Supplement for “Working 9 to 5, not the way to make an academic living: observational analysis of manuscript and peer review submission data over time”

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Flow diagrams of the number of included submissions and peer reviews

[Diagram showing flow of submissions and peer reviews]
Country-specific probabilities for manuscripts and peer reviews on weekends to the BMJ and BMJ Open.

The dots are the means and the horizontal lines are 95% credible intervals.
Country-specific probabilities for manuscripts and peer reviews on holidays to the BMJ and BMJ Open.

The dots are the means and the horizontal lines are 95% credible intervals.
Details on the regression model to examine the differences in manuscript and peer review submissions by time of day

We first consider a model that examines manuscript submissions as the dependent variable and country as the key independent variable. The first equation is:

\[ C(i,c) \sim \text{Poisson} \left[ \mu(i,c) \right], \quad i = 0, 1, \ldots, 23, \ c = 1, 2, \ldots, N. \]

So the count of manuscript submissions at hour \( i \) in country \( c \) has a Poisson distribution. We look at all 24 hours in the day and there are \( N \) countries. The mean is modelled as:

\[ \log[\mu(i,c)] = \log[T(c)] + \gamma(i) + s(i,c), \]

where \( Tc \) is the total number of manuscript submissions in country \( c \) and is an offset which means that \( \mu \) models the probability of submission. The \( \gamma \)'s model the overall pattern by hour, which is the common pattern across countries. These are modelled as a random effect using a Normal distribution:

\[ \gamma(i) \sim N(0, \sigma^2_\gamma). \]

The inverse-variance is modelled using a gamma distribution, which is standard in Bayesian modelling:

\[ 1/\sigma^2_\gamma \sim \text{Ga}(1, 1). \]

The smooth country effect is modelled using a sinusoid:

\[ s(i,c) = \alpha(c) \cos(2\pi i/24) + \beta(c) \sin(2\pi i/24). \]

This is a flexible function that allows a peak in manuscript submissions of any height and at any time during the 24-hour clock. The average of \( s() \) over the 24-hour clock is zero, meaning the country-specific change is centred on the average. The sinusoid is symmetric, as the nadir is 12 hours after the peak.

The priors for the sinusoid parameters are vague Normal distributions:

\[ \alpha(c) \& \beta(c) \sim N(0, 10^4). \]

We give an example below showing the overall pattern, country-specific smooth effect, and the combination of the two.
For the example the timing of the country-specific peak is at midday, and the height of the peak is a probability ratio of 1.10. So in this country, submissions at midday are 10% higher than average.

We extended the model to include a smooth difference for journal (BMJ or BMJ Open) using:

$$\log[\mu(i,c,j)] = \log[T(c)] + \gamma(i) + s(i,c) + x(i)\times I(j = 1),$$

$$x(i) = \delta(1) \cos(2\pi i/24) + \delta(2) \sin(2\pi i/24),$$

where $I()$ is an indicator function, and $j$ is 0 for BMJ Open and 1 for BMJ. So the difference between journals is also a smooth sinusoid, with the $\delta$’s also given vague Normal priors.

The models were estimated using WinBUGS version 1.4.3. We used 2 chains each with 5,000 estimates thinned by 3. We visually checked the convergence and mixing of the chains using a time series plot.
Peak times and heights for manuscripts

The table below gives the estimated timing and height of the peak in submissions for each country. The height of the peak is presented as a probability ratio. The countries are ordered by the probability ratio. The hour labels \([a-b]\) mean from time \(a\) to just before time \(b\) using a 24-hour clock.

| Country      | Peak hour | Probability ratio | 95% CI  |
|--------------|-----------|-------------------|---------|
| China        | [0-1)     | 1.86              | 1.79, 1.94 |
| Japan        | [23-0)    | 1.46              | 1.36, 1.57 |
| Denmark      | [10-11)   | 1.37              | 1.27, 1.47 |
| Brazil       | [1-2)     | 1.27              | 1.14, 1.42 |
| New Zealand  | [12-13)   | 1.25              | 1.12, 1.39 |
| France       | [19-20)   | 1.23              | 1.14, 1.33 |
| Canada       | [9-10)    | 1.20              | 1.13, 1.27 |
| Netherlands  | [14-15)   | 1.17              | 1.12, 1.23 |
| USA          | [9-10)    | 1.17              | 1.12, 1.23 |
| Norway       | [10-11)   | 1.15              | 1.05, 1.26 |
| Italy        | [19-20)   | 1.15              | 1.06, 1.25 |
| Belgium      | [13-14)   | 1.15              | 1.03, 1.29 |
| UK           | [14-15)   | 1.13              | 1.09, 1.16 |
| Australia    | [12-13)   | 1.09              | 1.05, 1.15 |
| Finland      | [10-11)   | 1.09              | 1.02, 1.20 |
| Spain        | [22-23]   | 1.09              | 1.02, 1.19 |
| Switzerland  | [8-9)     | 1.08              | 1.01, 1.19 |
| Sweden       | [10-11]   | 1.07              | 1.02, 1.15 |
| Germany      | [14-15)   | 1.07              | 1.01, 1.14 |

