

Statistical analysis of the daily number of flights during the period of Christmas and New Year from 2012 till 2017



Performed by:

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The department of research and studies performed a statistical analysis concerning the number of flights for the period extending from 2012 till 2017, during the period of Christmas and New Year spreading over month 1, 11 and 12 of each year, for the purpose of showing the percentages of increase in air traffic during this period.

Based on the analysis of the study performed, the following was obtained:

- The daily number of flights landing at and departing from Beirut International Airport, fluctuates between 160 and 170 flights per day, while the highest daily movement was reached during the last three years, 2015, 2016, and 2017.
- The daily number of flights exceeded the previous averages to reach 192 aircrafts per day during the period before Christmas due to the coincidence of Christmas and the pilgrimage to Iraq to attend the 40th memorial of Imam Hussein.
- The increase in the daily number of flights during the period of Christmas and New Year was between 7% and 15% from the normal daily number of flights.
- The annual increase in the daily number of flights was 2% compared to previous years.

The study concluded that the daily number of flights for the period of Christmas and New Year is expected to rise to around 200 flights per day by 16 December 2017 till 8 January 2018.

The following will show the details of study performed:

1 Number of flights and their averages during the period of Christmas and New Year from year 2012 till 2017

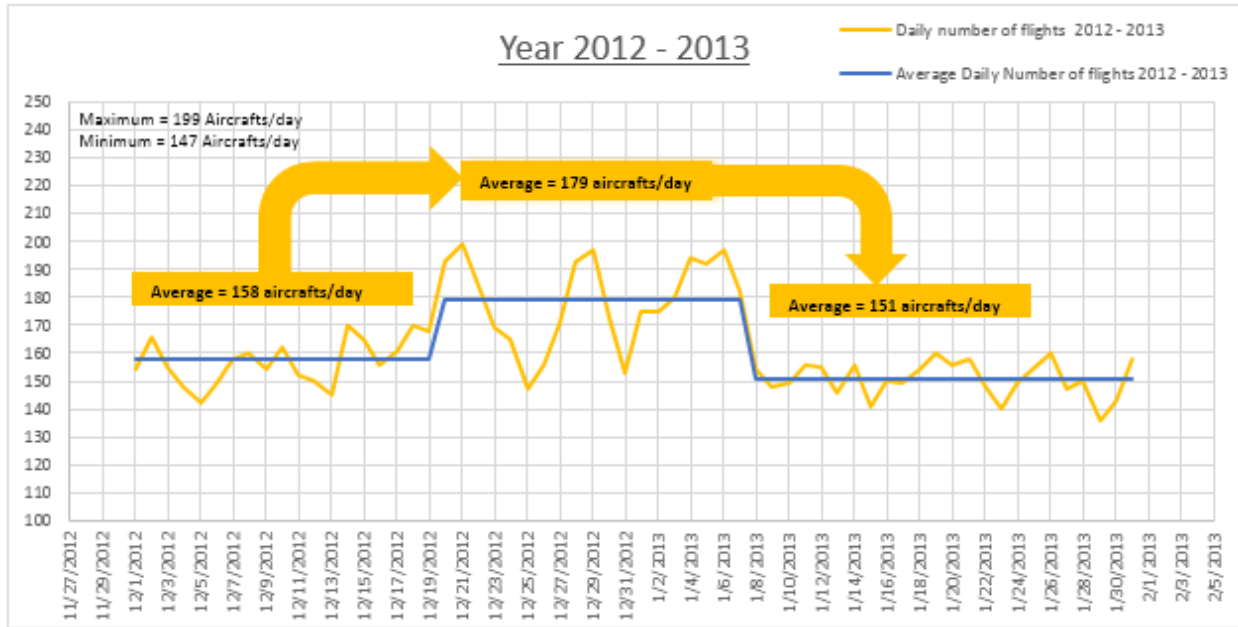


Figure 1: Daily number of flights (2012 – 2013)

