

FLOOD WATERS IN BIHAR STATE - AS OF 31 AUGUST 2008

FLOOD ANALYSIS WITH ENVISAT-ASAR (IMM) RADAR DATA RECORDED ON 22 JUNE, 27 JULY & 31 AUGUST 2008



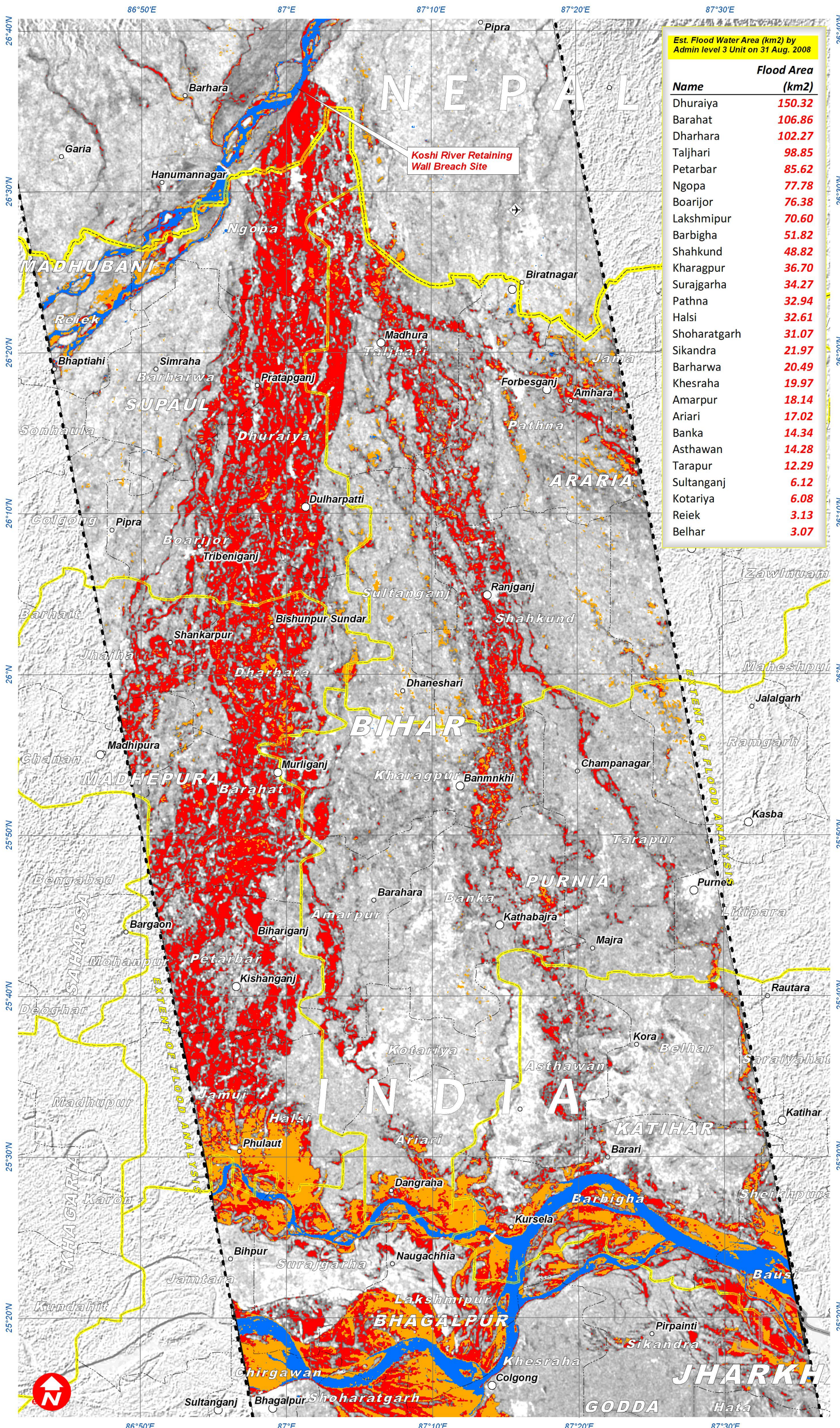
Disaster coverage by the International Charter 'Space and Major Disasters'. For more information on the Charter, which is about assisting the disaster relief organizations with multi-satellite data and information, visit www.disasterscharter.org

