

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

UNITED STATES OF AMERICA,)	
)	
v.)	Criminal Action No. 05-0386 (ESH)
)	
ANTOINE JONES, <i>et al.</i> ,)	
)	
Defendants.)	

MEMORANDUM OPINION AND ORDER

Defendant Antoine Jones is charged with Conspiracy to Distribute and Possess with Intent to Distribute Five Kilograms or more of Cocaine and Fifty Grams or more of Cocaine Base, in violation of 21 U.S.C. § 846. (Superseding Indictment, Mar. 21, 2007 [ECF No. 344].) During the government’s investigation of Mr. Jones, the government applied for and obtained several orders authorizing the disclosure of prospective cell-site information for defendant’s cellular telephones covering a period of approximately four months. Defendant moved to suppress the government’s use of that cell-site data at trial, but on December 14, 2012, the Court denied defendant’s motion. (*See* Memorandum Opinion and Order [Dkt. No. 658].) Defendant now seeks to exclude the testimony of the government’s proffered expert in the field of “cell site analysis,” FBI Special Agent Scott Eicher. (Defendant’s Motion in Limine to Exclude the Expert Testimony and Cellular Analysis Report of FBI Special Agent Scott Eicher, Jan. 3, 2013 [Dkt. No. 662] (“Mot.”).) Having reviewed the pleadings, Agent Eicher’s reports, and testimony he provided in another case in this Court,¹ and for the reasons set forth herein, the Court will deny defendant’s motion.

¹ *See* Transcript of Trial at 21-108, *United States v. Pray*, No. 10-51 (D.D.C. Mar. 5, 2012), ECF No. 478.

FACTUAL BACKGROUND

The facts underlying the process by which the government obtained defendant's cell-site information have been set forth in this Court's December 14, 2012 Memorandum Opinion. The government also obtained similar cell-site data for phones belonging to defendant's alleged co-conspirators, Carlos Reyna and Roel Bermea.

The government has proffered FBI Special Agent Scott Eicher as its cell site analysis expert. Agent Eicher has submitted four reports disclosing his expected testimony at trial. Each of his reports consists of a series of satellite images onto which he has plotted the cell towers that the witnesses' phones connected to at the beginning and end of the traced phone calls. On each such map, Agent Eicher has indicated all of the cell towers in a given area with red dots. Then, for each phone call, he has indicated the cell tower to which the phone connected and the specific 120° sector of the tower that was used for the call. These 120° sectors are indicated by pie-shaped wedges extending out from the cell tower. At a status conference on January 17, 2013, the government confirmed the Court's understanding that the length of the pie-shaped wedges is not meant to indicate the distance the signal extends from the tower or to suggest that the phone must have been within that wedge. Instead, the signal could extend well beyond the end of the pie-shaped wedge. Each map is accompanied by a brief description of what can be gleaned from the phone calls shown on that map.

The government has explained that Agent Eicher based his maps on the combination of two sources: (1) the call records of the cell phone companies that were produced pursuant to court orders, which identify the particular tower and sector the phones connected to at the beginning and end of each call, and (2) cell tower lists provided to law enforcement by the cell

phone companies, which specify the location of their cell towers, including the GPS coordinates for each tower and the direction that the sectors point in for those towers. (Opp'n at 2-3 & n.3.)

Defendant argues that Agent Eicher's methodology for determining the direction and size of the pie-shaped wedge is unreliable. He further argues that the use of those pie-shaped wedges to depict the cell tower sector used for each call is misleading and thus any probative value of his testimony is outweighed by the danger of unfair prejudice.²

ANALYSIS

I. LEGAL FRAMEWORK

The admissibility of expert testimony in federal courts is governed by Federal Rule of Evidence 702, which provides that a witness may offer expert opinion testimony 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 upon 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.

As explained by the Supreme Court, under Rule 702, "the trial judge must determine at the outset . . . whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 592 (1993). The first prong of the analysis "establishes a standard

² In his motion, defendant initially argued that Agent Eicher's methodology was unreliable because he assumed that a cell phone always connects to the cell tower that is closest to it—an assumption defendant referred to as the "granulization" theory. (Mot.) However, the government clarified in its response that Agent Eicher does not rely on any such assumption, (Opp'n at 8 & n.7.), and defendant—through his then-counsel Jeffrey O'Toole—acknowledged at the January 17, 2013 status conference that he was no longer challenging Agent Eicher's testimony on that basis. Therefore, defendant's reliance on *United States v. Evans*, 2012 WL 3779302 (N.D. Ill. 2012), is of no help, since it focused on the granulization theory.

of evidentiary reliability,” *id.* at 590, while the second prong “goes primarily to relevance,” *id.* at 591.

