



# Hydrometeorological Automated Data System HADS



## Secondary Processors of GOES DCS Data

Presented by Brian Jackson  
April 25, 2019



# Hydrometeorological Automated Data System HADS



- National Weather Service system
- Secondary Processors of GOES DCPs (**HADS owns no DCPs**)
- NOAA Primary Mission Essential Function
- Operational since 1992
- Stakeholders
  - 152 NWS Field Offices
  - National Centers for Environmental Prediction (NCEP)
  - National Operational Hydrologic Remote Sensing Center (NOHRSC)
  - National Centers for Environmental Information (NCEI)
  - Multi-Radar/Multi-Sensor System (MRMS)
  - **Advanced Hydrologic Prediction System (AHPS)**
  - **Other agencies via HADS Public Website**
- 2 People provide Tier 2 support (handle decoding, metadata updates, etc.)
- 1 Person provides Tier 3 support (system support and help to Tier 2 support)



# Hydrometeorological Automated Data System

## HADS



HADS Processes more than 17,000 GOES DCPs owned by over 200 Owners

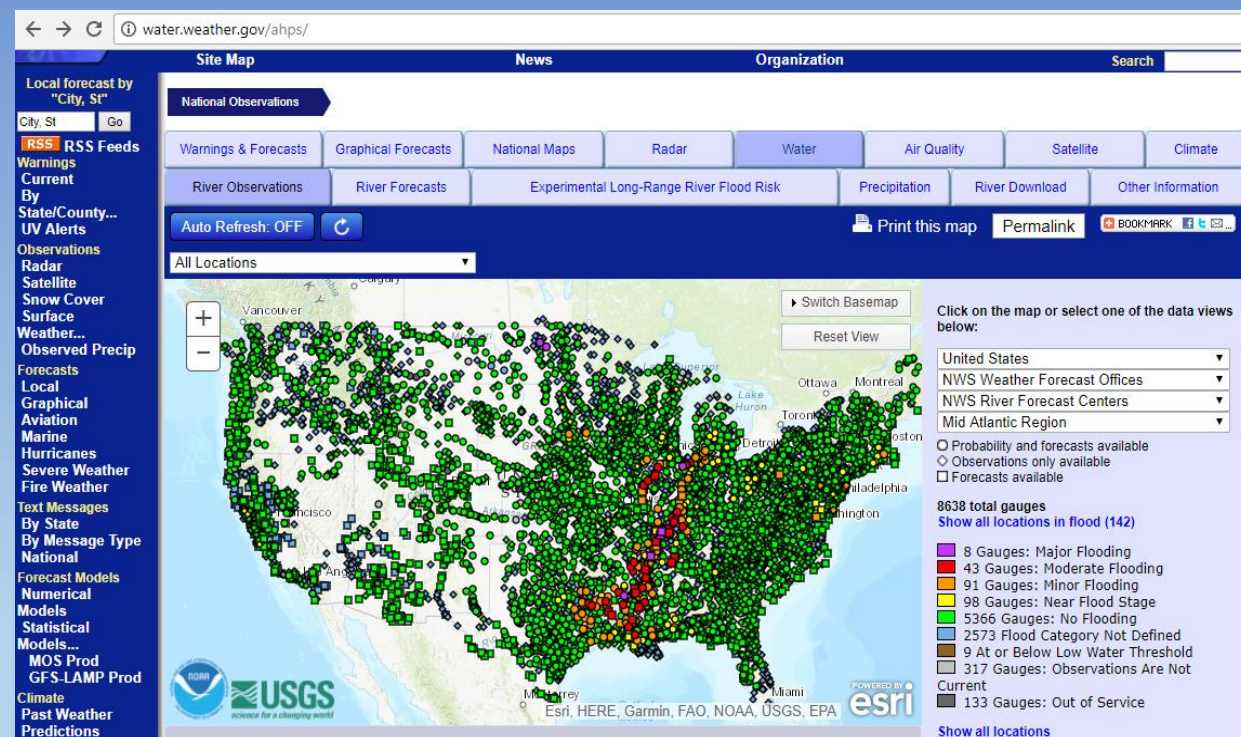
AAWQMO	ACPWA1	AKFDRN	ALBERS	ALBERT	ALKDNP	ALKDNR	ARFDRN	ARKSAS	BAGGS1	BASTRP	BCHYPW	BCRFC1	BERKLY
BIAPRR	BLM001	BLM002	BLMFIR	BLMWRF	BOISDE	BURGPR	BURMPR	BURPNW	BURUCR	CALDFP	CALFED	CANALS	CARBER
CASNOW	CBPWWD	CCSUWD	CCWH20	CELMK1	CELRB1	CELRE1	CELRH1	CELRL1	CELRN1	CELRP1	CEMVD1	CEMVM1	CEMVN1