Heavy Rainfall & Flooding 1 September 2008

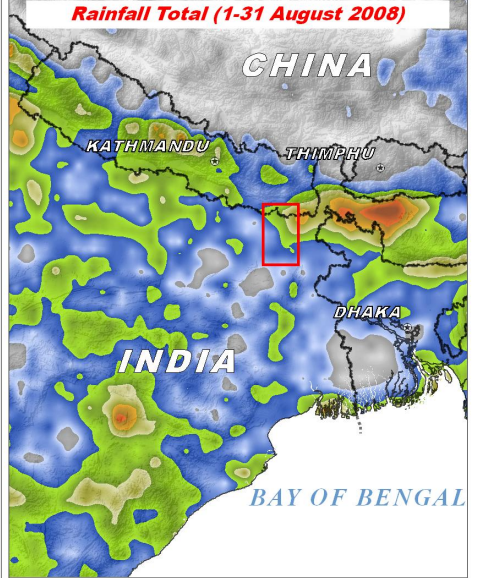


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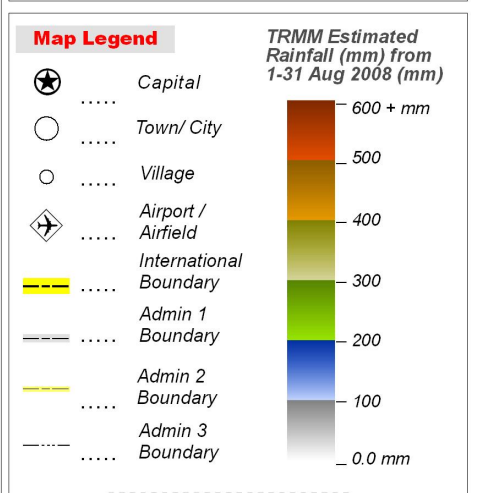
Est. Flood Water Area (km2) by Admin level 3 Unit on 31 Aug. 2008	
Name	Flood Area (km2)
Dhuraiya	150.32
Barahat	106.86
Dharhara	102.27
Taljhari	98.85
Petarbar	85.62
Ngopa	77.78
Boarjor	76.38
Lakshmipur	70.60
Barbiga	51.82
Shahkund	48.82
Kharagpur	36.70
Surajgarha	34.27
Pathna	32.94
Halsi	32.61
Shoharatgarh	31.07
Sikandra	21.97
Barharwa	20.49
Khesraha	19.97
Amarpur	18.14
Ariari	17.02
Banka	14.34
Asthawan	14.28
Tarapur	12.29
Sultanganj	6.12
Kotariya	6.08
Reiek	3.13
Belhar	3.07



Map Information

This map illustrates satellite detected flood waters for Bihar State following an embankment breach on the Koshi River in Nepal on 18 August 2008. Flood water detection was made using a time series of ENVISAT-ASAR (IMM) radar data recorded on 22 June, 27 July & 31 August 2008. Estimated flood water area has been estimated for admin level 3 units in km2. This flood detection is a preliminary analysis & has not yet been validated in the field.

The depiction and use of boundaries, geographic names and related data shown here are not warranted to be error-free nor do they imply official endorsement or acceptance by the United Nations. This map was produced by the United Nations Institute for Training and Research (UNITAR) Operational Satellite Applications Programme (UNOSAT). UNOSAT provides satellite imagery and related geographic information to UN humanitarian and development agencies and their implementing partners.



ENVISAT_ASAR Flood Water Classification

- Flood Waters on 31 August 2008
- Flood Waters on 27 July 2008 (Before Retaining Wall Breach)
- Pre-Flood Waters on 22 June 2008

Map Scale for A3: 1:450,000
1 centimeter equals 4.5 kilometers

0 2.5 5 10 15 20 Kilometers

Satellite Data ENVISAT-ASAR IMM
Resolution 150 m
Date Series 22 June, 27 July & 31 Aug. 2008
Copyright ESA (2008)
Flood Analysis UNOSAT & ESA (FAIRE)
Rainfall Data TRMM (NASA)
Resolution 0.25 deg
Date Series 1-31 Aug 2008
Other GIS Data GIST, USGS, WHO
Map Production UNOSAT (1 September 2008)
Projection UTM, Zone 45 North
Datum WGS 1984

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