

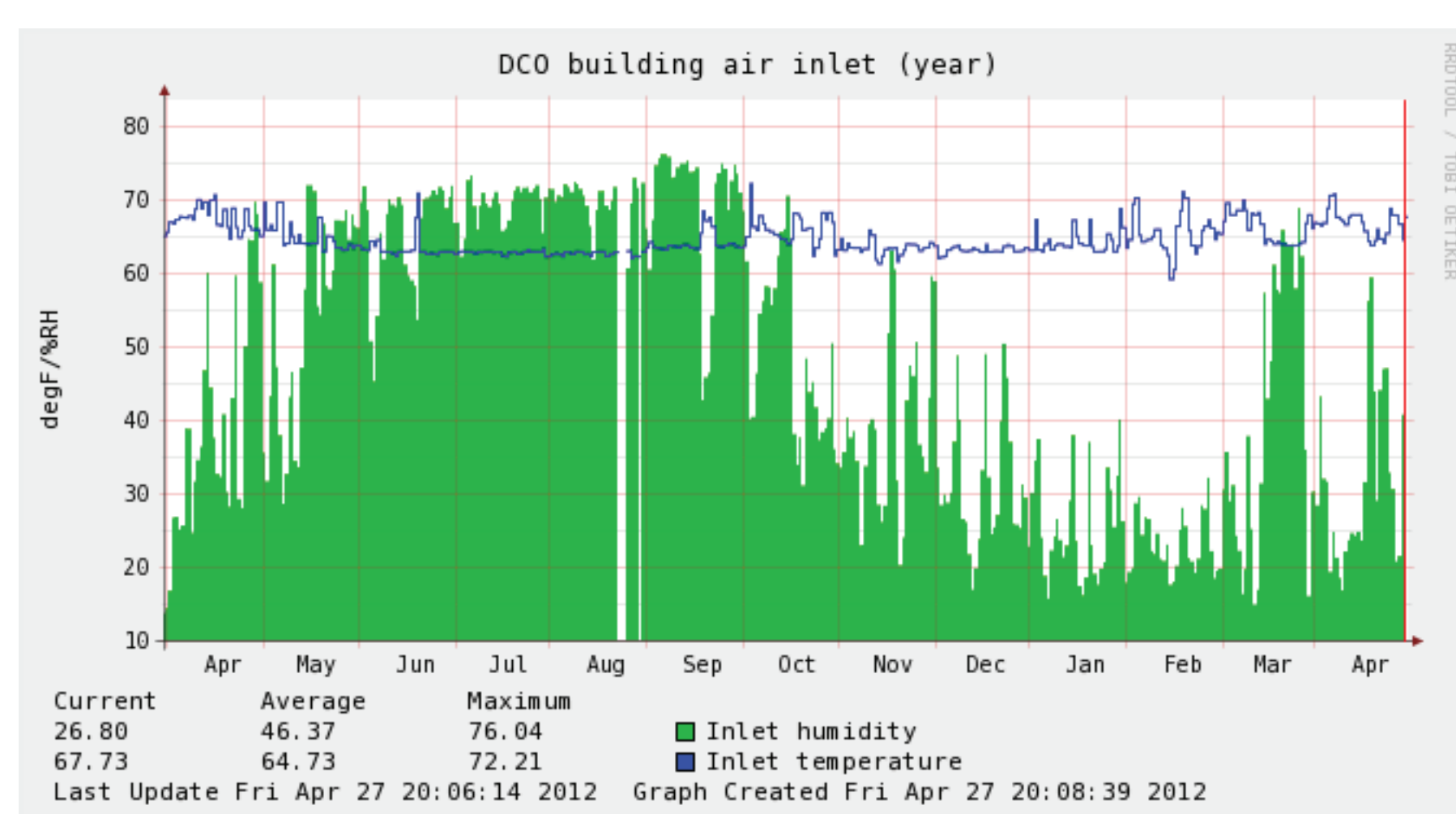
