

5-2023

## **A Geospatial Assessment of Turkey's Military Campaigns Against the Autonomous Administration of North and East Syria**

Steven Lucas Escalante  
*University of Arkansas-Fayetteville*

Follow this and additional works at: <https://scholarworks.uark.edu/etd>



Part of the [Geography Commons](#), and the [Near and Middle Eastern Studies Commons](#)

---

### **Citation**

Escalante, S. L. (2023). A Geospatial Assessment of Turkey's Military Campaigns Against the Autonomous Administration of North and East Syria. *Graduate Theses and Dissertations* Retrieved from <https://scholarworks.uark.edu/etd/5011>

This Thesis is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu).

A Geospatial Assessment of Turkey's Military Campaigns Against the Autonomous  
Administration of North and East Syria

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Science in Geography

by

Steven Lucas Escalante  
University of Arkansas  
Bachelor of Arts in International Relations, 2014

May 2023  
University of Arkansas

This thesis is approved for recommendation to the Graduate Council.

---

Dr. Edward C. Holland  
Thesis Director

---

Dr. Fiona Davidson  
Committee Member

---

Dr. Najib Ghadbian  
Committee Member

## **Abstract**

In addition to hosting more Syrian refugees than any other nation, Turkey has played a significant role in the dynamics of the Syrian civil war since 2011 under President Recep Tayyip Erdoğan. As the dynamics in the war shifted, so did Ankara's focus towards the preferred ground forces of the Global Coalition for the fight against the Islamic State, who Ankara views as an extension of the PKK. In turn, this PYD-led de-facto Autonomous Administration has faced multiple Turkish ground invasions since 2016 and a continuing series of aerial attacks. A geospatial assessment of the Turkish-Syrian Democratic Forces border conflict from 2017 through 2 March 2023, this work endeavors to use GIS modeling, geospatial analysis, and cartography to explore the complexities of the conflict in north and east Syria. Primarily focused on cross-border attacks, damage to civilian and critical infrastructure, estimated civilian fatalities, and targeted attacks on leadership within the Autonomous Administration of North and East Syria using geolocated data from the Syrian and Turkish Armed Conflict Location Event Datasets. Corroborates other analysis of the conflict on Turkish and Turkish-backed forces escalating actions, particularly for the year 2022. Analysis of ACLED data shows airstrike and shelling event trends increasing substantially for the year 2022, with monthly events on par or surpassing the monthly totals during the events of Operation Olive Branch and Operation Peace Spring. Furthermore, research finds a substantial trend upwards in monthly aerial attack events during Operation Claw Sword in November 2022.

Additionally, research suggests a significant upward trend in targeted attacks on Autonomous Administration and Syrian Democratic Forces leadership for the years 2021 and 2022. Ultimately, this research suggests that although considered less intensive than the actions during previous ground invasions, the assessments indicate the upward trend in attack events

seen during the year 2022 ultimately serves much of the same purpose as another ground invasion. Therefore, research could prove useful for geopolitical analysis and policy suggestions.

## **Acknowledgements**

I would first like to express my appreciation and thanks to my professors and thesis committee members Dr. Fiona Davidson and Dr. Najib Ghadbian. I would also like to thank the University of Arkansas, especially those within the Department of Geosciences. I owe a sincere debt of gratitude to Dr. Sarwar Alam as well, as your encouragement and guidance during undergrad played a significant role in the decision to further my education. Furthermore, I would not have made it this far without my wife Kiley and her continued patience and support.

Lastly, and most importantly, I owe a special thanks to my advisor, Dr. Ted Holland for his support, guidance, encouragement, and patience throughout this process. My time away inevitably led to a few additional steps and minor complications, so your continued correspondence with the university to ensure everything was in order did not go unnoticed. I sincerely appreciated being treated as a peer and cannot thank you enough for guiding me through every step of the process.

## Table of Contents

1: Introduction.....	1
2: Background.....	4
2.1 Rise of the Islamic State, the Refugee Crisis, and Regional Destabilization.....	5
2.1.1 Rise of the Islamic State.....	5
2.1.2 The Refugee Crisis and Regional Destabilization.....	8
2.2 Autonomous Administration of North & East Syria (AANES, or Rojava).....	11
2.2.1 Ideology.....	12
2.2.2 Governance Structure.....	14
2.2.3 The Charter of the Social Contract.....	15
2.2.4 Territorial Expansion, Outreach, Challenges, and Criticisms.....	17
2.3 Syria and Turkey’s Kurdish Question.....	20
2.3.1 Syria.....	20
2.3.2 Turkey.....	22
2.4 International Involvement and Interests.....	26
2.4.1 Iran.....	27
2.4.2 Iraq.....	28
2.4.3 Russia.....	31
2.4.4 Turkey.....	33
2.4.5 United States.....	35

3: Turkish Operations Within AANES Territories .....	38
3.1 Operation Shah Euphrates .....	40
3.2 Operation Euphrates Shield.....	40
3.3 Operation Olive Branch .....	43
3.4 Operation Peace Spring.....	48
3.5 Operation Claw-Sword.....	52
4: Methods and Materials.....	54
4.1 Software Programs .....	54
4.1.1 ArcGIS Desktop 10.x .....	54
4.1.2 ArcGIS Online .....	54
4.1.3 Microsoft Excel .....	54
4.1.4 Adobe Illustrator.....	55
4.1.5 Google Earth Pro .....	55
4.2 Assessment and Analysis .....	55
4.2.1 Cross-Border Assessment.....	55
4.2.2 Quantitative Assessment.....	57
4.2.3 Targeted Attacks.....	59
5: Results.....	62
5.1 Cross-Border Attacks .....	62
5.2 Quantitative Assessment .....	69

5.3 Attacks on High-ranking Members of the SDF/AANES/Social Base .....	75
6: Summary and Conclusion.....	80
6.1 Summary of Geospatial Assessment.....	80
6.2 Future Studies and Conclusion.....	81
6.2.1 Future Studies.....	81
6.2.2 Conclusion.....	82
References.....	84



## List of Figures

Figure 1. ISIS Territorial Control Zones - June 2014 (Institute for the Study of War Map Room, “ISIS Actual Sanctuary: June 23, 2014”). .....	7
Figure 2. Sectarian and Ethnic Distribution in Syria 2011. (Balanche & Kalbach Horan, 2018) 12	
Figure 3. Data from LiveUAMap showcasing approximate territorial control in August 2016 prior to Operation Euphrates Shield (Cartography by Steven Escalante).....	41
Figure 4. Data from LiveUAMap showcasing approximate areas of control after Operation Euphrates Shield in March 2017 (Cartography by Steven Escalante).....	43
Figure 5. Data from LiveUAMap showcasing approximate areas of control after Operation Olive Branch in March 2017 (Cartography by Steven Escalante).....	48
Figure 6. Data from LiveUAMap showcasing approximate areas of control after Operation Peace Spring in November 2019 (Cartography by Steven Escalante). .....	52
Figure 7. Proportional symbol map displaying Cross-border attacks into Turkey attributed to SDF, YPG, or affiliates from March 2021 to February 2023 (ACLED, 2023). .....	63
Figure 8. Cross-border attacks into Turkey by month attributed to SDF, YPG, or Affiliates (ACLED, 2023).....	64
Figure 9. Cross-border ACLED events attributed to Turkish and Turkish-backed forces against SDF, YPG, or civilians by administrative district from 1 August 2020 to 31 March 2023 (ACLED, 2023; Cartography by Steven Escalante). .....	66
Figure 10. Cross-border ACLED events attributed to Turkish and Turkish-backed forces against SDF, YPG, or civilians by administrative district from 1 August 2020 to 31 March 2023 (ACLED, 2023; Cartography by Steven Escalante). .....	68
Figure 11. Total counts from assessment of Turkish and Turkish-backed forces airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023) .....	71
Figure 12. Total counts from assessment of Turkish and Turkish-backed forces airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023) .....	74
Figure 13. Choropleth map of attack events on high-ranking AANES/SDF personnel and noncombatant affiliates by Turkish and Turkish-backed forces from March 2019 to January 2023 (ACLED, 2023; Cartography by Steven Escalante). .....	77
Figure 14. Attacks by year on high-ranking AANES/SDF personnel and noncombatant affiliates by Turkish and Turkish-backed forces from March 2019 to January 2023 (ACLED, 2023).....	78

## List of Tables

Table 1. Two event examples from ACLED dataset, note “QSD leader” vs. “QSD member”. Entry shaded in green was included in assessment, while entry shaded in red was not (ACLED, 2022). .....	61
Table 2. Total counts from assessment of Turkish and Turkish-backed forces ACLED airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023).....	70
Table 3. Districts with at least 50 events from assessment of Turkish and Turkish-backed forces airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023).....	73
Table 4. Events with stated damage to civilian or critical infrastructure from assessment of Turkish and Turkish-backed forces targeting SDF forces and civilians within AANES territories (ACLED, 2023).....	73

## **List of abbreviations**

AANES: Autonomous Administration of North and East Syria

ACLED: Armed Conflict Location and Event Database

AKP: Justice and Development Party

AQI: Al-Qaeda in Iraq

DAA: Democratic Autonomous Administrations

FSA: Free Syrian Army (since 2018 SNA or TFSA [Turkish Free Syrian Army])

HDP: People's Democratic Party

ISIS: Islamic State of Iraq and Syria (also known as Islamic State, IS, ISIL, or Daesh)

KCK: Kurdistan Communities Union

KDP: Kurdistan Democratic Party

KDP-S: Kurdistan Democratic Party - Syria

KNC: Kurdish National Council of Syria

KRG: Kurdistan Regional Government of Iraq

KRI: Kurdistan Region of Iraq

MIT: National Intelligence Organization of Turkey

OIR: Combined Joint Task Force Operation Inherent Resolve

PKK: Kurdistan Workers Party

PUK: Patriotic Union of Kurdistan

PYD: Democratic Union Party

SAA: Syrian Arab Army

SDF: Syrian Democratic Forces

SNA: Syrian National Army

SNC: Syrian National Coalition

TAF: Turkish Armed Forces

TEV-DEM: Movement for a Democratic Society

YAT: Anti-Terror Special Operations Units of the Syrian Democratic Forces

YBŞ: Sinjar Resistance Units

YPG: People's Protection Units (male brigade of YPG-J)

YPJ: Women's Protection Units (female brigade of YPG-J)

YPS: Civil Protection Units

## **1: Introduction**

Beginning in 2011 during the series of protests and uprisings that came to be known as Arab Spring, Syria's descent into a brutal civil war has led to a chaotic, multifaceted conflict filled with various militias, factions, terror groups, in addition to international and regional powers alike. Currently the largest refugee crisis in the world, the fallout from this geopolitically complex and long-lasting conflict cannot be overstated. The culmination of the Assad regime's continued bombardments against civilians and civilian infrastructure, continuing violence against civilians by non-state actors, rampant corruption, and abject poverty from more than a decade of economic upheaval have caused the number of displaced Syrians to soar to an estimated 13.6 million people (UNHCR, 2022).

Nonetheless, amongst the continued displacement and destruction, Syria's Kurdish population in the north of the country has managed to leverage Assad's weakened central government and the international community's need to dismantle the Islamic State in order to form a de-facto autonomous region focused on the creation of a society rooted in the ideas of democratic confederalism. Seen by imprisoned Kurdistan Worker's Party (Partiya Karkerên Kurdistanê [PKK]) leader Abdullah Öcalan as the best answer to the Kurdish liberation struggle, this ideology focuses on multiculturalism/multiethnic coexistence, freedom of religion, gender equality, decentralization, and grassroots direct democracy in lieu of focusing on the separation and foundation of the typical nation-state. Backed by the U.S.-led coalition against the threat of ISIS since the Battle of Kobani in 2014, what would come to be known as the Autonomous Administration of North and East Syria (AANES, aka Rojava) has attempted to bring this ideology along to areas liberated from ISIS control.

This fight for self-determination would come at a heavy cost, as the Syrian Democratic Forces (SDF) suffered over 10,000 fatalities in the fight against ISIS. Moreover, Turkey and Syria's Kurdish Question remains a barrier to a sustainable and peaceful solution to this conflict, with Turkey's multiple military operations into AANES territories, support of radical proxies within these occupied territories, and continuous airstrikes on civilians and critical infrastructure within AANES territories.

This thesis uses GIS modeling, geospatial analysis, and cartography to explore the complexities of the conflict in northern Syria. A major aspect of the research involves a continuation of much of the same methodology derived from Amy Austin Holmes' May 2021 entry in the Wilson Center's Middle East Program Occasional Paper Series entitled: *Threats Perceived and Real: New Data and the Need for a New Approach to the Turkish-SDF Border Conflict* in which Holmes uses data from the Armed Conflict Location and Event Database (ACLED) to compare cross-border attacks between the SDF and the Turkish armed forces (TAF). In addition, a quantitative assessment on estimated civilian casualties and infrastructure damaged from Turkish shelling and airstrikes targeting the SDF and the People's Protection Units (Yekîneyên Parastina Gel [YPG]) is explored. As the Turkish government considers any group or person affiliated with the Koma Civakên Kurdistanê (Kurdistan Communities Union [KCK]) to be members of the PKK, this assessment also aims to quantify the human toll suspected Turkish airstrikes and targeted attacks have had on AANES noncombatant personnel, SDF commanders, and Kurdish rights activists alike.

Foundationally, the purpose of the research is to use a geospatial approach to focus on Turkey's Kurdish question, assess, and analyze Ankara's continued efforts to approach this question militarily beyond its own borders. Although nowhere near the sheer number of

abhorrent actions from the Assad regime, Turkey's continued military interventions within Iraq and Syria have only exacerbated an already dire situation, especially in war-torn Syria, particularly by making life unlivable in targeted areas due to military threats, economic challenges, and environmental pressures. Furthermore, this underlying issue is but one of the many facets obstructing a lasting, peaceful political solution for the people of Syria.

## **2: Background**

Since 1970, Syrians have been under the authoritarian regime of the Assad family and the secular Baath Party. Under their control, Syria transitioned towards a free-market economy and has experienced a series of domestic and economic problems the last forty years. These include the degradation of social services such as the cutting of state subsidies for basic goods, a high unemployment rate due to the free market's effect on local industries, and the prevalence of rampant corruption.

The Assads are a part of the minority Alewite sect, an offshoot of Shiite Islam who make up approximately 12 percent of the country's population. Syria's Alewite minority have long faced discrimination from portions of the Sunni majority, whose resentment of Alewite control of the government has led some to look towards Islamic fundamentalism as a possible solution (Goldschmidt Jr. & Davidson, 2013). To quell this dissent, from 1963 to 2011, the regime ruled under an Emergency Law that denied any constitutional protections to Syrians. In turn, Syria's army and police have carried out several brutal crackdowns over the years on the people of Syria. This includes the infamous Hama rebellion in which a conservative Sunni movement with a stronghold in the west-central city of Hama carried out a rebellion against the regime that lasted from 1976 until 1982 when the Syrian Arab Army (SAA) surrounded and shelled the city indiscriminately with tanks and artillery. This would lead to an estimated 25,000 civilians losing their lives (Goldschmidt Jr. & Davidson, 2013).

This incident would serve as a precedent for the government response to widespread protests in 2011 during the series of protests and uprisings that came to be known as Arab Spring. Following a series of coordinated demonstrations in various cities throughout Syria, the situation came to a head in the city of Dar'a on March 20th when protestors started setting fire to



the local Baath Party headquarters and other government buildings (Goldschmidt Jr. & Davidson, 2013). In response, the Assad government sent SAA units of mainly Alawite soldiers to stamp out dissent. This would lead to snipers targeting protestors from rooftops, as well as artillery, tanks, and mortar rounds being utilized on citizens as well (Goldschmidt Jr. & Davidson, 2013).

Following the escalation by the Assad regime, the mass protests would begin to take on a new form. Some protestors armed themselves with weapons, while some soldiers started to desert the SAA. In total, an estimated 20,000 soldiers deserted the SAA, with some choosing to join the resistance. Instances of violence and armed clashes rose exponentially, with nearly 5,000 people being killed by the end of the year (Hale, 2019).

Syria's descent into a brutal civil war has led to a chaotic and multifaceted conflict filled with various militias, factions, and terror groups. The entrance of external powers eventually led to a protracted conflict in which the government would regain control of a majority of the country. However, by the end of 2019, over 5 million Syrians had fled the country, another 6 million or more had been internally displaced, and well over half a million casualties had occurred in addition to over 2 million injured (McDowall, 2021).

## **2.1 Rise of the Islamic State, the Refugee Crisis, and Regional Destabilization**

### **2.1.1 Rise of the Islamic State**

The Islamic State of Iraq and Syria (ISIS) emerged from the remnants of Al-Qaeda in Iraq (AQI), along with several former officers with prior military experience in the Baathist regime of Saddam Hussein, including former members of the Republican Guard and the Fedayeen paramilitary force (Hamza & Zahra, 2015). In addition, evidence points to the Assad

regime also playing a significant role in the rise of the Islamic State by releasing known terrorists from prison, focusing military efforts on moderate opposition, and portraying moderate opposition and non-violent protestors as terrorists to serve the narrative that the choice was between his regime or the ‘terrorists’ (Levitt, 2021). Furthermore, veteran jihadists flooded in to offer their expertise from Chechnya and other hotspots (Ratelle, 2016). ISIS took the world by storm in 2014 when they were able to take advantage of the weakened central governments of both Iraq and Syria, conquering large swathes of both countries. ISIS carried out a brutal campaign against the people of Iraq and Syria, with the goal of establishing an Islamic governance rooted in a strict form of Sharia Law derived from 8<sup>th</sup> century Islam (Warrick, 2015). Composed of ultra-radical Sunni Muslims, ISIS quickly became infamous worldwide due to their ruthless actions such as the Camp Speicher Massacre and the genocide and enslavement of thousands of Yazidis in Iraq's Shengal Valley.

Not only did the group have the advantage of experienced fighters and officers in their command, but the Islamic State also had a prolific presence online that spread their Salafi Jihadist message far and wide across the digital world. Thousands upon thousands of accounts across various social media platforms and websites spread their media releases displaying in part: combat footage, executions, and suicide vehicle borne improvised explosive device (SVBIED) attacks. These videos were shot in high quality with Hollywood levels of production and effects. The effectiveness of their online campaign could not be denied, as approximately 40,000 foreign fighters from 110 countries flooded into Syria, a majority of which by way of Turkey (United Nations Meetings Coverage and Press Releases, 2017; Zelin, 2012).

The caliphate peaked in fall 2014 at an estimated 6.3 million people (19 percent of the population) covering approximately 58,372 km<sup>2</sup> (13 percent of Iraq’s territory). In Syria, ISIS

was controlling an estimated 3.3 million people (14 percent of the population) in fall 2014 covering an area of roughly 47,497 km<sup>2</sup> (25 percent of the territory) (Jones et al., 2017). Figure 1 below displays the Islamic State territorial control zones in June 2014 just prior to the caliphate’s peak.

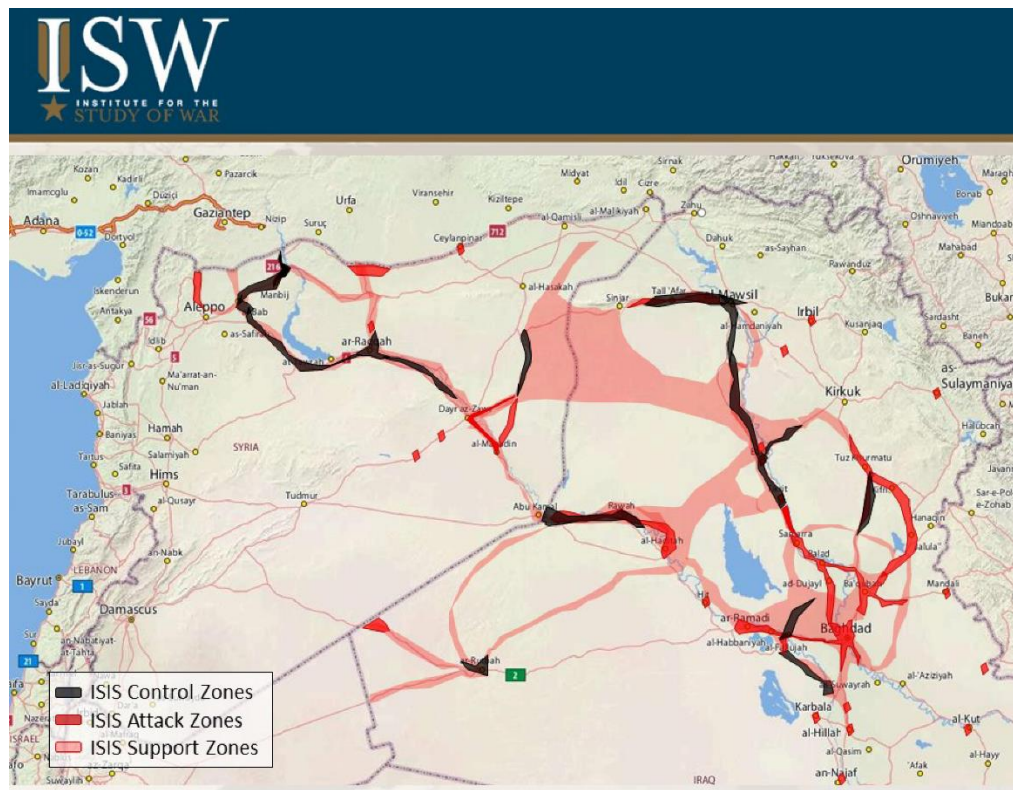


Figure 1. ISIS Territorial Control Zones - June 2014 (Institute for the Study of War Map Room, “ISIS Actual Sanctuary: June 23, 2014”).

Furthermore, the Islamic State’s indiscriminate violence was not limited to Iraq and Syria. Although much of their propaganda was primarily aimed at bringing in recruits to the two countries originally, as their territory began to shrink, Islamic State propaganda began to prioritize lone wolf attacks in the West and for those who were unable to travel. Notable examples in Europe include the November 2015 Paris attacks (over 400 injuries, 137 deaths), and the July 2016 Nice truck attack (over 400 injured, 86 deaths). In the United States, this

includes the December 2015 San Bernardino attack (21 injuries, 14 deaths) and the June 2016 Pulse nightclub shooting (58 injuries, 49 deaths). In addition, numerous attacks in which the attackers either pledged their allegiance to or said to be inspired by ISIS took place throughout the Middle East and North Africa, Sub-Saharan Africa, Asia, and Australia. Since declaring the caliphate in 2014, the Islamic State had either orchestrated or inspired more than 140 attacks in 29 countries by 25 July 2016 (Lister et al., 2016).

### **2.1.2 The Refugee Crisis and Regional Destabilization**

Meanwhile, the number of displaced people continued to soar from the culmination of the Assad regime's continued bombardments against various rebel groups and civilian infrastructure, combined with the Islamic State's conquering of more and more territory in both Syria and Iraq. By July 2015, an estimated 7.6 million Syrians were internally displaced, and another 4 million people had fled the country according to statistics from the United Nations High Commissioner for Refugees (UNHCR, 2015). Although the number of internally displaced people (IDPs) had slightly decreased to an estimated 6.9 million by 2021, as of July 2022 the number of registered Syrian refugees has increased to an estimated 5.6 million people (UNHCR, 2022).

