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WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

Samsun Province Flash Flood Event Induced by Convection



WMO OMM

World Meteorological Organization

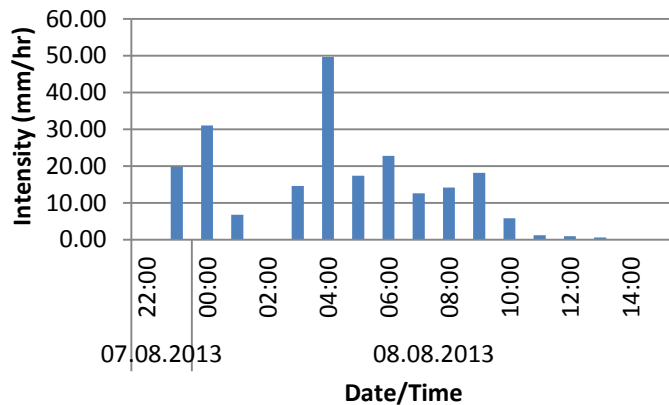
Organisation météorologique mondiale

Samsun FF Event

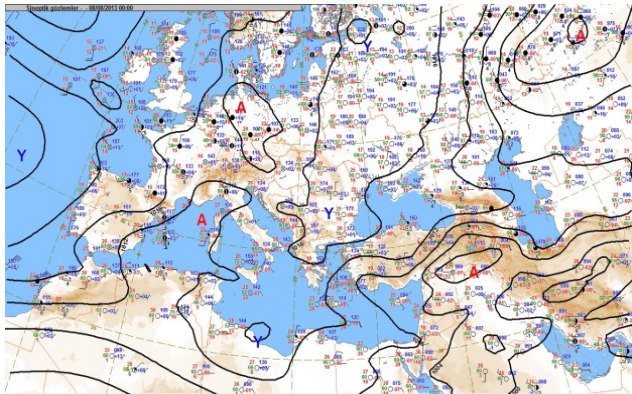


- Flash floods occurrences in Samsun province on the 7th and 8th August, 2013, which inflicted heavy property damages and casualties, are to be investigated as a third case study. TSMS observations show that the event started on the 7th at 23 UTC and lasted until the 8th at 13 UTC with 216 mm surface rainfall accumulation. Rainfall intensity (mm/hr) measurement at the Samsun AWOS station shows that precipitation started on August 7 at 23 UTC and lasted until 8 at 14 UTC with peak rainfall intensity of 49.6 mm/hr on 8 August at 04 UTC.

