

HSEB Quarterly Newsletter Glossary

- ABRFC -- Arkansas-Red Basin River Forecast Center in Tulsa, OK
- ALERT – NWS’s Automated Local Evaluation in Real Time gauge network
- Apex – Apex Digital Systems, Inc. (recently acquired by TerpSys) in Silver Spring, MD
- APRFC – Alaska-Pacific River Forecast Center in Anchorage, AK
- AWIPS – Advanced Weather Interactive Processing System
- AWIPS I – AWIPS, first generation software, 1996 through 2009
- AWIPS II – AWIPS, second generation software, 2010 and beyond
- AWIPS II Extended – The phase of the AWIPS-II generation software beyond simple migration from AWIPS I. This includes topics such as CHPS integration, NAWIPS integration, Weather Event Simulator integration, and Thin Client development.
- BOC – Baseline Operational Capability; the first operational manifestation of CHPS at the 4 CAT RFCs, sometimes called BOC-I(1) or BOC I(1).
- BOC II – Baseline Operational Capability; the second operational manifestation of CHPS at all 13 RFCs, sometimes called BOC-II(2).
- BTG – NWS’s Back-up Telecommunications Gateway at Mt. Weather, VA
- CAP – Common Alert Protocol starting to be used within NWS watch and warning public products
- CAT – CHPS Acceleration Team. Membership includes: HIC ABRFC (Billy Olsen), HIC CNRFC (Rob Hartman), DOH NERFC (Rob Shedd), DOO NOHRSC (John Halquist), HIC NWRFC (Harold Opitz), OHD Senior Scientist (Pedro Restrepo)
- CAT II – CHPS Acceleration Team (Phase II). Membership includes representatives from the remaining nine RFCs
- CBRFC – Colorado Basin River Forecast Center in Salt Lake City, UT
- CHPS – Community Hydrologic Prediction System. Built upon Delft-FEWS for its infrastructure, CHPS also includes NWS-specific software components and models that assist with the flood forecasting function at all 13 NWS RFCs. Ultimately CHPS will facilitate the exchange of products and services among a hydrologic community broader than the NWS.
- CNRFC – California-Nevada River Forecast Center in Sacramento, CA

HSEB Quarterly Newsletter Glossary

- CRN – Climate Reference Network
- CUAHSI -- Consortium of Universities for the Advancement of Hydrologic Science, Inc.
- CY – Calendar Year
- DailyQC – Data Quality Control functionality developed in the Western Region and implemented in the MPE application
- DCP – Data Collection Platform
- GOES DCS – Data Collection System operated by NOAA’s NESDIS
- Delft – Abbreviated name for WL | Delft Hydraulics, in the Netherlands
- Delft-FEWS – An open shell system created and maintained by WL | Delft Hydraulics, already in operational use by several countries in Europe. For information visit: <http://www.wldelft.nl/soft/fews/int/index.html>. The Delft-FEWS was selected as the CHPS software infrastructure in January 2008.
- Deltares – A Dutch institute formed January 1, 2008 from WL | Delft Hydraulics and others. Visit: http://www.deltares.nl/xmlpages/page/deltares_en.
- DHM – Distributed Hydrologic Model – An NWSRFS operation which uses a gridded rainfall-runoff and routing component to calculate flows
- DHR – Digital Hybrid Reflectivity radar product
- DOH – Development and Operations Hydrologist position at a River Forecast Center
- DOMSAT – Domestic communications Satellite
- DOO – Development Operations Officer (at NOHRSC)
- DPA – Digital Precipitation Array precipitation radar product
- DRGS – Direct Readout Ground Station
- DWOPER – Dynamic Wave Operation – a hydraulic routing program developed by OHD and available for use within NWSRFS
- D2D – Display-2-Dimensions meteorological data viewer in AWIPS-I
- EDDN – USGS’s Emergency Data Distribution Network
- EnsPost – Ensembles Post Processor for XEFS

