ViEWS monthly forecasts, October 2018*

Summary of forecasts

Tuesday 2nd October, 2018

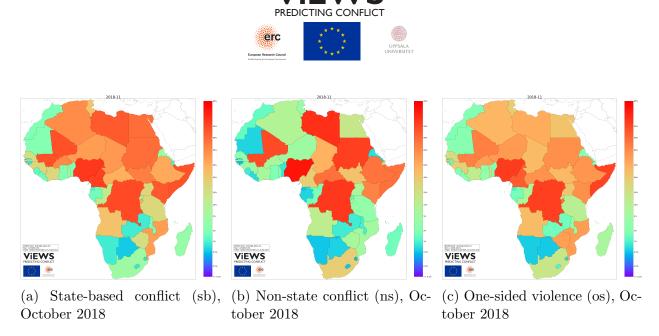


Figure 1: Ensemble forecasts for October 2018

This report presents ViEWS forecasts for October 2018 through October 2021 as of 31 August 2018. The forecasts are based on data that are updated up to and including August 2018. 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/.

We highlight developments in the most recent month. For a discussion of what underlies the forecasts in terms of slowly changing risk factors as well as methodological issues, see

^{*}This report was prepared by Håvard Hegre, Marie Allansson, Mihai Croicu, Frederick Hoyles, Stina Högbladh, and Remco Jansen. The research was funded by the European Research Council, project H2020-ERC-2015-AdG 694640 (ViEWS). The simulations were performed on resources provided by the Swedish National Infrastructure for Computing (SNIC) at Uppsala Multidisciplinary Center for Advanced Computational Science (UPPMAX).

the ViEWS overview article. Figure 1 shows our country-level forecasts for October 2018, Figure 2 the corresponding forecasts at detailed geographic locations, and Figure 3 indicates forecasted trends in organized violence up to October 2021. Figure 4 shows the most recent observed conflict events. Similar reports for previous months are available at http://www.pcr.uu.se/research/views/, along with other information on the ViEWS project.

1 Forecasts for October 2018

The plots in Figure 1 show the ViEWS country-level forecasts for the immediate future — what do we forecast will happen in October 2018? We show the probability of at least one event in each country in October 2018, based on data up to and including August 2018. Countries with red color have forecast probabilities close to 1, whereas blue countries have forecasts at less than 0.01. When the forecasts indicate that no events is as likely as at least one event, countries are drawn with an orange color.

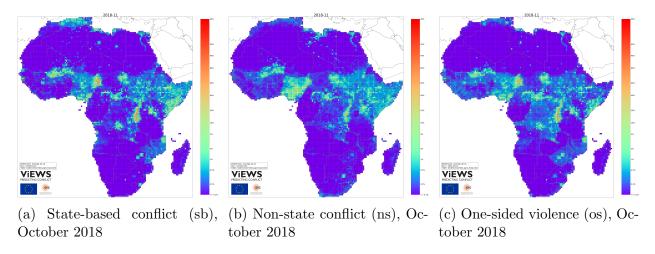


Figure 2: Ensemble forecasts for October 2018

Our forecasts for October 2018 to October 2021 are mostly similar to last month's forecasts. The October 2018 run is using the same set of models as last month, so only changes to input variables will matter for the forecasts.

The UCDP has recorded some conflict events in August 2018 that change the forecasts for some countries (Figure 4 illustrates the most recent history of events).

We continue to forecast a high probability of conflict in countries that have a recent history of conflict or with recent protest events. In Mali, Nigeria, and DR Congo at least one conflict event is almost certain. We also forecast a high probability of state-based conflict

¹http://files.webb.uu.se/uploader/1576/ViEWS-OverviewArticle-June2018.pdf.

(sb) in Cameroon, as the recent violence continues (see Figure 4a). The separatist violence in southern Cameroon continued throughout the summer of 2018, ² as did clashes between government forces and IS (often referred to as Boko Haram) in the North.³ In Kenya, clashes between the government and Al-Shabaab have been reported in every month up to August 2018, and these are likely to continue.⁴

Our forecasts also indicate that the situation will remain very volatile in Mozambique and Zimbabwe, and probably deteriorate in Angola.

The forecast maps for non-state conflict (**ns**) and one-sided violence (**os**) follow partly the same patterns as **sb**, but the patterns of past events differ across conflict types (see Figure 4). Cameroon and Egypt, for instance, have not had much **ns** conflict, whereas Libya and Sudan have seen a lot. We forecast a high probability also of **ns** in Kenya due to recent confrontations between cattle rustlers and herders. Furthermore, actors with unclear affiliation carried out attacks against civilians.

The forecasts for **os** respond to about the same factors, but are less clearly related to protests and regime change. They also in general occur more frequently in newly independent countries. Kenya, again, will see continued one-sided violence, most likely perpetrated by Al-Shabaab and the government of Kenya.⁵

We forecast an increased risk of one-sided violence as well as state-based conflict in Angola and Tunisia, responding to new records of one-sided violence recorded by the UCDP for August 2018.

Figure 2 presents forecasts at fine-grained sub-national geographical locations for October 2018, for each of the three outcomes. The color mapping is the same as for the cm forecasts.