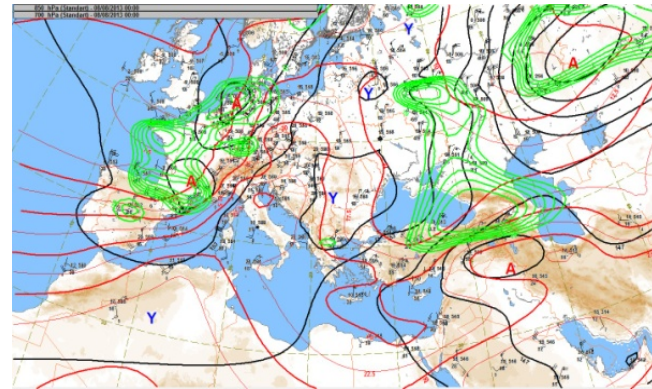
Rainfall Intensity in Samsun, Turkey



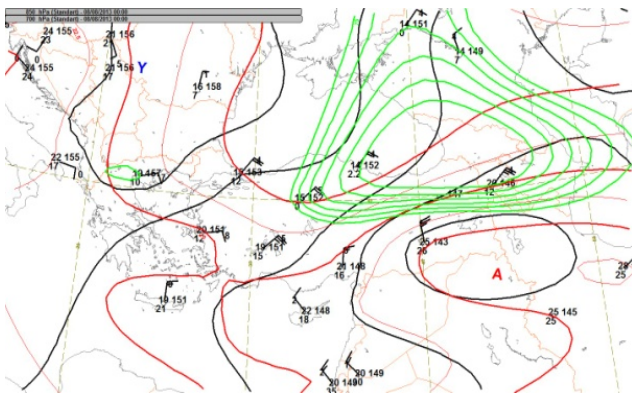
Synoptic Analysis



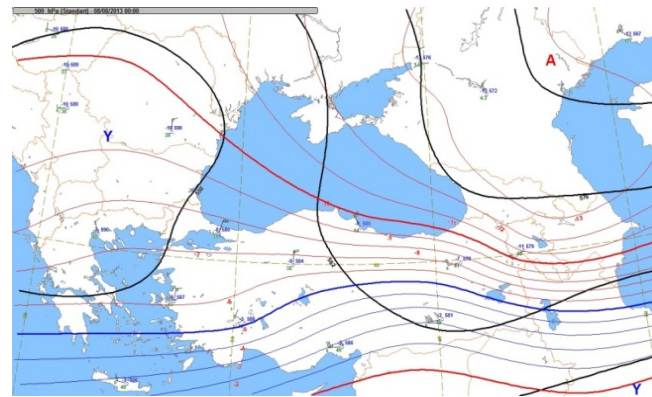
08.08.2013 00 UTC



08.08.2013, 00 UTC 850 hPa



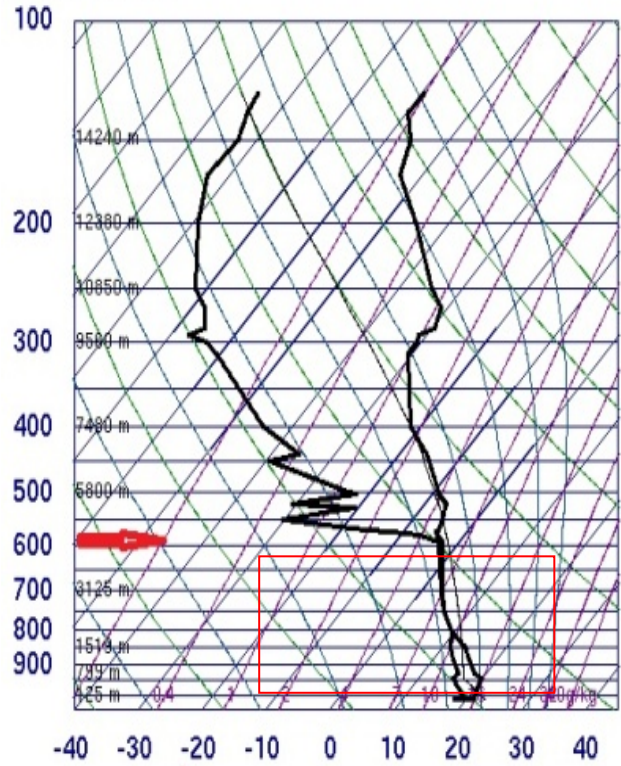
08.08.2013, 00 UTC 850 hPa



08.08.2013, 00 UTC 500 hPa

Sounding

17030 Samsun

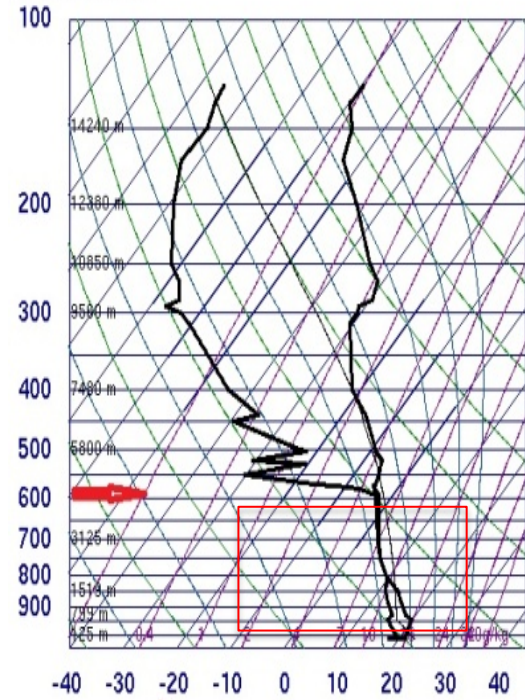


00Z 08 Aug 2013

University of Wyoming

SLAT 41.27
 SLON 36.29
 SELV 4.00
 SHOW 1.94
 LIFT 0.47
 LFTV 0.08
 SWFT 193.8
KINX 34.20
 CTOT 20.70
TOTL 43.60
 CAPE 182.1
 CAPV 214.0
 CINS -45.8
 CINV -38.8
 EGLV 397.6
 EQTV 393.3
 LFCV 844.1
 BRCH 10.89
 BRCV 12.80
 LCLT 290.5
 LCLP 949.1
 MLTH 294.9
 MLMR 13.36
 THCK 5675
PWAT 42.07

