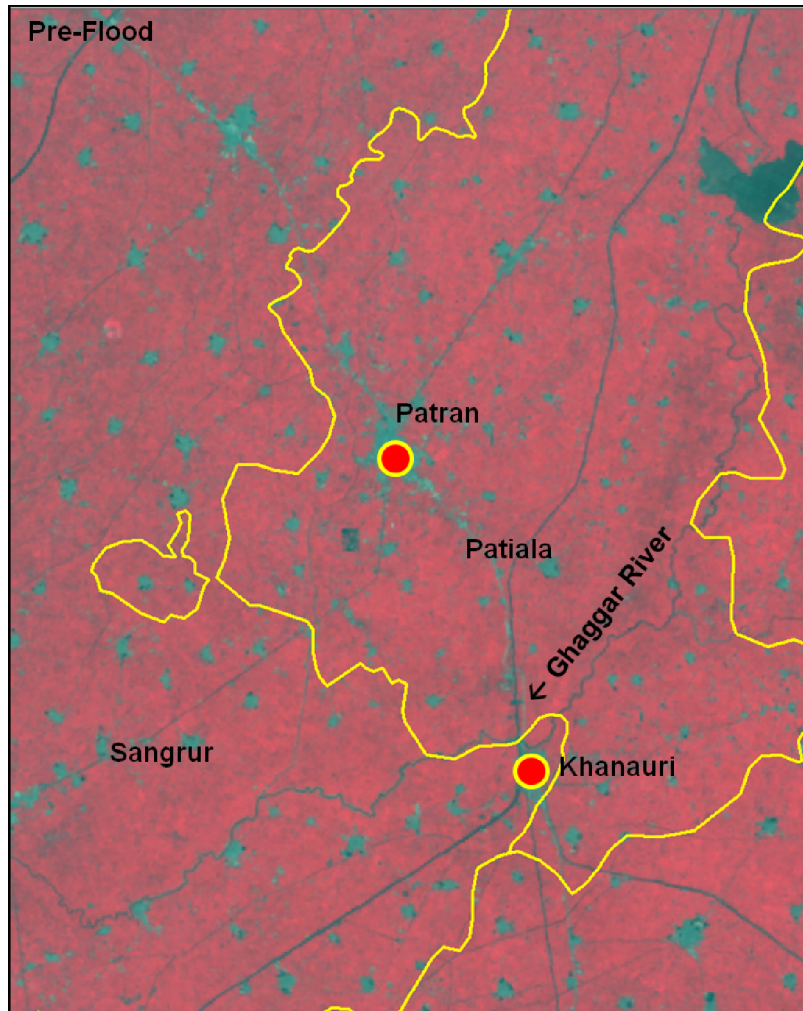


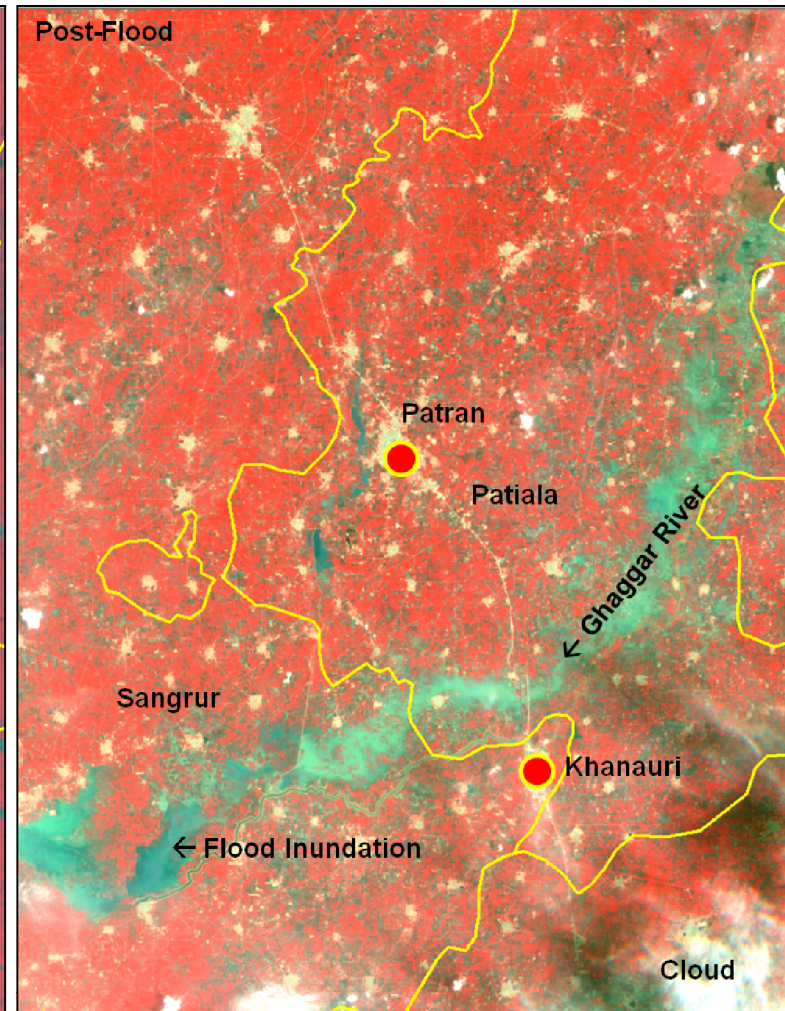
PUNJAB FLOODS - 2019

- Heavy incessant rains were reported in Punjab state during third week of July, 2019 inundating vast tracts of land in Patiala & Sangrur districts. NRSC acquired RADARSAT-2 SAR satellite data of 22nd & Resourcesat-2A LISS IV FMX Data of 24th July 2019 to map & monitor the flood inundated areas.
- The following satellite images show pre & post flood situation in districts.

