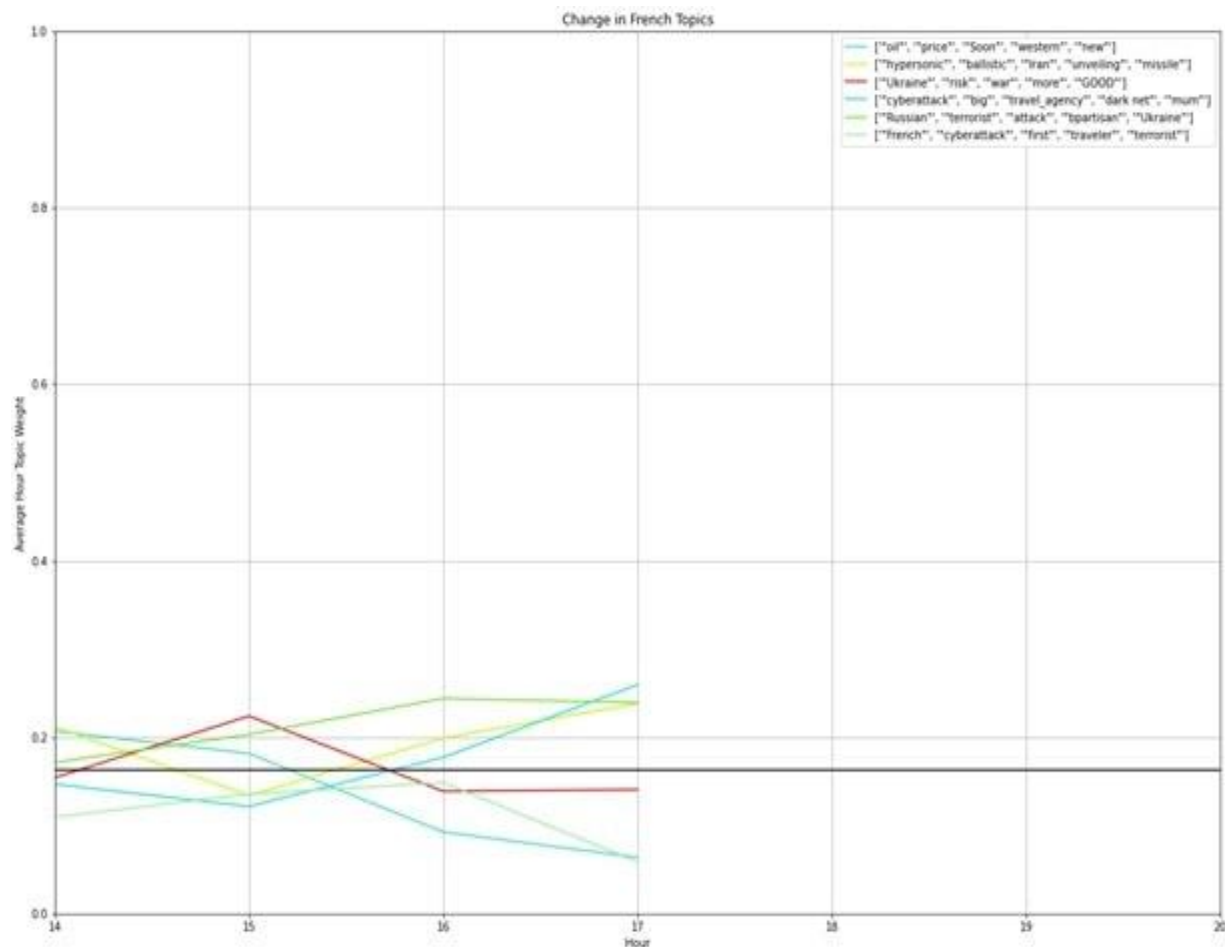


## Appendix B:

Figures 6 and 7 display our second example, while Figures 8 and 9 display our third example for the Hourly Emerging Topic Modeling Analysis.

