘07 until 1h39‘58, Spectrum from 0 to 832 Hz

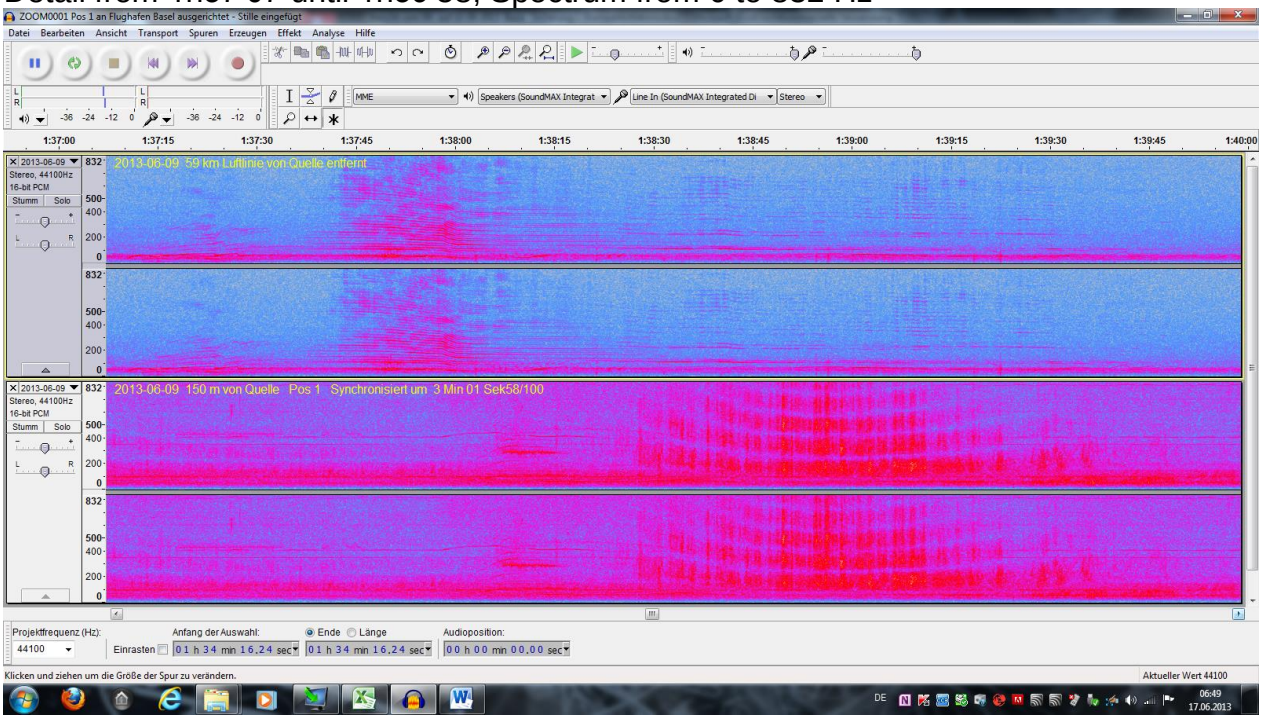

Figure A72

Detail from 1h40‘13 until 1h45‘52, Spectrum from 0 to 832 Hz

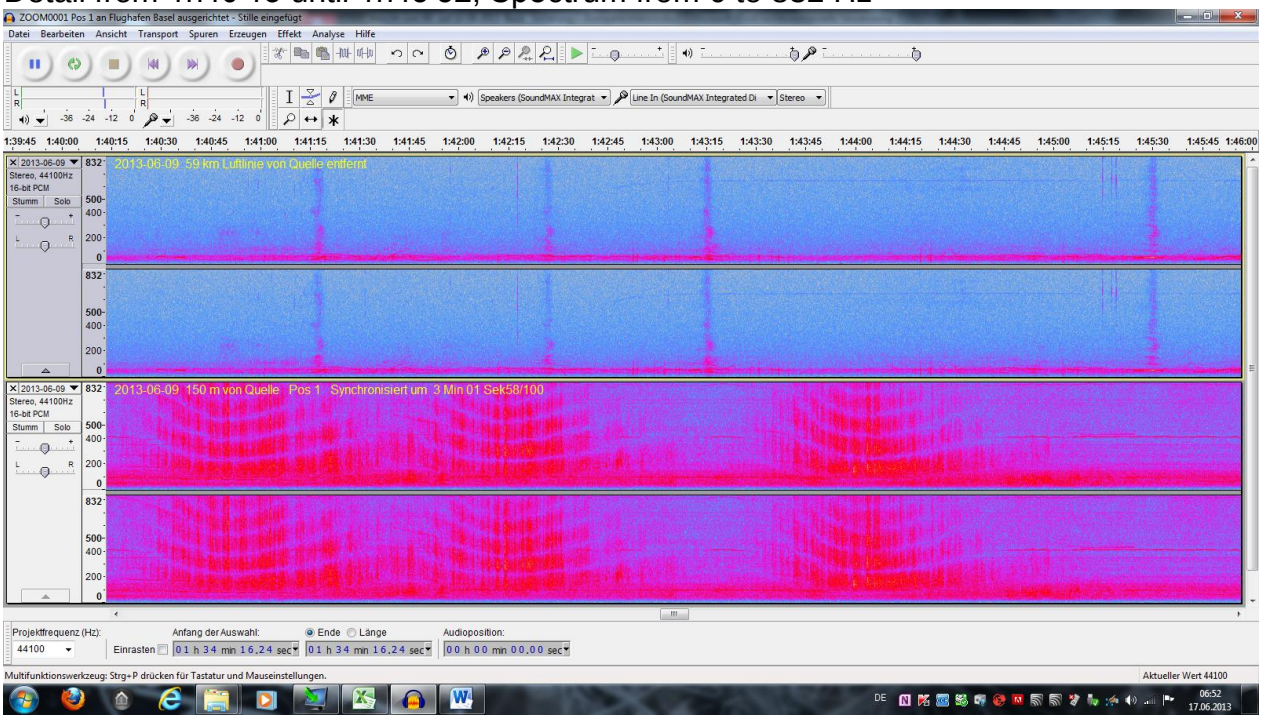

Figure A73

Detail from 1h51‘15 until 1h57‘00, Spectrum from 0 to 832 Hz

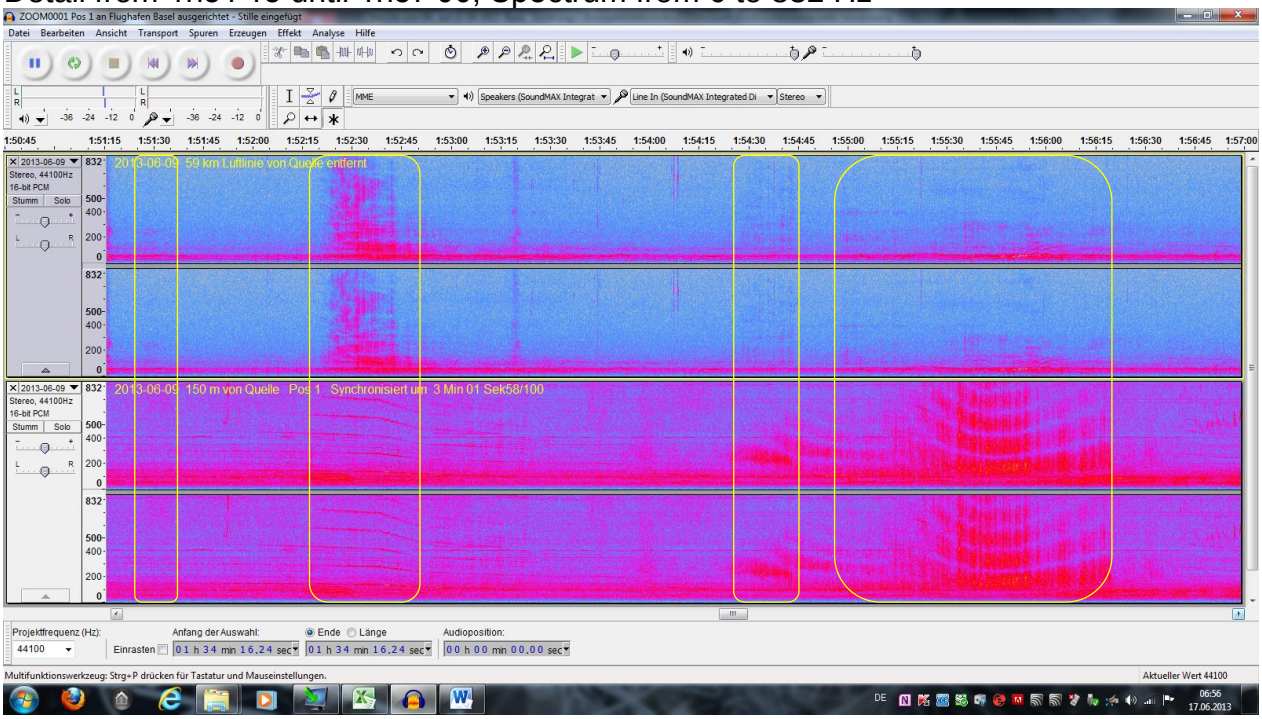

Figure A74

Detail from 1h59‘55 until 2h05‘30, Spectrum from 0 to 832 Hz

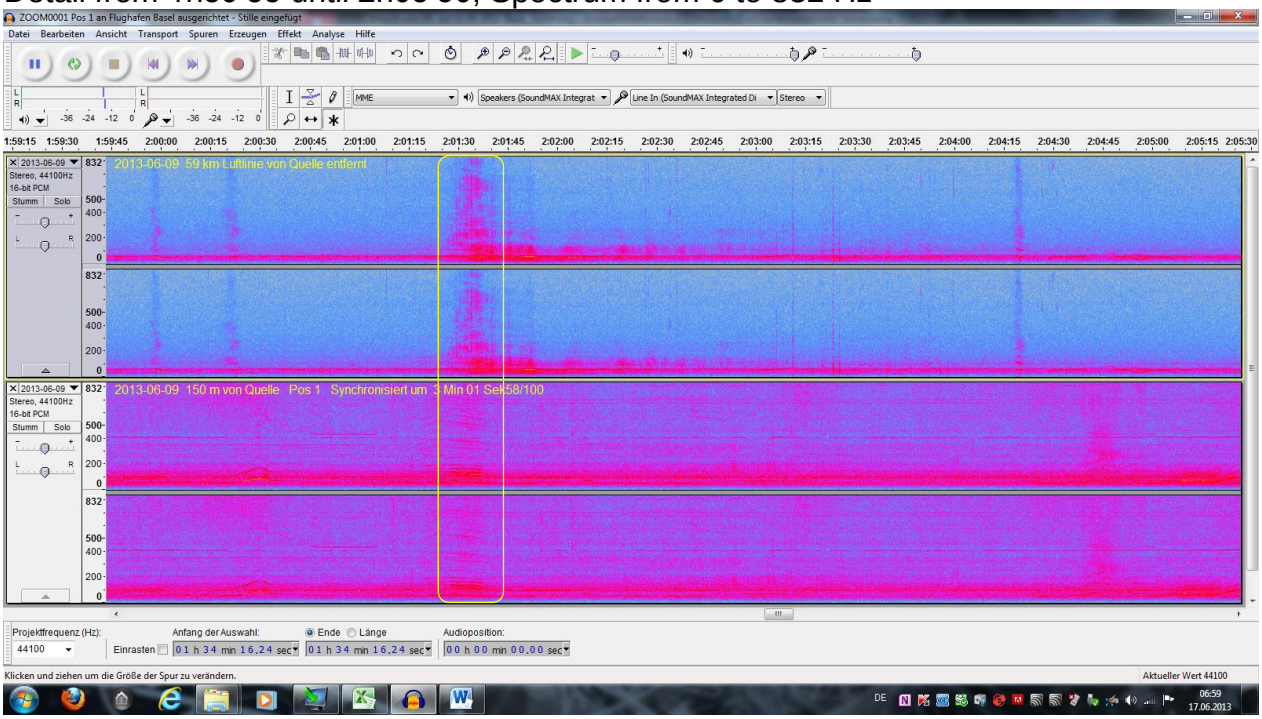

Figure A75

