

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS**

UNITED STATES OF AMERICA,

Plaintiff,

v.

G'ANTE BUTLER, et al.,

Defendants.

Case No. 21-20027-JAR

MEMORANDUM AND ORDER

This matter comes before the Court on Defendant Zarion Butler's *Daubert* Motion to Exclude Certain Opinion Testimony of Ryan Williams Relating to Historical Mobile Device Location Analysis (Doc. 86), and *Daubert* Motion to Exclude Certain Opinion Testimony of Ryan Williams Relating to Snapchat Locational History (Doc. 87). Defendants G'Ante Butler, Nadarius Barnes, and Donnell Hall join in the motions. The Government has responded and the Court held a *Daubert* hearing on January 6, 2023. Having fully considered the evidence and arguments offered by the parties, and for the reasons detailed below, Defendants' motions to exclude are denied.

I. Factual Background

The Indictment charges G'Ante Butler, Zarion Butler, Nadarius Barnes, Chase Lewis, and Donnell L. Hall with Forcible Assault of a Federal Officer in violation of 18 U.S.C. §§ 111(b) and 2, and Use of a Firearm in Furtherance of a Crime of Violence in violation of 18 U.S.C. § 924(c)(1)(A)(ii).¹ The charges stem from Defendants' involvement with an August 3,

¹ On November 4, 2022, the Court issued a Memorandum and Order granting Defendants Hall, G'Ante Butler, and Barnes' joint motion to sever and denying the Defendants' motion to dismiss. Doc. 99.

2020 shooting at 1913 N. Allis Street, Kansas City, Kansas. The Government alleges that at approximately 11:21 p.m., subsequent to the execution of a state search warrant at that location, seven federal officers exited the residence and were walking to their respective vehicles when they and their vehicles were fired upon by multiple shooters in an alleyway west of their location. There had also been a shooting earlier that evening at a residence that investigators attributed to the Butlers on Farrow Avenue at approximately 6:30 p.m.

During the subsequent investigation, Bureau of Alcohol, Tobacco, and Firearms (“ATF”) personnel obtained multiple search warrants to identify the suspects’ subscriber information, call records, and locations surrounding the offense date. The Government obtained historical cell site location data for cell phones associated with Nadarius Barnes ((816) 726-7335), Donnell L. Hall ((785) 730-4193), and Zarion Butler ((913) 202-8656).

On September 9, 2020, FBI Task Force Officer Chris O’Neill applied for, and was granted, a federal search warrant for records related to Snapchat username “glock_baby23,” which investigators attributed to Defendant Chase Lewis, from August 1, 2020 through August 20, 2020. The requested information included “[a]ll ‘check-ins’ and other historical location information associated with the user of the device utilized to access the account to include the last known device location (latitude and longitude with any known degree of accuracy expressed in meters).”² Snapchat later produced the requested information including location data to agents.

As part of its case-in-chief, the Government plans to call as an expert witness FBI Special Agent (“SA”) Ryan J. Williams to present analysis of historical cell site data for the three cell phones. The Government also plans to offer SA Williams as an expert to explain how

² Case No. 20-mj-8213-TJJ, Doc. 2, Attach. A ¶ i.

investigators utilized Lewis' Snapchat location history. SA Williams prepared a slide show containing his analysis of the historical cell site data and Snapchat location information.³ He testified at the *Daubert* hearing about both types of information, and the Government submitted additional exhibits at the hearing in support of his testimony. He intends to testify that these records show these Defendants' general location before, during, and after the shooting.

II. Standard

Whether expert testimony should be admitted is a matter committed to the court's broad discretion.⁴ Fed. R. Evid. 702, which governs the admissibility of expert testimony, provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,⁵ the Supreme Court held that Rule 702 imposes a gatekeeping responsibility on trial courts to ensure that proposed expert testimony "is not only relevant, but reliable."⁶ In performing this gatekeeping function, the court "generally must first determine whether the expert is qualified 'by knowledge, skill, experience, training, or

³ Doc. 87-1.

⁴ *Kieffer v. Weston Land, Inc.*, 90 F.3d 1496, 1499 (10th Cir. 1996).

⁵ 509 U.S. 579 (1993).

