

LIGHTNING DATA CENTER MINUTES

September 9, 2016
ST. ANTHONY HOSPITAL WEST, LAKEWOOD, CO
www.lightningdatacenter.org

“We’ve heard about animals being struck by lightning and killed, but I don’t remember hearing about lightning killing animals on this scale before.” Norwegian Nature Inspectorate Knut Nyland, on the lightning strike which killed 300+ reindeer in Norway. Link: <http://www.theverge.com/2016/8/29/12688614/lightning-strike-kills-reindeer-norway>

1. Members Present: Clark, Yarnell, Wachtel, Nibbe, Gift, Cui-Gift and Swanson. Meeting began at 11:45 AM and ended at 1:10 PM. Clark moderated.
2. The website is live. The URL is www.lightningdatacenter.org and is shown above. At this time, we have replicated the content from the old website and added a small amount of new content. The “Search” feature is presently unavailable. There are places on the website that are presently empty. Eventually, those places will be populated by content. Your suggestions for content are welcome. Please e-mail those to me at: sclarktoto@gmail.com.
3. As most of you know, a large herd of 300+ reindeer were killed by lightning in Norway. Carl Swanson offered a suggestion on what led to their deaths. He thinks the reindeer were killed by forked lightning. He showed us a still photograph and a video. At the lower right of the still image, Carl pointed out a reindeer that was buckled onto its legs. From the video, reindeer farther away showed what Carl referred to as “death poses” and “death masks”, drawing from his law enforcement training. Carl said those reindeer most likely suffered some pain before they died. Carl reached out to some people in Norway asking about the nature of the rock in the ground. He was told the underlying rock is mostly granite and gneiss, both of which are dense and relatively poor conductors. Carl thinks the fork of lightning with the greater current instantly killed the reindeer that was buckled onto its legs. He thinks the other fork with a lesser current connected with the ground and caused the other animals to die by ground current. Phil Yarnell said their deaths were most likely a result of cardiac arrest and a few of the animals appeared to have rigor mortis.
4. Dr. Yarnell presented a few cases of lightning survivors and electric shock survivors.

In the 1700s, a man and two women were killed while closing a window, when lightning struck a nearby windmill.

A man suffered a lightning strike 30 years ago. Since then, he has seen many neurologists. He complains of chronic pain, PTSD, insomnia (3 hours sleep a night), tremors, musculoskeletal problems, non-Parkinsonian depression, anger and spinal disease. He wanted to know if these health issues are a result of the strike 30 years ago.

A man was struck by lightning in 2014. He thought little of it. That night, he could not sleep. His urine was dark for a week following the strike. His vision in his right eye became blurry. His right leg will occasionally spasm. He has memory loss, pain in his legs and hip and abnormal skin sensations. He is overly sensitive to sound and light. One day, he had a “head sensation”, which was followed about 20-30 minutes later by a thunderstorm. He also has leg pain when thunderstorms are in the area. A question was posed to the group. Can barotrauma be the cause of these sequelae?

An electric shock victim reported being hurt at work. He was thrown and landed on his right side. He has muscular atrophy in his right leg, constant pain, memory loss and PTSD.

Another person received a 12,500-volt shock and wanted to know the long-term effects of electric shock. Symptoms are similar to other electric shock survivors. He was unconscious for a while. EEG was negative. His main problem now is disorientation while driving at night.

A man received a high-voltage shock while picking oranges and was severely burned. He cries constantly and is weak. He reports feeling weird inside and a sensation of electricity in his body all the time.

5. Questions, comments, notification of errors, and critiques of these minutes are welcome. Please forward those to Steve Clark at: sclarktoto@gmail.com. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
6. 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.
7. Next meeting: Friday, October 14, 2016 at 11:45 AM at St. Anthony Hospital West in the Pinecone Room.

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.

Padilla, A., 2016: "Daughter Writes Loving Message About Arvada Man Killed by Lightning". *Kdvr.com*, August 20, 2016. Link: <http://kdvr.com/2016/08/20/arvada-man-killed-by-lightning-in-forest-in-northern-colorado/>

Pohl, J., 2016: "Man Killed After Larimer County Lightning Strike". *Thecoloradoan.com*, August 20, 2016. Link: <http://www.coloradoan.com/story/news/2016/08/20/man-killed-after-larimer-county-lightning-strike/89050500/>

DiSpirito, L., 2016: "Daughter was on Phone with Dad When He Was Struck by Lightning". *Cbslocal.com*, August 23, 2016. Link: <http://denver.cbslocal.com/2016/08/23/daughter-was-on-phone-with-dad-when-he-was-struck-by-lightning/?e=luDiwrL6HwDOSg>

2016: "323 Reindeer Killed by Lightning in Norway". www.thelocal.no, August 29, 2016. Link: <http://www.thelocal.no/20160829/323-reindeer-killed-by-lightning-in-norway>

Gajanan, M., 2016: "A Bolt of Lightning Has Killed 323 Reindeer in Norway". *Time*, August 29, 2016. Link: <http://time.com/4470432/lightning-strike-norway-reindeer/> This has the video Carl presented.

The Associated Press, 2016: "Strange Lightning Strike Kills 300 Reindeer in Norway". *Thedenverchannel.com*, August 29, 2016. Link: <http://www.thedenverchannel.com/news/national/strange-lightning-strike-kills-300-reindeer-in-norway>

Toor, A., 2016: "Lightning Strike Kills 323 Reindeer in Norway." *Theverge.com*. August 29, 2016. Link shown above under the monthly quote.

Video: "Top Lightning Strike Effects – Amazing Hits by Mother Nature 2016-2017" Link: <https://www.youtube.com/watch?v=vKgy471AnVo>

Meyers, J., 2016: "Lightning Deaths Climb, Deadliest Year Since 2007." *Thedenverchannel.com*, September 9, 2016. Link: <http://www.thedenverchannel.com/storm-shield/storm-shield-featured/lightning-deaths-climb-deadliest-year-since-2007>