Deatail from 2h05‘25 until 2h11‘00, Spectrum from 0 to 7000 Hz

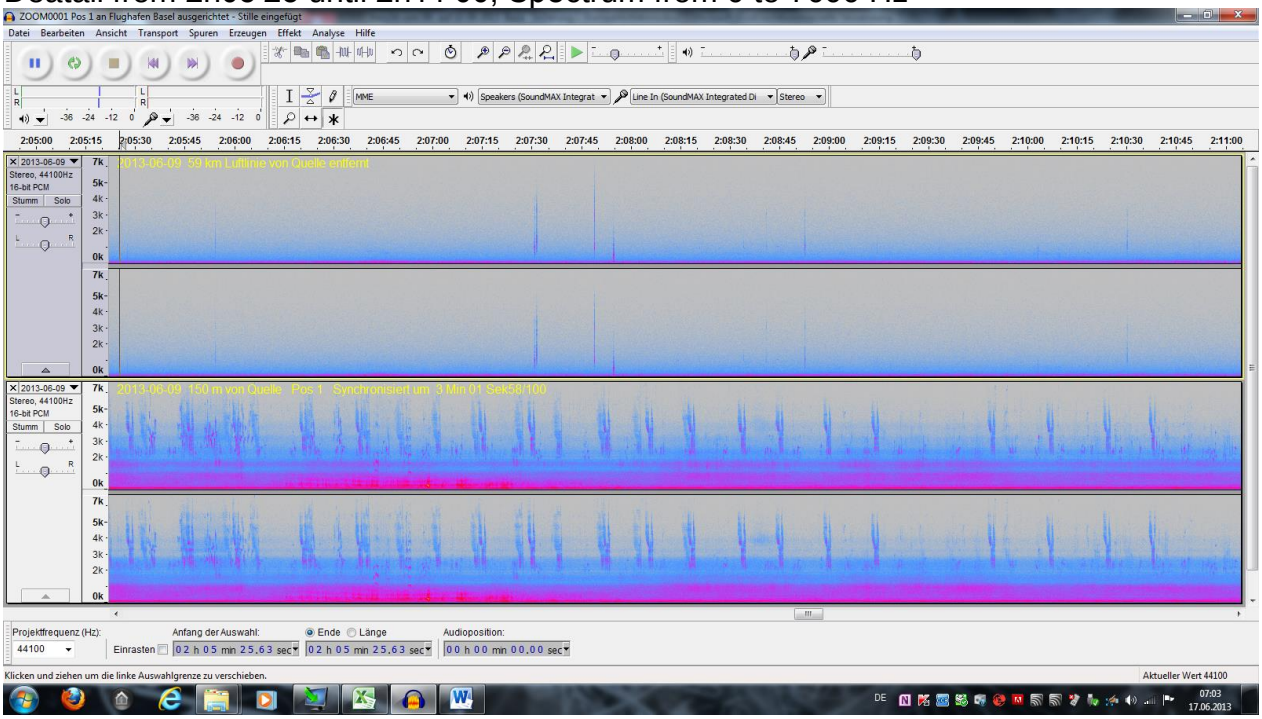

Figure A76

Detail from 2h05‘25 until 2h11‘00, Spectrum from 0 to 416 Hz

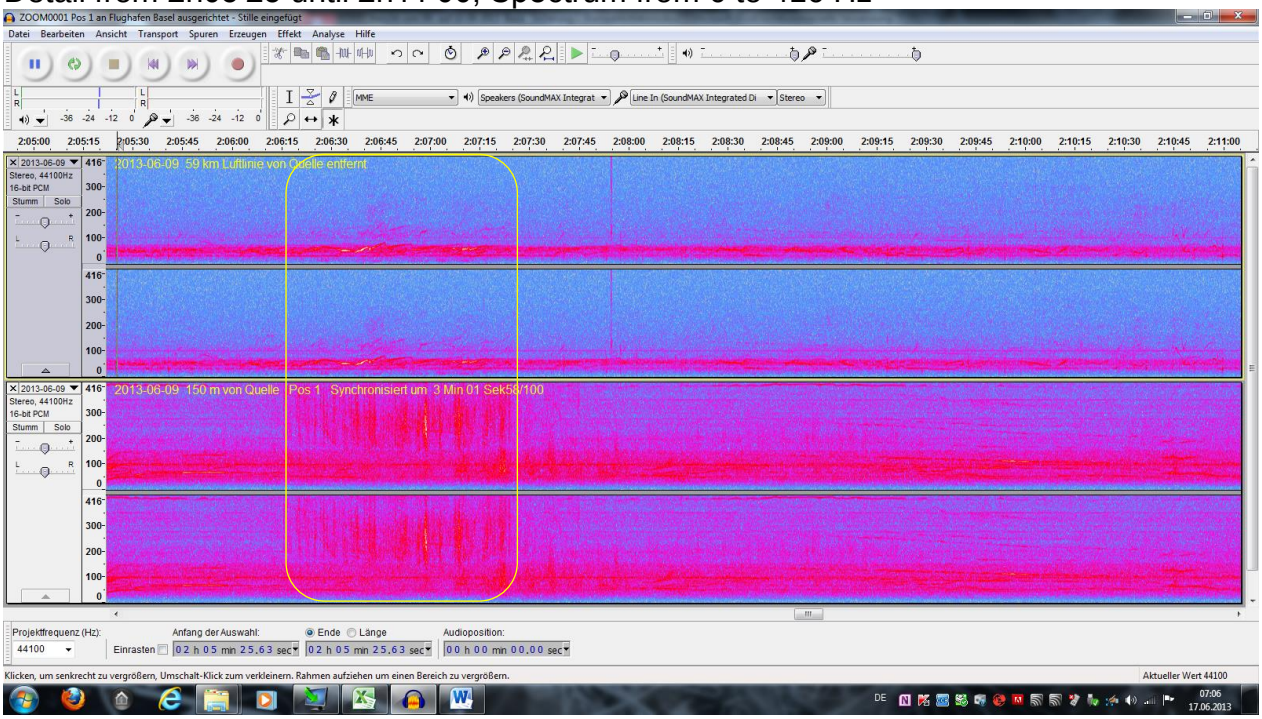

Figure A77

Detail from 2h10‘50 until 2h34‘00, Spectrum from 0 to 416 Hz

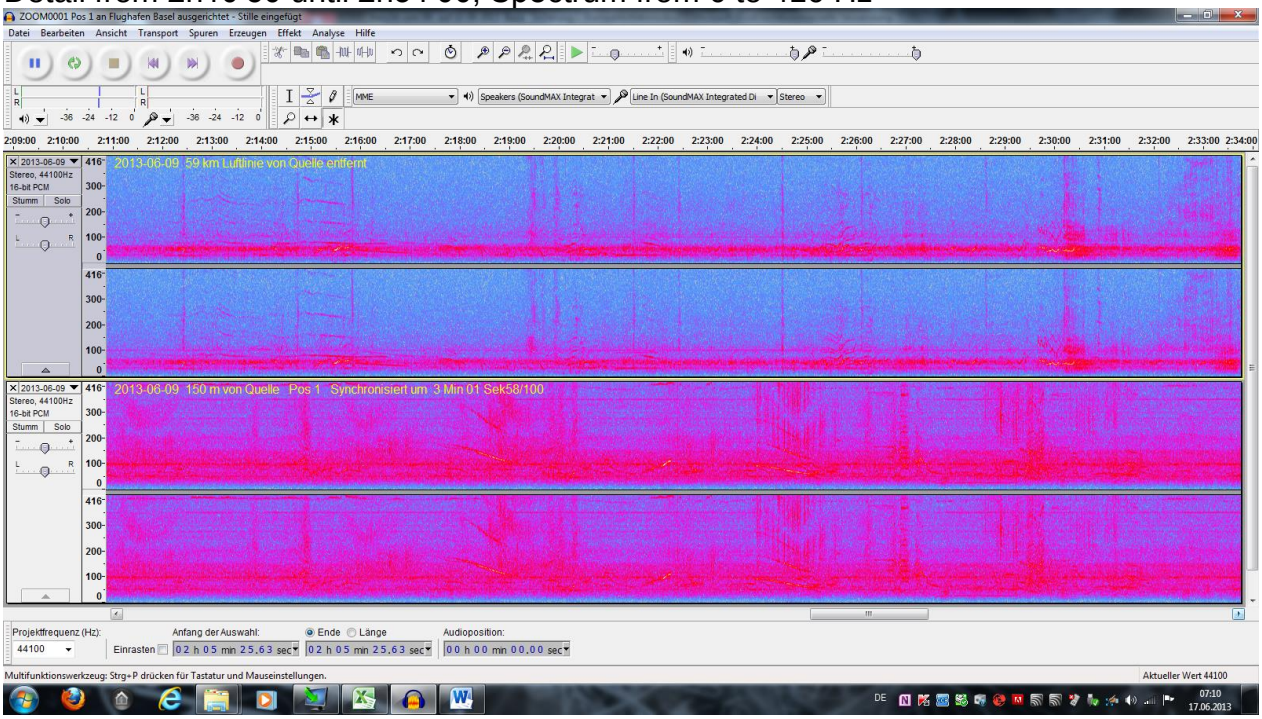

Figure A78

Detail from 2h28‘00 until 2h51‘00, Spectrum from 0 to 416 Hz

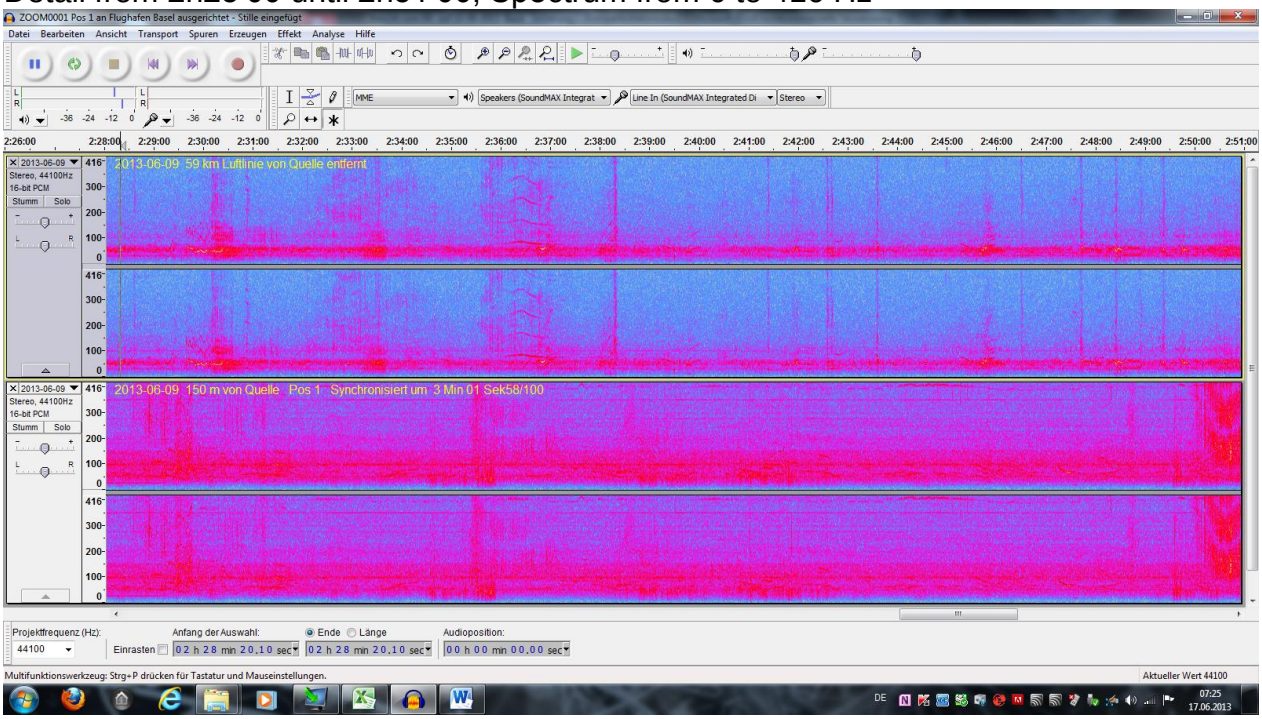

Figure A79