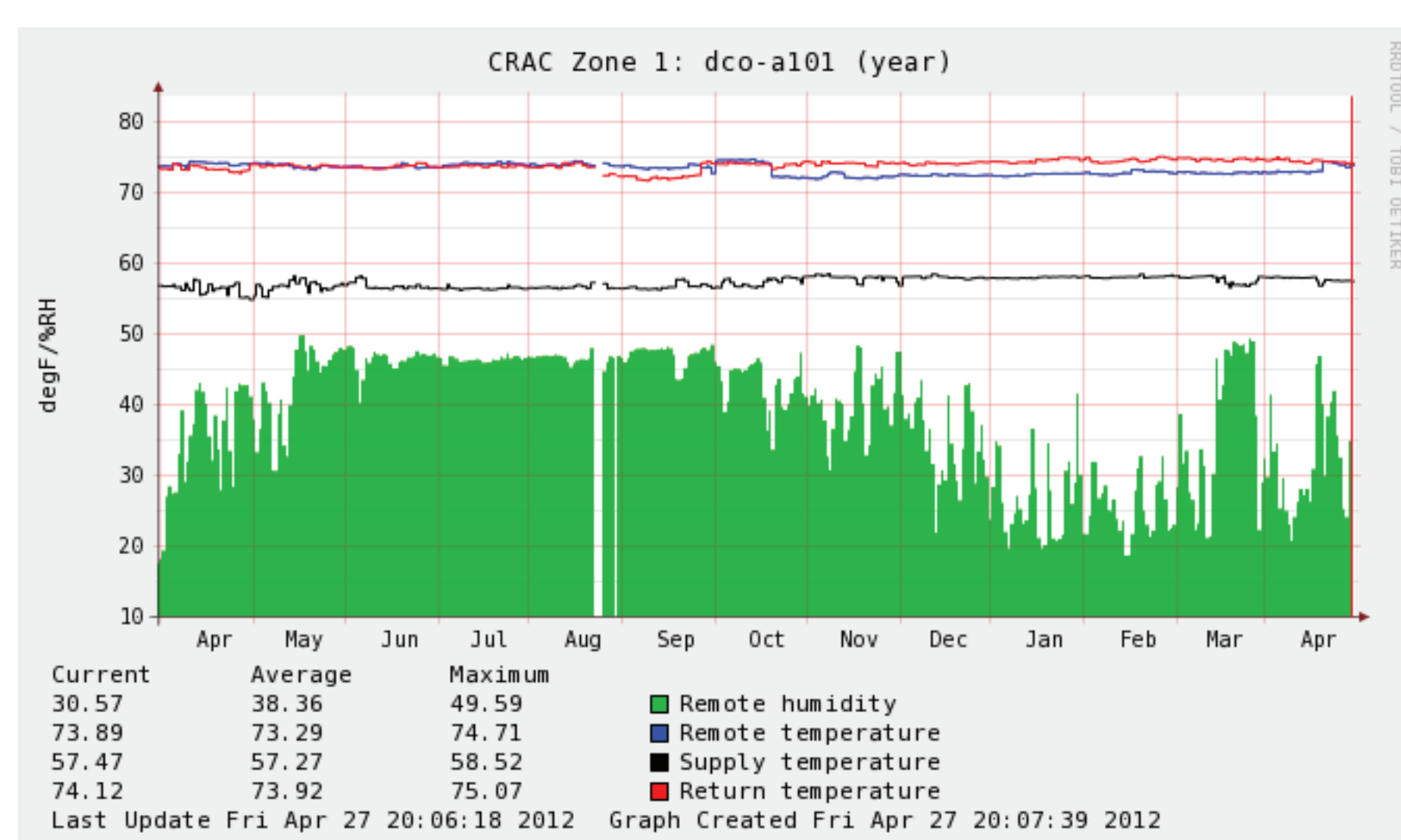
Physical Makeup of the DCO

