

Mini example automatic reporting with knitR*

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Contents

| | | |
|----------|-------------------------------------|----------|
| 1 | Quick overview | 2 |
| 2 | Heatmaps and tables per year | 4 |
| 2.1 | Year 2007 | 4 |
| 2.2 | Year 2008 | 5 |
| 2.3 | Year 2009 | 6 |

1 Quick overview

| ymd | weekday | nr_weekday | sum_out | holiday |
|------------|---------|------------|---------|---------|
| 2007-01-01 | Mon | 1 | 4040 | 1.00 |
| 2007-01-02 | Tue | 2 | 22760 | 1.50 |
| 2007-01-03 | Wed | 3 | 18810 | 0.00 |
| 2007-01-04 | Thu | 4 | 24910 | 0.00 |
| 2007-01-05 | Fri | 5 | 25650 | 0.50 |
| 2007-01-06 | Sat | 6 | 5650 | 1.00 |

Table 1: First six lines of the dataset

The dataset (see Table 1) contains daily withdrawn amounts in the period from 2007-01-01 till 2009-12-31 (30 entries are missing). We expect weekdays and holidays to have a strong influence on withdrawn amounts and, additionally, to see an impact of the financial crisis starting with autumn 2008. Figure 1, Figure 2 as well as Table 2 confirm this suspicion.

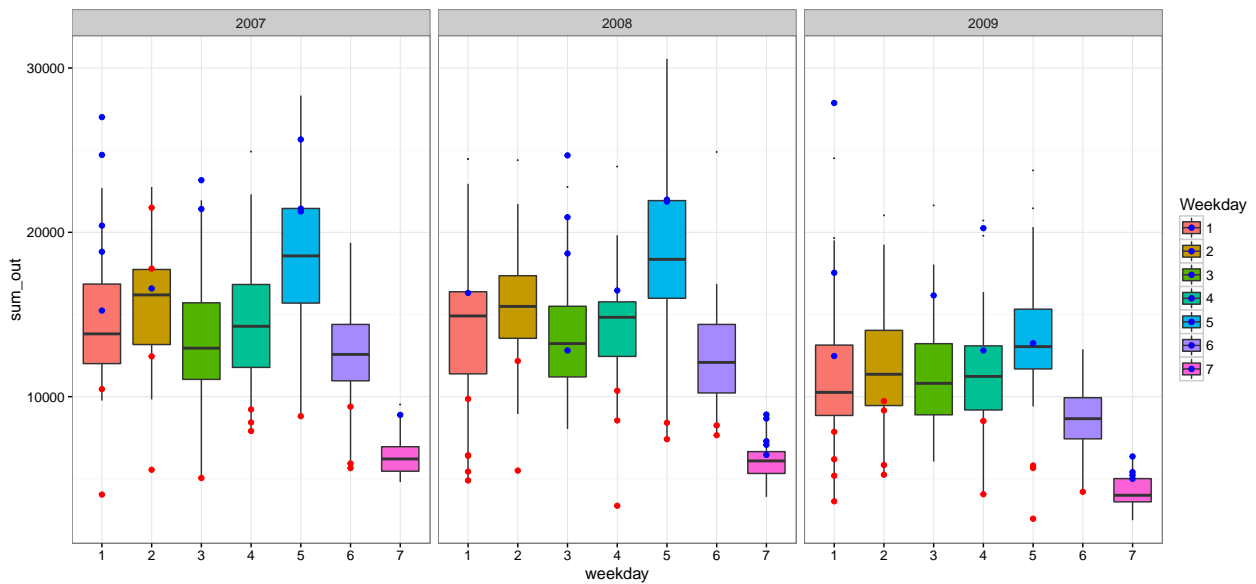


Figure 1: Boxplot per day of week and year, the medians are also printed in Table 2

Considering all years together the median withdrawn amount is 13060 € on Mondays, 14315 € on Tuesdays, 12525 € on Wednesdays, 13200 € on Thursdays, 16630 € on Fridays, 10950 € on Saturdays, and 5490 € on Sundays.

| weekday | year | sum_out |
|---------|------|----------|
| Mon | 2007 | 13820.00 |
| Mon | 2008 | 14910.00 |
| Mon | 2009 | 10260.00 |
| Tue | 2007 | 16190.00 |
| Tue | 2008 | 15490.00 |
| Tue | 2009 | 11360.00 |
| Wed | 2007 | 12950.00 |
| Wed | 2008 | 13230.00 |
| Wed | 2009 | 10810.00 |
| Thu | 2007 | 14280.00 |
| Thu | 2008 | 14830.00 |
| Thu | 2009 | 11230.00 |
| Fri | 2007 | 18565.00 |
| Fri | 2008 | 18355.00 |
| Fri | 2009 | 13045.00 |
| Sat | 2007 | 12570.00 |
| Sat | 2008 | 12085.00 |
| Sat | 2009 | 8660.00 |
| Sun | 2007 | 6210.00 |
| Sun | 2008 | 6090.00 |
| Sun | 2009 | 4000.00 |