Detail from 3h05‘00 until 3h23‘00, Spectrum from 0 to 7000 Hz

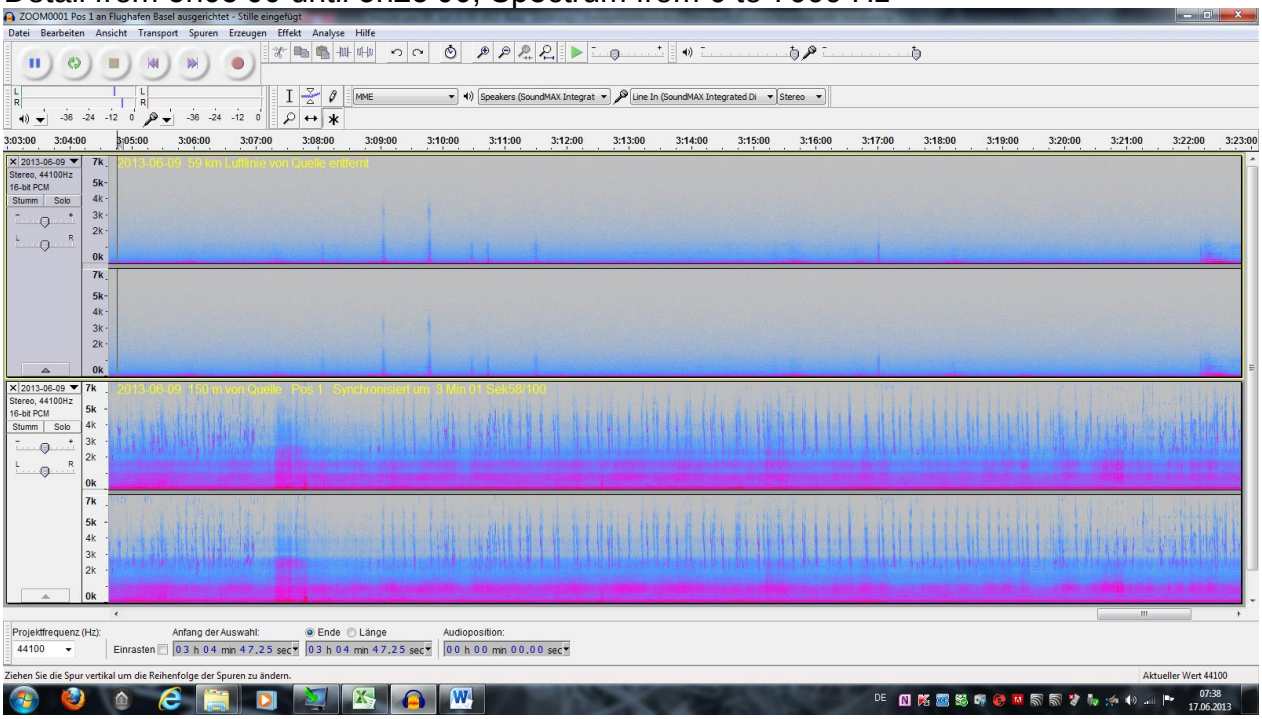

Figure A80

Detail from 3h05‘00 until 3h23‘00, Spectrum from 0 to 208 Hz

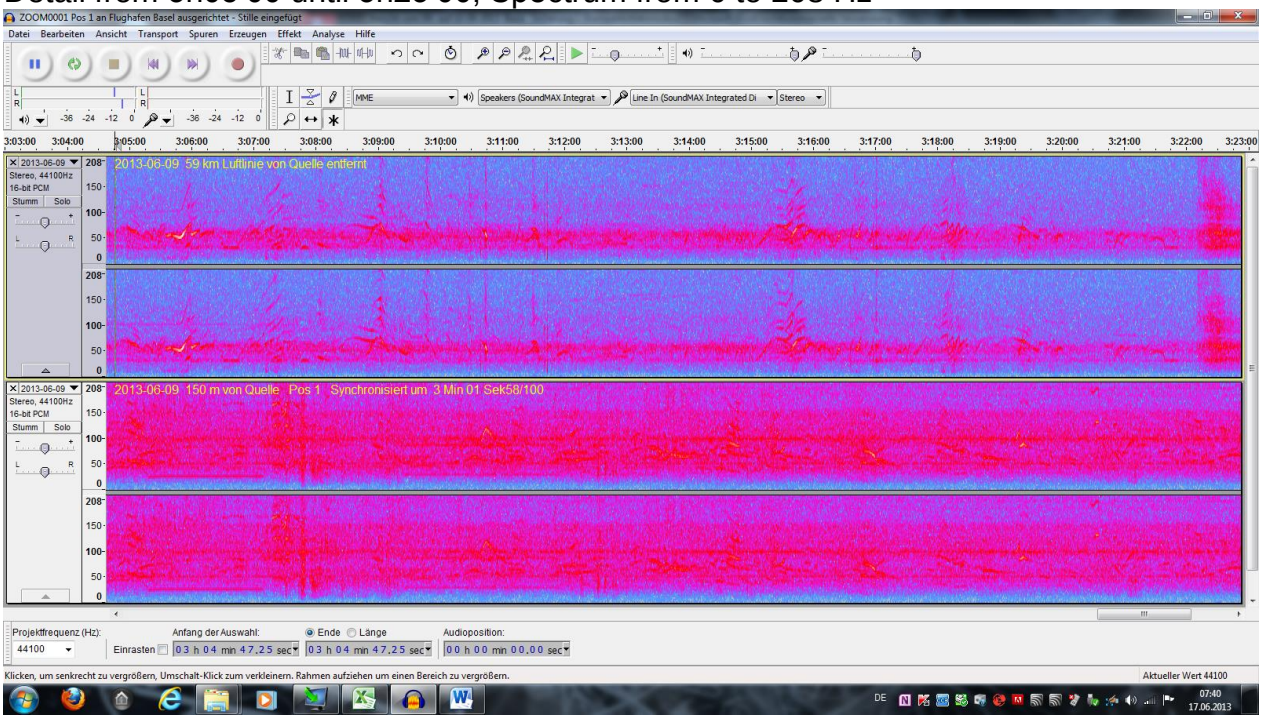

Figure A81

Detail from 3h05‘00 until 3h23‘00, Spectrum from 0 to 120 Hz

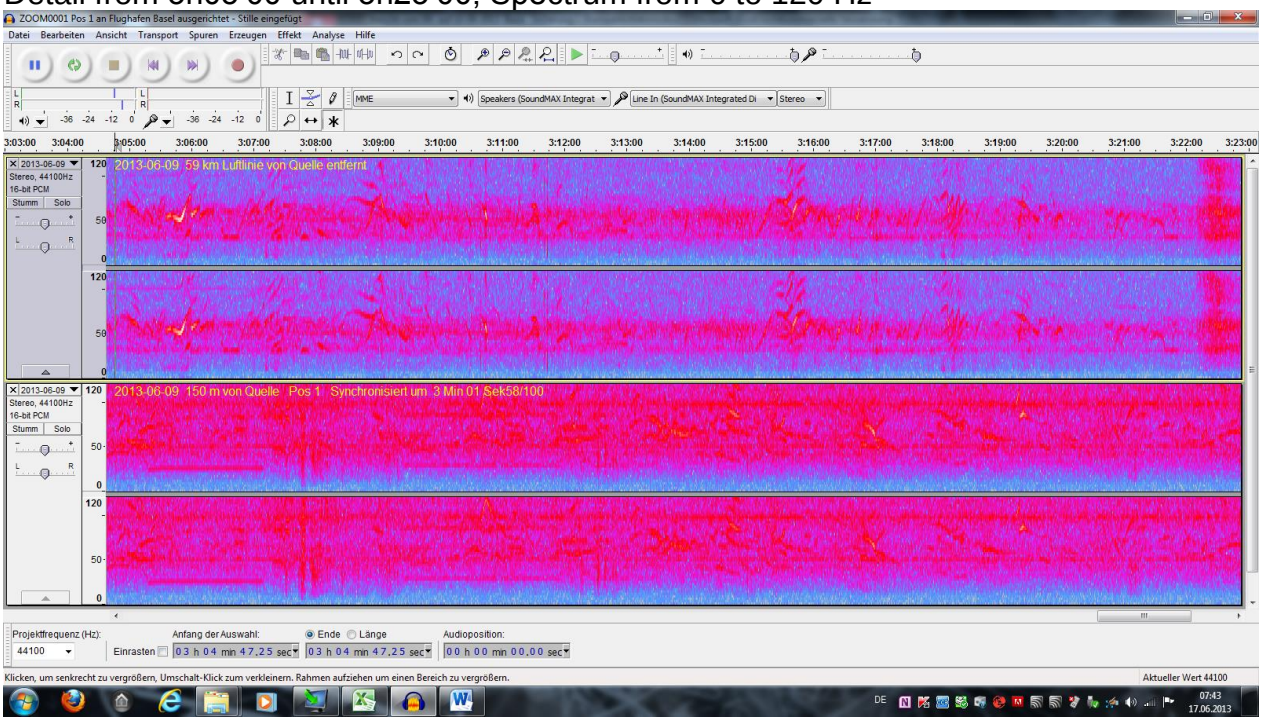

Figure A82

12. Audio-recordings no. 4, from 22.44 until 2.06h, personal condition.

Personal condition in 416 km linear distance to source noted.
The sound events depicted here took place approx. 20 minutes later at the location of personal condition.

12.1. Affidavit:

The author herself is surprised by the precise coincidence of her physical perception and the signal strength as well as the frequency patterns at the source.

Explicitly, she declares in lieu of oath, that all content of this report are true and correct.

Entire recording from 22.44 until 2.06h, same scaling, waveform tracks synchronized at 3'01'58