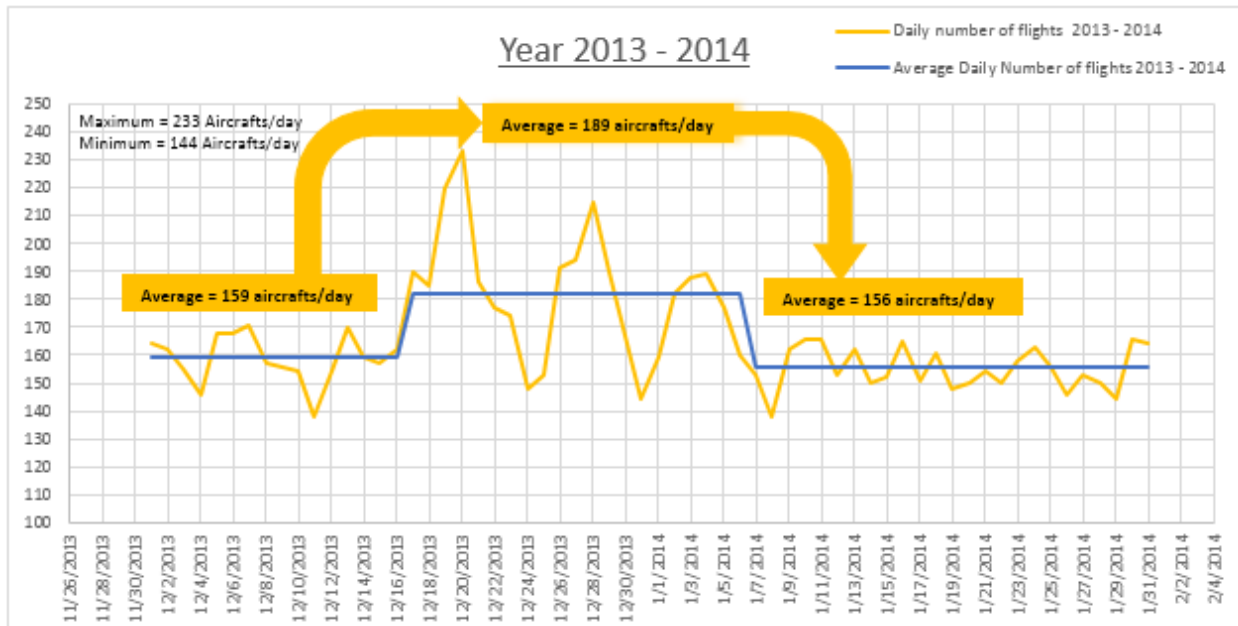


Figure 2: Daily number flights (2013 - 2014)

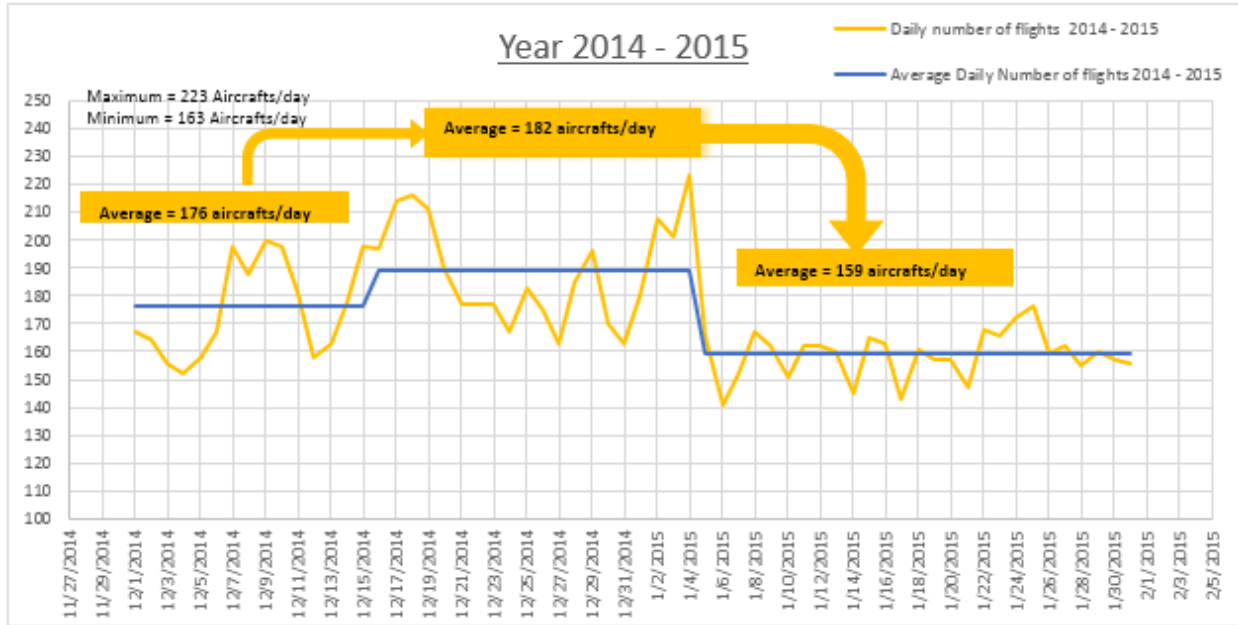


Figure 3: Daily number of flights (2014 - 2015)