Table 2: Median withdrawn amount per year and day of week

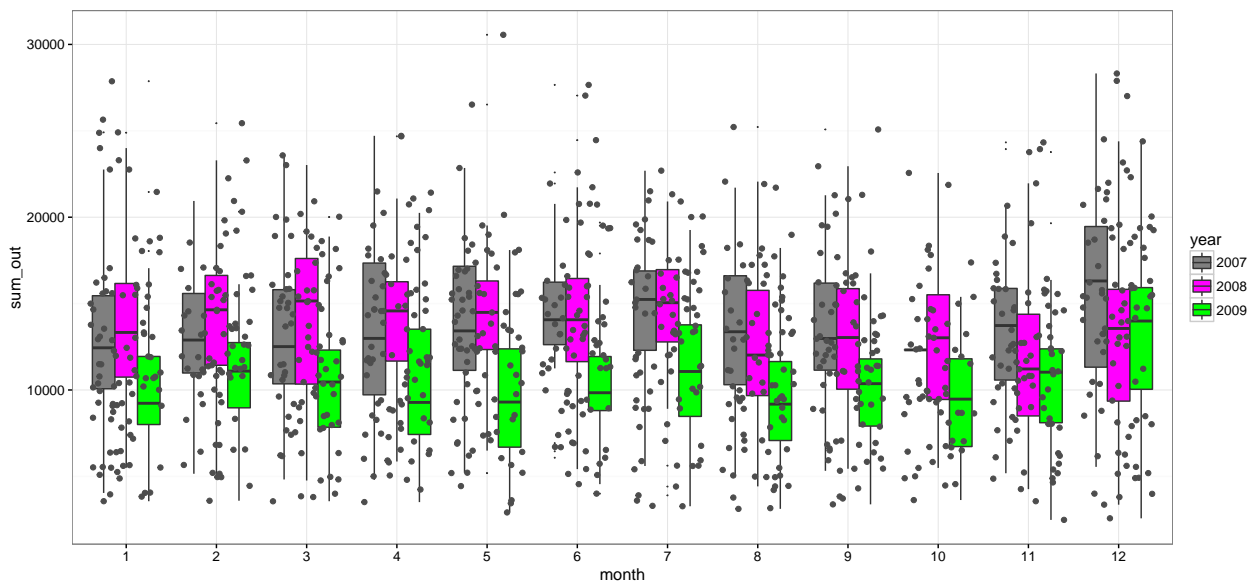


Figure 2: Boxplot per month, the impact of the financial crisis starting with autumn 2008

2 Heatmaps and tables per year

In the following we produce individual heatmaps and tabular summaries for every year in the dataset.