HSEB Quarterly Newsletter Glossary

- EPP – Ensembles Pre-Processor for XEFS
- EROS – USGS’s Earth Resources Observation & Science data center in Sioux Falls, SD
- ESP – Ensemble Streamflow Prediction
- ESPADP – Ensemble Streamflow Prediction Analysis and Display Program
- EVS – Ensemble Verification System
- FEWS – Flood Early Warning System; preferred usage is “Delft-FEWS” (defined above)
- FFG – Flash Flood Guidance
- FFMP – Flash Flood Monitoring and Prediction
- FLDWAV – hydraulic routing model developed by OHD to supersede DWOPER; also available for use within NWSRFS
- FORTRAN – FORMula TRANslation; computer language
- FSS – Forecasting Shell Server (an architectural component of Delft-FEWS)
- FY – Fiscal Year
- GFE – Graphical Forecast Editor
- GOES – Geostationary Operational Environmental Satellite
- GMT – Greenwich Mean Time
- GRIB – Gridded Binary data format
- HADS -- Hydrometeorological Automated Data System
- HAS – Hydrologic Analysis and Support position at a River Forecast Center
- HEC – The USACE’s Hydrologic Engineering Center in Davis, CA
- HEC-RAS – USACE HEC’s River Analysis System
- HEPEX – Hydrologic Ensemble Prediction eXperiment
- HIC – Hydrologist-In-Charge position at a River Forecast Center
- HL-RDHM – Hydrology Laboratory Research Distributed Hydrologic Model

HSEB Quarterly Newsletter Glossary

- HMOS -- Hydrologic Model Output Statistics
- HPE – High-resolution Precipitation Estimator
- HPN – High-resolution Precipitation Nowcaster
- HSD – Hydrologic Services Division within NWS’s OCWWS
- HSEB – Hydrologic Software Engineering Branch within OHD’s Hydrology Laboratory
- HSMB – Hydrologic Science and Modeling Branch within OHD’s Hydrology Laboratory
- HydroBase – Hydrologic Database Manager
- HydroView – Hydrologic Data Viewer
- HydroXC – Hydrology XML Consortium sponsored by OHD
- ICP – Interactive Calibration Program
- IFD – Interactive Forecast Display, a (so far) informal term used for the new RFC forecaster GUIs in CHPS provided by the FEWS infrastructure
- IFP – Interactive Forecast Program, part of NWSRFS
- IHFS – Integrated Hydrologic Forecast System
- IWRSS – Integrated Water Resources Science and Services
- LDM – Local Data Manager application from Unidata
- LMRFC – Lower Mississippi River Forecast Center in Slidell, LA
- LOOKUP3 – The NWSRFS three variable lookup operation which linearly interpolates for a dependent result given two dependent arguments and a defined family of curves depicting the relationship between the dependent and independent variables.
- MARFC – Middle Atlantic River Forecast Center in State College, PA
- MAP – (Basin) Mean Areal Precipitation, input to river models
- MAT – (Basin) Mean Areal Temperature, input to river models
- MAXSTAGE – A method within the NWSRFS RES-J operation which computes a reservoir release based on the maximum permissible discharge at a given downstream control point.

HSEB Quarterly Newsletter Glossary

- MBRFC – Missouri Basin River Forecast Center in Pleasant Hill, MO
- MC – Master Controller (an architectural component of Delft-FEWS)
- MDL – Meteorological Development Laboratory within NWS’s OS&T
- MOD – Real-Time modifications to data, parameter, or state values within the NWSRFS which allow the forecaster to adjust the behavior of the models and operations during the forecasting process.
- MPE – Multi-sensor Precipitation Estimator suite of applications for managing model forcing data such as precipitation and temperature
- NCDC – NOAA’s National Climatic Data Center in Asheville, NC
- NCRFC – North Central River Forecast Center in Chanhassen, MN
- NERFC – Northeast River Forecast Center in Taunton, MA
- NESDIS – NOAA’s National Environmental Satellite, Data, and Information Service
- NEXRAD – Next-Generation Radar; the NWS network of WSR-88D radars
- NMQ – National Mosaic & Multi-sensor QPE (from NSSL)
- NOAA – National Oceanic and Atmospheric Administration within the U.S. Department of Commerce
- NOHRSC – National Operational Hydrologic Remote Sensing Center in Chanhassen, MN
- NSOF – NOAA Satellite Operations Facility in Suitland, MD
- NSSL – NOAA’s National Severe Storms Laboratory in Norman, OK
- NSTEP – NWS’s National Strategic Training and Education Plan which describes the mechanism by which the NWS training and education requirements are identified, prioritized, and met.
- NWIS – USGS’s web-based National Water Information System
- NWRFC – Northwest River Forecast Center in Portland, OR
- NWS – NOAA’s National Weather Service
- NWSEO – NWS Employees Organization (sometimes referred to as “the Union”)
- NWSLI – National Weather Service Location Identifier