Most of the Syrian refugees have fled to neighboring countries, placing an enormous amount of strain on governments and the international community to provide basic needs like shelter, food, and safety. Turkey hosts an estimated 3.6 million Syrian refugees as of July 2022, approximately 65 percent of the total refugee population. Lebanon (14.8%, 831,000), Jordan (12%, 675,000), Iraq (4.7%, 263,000), and Egypt (2.6%, 144,000) host most of the remaining refugees (UNHCR, 2022). Furthermore, approximately one in four people are a Syrian refugee in Lebanon, one example of the sheer weight these countries have carried regarding the hosting of displaced civilians from the conflict (UNHCR, 2018).

Through no fault of their own, the millions of refugees and IDPs from the civil war have worried regional governments and the international community alike, due to the massive impact on the infrastructure, economies, and societies that a sudden influx of a population can have on a region or country. The crisis remains a potentially volatile entity in a region of the world such as the Levant that has already struggled with instability historically. Due to this, the actions, or lack thereof from the international community have been a focal point of the crisis. Germany, Sweden, the United Kingdom, and the United States have seen much of the ire for not opening legal, safe avenues of immigration to an adequate number of asylum seekers, as historically they “accommodate relatively large numbers of asylum seekers annually and enjoy a positive reputation for providing refuge to those in need in times of crisis” (Ostrand, 2015 p.257).

Despite the weariness of these countries to host an influx of refugees, over one million first-time asylum applications were recorded for 2015 and 2016 according to the European Union Eurostats, a number not seen in Europe since the Second World War (Brannon, Campbell, Davies, et al., 2016). Moreover, due to domestic policy decisions in many European and western states, most arrivals were through unauthorized journeys by sea. The route most frequented by those fleeing the violence in Syria and Iraq is from Turkey to the Greek Islands. According to the UNHCR Data Portal, there were over one million arrivals by sea in 2015, and over 350,000 in 2016. The UNHCR Data Portal also estimates the number dead and missing at sea for 2015 and 2016 to be 3,771 and 5,096 respectively. Many social media and internet users became aware of the perils facing those trying to reach Europe in September 2015 when the heartbreaking photos of Alan Kurdi’s body reached international news outlets. Kurdi, a two-year-old boy from Kobani, Syria, was washed ashore a Turkish beach during his family’s attempt to reach Europe.

Kurdi's mother and brother also perished on the same day in their attempt to eventually reach family in Canada.

In lieu of adequately expanding legal routes of entry to those fleeing the war, financial support has been the primary form of assistance from the international community; by January 2015 the European Union has dedicated more than 3.5 billion USD for humanitarian, development, and stabilization assistance to Syrian refugees and their host countries according to Ostrand (2015). Furthermore, Ostrand writes that the United Kingdom and the United States have been the largest single-state donors, with the U.S. contributing some 2.9 billion USD between 2012 and 2014, and the UK some 790 million USD by February 2015 according to statistics from UK Department for International Development, U.S. Agency for International Development, and the U.S. Bureau of Population, Refugees, and Migration (Ostrand, 2015). Sweden's Ministry of Foreign Affairs has also provided some 169 million USD in humanitarian aid from March 2011 through October 2014 (Ostrand, 2015). Kuwait (149 million USD), Germany (131 million USD), Saudi Arabia (118 million USD), Japan (91 million USD), and Canada (80 million USD) have all given a considerable amount for humanitarian aid, with Kuwait being the third largest bilateral donor in 2014, followed by Germany, Saudi Arabia, Japan, and Canada according to 2015 statistics from the UN office for the Coordination of Humanitarian Affairs cited by Ostrand (2015).

However, despite these donations, the amount of aid given for the Syrian Regional Response Plan was still inadequate for the year 2014, reaching only 63 percent of the total estimated 3.74 billion USD needed to cover refugee needs and host community expenses (Ostrand, 2015). Furthermore, due to inadequate funding, in December 2014 there was a two-week period where the UN World Food Program had to suspend food assistance operations for over 1.7 million

Syrian refugees (WFP, 2014; Ostrand, 2015). Moreover, the geopolitical situation continues to strain the efforts of NGOs and food programs to deliver staples, with sanctions and blockades complicating logistics regularly.

## **2.2 Autonomous Administration of North & East Syria (AANES, or Rojava)**

The Kurds are a non-Arab ethnic group of the Middle East bound by common culture and language. Kurds have been present in the region for centuries, with the name *Kurdistan* first appearing in Arabic historical writings in the twelfth century (Knapp et al., 2016). The area referred to as Kurdistan encompasses parts of Armenia, Iran, Iraq, Syria, and Turkey, with each nation-state containing a minority population of Kurds. Estimates suggest around 19 million Kurds live in Turkey, 10-18 million in Iran, 5.6 million in Iraq, three million in Syria, one million in Europe, and around 0.5 million in the former Soviet Union (Knapp et al., 2016). Behind only Arabs and Turks, Kurds are the third largest ethnic group in the Middle East, with population estimates ranging anywhere from 30-40 million worldwide. Due to this fact, Kurds are the world's largest nation without a state (Federici, 2015).

In July 2012, one year into Syria's freefall into a full-scale civil war, an opportunity presented itself to Syria's Kurdish population in the north of the country. Stretched thin and presented with intense opposition, the Assad regime chose to withdraw its administration and army from parts of Northern Syria. Seizing this opportunity, the *Partiya Yekîtiya Demokrat* (Democratic Union Party [PYD]) and their militia arm, the YPG, gained control of Kurdish-populated areas after the Syrian Army's withdrawal from these areas. By mid-2013, the PYD had declared a de-facto autonomous region in northern Syria they called Rojava, meaning 'West' in the Kurdish language. Rojava consists of three cantons, later referred to as areas (Afrin, Kobanî, and Cizîrê) and composes approximately ten percent of Syria's total landmass (Knapp et al.,

2016). Figure 2 below displays a cartographic representation of Syria's sectarian and ethnic distribution in 2011.

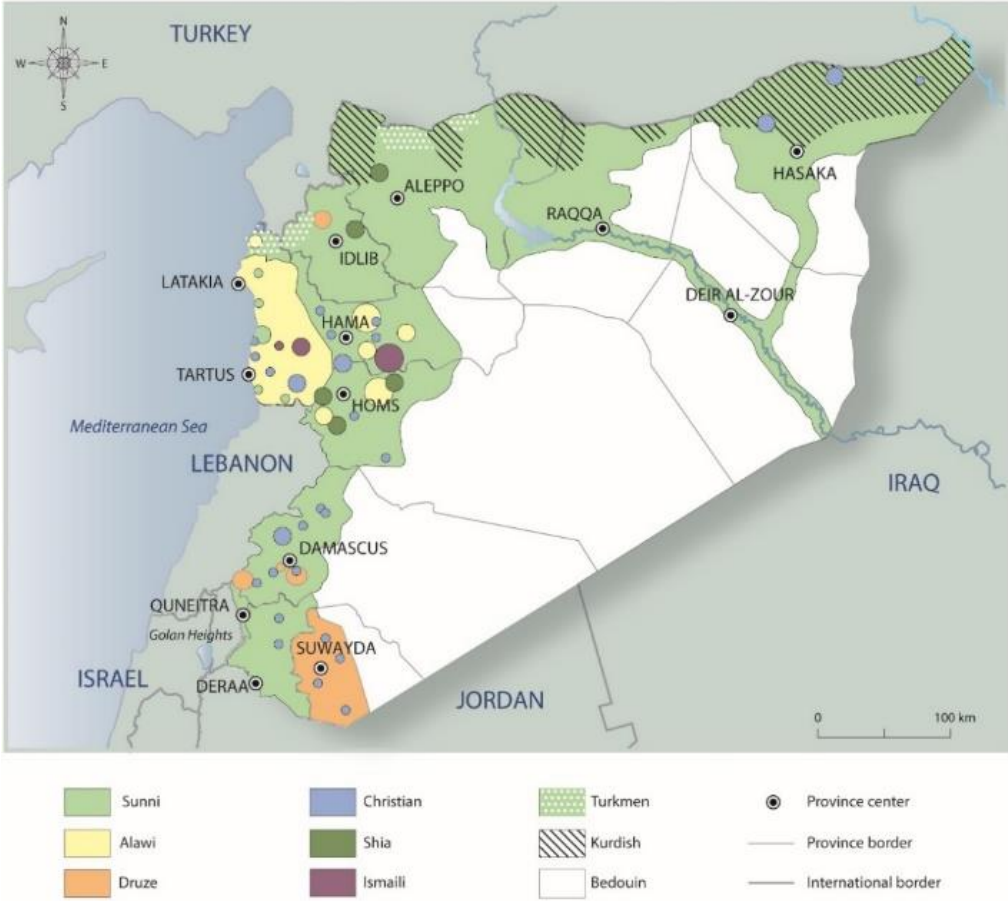


Figure 2. Sectarian and Ethnic Distribution in Syria 2011. (Balanche & Kalbach Horan, 2018)

**2.2.1 Ideology**

When initially aiming to establish societal and governmental structures for Rojava, the PYD drew ideological inspiration from the writings of imprisoned PKK leader Abdullah Ocalan.



During his imprisonment beginning in 1999, PKK leader Abdullah Öcalan began to read the works of libertarian socialists and philosophers such as Murray Bookchin and Friedrich Nietzsche. Reflecting on the mistakes made by the PKK during their struggle against the Turkish state, Öcalan concluded that the Marxist-Leninist ideology the PKK once subscribed to had led to some of the failings he mentions in his work *War and Peace in Kurdistan: Perspectives for a Political Solution of the Kurdish Question* (Öcalan, 2013). His main critiques of the PKK's actions in the 1970s and 1980s was the hierarchy manifested within their organization, and even more so, their approach to violence. Öcalan had come to see this hierarchy as state-like, and therefore ideologically opposed to the principles of democracy, freedom, and equality that the group strived to obtain. Although he writes that the dynamics which would lead to the development of hierarchical structures and their use of violence beyond a means of self-defense were not intentional, the damage their movement sustained nonetheless occurred (Öcalan, 2013).

He states, “Although the PKK stood for freedom-oriented views we had not been able to free ourselves from thinking in hierarchical structures” (Öcalan, 2013 p.28). Öcalan had come to oppose the very idea of a Kurdish nation-state, or at least was skeptical of the idea. He concluded that even if a Kurdish nation-state were to be established, it would still be plagued by many of the same problems seen in countless other established nation-states prone to authoritarianism, marginalization, and imposed state identity (Öcalan, 2001; Bonger, 2017). Writing in regard to their use of violence, Öcalan states “War was understood as the continuation of politics by different means and romanticized as a strategic instrument. This was a blatant contradiction to our self-perception as a movement struggling for the liberation of the society. According to this, the use of armed force can only be justified for the purpose of necessary self-defense” (Öcalan, 2013 p.29). This is mentioned towards the end of his work as well, with Öcalan admitting that

like the Turkish state, the PKK had also used violence to an extent that goes beyond legitimate self-defense (Öcalan, 2013).

Öcalan views democratic confederalism as a model and potential solution to many of the issues mentioned regarding nation-states, as in his view, democratic self-organization and participation is vital to the very sovereignty of the people. He states that this framework creates the instruments and institutions for democratic self-government, allows for any group to organize autonomously, and offers a long-term and continuous process aimed at “the economic, social, and political sovereignty of all parts of the society” (Öcalan, 2013 p.32). This process of self-government would be organized within a system of congresses, neighborhood councils, and district councils, for example. These structures will be further explored below when discussing the Charter of the Social Contract for the Autonomous Administration/Rojava.

### **2.2.2 Governance Structure**

The foundations for the implementation and expansion of the democratic autonomy project began with the PYD in 2004 and their establishment of local, underground social projects such as the women founded Yekîtiya Star (now known as Kongra Star), or Star Congress in Kurdish. Due to the widespread persecution from the Assad regime, many of the project’s sympathizers kept their financial support and backing a secret. This would isolate the project and limit their ability to challenge the current government structures directly (Knapp et al., 2016; Allsopp & van Wilgenburg, 2019). However, the situation began to change in 2011 as the existing governance structures weakened from the initial uprisings and social unrest occurring. The weakening of the central government afforded the opportunity for the PYD to establish the umbrella organization known as Tevgera Civaka Demokratik (the Movement for a Democratic Society), or TEV-DEM.

Made up of women's movements like Yekîtiya Star, other political parties, cultural foundations, and youth organizations, TEV-DEM would go on to become the political coalition governing the Democratic Autonomous Administrations and "one of the most important bodies coordinating the communes and council systems" (Allsopp & van Wilgenburg, 2019 p.91). Through the PYD and TEV-DEM, self-protection units were established to defend protesters from regime agents. These self-protection units were said to be the predecessors to the YPG (Knapp et al., 2016). Under this body, the development of direct democracy began to grow. Furthermore, due to the difficulties of administering centrally and the tenants of the ideology in which the model is based, decentralization was a key component of the structures that developed.

The three cantons would strive to become self-sufficient, therefore would have their own administration, each with its own legislative assembly, preparation, and monitoring committee (Allsopp & van Wilgenburg, 2019). From these structures, a group of 47 civil society organizations and 11 political parties, Christian, and Arab organizations gathered to discuss the development of a transitional administration. In what would be known as the Charter of the Social Contract, on 15 November 2013 a body of 60 canton representatives began to meet to form a committee to draft a joint interim constitution and a committee for the electoral system (Allsopp & van Wilgenburg, 2019). However, it must be noted that most of the parties and organizations mentioned had direct or close connections to the PYD.

### **2.2.3 The Charter of the Social Contract**

In an effort to gain more recognition and support internationally, regionally, and among Syrians themselves, the TEV-DEM established a transitional administration in November 2013 focused on creating a social charter. Published on 29 January 2014, the Charter of the Social Contract committed to the development of a democratic society "free from authoritarianism,

militarism, centralism, and the intervention of religious authority in public affairs, the Charter recognizes Syria's territorial integrity and aspires to maintain domestic and international peace" (Preamble, Social Contract, 2014). This charter is meant to function as a sort of constitution, establishing the rules to which all citizens within the autonomous regions voluntarily agree in order to participate in the local councils. Although the intricacies of how this would be undertaken in practice were not specified, the charter also gave the option of voluntary membership within the canton system to all towns, cities, and villages in Syria that agreed to it (Allsopp & van Wilgenburg, 2019; Social Contract, Article 7, 2014). Nonetheless, the published Charter committed to the establishment of the Democratic Autonomous Administrations (DAAs) and democratic autonomy for the three cantons.

Furthermore, the Charter established the commitment to the Universal Declaration of Human Rights, as well as other internationally recognized human rights conventions" (Social Contract, Article 21, 2014). While also stating that everyone within the cantons have the right to express their "ethnic, cultural, linguistic, and gender rights" (Social Contract, Article 23, 2014). Knapp et al. (2016 p. 113) mention how Article 21 of the Social Contract is unique in its recognition and stated intent to follow all international human rights conventions, stating "We know of no state or region that in its constitution makes a blanket recognition of all international human rights agreements." Öcalan's views on women's liberation are also clearly entrenched within the Charter, as articles 27 and 28 state that men and women are equal in the eyes of the law, that women "have the inviolable right to participate in political, social, economic, and cultural life," and also "mandates public institutions work towards the elimination of gender discrimination" (Social Contract, Articles 27 & 28, 2014). The rights of minors are also guaranteed in the Charter, stating "children shall not suffer economic exploitation, child labor,

torture or cruel, inhuman or degrading treatment or punishment, and shall not be married before attaining the age of majority” (Social Contract, Article 29, 2014).

While the preamble establishes the separation of society from religious authority in public affairs, Articles 31 and 32 establish the right to freedom of worship and to practice one’s own religion free of persecution. Article 32 is unique in particular, as it specifically recognizes the Yezidi religion and guarantees their “adherents’ rights to freedom of association and expression” (2014). Although the autonomous administration has struggled to realize many of the goals stated in the social contract, this recognition and protection offered to Yezidis living within the autonomous regions would serve as a stark reminder to one of the stated core ideals of the political project, and unfortunately, the consequential effects of realpolitik and appeasement for practical purposes. Moreso, past history and actions that had yet to occur during the time the Charter was published give credence to this, considering the genocide and enslavement of thousands of Yezidis in Sinjar, Iraq less than a year later by ISIS, the repeated massacres Yezidis have faced since the time of the Ottoman Empire, and the displacement, persecution, extortion, shrine desecration, and forced conversions that Yezidis have suffered within areas occupied by the Turkish military and their affiliated proxies since 2018 and 2019 (Holmes, 2020).

#### **2.2.4 Territorial Expansion, Outreach, Challenges, and Criticisms**

Although largely portrayed in international media as overwhelmingly Kurdish, Arabs are now believed to constitute the largest percentage (>50%) of soldiers in the SDF as of 2019 (Holmes, 2019). Firmly entrenched as the preferred ground forces for the coalition by this point in the fight against the Islamic State, Arab fighters were incorporated more and more as the SDF and the coalition liberated major Arab population centers such as Manbij, Deir Ezzor, and Raqqa. Based on multiple surveys done by Holmes on the ground in AANES territories, Arab

SDF survey respondents identified themselves as belonging to 46 different tribes or sub-tribes, including tribes who historically took part in suppression of Syrian Kurds in the 1960s in the case of the al-Walda clan, and in 2004 in the cases of the al-Jabbur tribe and the Tay tribe (Holmes, 2019).

Despite the attempts at inclusion and outreach, the Autonomous Administration has faced a host of challenges, setbacks, and criticisms in their attempts at developing and maintaining a multiethnic, democratic governance in north and east Syria. One example of this occurred when compulsory conscription was introduced. As territorial expansion occurred, so did the need for more enlisted men. To fill this need, the Autonomous Administration would attempt to enforce compulsory conscription for military-aged men. Unsurprisingly, the Autonomous Administration has faced significant backlash from this policy, most of which report that the policy resulted in further immigration of military-aged men out of Syria, especially those opposed to the PYD (Allsopp & van Wilgenburg 2019). Furthermore, in spite of the promised grassroots nature of the system of committees, communes, and councils created to serve the needs of the local populace, there was still a hierarchy visible within the DAAs according to Allsopp and van Wilgenburg (2019 p. 141), who write “In terms of achieving majority participation and representation, the DAAs fell short of expectations”. This was due in part to the combination of the limited resources of the local councils and the state-like powers assumed by the DAAs leaving few alternatives for those not willing to recognize or participate in the political project (Allsopp & van Wilgenburg, 2019). Despite the short fallings in some sectors, Allsopp and van Wilgenburg also write that certain goals of the Autonomous Administration have been at least partially realized in the eyes of some on the ground, and that the de-ethnicization, inclusiveness of the project, and the grassroots development of the women’s political movement were all seen as

positives by the majority interviewed in the field. However, the PYD's removal of Kurdish symbolism from elements of its governance and prioritization of placing a multiethnic coexistence with Arabs over Kurdish national interests were common criticisms among Kurdistan Democratic Party of Syria (KDP-S) supporters (Allsopp & van Wilgenburg, 2019).

In addition, Allsopp and van Wilgenburg suggest that many of the sectarian and political tensions remained in spite of the inclusive ideology of the PYD. Furthermore, in some Arab majority areas liberated from ISIS with tribal alliances already in place, the councils established tended to accommodate existing Arab tribes and their traditional power structures. Allsopp and van Wilgenburg argue that the alliances made between the PYD during their outreach was not based on shared ideology or a shared vision of social revolution, but on local Arab/Tribal political power, shared security interests, as well as the PYD's projected strength from their relationship with the coalition increasing its ability to gain compliance. They write "the ideology and central moral ethos of the PYD project was not a primary factor influencing cooperation nor did it dictate opposition to it within the particular political and security climate in Syria" (Allsopp & van Wilgenburg, 2019 pp. 132-133). Overall, the increasingly complex dynamics caused by the project's expansion into non-Kurdish majority areas and the entrenched ethnic and local identities among both Arabs and Kurds are not necessarily seen as negatives to some within the AANES (Allsopp & van Wilgenburg, 2019). Despite the struggle to increase participation in the councils and DAAs, the decentralization and emphasis on local participation in the PYD's governance system possibly lends itself to potentially volatile dynamics such as these.

## 2.3 Syria and Turkey's Kurdish Question

### 2.3.1 Syria

Kurds make up between seven and ten percent of the total population of Syria and have long faced persecution prior to, and under the Baathist Assad regime(s). Under the French Mandate in Syria, Kurds were given substantial rights, were granted citizenship, and were able to hold influential positions. However, Kurdish participation in the French *Spéciales du Levant* would prove to be a lingering source of resentment from Syrian Arabs towards the Kurds, as the French used these minority forces as a way to exert control on the Syrian Arab population. Furthermore, after Syrian independence, this history was used by some as a way to instill fear within the Syrian Arab population that the Kurds were Trojan Horses for Israel or the United States (McDowall, 2021).

Kurdish rights would diminish after Syria gained its independence in 1946 and an Arab nationalist government was elected. Several decrees were issued under then president Adib Shishakli that directly targeted Kurds, Armenians, and Assyrians, such as requiring businesses to hold Arab names, requiring all public meetings be held in Arabic, and ensuring that an equal number of Muslims was appointed to all minority organizational committees. Furthermore, after Shishakli's overthrow in 1954, Kurdish music and publications were seized and destroyed, and their owners imprisoned. Although this did not happen overnight, by 1958, Kurdish publications were formally forbidden and ranking Kurdish officers were purged from the military. Moreover, by 1961, two years before the Ba'athist takeover, Syria's provisional constitution formally referred to itself as the Syrian Arab Republic (McDowall, 2021).

In addition, the repression of Kurds within Syria was not limited to culture, language, or arts. Kurds in Syria continued to face various forms of systematic oppression. Many were denied



citizenship by the regime and therefore deprived of the right to own property, receive state education, legally marry, or even gain legal employment. Further measures were created to divide the Kurdish population and de-legitimize Kurdish claims to land in Syria, such as the creation of Arab settlements in predominantly Kurdish areas to shift demographics. The measures were ultimately implemented in 1973, although the plan had been decided upon in 1965 in response to Arab concerns of the Kurdish population's exponential growth in al-Hasaka governate (McDowall, 2021). Beginning in 1945, much of this population growth could be attributed to migration in order to flee repression and abject poverty experienced in Turkey. However, Kurds have a much longer history living within what would become Syria. This is especially true for Afrin, as it "had been the most densely Kurdish part of what became the state of Syria for the last 500 years" (McDowall, 2021 p.626;637).

Political activity within Syria began prior to the arrival of the PKK in 1980, as the Communist Party of Syria was known to be a Kurdish affiliated movement. Furthermore, the KDP-S had been established in 1957. Due to their calling for recognition of Kurds as an ethnic group with cultural rights, several leaders of the KDP-S were imprisoned for 18 months in 1960, leading to a party fracture (McDowall, 2021). No matter how brutal his regime was to Kurds in Syria, Hafez al-Assad saw the PKK as a tool to use against the Turkish state. Hafez al-Assad allowed the PKK to operate within Syria between 1980 and 1998 until Turkey threatened an invasion unless he signed the Adana Agreement, declaring the PKK a terrorist organization and expel it from Syria. This agreement would begin to improve relations among Turkey and Syria.