⁶ *Id.* at 589.

education’ to render an opinion.”⁷ If the expert is sufficiently qualified, the court must next determine whether the expert’s testimony has “a reliable basis in the knowledge and experience of [the relevant] discipline.”⁸

The Supreme Court in *Daubert* set forth a non-exhaustive list of four factors that courts may consider in determining the reliability of the proffered expert testimony: (1) whether the theory or technique can be and has been tested; (2) whether it has been subjected to peer review and publication; (3) the known or potential error rate; and (4) its degree of general acceptance in the relevant scientific community.⁹ The Supreme Court has emphasized, however, that these four factors are not a “definitive checklist or test” and that a court’s gatekeeping inquiry into reliability must be “tied to the facts of a particular case.”¹⁰ In some cases, “the relevant reliability concerns may focus upon personal knowledge or experience,” rather than the *Daubert* factors.¹¹ Ultimately, the court’s role “is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.”¹²

After determining that a witness is qualified to testify as an expert and that the testimony is reliable, the court must determine whether the expert testimony is sufficiently “relevant to the task at hand.”¹³ Under Fed. R. Evid. 401, evidence is relevant if “it has any tendency to make a fact more or less probable than it would be without the evidence,” and “the fact is of

⁷ *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009) (en banc) (quoting Fed. R. Evid. 702).

⁸ *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1233 (10th Cir. 2005) (quoting *Daubert*, 509 U.S. at 592).

⁹ *Daubert*, 509 U.S. at 593–94.

¹⁰ *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999) (quoting *Daubert*, 509 U.S. at 591, 593).

¹¹ *Id.*

¹² *Id.* at 152.

¹³ *Bitler*, 400 F.3d at 1234 (quoting *Daubert*, 509 U.S. at 597).

consequence in determining the action.” “Relevant expert testimony must ‘logically advance[] a material aspect of the case,’ and be ‘sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.’”¹⁴ In assessing whether expert testimony will assist the jury, the court should consider whether the testimony “is within the juror’s common knowledge and experience.”¹⁵

It is within the court’s discretion to determine how to perform its gatekeeping function under *Daubert*.¹⁶ The most common method for fulfilling this function is a *Daubert* hearing, although it is not specifically mandated.¹⁷ Here, on Defendants’ request, the Court agreed to conduct a *Daubert* hearing on January 6, 2023, at which SA Williams testified.

III. Discussion

Defendants filed two separate motions to exclude SA Williams’ testimony—one on the issue of historical cell site location data, and one based on Snapchat location data. The Tenth Circuit has held that an “agent’s testimony concerning how cell phone towers operate constituted expert testimony because it involved specialized knowledge not readily accessible to an ordinary person.”¹⁸ The Court finds that SA Williams’ testimony on the historical cell site location data constitutes expert testimony and his testimony on Snapchat location data also constitutes expert testimony involving specialized knowledge not readily accessible to a lay person. Thus, the

¹⁴ *United States v. Garcia*, 635 F.3d 472, 476 (10th Cir. 2011) (alteration in original) (first quoting *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 884 n.2 (10th Cir. 2005); and then quoting *Daubert*, 509 U.S. at 591).

¹⁵ *Garcia*, 635 F.3d at 476–77 (quoting *United States v. Rodriguez-Felix*, 450 F.3d 1117, 1123 (10th Cir. 2006)).

¹⁶ *Goebel v. Denver & Rio Grande W. R.R.*, 215 F.3d 1083, 1087 (10th Cir. 2000) (citing *Kumho Tire Co.*, 526 U.S. at 152).

¹⁷ *Id.*

¹⁸ *United States v. Yeley-Davis*, 632 F.3d 673, 684 (10th Cir. 2011).

Court must make findings on the record to fulfill its gatekeeper role before admitting SA Williams' testimony on this subject.

Defendants argue that SA Williams' testimony on historical cell site location data should be excluded under Rule 702 and *Daubert* because his methodology is flawed. Defendants argue that SA Williams' testimony on Snapchat location data should be excluded because: (1) SA Williams is not qualified to testify about this issue; and (2) the methodology is unreliable because it is untested, has not been subjected to peer review, has no known error rate, and has not gained general acceptance in the scientific community. The Court first addresses SA Williams' testimony relating to historical cell site location data and then considers his testimony about Snapchat location data.

A. Historical Cell Site Location Data

1. Qualifications

SA Williams has a bachelor's degree in business administration and passed the certified public accounting examination in 1997. In 2002, he joined the FBI, initially with an emphasis on white collar crime and public corruption investigation. By the mid-2000s, SA Williams began using cell site location data during his investigations while running pen registers. In 2015, he went through the FBI's Project Pin Point curriculum, which is a 74-hour training course that includes historical cell site analysis in investigations.