CEMVP1	CEMVR1	CEMVS1	CENAB1	CENAO1	CENAP1	CENED1	CENPA1	CENWD1	CENWK1	CENWO1	CENWP1	CENWS1	CENWW1
CEORD1	CESAJ1	CESAM1	CESAMO	CESAS1	CESAW1	CESPD1	CESPK1	CESPL1	CESWA1	CESWF1	CESWL1	CESWT1	CLACKA
COACUD	COLOCC	COPECO	CSUNRD	DAFS00	DCSHRF	DEFOSV	DELANO	DFWLNR	DODARM	DODMCF	DOIFWS	DRIEDU	EACDOA
EBMUD1	EBMUD2	EDDLNR	EBPARK	EPARG9	ERLETL	FFSDEP	FIRECA	FWSBID	FWSREF	GFDRNC	GOSODN	HAYS48	HETCHY
HONDRS	HOOPAV	HQAFSC	IAFDRN	IDADOT	INAWRD	INETER	INSVMH	KDFCRA	KERNCA	KINGSR	KOOTEN	KYFDRN	LAFIRE
LANDER	LARIME	LEWISC	LPFIRE	MADERA	MAKAHI	MANTOB	MCHDNR	MDFDRF	MDNRCF	MEFDRN	MERCED	MEXGAS	MEXMMD
MEXNMS	MIDHDE	MINDNR	MNCITO	MOBOT1	MOFDRN	MSCPNL	MSFDRN	MSFRCM	MTWATR	NCDOFR	NCDPS1	NCOEMA	NEBDNR
NEPWRC	NEVADA	NHDESB	NHMASS	NLWNPG	NMSTD1	NOACRD	NOAERD	NOAHCN	NOAWRC	NOVATO	NPEVER	NPS001	NPS002
NPS003	NPSERM	NPSLMR	NPUPDE	NWFWMD	NWSAKA	NWSARH	NWSBLM	NWSCRH	NWSERH	NWSPAC	NWSSRH	NWSWRH	NYSFDR
OAKLAN	OKOWRB	ONFIRE	OREDOF	OREERD	OREWRD	OROVIL	PAC001	PADCNR	PADMVA	PARKWY	PCEMMC	PGECHP	PLACER
PRDNER	RAFES1	RDLAKE	SANCLA	SANGAE	SAWACO	SBBG01	SBFIRE	SCCSDP	SCFC01	SCSWCD	SDDENR	SERNA1	SFPUCW
SHERDN	SHNCLG	SIDNEY	SMHCPH	SNWANR	SOCDWR	SOFDRN	SSCAFC	SSDENR	SSFRAN	STANOE	STCLAF	TENNVA	TXFSRA
UAHCRN	USDANR	USFDMS	USGS01	USGSBR	USIBWC	USMCCP	USMCWA	USUEES	USVIFD	UTICAP	VATECH	VCAPCD	VCFWCD
WASDNR	WESTCO	WGRACE	WISDNR	WSCCAL	WSCFTN	WSCGUE	WSCNWT	WSCREG	WSCVAN	WSCWPG	WSDECO	WVADOC	WWBWC1
WYGVID	WYOSEO	WYOST1	WYUWYO	YAKAMA	YUKOAA								



