A photograph of a dirt road winding through a dense green forest. The road is light brown and appears to be a narrow path or driveway. The trees are lush and green, filling most of the frame. In the background, a utility pole is visible against a clear blue sky. The overall scene is a natural, wooded area.

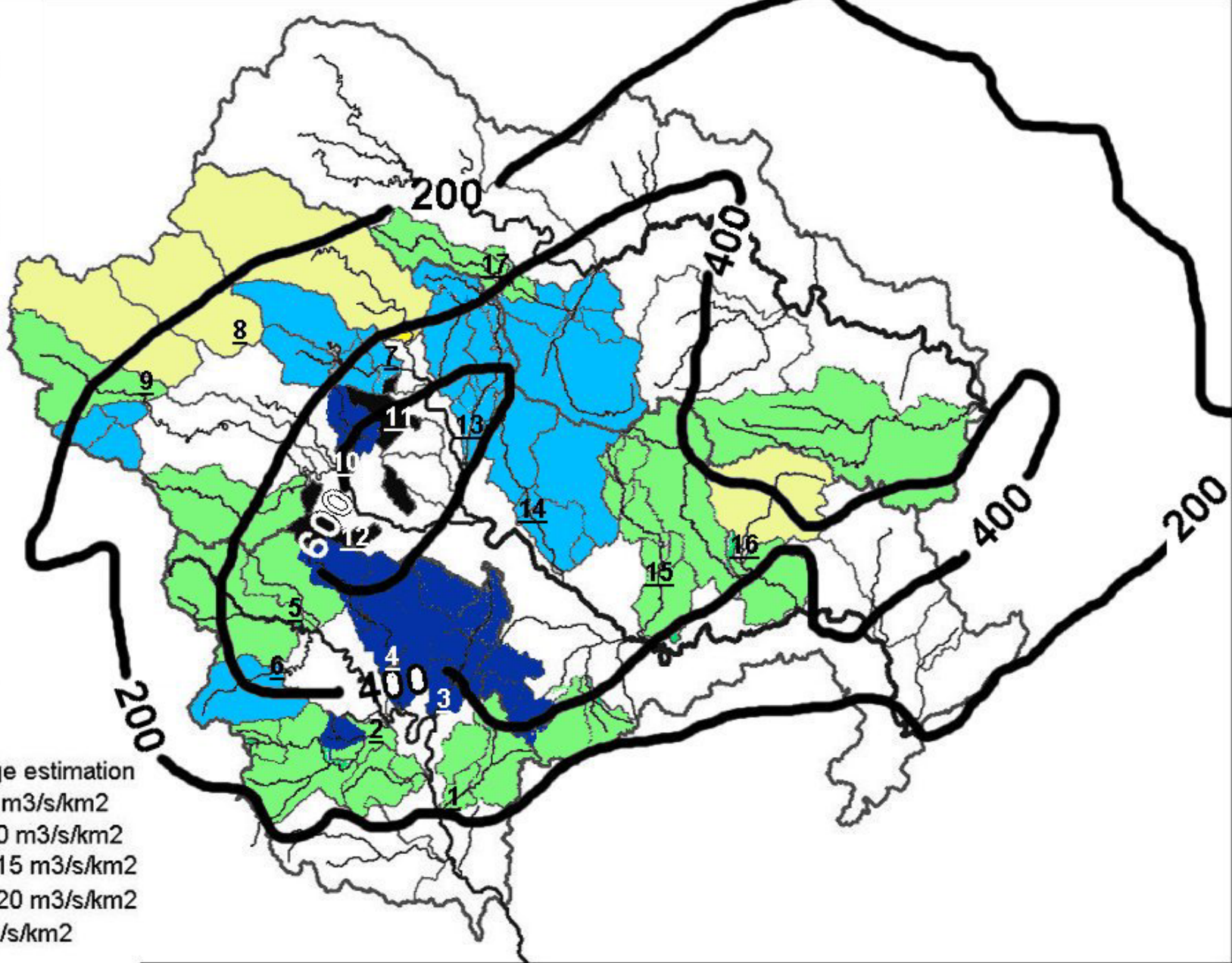
Choice of hydrological forecasting models