SA Williams ultimately became a certified cell site location data analyst with over 490 hours of specialized training related specifically to cellular technology and the analysis of historical cellular records. He has been a member of the FBI's Cellular Analysis Survey Team ("CAST") Unit since 2016, which is comprised of approximately 85 members. His annual

training includes provider-specific training sessions, including by T-Mobile—the provider of all three cell phones at issue in this case.

In addition to his training, SA Williams testified at length about his experience utilizing historical cell site location data during investigations. He testified about his extensive experience “drive testing,” a practice whereby an investigator drives around an area with a scanner that collects cell signals in order to confirm and determine coverage areas provided by cell phone providers, which then is mapped. He has testified as an expert witness on three occasions in federal courts and eleven times in state court about historical cell site location data.

The Court finds that SA Williams is qualified to testify as an expert witness in this case on the issue of historical cell site location data based on his specialized training and experience.

2. Reliability

SA Williams completed an analysis of historical cell site location records for the three cellular telephones that investigators attribute to Defendants Nadarius Barnes, Zarion Butler, and Donnell Hall. All three phones used T-Mobile as a provider. SA Williams was asked by the case agents to look at the T-Mobile records for these phones, try to determine their general location before, during, and after the shootings on Farrow Avenue and Allis Street, and map those locations. SA Williams testified that he was provided the three pieces of predicate information that he required to perform this analysis: (1) call detail records (“CDRs”) for the three phones; (2) a T-Mobile tower list for the time period that included August 3, 2020; and (3) pertinent locations and times relevant to the case.

SA Williams prepared a report on May 15, 2022, that explains the methodology behind his analysis, and maps the three phones based on his analysis. He described his methodology as follows:

An analysis was performed on the call detail records obtained for the target cell phones. The call detail records documented the network interaction to and from the target cell phones. Additionally, the records documented the cell tower and cell sector (“cell site”) which served the cell phones during this activity. Used in conjunction, the call detail records and a list of cell site locations illustrate an approximate location of the target cell phones when they initiated contact with the network.¹⁹

Based on this analysis, SA Williams determined an approximate location of the respective phones when they initiated contact with the network. He then prepared a report with maps detailing the respective towers and sectors utilized by each device during specified time periods on August 3, 2020. SA Williams found that, on August 3, 2020, the cell phone that investigators attributed to Defendant Nadarius Barnes was in the general vicinity of 1722 Waverly at 11:00 p.m., and the cell phone that investigators attributed to Defendant Zarion Butler was in the general vicinity of 1722 Waverly at 11:05 p.m. SA Williams also found that, on August 3, 2020, the cell phones investigators attributed to Defendants Nadarius Barnes and Donnell Hall were in the general vicinity of 1913 N. Allis at 11:13 p.m.

Defendants argue that SA Williams’ testimony on historical cell site data should be excluded under Rule 702 and *Daubert* because his methodology is flawed. According to Defendants, SA Williams’ report reflects that on each instance of cell site contact, numerous other cell towers were nearby. Relying exclusively on secondary source material, Defendants argue that because numerous factors determine which cell tower a phone will connect to, Williams’ opinion that the phones connected to a specific tower is flawed.²⁰ Defendants also rely on *United States v. Evans*,²¹ where the United States District Court for the Northern District

¹⁹ Ex. 1 at 2.

²⁰ See, e.g., Matthew Tart, et al., *Historical Cell Site Analysis—Overview of Principles and Survey Methodologies*, 8 DIGITAL INVESTIGATIONS 185, 186–87 (2012).

²¹ 892 F. Supp. 2d 949 (N.D. Ill. 2012).

of Illinois excluded in part testimony of an FBI agent who purported to estimate the precise location of a target phone using CRDs.²² Defendants argue that Williams uses the same methodology here to determine the location of Defendants' cell phones at a particular time on August 2, 2020.

The Government responds by arguing that SA Williams has testified several times in federal court as an expert witness on this issue, and that his testimony is both reliable and relevant under rule 702 and *Daubert*. The Government maintains that Defendants' reliance on *Evans* is misplaced, and in fact supports admitting Williams' testimony in this case because, unlike in *Evans*, the Government here does not offer evidence that agents used historical cell site data to determine Defendants' exact location. The Court addresses these arguments in turn.

a. Methodology

District courts have generally allowed testimony about historical cell site location information at trial, but “[n]o federal court of appeals has yet said authoritatively that historical cell-site analysis is admissible to prove the location of a cell phone user.”²³ Defendants' primary objection to SA Williams' methodology is that he fails to take into account the many factors that affect the tower and sector with which a cell phone connects. They cite secondary source material and record evidence from other cases for the proposition that cell phones do not necessarily connect to the tower that is the closest; other factors, such as phone wattage, phone bandwidth, topography, weather conditions, tower height, tower wattage, the tower's antennae,

²² *Id.* at 957.