Setting the foundation for their ability to mobilize during the civil war, in 2003, the Kurdish Democratic Union Party (PYD) was formed clandestinely either by former members of the PKK or by Kurds in Syria who saw the ideology of the PKK as a viable solution to their

problems (Kaya & Low, 2017). Inevitably, the PYD's shared ideology with the PKK and past history between the Assad regime and the PKK have led to suspicions among many of the Arab rebels, external sponsors, and some KNC supporters that the PYD was actually loyal to the Assad regime. Why had the PYD not called for the overthrow of the Assad regime? How had the PYD taken over government positions without any fight? Were some of the questions being asked among those questioning the PYD, according to McDowall (2021). Although hostilities between the PYD and government forces seen throughout the war suggest that any semblance of cooperation is simply a political calculation made by both sides, McDowall (2021) writes "Such questions went unanswered" (p. 685).

### **2.3.2 Turkey**

In the Ottoman Empire, the Kurds lived under the millet system and although they had no official status, they were granted some autonomy and permitted to govern many of their own affairs. During the disintegration of the Ottoman Empire following its collapse after the First World War, the European powers aimed to partition the former empire. After negotiations over the divisions of Ottoman land, the Treaty of Sevres was signed in 1920. This treaty promised an autonomous region for the Kurds and the right to vote for independence in a future referendum (McDowall, 2021). However, Kemal Ataturk rejected this treaty not long after it was signed. This led to the signing of the Treaty of Lausanne in 1923, which failed to mention either Kurdistan or the Kurds themselves. This treaty divided Ottoman-era Kurdistan into primarily four states: an already sovereign Iran, the newly established Turkey under Ataturk, and Iraq and Syria, both of which were first ruled under mandates by Britain and France until gaining their independence in 1932 and 1946 respectively (Goldschmidt Jr. & Davidson, 2013).

Following the Treaty of Lausanne, the Kurds started to experience repression from the Turkish state, as Ataturk saw minorities as a threat to the establishment of a homogenous nation-state. Kurdish rebellions followed a string of repressive policies such as the Kurdish language being forbidden, their education being banned, and Kurdish political movements not being permitted. The repressive policies forced on Kurds within Turkey would ultimately become a catalyst to the establishment of the PKK in 1978 (Leezenberg, 2016).

Originally formed on Marxist--Leninist principles, under their leader Abdullah Öcalan, the PKK became the main resistance against Turkish oppression. Clashes between the Turkish state and the PKK peaked during the 1980s and 1990s. The violent guerrilla campaigns of the PKK combined with the brutal crackdown and razing of Kurdish villages from the Turkish state would lead to over one million estimated displacements and thousands of deaths, including civilian casualties caused from both sides (Crawford, 2021; McDowall, 2021). Öcalan was arrested in 1999 and remains imprisoned to this day. Although peace talks between Öcalan and Turkish officials have occurred periodically, no agreements have been made.

The first round of recent peace talks between the PKK and Turkish officials appeared to have taken place in secret sometime between 2009 and 2011 (Leezenberg, 2016). During this first round of peace talks, Öcalan was said to have presented his 'Road Map' to Turkish representatives. Michael Leezenberg (2016, p. 680) reports from these negotiations that “Turkish state representatives gave positive signals concerning these proposals, and even hinted that then Prime Minister Erdoğan also agreed with much of them.” However, talks were discontinued after the Adalat ve Kalkinma Partisi (AKP) or Justice and Development Party gained 49.8% of the vote in the June 2011 national elections.

After Erdoğan hinted as much in December of 2012, another round of secret peace talks was announced in March 2013 when a letter by Öcalan was read aloud during a Newroz gathering in Diyarbakir, the largest Kurdish-majority city in Turkey. In this letter, Öcalan stated the need for a negotiated solution. Although this new round of talks gave hope to some momentarily, no concrete agreements were announced. According to Leezenberg, the main flaw of the peace talks was the fact that they were done in secret, with no details being released to the public. Leezenberg (2016) also argues that the secrecy and top-down structure of the peace talks made it nearly impossible for outsiders or the public to judge their progress, and thus may have been a main factor in their failure to secure any progress. However, Leezenberg mentions one major unintended consequence of the peace talks: the legitimization of the PKK as a negotiating partner. He states “Turkish state representatives preferred negotiating with an imprisoned guerrilla leader to talking with elected officials, let alone consulting the Kurdish population at large, apparently assuming that a top-down approach would lead to a durable solution imposed from above. In the process, they not only implicitly recognized the PKK as a legitimate negotiating partner, in a move at odds with the continuing propaganda brandishing it a terrorist organization” (Leezenberg 2016, pp. 680-681).

In contrast to the first decade of the twenty-first century when Turkish officials were in talks to join the European Union and made a number of democratic reforms, and especially since the failed coup attempt in 2016, Turkey has quickly trended to that of an authoritarian and autocratic regime under President Recep Tayyip Erdoğan and his AKP. To silence oppositional voices in media and academic institutions, and to further entrench control of judiciary procedures, Erdoğan and the AKP have undertaken widespread purges of state institutions, public sector employees, media outlets, and even NGOs operating within Turkish borders

(Leezenberg, 2016). This includes more than 100,000 public sector employees such as academics, army personnel, judges, police officers, prosecutors, and teachers. In addition, 156 media outlets were closed by executive decrees between July 2016 and February 2017 with an additional 23 being closed by the Radio and Television High Council (Amnesty International, 2017).

Furthermore, many of the victims of the AKP's crackdown on dissenting voices have had their right to confidential communication with lawyers violated. According to a May 2017 Amnesty International report entitled *Journalism is Not a Crime: Media Crackdown on Media Freedom in Turkey*: “Over 47,000 people detained pending trial have been subjected to severe restrictions on their rights in detention, such as confidential access to a lawyer” (p. 3). In addition, a 2019 report from the Committee to Protect Journalists states that although the year 2019 marks the first time in four years that Turkey has not been the world’s worst jailer of journalists, the reduced number of prisoners does not signal an improved situation for the Turkish media. Rather, the decline in the number of journalists imprisoned from years previous reflects the successful efforts by Erdoğan and his administration to stamp out independent reporting and criticism. The report also mentions that terror-related charges have been lodged against many of the closed media outlets staff (Beiser, 2019).

Moreover, political opponents have also fallen victim to widespread arbitrary arrest and detention by Erdoğan and his administration. According to the pro-Kurdish Halkların Demokratik Partisi (People’s Democratic Party [HDP]), more than 22,000 HDP members have been arbitrarily detained since June 2015 (Holmes, 2021). Additionally, a closure case was filed against the HDP in May 2021 to entirely shut down the third largest party in the country for alleged ties to the PKK. A claim which HDP officials vehemently deny. Furthermore, HDP

assets have also been frozen by the state. This comes after nearly two million voters have already lost elected representation from elections in 2019, where democratically elected representatives in 38 district municipalities and three metropolitan municipalities won by pro-Kurdish parties were replaced with trustee appointments (Kurdish Peace Institute, 2022). This amounts to 100 percent of pro BPD/HDP voters in metropolitan municipalities, and 77 percent of voters from district municipalities losing their elected representatives to trustee appointments (Kurdish Peace Institute, 2022).

The aggressive and suppressive domestic policies that Erdoğan and the AKP have embraced are also a potential danger for those with interest in the highest levels of Turkish political office. A very recent example of this is in the case of the current mayor of Istanbul, Ekrem İmamoğlu. Once seen by many as the leading front runner to Erdoğan in the upcoming May 2023 presidential election, İmamoğlu was banned from politics and sentenced to more than two and half years in prison on charges of insulting members of the Supreme Electoral Council (Aljazeera, 2022). He and his legal team are currently appealing his sentence. Undoubtedly, the suppression of dissenting voices and political opponents in Erdoğan's Turkey by way of intimidation, criminal proceedings, and arbitrary detention shows no signs of decrease.

## **2.4 International Involvement and Interests**

Following the inception of the uprisings in 2011, the civil war in Syria has been used as a catalyst for multiple external actors and their divergent geopolitical interests. Not only in Syria, but in the greater Middle East as well. More than a decade in and with no clear end in sight, the future of Syria is still unknown. Furthermore, in tandem with the future stabilization of Syria as a whole, the continuation of Rojava and the AANES is also uncertain, as their survival is most likely contingent on their relationships with the Assad Regime, Russia, and the United States.

### **2.4.1 Iran**

Syria has long been a key ally to Iran and is seen as vital to Iranian interests in the Middle East. Iran has been allowed to move people, weapons, and monetary support through Syria to Iranian proxies such as Hamas, Hezbollah, and the Palestinian Islamic Jihad. In return, Iran has provided scientists, precursor chemicals, and training to support to Syria's chemical weapons programs (Fulton et al., 2013). Therefore, it was no surprise that from the beginning of the civil war, the Islamic Republic of Iran has been heavily involved not only militarily, but also through providing intelligence and logistical support for the Syrian government. This includes resupplying of vital military assets predominantly via air, ground troops made up of the Islamic Revolutionary Guards Corps (IRGC), Quds force, Hezbollah, and even Iraqi Shi'a militants such as the Abu al-Fadl al-Abbas Brigade. The Institute for the Study of War (ISW) describes these efforts as "extensive, expensive, and integrated" (Fulton et al., 2013 p.6). Iranian efforts conducted during this conflict have the specific aim of keeping Bashar al-Assad in power as long as possible, and to also set the course to continue utilizing Syrian territory for its own geopolitical interests in the region should the Assad regime fall.

In relation to the AANES, Iranian views towards the administration can be seen as similar to those of other regional and global actors in the conflict in that any cooperation with or tolerance for the AANES is only made in an attempt to further their own self-interests. Iran's geopolitical interests in Syria put it at odds with those of Turkey, and throughout the war Iran has attempted to place the AANES between the regional powers. However, despite the fundamental differences in policy and interests, cooperation between the two regional powers has been seen as both Iran and Turkey have a common interest in weakening or containing any form of grassroots, democratic autonomy in Syria.

In August 2013, both PYD co-chair Salih Muslim and KDP-S politician Abdulhakim Bashar were invited to a meeting in Teheran. Although the outcome of the meeting was unclear, it was said that Syrian Kurds were asked to support the Syrian government. This meeting would lead to allegations from the KDP-S and Kurdish National Council (KNC) that the PYD was working under the influence of Iran and Bashar al-Assad. The PYD has vehemently denied these claims, and evidence to the contrary has occurred both prior to and periodically throughout the war. This includes the Syrian government's frequent blockades to the YPG-held Sheikh Maqsood neighborhood of Aleppo, their denunciation of the PYD's federal and education system, relatively frequent clashes between government officials and PYD affiliated groups, and the PYD's boycott of government elections in Kurdish towns in both June 2014 and April 2016. Furthermore, PYD officials have stated on numerous occasions that they would cooperate with whomever was necessary to protect their interests and the civilians living within AANES territories (Allsopp & van Wilgenburg, 2019).

#### **2.4.2 Iraq**

The central government of Iraq's relations with the PYD began in July 2012, as both had incentive to do so. The PYD needed to secure stable land access to and from Iraqi territory to supply the autonomous areas with resources. Baghdad had interests much in line with Iran, and thus Damascus, as Tehran had provided vast support and military aid to Iraq's Shia militias in their fight against ISIS. Furthermore, Iraq's central government saw their cooperation with the PYD as a means of limiting Ankara and the Kurdistan Regional Government's (KRG) influence regionally. The PYD knew cooperation with the Iraqi central government was necessary in order to secure a stable border crossing, as they could not rely on their border crossings with the Kurdistan Region of Iraq (KRI) to remain open. One example of this dynamic occurred in



October 2013, when the YPG, in conjunction with the Iraqi government, captured the Yarubiyah border crossing from jihadist groups. However, this stable crossing route would only be temporary, as Kurdistan Democratic Party (KDP) Peshmerga would go on to gain control of the Iraqi side of the border crossing in June 2014 (Allsopp & van Wilgenburg, 2019).

Turkey had made itself indispensable to the KRI, as 44 percent of foreign companies investing in the region were of Turkish origin. In addition, 30 percent of Iraq's total imports were from Turkey, 70 percent of which was concentrated in the KRI (Dionigi, 2018; McDowall, 2021). Due to this considerable leverage, border crossings with the KRI were regularly closed at the behest of Turkey. Current leader of the KDP and former President of the KRI from 2005-2017, Masoud Barzani's relationship with Turkey would also come to directly affect his attempts at coordinating the 'Supreme Committee' among Syria's Kurdish parties, a joint administration aimed at establishing cooperation between the KNC and the PYD in Syria. According to McDowall, it was primarily Barzani's close political and economic ties with Turkey that left much doubt in the minds of many Syrian Kurds, as "They could not doubt that Barzani preferred the KNC over the PYD, but how far would he compromise Syrian Kurdish interests generally, in order to maintain good relations with Turkey?" (McDowall 2021, p. 684).

Further complicating relations between the Autonomous Administration, the KRG, Yezidis living in Sinjar, and the Kurdish population in general were the actions leading up to and following the Yezidi genocide perpetrated by ISIS on 3 August 2014 (Abraham et al., 2022; McDowall, 2021). As the central Iraqi government ultimately failed to defeat the advances of ISIS in and around Mosul and Anbar Province, KDP commanders gave the largely Yezidi and Christian villages west of Mosul assurances of protection against ISIS. However, they ultimately denied the local population's requests for weapons or the ability to arm themselves. In addition,

the vulnerable populations were also denied evacuations to the KRI on the grounds that they would be protected. However, Peshmerga forces chose to withdraw from these areas on 2 August as the Islamic State's forces approach to Sinjar loomed, leaving the vulnerable populations defenseless against their impending arrival (McDowall, 2021).

In the detestable actions that would follow, over 5,000 Yezidi men and boys were massacred while over 5,000 women and adolescent girls were forced into sexual slavery, advertised for sale on private servers, and suffered mass rape, torture, forced conversions, forced marriages, and forced pregnancies. Yezidi children captured were either given to Islamic State authorities for indoctrination and forced conscription if boys or given up for adoption to Sunni families if girls. Thousands of Yezidis who managed to escape fled to the mountains of Sinjar, where eventually aid was supplied by Iraqi, UK, and US aircraft. In stark contrast to the Peshmerga response, the YPG and YPJ quickly mobilized across the border to those stranded atop Mount Sinjar and coordinated an escape corridor to Derik with the help of US air support, staving off further IS advancements (McDowall, 2021). According to McDowall, the PYD/YPG had been aware of the potential dangers, and thus had already established contact with the Yezidis in Sinjar after the fall of Mosul. Beginning in July, they had even begun smuggling weapons into Sinjar while smuggling Yezidi militia members out for training. This KCK-affiliated militia was originally formed in 2007 after a string of attacks from Sunni extremists and would come to be known as the Yêkîneyên Berxwedana Şengalê (Sinjar Resistance Units), or YBŞ. Although their efforts proved to be too little and too late, the solidarity shown by the PYD, YPG, and YPJ during this tragedy in comparison to Peshmerga forces and the KDP would only give further credence as to why some Syrian Kurds were hesitant to embrace the KDP-S (McDowall, 2021 p. 820-821; 871).

Although the KRG made numerous attempts at courting the Yezidi community after their abandonment, the damage was done for many. Despite the significant loss of trust, the KRG still managed to incorporate some of the Yezidi fighters into their ranks. Nonetheless, these events would have a ripple effect on regional politics surrounding the Yezidis in Sinjar, as both Baghdad and the KRG wanted to regain influence in the region. Baghdad was more cooperative with the PKK and Syrian PYD affiliated YBŞ than the KRG, even reportedly paying their salaries between January 2016 and February 2017 until pressured to stop by the US and Turkey (Allsopp & van Wilgenburg, 2019).

### **2.4.3 Russia**

Russia has played a significant role in Syria from the beginning of the civil war, offering unwavering support for Assad (Souleimanov & Dzutsati, 2018). Initially, this support took the form of supplying arms and by representing the Assad government on the international stage. By September 2015, this role would increase to a military intervention from the Kremlin at the behest of Assad, as his troops were struggling against continuous attacks from various rebel and Jihadist groups. There was much for Russia to gain by coming to the rescue of Assad and the SAA. Assad had long been a key ally for Russia in the region, and combined with Iranian support for the intervention, Russia was given a near free reign to act in Syria (Hale, 2019).

Russia would use this free reign to counter U.S. and Turkish spheres of influence in the conflict, aiming to re-establish its role as a global power, reassert itself into a competition for influence, resources, and overall Russian advancement in the Levant and greater Middle East. By January 2017, it was apparent that Russia's involvement in the conflict had successfully increased its presence in the region. A long-term agreement was signed that would further

establish Russian presence in the country, extending its defense systems and naval and air bases (Charap et al., 2019).

In addition to offering unwavering support for Assad, the Kremlin at times appeared to represent Kurdish interests, particularly in Northwest Syria, as U.S. influence was mainly contained east of the Euphrates. Reportedly, Russia tried to include the PYD in international councils in both Sochi and Astana, even speaking with Turkish officials after they vetoed this proposal. This support could also be seen in April 2016, and again in August of the same year when Russian officials acted as mediators between the Syrian government and the Autonomous Administration when a week of clashes between the two erupted in the north-eastern city of Qamishli (McDowall, 2021).

Capitalizing on Kurdish fears of another Turkish invasion and the U.S.'s tepid responses to Turkish aggressions towards their allies in the fight against ISIS, Russia would use the goodwill it had earned from the Kurds to further it and the Assad regime's influence in SDF-held territories in northern Syria. By April 2017, Russia and the SAA had established military bases approximately 19 kilometers from the city of Afrin to curtail any potential Turkish incursion into Afrin Canton. Another example of this was seen towards the end of Operation Euphrates Shield after the Turkish military captured al-Bab in February 2017, when Russian officials once again mediated a deal between the SDF and the Syrian government in which the SDF handed over the control of several villages surrounding Manbij to the SAA after repeated Turkish threats to take the city.

In the civil war thus far, the Kremlin had wisely maneuvered the chaos of the conflict, using leverage from Turkey's obsession with the PYD and the U.S.'s unwillingness to fully commit to the protection of their partners in the fight against ISIS in fear of further complicating

its relationship with a NATO ally. This leverage was used to attempt to steer the Kurds away from their U.S. allies and into a further partnership with the Syrian government. However, the limitations of this partnership would soon become apparent to not only those within the Autonomous Administration, but also to the civilians living within the Afrin Canton.

Another Turkish military operation and occupation was announced in January 2018, dubbed 'Operation Olive Branch,' a tongue in cheek name referencing the vast olive industry present in the Afrin Canton (McDowall, 2021; Petti, 2020). Despite the establishment of Russian and SAA bases within the outskirts of the Afrin Canton, Turkey was given the green light for the operation from Russia after the AANES refused to hand the region to the Syrian government. Faced with the reality that it was seen as a non-state actor to international and regional powers, therefore, any cooperation and platitude Russia and the Assad regime provided to the Autonomous Administration was subsidiary to that of any state actor in the conflict. Nonetheless, the Autonomous Administration blamed an alleged deal over Idlib between Russia and Turkey as the cause for the green light being given.

David McDowall writes in *A Modern History of the Kurds* that “Like the US, Russia was also naturally more concerned with the deals it could cut with Turkey than with any substate actor” (2021, pp. 506-507). He also states that although Russia claimed the Autonomous Administration had refused to allow SAA troops into Afrin Canton, that it was hardly a justification for allowing Turkey to occupy it. He continues, writing “The only credible explanation was the political gains Moscow could obtain from Ankara” (2021, pp. 506-507).

#### **2.4.4 Turkey**

Initially, towards the beginning of Arab Spring, then-Prime Minister Erdoğan attempted to appeal to Assad diplomatically and persuade him to offer social and economic concessions to

the Syrian people. However, chaos had ensued by the end of 2011, with nearly 5,000 Syrian civilian deaths during clashes with the government. After his attempts to appeal to Assad had no effect, there was a shift in Turkish policy towards the Assad regime with Erdoğan stating that the aim of his administration would be to overthrow the Assad government (Hale, 2019). This shift could be seen in the following years, as Turkey began providing support to dozens of rebel groups in addition to hosting a Sunni Arab political group known as the Syrian Interim Government. This political entity intertwined itself with the Free Syrian Army (FSA) at the time. However, this political entity was unable to achieve much success, as Russian and Iranian support to the Assad regime picked up after the summer of 2013 (Hale, 2019).

By 2014, Turkish foreign policy towards Syria shifted its focus to the Kurdish population in the north of the country. Their focus was on the PYD who had gained control of a swath of territory in northern Syria when Syrian government forces withdrew from the area. Initially, between 2013 and 2014, the Turkish government reached out to the PYD and invited its leader, Salih Muslim, to Ankara and reportedly offered him a proposition. Turkish officials suggested that the PYD and its military wing—the YPG—link up with the FSA in a joint operation against the Assad regime (Hale, 2019; Allsopp & van Wilgenburg, 2019). Muslim apparently turned down the offer, as the PYD had stated from the beginning that their intent was not focused on attempting to overthrow the Syrian government, but on self-defense and the implementation of a society that looked towards the writings of Murry Bookchin and Abdullah Öcalan as an alternative to traditional nation-states.

From then on, a shift occurred in which the Turkish government would strongly oppose the PYD/YPG, who they viewed as an extension of the PKK (Hale, 2019). This shift from Ankara towards a policy of zero tolerance towards the PYD would have major ramifications, not

only for those cooperating with or working within the PYD/AANES, but also for the civilians living within AANES held territory. Ultimately, this would lead to multiple invasions and occupations of northern Syria, including Operation Euphrates Shield in 2016, Operation Olive Branch in 2018, and Operation Peace Spring in 2019. The motives, actions, and results of these operations will be explored in chapter 3.

#### **2.4.5 United States**

Although it was stated that America's interests must be protected, initially the Obama administration was hesitant to commit to another military involvement in the Middle East. Domestic support from the public for the United States to intervene was lacking, as the memories of the Invasion of Iraq and the continuation of troops in Afghanistan were fresh in the public's minds. The United States had recently completed the withdrawal from Iraq in late 2011, thus the Obama administration was adamant about reminding the public that although America's interests had to be protected, that there would be minimal troops on the ground if the U.S. were to get involved.

However, as violence escalated, the conflict turned into a full-scale civil war, causing millions to flee, and increasing regional instability. President Obama pledged in August 2012 to act against the Assad regime if they were to cross his administration's red line by the using of chemical weapons in the conflict (Hale, 2019). Soon enough, the Obama administration's strategy was tested by August 2013 when it was revealed that regime forces had dropped Sarin nerve gas from a helicopter onto civilian targets in the city of Duma in Eastern Ghouta. This attack would reportedly lead to the deaths of over 1,000 people (Hale, 2019).

