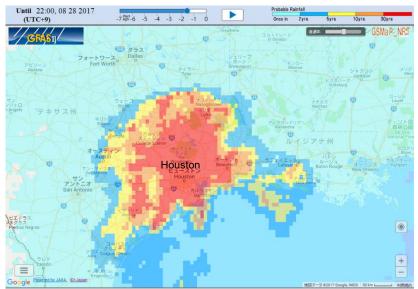
USA(Texas, Louisiana) Hurricane HARVEY			
Country and Districts	USA Texas: Houston, Fort Bend, Rock Port, Port Arthur, etc. Louisiana: Iowa, Lake Charles, etc.	Death	88
Date of Occurrence	August 25, 2017	Missing	no data
Outline	Hurricane Harvey made landfall on the central Texas coast as a Category 4 storm on August 25. Houston and other areas of Southeast Texas were severely affected. Harvey became the 2 <sup>nd</sup> costliest natural disaster in U.S. history, behind only Hurricane Katrina in 2005.		

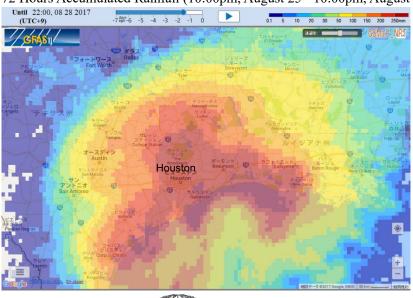
# Precipitation Data from GFASII (Global Flood Alert System Ver.2.1)

GRASII is operated by Infrastructure Development Insutitute-Japan.



72 Hours Probable Rainfall (10:00pm, August 25 - 10:00pm, August 28 JST)

72 Hours Accumulated Rainfall (10:00pm, August 25 - 10:00pm, August 28 JST)





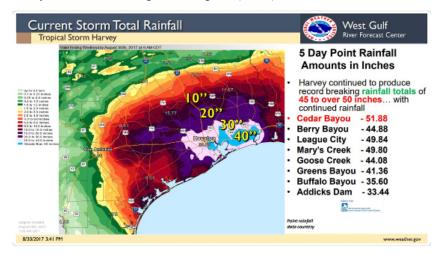
一般社団法人 国際建設技術協会 Infrastructure Development Institute - Japan

## Harvey's path (NWS)



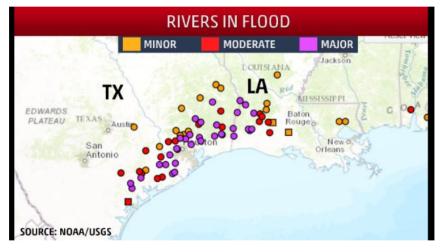
Source: http://www.weather.gov/crp/hurricane\_harvey

## 5 Day Rainfall from Aug 25 to Aug. 30 (NWS)



Source: https://twitter.com/NWSHouston

### River Flood Status as of August 31 (NOAA/USGS)



Source: https://weather.com/storms/hurricane/news/tropical-storm-harvey-river-flooding-texas-louisiana





Search and Rescue continued by FEMA August 30, 2017 (FEMA)

Source: https://www.facebook.com/pg/FEMAHarvey/photos/?ref=page\_internal

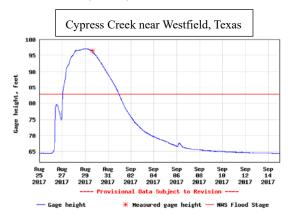


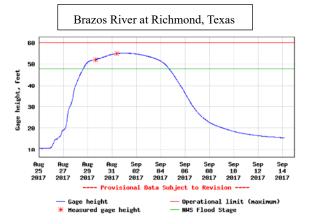
Source: <a href="http://www.weather.gov/crp/hurricane\_harvey">http://www.weather.gov/crp/hurricane\_harvey</a>

A destroyed building in Rockport, Texas (NWS)



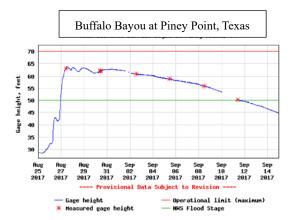
### River Levels (USGS)





**Hurricane Harvey** 

Peak Storm Tide Observations



#### Sources:

#### Cypress Creek near Westfield

 $\label{eq:linear} https://waterdata.usgs.gov/nwis/uv?cb_00060=on\&cb_00065=on\&format=gif_default&site_no=08069000\&period=\&begin_date=2017-08-25\&end_date=2017-09-14$ 

#### Buffalo Bayou at Piney Point

https://waterdata.usgs.gov/tx/nwis/uv?cb\_00060=on&cb\_00065=on&cb\_00065=on &format=gif\_default&site\_no=08073700&period=&begin\_date=2017-08-25&end \_\_\_\_\_\_date=2017-09-14

#### Brazos River at Richmond

https://waterdata.usgs.gov/nwis/uv?cb\_00010=on&cb\_00045=on&cb\_00060=on&cb\_00065=on&cb\_00095=on&cb\_00300=on&cb\_00400=on&cb\_72148=on&form at=gif\_default&site\_no=08114000&period=&begin\_date=2017-08-25&end\_date= 2017-09-14

### Storm Tide (NWS)

Corpus Christi

Preliminary

Fri Aug 25, 2017



Port Aransas



Source: http://www.weather.gov/crp/hurricane\_harvey



c 1'

3.5

2.8

Middle

Texas Coast

Port Aransas

Port Lavaca

Aransas Wildlife Refuge

Legend:

Red: NWS Survey

**Black: Tide Gauge** 

#### 4