

TI	AB
	Despite flash flooding being one of the most deadly and costly weather-related natural hazards worldwide, individual datasets to characterize them in the united states are hampered by limited documentation and can be difficult to access. This study is the first of its kind to assemble, reprocess, describe, and disseminate a georeferenced u.s. Database providing a long-term, detailed characterization of flash flooding in terms of spatiotemporal behavior and specificity of impacts. The database is composed of three primary sources: 1) the entire archive of automated discharge observations from the u.s. Geological survey that has been reprocessed to describe individual flooding events, 2) flash-flooding reports collected by the national weather service from 2006 to the present, and 3) witness reports obtained directly from the public in the severe hazards analysis and verification experiment during the summers 2008-10. Each observational data source has limitations, a major asset of the unified flash flood database is its collation of relevant information from a variety of sources that is now readily available to the community in common formats. It is anticipated that this database will be used for many diverse purposes, such as evaluating tools to predict flash flooding, characterizing seasonal and regional trends, and improving understanding of dominant flood-producing processes. We envision the initiation of this community database effort will attract and encompass future datasets.
GOURLEY JJ, 2013, BULL AMER METEOROL SOC	A unified flash flood database across the united states

Covidence: NO

Reject: NO

Inclusion Criteria Guide

- 1. Is the paper relevant to flash flooding or hydrology in general? (If NO – Not Relevant)
- 2. If Yes, is the paper about more than the underlying hydrology behind flooding (If NO – Hydrology)
- 3. If Yes the paper will likely be included in our analysis. What kind of paper is it?
 - 1. Is the paper primarily geophysically focused?
Or socio-politically/impact focused?
(Select appropriate toggle, it can be both)
 - 2. Is the paper about an event? (If YES – Event)
- 4. Does the paper disaggregate by flood type? (if NO – Not Disaggregated)
- 5. Is the paper extremely relevant to our analysis and questions about the impact, vulnerability actions, or

Classification Info

Hydrology – Core, underlying process. Not directly related to flash floods.
Model – Observing, forecasting, or mapping.
Social – How people interact, respond, or communicate.
Event – Related to a specific event.
Review Database – Highly relevant to paper, seminal work on flash flood impact
Not Relevant – Reject if does not relevant to the above categories.
Not disaggregated – doesn't disaggregate by flood type, lumps flash floods and riverine floods together

Choose a flood data classification

Not Relevant ☐

Hydrology ☐

Model/Forecast/Maps ☒

Socio-political or Impact ☒

Event ☒

Not Disaggregated ☐

Review Database ☒

Notes

Next

TI

AB

RAJESH S, 2018, ECOL INDIC

Inherent vulnerability assessment of rural households based on socio-economic indicators using categorical principal component analysis: a case study of kimsar region, uttarakhand

The recent trend of shifting focus from hazard centric drivers of vulnerability towards the social and economic drivers of vulnerability has led to a number of conceptual frameworks for social vulnerability assessment. Contributing towards this growing trend of social vulnerability assessment, this study proposes a framework to measure inherent vulnerability, which is centered on hazard generic and livelihood oriented socio-economic factors of vulnerability. Inherent vulnerability is defined as the predisposition of a household to suffer harm. The study focuses on the mountainous communities in kimsar region, located in uttarakhand state, india. The communities in the region suffer from multiple stressors including extreme precipitation, drought, landslides, cloudbursts and flash floods. Vulnerability indicators with mixed scaling are used, to capture household's perception and other socio-economic attributes, which contribute towards its inherent vulnerability. Data was collected by conducting household surveys in nine villages of kimsar region. In order to process the indicators with mixed scaling, and obtain an empirical summary of the data set, the method of non-linear principal component analysis was used for computing a household level inherent vulnerability index. Results obtained revealed that principal components explaining a major variance in the data set were access to employment opportunities, effectiveness of local government, access to food, occupational diversity, access to resources, educational attainment and access to water. It was observed that the villages of dharkot, kandakhal and bhumiyaikisar have the highest percentage of households, which were relatively less vulnerable to environmental stressors. Higher vulnerability was observed in majority of households in the village kimsar, ramjeewala and malls banas. A majority of households in talla banas, jogiyana and kasan were moderately vulnerable. Inherent vulnerability assessment has the potential to predict the future harm a household might suffer due to hazard events.

Assessment Definitions:

Risk Assessment – including creating risk (or susceptibility) maps, risk analysis, and resilience assessments

Vulnerability – Vulnerability assessments, creating vulnerability maps

Risk Perception – e.g. interviews about individuals perspectives on flash flood risks, risk cognition, awareness.

Flash Flood Type Definitions:

Not specified – flood type not defined or explicitly stated, unclear

Rainfall – runoff, cloudburst, pluvial, caused by heavy precipitation (no river involved)

Dam/levee breach – anything to do with dams or levees

Speedy river – river height changes rapidly, fast onset riverine flood

Landslide/mudslide – explicitly mentions landslide/mudslide or debris in water

Snowmelt – caused by melting snow

General Planning – select if the paper is not explicitly related to a single event and is about preparing or planning for future even

If the paper is about impacts in general, not related to a specific event, make sure 'general' is clicked before selecting the impact

General Science – select if paper is about science-based general planning – ie developing geophysical risk maps

You have reviewed -1 papers in this session
In total, we have reviewed 727 of 727

Not Relevant

META-ANALYSIS

CLIMATE CHANGE

LONG TERM IMPACT

LAND COVER

POLICY

ASSESSMENT TYPE

GENERAL

Vulnerability Assessment

PLANNING

SCIENCE

'DIRECTLY' BEFORE A FLOOD

FORECASTING

EARLY WARNING SYSTEM

ANTICIPATORY RESPONSE

'DURING' A FLOOD

FLOOD DETECTION

EMERGENCY MANAGEMENT

COMMUNITY ACTIONS

IMPACT

METHODS

☐ Fatalities

☐ Economic

☐ Health

☐ Psychological

☐ Community

☐ Infrastructure

☐ Other [leave a note]

☐ Remote sensing & weather modelling

☐ Machine learning

☐ Mapping & GIS

☐ Simulations or scenarios

☐ Community guidance & tools

☐ Interviews/surveys

☐ Social media or crowd sourcing

GEOGRAPHY

SELECT FLOOD TYPE

Urban

Landslide/Mudslide

Notes

NEXT