In response to this attack, President Obama stated on 31 August that his administration was prepared to launch aerial attacks against regime targets. However, in a move seen as a

backtrack on his stated red line to some, Obama iterated that although he was not obliged to do so, that he would first go to Congress to seek permission. Even though it prohibited the use of ground troops, President Obama's request for limited action for 60 days was denied without a floor vote in both houses of Congress. John Kerry, then Secretary of State, disputed the claims that Obama retracted his red line, stating that he simply chose another route by pursuing a diplomatic solution in conjunction with Russia (Lee, 2017). Kerry was referring to the agreement negotiated by Russia and the U.S. in which the Assad regime agreed to surrender its chemical weapons stockpiles under international supervision (Hale, 2019).

This agreement, however, was insufficient in various manners. Former special representative of the Syrian National Coalition to Washington and the United Nations from 2013-2018, Najib Ghadbian (2021), has argued that in addition to the agreement not having the enforcement mechanisms in place to ensure the surrendering of stockpiles was followed through with, the agreement also did not include any measures to prevent the Assad regime from using any other type of airstrike against civilians. Ghadbian writes "After the deal, the [Assad] regime relied increasingly on the use of barrel bombs, which became its preferred weapon against civilians" (2021, p.66). Similar to the views of Ghadbian, William Hale, Emeritus Professor from the School of Oriental and African Studies at the University of London, saw the lack of action from the United States and the international community as insufficient, stating "Tragically, the Western powers' failure to act put Russia into a position of dominance, and Assad was able to carry on the civil war for years to come" (2019, p. 26).

Although the United States ultimately had no plans or intentions to overthrow the Assad regime, they did decide that the rapid degradation of regional stability called for a limited form of involvement to combat the swift takeover by ISIS. On 10 September 2014, President Barack



Obama announced his intention to “degrade, and ultimately destroy, ISIL through a comprehensive and sustained counterterrorism strategy” (The White House, 2022). This U.S.-led counterterrorism operation would come to be known as Combined Joint Task Force Operation Inherent Resolve (OIR). Coordinated and led by a three-star general under U.S. Central Command, OIR’s stated mission was to leverage Syrian opposition, Iraqi and other partners to defeat ISIS and increase regional stability in the Combined Joint Operations Area of Iraq and Syria.

Beginning during the Battle of Kobanî in 2014, OIR would expand to the use of airstrikes, intelligence units, and a small number of U.S. troops on the ground to assist, train, and advise local partner forces. Established in tandem with the Joint Task Force was the Global Coalition Task Force to counter the Islamic State. This coalition was made up of 66 countries and was led by a special presidential envoy that reported directly to the U.S. Secretary of State. Through this, the United States had established a multi-faceted approach to combat the Islamic State that included humanitarian aid, a focus on impeding the flow of foreign fighters into Syria as well as the uncovering of Islamic State finances, and continued partnerships with local forces (Jones et al., 2017).

### **3: Turkish Operations Within AANES Territories**

Since 2015, Turkey has undertaken several operations within AANES-held territories. While initial intent seemed focused on countering the Islamic State, statements made, and actions undertaken by Ankara leave no doubts that they view the PYD-led Autonomous Administration as a bigger threat than the Islamic State. Turkey's rationale for its actions in Syria are multi-pronged. Their actions in Idlib have been seen as a preemptive measure to prevent a number of the 3.9 million plus IDPs in and around Idlib from attempting to flee over the border into Turkey due to continued bombardments from SAA and Russian forces. Currently hosting over three million Syrian refugees, Ankara sees another massive wave of refugees as politically and financially unfeasible to absorb. In addition, Erdoğan has been vocal about his intentions to relocate Syrian refugees within Turkey into sections of the 30 kilometer 'safe zone' taken from the AANES.

Regarding its actions in current and former AANES-held territories, Ankara considers the YPG, and any group affiliated or ideologically aligned with the KCK to be an extension of the PKK, and therefore a terrorist group. Amy Austin Holmes argues in *Threats Perceived and Real* that although Ankara's fears may be justified, they are based on the past two decades and do not reflect the reality of the situation currently (Holmes, 2021). She continues, stating that in spite of the autonomous administration's ties to the PYD and the YPG, Ankara's actions in AANES territories now impact every religious and ethnic group within northern Syria, the KRI, and the Sinjar region of western Iraq (Holmes, 2021).

As mentioned in section 2.2., the grassroots structures, emphasis on multiethnic coexistence, and outreach to include other ethnicities administratively and militarily within the AANES give credence to this argument. Although much of Ankara's expansionism and aerial

attacks within the AANES are concentrated to Kurdish majority areas, attacks on what they would argue to be another branch of the PKK has actually transformed into a majority Arab and “multi-ethnic force that consists of Kurds, Arabs, Christians, as well as Yezidis and Turkmen” (Holmes, 2019). Nonetheless, the aggressive policies seen towards political refugees abroad, Kurdish rights activists, and despite its close ties to the KRI, any additional forms of grassroots Kurdish autonomy within or outside Turkish borders showcase the perceived threat that Ankara believes a greater autonomous region involving the PYD within Syria poses. Moreover, Turkey’s primary focus within Syria has been to leverage its regional and international standing, the Syrian refugee crisis, and its longstanding conflict with the PKK as a pretext to escalate its attacks on the Autonomous Administration and occupy large swaths of land in northern Syria.

Turkey invoked Article 51 of the UN Charter in its letters to the UN to justify its incursions into northern Syria in 2016, 2018, and 2019, citing their right to self-defense in order ‘to counter’ an ‘imminent terrorist threat.’ Citing within their letters that ‘PKK/PYD/YPG’ units close to Turkish borders ‘continue to be a source of direct and imminent threat’ by way of snipers and anti-tank guided missiles (ATGMs). In their letter to the UN for Operation Olive Branch, the Turkish state stated that over 700 cross-border attacks originating from Afrin have targeted Turkish cities. In spite of a lack of response from the broader international community to publicly question claims made by the Turkish state, several scholars and journalists alike have challenged, not only the number of attacks stated in Turkish letters to the UN, but to the overall legitimacy, and therefore legality of invoking Article 51 against the YPG/SDF/AANES. This will be explored below in sections 3.3. and 3.4.

### **3.1 Operation Shah Euphrates**

On 22 February 2015, hundreds of Turkish ground troops entered through the Kobanî border crossing in an operation dubbed “Shah Euphrates”. The first goal of the operation was to relocate the remains of Suleyman Shah, grandfather of the founder of the Ottoman Empire Osman I, from ISIS occupied territory southeast of Aleppo to the recently liberated Kurdish village of Esme in Kobanî. The second aim of the operation included evacuating the 38 troops stationed as security at the tomb. In a show of the PYD’s willingness to cooperate peacefully with Turkey, this operation was conducted in conjunction with the YPG, who played an active role in the operation as they maintained control of the Kobanî enclave and its surrounding areas (Letsch, 2015). Despite the accidental death of a member of the TAF, the operation was a success (Coskun, 2015). Although Turkish officials would later deny that the YPG offered support during this operation, Brett McGurk, the current National Security Council's coordinator for the Middle East and North Africa under President Biden and the former Special Presidential Envoy for the Global Coalition to Counter ISIS under the administrations of Presidents Obama and Trump stated that he helped facilitate the cooperation for this operation from Ankara (Open to Debate, 2019).

### **3.2 Operation Euphrates Shield**

By the end of 2015, Turkey came to the realization that their hope for the overthrow of Assad and the implementation of an Islamic administration led by the Muslim Brotherhood was unrealistic given the extent Russia and Iran were involved in aiding the regime. Therefore, Turkey scaled back its ambitions and focused its attention to "it’s one permanent obsession: neutralizing the Kurds" (McDowall, 2021 p. 507). Beginning in December 2015, with US air support, the SDF advanced southwards from Kobanî reclaiming the southern districts of Kobanî

canton before pausing on the west bank of the Tishrin dam. Their aim was to prepare for their anticipated assault of ISIS occupied Manbij.

The assault on Manbij began in June 2016 and ended in August of the same year with the SDF taking control of the city after a harrowing campaign of urban warfare against ISIS. While the SDF fought for control of Manbij, SDF troops in the Northwest Afrin Canton began advancing along with Russian air support eastwards out of Afrin to secure the city of Tal Rifa'at. Following the victory in Manbij, the SDF set its sight on the ISIS held town of al-Bab, located 50 kilometers west. As seen in Figure 3 below, securing al-Bab would have signaled a major victory for the SDF, as prior to Operation Peace Spring, Cizîrê and Kobanî cantons were completely connected. Securing al-Bab would have established a land bridge from Kobanî canton to Afrin canton and thus an unbroken territory the length of the Turkish border.

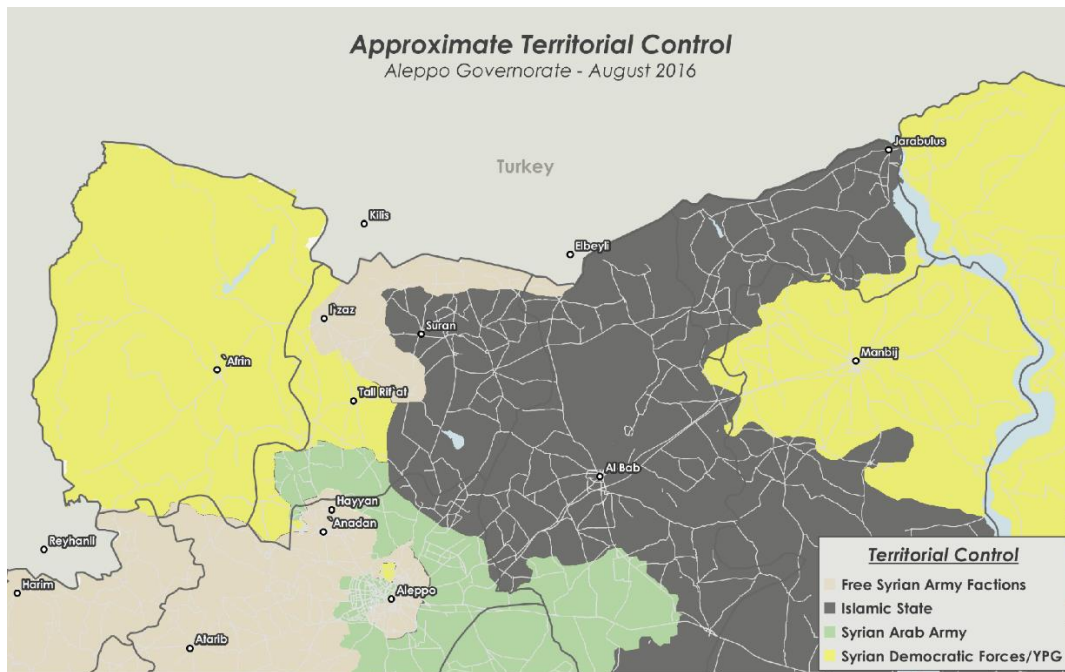


Figure 3. Data from LiveUAMap showcasing approximate territorial control in August 2016 prior to Operation Euphrates Shield (Cartography by Steven Escalante).

Turkey anxiously watched these SDF advances, and in the meantime had made it abundantly clear that it did not approve of AANES governance along its border. Turkey's border with Syria served as a supply route to support Syrian rebels and was also utilized extensively by ISIS for these purposes as well. However, all border crossings with SDF held territories were closed and Ankara began to build concrete walls along its Syrian border (Allsopp & van Wilgenburg, 2019; McDowall, 2021). This fact was also stated during a 2019 panel by Brett McGurk. In reference to Turkey's border with Syria, McGurk stated: "I ran the ISIS campaign. 40,000 foreign fighters, jihadis from 110 countries around the world all came into Syria to fight in that war and they all came through Turkey. The Caliphate was on the border of Turkey. We worked with Turkey, I was in Turkey more than any other country to have them seal their border and they would not do it. They said they couldn't do it, but the minute the Kurds took parts of the border its totally sealed with a wall, so let's be honest about the record. It is not the fact that we went with the YPG and told Turkey to sit in a corner, that's just not factual" (Open to Debate, 2019).

The stated goal of Operation Euphrates Shield was to capture the border town of Jarablus from ISIS and to remove 'terror groups' from the border. However, it became apparent that the actual purpose of the operation was to ensure that the SDF was prevented from connecting the Kobanî and Afrin cantons. Nonetheless, Turkey and Turkish-backed groups began an offensive into northern Syria as soon as Manbij fell to the SDF in August 2016, warning the US and the SDF not to advance any further westward (McDowall, 2021). Wanting to avoid conflict with their NATO ally and possibly Russia as well, the US halted the SDF advance and urged the YPG to retreat to the west of the Euphrates. The Turkish army and their proxies would go on to capture over 2000 square kilometers of territory, inflicting significant losses to SDF troops along

the way. Ankara would go on to gain substantial influence in the captured zone by way of Islamist and Turkmen groups under its command. Figure 4 displays the approximate areas of control in March 2017 after the operation.

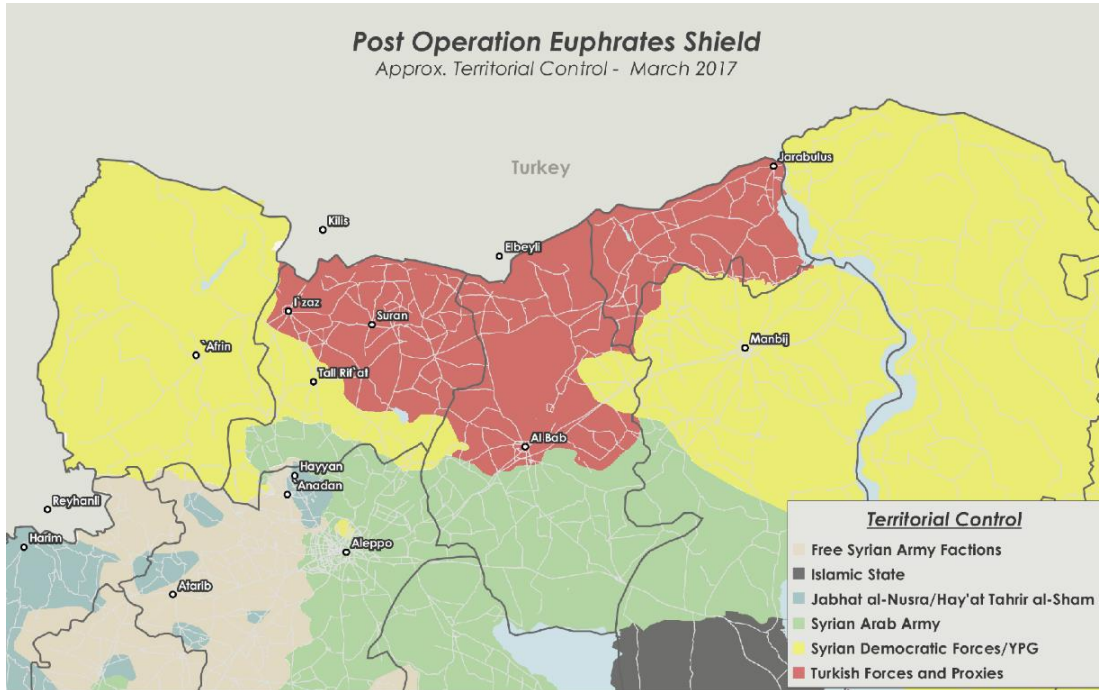


Figure 4. Data from LiveUAMap showcasing approximate areas of control after Operation Euphrates Shield in March 2017 (Cartography by Steven Escalante).

Despite losing territory and the ability to connect the Kobani and Afrin cantons, one minor victory for the SDF/AANES was the newly liberated city of Manbij remaining under SDF control. Composed of mostly Arabs from Manbij and surrounding areas, and formed prior to the Manbij Offensive, the Manbij Military Council (MMC) remained in control of the area despite threats from Turkey and the TFSA.

### 3.3 Operation Olive Branch

The northwestern Syrian city of Afrin is located near the Turkish border and is administratively within the Governate of Aleppo. Prior to 2018, outside of a relatively small

Arab population long integrated into local society, the population was largely Kurdish (al-Hilu, 2019). In addition, Afrin enclave contained at least 30 Yezidi settlements and also had a significant number of displaced Syrians relocate themselves and their businesses to the enclave, mostly from Aleppo (Holmes, 2021; al-Hilu, 2019). Afrin had been the most densely Kurdish part of modern-day Syria for at least 500 years, and where the PYD had established itself initially. The region of Afrin also served as an economic lifeline to the Autonomous Administration, as according to the Rojava Minister of Economy in Afrin, industry in Afrin included “50 soap factories, 20 olive oil factories, 250 olive processing plants, 70 factories making construction material, 400 textile workshops, eight shoe factories, five nylon producing factories, and 15 marble processing factories” prior to the invasion (Allsopp & van Wilgenburg, 2019 p.127).

In January 2018, Erdoğan announced a new military operation into Afrin after six months of warnings. Wishing to extend its ‘buffer zone’ within Syria and its control westward to Hatay province from areas acquired during Operation Euphrates Shield, Turkish forces and their proxies invaded under the oxymoronic name ‘Operation Olive Branch’. Effectively, the Kremlin had given the green light for Turkey to carry out the operation by withdrawing troops from its base in Kafr Jana after the YPG refused to turn over the area to the Assad regime (al-Hilu, 2019; McDowall, 2021).

Initially, the YPG/SDF chose to stay and try to resist the Turkish onslaught, an expected response considering the strong cultural and economic significance Afrin held with the AANES. Despite their will to fight, the YPG/SDF chose to retreat from Afrin’s city center by mid-March to mitigate further civilian casualties. A non-state actor with no air force, YPG/SDF troops were easily outmatched against continuous Turkish airstrikes. To make matters worse, the US forbade



the YPG from using anti-tank missiles provided to them for the fight against ISIS (McDowall, 2021).

During the two months of the Turkish offensive, hundreds of civilians were killed or wounded from indiscriminate aerial bombardments and shelling. Mashi et al. conclude in their journal entry on the legality of the operation under international law that this bombardment violated international law, “as the criteria of necessity and proportionality were not respected” (Mashi et al., 2022 p. 350). Unsurprisingly, many of those who were able hastily left their homes. In turn, according to the United Nations, an estimated 183,500 people had been displaced in Afrin district by 27 March 2018 (United Nations Meetings Coverage and Press Releases, 2018). Despite Turkey’s arguing that it had the right to self-defense under Article 51 of the United Nations Charter, the legality of this operation under international law has been widely disputed among legal experts.

For example, Mashi et al. argue that the minimum threshold for an armed attack was not met for the operation to occur under international law, and therefore the operation “did not respect the conditions of self-defence, as detailed in Article 51” and in so, actually violates Article 2(4) of the United Nations Charter (Mashi et al., 2022, pp. 327-330). Furthermore, the arguments presented by Mashi et al. have been prevalent from the beginning of the operation, as they argue that Ankara’s claim of more than 700 cross-border attacks originating from the Afrin region into Turkish villages in 2017 was not backed up with concrete evidence. In fact, they point to a 2018 BBC article from Irem Koker, in which the author’s study concluded that only 15 reports were found originating from Afrin after researching multiple sources for reported attacks on Turkey for the time period (Koker, 2018). Also notable from the article is that Koker reached out to the Turkish Ministry of Foreign Affairs for clarification and to release its records of the

700 incidents. However, Koker writes that they were simply given a booklet of news articles of “terror threats from Syria to Turkey”, in which their study had already recorded all but three minor incidents and told the 700 incidents included cases of “harassment fire” which included “anything that does not directly target Turkey, but is felt as a side-effect of an ongoing incident or clashes Syria” (Koker, 2018).

Nonetheless, after gaining control of Afrin, Milli İstihbarat Teşkilatı (National Intelligence Organization of Turkey [MIT]) and Turkish special units took over former security and military headquarters of the YPG, in addition to former YPG checkpoints. MIT would use the former YPG headquarters in order to directly oversee the operations of other parties engaged in securing the area, investigate, and detect suspected YPG cells (al-Hilu, 2019). In addition, Turkey also established a number of military bases and command posts, many of which throughout eastern Afrin towards the frontline with SDF troops (al-Hilu, 2019). Also established was a Syrian Task Force affiliated with the Turkish Police Special Operations and a Syrian Special Forces Unit directly under the command of MIT (al-Hilu, 2019). Furthermore, under the payroll of Turkey and directly overseen by MIT are some estimated 30,000 members of various armed factions and extremist groups encompassing the Syrian National Army (SNA). Some of which includes Al-Hamza Division, Ahrar Al-Sharqiya, Suleyman Shah, Sultan Murad Division, and the Sham Legion, a Syrian branch of the Muslim Brotherhood (al-Hilu, 2019; Puttick et al., 2020).

Firmly in control of Afrin, multiple reports including HRC-45-31 from the United Nations have shown that the Turkish army allowed National Army factions to openly loot, pillage, and expropriate the homes and properties of former Kurdish inhabitants for themselves or their families (Baghdassarian & Zadah, 2021; al-Hilu, 2019). In addition, various accounts of

kidnappings, forced detentions, torture, sexual assaults, extrajudicial killings, and shrine desecrations have also been widely documented despite the lack of a free press within Afrin (Baghdassarian & Zadah, 2021; McKeever, 2019). One example of journalists and researchers aiming to document abuses without the ability to do so on the ground is The Missing Women of Afrin Project (<https://missingafrinwomen.org/data/>). The Missing Women of Afrin Project alone has documented nearly 230 cases of reported kidnappings and murders, 135 of which were still missing as of July 2021 (Wilkofsky et al., 2021). In particular, arbitrary detentions have been a constant threat to the inhabitants of Afrin, as within a year of their seizure of the city, Turkish forces and their proxies have arrested more than 2,500 civilians, many accused of collaborating with or belonging to the YPG or PYD (al-Hilu, 2019).

In the months following the operation, Turkey would reportedly begin to resettle Sunni Arab refugees into the numerous vacant properties of those who fled. Many of the refugees came from Eastern Ghouta initially, although attempts to resettle refugees who fled into Turkey are also continuing (Eralp, 2020). However, it must be noted that by September 2018, an estimated 300,000 people had been displaced into neighboring IDP camps, towns, and villages as a result of the operation (Eralp, 2020). Figure 5 below displays the approximate areas of control after Operation Olive Branch in March 2017.