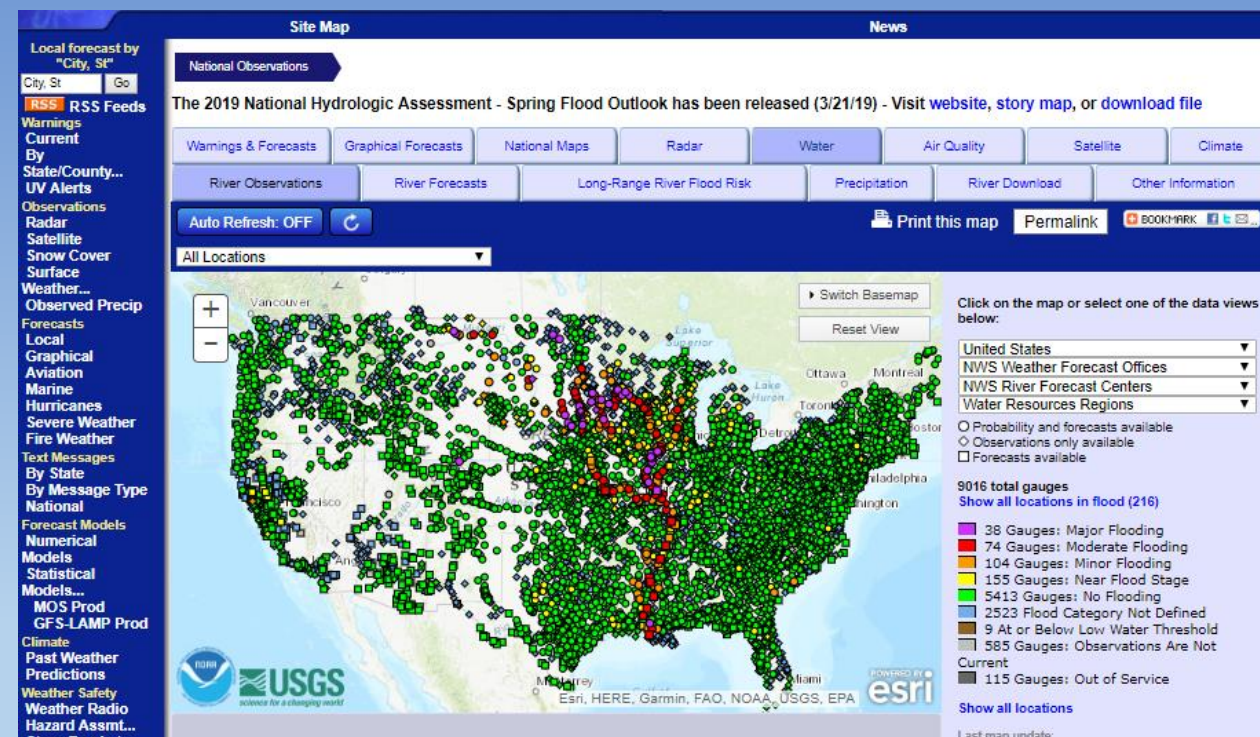
# Hydrometeorological Automated Data System HADS



## AHPS Website



Spring 2018 (Date Unknown)