Resourcesat-2 AWiFS image of 18-Feb-2018



Resourcesat-2A LISS IV FMX image of 24-Jul-2019



PUNJAB FLOODS - 2019

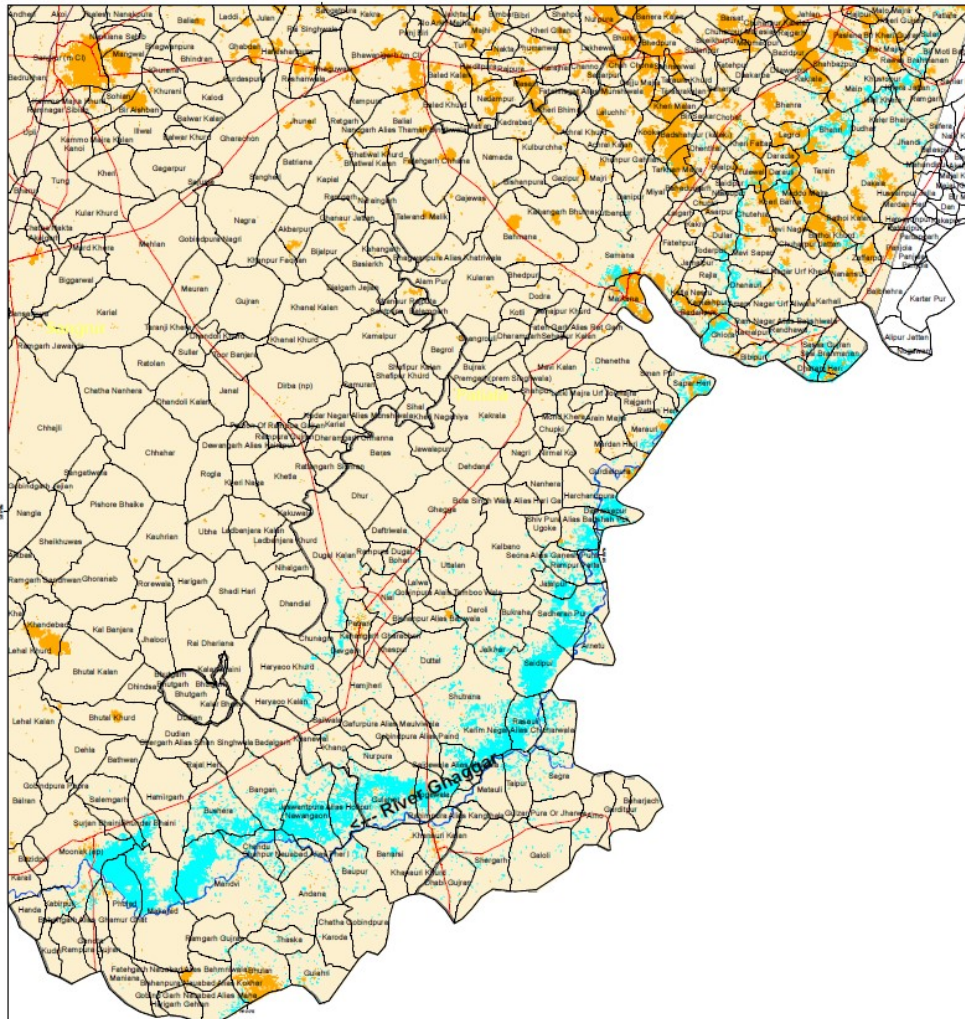
Flood Inundated areas in part of Punjab State

Based on the analysis of ResourceSat 2A LISS 4 FMX satellite image of 24th July 2019

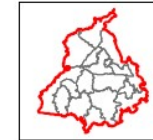
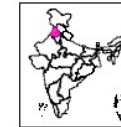
For official use

DISASTER EVENT ID: 06-FLD-2019-PU
MAP ID: 2019/02

Date of Issue : 25.07.2019



Location Map



About the Event

Heavy rains has been reported in parts of Punjab during the third week of July, 2019 which has caused flooding on the banks of River Ghaggar in many districts across the state. Major crop damage was reported in Patiala and Sangrur.
(Source: News Media)

Satellite Observations

This map highlights the flood inundation in 2 districts of Punjab State as on 25 July 2019.

Satellite data used

Pre Flood:
Satellite: ResourceSat-2
Sensor: AWIFS
Date of Pass: 07-March-2018

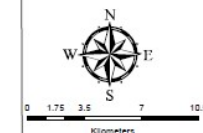
Post Flood:
ResourceSat 2A LISS 4 FMX satellite
data of 24-07-2019

Other data used

NRC Landuse/Landcover Data of 2014-15
Shaded Relief -Background Map

Legend

- Village Boundary
- District Boundary
- State Boundary
- Ralls
- National Highway
- State Highway
- Normal River/Water Bodies
- Cloud cover
- Flood Inundation
- Area covered by Satellite



This product is prepared on rapid mapping mode for immediate use and sharing amongst official agencies. This provides preliminary results.

Flood inundation may include rain water accumulation / flood water in low lying areas.

Districts with inundation less than 1000 ha are not included in the statistics

All geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials.

No ground verification is done.

Note: When publishing this map as part of any report, source may be indicated as " NRSC (2019) - Flood Inundated areas in Part of Punjab State (as on 24 July 2019)" dated 25.07.2019 DSC/NDEM Map no : 2019/02, NRSC/ISRO, Hyderabad

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