2.1 Year 2007

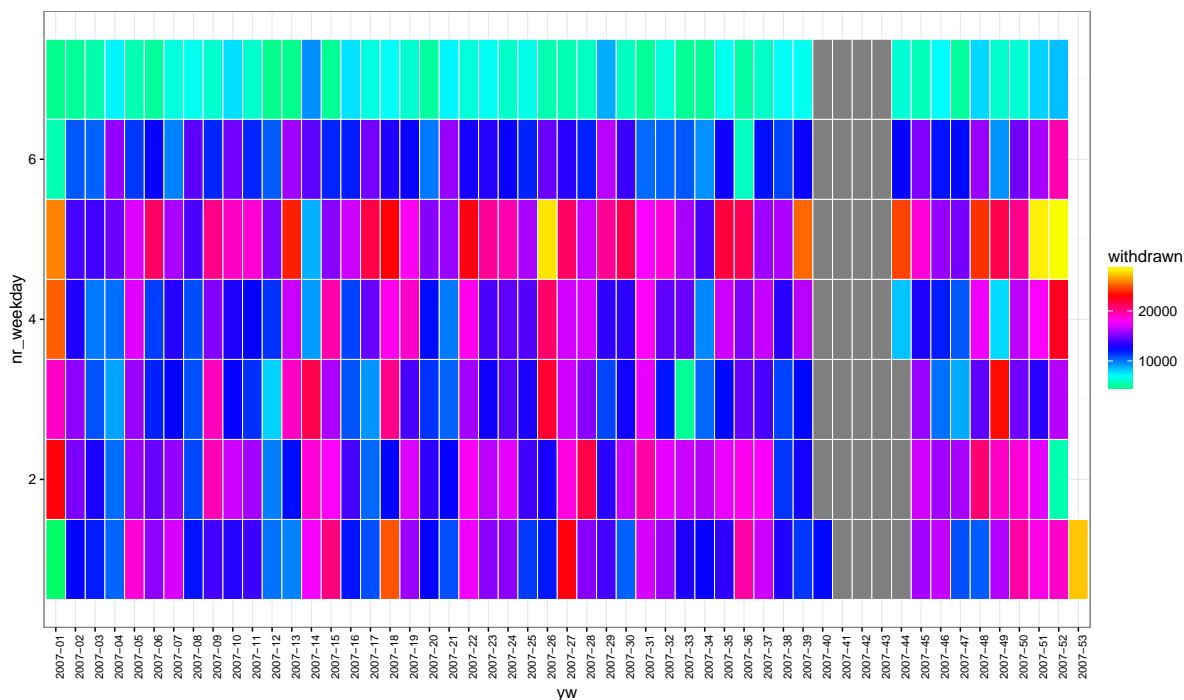


Figure 3: Heatmap Year 2007

| nr_weekday | weekday | sum_out.mean | sum_out.median | sum_out.sd |
|------------|---------|--------------|----------------|------------|
| 1 | Mon | 14655.51 | 13820.00 | 4131.91 |
| 2 | Tue | 15553.19 | 16190.00 | 3339.58 |
| 3 | Wed | 13767.02 | 12950.00 | 3794.76 |
| 4 | Thu | 14460.21 | 14280.00 | 3643.58 |
| 5 | Fri | 18976.04 | 18565.00 | 4237.93 |
| 6 | Sat | 12525.83 | 12570.00 | 2534.68 |
| 7 | Sun | 6344.17 | 6210.00 | 1134.37 |