17030 Samsun



00Z 08 Aug 2013

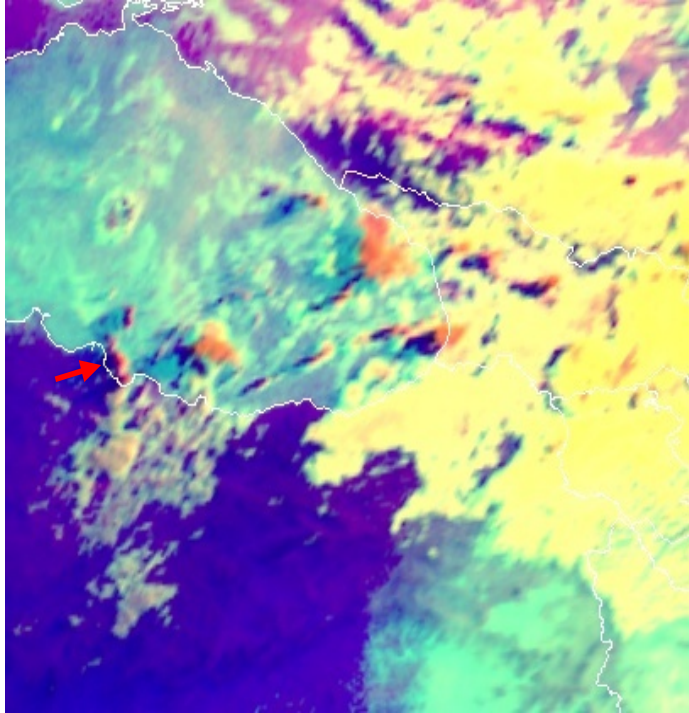
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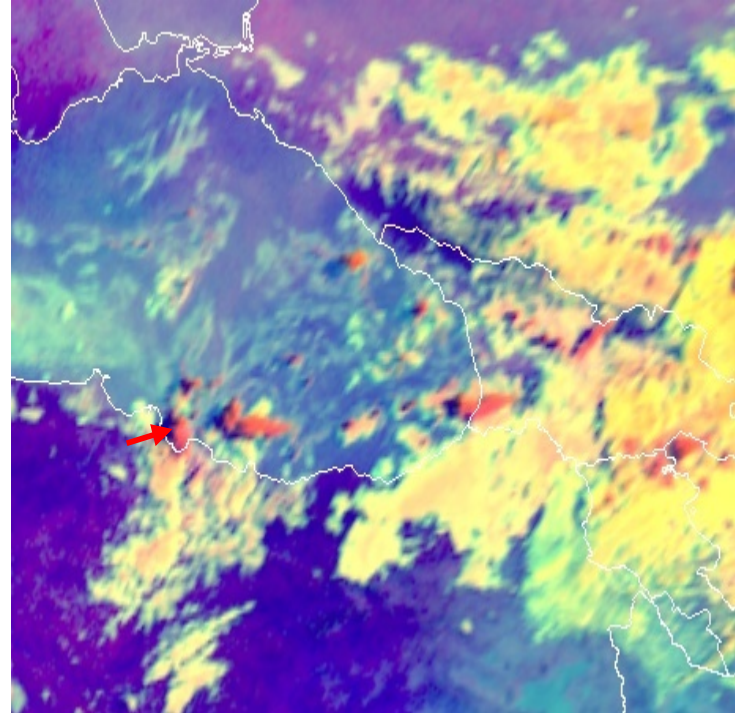