March 29, 2019

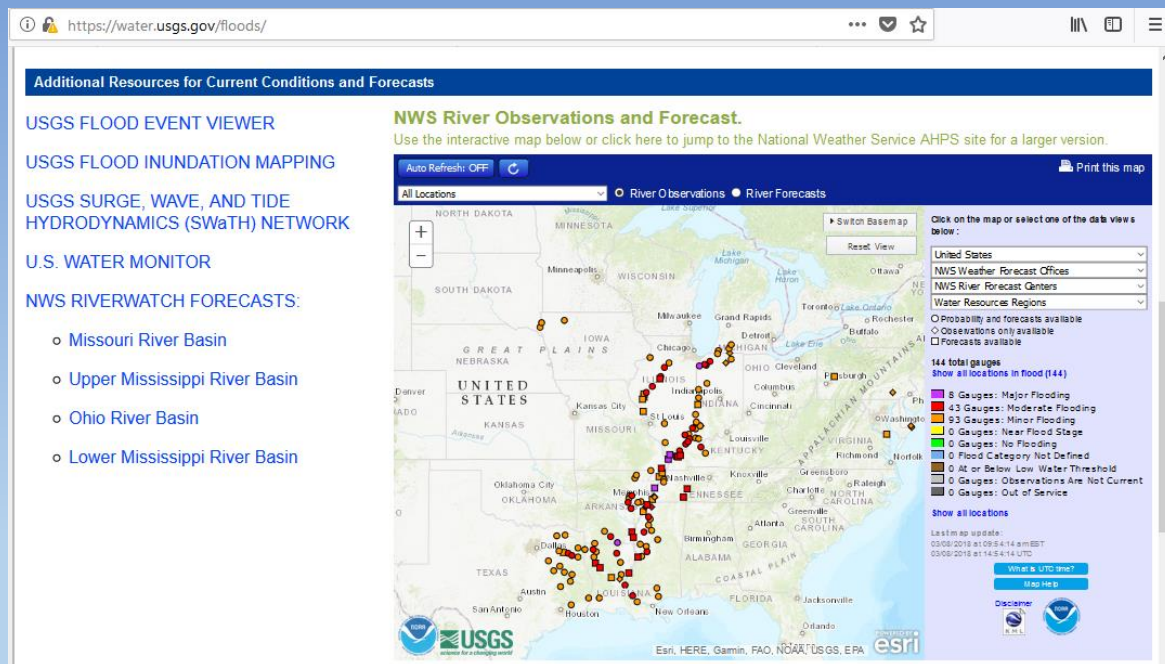




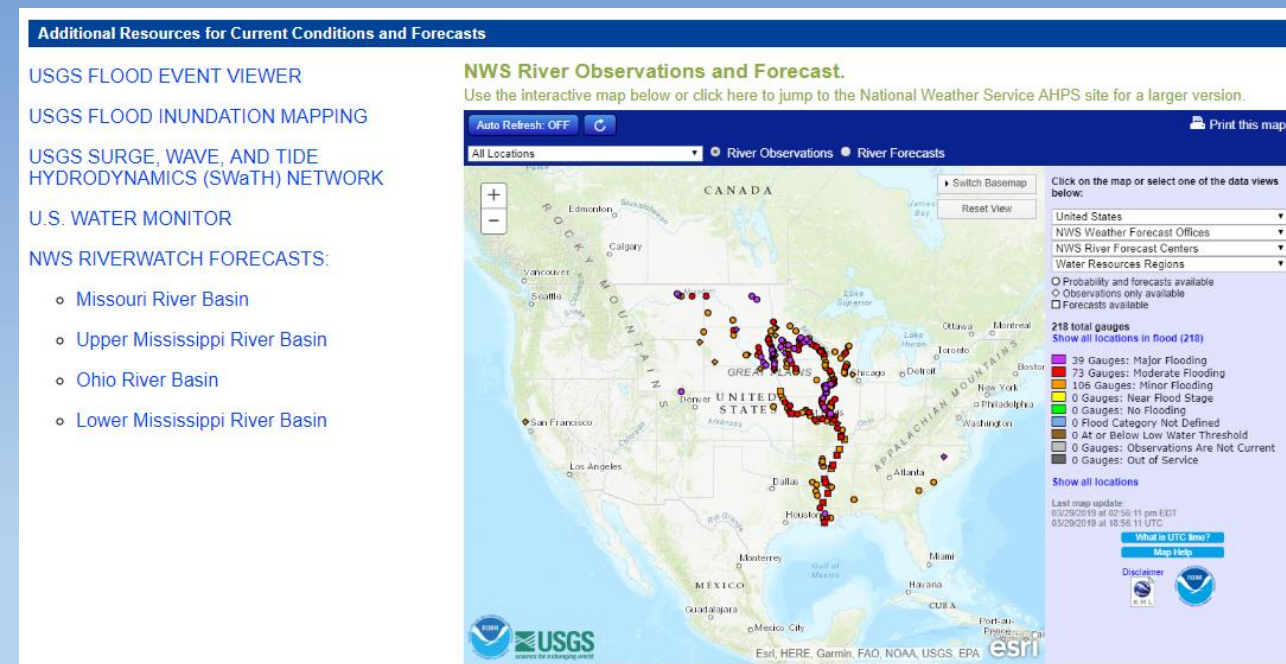
# Hydrometeorological Automated Data System HADS



