

## **Comments on November Recordings from 2015**

The ten recorders were put out on 7th Nov and retrieved on 26th Nov, so a total of  $19 \times 16 \times 10 = 3040$  time slots were recorded.

The number of boom trains in each time slot were counted and a comment on the background noise level of each time slot was recorded.

Total of boom trains counted was 11,870.

### **Boom Trains**

Stations with the greatest counts were B5 (1859) and B10 (1901)

Stations with the least counts were B1 (401) and B6 (619)

Stations with counts of more than 30 in any time slot were B2, B3, B5, B8, B9 and B10.

38% of all boom trains counted were in the first 3 time slots, 40% in the evening.

It is likely a higher percentage could have been recorded in the morning if we had started recording earlier (see below).

### **Background Noise**

B4 had no 'High' noise levels ?

B4 = 255 and B10 = 260 had far more (low + none) readings.

Average for 10 stations was 155

Why are these two sites so much quieter?

B1, B7 and B8 were the noisiest. Why?

In October, 929 (34%) of the total 2720 time slots were in the low or none noise category, or two thirds of the readings were affected by medium to high background noise levels.

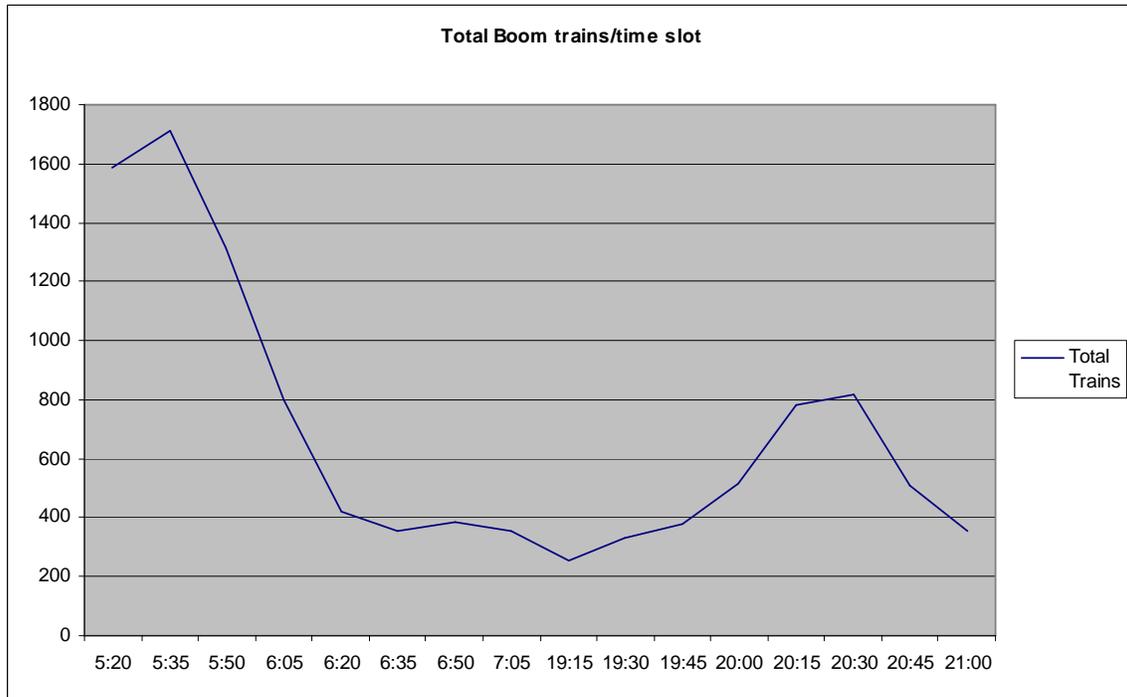
In November, the situation was a little better with 1555 (51%) of 3040 recordings being low to none, but still half of the readings could be unreliable.

### **Timing of recording**

Our records from October showed a greater number of trains at dawn than at sunset and suggested that we would have been better to start recording earlier.

The effect of longer days in November shows clearly in the charts below and it is likely that in November recording started after the peak of morning booming.

October recordings:

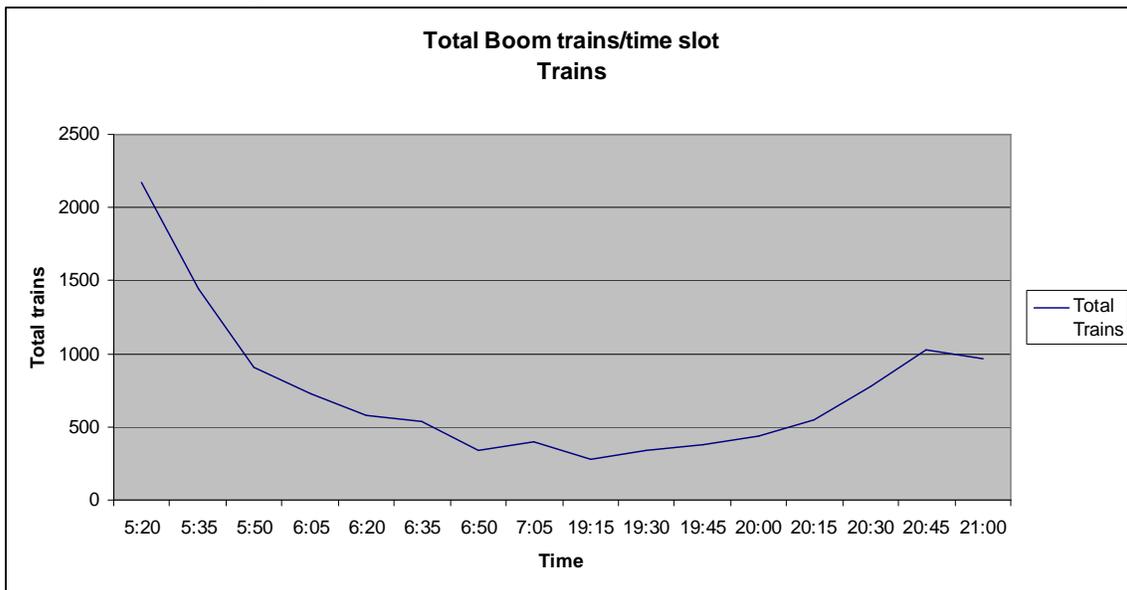


Sunrise at Collingwood 20th Oct 6:32am

Sunset at Collingwood 20th Oct 7:56pm

Peak time for booms approx 1 hour before sunrise and 1 hour after sunset.

November recordings:



Sunrise at Collingwood 16th Nov 6:00am

Sunset at Collingwood 16th Nov 8:28pm

Peak time for booms before sunrise unknown and approx 30 mins after sunset.