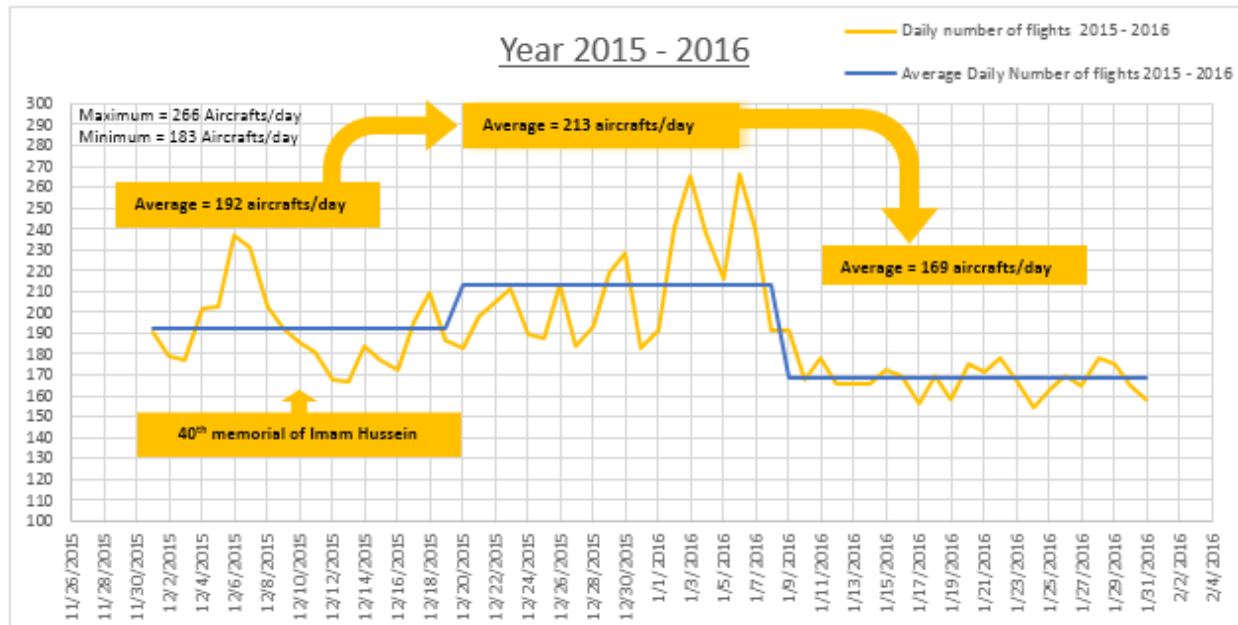


Figure 4: Daily number of flights (2015 - 2016)