Table 3: Summary year 2007

The biggest withdrawn amount in 2007 was 28320€

2.2 Year 2008

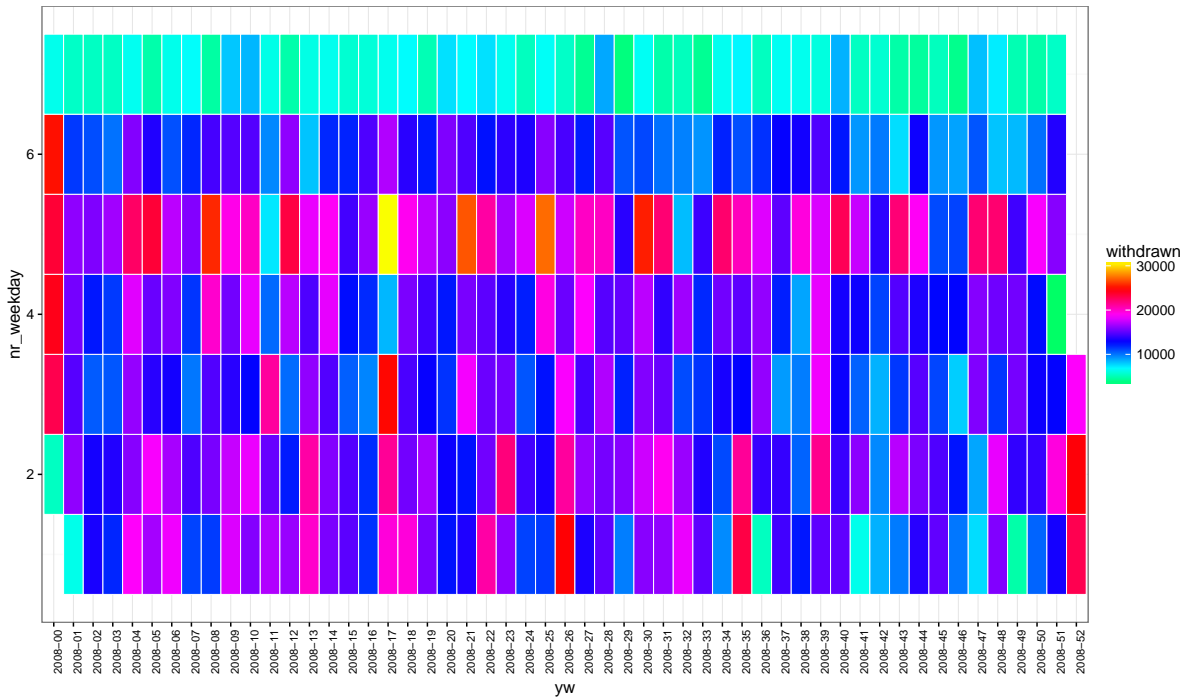


Figure 4: Heatmap Year 2008

| nr_weekday | weekday | sum_out.mean | sum_out.median | sum_out.sd |
|------------|---------|--------------|----------------|------------|
| 1 | Mon | 14187.12 | 14910.00 | 4414.79 |
| 2 | Tue | 15544.53 | 15490.00 | 3510.02 |
| 3 | Wed | 13810.57 | 13230.00 | 3448.05 |
| 4 | Thu | 14428.46 | 14830.00 | 3232.05 |
| 5 | Fri | 18596.35 | 18355.00 | 4532.53 |
| 6 | Sat | 12396.73 | 12085.00 | 2918.13 |
| 7 | Sun | 6111.73 | 6090.00 | 1179.82 |

Table 4: Summary year 2008

The biggest withdrawn amount in 2008 was 30560€

2.3 Year 2009

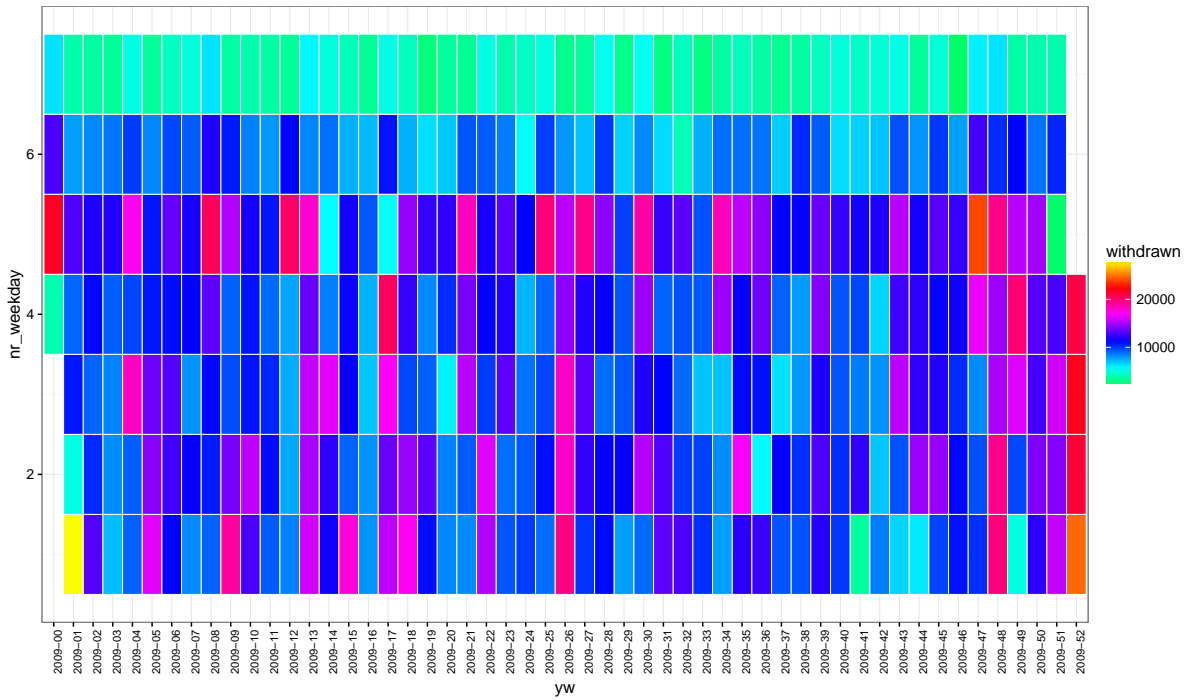


Figure 5: Heatmap Year 2009

| nr_weekday | weekday | sum_out.mean | sum_out.median | sum_out.sd |
|------------|---------|--------------|----------------|------------|
| 1 | Mon | 11707.12 | 10260.00 | 4631.55 |
| 2 | Tue | 11779.23 | 11360.00 | 3261.20 |
| 3 | Wed | 11335.77 | 10810.00 | 3424.13 |
| 4 | Thu | 11399.62 | 11230.00 | 3240.35 |
| 5 | Fri | 13723.27 | 13045.00 | 4034.71 |
| 6 | Sat | 8714.23 | 8660.00 | 1764.10 |
| 7 | Sun | 4320.58 | 4000.00 | 939.36 |

Table 5: Summary year 2009

The biggest withdrawn amount in 2009 was 27870€