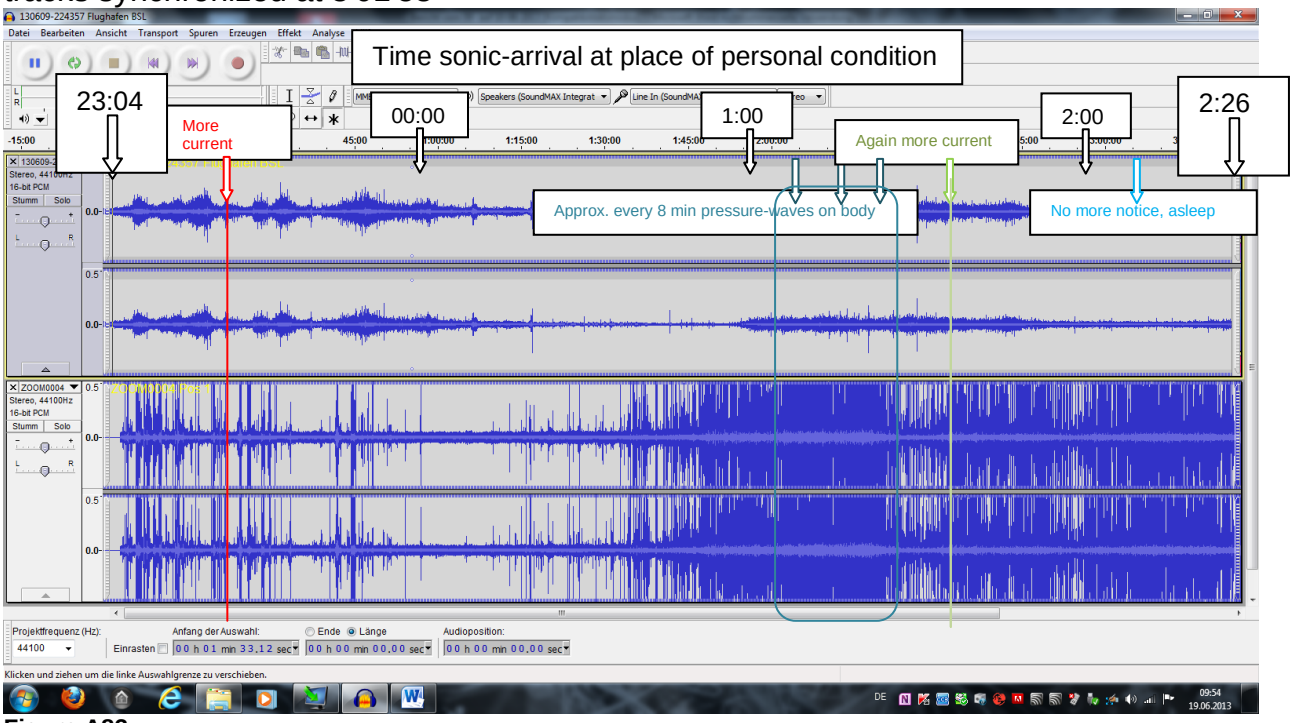

Figure A83

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 13000 Hz

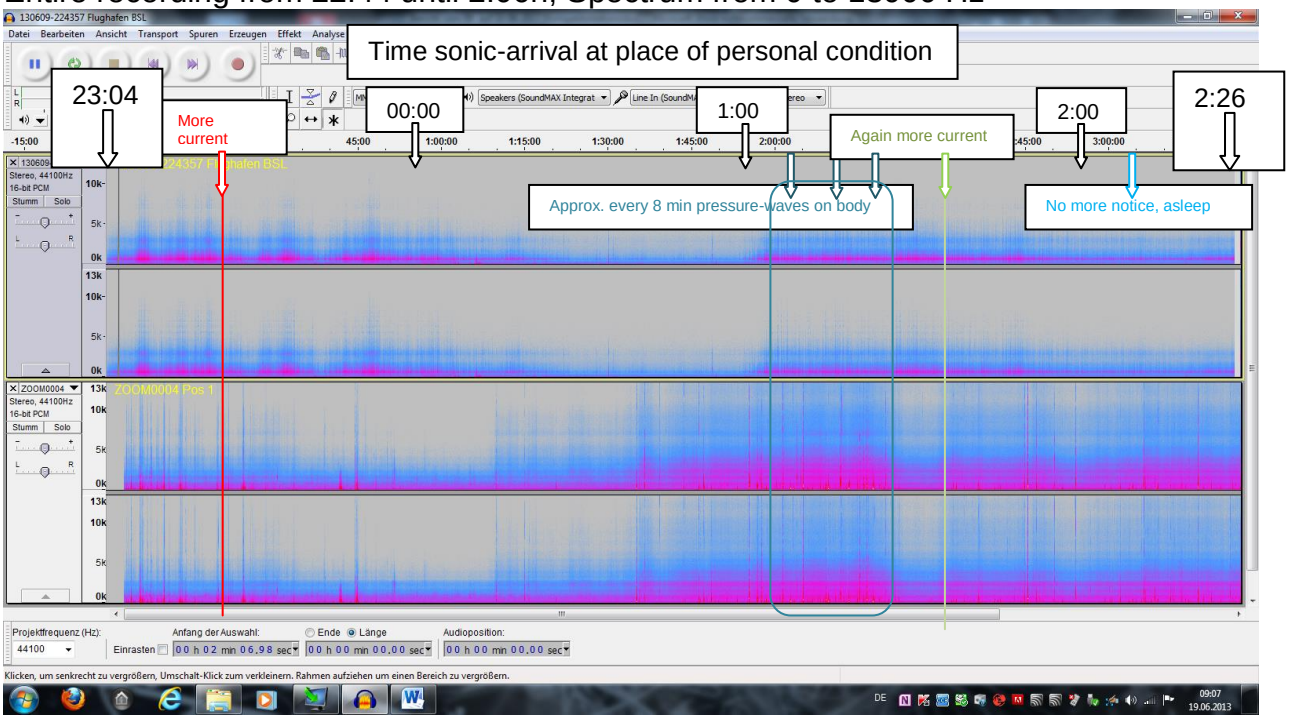

Figure A84

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 6000 Hz

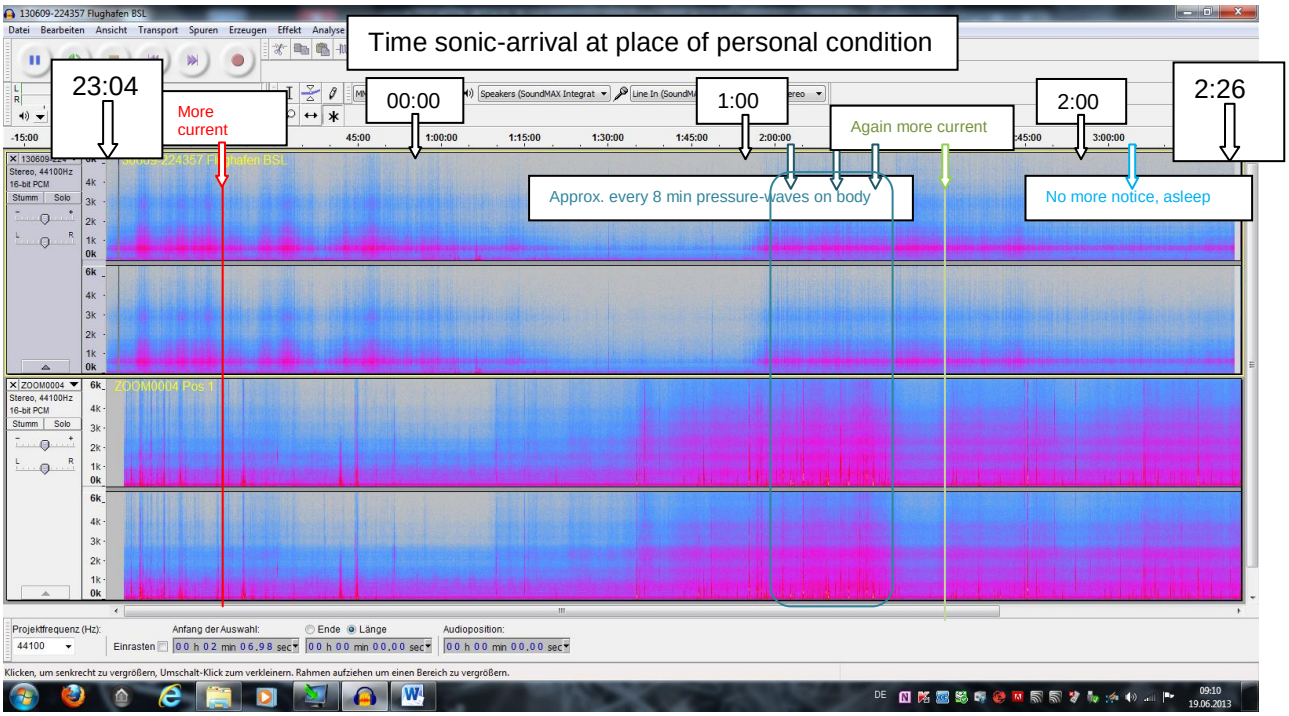

Figure A85