Manuscript submissions from China were 86% higher than the average during the hours of midnight to just before 1am. Germany had the smallest increase in submissions at just 7% higher than the average from 2pm to just before 3pm.
Peak times and heights for peer reviews

This is the same table as above but examining peer reviews.

| Country   | Peak hour | Probability ratio | 95% CI   |
|-----------|-----------|-------------------|----------|
| China     | [0-1)     | 1.57              | 1.46, 1.68|
| Japan     | [0-1)     | 1.37              | 1.27, 1.47|
| France    | [20-21)   | 1.22              | 1.13, 1.31|
| USA       | [8-9)     | 1.22              | 1.18, 1.25|
| Ireland   | [13-14)   | 1.22              | 1.11, 1.33|
| Finland   | [11-12)   | 1.21              | 1.10, 1.33|
| Canada    | [8-9)     | 1.21              | 1.15, 1.26|
| Brazil    | [22-23)   | 1.19              | 1.09, 1.30|
| Norway    | [10-11)   | 1.16              | 1.07, 1.26|
| Germany   | [14-15)   | 1.15              | 1.08, 1.22|
| Netherlands| [17-18)   | 1.13              | 1.07, 1.20|
| Italy     | [17-18)   | 1.13              | 1.07, 1.19|
| Belgium   | [16-17)   | 1.13              | 1.03, 1.25|
| Spain     | [21-22)   | 1.12              | 1.04, 1.20|
| UK        | [3-4)     | 1.10              | 1.08, 1.13|
| Sweden    | [9-10)    | 1.10              | 1.03, 1.18|
| Australia | [10-11)   | 1.10              | 1.05, 1.14|
| Denmark   | [8-9)     | 1.09              | 1.03, 1.18|
| New Zealand| [7-8)    | 1.09              | 1.02, 1.18|
| Switzerland| [11-12)  | 1.09              | 1.02, 1.18|

China had the highest relative increase in reviews, with an average 57% higher during the hours of midnight to just before 1am. Switzerland had the smallest increase in reviews at just 9% higher than the average from 11am to just before midday.
Checks of convergence for the Bayesian models

The figure below shows the Markov chain Monte Carlo estimates for the hour of day models. They show the intercept and inverse-variance for the random effect (labelled 'taubeta'). All chains are stable and show good mixing. These estimates were made using WinBUGS (Version 1.4.3).

The following two figures are the Markov chain Monte Carlo estimates for the best model in each journal / outcome / type combination, for the weekend and holiday analyses. There are two chains per model and they are all stable and show good mixing. The estimates are the overall intercept (beta[1]) and the trend (beta[2]). These estimates were made using JAGS (Version 4.2.0).
Country national holidays

Countries listed in alphabetical order.

Australia
2012: Jan-1, Jan-26, Apr-6, Apr-9, Apr-25, Dec-25, Dec-26
2013: Jan-1, Jan-26, Mar-29, Apr-1, Apr-25, Dec-25, Dec-26
2014: Jan-1, Jan-26, Apr-18, Apr-21, Apr-25, Dec-25, Dec-26
2015: Jan-1, Jan-26, Apr-3, Apr-6, Apr-25, Dec-25, Dec-26
2016: Jan-1, Jan-26, Mar-25, Mar-28, Apr-25, Dec-25, Dec-26
2017: Jan-1, Jan-26, Apr-14, Apr-17, Apr-25, Dec-25, Dec-26
2018: Jan-1, Jan-26, Mar-30, Apr-2, Apr-25, Dec-25, Dec-26
2019: Jan-1, Jan-26, Apr-19, Apr-22, Apr-25, Dec-25, Dec-26

