

# Dartmouth Flood Observatory

## Flood Analysis Report 2003-061

Event:	DFO-2003-061, Southwestern Turkey	Previous Events:	DFO-2001-156, 2001-149.
Duration:	February 4 - March 12, 2003, 37 days	News Notes:	No news reports. Possibly seasonal flooding.
Cause		Locations:	From DFO remote sensing: Izmir and Audin Provinces - Buyukmenderes River
Region Affected:	37,810 sq. km	Watershed:	66,370 sq. km; Buyukmenderes River and tributaries.
Severity:	1	GIS vectors:	20030710910swTurk061M2.35 20030620915WTurk060-61M2.24 20030581115WTurk060-61Ma2.27 20030570855SWTurkey061M2.37 20030410855swTurk061M2.32 20030390910swTurk061M2.35 20030351100SWTurk061Ma2.40
Magnitude:	7.0		

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 rt region affected (sq. km)} x .01.

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

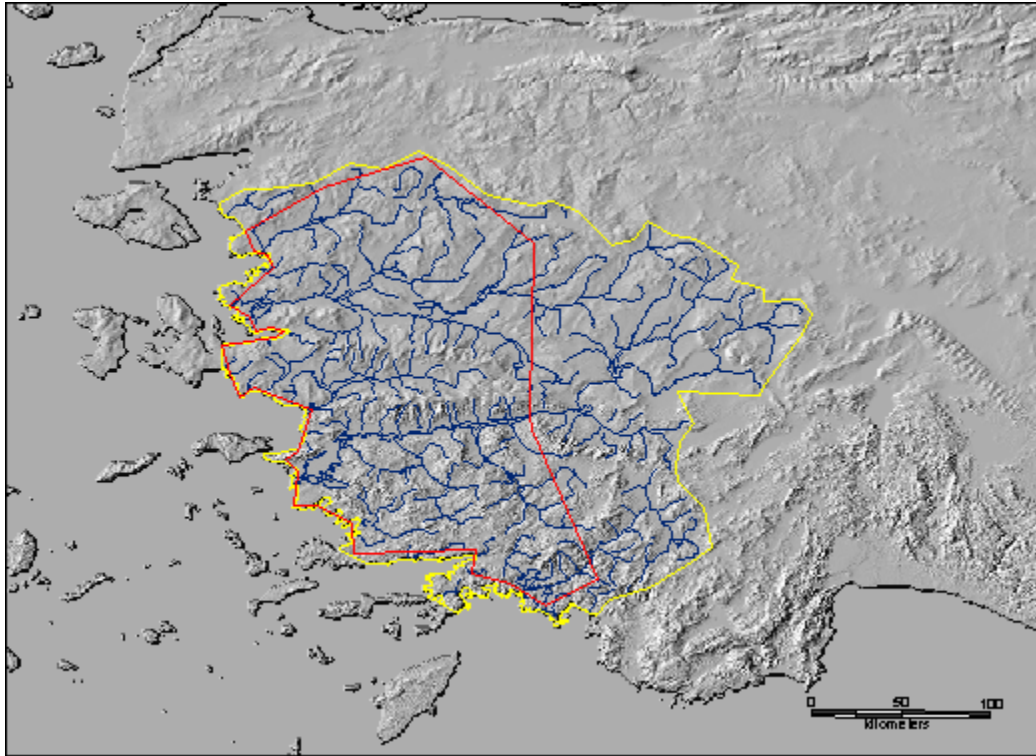
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*Figure 1. Location of contributing watershed (yellow line) and area affected by flooding (red line)*



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


# DFO event # 2003-061


Area affected 


MODIS flood inundation limit


March 12, 2003 


March 3, 2003 

February 27, 2003 


February 26, 2003 


February 10, 2003 

February 8, 2003 

February 4, 2003 

MODIS data cloud free area

March 12, 2003 

MODIS reference water 

Main city 

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Universal Transverse Mercator  
UTM Zone 35 North; WGS 84  
Graticule: 2 degrees