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 2800 Hz

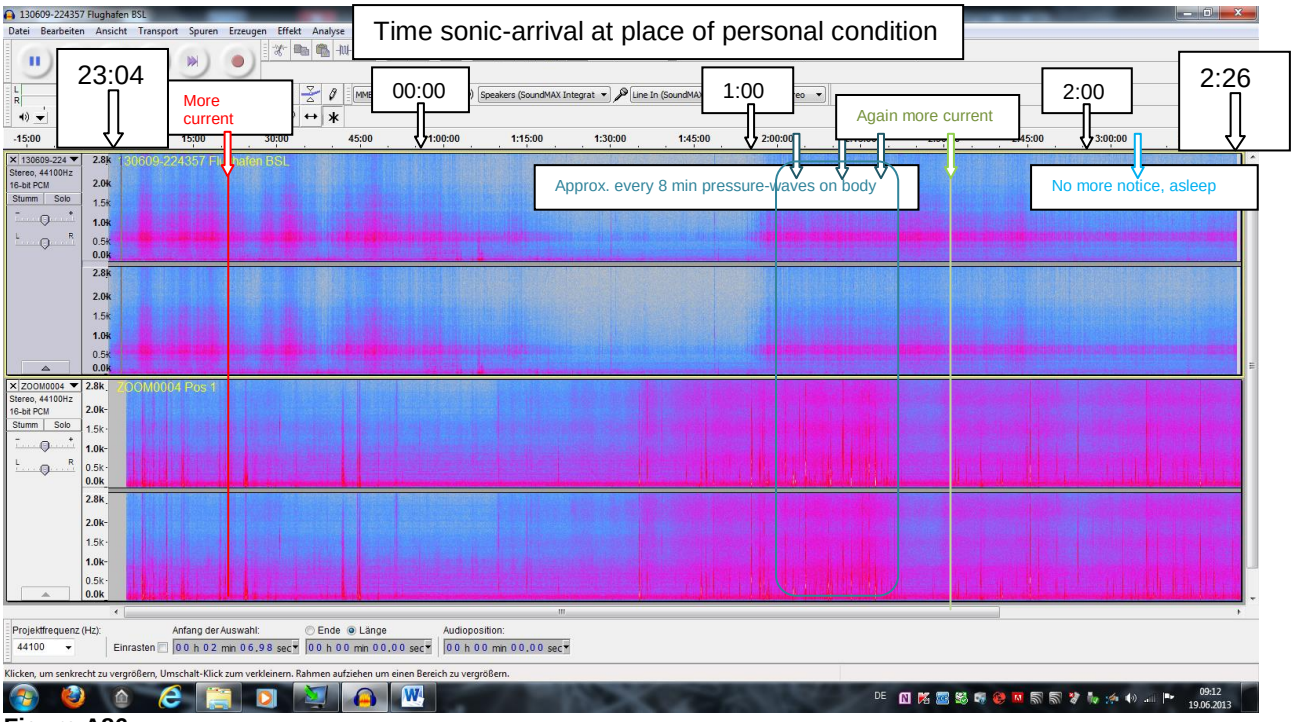

Figure A86

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 1378 Hz

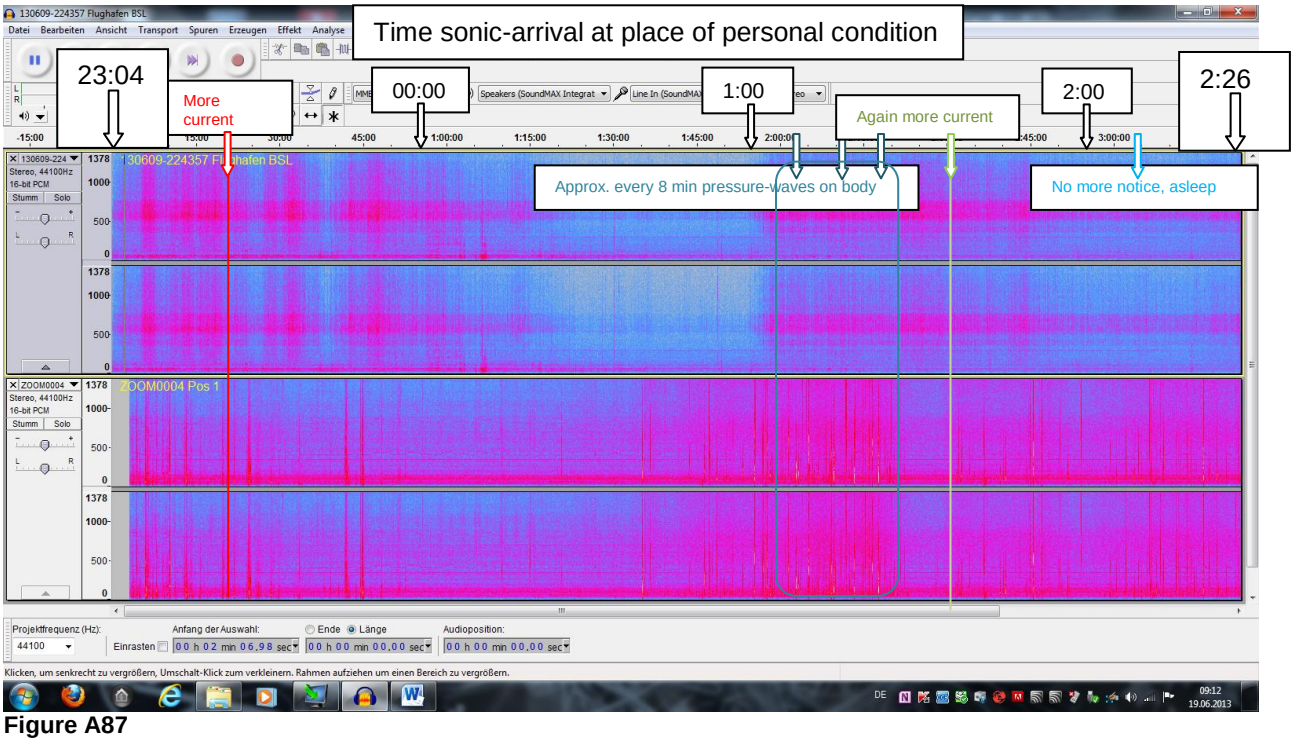

Figure A87

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 689 Hz

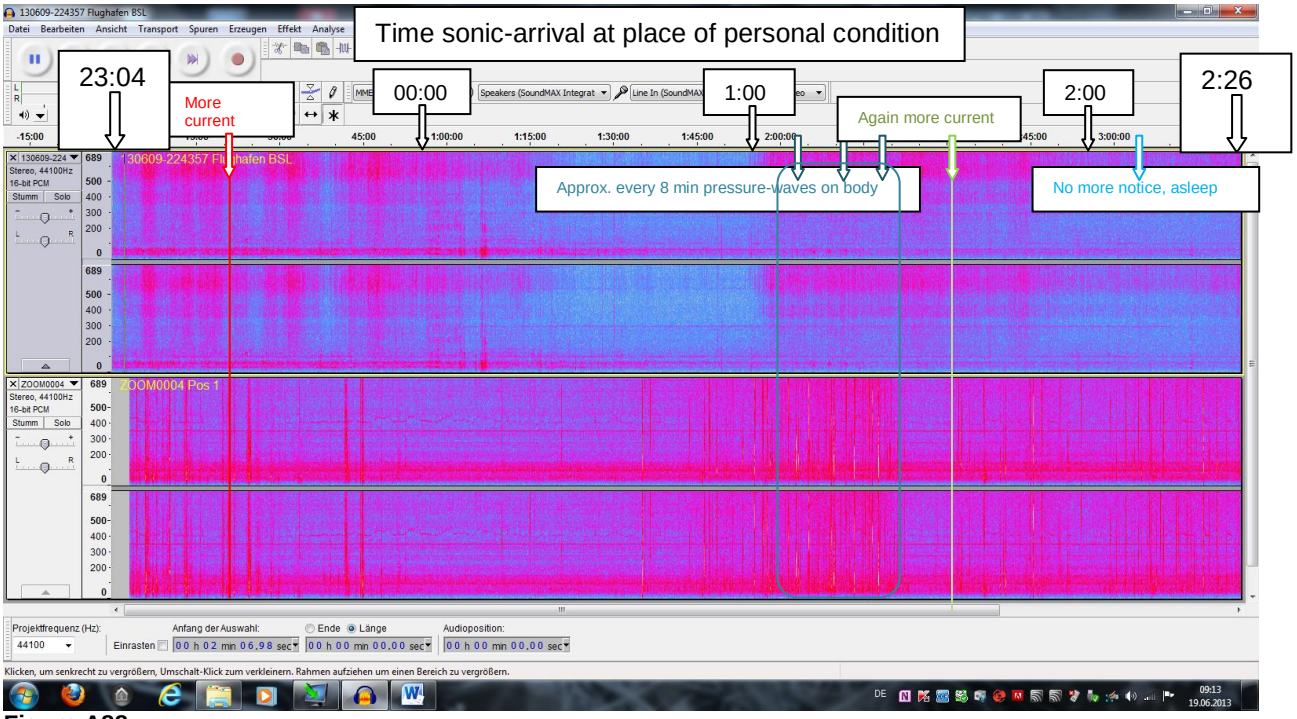