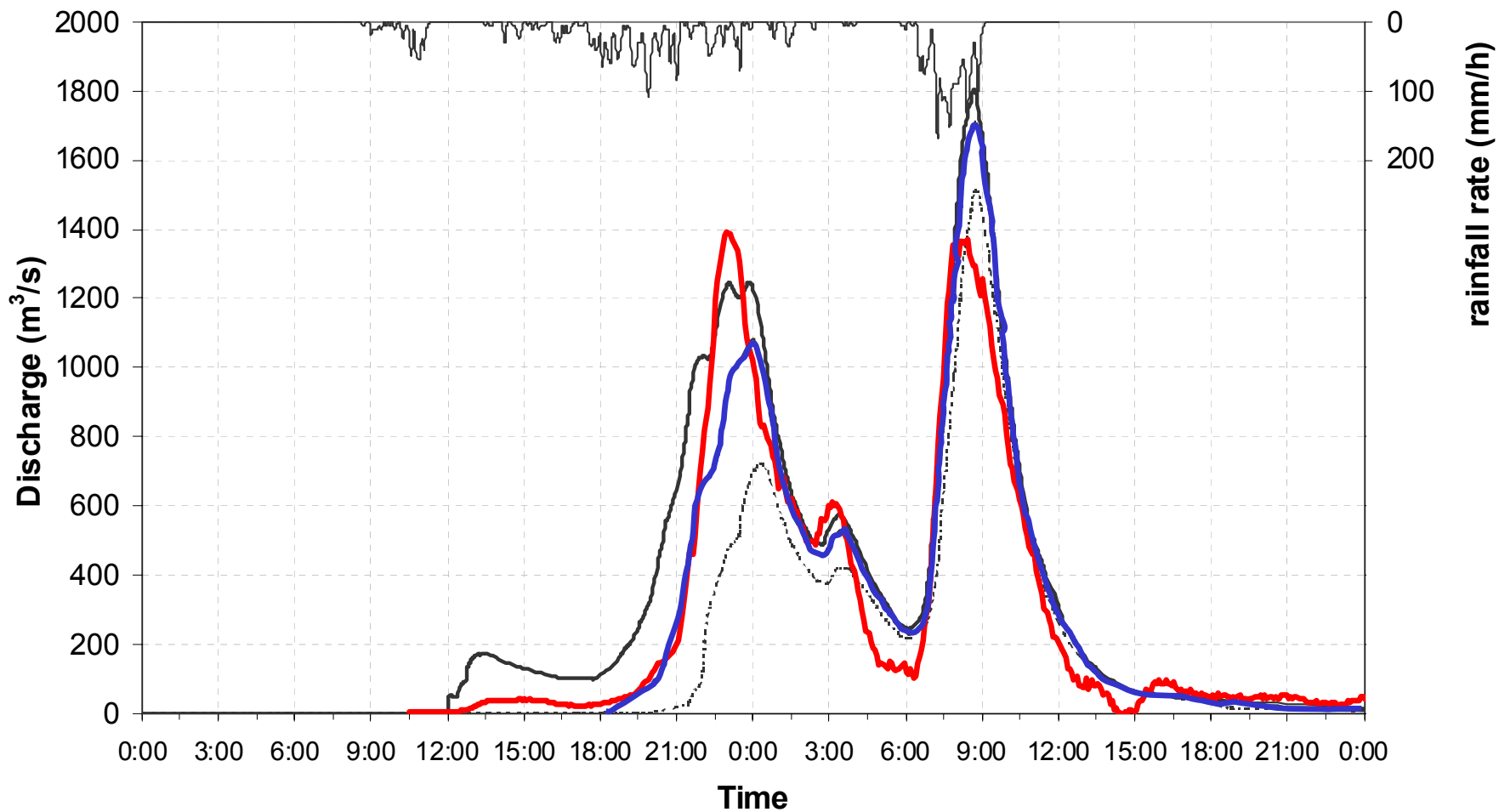
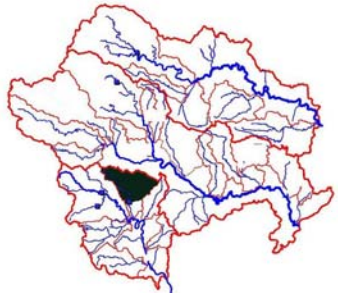
Flash flood examples

