

**LIGHTNING DATA CENTER MINUTES**  
**SEPTEMBER 10, 2010**  
**ST. ANTHONY CENTRAL HOSPITAL, DENVER, CO**  
[www.stanthonyldc.org](http://www.stanthonyldc.org)

Monthly Tidbit: Lightning in Chinese characters. On the web at:  
[http://chineseculture.about.com/library/symbol/blcc\\_lightning.htm](http://chineseculture.about.com/library/symbol/blcc_lightning.htm)

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Lightning in Chinese:                      **lightning:**

Chinese Pinyin: shan3 dian3



1. Meeting began at 11:50 AM and adjourned at 1:10 PM.
2. Members present: Clark, Nibbe, Wells, Collier, Elder, Cherington (Michael & Nancy), and Gift. Clark moderated the meeting.
3. Clark brought in two articles for review. The first was: “Electricity Collected from the Air Could Become the Newest Alternative Energy Source”, which was a press release from the 2010 Meeting of the American Chemical Society in Boston. The article suggests “hygroelectricity” might be drawn from the free atmosphere by using plates similar to solar collectors. The basic premise is water vapor in the air will enhance the natural charge of a substance. Experiments in high humidity environments showed silica became more negatively charged and aluminum phosphate became more positively charged. The article also stated their technology might prevent lightning strikes to buildings. The second article was in this Friday’s Denver Post: “Measure of Brain Maturity Weighed”. As noted in the journal Science, 238 volunteers, aged 7-30, had 12,000 connections in their brains scanned. The exact technology used to perform the scans was not mentioned in the article. The scans appear to accurately differentiate between the brains of children and adults and to determine where individuals lie on the path of normal brain development. The authors indicate more work is needed to refine the methodology, but state the potential uses are many. Medical ethicists are wary, fearing the technology could be misused. Links for both of these articles are in the Lightning in the News section below.

4. Robert Gift returned from China earlier this week. Robert said China Has a booming population and construction is everywhere. He said smog is getting worse, as personal wealth has increased and people shift away from bicycles and motorbikes to cars and trucks. China has highways like our Interstates, but people have not yet learned that slower traffic should keep to the right and allow faster traffic to pass. Urban areas tend to be haphazard in their land use, with residences being located right next to heavy industries. Newer developments are starting to be better designed, showing some understanding of land use and zoning concepts. There are Walmarts in China, but stores and other public buildings do not have restrooms in the facility. Instead, you go to a “water closet” outside. When they went out to eat at one restaurant, the food was placed on a large round glass rotating plate, off which people eat with their chopsticks – effectively a communal plate. Robert did get to witness a tornado siren test while in Yantai.
5. For those who were not present at last month’s meeting, Clark gave a brief summary of the lightning strike on the fellow on Longs Peak. Afterwards, Cherington asked if you would want to be using an iPod during the hike when a storm is in the area, which led to the question of having a grounding wire with you. Clark stated no. Gift thought he might want a copper strip starting just above his head, then going down his back and to ground, to allow the lightning a path to ground. Clark wondered of the strip wouldn’t result in greater potential for burn injury, since copper is a highly thermoconductive material.
6. Rich Keen and his wife are okay. Their house is well south of the Four Mile Canyon fire burning in Boulder County. Keen reported the total number of thunderstorms at his location was very low this year.
7. Reminder: Howard Wachtel will present a talk in December titled “You Have A Magnetic Personality.” The talk will discuss how the brain and the heart produce magnetic fields and how external magnetic fields affect the two organs. This should be a most interesting talk.
8. These minutes do not represent official positions of LDC or its members. They simply reflect the comments made at the meeting.
9. Next meeting: Friday, October 8, 2010 at 11:45 AM in Main Auditorium at St. Anthony Central Hospital. Subject: Roundtable. Reminder: Howard Wachtel will present in December. Please mark your calendars.

Respectfully Submitted,

Steven E. Clark, Consulting Meteorologist

## **In Case You Missed It...Lightning in the News**

**This is a monthly listing of news and videos about lightning and allied areas as reported in the media. A headline is listed, followed by a link to the article. Please note that some of the links are perishable, which means you'll need to go to the source for the article. Enjoy!**

"New Scan Measures Brain Maturation"

[http://www.denverpost.com/nationworld/ci\\_16036385](http://www.denverpost.com/nationworld/ci_16036385)

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"Electricity Collected from the Air Could Become the Newest Alternative Energy Source"

[http://portal.acs.org/portal/acs/corg/content?\\_nfpb=true&\\_pageLabel=PP\\_ARTICLEMAIN&node\\_id=223&content\\_id=CNBP\\_025501&use\\_sec=true&sec\\_url\\_var=region1&\\_uuid=3d7c7757-f157-441c-bc5a-394fb04ceb07](http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_ARTICLEMAIN&node_id=223&content_id=CNBP_025501&use_sec=true&sec_url_var=region1&_uuid=3d7c7757-f157-441c-bc5a-394fb04ceb07)