²³ *United States v. Hill*, 818 F.3d 289, 297 (7th Cir. 2016). As *Hill* explains, and as discussed in the next section, the Sixth Circuit has addressed historical cell-site analysis, allowing expert testimony to show that a person was *not* in a certain place at a certain time. *United States v. Reynolds*, 626 F. App'x 610, 616–17 (6th Cir. 2015). The Fifth Circuit has affirmed admission of such evidence to prove a person's precise location, noting that “the field is neither untested nor unestablished,” language that the Seventh Circuit characterized as “hardly a ringing endorsement.” *Hill*, 818 F.3d at 297 (quoting *United States v. Schaffer*, 439 F. App'x 344, 347 (5th Cir. 2011)).

and the angle of the cones on the tower can determine the nearest cell site. Defendants criticize SA Williams' testimony and report for failing to consider these other factors. Defendants also argue that the CDRs only state which tower actually connected to a phone call at initiation and fail to identify all possible towers that could have connected the call, that CDRs do not provide information about "load balancing" and redistribution of call traffic that may occur, and that SA Williams fails to include information about the cell towers' range or to clearly indicate the level of precision to which he identifies their locations at the relevant times. The Government responds that these factors go to the weight and not the admissibility of Williams' testimony.

The Court finds instructive the Seventh Circuit's 2016 decision in *United States v. Hill*, where the court affirmed the admission of expert testimony on historical cell site data where, as here, the expert testified about the cell phone's general location:

Historical cell-site analysis can show with sufficient reliability that a phone was in a general area, especially in a well-populated one. It shows the cell sites with which the person's cell phone connected, and the science is well understood. The technique requires specialized training, which Agent Raschke has and has employed successfully on hundreds of occasions. A mathematical error rate has not been calculated, but the technique has been subjected to publication and peer criticism, if not peer review. The advantages, drawbacks, confounds, and limitations of historical cell-site analysis are well known by experts in the law enforcement and academic communities. Agent Raschke described many of them at trial.

....

The admission of historical cell-site evidence that overpromises on the technique's precision—or fails to account adequately for its potential flaws—may well be an abuse of discretion. In this case, however, Agent Raschke's testimony on both direct and cross-examination made the jury aware not only of the technique's potential pitfalls, but also of the relative imprecision of the information he gleaned from employing it in this case. The science and methods upon which the technique is based are understood and well documented. Admitting Agent Raschke's testimony was

therefore not an abuse of the district court's considerable discretion under either Rule 702 or Rule 403.²⁴

Here, SA Williams does not opine that the three cell phones at issue were at specific locations on August 3, 2020. Instead, he clearly limits his testimony to estimating a general location within a few city blocks of a densely populated urban area. The Court finds that SA Williams' methodology is not flawed for failure to consider the many factors that determine which cell phone tower and sector the cell phones connected to at initiation. SA Williams testified at length at the *Daubert* hearing about how cell phones connect to cell towers, and to the sectors within those towers. He explained that cell phones are always scanning to look for a tower with the "best" signal, which is determined based on the strength and quality of the signal. SA Williams testified that most of the Kansas City T-Mobile towers have three sectors that provide each tower with a greater capacity. The CDRs provided by T-Mobile specify both the tower and sector at the time of initiation. Based on this information, SA Williams mapped the location of each connecting tower and sector during the time periods in question, acknowledging that the map does not reflect exact locations of the cell phones. He acknowledged that the sectors were not perfectly divided in thirds; there is some overlap, and they may be off slightly in either direction.

He also acknowledged that many factors determine with which tower a phone connects in the context of a 4G signal, like the phones at issue here, including terrain, physical structures, and proximity. SA Williams testified about a particular cell site connection on page 17 of Exhibit 1, for CID 100805-1 at 10:46:06 p.m. It shows a connection with a northern facing sector on Main Street near the Missouri River valley. SA Williams testified that he has seen

²⁴ *Hill*, 818 F.3d at 298–99 (citations omitted).

topography affect cell tower connections when they are near a river bed like this; he suspects that this phone was actually north of the river, where the other phones showed a connection at that time. SA Williams testified that weather is unlikely to affect cell tower connections, short of a major system such as a tornado or hurricane.