## USGS Floods Website



Spring 2018 (Date Unknown)



March 29, 2019



# Hydrometeorological Automated Data System HADS



Your Agency's Data Collections Platforms save lives and property!



# Hydrometeorological Automated Data System HADS



NWS Weather Forecast Office – Omaha  
Valley, Nebraska

on or about March 17, 2019



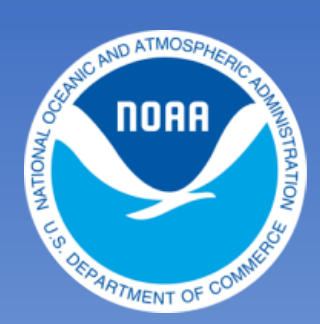




# Hydrometeorological Automated Data System HADS







# Hydrometeorological Automated Data System HADS







# Hydrometeorological Automated Data System HADS







# Hydrometeorological Automated Data System HADS



Imagine if these were the homes of your friends, your family, or you.

**GOES DCPs CAN and DO save lives and property**







# Hydrometeorological Automated Data System HADS



## How can your agency help the NWS save lives and property?

### 1. PDTs

- Update your PDT as soon and complete as possible after programming/reprogramming and/or moving your DCP.
- If discontinuing a DCP, noting "DISCONTINUED" it in the location name would be helpful
- If moving it to a new NESDIS ID, temporarily referencing the new ID in the location name of the old PDT would be helpful. (e.g. "MOVED TO FF112233")
- Include SHEF codes to describe the sensor, preferably in the order sensors are programmed
- Ensure Points of Contact exist and are current.

**2. Email alerts** - If possible, email [hadsteam@noaa.gov](mailto:hadsteam@noaa.gov) and provide details of the update to your DCP.

**3. Metadata Repository** - If your agency has an online repository of metadata, please contact [Brian.Jackson@noaa.gov](mailto:Brian.Jackson@noaa.gov) and provide details.



# Hydrometeorological Automated Data System HADS



## Why does the NWS need this help?

- No Standards for programming DCPs
- Metadata sources are often outdated, incomplete, inaccurate, and/or difficult to find
- The NWS may not be aware of available data, if the PDT is incomplete or inaccurate

***We are losing institutional knowledge and established relationships, making maintenance of our metadata more difficult.***



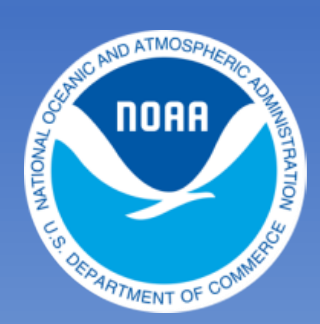
# Hydrometeorological Automated Data System HADS



HADS First Source of DCP Metadata is DADDS and PDTs

- As of 4/17/2019
  - 40,086 PDT records
  - 4,995 PDTs (58 owners) PDT last update date on 2009 day 295
  - 4,921 PDTs with lat/lon and no sensors listed
  - 4,908 PDTs not parked and no location listed
  - 27,297 PDTs without a point of contact
  - 11,719 PDTs without manufacturer and model
  - 1,023 PDTs listed as Handar
  - 1,540 PDTs coordinates wrong or suspect (not precise, lat/lon transposed, missing negative for W hemisphere)





# Hydrometeorological Automated Data System HADS



Contact [Brian.Jackson@noaa.gov](mailto:Brian.Jackson@noaa.gov) if help is wanted in updating PDT.