

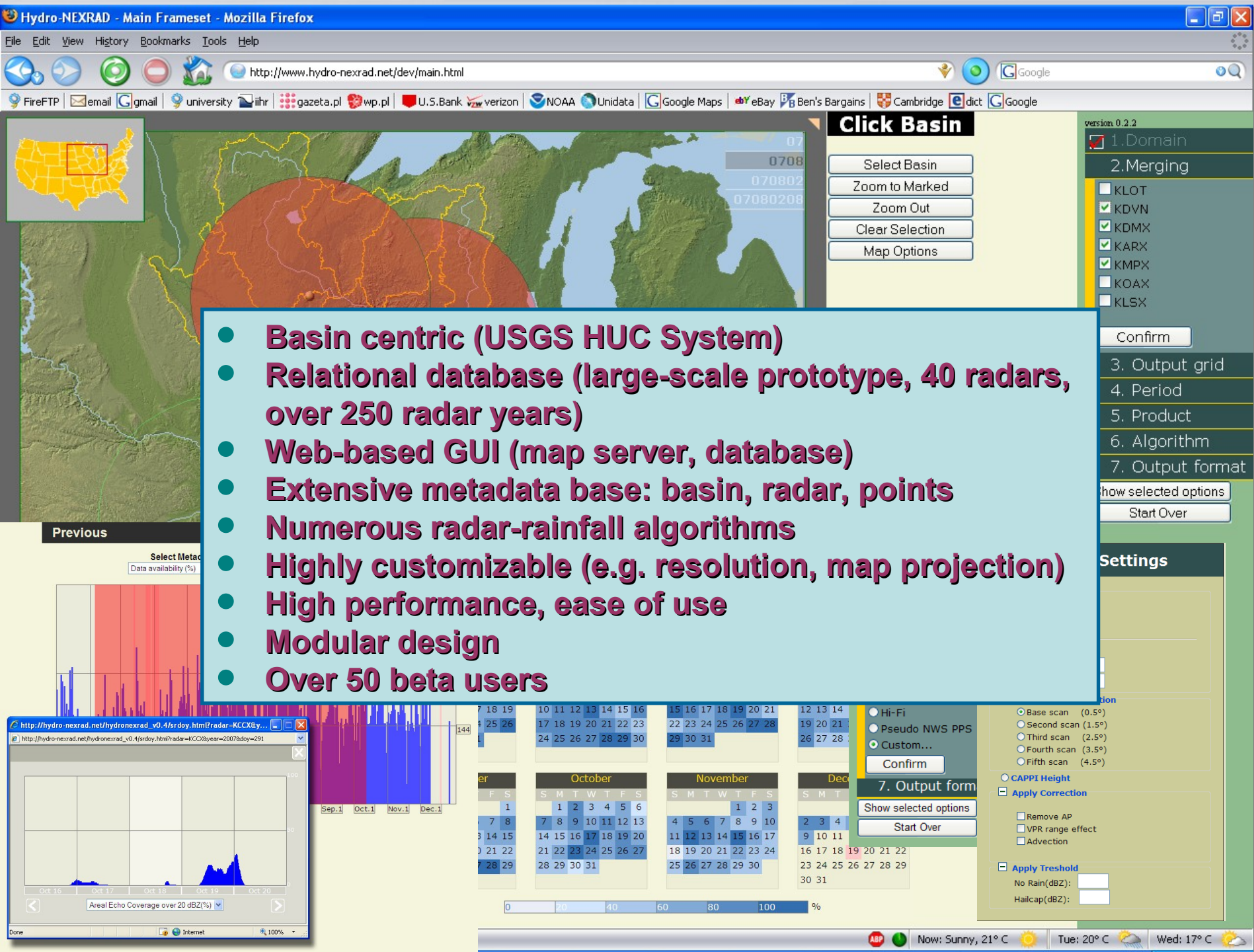
# **Hydro-NEXRAD: A Community Resource for Hydrologic Research and Applications**

**Project Goal: ...to provide the hydrologic community with ready access to the vast archives and real-time information collected by the national network of NEXRAD radars.**

**What is it? A WEB-based prototype information retrieval system that allows ordering customized radar-rainfall maps for hydrologic applications based on WSR-88D data.**

## **Science Goals**

- **Extreme events: flash-floods, urban flooding, debris flow, landslides, etc.**
- **Hydrologic forecasting: distributed models of water and contaminant transport**
- **Variability, predictability, complexity of water cycle**
- **Support of WATERS network**
- **Remote sensing ...and much more...**



# Cyberinfrastructure Challenges

- **Adaptation to real time service for the community**
- **Expanding to full national coverage (NCDC? CUAHSI?)**
- **Expanding to multisensor capability (rain gauge, satellite data)**
- **Comprehensive performance evaluation**
- **Dynamic nature of the system: implementation of new ideas**
- **Facing the question “What’s next?” Upkeep, growth, architecture: central or distributed, etc. etc.**