Austria
2012: Jan-1, Jan-6, Apr-9, May-1, May-17, May-28, Jun-7, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2013: Jan-1, Jan-6, Apr-1, May-1, May-9, May-20, May-30, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2014: Jan-1, Jan-6, Apr-21, May-1, May-29, Jun-9, Jun-19, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2015: Jan-1, Jan-6, Apr-6, May-1, May-14, May-25, Jun-4, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2016: Jan-1, Jan-6, Mar-28, May-1, May-5, May-16, May-26, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2017: Jan-1, Jan-6, Apr-17, May-1, May-25, Jun-5, Jun-15, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2018: Jan-1, Jan-6, Apr-2, May-1, May-10, May-21, May-31, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26
2019: Jan-1, Jan-6, Apr-22, May-1, May-30, Jun-10, Jun-20, Aug-15, Oct-26, Nov-1, Dec-8, Dec-25, Dec-26

Belgium
2012: Jan-1, Apr-8, Apr-9, May-1, May-17, May-28, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2013: Jan-1, Mar-31, Apr-1, May-1, May-9, May-20, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2014: Jan-1, Apr-20, Apr-21, May-1, May-29, Jun-9, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2015: Jan-1, Apr-5, Apr-6, May-1, May-14, May-25, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2016: Jan-1, Mar-27, Mar-28, May-1, May-5, May-16, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2017: Jan-1, Apr-16, Apr-17, May-1, May-25, Jun-5, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2018: Jan-1, Apr-1, Apr-2, May-1, May-10, May-21, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25
2019: Jan-1, Apr-21, Apr-22, May-1, May-30, Jun-10, Jul-21, Aug-15, Nov-1, Nov-11, Dec-25

Brazil
2012: Jan-1, Feb-21, Apr-6, Apr-8, Apr-21, May-1, Jun-7, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2013: Jan-1, Feb-12, Mar-29, Mar-31, Apr-21, May-1, May-30, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2014: Jan-1, Mar-4, Apr-18, Apr-20, Apr-21, May-1, Jun-19, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2015: Jan-1, Feb-17, Apr-3, Apr-5, Apr-21, May-1, Jun-4, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2016: Jan-1, Feb-9, Mar-25, Mar-27, Apr-21, May-1, May-26, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2017: Jan-1, Feb-28, Apr-14, Apr-16, Apr-21, May-1, Jun-15, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2018: Jan-1, Feb-13, Mar-30, Apr-1, Apr-21, May-1, May-31, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
2019: Jan-1, Mar-5, Apr-19, Apr-21, Apr-21, May-1, Jun-20, Sep-7, Oct-12, Nov-2, Nov-15, Dec-25
### Canada

2012: Jan-1, Apr-6, Jul-1, Sep-3, Oct-8, Dec-25  
2013: Jan-1, Mar-29, Jul-1, Sep-2, Oct-14, Dec-25  
2014: Jan-1, Apr-18, Jul-1, Sep-1, Oct-13, Dec-25  
2015: Jan-1, Apr-3, Jul-1, Sep-7, Oct-12, Dec-25  
2016: Jan-1, Mar-25, Jul-1, Sep-5, Oct-10, Dec-25  
2017: Jan-1, Apr-14, Jul-1, Sep-4, Oct-9, Dec-25  
2018: Jan-1, Mar-30, Jul-1, Sep-3, Oct-8, Dec-25  
2019: Jan-1, Apr-19, Jul-1, Sep-2, Oct-14, Dec-25

### China

2012: Jan-1, Jan-23, Apr-5, May-1, May-25, Sep-30, Oct-1  
2013: Jan-1, Feb-10, Apr-5, May-1, Jun-12, Sep-19, Oct-1  
2014: Jan-1, Jan-31, Apr-5, May-1, Jun-2, Sep-8, Oct-1  
2015: Jan-1, Feb-19, Apr-5, May-1, Jun-20, Sep-27, Oct-1  
2016: Jan-1, Feb-8, Apr-5, May-1, Jun-9, Sep-15, Oct-1  
2017: Jan-1, Jan-28, Apr-5, May-1, May-30, Oct-1, Oct-4  
2018: Jan-1, Feb-16, Apr-5, May-1, Jun-18, Sep-24, Oct-1  
2019: Jan-1, Feb-5, Apr-5, May-1, Jun-7, Sep-13, Oct-1