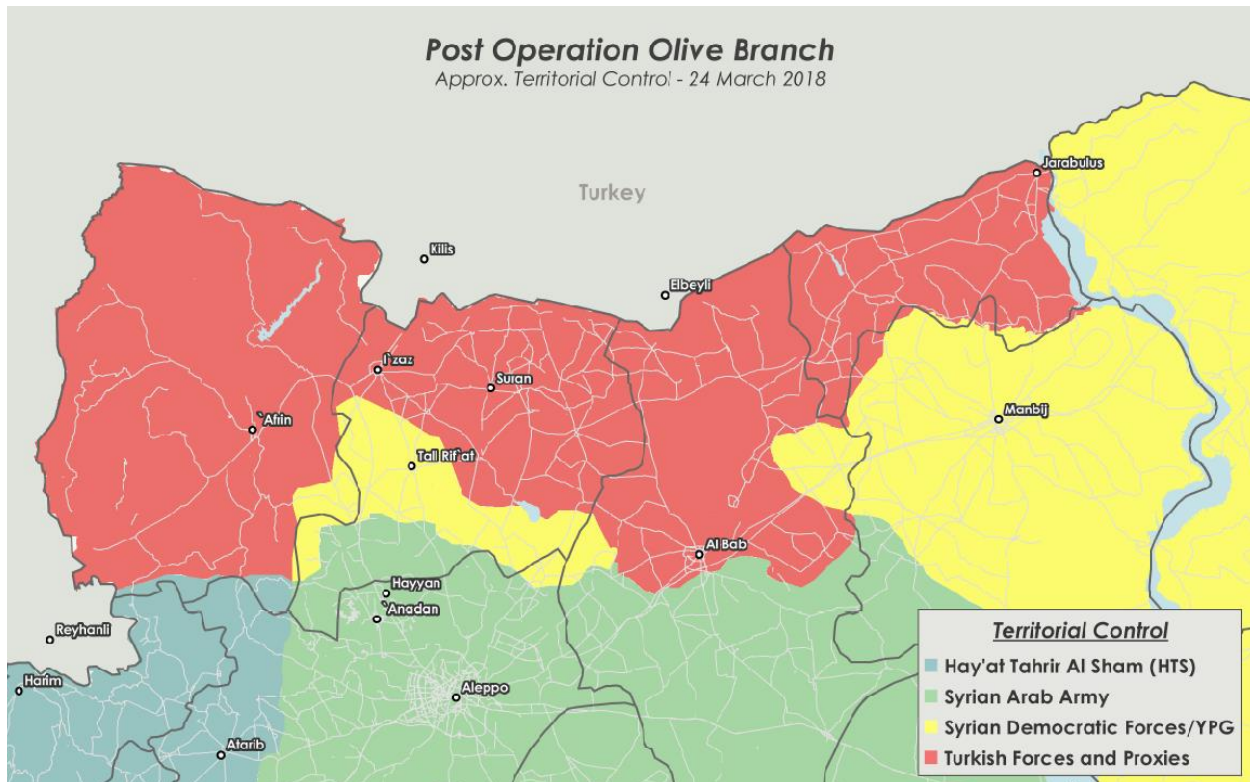


Figure 5. Data from LiveUAMap showcasing approximate areas of control after Operation Olive Branch in March 2017 (Cartography by Steven Escalante).

### 3.4 Operation Peace Spring

On 6 October 2019, much to the dismay of even some of those within his own administration, Trump announced after a phone call with Erdoğan that Turkey will be moving forward with its operation into northern Syria. The former president also stated in a press briefing that having defeated ISIS, US troops would no longer be in the immediate area (The White House, 2019). In turn, on 9 October 2019, the Turkish armed forces began its incursion into northeastern Syria in order to remove SDF troops from the area. Although cease fire agreements were made between Turkey, the US, and Russia by 23 October 2019, the fallout from the erratic withdrawal of US troops from areas such as Kobani, Manbij, and Ayn Isa would have a significant impact on the overall dynamics of the civil war as a whole.

Centered around the cities of Tel Abyad and Ras al-Ayn (Serê Kaniyê in Kurdish), the operation would ultimately lead to Turkey and its proxies' control of approximately 130 kilometers along Syria's northern border and extending roughly twenty-five kilometers to the south along the M4 highway. Initially, the ultimate objective of the operation was to push the Syrian Democratic Forces thirty kilometers to the south along the entire 450-kilometer border region from the Euphrates River to the Iraqi border (Eralp, 2020). However, commander in chief of the SDF, Mazloum Abdi stated in a 13 October op-ed for Foreign Policy that in spite of their lack of trust for the Assad Regime and Russia, due to the US withdrawal, they had no other option but to consider their proposals. Abdi's frustrations are apparent in his writings, as he references specific agreements made in the Northern Syria Buffer Zone, an agreement from August 2019 in which the SDF agreed to dismantle fortifications, withdraw heavy weapons from the border area with Turkey, remove YPG units from parts of the buffer zone, and allow joint US-Turkish ground patrols in Ras al-Ayn (Serê Kaniyê) and Tel Abyad (Abdi, 2019; Arafat, 2019).

Referencing relations with the Assad regime and Russia, Abdi writes "We know that we would have to make painful compromises with Moscow and Bashar al-Assad if we go down the road of working with them. But if we have to choose between compromises and the genocide of our people, we will surely choose life for our people" (Abdi, 2019). Shortly after the op-ed, the SDF would ultimately agree to allow SAA and Russian troops into Kobani and Manbij in order to deter another Turkish invasion (Perry, 2019). In addition, after facing heavy criticism from various media outlets and politicians, the Trump administration clarified that US troops would maintain a small presence in eastern Syria to deter any possible resurgence from the Islamic State.

Using many of the same methods and tactics utilized in Operation Olive Branch, the Peace Spring areas would be directly overseen by Turkey on matters deemed important, while various Turkish-backed extremist forces would mostly act independently on the ground. Unsurprisingly, a multitude of human rights violations occurred during Operation Peace Spring, including indiscriminate bombings, widespread looting, kidnappings, extortion, and expropriation of homes and businesses (SOHR, 2019). According to the Syrian Observatory for Human Rights (2019), the number displaced in Peace Spring areas exceeded 300,000 in the first 12 days of the operation.

The most infamous incident of the invasion was that of the 12 October 2019 execution of prominent Kurdish politician Hevrin Khalaf and her driver Ferhad Ramadan by Turkish-backed extremist group Ahrar al-Sharqiya after Khalaf's vehicle was initially stopped by gunfire on the M4 highway (Stocker, 2019). While it is believed Ramadan was killed in the initial barrage of gunfire, according to the coroner's report, Khalaf was dragged from the car and executed (McKeever, 2019). In addition, several other executions committed by Turkish-backed forces have also been documented, in which some of the victims included medical teams and civilians, both fleeing and returning to the Peace Spring Areas (McKeever, 2019).

Furthermore, the events of Operation Peace Spring would garner Turkey even more leverage over the AANES, as the Alouk water station would now be under their control. The importance of this water station cannot be overstated, as it serves drinkable water to an estimated 800,000 people in and around al-Hasakah (STJ, 2020). In addition, the water station is also the primary source to fill water trucks that transport water to the sprawling IDP camps in the surrounding areas, including al-Areesha, al-Hol, and Washo Kani according to a 2020 report from Syrians for Truth and Justice. Following the events of Peace Spring, Turkish forces have

shut off the water station several times without reason, despite Russian efforts to mediate an agreement which ensured Peace Spring areas would be supplied with electrical power from the Mabrouka station in exchange for keeping the water station running (STJ, 2020).

The unplanned, erratic, and shortsighted withdrawal of US forces perpetuated by the Trump administration was without a doubt a turning point in the civil war. The US withdrawal had unsurprisingly diminished its relationship with the AANES. In addition, the quick exit forced AANES officials to rely on the Assad regime and Russia to stave off another Turkish invasion. This necessity ultimately led to Russian troops taking over many of the abandoned former U.S. bases surrounding Kobani and Manbij, allowing SAA troops to enter into territories its security apparatus had not been present since the beginnings of the war. Although the re-entrance has been limited to a military presence, an entrance of the Assad regime in any capacity has cast doubt among many on the future of the AANES political project. Figure 6 below displays the approximate areas of control after Operation Peace Spring in November 2019.

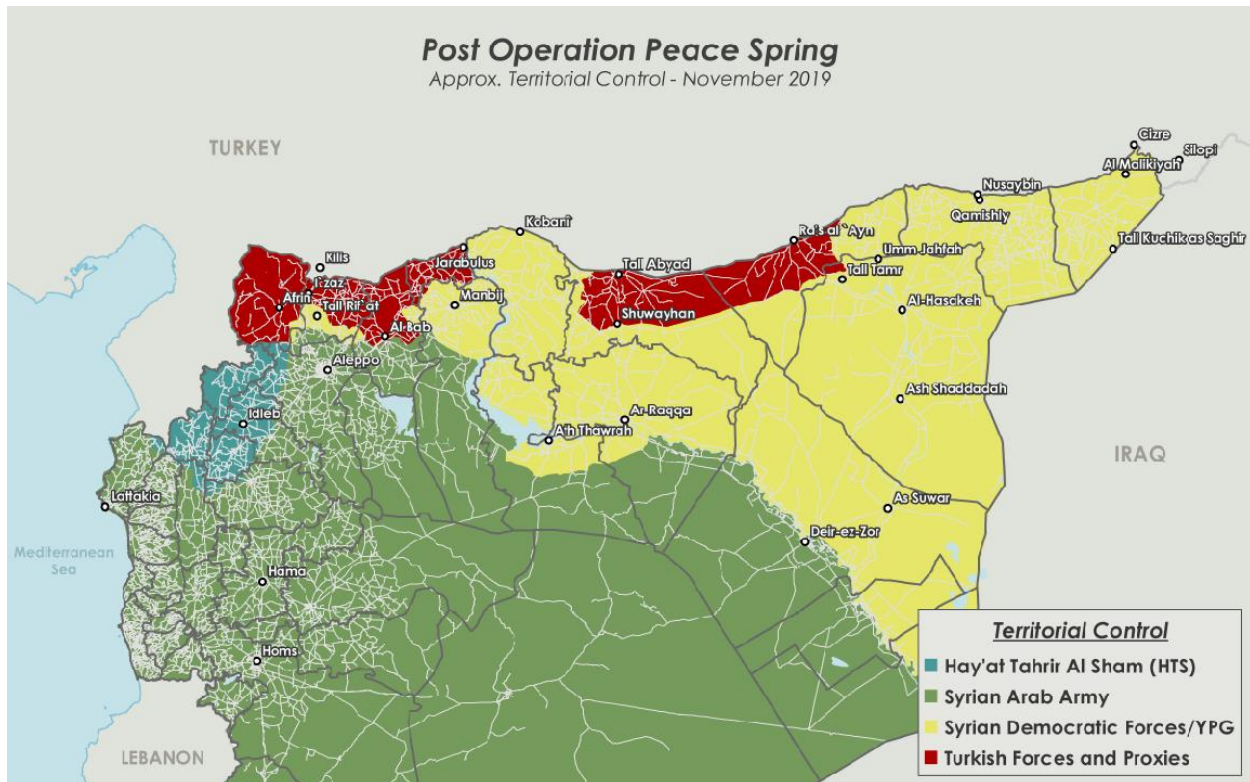


Figure 6. Data from LiveUAMap showcasing approximate areas of control after Operation Peace Spring in November 2019 (Cartography by Steven Escalante).

### 3.5 Operation Claw-Sword

On 13 November 2022, six people were killed and 81 were injured by a bomb in İstiklal Avenue, a popular Istanbul shopping street. The following day, a Syrian national was arrested as the primary suspect in the attack. According to the Turkish state, the suspect confessed that they were trained by the PYD as a special intelligence officer and that the attack was planned in a Kurdish-majority city in northern Syria (Michaelson and Narlı, 2022). Furthermore, the suspect reportedly confessed that their route had been Kobani, Manbij, and Idlib before crossing the border into Turkey (Bianet, 2022). However, Mazloum Abdi stated in a 22 November 2022 interview that they had nothing to do with the attack and had gathered information that links the suspect to an Islamic State family from Aleppo. He goes on to explain how three of the suspect's



brothers reportedly died fighting for the Islamic State, the suspect was reportedly married to three different Islamic State fighters, and that the suspect reportedly has another brother who is currently a commander among one of the Turkish-backed factions in Afrin (Zaman, 2022).

Nonetheless, Ankara would use this attack as a pretext to continue signaling for another ground offensive into Syria. Moreover, on 20 November 2022, Turkey announced “Operation Claw-Sword” in which they would escalate their bombing campaign across Iraq and Syria, targeting AANES personnel, critical infrastructure, and civilian infrastructure. During this operation, Turkish and Turkish-backed forces killed nearly 30 members of the SDF in between 19 November and 30 November (Rose et al., 2023). In response to the attacks, the SDF halted all counter ISIS operations. Although they would later resume, other coalition forces were forced to fill the gap left by the absence of the SDF (Rose et al., 2023).

## **4: Methods and Materials**

### **4.1 Software Programs**

#### **4.1.1 ArcGIS Desktop 10.x**

ArcGIS Desktop, a suite of geospatial software developed by Esri, was utilized extensively throughout this analysis. ArcGIS was the primary platform used to process multiple formats of geospatial datasets, primarily .csv and .kml(z) files. Datasets in the .csv format were imported, spatially projected, and exported as file geodatabase feature classes. Similarly, datasets in the .kml format were imported into ArcGIS and exported as file geodatabase feature classes to be used within ArcGIS.

After processing, ArcGIS served as the primary platform to visually explore geospatial data. In addition, it served as the primary platform for retrieving relevant conflict events using VBScript within the Select by Attributes tool. Geospatial tools such as Select by Location, Merge, Disperse Points, and Spatial Join among others were invaluable for creating new datasets of relevant spatial data used for producing maps, viewing, and aggregating statistics.

#### **4.1.2 ArcGIS Online**

ArcGIS Online, a cloud-based software to create and share interactive web maps, was used to locate spatial datasets publicly shared by other ArcGIS Online users. This spatial data was then exported to ArcGIS Desktop to create feature classes of Syrian administrative district polygons, major highways, military bases, border crossings, cities, towns, and villages.

#### **4.1.3 Microsoft Excel**

ACLED datasets were imported into Excel from Microsoft Access and exported to .csv format to be utilized in ArcGIS.

#### **4.1.4 Adobe Illustrator**

A graphical design software, Adobe Illustrator, was frequently utilized for editing and completing maps produced using ArcGIS software. Illustrator also proved useful in extracting .png or .tif images of maps located in PDF documents, which were then exported to be georeferenced in ArcGIS.

#### **4.1.5 Google Earth Pro**

Google Earth Pro, a software in which the focal point is to display satellite imagery as a 3D representation, was employed in the beginning of this analysis to view KML files exported from the Syria LiveUAMap (<https://syria.liveuamap.com/>) and The Missing Women of Afrin Google web map (<https://missingafrinwomen.org/data/>). The KML files were then converted to file geodatabase feature classes to be used within ArcGIS.

### **4.2 Assessment and Analysis**

#### **4.2.1 Cross-Border Assessment**

One focus of this analysis is a continuation of much of the same methodology derived from Amy Austin Holmes' May 2021 entry in the Wilson Center's Middle East Program Occasional Paper Series entitled: *Threats Perceived and Real: New Data and the Need for a New Approach to the Turkish-SDF Border Conflict*. Using impartial data from the Armed Conflict Location & Event Data Project (ACLED), Holmes compares the number of attacks in Syria attributed to Turkey or Turkish-backed forces against the SDF, YPG, and civilians between 1 January 2017 and 1 August 2020 to the number of attacks in Turkey attributed to the SDF and YPG between 1 January 2017 and 1 August 2020.

Holmes states the end date of 1 August 2020 was chosen to allow for the necessity of analyzing the data to ensure methodological rigor, while 1 January 2017 was chosen as the

beginning date as it is the earliest available ACLED data for both Syria and Turkey. Holmes also mentions some of the methodology used in the analysis to extract relevant events from the ACLED dataset, stating “We then specified the relevant actors in the conflict. These include the Turkish military as well as Turkish-backed factions which ACLED identifies either by the names of the individual factions, such as Hamza Division, Sultan Murad, Jaysh al-Islam, Ahrar al-Sharqiya, Ahrar al-Sham, and so forth, or as “Operation Peace Spring Forces” or “Turkish-backed forces,” as well as the SDF and YPG” (Holmes, 2021 p. 11).

Referring to the notorious infighting amongst the various Turkish-backed forces, Holmes continues to explain that “Because we are only interested in those attacks that target the SDF/YPG or civilians, we went through all 3,900 incidents and excluded events that involved infighting between Turkish-backed forces from our dataset, unless civilians were killed as a result of the infighting, in which case we included them” (Holmes, 2021 p.10). Using this methodology to parse through the data from ACLED, Holmes was able to extract 3,572 incidents in which Turkish or Turkish-backed forces targeted civilians or the SDF/YPG. This number includes “incidents that involved securing the Turkish occupation of Syrian land: Turkish patrols, building Turkish military bases or outposts inside Syria, imposing curfews in Turkish-held regions, detaining or arresting civilians who live in Turkish-held areas, and non-violent transfers of territory” (Holmes, 2021 p.11).

Furthermore, Holmes explained the reasoning behind removing these incidents from their final count of 3,319 incidents, saying that although these incidents may violate international or human rights law, they were excluded from the final tally in order to ensure their comparison remained as fair and accurate as possible. This was further explained by stating that it was impossible to find comparable events on the Turkish side of the border since the SDF/YPG does

not control territory inside Turkey. This being the case, Holmes stated that all incidents surrounding the securing of Turkey's occupation of Syrian land were removed from the count so that the comparison was limited to attacks that affected civilians or members of the YPG/SDF (Holmes, 2021).

Continuing their analysis with ACLED data for Turkey, Holmes found that there were only 22 incidents registered of cross-border attacks by the YPG/SDF into Turkey. Of the 22, there were ten which could not be independently verified. Holmes states: "In other words, we can only credibly account for 12 incidents. Furthermore, these 12 incidents all occurred after Turkey launched Operation Peace Spring in October 2019" (Holmes, 2021 p.11).

#### **4.2.2 Quantitative Assessment**

In addition to the continuation of Holmes's analysis on cross-border attacks from Syria into Turkey, my next analysis was to delve into a quantitative assessment of estimated civilian fatalities, civilian injuries, and infrastructure damaged in AANES territories by shelling, UAVs, and airstrikes from Turkish or Turkish-backed forces. Although the dataset from ACLED provides detailed descriptions of each event including the actors, location, time, fatalities, injuries, and the type of violence used, there is not a dedicated field to differentiate between civilian or military fatalities (Raleigh et al., 2010).

Therefore, fields for 'Civilian Fatalities', 'Civilian Injuries', 'SDF fatalities', 'Infrastructure Damaged' and 'Infrastructure Type' were added to the dataset. Basic VBScript and Python were used within ArcMap to select entries with relevant terms, phrases, actors, locations, and fatality count, which were then vetted individually to ensure methodological vigor. Methodology for fatality and casualty estimates followed that of ACLED, which states "When a

report does not note whether any fatalities occurred or not, or notes that it is unknown whether fatalities occurred at all, ACLED defaults to coding '0' as the fatality estimate. ACLED distinguishes between 'fatalities' and 'casualties.' Fatalities are assumed to be deaths. Casualties are assumed to be injuries or fatalities; as such, if a report only notes 'casualties', the conservative approach that ACLED takes is to assume all casualties are injuries and hence report 0 fatalities" (ACLED, 2023).

Methodology for fatality and injury recording for events where civilian fatalities and/or injuries were confirmed yet the number was unknown also included using the same data standards that ACLED employs in its datasets for like events with confirmed fatalities. This includes coding fatalities at ten for significant conflict events in active war zones where fatalities were confirmed yet the number was unknown, and coding fatalities at three for "attacks of more limited scope" in active war zones (ACLED, 2023). Furthermore, fatalities caused by shelling or airstrikes that targeted multiple villages were split between entries when fatalities were confirmed yet the number was unknown. The following is one example of this, where the 'Notes' column of six ACLED conflict events explained how shelling from Turkish forces struck six different villages, causing an unknown number of civilian fatalities:

" On 8 January 2022, Turkish forces shelled rockets at Salibi village in the countryside of Tell Abiad in Ar Raqqa governorate. Shelling of Bir Arab, Jurn Aswad, Khaneh, Salibi, Sawan, and Zarzouri resulted in the death of an unknown number of civilians. Unknown fatalities coded as 10 and split across the six locations as follows: 2 Bir Arab, 2 Jurn Aswad, 2 Khaneh, 2 Salibi, 1 Sawan, and 1 Zarzouri" (ACLED Event ID SYR98015, 2022).

Regarding the assessment on civilian and critical infrastructure, events that targeted grain silos were not included in the count for events targeting ‘Agriculture (farm; crops; livestock; grain silos)’ if the ‘Notes’ field indicated that SDF troops were positioned there, or SDF casualties occurred. This is because grain silos are often used as lookout points by troops in much of north and east Syria due to the prevalence of flat terrain. Furthermore, incidents targeting SDF infrastructure were not included in the assessment unless a prison was targeted, as the primary focus was on civilian and critical infrastructure. However, an argument could be made that such events should be included in the assessment due to the potential impact on civilian safety and security, as well as the potential impact on SDF and the Coalition’s stated goals in combating the presence of the Islamic State. Furthermore, the assessment includes only events in which damage was stated within the ‘Notes’ field of the ACLED event. For example, if the ‘Notes’ field only mentioned that Turkish airstrikes struck a town or village but did not specifically mention damage to critical or civilian infrastructure occurred, although it can be assumed damage was likely, the event was not included in the assessment.

#### **4.2.3 Targeted Attacks**

For this assessment, data from ACLED was supplemented with a dataset of targeted attacks on Autonomous Administration personnel and their affiliates compiled by Meghan Bodette, Director of Research for the Kurdish Peace Institute. In a 9 October 2022 tweet, Bodette compiled a list of 14 non-combatant politicians and AANES activists who fell victim to targeted assassinations or Turkish airstrikes ranging from 9 November 2021 to 4 October 2022. Using this dataset as a starting point, the 14 existing events were corroborated using both the Syrian and Iraqi ACLED datasets. Widening the scope from only non-combatant politicians and Kurdish rights activists, the aim of this assessment was to quantify the human toll airstrikes and

targeted attacks have had on the AANES and its struggles against religious extremists and historically repressive nation states.

Known Kurdish rights activists, journalists, and affiliates were included in the assessment because they have historically been victims of assassination and violence in both their homelands and abroad, alike. Furthermore, for combatants, this assessment only includes incidents where the targets held a prominent or commanding role within the SDF, YPG, or affiliate. Table 1 shows an example of two ACLED events, one valued in the assessment shaded in green due to the leadership role the target held, and one that was not valued in the assessment, shaded in red. For this assessment, VBScript and Python were utilized to further select relevant events pertaining to attacks on both combatants and non-combatants considered by the Turkish government to be affiliated with the PKK, based on 'Actors' field, 'Event Type' field, and various keywords within the 'NOTES' field, such as 'high-ranking', 'commander', 'leader', 'AANES', 'Autonomous Administration', 'QSD', 'YPG', 'activist', and 'affiliate', among others. After which the attack events were further vetted individually to ensure methodological rigor.



Table 1. Two event examples from ACLED dataset, note “QSD leader” vs. “QSD member”. Entry shaded in green was included in assessment, while entry shaded in red was not (ACLED, 2022).

event_id_cnty	notes	fatalities
SYR106013	On 26 September 2022, Turkish forces shot and killed 1 QSD leader in Ein Issa area in Ar Raqqa countryside. 1 fatality.	1
SYR103541	On 26 July 2022, a Turkish drone conducted an airstrike targeting a QSD point in Qazali town in Ar Raqqa countryside, killing 1 QSD member.	1

## **5: Results**

### **5.1 Cross-Border Attacks**

In total, there were 12 cross-border events attributed to the SDF, YPG, or affiliates within the Turkish ACLED dataset from March 2021 to February 2023 in which the attack reportedly originated from Syria into Turkey. Overall, the events were spread across six locations within Turkish borders. Four events occurred in both Karkamis and Oncupinar, while one event each took place in the following locations: Akcakale, Asagioylum, Cicekalan, and Kilis. In addition, all except for one of the events were shelling. According to the ACLED notes for the event, the one non-shelling event occurred when YPG combatants reportedly exchanged small arms fire across the border with Turkish Gendarmerie. Regarding fatalities, one of the events reportedly ended in three civilian fatalities occurring, while two other events reportedly caused three TAF fatalities, and 12 wounded in total amongst both TAF and special operations unit police officers. Figure 7 below displays a proportional symbol map of the attack events mentioned by location.



