

LIGHTNING DATA CENTER MINUTES

August 12, 2022

ST. ANTHONY HOSPITAL, LAKEWOOD, COLORADO

Monthly Quote: “If you stand up proudly and assert yourself like Ajax, you’re offering a nice little projection for the start of one of these lightning coaxers, a brush discharge. Ajax may have appealed to Homer, but to a modern meteorologist he was just a darn fool taking an awful chance. He got away with it, so he lives in literature as a hero – albeit a stupid one.”

The Evening Star, May 28, 1933.

Members present: Clark, Gift, Crow, Coomer, Stemple, Terry and Swanson. Meeting began at 11:50 AM and ended at 12:30 PM.

1. The LDC is accepting donations, either as cash or check. If you donate via check, please make your check payable to Steve Clark at 755 S. Clinton Street, #2A; Denver, CO 80247. He will cash the check and keep the cash holdings specifically for the LDC. When the LDC incurs expenses, Steve will pay for services rendered through his bank account using the cash from LDC’s cash holdings. A log will be maintained detailing the inflow and outflow of monies. LDC currently has \$1087.00 in cash, a reduction of \$95 due to a purchase of lightning data.
2. Notes About Upcoming Meetings: The September LDC meeting will be a Zoom-only meeting. The October meeting will be reserved to honor Dr. Cherington.
3. Carl Swanson gave us an update on his First Responder Project. A lightning strike on July 13, 2022 affected five people in the area of Crown Mountain Park, near El Jebel, Colorado. None of the five were injured or killed but all five were knocked to the ground and refused treatment or transport. According to the park director, lightning hit a fuse box at the base of a chairlift, then traveled up the cable and then struck a metal gate at a nearby BMX bike raceway. Carl is waiting for more information from first responders.

Carl presented an article about a man struck in Virginia while moving cattle in his pasture. He reached to close a latch to a gate when lightning struck the fence 200 yards away, knocking him back several feet. He had a burn on his left hip about the size of a half-dollar. He also had pain in his right arm but was able to call for help with his left. He went to the hospital for monitoring. Doctors said he was lucky there wasn’t any heart damage since the lightning went through his right arm and left hip. A security camera that looks out over the yard captured the strike.

4. A lightning strike in Washington DC made national headlines. Four people were struck in Lafayette Park across the street from the White House while sheltering from the rain underneath a tree. A couple from Wisconsin was killed at the scene and another individual died later from their injuries. A fourth person was injured and their condition was unknown.

5. Lightning struck 10 soldiers at Fort Gordon near Augusta, Georgia on July 20, 2022 at about 11 AM. One soldier died and the other nine were injured. The soldiers were on training exercises at the time. The condition of the survivors was unknown at press time.
6. Barb Stemple spoke with an employee at Rocky Mountain National Park (RMNP). The man told her a group of 6 trail workers on the east side of the park were struck by lightning a few years ago. The actual number of people that were affected is unknown, but one of them has ongoing issues. The incident was not reported. She will ask group members to join a future meeting.
7. LDC TRIP TO RMNP. On July 21, 2022, Ken Langford, Steve Clark, Coleen Crow, and two other park volunteers went to RMNP to visit the site of Coleen's lightning strike. She thinks she was struck by lightning at about 3:10 PM on July 8, 2018. Steve gave a brief presentation of the findings from that trip.

Lightning data were initially purchased from the U.S. Precision Lightning Network (USPLN). Data from that network showed a total of nine strikes clustered around the estimated location of the strike. It turns out the estimated location was approximately 0.2 miles away from the actual location at which Coleen was hit. As listed, the nearest strike was roughly 1.3 miles away (1.1 miles away correcting for the location error). The USPLN dataset listed only 3 strikes during the 3 PM hour on July 8. During our hike, Coleen told us when she came-to after being hit, she recalled seeing what looked like flash bulbs repeatedly going off.

Since only 3 strikes were recorded during the 3 PM hour and the nearest strike was 1.1 miles away, we decided to purchase data from the National Lightning Detection Network (NLDN). The NLDN data show 10 strikes at a distance of 1 mile or less away from Coleen's location. All 10 of them occurred during the 3 PM hour, specifically between 3:13 PM and 3:22 PM. The nearest strike was approximately 0.4 miles away. There was another strike at 3:08 PM that was 1.1 miles away, which appears to be commensurate with the 3:08 PM strike in the USPLN dataset, although the current readings are different. In addition, the NLDN network showed 21 strikes during the 3 PM hour, between 3:04 PM and 3:32 PM. The NLDN data appear to better support Coleen's recall of the flashbulbs going off, although the flashing could also be caused in part by in-cloud and cloud-to-cloud lightning, none of which will be detected by either network. Coleen told us there are transcripts of her radio communications with RMNP dispatch that should help to clarify the timing of events. More details will be given at the September meeting.