### Denmark

2012: Jan-1, Apr-5, Apr-6, Apr-8, Apr-9, May-4, May-17, May-18, May-27, May-28, Jun-5, Dec-24, Dec-25, Dec-26, Dec-31  
2013: Jan-1, Mar-28, Mar-29, Mar-31, Apr-1, Apr-26, May-9, May-10, May-19, May-20, Jun-5, Dec-24, Dec-25, Dec-26, Dec-31  
2014: Jan-1, Apr-17, Apr-18, Apr-20, Apr-21, May-16, May-29, May-30, Jun-5, Jun-8, Jun-9, Dec-24, Dec-25, Dec-26, Dec-31  
2015: Jan-1, Apr-2, Apr-3, Apr-5, Apr-6, May-1, May-14, May-15, May-24, May-25, Jun-5, Dec-24, Dec-25, Dec-26, Dec-31  
2016: Jan-1, Mar-24, Mar-25, Mar-27, Mar-28, Apr-22, May-5, May-6, May-15, May-16, Jun-5, Dec-24, Dec-25, Dec-26, Dec-31  
2017: Jan-1, Apr-13, Apr-14, Apr-16, Apr-17, May-12, May-25, May-26, Jun-4, Jun-5, Jun-5, Dec-24, Dec-25, Dec-26, Dec-31  
2018: Jan-1, Mar-29, Mar-30, Apr-1, Apr-2, Apr-27, May-10, May-11, May-20, May-21, Jun-5, Dec-24, Dec-25, Dec-26, Dec-31  
2019: Jan-1, Apr-18, Apr-19, Apr-21, Apr-22, May-17, May-30, May-31, Jun-5, Jun-9, Jun-10, Dec-24, Dec-25, Dec-26, Dec-31

### Finland

2012: Jan-1, Jan-6, Apr-6, Apr-8, Apr-9, May-1, May-17, May-27, Jun-22, Jun-23, Nov-24, Dec-6, Dec-24, Dec-25, Dec-26  
2013: Jan-1, Jan-6, Mar-29, Mar-31, Apr-1, May-1, May-9, May-19, Jun-21, Jun-22, Nov-23, Dec-6, Dec-24, Dec-25, Dec-26  
2014: Jan-1, Jan-6, Apr-18, Apr-20, Apr-21, May-1, May-29, Jun-8, Jun-20, Jun-21, Nov-22, Dec-6, Dec-24, Dec-25, Dec-26  
2015: Jan-1, Jan-6, Apr-3, Apr-5, Apr-6, May-1, May-14, May-24, Jun-19, Jun-20, Nov-21, Dec-6, Dec-24, Dec-25, Dec-26  
2016: Jan-1, Jan-6, Mar-25, Mar-27, May-1, May-5, May-15, Jun-24, Jun-25, Nov-19, Dec-6, Dec-24, Dec-25, Dec-26  
2017: Jan-1, Jan-6, Apr-14, Apr-16, Apr-17, May-1, May-25, Jun-4, Jun-23, Jun-24, Nov-25, Dec-6, Dec-24, Dec-25, Dec-26
2018: Jan-1, Jan-6, Mar-30, Apr-1, Apr-2, May-1, May-10, May-20, Jun-22, Jun-23, Nov-24, Dec-6, Dec-24, Dec-25, Dec-26
2019: Jan-1, Jan-6, Apr-19, Apr-21, Apr-22, May-1, May-30, Jun-9, Jun-21, Jun-22, Nov-23, Dec-6, Dec-24, Dec-25, Dec-26

France
2012: Jan-1, Apr-9, May-1, May-8, May-17, May-28, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2013: Jan-1, Apr-1, May-1, May-8, May-9, May-20, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2014: Jan-1, Apr-21, May-1, May-8, May-29, Jun-9, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2015: Jan-1, Apr-6, May-1, May-8, May-14, May-25, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2016: Jan-1, Mar-28, May-1, May-5, May-8, May-16, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2017: Jan-1, Apr-17, May-1, May-8, May-25, Jun-5, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2018: Jan-1, Apr-2, May-1, May-8, May-10, May-21, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25
2019: Jan-1, Apr-22, May-1, May-8, May-30, Jun-10, Jul-14, Aug-15, Nov-1, Nov-11, Dec-25