Figure 7. Proportional symbol map displaying Cross-border attacks into Turkey attributed to SDF, YPG, or affiliates from March 2021 to February 2023 (ACLED, 2023; Cartography by Steven Escalante).

Additionally, of the 12 events, eight events were attributed to the YPG, two were attributed to the Hêzên Rizgariya Efrînê, or the Afrin Liberation Forces (HRE), one was attributed to simply PYD, and the remaining event was attributed to the Yekîneyên Parastina Sivîl, or Civil Protection Units (YPS). HRE is an insurgent group created in December 2018 during the aftermath of Operation Olive Branch. Although the group has been disavowed by the YPG and no direct links to members or leaders have been uncovered, they are speculated to be a front group for the YPG in the same vein as the Kurdistan Freedom Hawks (TAK) are seen as a front to provide the PKK with plausible deniability for attacks targeting or affecting civilians (McKeever, 2019). Moreover, YPS are a PKK-affiliated militia group in urban areas of Turkey's

southeast, partially consisting of PKK youth militants absorbed from the dissolved Tevgera Ciwanen Welatparêz Yê Şoreşger, or Patriotic Revolutionary Youth Movement (YDG-H): the youth wing of the PKK (International Crisis Group, 2017). Although the event attributed to the YPS was included in the assessment count, it must be noted that the YPS is not known to operate within Syrian borders. In fact, using a VBScript, a query for ‘YPS’ among the Actor1, Actor2, Associate Actor1, Associate Actor 2, and Notes fields for the entire Syrian ACLED dataset from January 2017- March 2023 returned zero results. Furthermore, ACLED listed two Turkish news outlets as the sources for this event, Cumhuriyet and Sozcu.

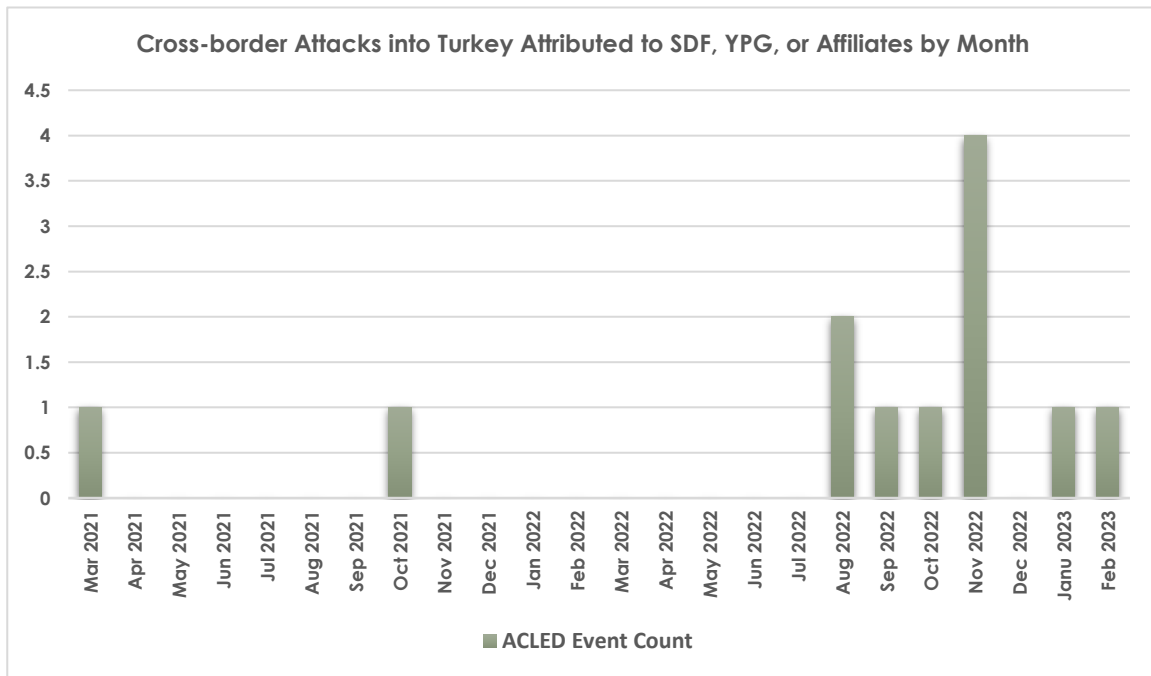


Figure 8. Cross-border attacks into Turkey by month attributed to SDF, YPG, or Affiliates (ACLED, 2023).

Figure 8 above displays the 12 attack events by month. As can be seen in figure 8, the number of attacks peak in November 2022 with four events. This increase in attacks during this month is of particular interest due to the events of Operation Claw Sword. Beginning on 20 November 2022, Operation Claw Sword consisted of hundreds of Turkish airstrike or shelling events across various targets in Iraq and Syria. Explored further in Section 5.2., figure 11 displays the number of ACLED airstrike and shelling events targeting the AANES from Turkish and Turkish-backed forces. As can be seen in figure 11, there is a clear and substantial increase in the number of airstrikes and shelling events during November 2022 due to the events of Operation Claw Sword. In fact, November 2022 is the month with the largest amount of airstrike and shelling events by Turkish forces for the entirety of the ACLED Syrian dataset.

With this in mind, it can be argued that the increase in attack events by SDF, YPG, or affiliates during November 2022 was a direct reaction to the attacks of Operation Claw Sword. This becomes clear when the exact dates of the four November 2022 cross-border attack events are examined. In fact, all four events either occurred on the same day as bombings began during Operation Claw Sword, or in the days after. The first two of the four attack events took place on 20 November 2022, the exact day Operation Claw Sword was announced, and the bombardments began (ACLED, 2023; Rose et al., 2023). Furthermore, the attack event which led to the three civilian fatalities occurred on 21 November 2022, simultaneously as the Turkish bombing campaign continued. Additionally, eight of the 12 TAF and special operations unit police officers wounded during the 12 attack events occurred on 20 November 2022.

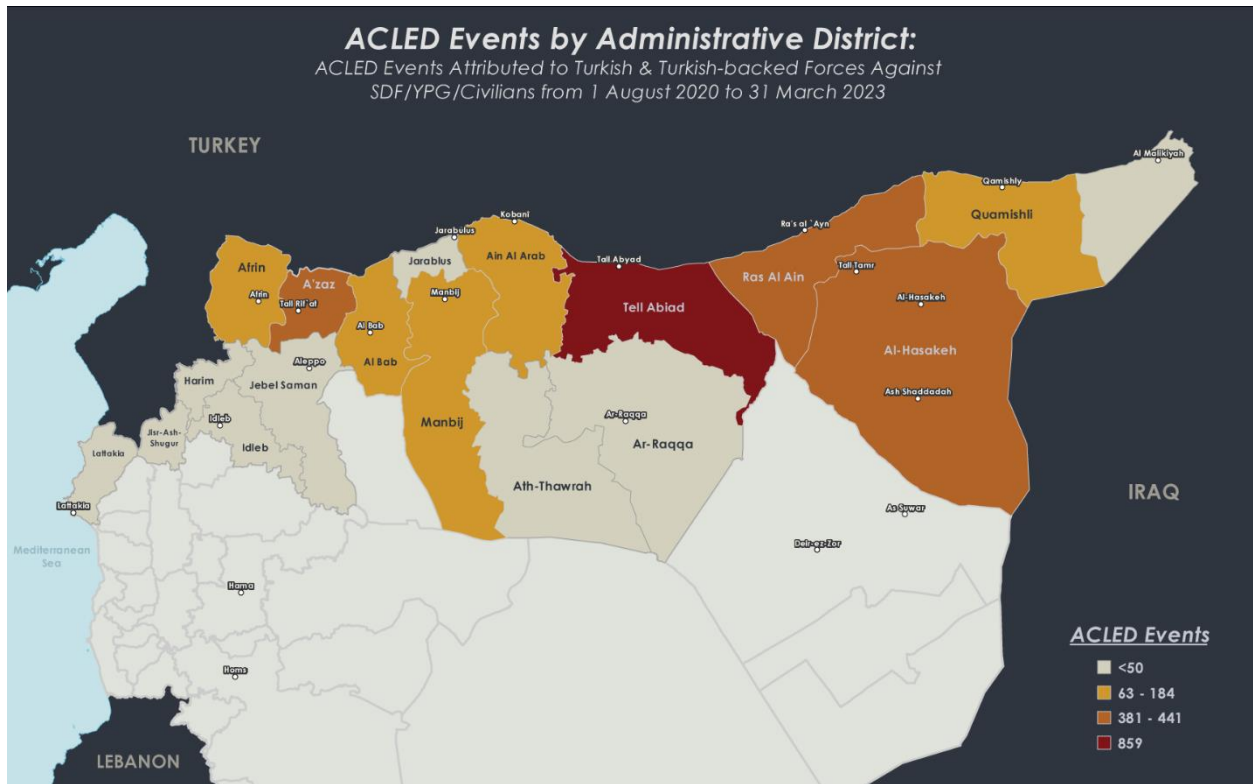


Figure 9. Cross-border ACLED events attributed to Turkish and Turkish-backed forces against SDF, YPG, or civilians by administrative district from 1 August 2020 to 31 March 2023 (ACLED, 2023; Cartography by Steven Escalante).

For Turkish and Turkish-backed forces cross-border events, in total there were 2,798 events from 1 August 2020 to 31 March 2023 in which the SDF, YPG, or civilians were either directly or indirectly targeted as the registered ‘actor2’ or ‘assoc\_actor\_2’ in the ACLED dataset. Figure 9 above displays a choropleth map of the distribution of these events by administrative district. Distributed among 18 administrative districts, 12 of the 18 districts directly share a border with Turkey. In addition, the remaining six districts are all adjacent to the 12 districts directly sharing a border with Turkey. Moreover, registered at 859 ACLED events, Tell Abiad is the administrative district with the most events for the time period examined. This is predictable, as Tell Abiad, along with Ras al Ain at 381 events are the two administrative districts primarily

encompassing the Operation Peace Spring areas. Overall, this distribution of events suggests not only that Turkey's goal of a 'safe zone' 30 kilometers into Syrian borders is still alive, but also that their previous statements regarding the repatriating of Syrian refugees into this 'safe zone' is also still a potential long-term goal.

Additionally, further geospatial analysis of Operation Peace Spring areas continues to substantiate the motives of future repatriations and possibly a future ground invasion still exists. Apparent from this analysis of the ACLED event data is the validity to reports of Turkish frontline encroachment and violations of the October 2019 ceasefire agreement. Examples of this can be seen when widening the scope to governates adjacent to the frontlines of the occupied Peace Spring areas. One frontline where this is evident when parsing the ACLED events is within Al-Hasakeh governate, as there were 803 events from Turkish and Turkish-backed forces in Tal Tamer and its surrounding villages from 1 August 2020 to 31 March 2023. Further analysis of the 803 events reveals that 734 of the events were either recorded as 'Shelling/artillery/missile attack' or 'Air/drone strike', a share of 91.4 percent of the total events. Nonetheless, the tactic of heavily targeting civilian areas near the frontline with the occupied areas is one with the potential goal of depopulating the areas or ensuring they stay depopulated, potentially making future encroachments and repatriations more feasible. At the very least, constant shelling such as this endangers civilians in the vicinity, and simply makes life unlivable in these areas due to the military threats and disruption to the local economies.

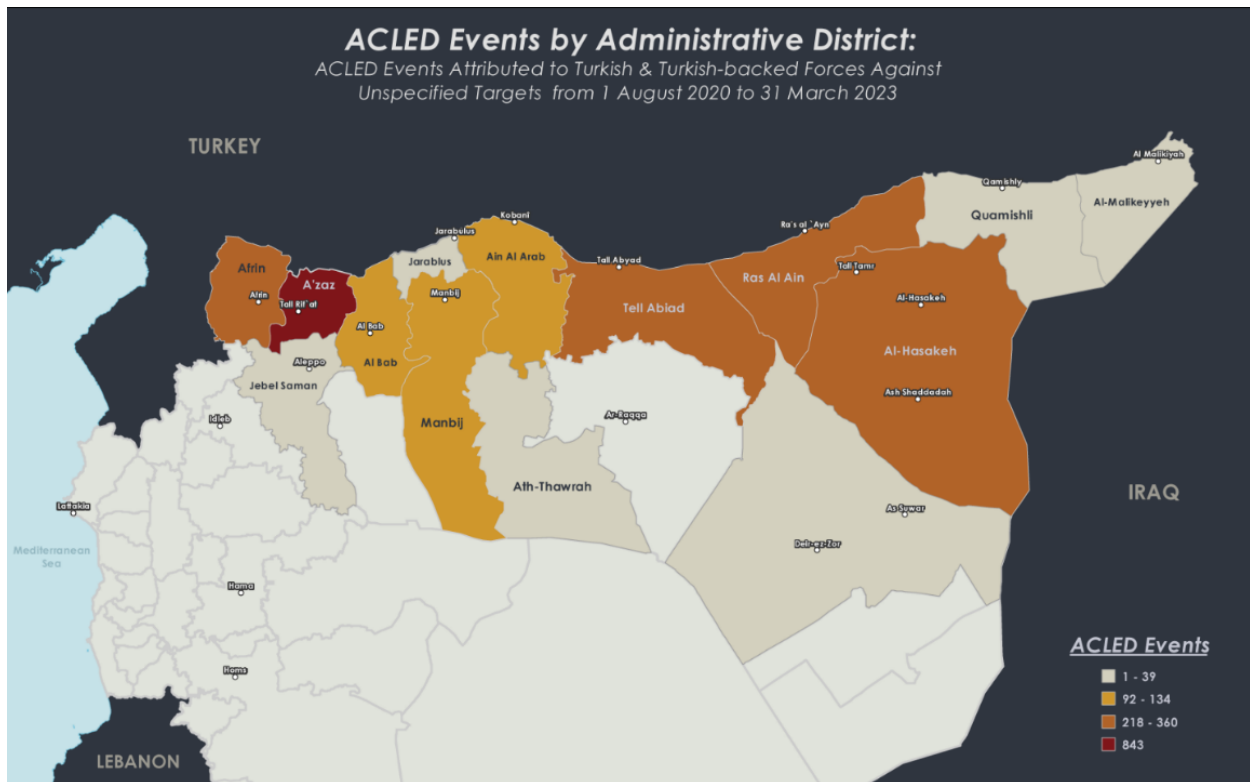


Figure 10. Cross-border ACLED events attributed to Turkish and Turkish-backed forces against unspecified targets by administrative district from 1 August 2020 to 31 March 2023 (ACLED, 2023; Cartography by Steven Escalante).

Similar to figure 9, figure 10 displays a choropleth map of 2,405 ACLED events by administrative district attributed to Turkish and Turkish-backed forces in which a target was not specified in the event recording. Although the maps classification ranges slightly differ since they are both using the natural breaks method of classification, the number of events distributed in the classification ranges are similar enough in range that the maps are comparable. Furthermore, geospatially the distribution of events is also very similar. In fact, 13 of the 14 administrative districts with recorded events in figure 10 are also districts in which Turkish and Turkish-backed forces had recorded events against SDF, YPG, or civilians, as seen in figure 9.



Overall, in comparison to the numbers in Holmes' assessment of 3,319 events in a 31-month period between January 2017 to 1 August 2020, the assessment using Holmes' methodology entailed 2,798 events in a 32-month period between 1 August 2020 to 31 March 2023. However, although the 2,405 events represented in Figure 10 lack the specification of a target, it must be noted that all 2,405 events are either within AANES-held or Turkish-controlled territories. In addition, 2,327 of the events were either registered as a 'Shelling/artillery/missile attack' (2,269 events) or as an 'Air/drone strike' (58 events). Furthermore, running a VBScript query to remove events within Turkish-controlled territories in Syria only removes 366 events, leaving 2,309 events registered to Turkish or Turkish-backed forces occurring within current AANES-held territory. Subsequently, this additional variable adjusts the number of events to roughly 5,000 for the 32-month period.

## **5.2 Quantitative Assessment**

The assessment of Turkish and Turkish-backed forces airstrike and shelling events targeting SDF/YPG forces or civilians within current and formerly held AANES territories detailed 3,295 events from January 2017, the earliest available date ACLED began recording incidents, until 10 February 2023. Parsing fatalities and extracting civilian casualty estimates from incident reports, an estimated 2,574 civilian casualties, and an estimated 1,293 civilian fatalities occurred due to Turkish and Turkish-backed forces airstrike and shelling events as seen in Table 2 below. Furthermore, using ACLED methodology for fatality estimates when the number was unknown, in total, estimated civilian fatalities were 21 percent higher than the estimated number of SDF fatalities for the same time period.

Table 2. Total counts from assessment of Turkish and Turkish-backed forces ACLED airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023).

<b>ACLED Airstrike/Shelling Events by Turkish &amp; Proxy Forces Within Current or Former AANES Territories: January 2017 – 10 February 2023</b>					
	ACLED Airstrike or Shelling Events	Estimated Civilian Casualties	Estimated Civilian Fatalities	Estimated SDF Fatalities	Events with Stated Damage to Civilian or Critical Infrastructure
<b>TOTAL:</b>	<b>3294</b>	<b>2578</b>	<b>1359</b>	<b>1021</b>	<b>219</b>

The figure below (figure 11) details the total number of 3,295 airstrike and shelling events by month and year. A few things of note are the uptick in events during the months of both Operation Olive Branch, (January 2018-March 2018), Operation Peace Spring, (October 2019), and Operation Claw Sword (November 2022). The number of airstrike and shelling events during the months of Operation Olive Branch were 165, 114, and 71, respectively. For the month of Operation Peace Spring, the number of events was 127. In addition, the most notable uptick in the number of events begins during the month of October 2021, and continues to climb for the next 15 months until the partial month of February 2023. During this timeframe, 13 of the 15 months registered at 50 or more events, seven of the months registered at over 100 events, and four of the months registered at over 150 events, with the number of events peaking in November 2022 during Operation Claw Sword at 281 events.

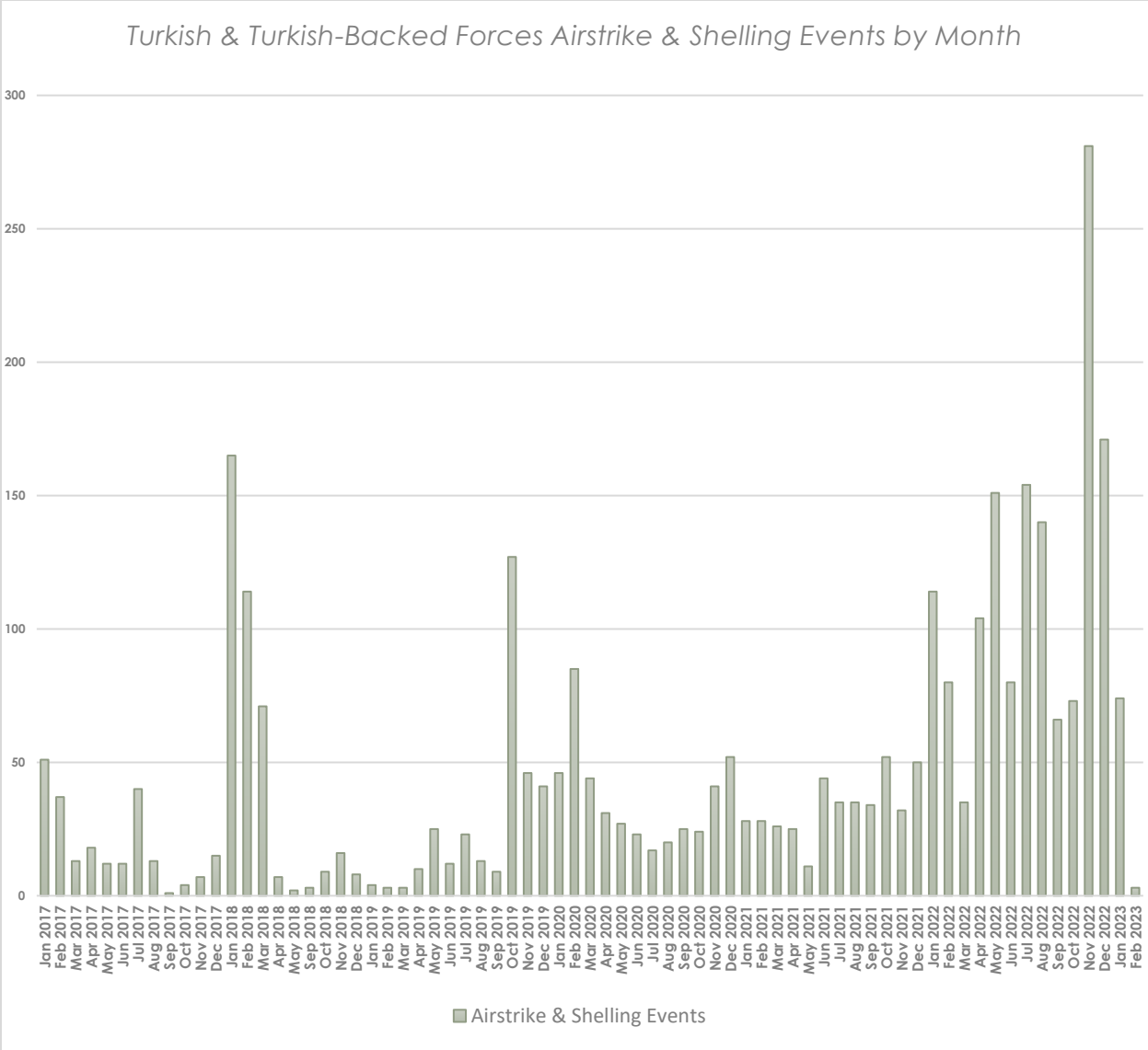


Figure 11. Total counts from assessment of Turkish and Turkish-backed forces airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023)

Furthermore, the attack events monthly distribution highlights an evolution in tactics from the Turkish forces, as they are increasingly utilizing a barrage of mostly artillery and airstrikes in lieu of another ground invasion during this continuing escalation against the AANES. Moreover, the escalation of attack events during this period will be explored further below and in section 5.3 when targeted attack results are discussed, as the monthly distribution

of attack events correlates to the targeting of AANES personnel, critical infrastructure, and civilians living within AANES territories.

The table below (Table 3) displays the 14 sub-districts with at least 50 ACLED airstrike/shelling events from Turkish and Turkish-backed forces from January 2017 to 10 February 2023, in which targeted SDF forces or civilians within current or former AANES territories. 2,788 of the total 3,295 attack events recorded were within the 14 sub-districts, a share of 84.6 percent. In addition, of the total estimated civilian casualties (2574) and civilian fatalities (1293), 74.5 percent of civilian casualties (1918) and 70.9 percent of civilian fatalities (917) occurred within the 14 sub-districts. Furthermore, estimated SDF fatalities within the 14 sub-districts maintained a similar percentage to that of estimated civilian casualties and estimated civilian fatalities within the sub-districts. Within the 14 sub-districts, 75.6 percent (772) of the total estimated SDF fatalities (1021) were recorded.