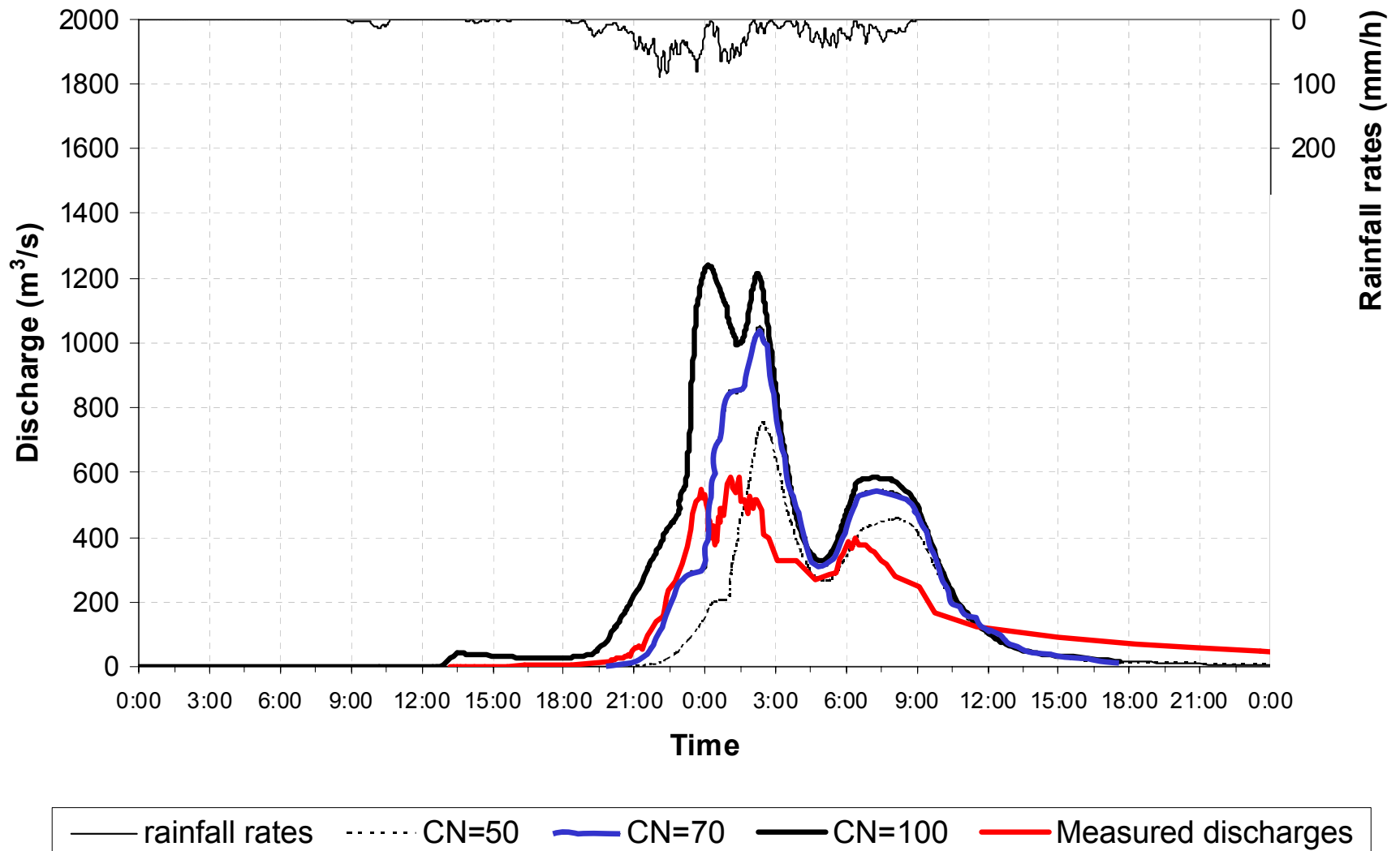
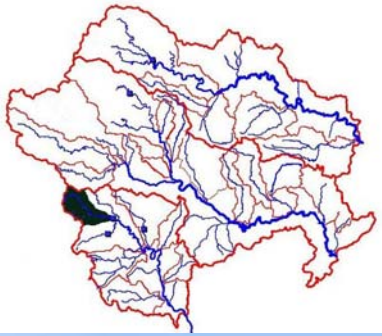
Choice of hydro. logical forecasting models