The densest risk clusters for state-based conflict are in north-eastern Nigeria, the North and South Kivu provinces in DRC, in Somalia, and in Darfur. The forecasted violence in Mali is also quite intense, but somewhat more spread out geographically. All of these regions have been ravaged with violence for years as shown in Figure 4. These maps reflect that countries' recent conflict history is the strongest predictor of future violence.

The data from the UCDP also indicate some shifts within countries. Fulani violence against other groups have escalated in both Nigeria and in Mali. The Egyptian Armed Forces initiated a 'Comprehensive Operation – Sinai 2018' in February, with significantly increased state-based conflict activity.

The forecasts for non-state conflict and one-sided violence depend on the same factors although with somewhat different implications. For ns, we forecast main clusters in central

²See the monthly report for June for some more details on Cameroon.

³See Figure 4a and http://ucdp.uu.se/#/statebased/12422.

⁴See Figure 4a and http://ucdp.uu.se/#/statebased/10589.

⁵See Figure 4c and http://ucdp.uu.se/#/onesided/1071.

Nigeria, Central African Republic, North and South Kivu, Darfur and the Kenyan Rift Valley. For **os**, northern Nigeria, Darfur, North Kivu, and Burundi are the primary hotspots.

2 Forecasts October 2018 to October 2021

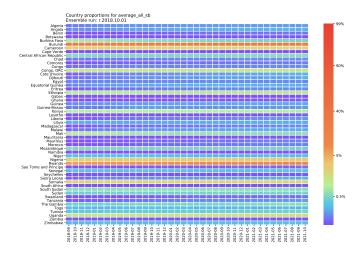
All forecasts shown so far have been for October 2018, the second month after the most recent data available. Figure 3 indicates how the forecasts change up to October 2021. The color mapping is roughly the same as above, but here correspond to the forecasted proportion of PRIO-GRID cells in **sb** conflict for each country. In Burundi, for instance, we expect about 18% of the cells to have conflict in each month. In Ethiopia, the forecast is 1.2%.

We forecast an increasing probability of state-based violence in Nigeria, Rwanda, and Uganda. Compared to last month, we forecast an even higher risk of escalation in non-state and one-sided violence in Rwanda.

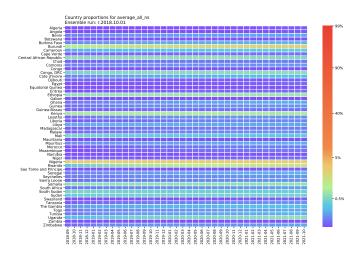
3 History of UCDP organized violence

Figure 4 presents the the recent history of violence in each PRIO-GRID cell. Red cells had conflict in October 2018, and purple ones have not seen conflict in many years.

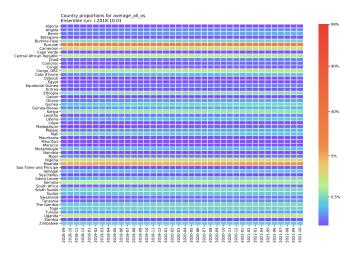
Figures 4a, 4b, 4c show state-based, non-state, and one-sided violence respectively from the UCDP. Figure 4d shows data on protests from ACLED (https://www.acleddata.com).



(a) State-based conflict (sb), October 2018



(b) Non-state conflict (ns), October 2018



(c) One-sided violence (os), October 2018

Figure 3: Heatmaps for October 2018

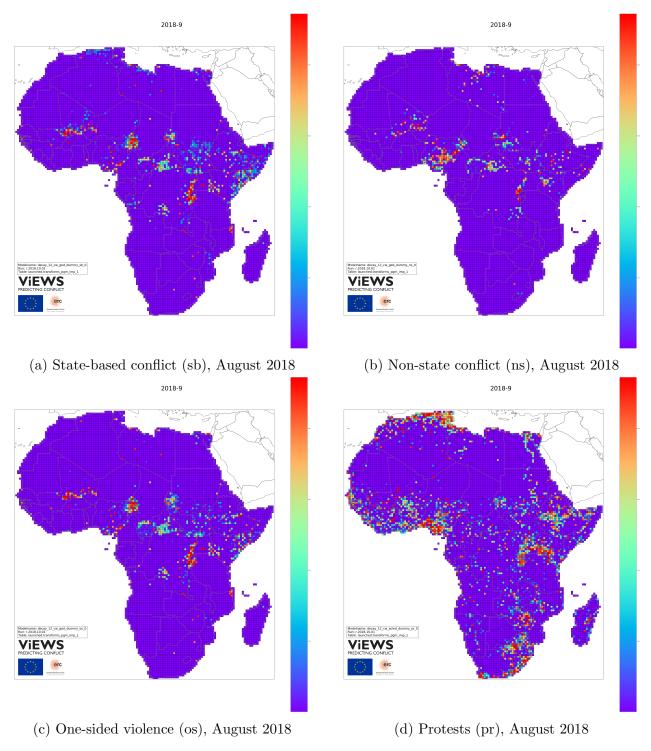


Figure 4: Decay function maps of observed conflict for August 2018