II. AGENT EICHER’S QUALIFICATIONS

Defendant does not attempt to challenge Agent Eicher’s qualifications, and with good reason, as the Court finds that he is highly qualified to provide testimony in the field of cellular telephone technology. The government’s expert disclosure (Mot. Ex. A, Expert Notice [Dkt. No. 662-2] at 6) and opposition to defense’s motion (Government’s Opposition to Defendant’s Motion in Limine to Exclude Expert Testimony and Cellular Report of FBI Special Agent Scott Eicher, Jan. 8, 2013 [Dkt. No. 665] (“Opp’n”)) lay out Agent Eicher’s extensive training in the field. He is also a member of the FBI’s Cellular Analysis and Survey Team, through which he has received specialized training to conduct historical cell site analysis to aid in law enforcement missions and present findings in court. (Expert Notice at 6.) He has worked on over 100 cases involving hundreds of hours of practical experience analyzing historical call detail records, and has used that information to determine the general area where a cell phone was located at a particular point in time. (*Id.* at 7.) He has trained local, state, and federal agencies in cellular tracking, including the analysis of historical call detail records. (*Id.*) Given these qualifications, he has been qualified as an expert witness in cell site analysis sixteen times, including twice in this Court. (*Id.*; see *United States v. Gordon*, No. 09-cr-153 (D.D.C.); *United States v. Pray*, No. 10-cr-51 (D.D.C.)).

III. RELIABILITY

Defendant argues that Agent Eicher’s methodology for determining the direction and size of the pie-shaped wedges is unreliable. Specifically, defendant claims that Agent Eicher improperly assumes that every cell tower is divided into three equal 120° sectors, when in fact

cell towers have at least two but sometimes more than three sectors. (Mot. Ex. C, Declaration of Lawrence Daniel [Dkt. No. 662-4] (“Daniel Decl.”) ¶ 9.) Defendant asserts that each particular sector antenna has a unique beamwidth, downward tilt, and angle, such that the specific coverage area for any given antenna cannot be determined without complex calculations that Agent Eicher does not purport to have done. (*Id.*) Thus, defendant argues that Agent Eicher cannot reliably claim that the coverage area for each cell tower sector is accurately represented by the pie-shaped wedges he uses in his reports.

Defendant’s argument lacks merit for two reasons. First, the government’s response clearly explains how Agent Eicher determined the direction of the pie-shaped wedges. The records obtained pursuant to the court orders specify the cell tower and sector the cell phone connected to at the beginning and end of each call. Additionally, the cellular service providers release lists of their cell towers to law enforcement, including “the location of their cell towers, with GPS coordinates for each tower, and *the specifications for each of the sectors of the towers.*” (Opp’n at 3 n.3 (emphasis added).) By combining those two resources, Agent Eicher plotted on a map the location of the precise cell tower and sector that the phones connected to for each phone call and the direction and width (i.e., 120°) of each sector. (Opp’n at 3.) The Court is therefore convinced that Agent Eicher’s opinions regarding the location and placement of each cell tower sector to which the witnesses’ phones connected were based on sufficient facts and data and are based on a reliable methodology.

Second, defendant incorrectly assumes that the size of Agent Eicher’s pie-shaped wedges are intended to portray the “coverage area” of the sectors in question. As described above, the size of the pie-shaped wedge is unimportant. The radius of the sides of the wedge, and thus the distance of the connecting arc from the cell tower, is not meant to convey the coverage area of

the signal coming from that antenna. The wedge is drawn in simply to indicate the direction of the sector to which the phone connected. The signal from that antenna could extend less far or farther away from the cell tower than the length of the pie-shaped wedges. Thus, because Agent Eicher does not purport to portray the “coverage area” of any particular cell tower or antenna, he cannot be said to have used an unreliable methodology in doing so.

On the whole, the Court is persuaded that Agent Eicher’s proposed testimony is based on reliable methodology. Indeed, the use of cell phone location records to determine the general location of a cell phone has been widely accepted by numerous federal courts. *See, e.g., United States v. Schaffer*, 439 F. App’x 344, 347 (5th Cir. 2011) (concluding that the field of “historical cell site analysis” was “neither untested nor unestablished”); *United States v. Dean*, 2012 WL 6568229, at *5 (N.D. Ill. Dec. 14, 2012) (finding that expert testimony relating to cell site records was reliable and would assist the trier of fact to determine a fact at issue, and noting that “such testimony is generally accepted in the Seventh Circuit”); *United States v. Fama*, 2012 WL 6102700, at *3 (E.D.N.Y. Dec. 10, 2012) (noting that “[n]umerous federal courts have found similar testimony reliable and admissible” (internal quotation marks omitted)). In light of Agent Eicher’s extensive experience in this well-established field, the Court agrees with the government that his testimony is based on reliable methods and principles.

Moreover, to the extent that Agent Eicher’s testimony relies on assumptions about the strength of the signal from a given cell tower, any challenges to those assumptions go to the weight of his testimony, not its reliability. Indeed, numerous other courts have concluded that the mere existence of factors affecting cell signal strength that the expert may not have taken into account goes to the weight of the expert’s testimony and is properly the subject of cross-examination, but does not render the fundamental methodology of cell site analysis unreliable.