Figure A88

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 344 Hz

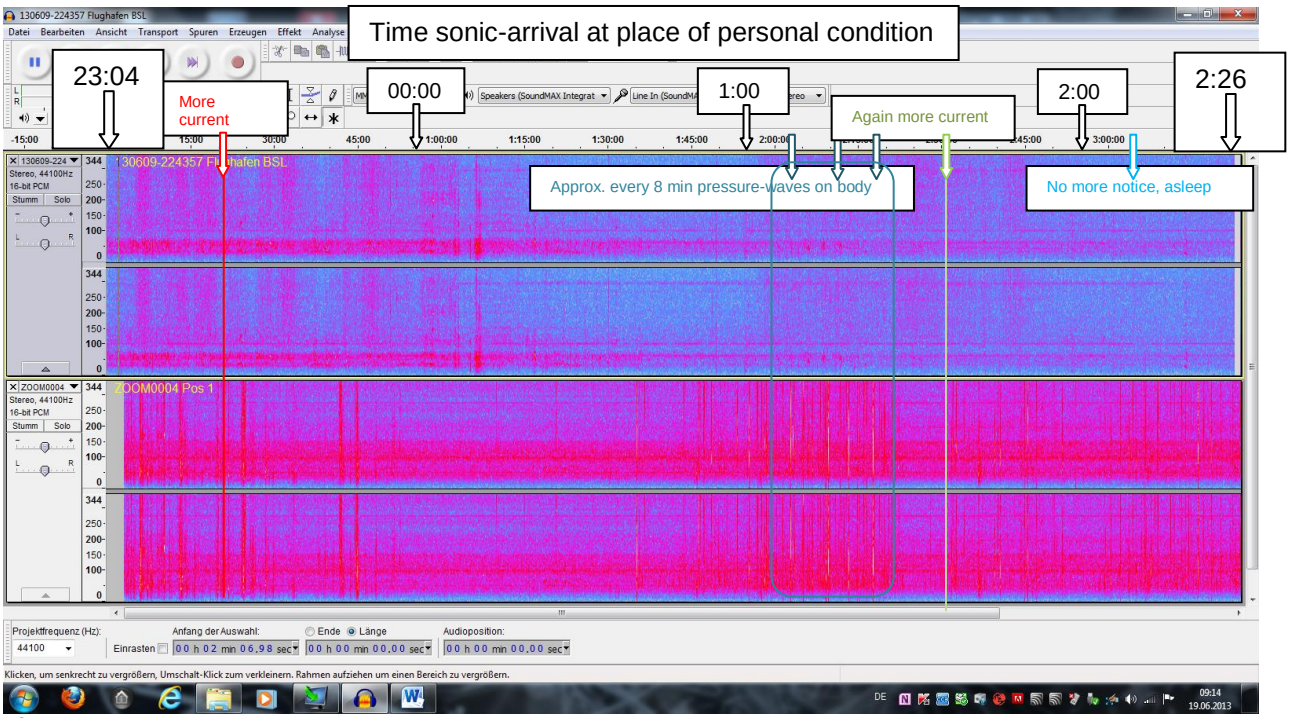

Figure A89

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 172 Hz

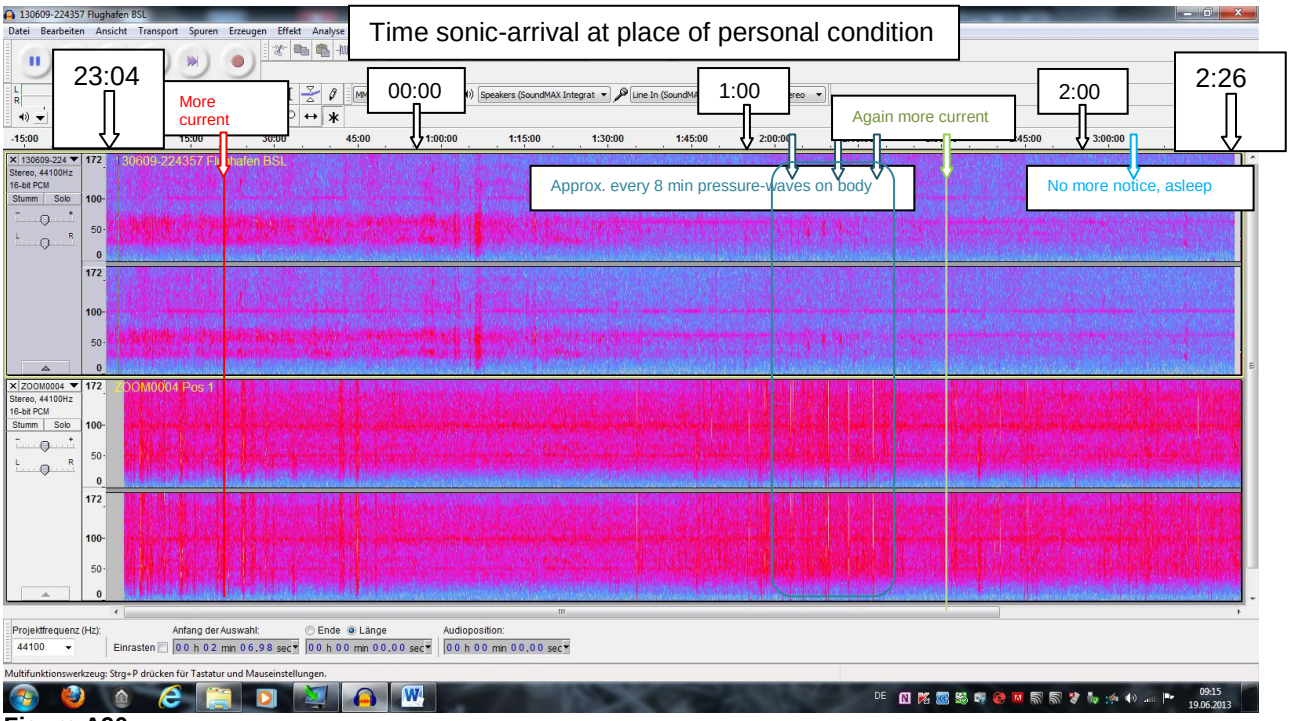

Figure A90

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 86 Hz