8. LDC welcomes your questions. Please send them via e-mail to Steve Clark at sclarktoto@gmail.com. Your medical questions will be forwarded to Dr. Phil Yarnell for his review and will usually be taken up for discussion in the next month's meeting. Please be advised any questions posed are for the general consideration by the group and do not constitute a formal medical opinion. If a formal evaluation is requested, arrangements can be made directly with Dr. Yarnell. If you have a medical emergency, please call 911 or your local EMS.
9. Questions, comments, error notifications, and critiques of these minutes are welcome. Please forward those to Steve Clark. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.

10. LDC Disclaimer: These minutes do not represent official positions of the LDC or its members. They simply reflect the comments made at the meeting. Furthermore, the LDC does not implicitly or explicitly recommend or endorse any product or service. Any product or service presented in these minutes is done so for purposes of discussion and analysis. The merit (or lack thereof) is open for the consideration and review by the entire membership.

11. Next meeting: Zoom Meeting Only. Friday, September 9, 2022, from 11:45 AM to 1:00 PM MDT. TOPIC: Update on Coleen Crow's Lightning Strike.

Respectfully Submitted,
Steven E. Clark, Consulting Meteorologist

Lightning Links

This is a monthly listing of periodicals, websites, and videos about lightning and allied areas from a variety of sources. A headline or description is listed, followed by the link. Please note that some of the links are perishable, which means you'll need to go to the source for the information.

Condon, S., 2022: Lightning Strikes Frazzle Nerves in Roaring Fork Valley. *Aspen Daily News*. July 19, 2022. Link: https://www.aspendailynews.com/news/lightning-strikes-frazzle-nerves-in-roaring-fork-valley/article_f80185a0-06fe-11ed-b2fb-67fc138672ed.html

Saurer, R., 2022: (VIDEO) Lightning Strikes in Colorado Springs Neighborhoods. *FOX 21 News*. July 17, 2022. Link: <https://www.fox21news.com/news/lightning-strikes-in-colorado-springs-neighborhoods/>

Helsel, P. and A. Cusumano, 2022: One Soldier is Dead and 9 Others Injured in a Lightning Strike at a Georgia Airbase. *NBC News*. July 20, 2022. Link: <https://www.aol.com/news/one-soldier-dead-9-others-234646425.html>

Lee, A., 2022: Colorado Ranks 4th in Nation for Lightning Fatalities. *FOX 21 News*. July 20, 2022. Link: <https://www.fox21news.com/news/colorado-ranks-4th-in-nation-for-lightning-strike-fatalities/>

Dawson, S., 2022: Jackson Resident Shares Shocking Experience With Lightning Strike. *WBBJ-TV*. June 13, 2022. Link: <https://www.wbbjtv.com/2022/06/13/jackson-resident-shares-shocking-experience-with-lightning-strike/>

Bullen, L., 2022: Lightning Bolt Caught on Video As It Strikes Near Woman, Dog. *Newsweek*. July 26, 2022. Link: <https://www.newsweek.com/lightning-bolt-caught-video-it-strikes-near-woman-dog-1728049>

Coleburn, C., 2022: Man Survives Lightning Strike Caught on Camera. *WAFF-TV*. August 11, 2022. Link: <https://www.waff.com/2022/08/11/man-survives-lightning-strike-caught-camera/>

McCullough, C., P. LeBlanc and S. Swire, 2022: 2 Killed in Lightning Strike Near White House. *CNN*. August 5, 2022. Link: <https://www.cnn.com/2022/08/04/politics/white-house-lightning-strike/index.html>

Cappucci, M., 2022: ‘Gigantic Jet’ Lightning Is A Mystery. These Researchers Are Solving It. *The Washington Post*. August 3, 2022. Link: <https://www.washingtonpost.com/climate-environment/2022/08/03/gigantic-jet-lightning-science/>

Boggs, L., D. Mach, E. Bruning, N. Liu, O. Van Der Velde, J. Montanya, S. Cummer, K. Palivec, V. Chmielewski, M. Peterson and 2 others, 2022: Upward Propagation of Gigantic Jets Revealed by 3D Radio and Optical Mapping. *Science Advances*. August 3, 2022. Link: <https://www.science.org/doi/10.1126/sciadv.abl8731>