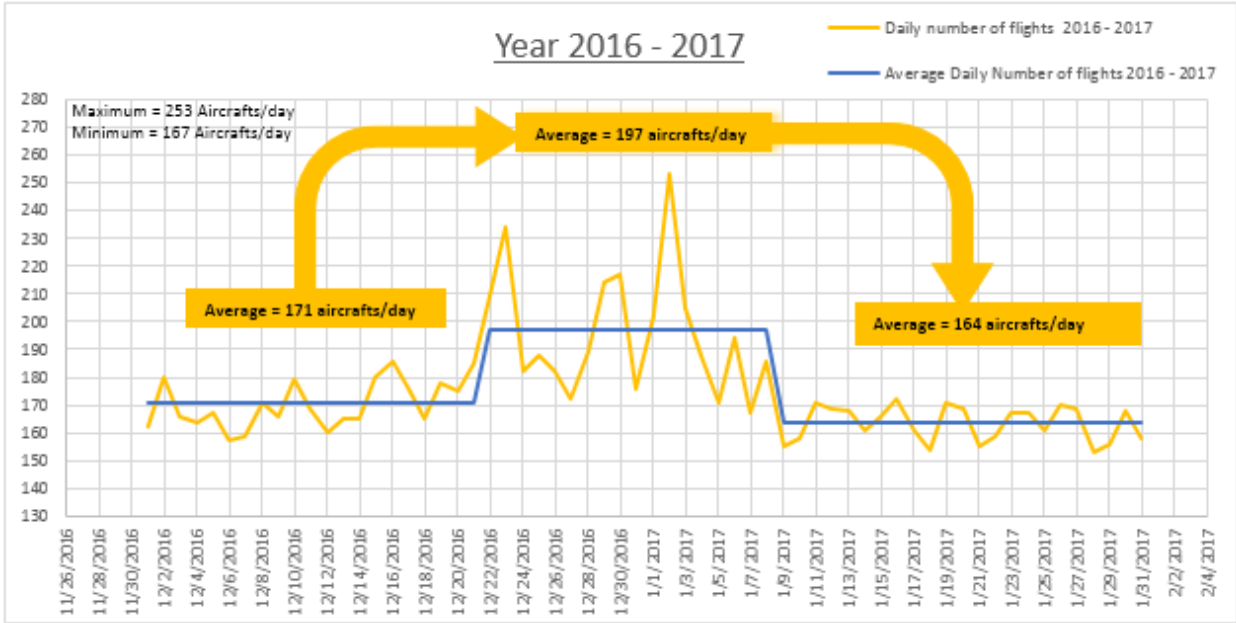


Figure 5: Daily number of flights (2016 - 2017)