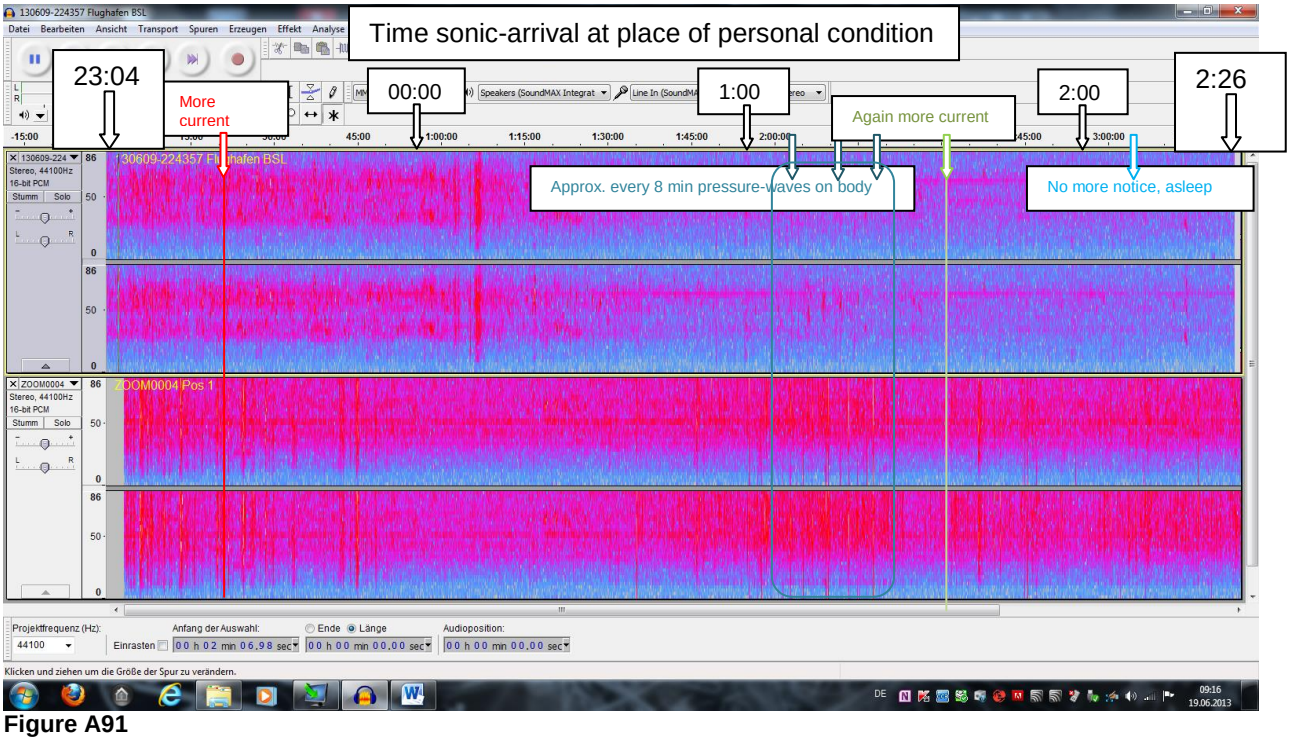

Figure A91

Entire recording from 22.44 until 2.06h, Spectrum from 0 to 26 Hz

Particularly striking are at the sound source the lower frequencies ranging down to 0 Hz. It must be assumed that the sound pressure is here particularly high.

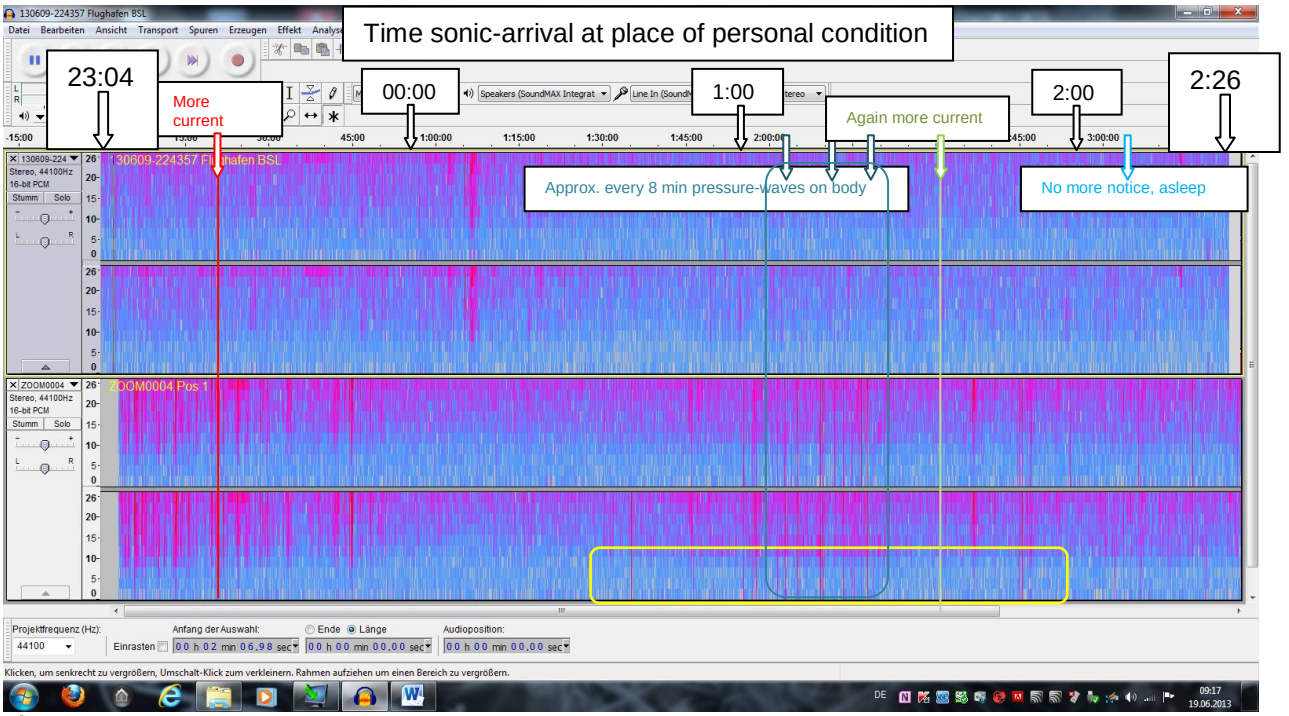

Figure A92