ViEWS monthly forecasts, July 2020*

Summary of forecasts

Sunday 27th September, 2020

Figure 1: Ensemble forecasts for September 2020

This report presents ViEWS forecasts at \( s = 4 \) for September 2020 as of 1 July 2020, which are based on data that are updated up to and including May 2020. The underlying conflict data were produced by the UCDP (http://ucdp.uu.se). The ViEWS compilation of these data and data from other sources are available at https://www.pcr.uu.se/research/views/data/downloads/.

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In the following, we highlight developments in the most recent months. For a discussion of what underlies the forecasts in terms of slowly changing risk factors as well as methodological issues, see the ViEWS introductory article.\textsuperscript{1}

Figure 1 shows our country-level forecasts (\textit{cm}) for September 2020, Figure 5 the corresponding forecasts at detailed geographic locations (PRIO-GRID level, or \textit{pgm})\textsuperscript{2}, and Figure 7 shows the most recent observed conflict events. Similar reports for previous months are available at http://views.pcr.uu.se, along with other information on the ViEWS project.

1 **Country-month forecasts for September 2020**

The plots in Figure 1 show the ViEWS country-level forecasts for the immediate future – what will happen in September 2020 according to our forecasts? We show the probability of at least one event leading to one or more fatalities in each country in September 2020, based on data up to and including May 2020. Countries with a red color have been assigned with a forecast probability close to 1, whereas purple countries have been assigned with a probability of less than 0.01. When the forecasts indicate that no event is as likely as at least one event, countries are drawn with a light orange color.

![Figure 2: Change in predicted state-based conflict (sb) at $s = 4$](image)

Our forecasts for September 2020 are mostly similar to last month’s forecasts. The July

\textsuperscript{1}https://journals.sagepub.com/doi/10.1177/0022343319823860.

\textsuperscript{2}PRIO-GRID is a grid structure that divides the terrestrial world into squares of approximately 55 by 55 kilometers. See http://grid.prio.org/
2020 run is using the same set of models as in the June run of the system, thus only changes to input variables will have affected the forecasts.

1.1 State-based conflict (sb)

In the July run of the forecasting system at \( s = 4 \), we continue to forecast a high probability of state-based conflict in countries that have a recent history of conflict or protest events. In
Burkina Faso, Cameroon, Chad, DRC, Egypt, Ethiopia, Kenya, Libya, Mali, Mozambique, Niger, Nigeria and Somalia, the risk of at least one battle-related death in state-based violence remains high and over 0.5, as illustrated by Figure 1a. In DRC and Nigeria, the risks now reach as high as 0.6.

Compared to the June forecasts at $s = 4$, Figure 2 shows that a particular risk elevation can be observed for two countries: the Central African Republic and Rwanda. For both countries, the conflict risk has increased by nearly 0.1; it now surpasses 0.3 in Rwanda and measures just shy of 0.4 in CAR.

The most notable decreases are found in Angola and Benin, albeit the steepest decrease only measures approximately -0.05 (Angola).

1.2 Non-state conflict (ns)

For non-state violence, the highest probabilities of at least one fatality in September 2020 are found in Nigeria, DRC, Ethiopia and Somalia, all of which exceed a probability of 0.5 in the July run of system.

Four significant risk increases are visible. In Malawi, the risk has elevated with nearly 0.15 to approximately 0.25; in Cameroon it has elevated with more than 0.1 to just over 0.4; in Kenya with about 0.1 to just above 0.45; and in Ethiopia, the increase of about 0.1 has resulted in the conflict probability exceeding 0.5 for September 2020.

Only one country observes a notable decrease in the risk profile for September 2020: South Sudan, which now faces a probability of approximately 0.42.

1.3 One-sided violence (os)

The highest probabilities of one-sided violence in September 2020 ($> 0.5$) are found in Central African Republic, Sudan, Cameroon, Burkina Faso, Ethiopia, Kenya, DRC, Burundi, Mozambique, Niger, Mali, Somalia, and Nigeria. Similar to the June run at $s = 4$, both DRC and Nigeria exceed 0.6.

For one-sided violence, both Libya and Zimbabwe observe a risk elevation greater than 0.1 in the July run of the system, both now measuring just shy of 0.4 at $s = 4$. Egypt, Mauritania and Central African Republic, in turn, observe a risk increase larger than 0.05. Only Central African Republic however surpasses a risk probability of 0.5 for September 2020.

As for non-state violence, a significant risk decrease for September 2020 is observed for South Sudan (nearly -0.1), now measuring approximately 0.26.
2 PRIO-GRID-month forecasts for September 2020

Figure 5 presents forecasts at fine-grained sub-national geographical locations for September 2020, for each of the three outcomes. The color mapping is the same as for the country-month forecasts.

![Figure 5: Ensemble forecasts for September 2020](image)

(a) State-based conflict (sb), September 2020  
(b) Non-state conflict (ns), September 2020  
(c) One-sided violence (os), September 2020

Figure 6: Change in \( pgm \) predictions at \( s = 4 \) compared to last month

![Figure 6: Change in \( pgm \) predictions](image)

(a) State-based conflict (sb)  
(b) Non-state conflict (ns)  
(c) One-sided violence (os)

2.1 State-based conflict (sb)

The densest risk clusters at the \( pgm \) level for state-based conflict at \( s = 4 \) continue to be found in north-eastern Nigeria, the Anglophone region of Cameroon, the Ituri and Kivu provinces of DRC, southern Somalia, the Nile delta and Sinai in Egypt, around Tripoli in Libya, the Cabo Delgado province of Mozambique, and in the border areas between central Mali, northern Burkina Faso, and south-western Niger.
Compared to our June forecasts at $s = 4$ (see figure 6a), the most pronounced changes in the risk assessment at the PRIO-GRID level also mostly align with the high-risk clusters, predominantly taking the form of risk elevations. The only notable decreases are found in dispersed grid cells across central Mali, aligning well with the communal conflict dynamics in the region.

### 2.2 Non-state conflict (ns) and one-sided violence (os)

The forecasts for non-state and one-sided violence largely depend on the same factors as the forecasts for state-based violence, albeit with somewhat different implications.

Seen from Figure 5b, Nigeria and the Ituri and Kivu provinces of DRC continue to be hotbeds for non-state conflict, along with the larger risk cluster that remains dispersed over the Horn of Africa. Likewise, the steady risk clusters over Sinai and the Nile delta in Egypt, as well as the protest prone regions in Morocco, Algeria, and Tunisia, remain intact.

While individual locations in the Horn of Africa, DRC, Nigeria and Mali do signal moderate risk elevations – the most notable changes in the July run at $s = 4$ are the decreases clustered in southern Nigeria, despite relatively recent violence (see figure 7b).

Also for one-sided violence (Figure 5c), the forecasts look largely the same as last month. Central Mali, northern Burkina Faso, north-eastern Nigeria, the Anglophone regions of Cameroon, the Kivu provinces of the Democratic Republic of Congo, as well northern-most Mozambique all continue to feature the strongest risk clusters. Additions for September 2020 are the heightened risks in Nigeria’s Zamfara and Katsina states, seen from figure 6c.

### 3 History of UCDP organized violence

Figure 7 presents the the recent history of violence in each PRIO-GRID cell. Red cells experienced violence in May 2020, and purple ones have not seen armed conflict in many years.

Figures 7a, 7b, 7c show state-based, non-state, and one-sided violence respectively from the UCDP. Figure 7d shows data on protests from ACLED (https://www.acleddata.com).
Figure 7: Decay function maps of observed conflict up until May 2020