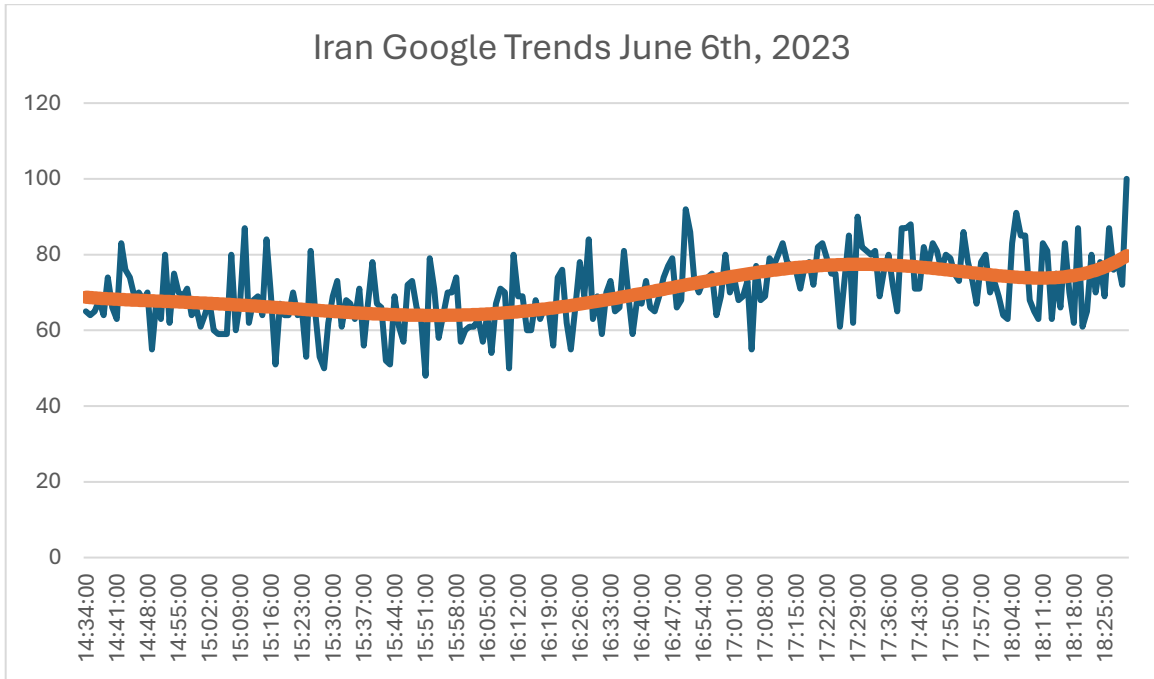
Figure 6 depicts the topics created and monitored from French tweets in our three-hour window on June 6<sup>th</sup>, 2023. The lime-green line shows the emergence of another “Iran” topic, this time around the debut of its hypersonic missile<sup>1</sup>. The Reuters article was published around 18:00 GMT, and we can see the “Iran” topic emerging before this article was published.



**Fig 6** French Topics generated and tracked for June 6<sup>th</sup>, 2023, from 14:00 to 17:00 GMT

<sup>1</sup> Hafezi, Parisa, "Iran Presents Its First Hypersonic Ballistic Missile, State Media Reports."

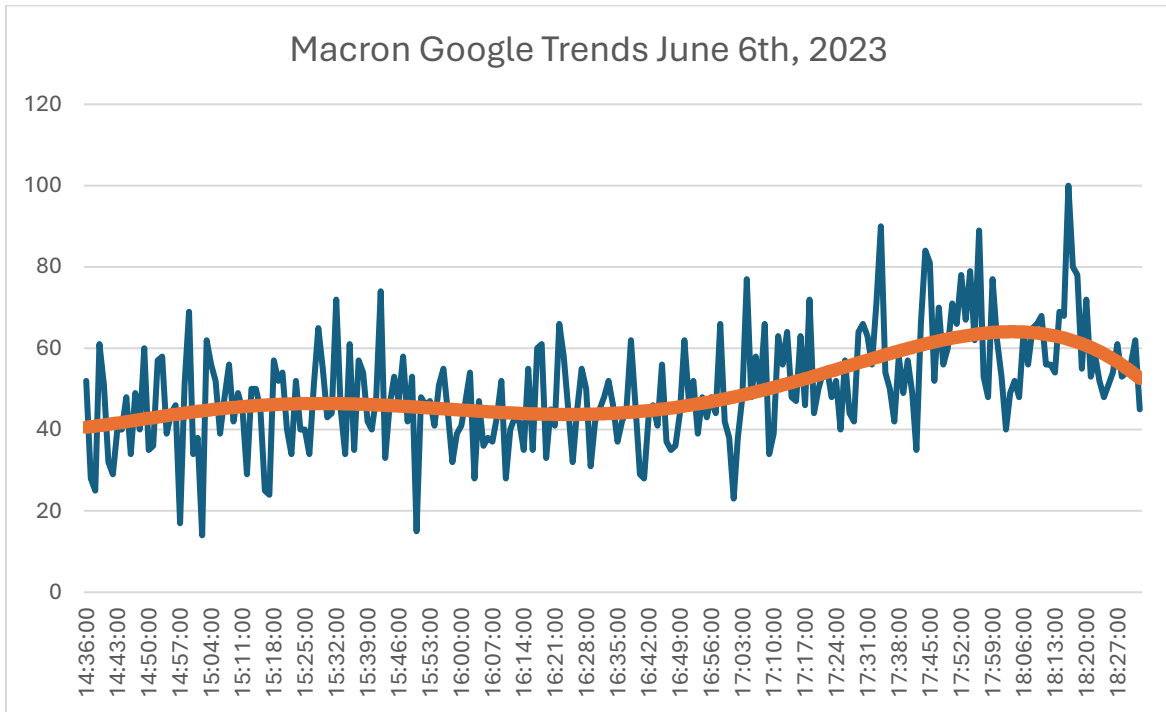
Below, Figure 7 shows the Google Trends for Iran on June 6<sup>th</sup>, 2023. As the orange trend line shows, interest in Iran as a search term starts increasing at 17:00 GMT and spikes after 18:25 GMT, which is after the topic had emerged in the French tweets.



**Fig 7** Google Trends tracking of "Iran" from 14:34 – 18:25 on June 1<sup>st</sup>, 2023



Figure 9 presents the change in Google Trends for “Macron” from 14:36 to 18:31 GMT. As the figure shows, the increase in search activity about Marcon did not peak until around 17:00 GMT, which is nearly two hours after it had peaked on X / Twitter.



**Fig 9** Google Trends tracking of “Macron” from for June 6<sup>th</sup>, 2023, from 14:36 to 18:27 GMT