

Dartmouth Flood Observatory Flood Analysis Report 2003-079

Event:	DFO-2003-079, Pripyat River	Previous Events:	DFO-1999-024; 1993-045; 1988-030. Every spring
Duration:	March 22-28, 2003, 7 days	News Notes:	None
Cause	11, Snowmelt	Locations:	From DFO remote sensing: Pripyat and Dnper Rivers and tributaries in Ukraine and Belarus
Region Affected:	255,400 sq. km	Watershed:	136,800 sq. km; Dnepr River and tributaries
Severity:	Seasonal	GIS vectors:	20030870905Pripyat079M2.26; 20030850915Pripyat079M2.30; 20030831110Pripyat079Ma2.33; 20030830930Pripyat079M2.25; 20030810940Poland079M2.29
Magnitude:	Not applicable		

Figure 1. Location of contributing watershed (yellow line) and area affected by flooding (red line)



Causation categories are: 1, thunderstorm; 2, precipitation band; 3, squall line; 4, stationary front; 5, mesoscale convective complex; 6, convective cloud cluster; 7, tropical cyclone; 8, extra-tropical cyclone; 9, stationary synoptic front; 10, ITCZ wave disturbance; 11, snowmelt; 12, rain and snowmelt; 13, ice jam or ice break-up; 14, dam break; 15, avalanche.

Severity classes: 1, large, 20%-5% exceedance probability – and/or significant damage to structures or agriculture; 2, very large, 5%-1%; 3, extreme, <1%.

Flood Magnitude: {Natural Log duration (days)} x {severity class} x {sq. km region affected (sq. km)} x .01.

Duration, region affected, and intensity are estimates from news and government reports.

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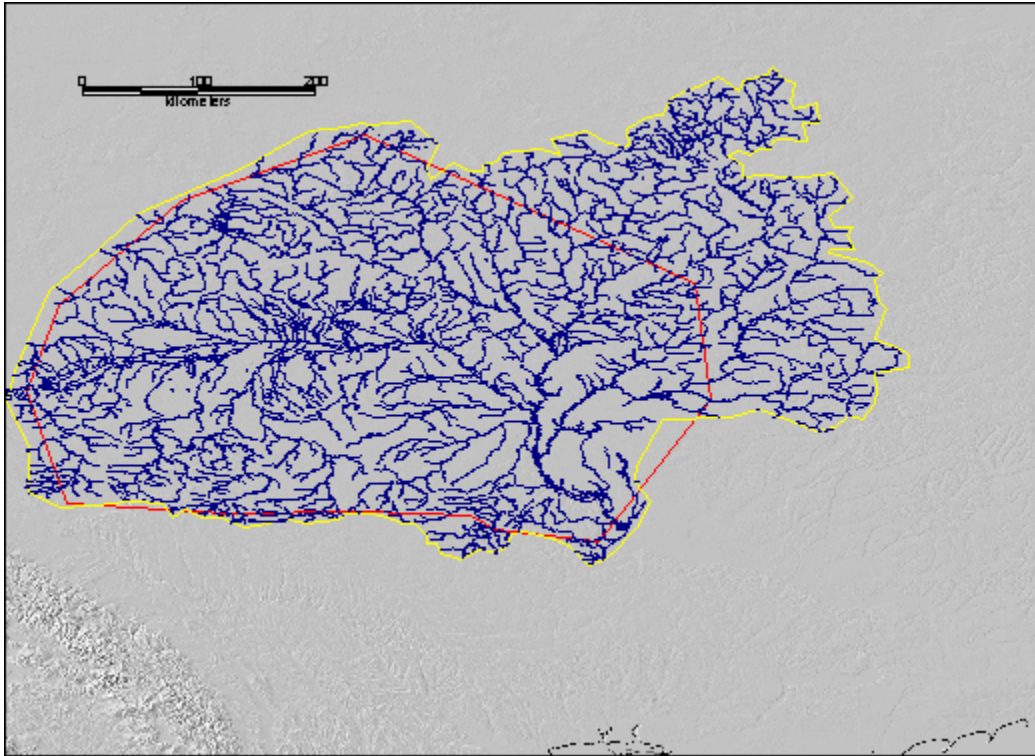








Figure 2. Flood-generating watershed for this flood event.


DFO event # 2003-079


Area affected 

MODIS flood inundation limit


- May 8, 2003 
- May 6, 2003 
- April 20, 2003 
- April 2, 2003 
- March 28, 2003 
- March 26, 2003 
- March 24, 2003 
- March 22, 2003 

MODIS data cloud free area

May 8, 2003 

Flooded Lands in: 2002 

1999 

MODIS reference water 

Main city 

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Universal Transverse Mercator
UTM Zone 36 North; WGS 84
Graticule: 2 degrees