Germany
2012: Jan-1, Apr-6, Apr-9, May-1, May-17, May-28, Oct-3, Dec-25, Dec-26
2013: Jan-1, Mar-29, Apr-1, May-1, May-9, May-20, Oct-3, Dec-25, Dec-26
2014: Jan-1, Apr-18, Apr-21, May-1, May-29, Jun-9, Oct-3, Dec-25, Dec-26
2015: Jan-1, Apr-3, Apr-6, May-1, May-14, May-25, Oct-3, Dec-25, Dec-26
2016: Jan-1, Mar-25, Mar-28, May-1, May-5, May-16, Oct-3, Dec-25, Dec-26
2017: Jan-1, Apr-14, Apr-17, May-1, May-25, Jun-5, Oct-3, Oct-31, Dec-25, Dec-26
2018: Jan-1, Mar-30, Apr-2, May-1, May-10, May-21, Oct-3, Dec-25, Dec-26
2019: Jan-1, Apr-19, Apr-22, May-1, May-30, Jun-10, Oct-3, Dec-25, Dec-26

Greece
2012: Jan-1, Jan-6, Feb-27, Mar-25, Mar-25, Apr-13, Apr-15, Apr-16, May-1, Jun-3, Jun-4, Aug-15, Oct-28, Dec-25, Dec-26
2013: Jan-1, Jan-6, Mar-18, Mar-25, Mar-25, May-1, May-3, May-5, May-6, Jun-23, Jun-24, Aug-15, Oct-28, Dec-25, Dec-26
2014: Jan-1, Jan-6, Mar-3, Mar-25, Mar-25, Apr-18, Apr-20, Apr-21, May-1, Jun-8, Jun-9, Aug-15, Oct-28, Dec-25, Dec-26
2015: Jan-1, Jan-6, Feb-23, Mar-25, Mar-25, Apr-10, Apr-12, Apr-13, May-1, May-31, Jun-1, Aug-15, Oct-28, Dec-25, Dec-26
2016: Jan-1, Jan-6, Mar-14, Mar-25, Mar-25, Apr-29, May-1, May-1, May-2, Jun-19, Jun-20, Aug-15, Oct-28, Dec-25, Dec-26
2017: Jan-1, Jan-6, Feb-27, Mar-25, Mar-25, Apr-14, Apr-16, Apr-17, May-1, Jun-4, Jun-5, Aug-15, Oct-28, Dec-25, Dec-26
2018: Jan-1, Jan-6, Feb-19, Mar-25, Mar-25, Apr-6, Apr-8, Apr-9, May-1, May-27, May-28, Aug-15, Oct-28, Dec-25, Dec-26
2019: Jan-1, Jan-6, Mar-11, Mar-25, Mar-25, Apr-26, Apr-28, Apr-29, May-1, Jun-16, Jun-17, Aug-15, Oct-28, Dec-25, Dec-26

Ireland
2012: Jan-1, Mar-17, Apr-9, May-7, Jun-4, Aug-6, Oct-29, Dec-25, Dec-26
2013: Jan-1, Mar-17, Apr-1, May-6, Jun-3, Aug-5, Oct-28, Dec-25, Dec-26
2014: Jan-1, Mar-17, Apr-21, May-5, Jun-2, Aug-4, Oct-27, Dec-25, Dec-26
2015: Jan-1, Mar-17, Apr-6, May-4, Jun-1, Aug-3, Oct-26, Dec-25, Dec-26
2016: Jan-1, Mar-17, Mar-28, May-2, Jun-6, Aug-1, Oct-31, Dec-25, Dec-26
2017: Jan-1, Mar-17, Apr-17, May-1, Jun-5, Aug-7, Oct-30, Dec-25, Dec-26
2018: Jan-1, Mar-17, Apr-2, May-7, Jun-4, Aug-6, Oct-29, Dec-25, Dec-26
2019: Jan-1, Mar-17, Apr-22, May-6, Jun-3, Aug-5, Oct-28, Dec-25, Dec-26
Italy
2012: Jan-1, Jan-6, Apr-8, Apr-9, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2013: Jan-1, Jan-6, Mar-31, Apr-1, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2014: Jan-1, Jan-6, Apr-20, Apr-21, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2015: Jan-1, Jan-6, Apr-5, Apr-6, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2016: Jan-1, Jan-6, Mar-27, Mar-28, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2017: Jan-1, Jan-6, Apr-16, Apr-17, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2018: Jan-1, Jan-6, Apr-1, Apr-2, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26
2019: Jan-1, Jan-6, Apr-21, Apr-22, Apr-25, May-1, Jun-2, Aug-15, Nov-1, Dec-8, Dec-25, Dec-26