SA Williams testified that the maps purport to illustrate only the general area of Kansas City where the phones were located at particular points in time, within a few square blocks. Thus, his testimony accounted for the “relative imprecision of the information he gleaned from employing” historical cell site data in this case and only purported to estimate a general location for the identified phones.²⁵ The Court finds that SA Williams’ testimony addressed the potential limitations of historical cell site data, and the relative imprecision of the information he gleaned from employing it in this case. Given that he only purports to estimate general locations of the phones here, this is sufficient to render his testimony reliable under *Daubert*.

b. *United States v. Evans*

Defendants heavily rely on *United States v. Evans* to support their position that SA Williams’ testimony here should be excluded. The Court finds this case inapposite. In *Evans*, the defendant moved to exclude Special Agent Joseph Raschke’s expert testimony regarding (1) the operation of cellular networks and how to use historical cell site data to determine the general location of a cell phone when a particular call is made; and (2) his opinion that the defendant’s calls during the course of a kidnapping conspiracy came from the building where the victim was held for ransom based on a theory called “granulization.”²⁶ The court granted in part and denied

²⁵ *Id.* at 299; *see also United States v. Banks*, 93 F. Supp. 3d 1237, 1254 (D. Kan. 2015) (“[I]f one is merely trying to place a phone in a general area, cell-site typically can answer that question. This is precisely what the government’s experts have done.”).

²⁶ 892 F. Supp. 2d 949, 951 (N.D. Ill. 2012).

in part the motion. The court denied the motion as to the expert's testimony about how cellular networks operate and determining the general location of a cell phone when a call was made.²⁷ But the court granted the motion as to the agent's testimony about the defendant's specific location under a granulization theory, finding several flaws in its methodology.²⁸ The court found that Agent Raschke assumed that the cell phone connected to the closest towers, without considering other factors, and that the granulization theory is "wholly untested by the scientific community."²⁹

The Sixth Circuit considered and discussed *Evans* in *United States v. Reynolds*.³⁰ The court criticized decisions that relied on other *federal courts'* acceptance of historical cell site data in making reliability findings, and cited with approval the *Evans* court's reliability analysis about the granulization theory.³¹ However, the court found that the district court in *Reynolds* did not err by admitting expert testimony because, unlike in *Evans*, it did not rely on "the questionable assumption that each call connected to one of the nearest towers."³² The agent used historical cell site information to exclude certain callers from a particular sector, rather than try to show the particular location of the defendant.³³ The Sixth Circuit found that the district court did not abuse its discretion in admitting this evidence since it did not rely on "the nearest-tower assumption."³⁴

²⁷ *Id.* at 955.

²⁸ *Id.* at 956–57.

²⁹ *Id.*

³⁰ 626 F. App'x 610 (6th Cir. 2015).

³¹ *Id.* at 616 (collecting cases).

³² *Id.* at 617.

³³ *Id.* at 617–18.

³⁴ *Id.* at 618.

Unlike in *Evans*, SA Williams did not use a granulization theory here, he did not opine about the cell phones' precise locations, and he did not assume that each phone connected to the nearest tower in performing his analysis. Instead, SA Williams testified in detail about the methodology he used to determine the cell phones' general locations, which included CDRs, a tower list, and information about pertinent locations involved in the investigation. He explained how cell phones choose a tower for connection based on a combination of strength and quality of the signal. SA Williams testified about the limitations of his methodology and only purports to opine on the general locations of the phones at issue. The Court finds that his methodology passes muster under Rule 702 and *Daubert*.

3. Relevance

The Court further finds that SA Williams' historical cell site location data testimony is relevant. His opinion about the location of the three Defendants' phones is probative of their location on the night of the shooting that forms the basis of the charges in this case. The Court finds that SA Williams' analysis of this data will be helpful to the trier of fact and is not within a juror's common knowledge and experience.

B. Snapchat Location Data

1. Qualifications

Defendants first argue that SA Williams is not qualified to render an opinion on Snapchat's locational capabilities because he lacks specialized training on how Snapchat's location data works. The Court disagrees. SA Williams' curriculum vitae reflects a 2-hour training with Snap, Inc., Snapchat's parent company, in October 2021. He testified that he completed another training with Snap, Inc. in December 2022, which included training on

Snapchat's locational information. SA Williams has also received training from "Skyhook" regarding geolocation software.