HSEB Quarterly Newsletter Glossary

- NWSRFS – National Weather Service River Forecast System
- NWSTC – The NWS Training Center in Kansas City, MO
- OBn.m – AWIPS Operational Build release number
- ObsFcstMonitor – Observed-Forecast Data Monitor application
- OCWWS – NWS’s Office of Climate, Water and Weather Services in Silver Spring, MD
- Ofsde – A program which reads data from the IHFS_DB and creates a file used to transfer data to the NWSRFS data storage system
- OHD – NWS’s Office of Hydrologic Development in Silver Spring, MD
- OHP – 16-level One Hour Precipitation radar product
- OHRFC – Ohio River Forecast Center in Wilmington, OH
- OSIP – NWS’s Operations and Services Improvement Process
- OS&T – NWS’s Office of Science and Technology in Silver Spring, MD
- OT&E – Operational Test and Evaluation
- PAL – Project Area Leader position within OHD’s HSEB
- PC – SHEF Physical element code for Precipitation, accumulator
- PostgreSQL – open source relational database management system
- PP – SHEF Physical element code for Precipitation, actual increment
- PPS – The Precipitation Preprocessing Subsystem software, developed and maintained by OHD, for the NEXRAD RPG and TDWR SPG.
- PrecipMonitor (PrecipMon) – Precipitation Data Monitor application
- Python – A programming language
- QPE – Quantitative Precipitation Estimate
- QPF – Quantitative Precipitation Forecast
- Q2 -- NSSL’s Next Generation QPE
- RAX – RFC Archiver

HSEB Quarterly Newsletter Glossary

- RAXBase – RFC Archiver Database Manager application
- RCP – Eclipse Rich Client Platform development tool platform
- RDA – Radar Data Acquisition subsystem for NEXRAD
- Res-J – Joint Reservoir Regulation Operation – The NWSRFS operation which models the operation of a system of reservoirs.
- ResSim – USACE HEC’s Reservoir Simulation model
- RFC – A NWS River Forecast Center
- RHEL – RedHat Enterprise Linux computer operating system
- RiverMonitor (RiverMon) – River Data Monitor application, associated with PrecipMon
- RiverPro – River Product Formatter application
- ROC – NEXRAD Radar Operations Center in Norman, OK
- ROC checker – Rate-of-Change checking application
- RPG – NEXRAD Radar Product Generator
- RTi – Riverside Technology, Inc. in Fort Collins, CO
- SAC-SMA – Sacramento Soil Moisture Accounting – A hydrologic model implemented as an operation within the NWSRFS which parameterizes soil moisture characteristics.
- SEC – The Systems Engineering Center within NWS’s OS&T
- SCAN – System for Convective Analysis and Nowcasting
- SCH – Service Coordination Hydrologist position in an RFC
- SERFC – Southeast River Forecast Center in Peachtree City, GA
- SHEF – (Standard Hydrological Exchange Format)
- SNOW-17 – A snow accumulation and ablation model implemented within NWSRFS.
- SOA – Service Oriented Architecture
- SPG – Supplemental Product Generator for TDWR products to AWIPS

HSEB Quarterly Newsletter Glossary

- SSHP – Site-Specific Hydrologic Predictor
- STP –16-level Storm Total Precipitation radar product
- SwEG – AWIPS Software Engineering Group integrated work team
- Swig -- An interface compiler that connects programs written in C and C++ with scripting languages such as Perl, Python, and Tcl
- TDWR – FAA’s Terminal Doppler Weather Radar system at U.S. airports
- TerpSys – An Information Technology consulting company in Rockville, MD that recently acquired Apex Digital Systems, Inc.
- THP –16-level Three Hour Precipitation radar product
- TIM – Technical Interchange Meeting
- TO n – Task Order number n
- Unidata – an organization within the University Corporation for Atmospheric Research (UCAR); developer of the network Common Data Form (netCDF)
- USACE – U.S. Army Corps of Engineers
- USGS – U.S. Geological Survey
- VAR – Variational Data Assimilation function
- VTEC – Valid Time Event Coding for NWS public products such as watches and warnings
- WaterML – Water Mark-Up Language, an emerging standard (from CUAHSI) for communicating hydrologic data using XML
- WFO – A NWS Weather Forecast Office
- WGRFC – West Gulf River Forecast Center in Fort Worth, TX
- WHFS – WFO Hydrologic Forecast System
- WMO – World Meteorological Organization
- XEFS – eXperimental Ensemble Forecast System
- XML – eXtensible Mark-up Language