Japan
2012: Jan-2, Jan-9, Feb-11, Apr-30, May-3, May-4, May-5, Jul-16, Aug-11, Sep-17, Oct-8, Nov-3, Nov-23, Dec-24
2013: Jan-1, Jan-14, Feb-11, Apr-29, May-3, May-4, May-6, Jul-15, Aug-12, Sep-16, Oct-14, Nov-4, Nov-23, Dec-23
2014: Jan-1, Jan-13, Feb-11, Apr-29, May-3, May-5, May-5, Jul-21, Aug-11, Sep-15, Oct-13, Nov-3, Nov-24, Dec-23
2015: Jan-1, Jan-12, Feb-11, Apr-29, May-4, May-4, May-5, Jul-20, Aug-11, Sep-21, Oct-12, Nov-3, Nov-23, Dec-23
2016: Jan-1, Jan-11, Feb-11, Apr-29, May-3, May-4, May-5, Jul-18, Aug-11, Sep-19, Oct-10, Nov-3, Nov-23, Dec-23
2017: Jan-2, Jan-9, Feb-11, Apr-29, May-3, May-4, May-5, Jul-17, Aug-11, Sep-18, Oct-9, Nov-3, Nov-23, Dec-23
2018: Jan-1, Jan-8, Feb-12, Apr-30, May-3, May-4, May-5, Jul-16, Aug-11, Sep-17, Oct-8, Nov-3, Nov-23, Dec-24
2019: Jan-1, Jan-14, Feb-11, Apr-29, May-3, May-4, May-6, Jul-15, Aug-12, Sep-16, Oct-14, Nov-4, Nov-23, Dec-23

Mexico
2012: Jan-2, Feb-6, Mar-19, May-1, Sep-17, Nov-19, Nov-30, Dec-25
2013: Jan-1, Feb-4, Mar-18, May-1, Sep-16, Nov-18, Dec-25
2014: Jan-1, Feb-3, Mar-17, May-1, Sep-16, Nov-17, Dec-25
2015: Jan-1, Feb-2, Mar-16, May-1, Sep-16, Nov-16, Dec-25
2016: Jan-1, Feb-1, Mar-21, May-2, Sep-16, Nov-21, Dec-25
2017: Jan-2, Feb-6, Mar-20, May-1, Sep-15, Nov-20, Dec-25
2018: Jan-1, Feb-5, Mar-19, May-1, Sep-17, Nov-19, Nov-30, Dec-25
2019: Jan-1, Feb-4, Mar-18, May-1, Sep-16, Nov-18, Dec-25

Netherlands
2012: Jan-1, Apr-6, Apr-8, Apr-9, Apr-27, May-5, May-17, May-28, Dec-25, Dec-26
2013: Jan-1, Mar-29, Mar-31, Apr-1, Apr-27, May-5, May-9, May-20, Dec-25, Dec-26
2014: Jan-1, Apr-18, Apr-20, Apr-21, Apr-26, May-5, May-29, Jun-9, Dec-25, Dec-26
2015: Jan-1, Apr-3, Apr-5, Apr-6, Apr-27, May-5, May-14, May-25, Dec-25, Dec-26
2016: Jan-1, Mar-25, Mar-27, Mar-28, Apr-27, May-5, May-16, Dec-25, Dec-26
2017: Jan-1, Apr-14, Apr-16, Apr-17, Apr-27, May-5, May-25, Jun-5, Dec-25, Dec-26
2018: Jan-1, Mar-30, Apr-1, Apr-2, Apr-27, May-5, May-10, May-21, Dec-25, Dec-26
2019: Jan-1, Apr-19, Apr-21, Apr-22, Apr-27, May-5, May-30, Jun-10, Dec-25, Dec-26

New Zealand
2012: Jan-2, Jan-2, Feb-6, Apr-6, Apr-9, Apr-25, Jun-4, Oct-22, Dec-25, Dec-26
2013: Jan-1, Jan-2, Feb-6, Mar-29, Apr-1, Apr-25, Jun-3, Oct-28, Dec-25, Dec-26
2014: Jan-1, Jan-2, Feb-6, Apr-18, Apr-21, Apr-25, Jun-2, Oct-27, Dec-25, Dec-26