Table 3. Sub-districts with at least 50 events from assessment of Turkish and Turkish-backed forces airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023).

<b>ACLED Airstrike/Shelling Events by Turkish &amp; Proxy Forces Within Current or Former AANES Territories: January 2017 – February 10, 2023</b>					
<b>Administrative Sub-Districts with at Least 50 Events</b>	<b>ACLED Airstrike or Shelling Events</b>	<b>Estimated Civilian Casualties</b>	<b>Estimated Civilian Fatalities</b>	<b>Estimated Civilian Fatalities (High-end Estimate)</b>	<b>Estimated SDF Fatalities</b>
Ein Issa	589	140	148	N/A	184
Ras al Ain	466	300	62	N/A	121
Tal Tamer	371	111	11	N/A	185
Tall Refaat	287	143	38	N/A	69
Afrin	217	432	216	275	35
Tell Abaid	189	54	24	N/A	43
Azaz	188	27	7	N/A	10
Mare	80	22	2	N/A	34
Lower Shyookh	79	27	2	N/A	13
Jebel Saman	74	310	104	N/A	3
Ain al Arab	72	63	18	N/A	51
Manbij	70	54	15	N/A	21
Al Bab	53	43	178	270	2
Jandairis	53	192	92	99	1
<b>TOTAL:</b>	<b>2788</b>	<b>1918</b>	<b>917</b>	<b>1075</b>	<b>772</b>

Table 4. Events with stated damage to civilian or critical infrastructure from assessment of Turkish and Turkish-backed forces targeting SDF forces and civilians within AANES territories (ACLED, 2023).

<b>Turkish &amp; Turkish-backed Forces Shelling &amp; Airstrike Events with Stated Damage to Civilian or Critical Infrastructure: January 2017 – 10 February 2023</b>			
<b><u>Infrastructure Type</u></b>	<b><u>Incident Count</u></b>	<b><u>Infrastructure Type</u></b>	<b><u>Incident Count</u></b>
Material Damages	57	Utility (waterline; dam; sanitation)	7
Agriculture (farm; crops; livestock; grain silos)	43	AANES Municipal Building	5
Civilian (residential damage; commercial damage)	37	Logistical (airport; highway)	5
Medical (hospital; clinic; medical team)	16	Civilian (school)	4
IDP Camp	13	Prison	2
Civilian (bus; vehicle)	11	Utility (communications)	1
Utility (electrical)	10	Incidents Affecting Two or More Listed Infrastructure Types	11
Utility (oil field; refinery; petrol station)	8		

Table 4 above shows a distribution of Turkish shelling and airstrike ACLED events in which the ‘Notes’ field stated damage to critical or civilian infrastructure occurred. In total, 219 events occurred from 1 January 2017 to 10 February 2023. Furthermore, Figure 12 below displays the events by month. During the events of Operation Olive Branch in January 2018, there were 42 events in which civilian or critical infrastructure was targeted. Of the 42 events, 37 stated the damage was either civilian properties, or simply ‘material damages’, giving further credence to the reports of indiscriminate civilian bombings witnessed during the events of Operation Olive Branch (al-Hilu 2019).

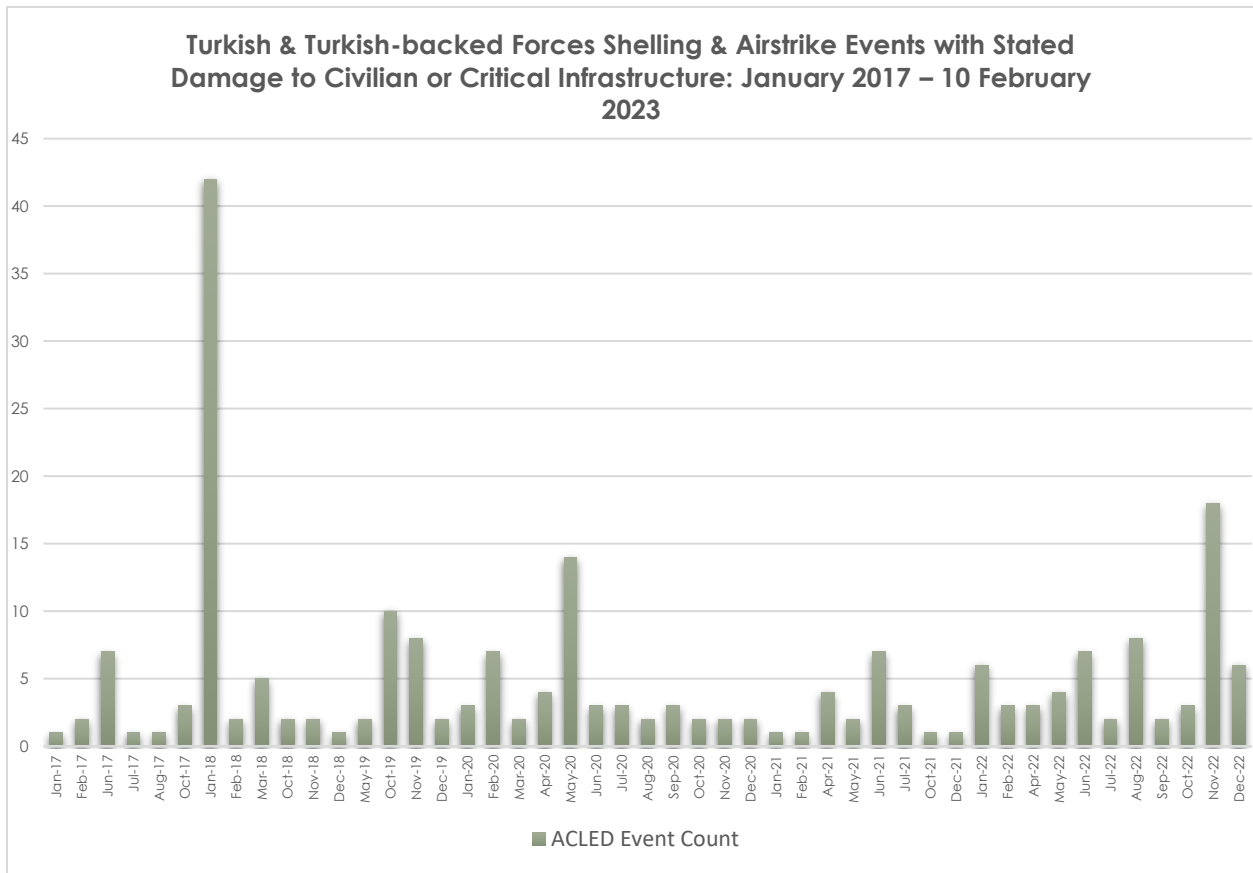


Figure 12. Total counts from assessment of Turkish and Turkish-backed forces airstrike/shelling events targeting SDF/YPG forces and civilians within AANES territories (ACLED, 2023)

Another month worth examining is November 2022 during the events of Operation Claw Sword. During this month, ACLED recorded 18 events in which damage occurred to civilian or critical infrastructure. Four events targeted oil fields and gas facilities within AANES territories, while electrical facilities, airports/airfields, and agricultural sites/livestock were all targeted three times each. Additionally, these attack events led to power outages in Derik/al-Malikiyah and forced several gas stations to suspend service during winter in an area where fuel tanks are the primary source of heat for resident's homes and a severe winter fuel shortage already existed (Rose et al., 2023). Furthermore, while civilian properties took the brunt of the damage from airstrike and shelling attack events during Operation Olive Branch, the airstrike and shelling attack events during Operation Claw Sword seemingly aimed to systematically target critical infrastructure in an effort to disrupt essential services, degrade the primary revenue stream of the Autonomous Administration, and undermine the Autonomous Administration's ability to provide basic services to the region.

### **5.3 Attacks on High-ranking Members of the SDF/AANES/Social Base**

In total, there were 43 ACLED attack events attributed to Turkish or Turkish-backed forces from 31 March 2019 to 3 January 2023 in which either directly targeted a high-ranking member of the AANES/SDF or other noncombatant affiliate, or led to their death, injury, or apprehension. Of the 43 events, 36 were directly attributed to either the armed forces of Turkey or MIT, with the remaining seven attributed to Turkish-backed forces. In addition, 31 of the 36 events attributed to Turkey were either by airstrike or drone strike. Furthermore, four of the remaining five events attributed to Turkey were by way of artillery shelling, with the remaining event classified as an "armed clash" in which the ACLED 'Notes' field stated that Turkish forces shot and killed one SDF leader on 26 September 2022 (ACLED, 2022).

As can be seen in Figure 13, the attack events have been concentrated to eight districts within Syria (Afrin, Al Bab, Ain Al Arab, Tell Abiad, Ras Al Ain, Al-Hasakeh, Quamishli, and Al-Malikeyyeh). Moreover, seven of the eight districts share a border with Turkey directly. In total, 42 of the 43 attack events attributed to Turkish or Turkish-backed forces were within the eight border districts. This is unsurprising considering Ankara's well-known objections against a PYD-influenced Autonomous region on its border. In Ankara's view, this objection necessitates targeting noncombatant targets as well. For example, a 23 June 2020 airstrike which led to the deaths of three Kongra Star members, a 27 September 2022 drone strike which killed two Co-chairs of the AANES Cizire Region Justice and Reform Office, both included in this assessment, and an 18 August 2022 airstrike targeting a U.N. funded school in which five students lost their lives (ACLED, 2022; Sallon, 2022). Furthermore, the one such event not displayed in Figure 13 took place in Kalar, Iraq.

Located in the Sulaymaniyah administrative district, Kalar is roughly 100 kilometers south from Sulaymaniyah, and over 250 kilometers south from Turkey's border with the KRI. This attack event occurred on 17 June 2022 when AANES Executive Council co-chair Ferhad Sibli was killed by a Turkish drone strike while in Kalar, Iraq, reportedly for medical treatment. Although an overwhelming majority of attacks on AANES leadership have occurred in districts sharing a border with Turkey, this event gives an insight into the lengths Ankara has gone to target AANES leadership outside of border regions.



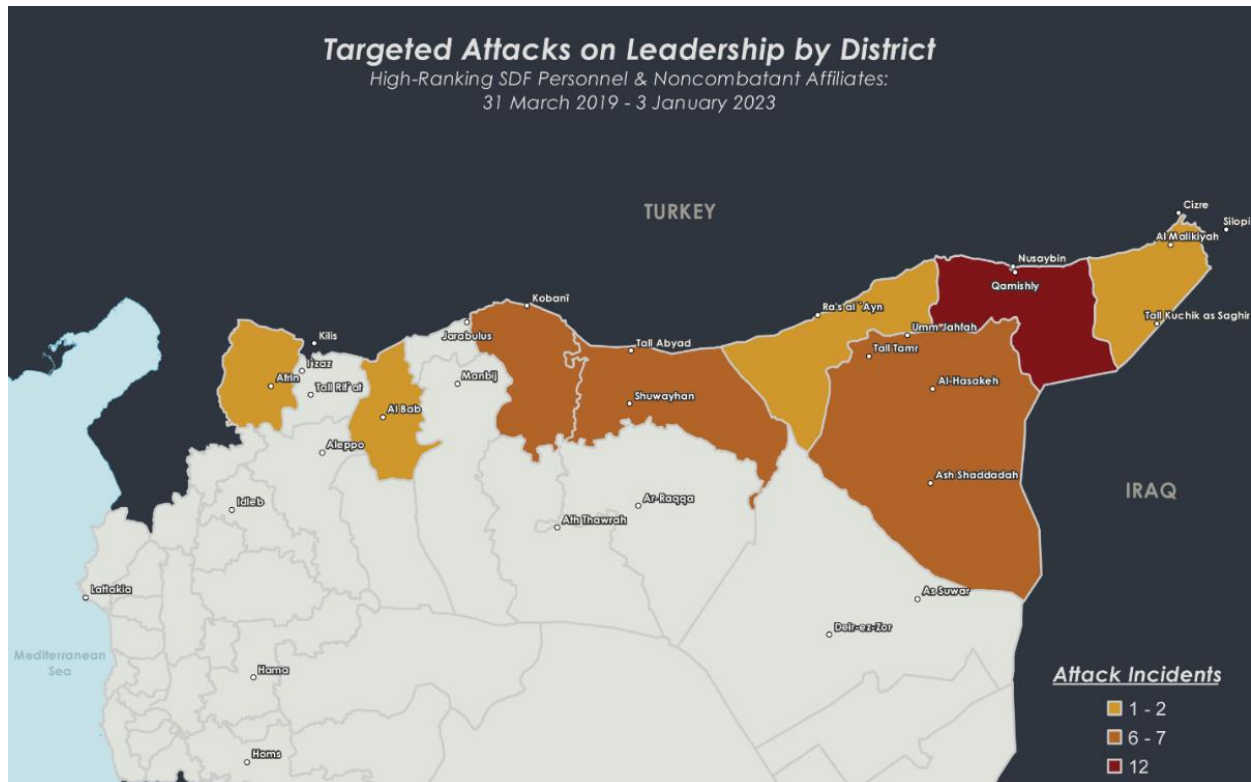


Figure 13. Choropleth map of attack events on high-ranking AANES/SDF personnel and noncombatant affiliates by Turkish and Turkish-backed forces from March 2019 to January 2023 (ACLED, 2023; Cartography by Steven Escalante).

The event breakdown displayed in Figure 14 helps shed further light on the number of attack events by year, including the yearly fatality totals. Essentially, there is an increase in the number of events beginning in 2021, in which the percentage of events increased by 300 percent from the previous year. However, although the 2021 increase from the year prior is actually the largest yearly percentage increase from the years examined, the statistic does not necessarily reflect what would become the centerpiece of this assessment. The 2021 statistics do, however, aid in displaying a pattern that would continue for the year 2022.

While there were nine attack incidents and 11 fatalities for the year 2021, the number would increase significantly in the year 2022 to 26 events and 28 fatalities. 26 events in 2022 is a

288 percent increase from that of 2021. Regarding fatalities, for the year 2022 there was a 254 percent increase from the year prior. This sharp increase in both events and fatalities during the year 2022 represents a substantial escalation by Ankara to target Autonomous Administration leadership.

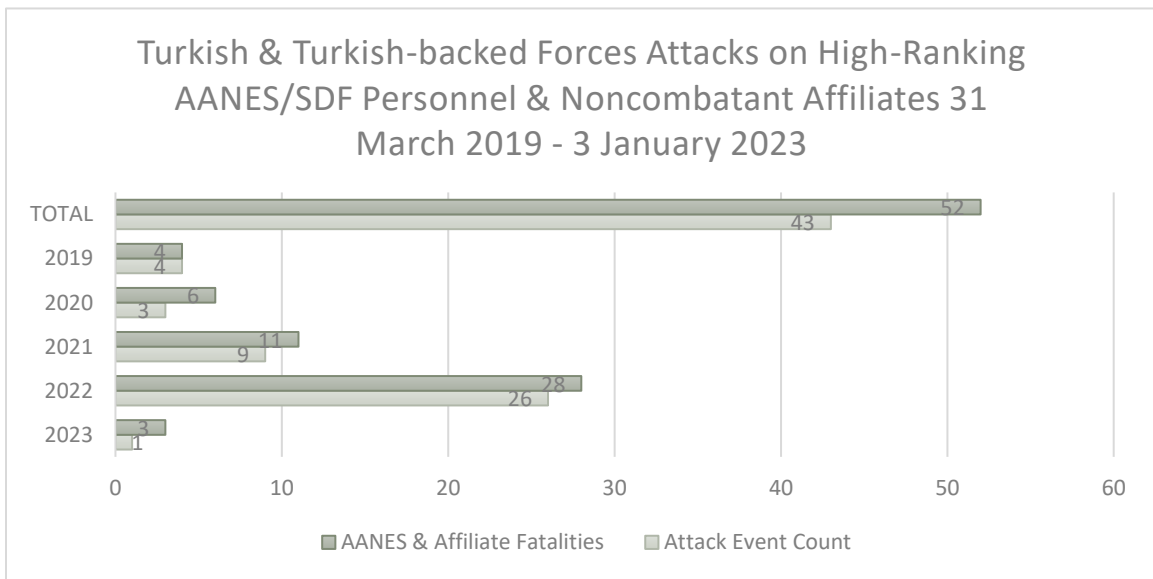


Figure 14. Attacks by year on high-ranking AANES/SDF personnel and noncombatant affiliates by Turkish and Turkish-backed forces from March 2019 to 3 January 2023 (ACLED, 2023).

During this escalation in the later months of 2022, including some of the events of Operation Claw Sword, several attack events targeting SDF leadership attributed to Turkish forces occurred. A few of the attacks will be highlighted, as they provide further context to Turkey’s multifaceted approach seemingly to degrade, limit, and undermine the Autonomous Administration’s ability to govern and provide security. One example a few months prior to Operation Claw Sword occurred on 22 July 2022, in which Jiyan Tolhildan (Salwa Yusuf), a deputy commander of the SDF who had helped establish the YPJ, and two other commanders in the SDF’s Yekîneyên Antî Teror, or Anti-Terror Units (YAT) task force were killed by a Turkish

airstrike near Qamishli. In addition to this attack, on 22 November 2022, an airstrike conducted by Turkey targeted a joint Global Coalition and YAT base in Hasakah, killing two of the United States Special Operations Forces-trained YAT members (Zaman 2022). On 23 November 2023 the following day, Turkish drone strikes reportedly killed eight SDF fighters guarding the infamous al-Hol camp, known for housing around 50,000 IDPs, some of which include family members of fighters from the Islamic State. In the chaos after this strike, several detainees reportedly attempted to escape the camp (Rose et al., 2023).

## **6: Summary and Conclusion**

### **6.1 Summary of Geospatial Assessment**

The first objective of this research was to continue much of the same methodology derived from Amy Austin Holmes' assessment in *Threats Perceived and Real*. In doing so, it was determined that despite the lack of another ground invasion into northern Syria, the number of ACLED events attributed to Turkish or Turkish-backed forces targeting SDF, YPG, or civilians for essentially the same timeframe has at best, decreased by 16 percent. However, considering the geospatial overlap of the 2,405 events of what could most likely be attributed as indiscriminate shelling into AANES territories, the number is realistically much higher than the previous 31 months accessed by Holmes. Furthermore, results for the SDF/YPG cross-border attack events into Turkey were nearly identical in number to those of Holmes, as it was determined that at most, 12 cross-border attacks occurred. Moreover, the events during the month with the highest number of cross-border attacks for the 32 months assessed all occurred after the unprecedented escalations of Operation Claw Lock had already begun.

The next objectives of this research were to assess and quantify the impacts on civilians, high-level SDF/AANES personnel, and civilian/critical infrastructure from Turkish and Turkish-backed forces shelling and airstrike events within current and former AANES-held territories. Through this assessment, it was found that there was a tangible escalation of airstrike and shelling events in 2022 to levels not seen since the months of Operation Olive Branch and Operation Peace Spring. Moreover, the assessment of targeted attacks on SDF/AANES personnel quantified the human toll the 2022 escalation has had on the AANES' ability to provide security and govern. Furthermore, in addition to the increases seen beginning in January 2022, the events of Operation Claw Sword marked an unprecedented escalation in the number of

airstrike and shelling events from Turkish and Turkish-backed forces, several of which targeted critical and civilian infrastructure. The assessment was also able to estimate civilian casualties and fatalities using ACLED methodology through common data management, data modeling, and geospatial analysis practices.

## **6.2 Future Studies and Conclusion**

### **6.2.1 Future Studies**

This research primarily focused on quantitative assessments of ACLED event data to give a broad overview of the situation in north and east Syria, by comparing cross-border events and primarily focusing on the events and event types initiated by one side of the conflict towards the other. Possible future studies utilizing ACLED data include an evaluation of overall action-reaction, or action-reaction for specific frontlines along the border of occupied areas such as Ein Issa, Abu Rasin, Tall Refaat, and Tal Tamer. The results from the cross-border analysis suggested that escalations initiated by Turkey led to a minor increase in the number of cross-border events from SDF-held territories. This considered, along with the fact that the SDF is also guilty of shelling into Turkish-occupied areas of Syria, a more in-depth analysis on the dynamics of this could prove fruitful.

In addition, considering the Assad regime and its allies widespread bombing campaigns, the methodology used in this study could be repeated to estimate civilian casualties and civilian/critical infrastructure targeted in and around heavily targeted areas such as Idlib. Moreover, much of the methodology used in this study could also be repeated in Iraq's Shengal Valley and the KRI, as members of the KCK affiliated YBŞ have been targeted by Turkish airstrikes much like members of the SDF/YPG. Furthermore, Turkey's campaign against the PKK in the Qandil Mountains of Iraqi Kurdistan is still underway and has been known to

produce civilian casualties such as the 20 July 2022 artillery strikes leading to the deaths of eight tourists in a resort area in the Zakho district (Abdul-Zahra & Yahya, 2022).

### **6.2.2 Conclusion**

Essentially, the goal of this research was to utilize common geospatial analysis practices in order to further gain insight into Turkish and Turkish-backed forces actions within north and east Syria. Seemingly, these actions can be portrayed as antagonistic, and seemingly meant to disrupt any semblance of stability for those within these areas. After negotiations with the PYD broke down in 2013, Ankara has undertaken a multifaceted approach which suggests the intent to degrade the AANES by any means necessary, including three prior ground invasions. As the assessments in this research suggest, everchanging international dynamics have led to a shift in Ankara's tactics, in turn leading to a visible upward trend in cross-border events, shelling and airstrike events by month, and in their efforts to target leadership, both combatant and noncombatant.

The geospatial distribution of ACLED airstrike and shelling events suggests that the targeting of civilian infrastructure with heavy shelling along villages close to their occupied areas and the border were most prevalent. Regarding the timeline of events, the monthly distributions remained fairly consistent outside of the months of Operation Olive Branch and Operation Peace Spring, before a substantial trend upwards is seen beginning in 2022. Furthermore, November of the same year marked an unprecedented string of aerial attacks across north and east Syria. In addition to the quantitative assessment of civilian harm through these means using ACLED fatality methodology, the critical infrastructure assessment also showed a moderate upward trend in 2022 of targeting essential infrastructure including water pipelines,

electrical power stations, medical buildings, oil fields, and gas facilities. In turn, causing mass power outages and worsening an existing gas shortage during winter. Further environmental pressures briefly mentioned in section 3.4. include the disrupting of water provisions by cutting off the water supply from a major water station in the Peace Spring areas and lowering the levels of the Euphrates River, which a September 2022 report from the United Nations and a November 2022 report from Human Rights Watch both stated exacerbated, if not directly contributed to a cholera epidemic (UN News, 2022; HRW, 2022). 2022 in particular also marked a substantial increase in targeted attacks on SDF forces, as well as both combatant and noncombatant leadership within the AANES. Overall, the peak of the upward trend seen in 2022 would inevitably lead to the halting of counter-ISIS operations temporarily and the degradation of the AANES' ability to provide security and govern effectively due to the threat of aerial attacks.