Interesting Statistics

- As of October 2013 there are 750+ computers in the DCO, connected to 30+ network switches, 80+ power distributors and 20+ remote console servers with a total of 2100+ cables
- There are a total of 6300+ CPU cores, 15+ TiB of memory and 1.4+ PB of disk space across 1800+ spindles
- 12 air conditioners within the three zones process hot air back to normal building temperatures
- 20+ sensor nodes monitor environmental conditions in the room; most equipment can send email to alert to adverse conditions

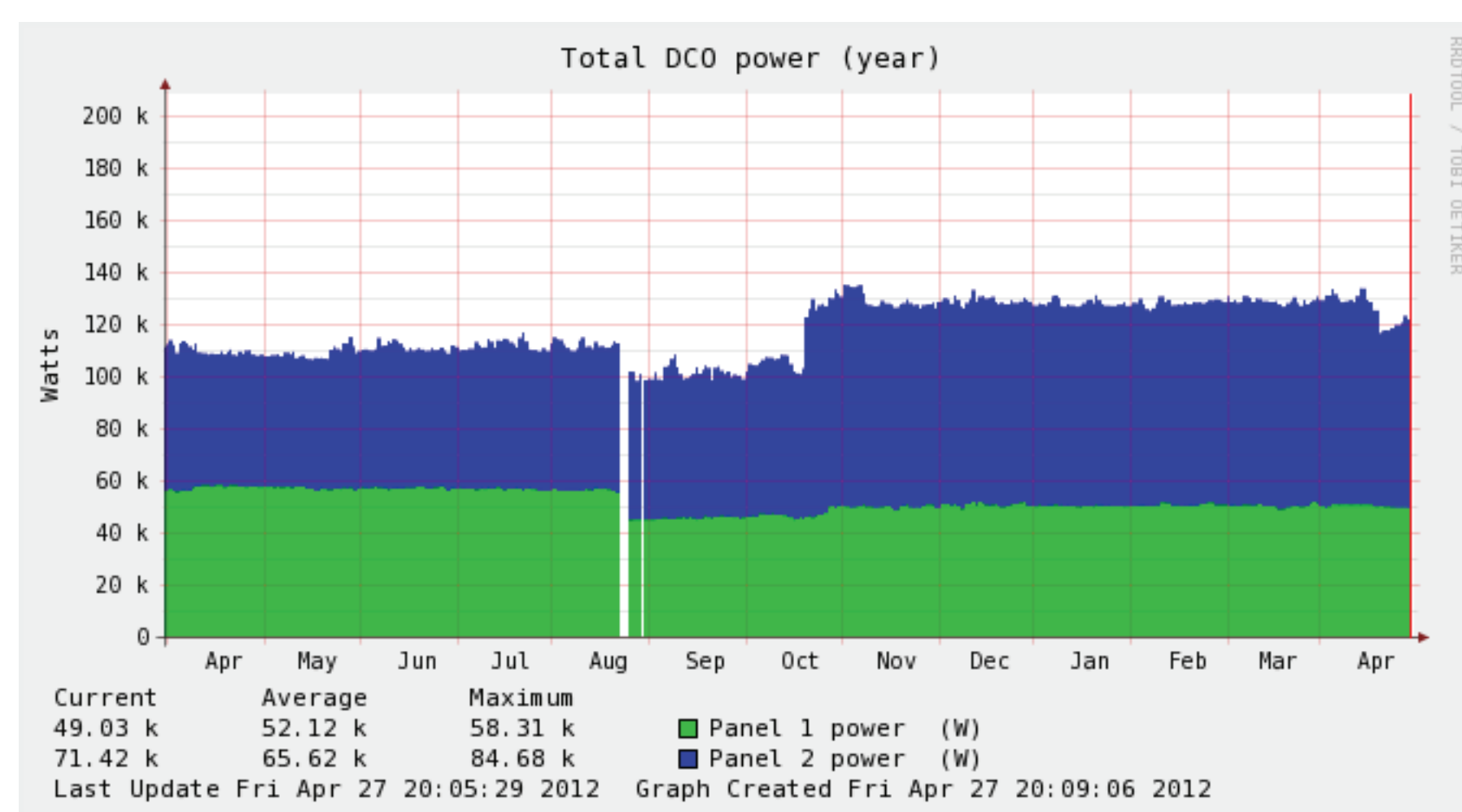
TEMPERATURE AND HUMIDITY

- Temp and humidity of the building's fresh air as supplied to the DCO
- Over the last year, temperature remained nearly constant
- Humidity was controlled by the DCO air conditioners at all times during the year



ELECTRICAL POWER CONSUMED IN THE DCO

- There are currently seven power distribution units within the computing zones, each having a capacity of around 70 kW



General Schematic

MONITORING / INFRASTRUCTURE

- Air temperature
- Water temperature
- Fan speed
- Humidity
- Power (quantity & quality)
- Machine status
- Network status
- Grey system for room access security
- Double interlock pre-action sprinkler system
- Distance-read sub-floor leak detection system
- Nagios and SNM monitoring systems