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Norway
2012: Jan-1, Apr-5, Apr-6, Apr-8, Apr-9, May-1, May-17, May-17, May-27, May-28, Dec-25, Dec-26
2013: Jan-1, Mar-28, Mar-29, Mar-31, Apr-1, May-1, May-9, May-17, May-19, May-20, Dec-25, Dec-26
2014: Jan-1, Apr-17, Apr-18, Apr-20, Apr-21, May-1, May-17, May-29, Jun-8, Jun-9, Dec-25, Dec-26
2015: Jan-1, Apr-2, Apr-3, Apr-5, Apr-6, May-1, May-14, May-17, May-24, May-25, Dec-25, Dec-26
2016: Jan-1, Mar-24, Mar-25, Mar-27, Mar-28, May-1, May-5, May-15, May-16, May-17, Dec-25, Dec-26
2017: Jan-1, Apr-13, Apr-14, Apr-16, Apr-17, May-1, May-17, May-25, Jun-4, Jun-5, Dec-25, Dec-26
2018: Jan-1, Mar-29, Mar-30, Apr-1, Apr-2, May-1, May-10, May-17, May-20, May-21, Dec-25, Dec-26
2019: Jan-1, Apr-18, Apr-19, Apr-21, Apr-22, May-1, May-17, May-30, Jun-9, Jun-10, Dec-25, Dec-26

Poland
2012: Jan-1, Jan-6, Apr-8, Apr-9, May-1, May-3, May-27, Jun-7, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26
2013: Jan-1, Jan-6, Mar-31, Apr-1, May-1, May-3, May-19, May-30, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26
2014: Jan-1, Jan-6, Apr-20, Apr-21, May-1, May-3, Jun-8, Jun-19, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26
2015: Jan-1, Jan-6, Apr-5, Apr-6, May-1, May-3, May-24, Jun-4, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26
2016: Jan-1, Jan-6, Mar-27, Mar-28, May-1, May-3, May-15, May-26, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26
2017: Jan-1, Jan-6, Apr-16, Apr-17, May-1, May-3, Jun-4, Jun-15, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26
2018: Jan-1, Jan-6, Apr-1, Apr-2, May-1, May-3, May-20, May-31, Aug-15, Nov-1, Nov-11, Nov-12, Dec-25, Dec-26
2019: Jan-1, Jan-6, Apr-21, Apr-22, May-1, May-3, Jun-9, Jun-20, Aug-15, Nov-1, Nov-11, Dec-25, Dec-26

Portugal
2012: Jan-1, Feb-21, Apr-6, Apr-8, Apr-25, May-1, Jun-7, Jun-10, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2013: Jan-1, Feb-12, Mar-29, Mar-31, Apr-25, May-1, May-30, Jun-10, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2014: Jan-1, Mar-4, Apr-18, Apr-20, Apr-25, May-1, Jun-10, Jun-19, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2015: Jan-1, Feb-17, Apr-3, Apr-5, Apr-25, May-1, Jun-4, Jun-10, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2016: Jan-1, Feb-9, Mar-25, Mar-27, Apr-25, May-1, May-26, Jun-10, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2017: Jan-1, Feb-28, Apr-14, Apr-16, Apr-25, May-1, Jun-10, Jun-15, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2018: Jan-1, Feb-13, Mar-30, Apr-1, Apr-25, May-1, May-31, Jun-10, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25
2019: Jan-1, Mar-5, Apr-19, Apr-21, Apr-25, May-1, Jun-10, Jun-20, Aug-15, Oct-5, Nov-1, Dec-1, Dec-8, Dec-25

South Africa
2012: Jan-1, Mar-21, Apr-6, Apr-9, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26
2013: Jan-1, Mar-21, Mar-29, Apr-1, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26

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2014: Jan-1, Mar-21, Apr-18, Apr-21, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26
2015: Jan-1, Mar-21, Apr-3, Apr-6, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26
2016: Jan-1, Mar-21, Mar-25, Mar-28, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26
2017: Jan-1, Mar-21, Apr-14, Apr-17, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26
2018: Jan-1, Mar-21, Mar-30, Apr-2, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26
2019: Jan-1, Mar-21, Apr-19, Apr-22, Apr-27, May-1, Jun-16, Aug-9, Sep-24, Dec-16, Dec-25, Dec-26

Spain
2012: Jan-1, Jan-6, Apr-6, Apr-8, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2013: Jan-1, Jan-6, Mar-29, Mar-31, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2014: Jan-1, Jan-6, Apr-18, Apr-20, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2015: Jan-1, Jan-6, Apr-3, Apr-5, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2016: Jan-1, Jan-6, Mar-25, Mar-27, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2017: Jan-1, Jan-6, Apr-14, Apr-16, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2018: Jan-1, Jan-6, Mar-30, Apr-1, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25
2019: Jan-1, Jan-6, Apr-19, Apr-21, May-1, Aug-15, Oct-12, Nov-1, Dec-6, Dec-8, Dec-25