Undoubtedly, as this research concluded, the focal point became Turkey's shift in tactics following their last ground invasion in 2019. Although considered less intensive than the actions during Operation Olive Branch and Operation Peace Spring, the assessments in this research suggest the upward trend in attack events seen during the year 2022 ultimately serves much of the same purpose as another ground invasion. Although the emergence of the Islamic State led to some slight changes focused primarily on utilizing the SDF in the fight countering them in Syria, continuing status-quo U.S. policy does not seek to affect a broader diplomatic solution. Therefore, Ankara has correctly realized that they can continue towards many of the same goals achieved in 2018 and 2019 by weakening the Autonomous Administration in a variety of manners other than a full-scale ground invasion. All without receiving any or very little international response while doing so.

## References

- Abdi, M. (2019, October 13). *If we have to choose between compromise and genocide, we will choose our people*. Foreign Policy. <https://foreignpolicy.com/2019/10/13/kurds-assad-syria-russia-putin-turkey-genocide/>
- Abdul-Zahra, Q., & Yahya, R. (2022, July 20). *Turkish strikes in northern Iraq kill at least 8 tourists*. AP NEWS. <https://apnews.com/article/middle-east-turkey-iraq-baghdad-7488a761ef3fc1115a2307701d4be50c>
- Abraham, A., Eatwell, T., & Zammit Borda, A. (2022). *State responsibility and the genocide of the Yazidis*. Yazidi Justice Committee. [https://uploads-ssl.webflow.com/627bd75ca5e3f80964e3b246/62c44c59b6125c40850062cc\\_YJC%20-%2006.07.22%20-%20State%20Responsibility%20and%20the%20Yazidi%20Genocide%20-%20Final.pdf](https://uploads-ssl.webflow.com/627bd75ca5e3f80964e3b246/62c44c59b6125c40850062cc_YJC%20-%2006.07.22%20-%20State%20Responsibility%20and%20the%20Yazidi%20Genocide%20-%20Final.pdf)
- Al-Hilu, K., & Cuyler, Z. D. (2019). *Afrin under Turkish control: political, economic and social transformations*. In *Publications Office of the European Union*. European University Institute. <https://op.europa.eu/en/publication-detail/-/publication/84f2be86-3385-11eb-b27b-01aa75ed71a1/language-en>
- Aljazeera. (2022, December 15). *Why has Istanbul mayor Imamoglu been sentenced to prison?* [Www.aljazeera.com. https://www.aljazeera.com/news/2022/12/15/why-has-a-turkish-court-given-istanbul-mayor-a-prison-term-explainer](https://www.aljazeera.com/news/2022/12/15/why-has-a-turkish-court-given-istanbul-mayor-a-prison-term-explainer)
- Allsopp, H., & van Wilgenburg, W. (2019). *The Kurds of Northern Syria : governance, diversity and conflicts: Vols. 2: "Governing diversity : the Kurds in a new Middle East."* I.B. Tauris.
- Amnesty International. (2017). *Turkey: Journalism is not a crime: Crackdown on media freedom*



in Turkey. In *amnesty.org*. <https://www.amnesty.org/en/documents/eur44/6055/2017/en/>

Arafat, H. (2019, August 16). SDF command reveals details about buffer zone in northeast Syria. *Kurdistan24*. [https://www.kurdistan24.net/en/news/1b44b8a4-ff0c-44e0-98fe-51c4682e5e6f?\\_\\_cf\\_chl\\_tk=xZfUjKji8jNDb19PkeRgAQSfeKWZThl7qh0U2dcHaf8-1681684852-0-gaNycGzNGmU](https://www.kurdistan24.net/en/news/1b44b8a4-ff0c-44e0-98fe-51c4682e5e6f?__cf_chl_tk=xZfUjKji8jNDb19PkeRgAQSfeKWZThl7qh0U2dcHaf8-1681684852-0-gaNycGzNGmU)

Armed Conflict Location and Event Data Project. (2023). *FAQs: ACLED Fatality Methodology Table of Contents Does ACLED have a minimum fatality criterion for events? 2 How does ACLED code fatalities? 2*. [https://acleddata.com/acleddatanew/wp-content/uploads/2023/01/FAQs-ACLED-Fatality-Methodology\\_2023.pdf](https://acleddata.com/acleddatanew/wp-content/uploads/2023/01/FAQs-ACLED-Fatality-Methodology_2023.pdf)

Baghdassarian, A., & Zadah, S. (2021). Voices from Afrin: First-Hand Accounts of Turkish Crimes against the Kurds and Policy Proposals from Those Affected. *Yale Journal of International Affairs*, 16, 119–135. <https://www.yalejournal.org/publications/voices-from-afrin-first-hand-accounts-of-turkish-crimes-against-the-kurds-and-policy-proposals-from-those-affected>

Balanche, F., & Horan, M. K. (2018). *Sectarian and Ethnic Distribution in Syria 2011* (No. 2) [Map]. The Washington Institute for Near East Policy. <https://www.washingtoninstitute.org/media/4137>

Beiser, E. (2019). China, Turkey, Saudi Arabia, Egypt are world’s worst jailers of journalists. In *cpj.org*. Committee to Protect Journalists. <https://cpj.org/reports/2019/12/journalists-jailed-china-turkey-saudi-arabia-egypt/>

BIA News Desk. (2022, November 17). *İstanbul bomber, accomplice “brought bomb-laden bag from Syria.”* Bianet - Bagimsiz Iletisim Agi. <https://bianet.org/english/law/270098-istanbul-bomber-accomplice-brought-bomb-laden-bag-from-syria>

- Bongers, L. (2017). *Behind the Smoke Screen: The Rise of Kurdish Rojava from the Syrian Ruins* [M.A. Thesis].  
<https://www.kurdipedia.org/files/books/2020/381552.PDF?ver=132292220130000000>
- Brannan, S., Campbell, R., Davies, M., English, V., Mussell, R., & Sheather, J. C. (2016). The Mediterranean refugee crisis: ethics, international law and migrant health. *Journal of Medical Ethics*, 42(4), 269–270. <https://doi.org/10.1136/medethics-2016-103444>
- Charap, S., Treyger, E., & Geist, E. (2019). Understanding Russia’s Intervention in Syria. In <https://www.rand.org/>. RAND Corporation. <https://doi.org/10.7249/rr3180>
- Coskun, O. (2015, February 21). Turkish military enters Syria to evacuate soldiers, relocate tomb. *Reuters*. <https://www.reuters.com/article/uk-syria-crisis-turkey-idAFKBN0LQ03Y20150222>
- Crawford, J. (2021). The continued persecution of the Kurdish people in Turkey. *American Indian Law Review*, 45(2), 327.  
[https://digitalcommons.law.ou.edu/ailr/vol45/iss2/4/?utm\\_source=digitalcommons.law.ou.edu%2Ffailr%2Fvol45%2Fiss2%2F4&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](https://digitalcommons.law.ou.edu/ailr/vol45/iss2/4/?utm_source=digitalcommons.law.ou.edu%2Ffailr%2Fvol45%2Fiss2%2F4&utm_medium=PDF&utm_campaign=PDFCoverPages)
- Dionigi, F. (2018). The Syrian Refugee Crisis in the Kurdish Region of Iraq: Explaining the Role of Borders in Situations of Forced Displacement. *International Migration*, 57(2), 10–31.  
<https://doi.org/10.1111/imig.12468>
- Eralp, D. (2020). The Safe Zone for Undesirables on the Turkey-Syria Border. *Peace Review*, 32(2), 181–189. <https://doi.org/10.1080/10402659.2020.1836437>
- Federici, V. (2015). The Rise of Rojava: Kurdish Autonomy in the Syrian Conflict. *The SAIS Review of International Affairs*, 35(2), 81–90. <https://www.jstor.org/stable/27000999>

- Fulton, W., Holliday, J., & Wyer, S. (2013). *Iranian strategy in Syria: A joint report by AEI's critical threats project & Institute for the Study of War*.  
<https://www.understandingwar.org/sites/default/files/IranianStrategyinSyria-1MAY.pdf>
- Ghadbian, N. (2021). The Syrian Refugee Crisis and the International Community. *Middle East Policy*, 28(1). <https://doi.org/10.1111/mepo.12543>
- Goldschmidt, A., & Davidson, L. (2013). *A concise history of the Middle East* (10th ed.). Westview Press.
- Hale, W. (2019). Turkey, America, Russia and the Syrian Civil War. *Insight Turkey*, 21(4).  
<https://doi.org/10.25253/99.2019214.02>
- Hendawi, H., & Qassim Abdul-Zahra, Q. (2015, August 15). ISIS Top Brass Is Iraqi Army's Former Best and Brightest. *Haaretz*. <https://www.haaretz.com/2015-08-08/ty-article/isis-top-brass-is-iraqi-armys-former/0000017f-eefe-d4cd-af7f-efeebad0000>
- Holmes, A. A. (2019). SDF'S ARAB MAJORITY RANK TURKEY AS THE BIGGEST THREAT TO NE SYRIA. In *wilsoncenter.org*.  
[https://www.wilsoncenter.org/sites/default/files/media/documents/publication/sdf\\_arab\\_majority\\_rank\\_turkey\\_as\\_biggest\\_threat.pdf](https://www.wilsoncenter.org/sites/default/files/media/documents/publication/sdf_arab_majority_rank_turkey_as_biggest_threat.pdf)
- Holmes, A. A. (2020). Syrian Yezidis under four regimes: Assad, Erdogan, ISIS and the YPG. In *wilsoncenter.org*.  
[https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/MEP\\_200710\\_OCC%2037\\_FINAL.pdf](https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/MEP_200710_OCC%2037_FINAL.pdf)
- Holmes, A. A. (2021). Threats perceived and real: new data and the need for a new approach to the Turkish-SDF border conflict. In *wilsoncenter.org*.  
[https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/MEP\\_210514](https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/MEP_210514)

\_Threats%20Perceived-V1r2\_0.pdf

Human Rights Watch. (2022, November 7). *Syria: Parties to conflict aggravate cholera epidemic*. Human Rights Watch. <https://www.hrw.org/news/2022/11/07/syria-parties-conflict-aggravate-cholera-epidemic>

Institute for the Study of War. (2015). *ISIS Actual Sanctuary: June 23, 2014* [Map]. Institute for the Study of War. <https://www.understandingwar.org/backgrounder/isis-sanctuary-map-june-23-2014>

International Crisis Group. (2017, May 2). *Managing Turkey's PKK conflict: The case of Nusaybin*. <https://www.crisisgroup.org>. <https://www.crisisgroup.org/europe-central-asia/western-europemediterranean/turkey/243-managing-turkeys-pkk-conflict-case-nusaybin>

Jones, S. G., Dobbins, J., Byman, D., Chivvis, C. S., Connable, B., Martini, J., Robinson, E., & Chandler, N. (2017). *Rolling Back the Islamic State*. Rand Corporation.

Jowarrick. (2016). *Black flags : the rise of ISIS*. Gorgias Press.

Kaya, Z., & Lowe, R. (2017). The curious question of the PYK-PKK Relationship. In G. Stansfield & M. Shareef (Eds.), *The Kurdish Question Revisited* (pp. 275–287). Oxford University Press.  
[https://www.researchgate.net/publication/292004959\\_The\\_curious\\_question\\_of\\_the\\_PYD-PKK\\_relationship](https://www.researchgate.net/publication/292004959_The_curious_question_of_the_PYD-PKK_relationship)

Knapp, M., Flach, A., Ayboga, E., Graeber, D., Abdullah, A., & Biehl, J. (2016). *Revolution in Rojava : Democratic autonomy and women's liberation in Syrian Kurdistan*. Pluto Press.

Koker, I. (2018, March 20). Reality check: How many attacks did Turkey face from Afrin? *BBC News*. <https://www.bbc.com/news/world-middle-east-43262839>

- Kurdish Peace Institute. (2022). Democracy Destroyed: Trustee Appointments Have Ended Local Democracy for Supporters of Pro-Kurdish Parties in Turkey. In *kurdishpeace.org*. [https://www.kurdishpeace.org/app/uploads/2022/10/Democracy-Destroyed-\\_Trustee-Appointments-Have-Ended-Local-Democracy-for-Supporters-of-Pro-Kurdish-Parties\\_Final.pdf](https://www.kurdishpeace.org/app/uploads/2022/10/Democracy-Destroyed-_Trustee-Appointments-Have-Ended-Local-Democracy-for-Supporters-of-Pro-Kurdish-Parties_Final.pdf)
- Lee, M., & The Associated Press. (2017, January 5). *Recalling Syria “red line,” Kerry says U.S. didn’t back down*. Military Times. <https://www.militarytimes.com/news/pentagon-congress/2017/01/06/recalling-syria-red-line-kerry-says-u-s-didn-t-back-down/>
- Leezenberg, M. (2016). The ambiguities of democratic autonomy: the Kurdish movement in Turkey and Rojava. *Southeast European and Black Sea Studies*, 16(4), 671–690. <https://doi.org/10.1080/14683857.2016.1246529>
- Levitt, M. (2021). The role of the Islamic State in the Assad regime’s strategy for regime survival : How and why the Assad regime supported the Islamic State. In *La Lutte Contre le Terrorisme : ses acquis et ses défis / the fight against terrorism: Achievements and challenges*. Bruylant. <https://www.larcier-intersentia.com/fr/lutte-contre-terrorisme-acquis-defis-the-fight-9782802768890.html>
- Lister, T., Sanchez, R., Bixler, M., O’Key, S., Hogenmiller, M., & Tawfeeq, M. (2016, July 25). *ISIS: 143 attacks in 29 countries have killed 2,043*. CNN; CNN. <https://www.cnn.com/2015/12/17/world/mapping-isis-attacks-around-the-world/index.html>
- Liveuamap. (n.d.). *Map of the Syrian Civil War* [Map]. Retrieved 2022, from <https://syria.liveuamap.com/>
- Mashi, F., Hamdi, S., & Salman, M. (2022). “Operation Olive Branch” in Syria’s Afrin District:

- towards a new interpretation of the right of self-defence?. *Journal on the Use of Force and International Law*, 9(2), 1–28. <https://doi.org/10.1080/20531702.2022.2097418>
- McDowall, D. (2021). *Modern History Of The Kurds*. (4th ed.). Bloomsbury.
- McKeever, A. (2019a, March 1). *Wrath of the olives: Tracking the Afrin insurgency through social media*. Bellingcat. <https://www.bellingcat.com/news/mena/2019/03/01/wrath-of-the-olives-tracking-the-afrin-insurgency-through-social-media/>
- McKeever, A. (2019b, July 11). *Afrin: Incidents Of Desecration And Destruction Of Cultural Sites*. Bellingcat. <https://www.bellingcat.com/news/mena/2019/07/11/afrin-incidents-of-desecration-and-destruction-of-cultural-sites/>
- McKeever, A. (2019c). Murder, looting, and displacement: Two months into Turkey’s invasion of eastern Syria. In <https://akmckeever.com>. <https://akmckeever.com/2019/12/27/murder-looting-and-displacement-two-months-into-turkeys-invasion-of-eastern-syria/>
- Michaelson, R., & Narlı, D. B. (2022, November 14). *Kurdish militants deny Turkish claims they carried out Istanbul attack*. The Guardian. <https://www.theguardian.com/world/2022/nov/14/pkk-denies-role-in-istanbul-bomb-attack-that-killed-six>
- Missing Women of Afrin Project. (2018). *Missing Afrin women* [Map]. <https://missingafrinwomen.org/data/>
- Moorman, C., Shabaniyan, A., & Wilder, C. (2023, March 7). *Operation Claw-Sword Exposes Blind Spots in the US’ NE Syria Strategy*. New Lines Institute. <https://newlinesinstitute.org/syria/operation-claw-sword-exposes-blind-spots-in-the-us-ne-syria-strategy/>
- Öcalan, A. (2007). *Prison Writings: The Roots of Civilization*. Pluto Press (UK).

- Öcalan A. (2013). *War and peace in Kurdistan : perspectives for a political solution of the Kurdish question*. International Initiative Ed. <https://www.freeocalan.org/wp-content/uploads/2012/09/Ocalan-War-and-Peace-in-Kurdistan.pdf> (Original work published 2009)
- Open to Debate. (2019, September 19). *Turkey Is An Asset To NATO // Debate #3*. [Www.youtube.com. https://youtu.be/rAI2QIDqFqA](https://www.youtube.com/watch?v=rAI2QIDqFqA)
- Ostrand, N. (2015). The Syrian Refugee Crisis: A Comparison of Responses by Germany, Sweden, the United Kingdom, and the United States. *Journal on Migration and Human Security*, 3(3), 255–279. <https://doi.org/10.14240/jmhs.v3i3.51>
- Perry, T. (2019, October 13). Report: Syrian army to enter SDF-held Kobani, Manbij. *Reuters*. <https://www.reuters.com/article/us-syria-security-towns-report-idUSKBN1WS0K0>
- Petti, M. (2020, November 23). The Olive Oil in Your Local Store May Be Funding Syrian Warlords. *The Daily Beast*. <https://www.thedailybeast.com/the-olive-oil-in-your-local-store-may-be-funding-syrian-warlords>
- Puttick, M., Al-Kaisi, Y., & Bilikhodze, M. (2020). *Cultivating chaos: Afrin after Operation Olive Branch*. Ceasefire Centre for Civilian Rights and YASA e.V. – Kurdish Centre for Studies & Legal Consultancy. [https://www.ceasefire.org/wp-content/uploads/2020/07/CFR\\_Syria\\_EN\\_July20.pdf](https://www.ceasefire.org/wp-content/uploads/2020/07/CFR_Syria_EN_July20.pdf)
- Raleigh, C., Linke, A., Hegre, H., & Karlsen, J. (2010). Introducing ACLED: An Armed Conflict Location and Event Dataset. *Journal of Peace Research*, 47(5), 651–660. <https://www.jstor.org/stable/20798933>
- Ratelle, J.-F. (2016). North Caucasian foreign fighters in Syria and Iraq: assessing the threat of returnees to the Russian Federation. *Caucasus Survey*, 4(3), 218–238.

<https://doi.org/10.1080/23761199.2016.1234096>

Sallon, H. (2022, October 8). Turkey wages drone war in Syrian Kurdistan. *Le Monde.fr*.

[https://www.lemonde.fr/en/international/article/2022/10/08/the-turkish-drone-war-in-syrian-kurdistan\\_5999592\\_4.html](https://www.lemonde.fr/en/international/article/2022/10/08/the-turkish-drone-war-in-syrian-kurdistan_5999592_4.html)

Souleimanov, E. A., & Dzutsati, V. (2018). Russia's Syria War: A Strategic Trap? *Middle East Policy*, 25(2), 42–50. <https://doi.org/10.1111/mepo.12341>

Stocker, J. (2019, October 13). *Turkey-backed Syrian rebels kill Kurdish politician, execute prisoners*. The Defense Post. <https://www.thedefensepost.com/2019/10/13/turkey-backed-syrian-rebels-kill-kurdish-politician-execute-prisoners/>

Syrians for Truth and Justice. (2020, August 31). *Timeline of the disruptions series of Aluk water pumping station, north east Syria*. Syrians for Truth and Justice. <https://stj-sy.org/en/timeline-of-the-disruptions-series-of-aluk-water-pumping-station-north-east-syria/>

The Social Contract of the Autonomous Regions of Afrin, Jazira, and Kobane. (2014). In *Rojava Information Center*. <https://rojavainformationcenter.com/storage/2021/07/2014-Social-Contract-of-the-Autonomous-Regions-of-Afrin-Jazira-and-Kobane-1.pdf>

The Syrian Observatory For Human Rights. (2019, October 21). *12 days of Operation "Peace Spring": Turkish-backed factions continue to violate the ceasefire and commit violations against citizens in areas under their control. The death toll among the "SDF", the regime, Turkish forces and factions loyal to it rises to 477* • The Syrian Observatory For Human Rights. <https://www.syriahr.com/en/144745/>

The White House. (2014). *Statement by the President on ISIL* [TV].

<https://obamawhitehouse.archives.gov/the-press-office/2014/09/10/statement-president->



isil-1

The White House. (2019). Statement from the Press Secretary. In

*<https://trumpwhitehouse.archives.gov/>. <https://trumpwhitehouse.archives.gov/briefings-statements/statement-press-secretary-85/>*

United Nations High Commission for Refugees. (2022). *Refugee Statistics | USA for UNHCR*.

*Unrefugees.org*. <https://www.unrefugees.org/refugee-facts/statistics/>

United Nations High Commissioner for Refugees. (2015). UNHCR: Total number of Syrian

refugees exceeds four million for first time. In *unhcr.org*. <https://www.unhcr.org/en-us/news/press/2015/7/559d67d46/unhcr-total-number-syrian-refugees-exceeds-four-million-first-time.html>

United Nations High Commissioner for Refugees. (2018). Seven Facts About The Syria Crisis.

In *unhcr.org*. <https://www.unhcr.org/ph/13418-seven-facts-syria-crisis.html>

United Nations High Commissioner for Refugees. (2022). *Situation Syria Regional Refugee*

*Response*. *Data.unhcr.org*. <https://data.unhcr.org/en/situations/syria>

United Nations Meetings Coverage and Press Releases. (2017, November 28). *Greater*

*Cooperation Needed to Tackle Danger Posed by Returning Foreign Fighters, Head of Counter-Terrorism Office Tells Security Council*. UN Press.

<https://press.un.org/en/2017/sc13097.doc.htm>

United Nations Meetings Coverage and Press Releases. (2018, March 27). *Humanitarian Affairs*

*Chief Calls on Parties in Syria to Allow Aid Delivery, as Security Council Reviews Implementation of Resolution 2401 (2018)*. UN Press.

<https://press.un.org/en/2018/sc13266.doc.htm>

- United Nations News. (2022, September 13). *Syria: Cholera outbreak is “serious threat” to whole Middle East*. UN News. <https://news.un.org/en/story/2022/09/1126531>
- Wilkofsky, D., Zaman, A., & Hardan, M. (2021, July 22). *Turkish-backed rebels leave trail of abuse, criminality in Syria’s Afrin*. Www.al-Monitor.com. <https://www.al-monitor.com/originals/2021/07/turkish-backed-rebels-leave-trail-abuse-and-criminality-syrias-afrin>
- World Food Programme. (2014, December 1). *WFP Forced To Suspend Syrian Refugee Food Assistance, Warns Of Terrible Impact As Winter Nears | World Food Programme*. Wfp.org. <https://www.wfp.org/news/wfp-forced-suspend-syrian-refugee-food-assistance-warns-terrible-impact-winter-nea>
- Zaman, A. (2022, November 22). *Syrian Kurdish commander says Kobani likely target of threatened Turkish ground offensive*. Www.al-Monitor.com. <https://www.al-monitor.com/originals/2022/11/syrian-kurdish-commander-says-kobani-likely-target-threatened-turkish-ground>
- Zelin, A. Y. (2012, June 11). *Foreign Fighters Trickle into the Syrian Rebellion*. The Washington Institute. <https://www.washingtoninstitute.org/policy-analysis/foreign-fighters-trickle-syrian-rebellion>