Satellite Images

08.08.2013, 03 UTC METEOSAT MSG

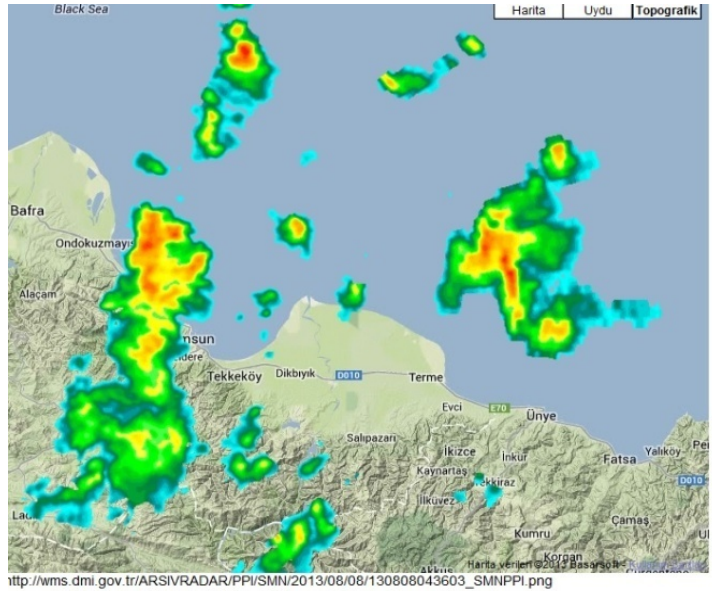


08.08.2013, 04 UTC METEOSAT MSG

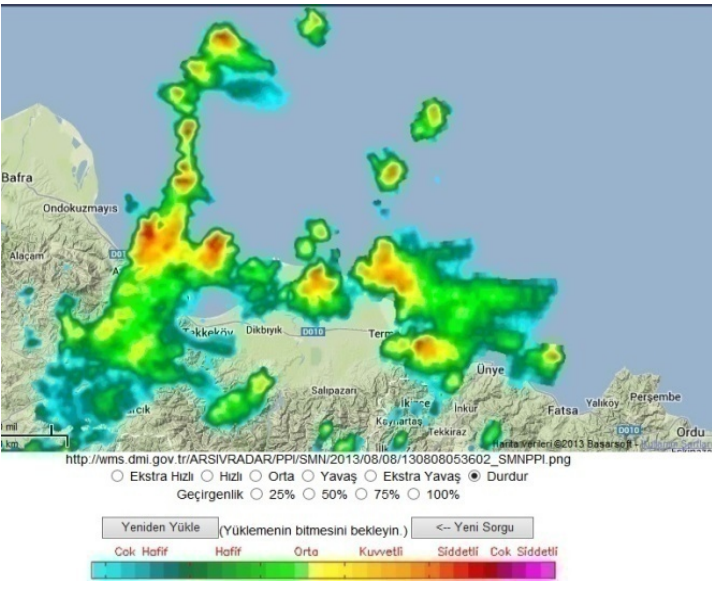


Radar Images

08.08.2013, 04:36 UTC SAMSUN RADAR PPI



08.08.2013, 05:36 UTC SAMSUN RADAR PPI



BSMEFFGS

BSMEFFG - Black Sea Middle East Flash Flood Guidance System

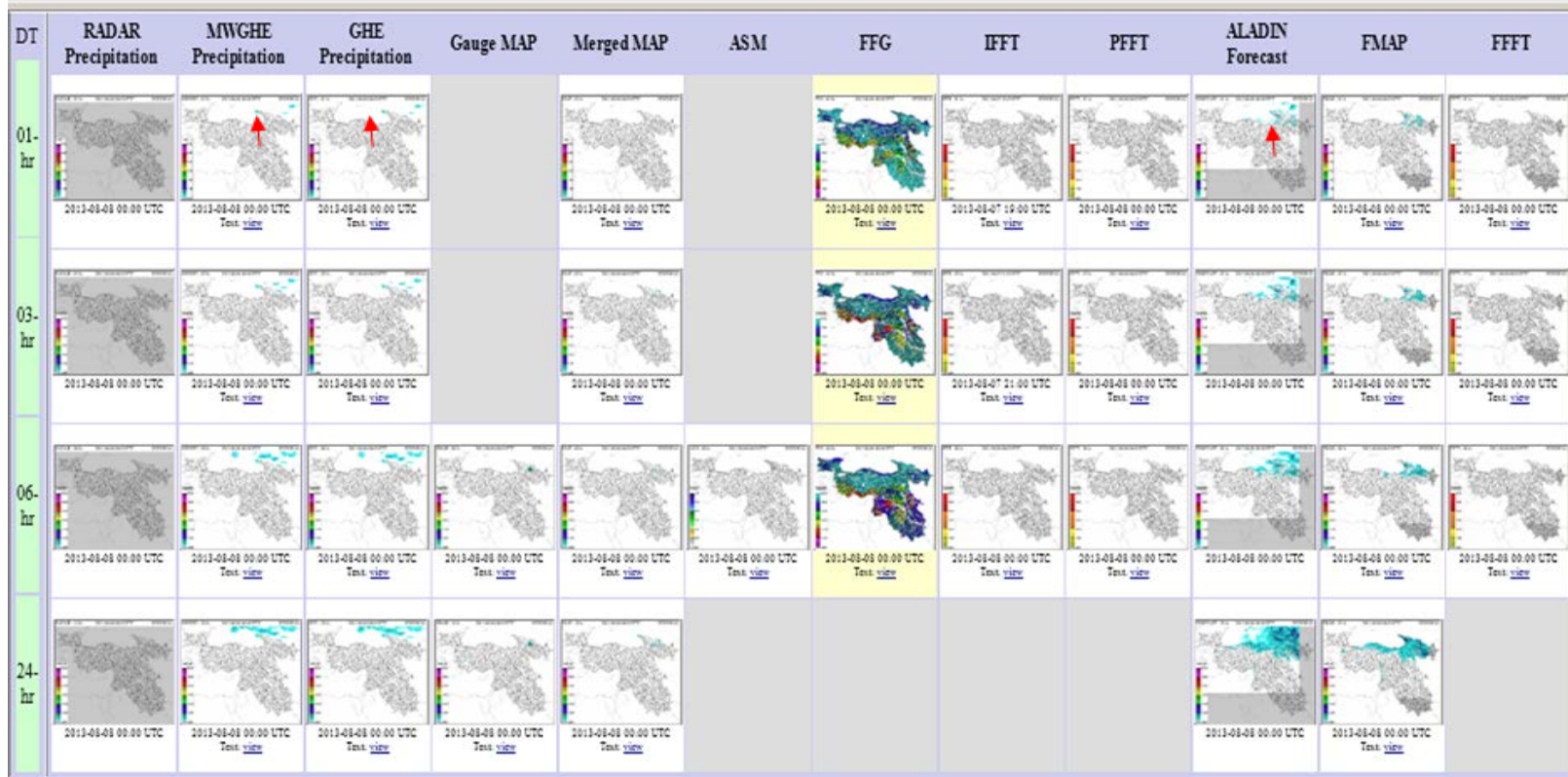
Current Date: 2013-08-08 06:28 UTC

Nav Date: 2013-08-08 00:00 UTC

Year: 2013 Month: 08 Day: 08 Hour: 00 REGION: REGIONAL

-1 Month -1 Day -6 Hours -1 Hour +1 Hour +6 Hours +1 Day +1 Month

Prev 6-hr Interval (18 UTC) Reset to Current Next 6-hr Interval (06 UTC)



Flash Floods

interpress ZAMAN ORTA KARADENİZ Haftalık Bölgesel Gazete Ek
medya takip merkezi 1940 İSTANBUL SİYASİ

Tarih: 14.08.2013
Sayfa No: 1
Tiraj: 1002992
StkCm: 309

Selle mücadeleyi başarıyla yöneten Vali, ilçeyi 36 saatte normale döndürdü



FATİH YALÇINER-SAMSUN
Samsun'da 46 yıl aradan sonra metrekareye düşen 205 kilogramlık sağanak yağmur, 8 Ağustos'ta Atakum ilçesinde yine sel felaketi yaşanmasına neden oldu. Geçen sene ki sel felaketinden sonra başta Büyükşehir Belediyesi olmak üzere ilgili kamu kurumlarının aldığı alt yapı tedbirleri daha büyük bir felaket yaşanmasına engel oldu. Alt yapı projelerinde gözden kaçan veya tamamlanamayan eksiklikler nedeniyle yine de cadde ve sokaklar ile 200'ün üzerinde ev ve iş yerlerini sular altında bırakan sel, bu kez can alamadı. Sağanak yağış başlamasıyla