Sweden
2012: Jan-1, Jan-6, Apr-6, Apr-8, Apr-9, May-1, May-17, Jun-6, Jun-22, Jun-23, Nov-3, Dec-24, Dec-25, Dec-26, Dec-31
2013: Jan-1, Jan-6, Mar-29, Mar-31, Apr-1, May-1, May-9, Jun-6, Jun-21, Jun-22, Nov-2, Dec-24, Dec-25, Dec-26, Dec-31
2014: Jan-1, Jan-6, Apr-18, Apr-20, Apr-21, May-1, May-29, Jun-6, Jun-20, Jun-21, Nov-1, Dec-24, Dec-25, Dec-26, Dec-31
2015: Jan-1, Jan-6, Apr-3, Apr-5, Apr-6, May-1, May-14, Jun-6, Jun-19, Jun-20, Oct-31, Dec-24, Dec-25, Dec-26, Dec-31
2016: Jan-1, Jan-6, Mar-25, Mar-27, May-1, May-5, Jun-6, Jun-24, Jun-25, Nov-5, Dec-24, Dec-25, Dec-26, Dec-31
2017: Jan-1, Jan-6, Apr-14, Apr-16, Apr-17, May-1, May-25, Jun-6, Jun-23, Jun-24, Nov-4, Dec-24, Dec-25, Dec-26, Dec-31
2018: Jan-1, Jan-6, Mar-30, Apr-1, Apr-2, May-1, May-10, Jun-6, Jun-22, Jun-23, Nov-3, Dec-24, Dec-25, Dec-26, Dec-31
2019: Jan-1, Jan-6, Apr-19, Apr-21, Apr-22, May-1, May-30, Jun-6, Jun-21, Jun-22, Nov-2, Dec-24, Dec-25, Dec-26, Dec-31

Switzerland
2012: Jan-1, May-17, Aug-1, Dec-25
2013: Jan-1, May-9, Aug-1, Dec-25
2014: Jan-1, May-29, Aug-1, Dec-25
2015: Jan-1, May-14, Aug-1, Dec-25
2016: Jan-1, May-5, Aug-1, Dec-25
2017: Jan-1, May-25, Aug-1, Dec-25
2018: Jan-1, May-10, Aug-1, Dec-25
2019: Jan-1, May-30, Aug-1, Dec-25

Turkey
2012: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2013: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2014: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2015: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2016: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2017: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2018: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29
2019: Jan-1, Apr-23, May-1, May-19, Jul-15, Aug-30, Oct-29

**United Kingdom**
2012: Apr-6, Apr-9, May-7, May-28, Dec-25, Dec-26
2013: Jan-1, Mar-29, Apr-1, May-6, May-27, Dec-25, Dec-26
2014: Jan-1, Apr-18, Apr-21, May-5, May-26, Dec-25, Dec-26
2015: Jan-1, Apr-3, Apr-6, May-4, May-25, Dec-25, Dec-28
2016: Jan-1, Mar-25, Mar-28, May-2, May-30, Dec-26, Dec-27
2017: Apr-14, Apr-17, May-1, May-29, Dec-25, Dec-26
2018: Jan-1, Mar-30, Apr-2, May-7, May-28, Dec-25, Dec-26
2019: Jan-1, Apr-19, Apr-22, May-6, May-27, Dec-25, Dec-26

**United States**
2012: Jan-2, Jan-16, Feb-20, May-28, Jul-4, Sep-3, Nov-12, Nov-22, Dec-25
2013: Jan-1, Jan-21, Feb-18, May-27, Jul-4, Sep-2, Nov-11, Nov-28, Dec-25
2014: Jan-1, Jan-20, Feb-17, May-26, Jul-4, Sep-1, Nov-11, Nov-27, Dec-25
2015: Jan-1, Jan-19, Feb-16, May-25, Jul-3, Sep-7, Nov-11, Nov-26, Dec-25
2016: Jan-1, Jan-18, Feb-15, May-30, Jul-4, Sep-5, Nov-11, Nov-24, Dec-26
2017: Jan-2, Jan-16, Feb-20, May-29, Jul-4, Sep-4, Nov-10, Nov-23, Dec-25
2018: Jan-1, Jan-15, Feb-19, May-28, Jul-4, Sep-3, Nov-12, Nov-22, Dec-25
2019: Jan-1, Jan-21, Feb-18, May-27, Jul-4, Sep-2, Nov-11, Nov-28, Dec-25