In addition, SA Williams testified at length about his experience using Snapchat locational data in other cases, and about independent testing he completed comparing Snapchat's location data with Global Positioning System ("GPS") data in November 2022. The Court finds that SA Williams' training and experience qualify him to testify on this topic as an expert at trial.

2. Reliability

Defendants generally argue that the methodology behind Snapchat's locational capability is untested in court and lacks any sort of peer review. Defendants specifically challenge the error rate estimates provided by Snapchat, arguing that SA Williams lacks firsthand knowledge about the reliability of those estimates.

SA Williams testified that the Snapchat application can track locational information if it is running on a device and the user has opted to allow Snapchat to collect that information. In this case, SA Williams received from case agents the Snapchat records for Snapchat username "glock_baby23," which investigators attribute to Defendant Chase Lewis. These records include time stamps with locational data shown in latitude and longitude "pins" to the third decimal, and an error radius measured in meters. Thus, on a map, the Snapchat geolocation is shown with a small circle, surrounded by a larger circle that represents the error radius. According to SA Williams' training with Snap, Inc., the latitude and longitude pin is based on GPS data that Snapchat collects from the device, but the error radius is provided by Snapchat and Snapchat has not shared how it determines this number.

Snapchat's locational information for the glock_baby23 device provided several locations with an error radius varying between 4.96 and 39.66 meters. SA Williams does not believe the

error radius provide by Snapchat is accurate and testified that a larger error radius—one city block—is more accurate based on his experience using Snapchat locational data in other investigations. This opinion is supported by a December 7, 2022 test he conducted with another agent comparing Snapchat’s locational data with locational information provided by a GPS device.³⁵ The agents collected 729 location points on Snapchat and compared them with the 907 collection points they collected at the same time on a GPS device. SA Williams found that Snapchat’s location information had an average error rate of 46.9 meters, which was slightly higher than Snapchat’s largest estimate of 39.66 meters. SA Williams prepared maps showing the difference between Snapchat’s locational information during his test, and the GPS locational information. The pins were extremely close; he testified that 95% of Snapchat’s pins were within 100 meters of the GPS device’s location measurements.

SA Williams testified at length about the limitations of Snapchat’s locational information. Specifically, he criticized the fact it provides latitude and longitude pins to the third decimal and admitted it is unclear whether that number is rounded or truncated. Further, he believes that even the largest error radius provided by Snapchat of 39.66 meters is not large enough. Instead, he testified that he is more confident opining that Snapchat’s locational information is correct within one city block.

The Court finds that SA Williams’ testimony about Snapchat’s locational information is reliable based on the same variables that impact reliability of historical cell site data.³⁶ First, SA Williams does not opine that Defendant Lewis’ device was at a precise location at any point on August 3, 2020. Instead, he intends to opine that it was located within one city block of the pin

³⁵ Ex. 2.

³⁶ See *United States v. Hill*, 818 F.3d 289, 298–99 (7th Cir. 2016).

provided by Snapchat. He bases this opinion on information provided by Snapchat and independently tested by him both in his past investigations and during his December 7, 2022 test. Second, SA Williams testified about the limitations of Snapchat's information—the three-decimal pins and the error radius—and provided a larger error radius to account for these limitations. The Court finds that SA Williams' testimony on this subject is therefore sufficiently reliable under Rule 702 and *Daubert*. Defendants' criticisms of this data can be adequately tested through rigorous cross-examination; they go to the weight and not the admissibility of the evidence.

3. Relevance

The Court finds that SA Williams' Snapchat location data testimony is relevant. His opinion about the location of Defendant Lewis' phone is probative of his location on the night of the shooting that forms the basis of the charges in this case. Moreover, SA Williams testified that the Snapchat location data that he mapped for Lewis' phone was consistent with statements Lewis provided about his location on August 3, 2020. The Court finds that SA Williams' analysis of this data will be helpful to the trier of fact and is not within a juror's common knowledge and experience.

IT IS THEREFORE ORDERED BY THE COURT Defendants' *Daubert* Motion to Exclude Certain Opinion Testimony of Ryan Williams Relating to Historical Mobile Device Location Analysis (Doc. 86), and *Daubert* Motion to Exclude Certain Opinion Testimony of Ryan Williams Relating to Snapchat Locational History (Doc. 87) are **denied**.

IT IS SO ORDERED.

Dated: February 6, 2023

S/ Julie A. Robinson
JULIE A. ROBINSON
UNITED STATES DISTRICT JUDGE