sel olacağı bilgisini alarak Samsun Valiliği İl Afet ve İl Afet ve Acil Durum Müdürlüğü (AFAD)'da kurulan kriz merkezi yetkilileri acilen toplayan Samsun Valisi Hüseyin Aksoy, önemli bir rekora da imza attı. Geçen yıl şehrin normale dönmesi yaklaşık 2 haftayı bulurken, Vali Aksoy'un kufurları başarıyla koordine etmesiyle sel sonrası çalışmaların titizlikle yürütmesi sebebiyle ilçe 36 saatte normale döndü. **SAYFA 02**



Conclusions

- 1) Satellite precipitation retrievals of convection NWP QPF forecasts are poor comparing with the frontal systems and other large scale circulations.
- 2) In addition to BSMEFFG products, forecasters must use additional tools and products e.g., weather Radar, high resolution satellite images e.g., METEOSAT HRV, and instability analysis from sounding stations.
- 3) Knowledge of local micro climatological conditions are essential for preparing BSMEFFG bulletins.
- 4) When forecasters combine all available tools and products, they will be able to prepare more realistic FFG bulletins.
- 5) As an alternative precipitation source weather Radar precipitation products depending on the availability could be used if they were well calibrated and bias adjusted with ground gauge data.



Thank you

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WMO OMM

World Meteorological Organization

Organisation météorologique mondiale

For more information please visit:

<http://www.wmo.int/ffgs>

<http://www.hrcwater.org>