See, e.g., Fama, 2012 WL 6102700, at *4; *United States v. Allums*, 2009 WL 806748, at *2 (D. Utah Mar. 24, 2009).

Overall, the Court is persuaded that Agent Eicher's opinions relating to the location of the cell towers, the sectors used for each call, and the general location where the cell phones must have been when they connected to each tower, are the product of reliable principles and methods. Agent Eicher's reports demonstrate that he has reliably applied that methodology to the facts of this case, and thus his proffered testimony meets the reliability standards required under Rule 702 and *Daubert*.

IV. RELEVANCE

The defense also insists that because Agent Eicher's testimony is not based on reliable principles and methods, it cannot be relied on to assist the jury to understand or determine a fact in issue, as required by Rule 702. Because the Court has concluded that Agent Eicher's testimony is based on a reliable methodology that has been reliably applied to the facts of this case, however, the Court disagrees. An explanation of how cell towers work and what general location a cell phone user must have been in at the time his cell phone connected to a particular cell tower would be helpful to the jury in understanding the government's claims about the movements and whereabouts of Jones and his co-conspirators. *See Evans*, 2012 WL 3779302, at *5 (cell site analysis was relevant because "it would allow the jury to narrow the possible locations of [the defendant's] phone during the course of the conspiracy").

V. RULE 403

Finally, defendant argues that the probative value of Agent Eicher's proposed testimony "is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury" and thus should be excluded under Rule 403. (Mot. at 11.)

Defendant first says that Agent Eicher's testimony is misleading because even the government admits that cell-site information is not precise enough to identify the specific building an individual was in when a phone call was placed, yet the government attempt to do just that. (Mot. at 11-12.) However, the government has made it clear that Agent Eicher's proposed testimony "will not claim to have determined the exact location of the phone user, but rather the *general location* where a cell phone would have to be located to use a particular cell tower and sector." (Opp'n at 2 n.1 (emphasis added).) Thus, his testimony is not misleading in that respect.

Defendant further argues that the proposed testimony is misleading because the reports contain "precise pie wedge shapes drawn in a compelling manor [sic] to try to prove Mr. Jones's phone was in certain key locations at specific times, [even though] the actual methodology (or lack thereof) behind these plotted maps does not support that conclusion." (Mot. at 12.)

As explained above, defendant's premise here is incorrect; Agent Eicher does not claim that defendant's phone was within the pie-shaped wedges at the time the calls were made. *See supra* at 2. However, the Court agrees that the use of the wedges could confuse members of the jury and mislead them into believing that defendant's phone must have been within that space. Thus, in order to avoid any unfair prejudice to the defendant, the arcs used to depict the outer limit of the pie-shaped wedges should be removed from Agent Eicher's reports. The wedges will then appear as open-ended "V" shapes opening out in the direction of the sector used by the phone. With this modification, the Court does not believe that there is any danger of unfair prejudice.

VI. NECESSITY OF A *DAUBERT* HEARING

In his motion, defendant requested a hearing to address the admissibility of Agent Eicher's testimony. (Mot. at 1.) The Court finds that no *Daubert* hearing is necessary.

It is well established that a court "is not required to hold an evidentiary hearing regarding the admissibility of expert testimony." *Fama*, 2012 WL 6102700, at *4 (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)). The use of cell phone records to locate a phone has been widely accepted in both federal and state courts across the country. *See supra* at 6; *see also People v. Wells*, 2007 WL 466963, at *11 (Cal. Ct. App. 2007) ("It is simply not true, as defendant contends, that the use of cell phones to locate a caller is new to the law. Cell phone evidence has been introduced for that purpose in a number of cases across the country . . ."); *People v. Davis*, 2006 WL 2965368, at *10 (Cal. Ct. App. 2006) ("[T]he technology in question is neither new to science or the law."); *Pullin v. State*, 534 S.E. 2d 69, 71 (Ga. 2000). In such a case, where the science is well understood and the issues are thoroughly briefed, the court need not hold an evidentiary hearing. *See Bell v. Gonzales*, 2005 WL 3555490, at *16 n.16 (D.D.C. Dec. 23, 2005) (noting that in cases where the expert report and affidavits "provide the necessary information, and the matter is not unusually complex or novel, a hearing is unnecessary"). Indeed, Judge Urbina of this Court recently denied a defendant's request for a *Daubert* hearing and qualified Agent Eicher as a cell site analysis expert. *See United States v. Gordon*, 09-cr-153 (D.D.C.).

CONCLUSION

For the foregoing reasons, defendant's Motion to Exclude the Expert Testimony of FBI Special Agent Scott Eicher is **DENIED**.

 /s/
ELLEN SEGAL HUVELLE
United States District Judge

Date: January 23, 2013