SBNONLINE PROPOSED UPDATES

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EP-NU MEETING

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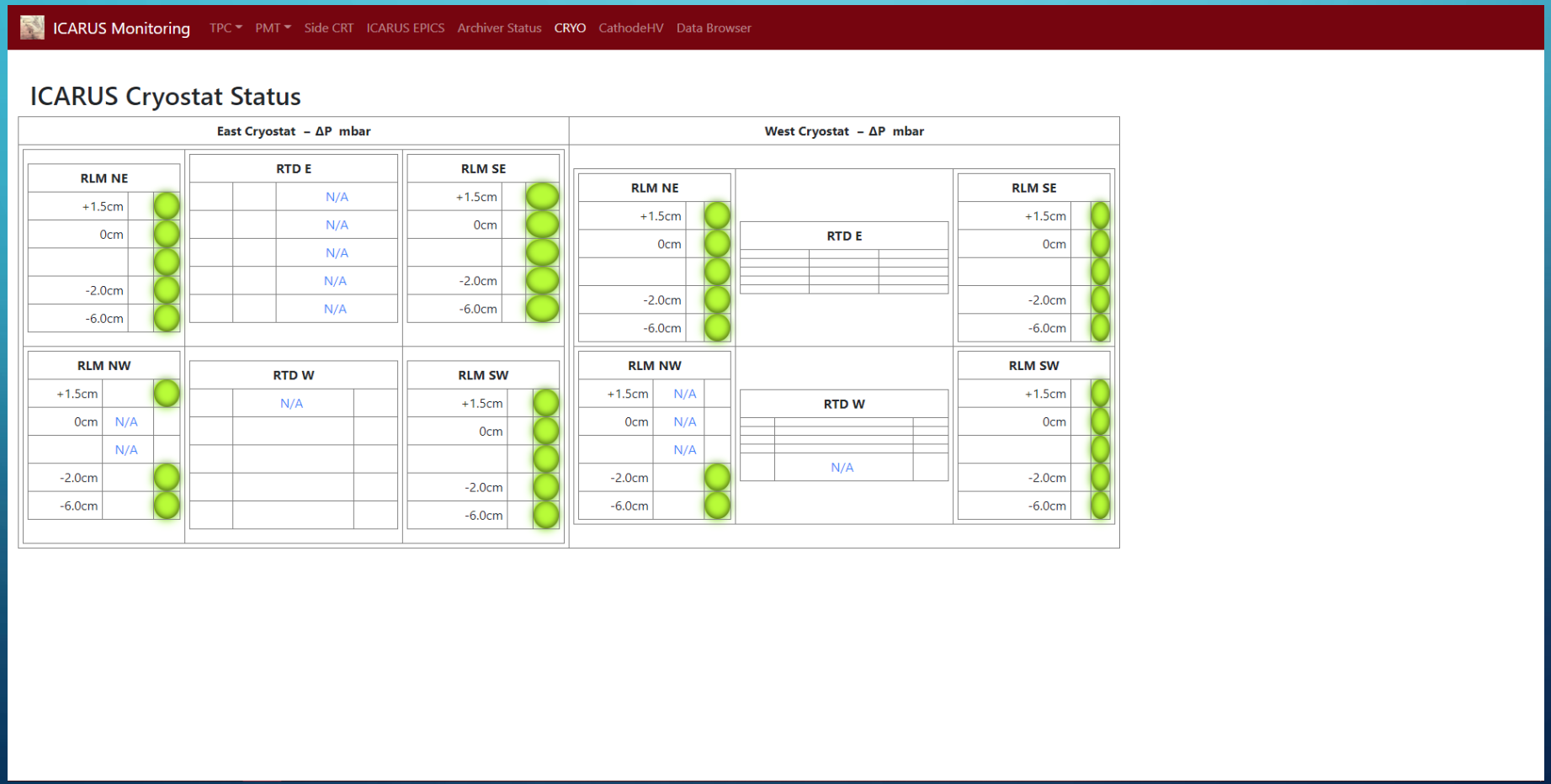
CURRENT STATE

- Currently SBNOnline provides monitoring for several hundreds of sensors of the SBND and Icarus
- The sensors include temperature, cathode high voltage, PMT status, electrical and timing information
- SBNOnline uses PostgreSQL database which contains data archived from EPICS.
- It's accessed from control room PC (physically or via VNC) after connecting to Fermilab VPN by opening a webpage https://sbn-online.fnal.gov (shortcut available on PC under /home/Desktop).
- This will be changed in the future to remove VPN from the procedure and allow direct access from ICARUS Control Room PC at CERN (based on IP)

EXAMPLE (CRYOSTAT STATUS)



PROPOSED UPDATES

- In order to simplify monitoring for the shifters, the unification of all the interfaces is proposed
- For this, DCS sensors, DSS alarms data should be brought to SBNOnline
- First page to appear will contain data from TPC Power Supply units and should be available next week
- The SBNOnline is planned to serve as a unique monitoring and data quality analysis tool for all subsystems of detector and to be used in tandem with control tools.

DEVELOPMENT PLAN

- First steps:
  - Add TPC power supply sensors pages
    - ETA: November 23-29
  - Fix SQL-Injection vulnerability
    - ETA: November 30 – December 6
- Port the code from Python 2 to Python 3
  - ETA: January 11-17 (to be done in parallel to other parts)
- Bring the rest of existing data from DCS to SBNOnline
  - PMTs
    - ETA: January 4-10
  - Electrical
    - ETA: January 11-17
- Bring DSS Alarms to SBNOnline
  - ETA: February 15 – March 15 (due to discussions necessary in order to see how to archive alarms in DB)
- Bring newly added data from DCS to SBNOnline
  - ETA: March 15 - … (to be done in parallel and as new sensors are added to DCS)

CONTRIBUTORS

- Code:
  - Gray Putnam
  - George Salukvadze (since about a month ago)
- General discussions:
  - Geoffrey Savage
  - William F Badgett Jr
  - Wesley Robert Ketchum
  - Angela Fava
  - Bruce Howard
  - Umut Kose