Flash floods examples



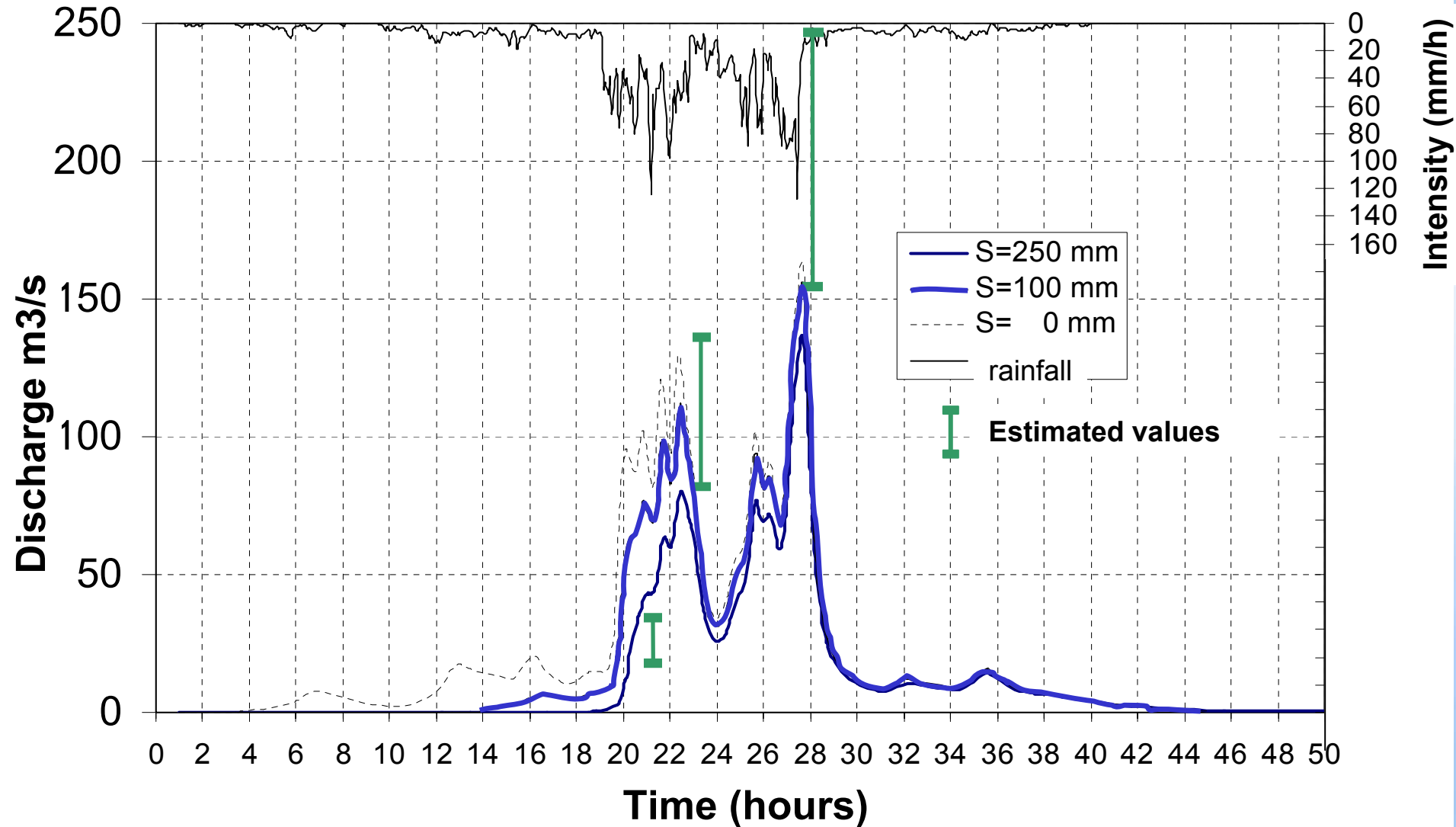






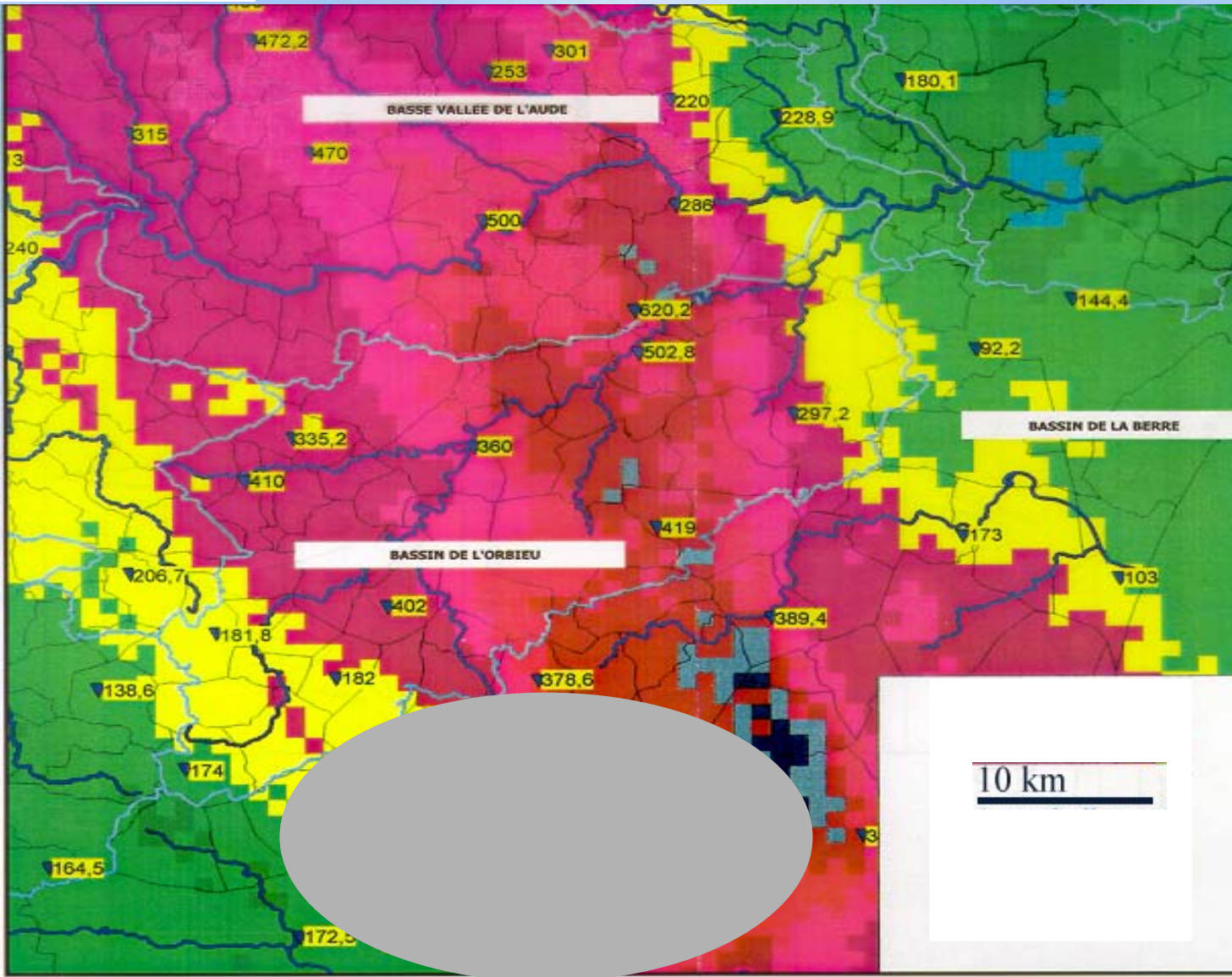


Comparison between numerical simulations and observations





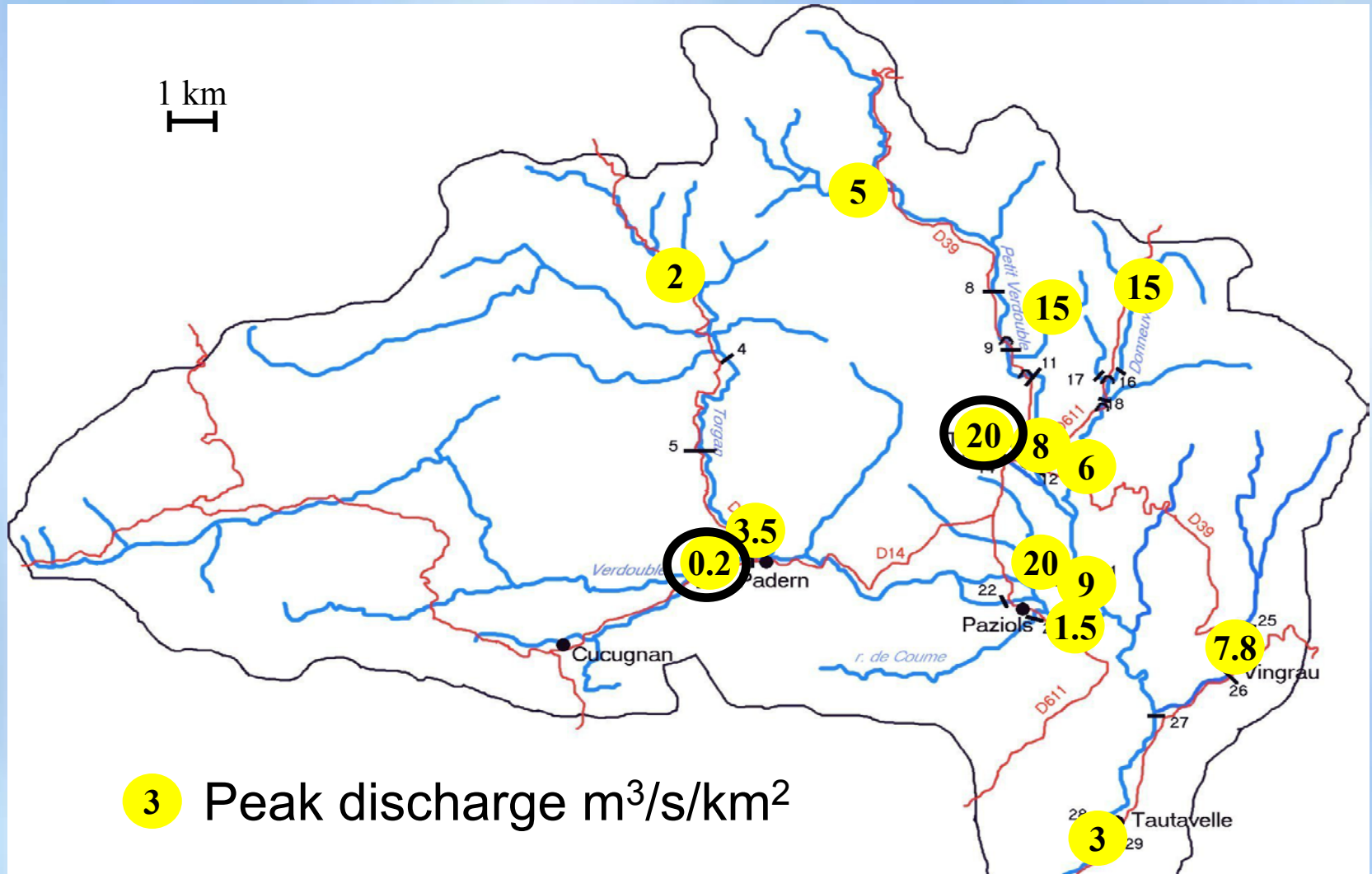
Measured rainfall amounts 12 and 13 November 1999



millimeters

0 < . < 10
10 < . < 25
25 < . < 50
50 < . < 75
75 < . < 100
100 < . < 150
150 < . < 200
200 < . < 300
300 < . < 400
400 < . < 500
500 < . < 600
600 et +

Estimated Peak discharges on the Verdouble watershed



Conclusions

Simulation requires understanding
Understanding requires **observation**

A large database on the 2002 Gard event:
<http://www.enpc.fr/cereve/HomePages/gaume/gard02b.zip>