2 Comparison of all years

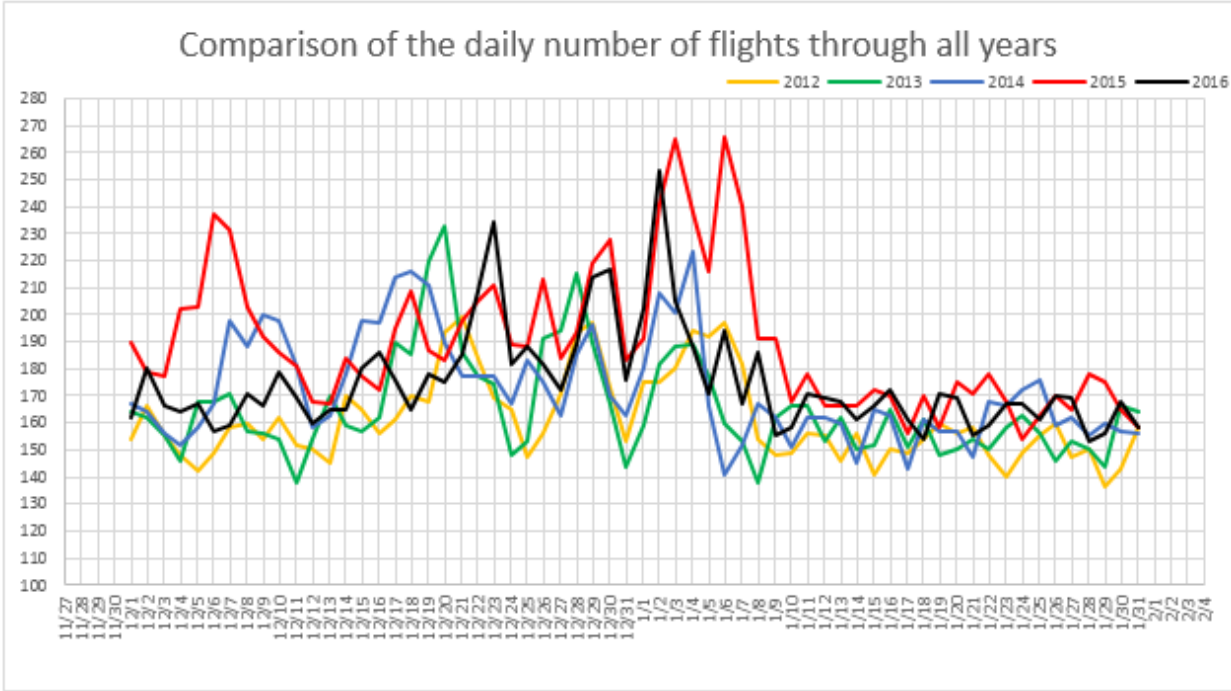


Figure 6: Comparison of the daily number of flights through all years

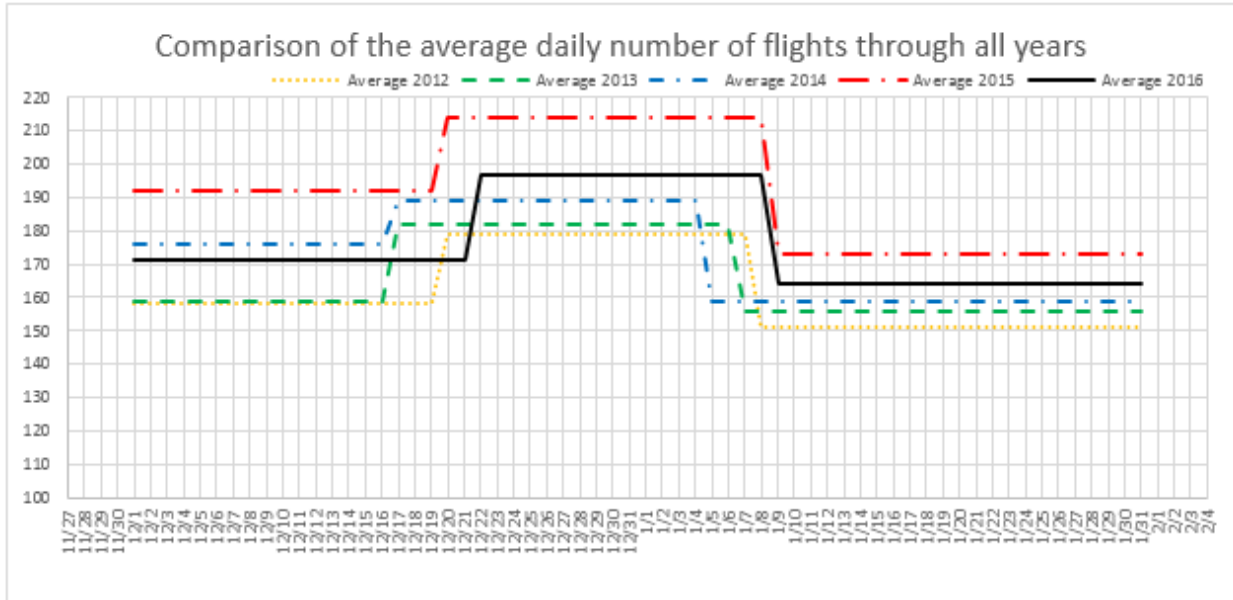


Figure 7: Comparison of the daily average number of flights through all years

3 Average percentage of increase over the previous 5 years

Year	From	To	Number of days	Total number of flights	Increase before Christmas and New year	Increase from year to year	Average Increase during Christmas and New year
2012 - 2013	1-Dec-12	19-Dec-12	18	158	13.3%	+ 1.7 %	12.3 %
	20-Dec-12	7-Jan-13	18	179			
	8-Jan-13	31-Jan-13	23	151			
2013 - 2014	1-Dec-13	16-Dec-13	15	159	14.5%	+ 3.8 %	
	17-Dec-13	6-Jan-14	20	182			
	7-Jan-14	31-Jan-14	24	156			
2014 - 2015	1-Dec-14	15-Dec-14	14	176	7.4%	+ 12.7 %	
	16-Dec-14	4-Jan-15	19	189			
	5-Jan-15	31-Jan-15	26	159			
2015 - 2016	1-Dec-15	19-Dec-15	18	192	10.9%	- 7.5 %	
	20-Dec-15	8-Jan-16	19	213			
	9-Jan-16	31-Jan-16	22	169			
2016 - 2017	1-Dec-16	21-Dec-16	20	171	15.2%		
	22-Dec-16	8-Jan-17	17	197			
	9-Jan-17	31-Jan-17	22	164			

Based on the data from the previous table, the rise in air traffic is expected to start around **Saturday, December 16, 2017** and the decrease will start occurring around **Monday, January 8, 2018**.

The **maximum** increase will be **15.2 %**, with a **minimum** of **7.4 %** and an **average** of **12.3 %**.

4 Maximum and minimum number of flights

The following table will provide the maximum number of flights during the peak periods and their percentage from the average of the previous period of the peak during the period of Christmas and New Year.

Period of Christmas and New year for Year	Minimum	Percentage of minimum	Average	Maximum	Percentage of maximum
2012 – 2013	147	Decrease 18%	179	199	Increase 11%
2013 – 2014	144	Decrease 21%	182	233	Increase 28%
2014 – 2015	163	Decrease 14%	189	223	Increase 18%
2015 – 2016	183	Decrease 14%	213	266	Increase 24%
2016 – 2017	167	Decrease 15%	197	253	Increase 28%

5 Expectations for year 2017 – 2018

The increase is estimated to start at	Saturday, December 16, 2017
The increase is estimated to end at	Monday, January 8, 2018
Average daily number of flights during month 11 and 12, 2017	178
Average Increase	12.3 %
Number of flights based on the average increase	200 flights
Maximum increase	28%
Number of flights based on the maximum increase	228 flights
Maximum Decrease	21%
Number of flights based on the maximum decrease	144 flights

Expectations for 2017 - 2018

- Expectations for 2017- 2018 based on Averages
- - - Maximum Value Reached Previously
- Minimum Value Reached Previously

