Statistical Theory of Extremes
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Part 5
Complements

Exercises

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5.1. Study the data given in Sneyers (1977) for early maximal precipitations in mm at Uccle for durations of 20 min, 2h and 6h (samples of 17 observations) (Table 1).

5.2. Study some of the data contained in the references to Part 5 (and in particular the lag-correlation) as well as data contained in Parts 2, 3 and 4.

5.3. For Sneyers (1977) data (Chapter 5) compare the estimators obtained for the full sample (1938/72) and a partial one (1956/72) like the one given above. Compare the two partial samples (1956/72) and discuss if there is an average relation between the durations and the amount of maximal precipitations.

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Table 1

Year	20 min	30 min	2 h	6 h
1956	14.0	16.2	26.7	32.9
1657	10.2	10.4	19.0	27.0
1958	8.4	9.5	18.5	22.7
1959	10.6	11.2	15.2	18.6
1960	14.4	15.3	15.4	18.3
1961	15.5	17.6	20.1	20.1
1962	19.5	23.5	48.5	48.5
1963	11.8	11.9	16.0	30.5
1964	13.2	13.3	25.3	25.3
1965	15.0	15.0	15.8	25.8
1966	10.2	10.2	15.5	25.3
1967	13.0	13.0	13.4	15.5
1968	9.0	11.4	17.1	17.5
1969	21.0	21.5	31.8	49.0
1970	17.1	17.1	20.0	27.9
1971	10.5	14.0	21.8	41.0
1972	13.0	15.5	20.8	21.7

References

Sneyers, R., 1977. L'intensite maximale des precipitations en Belgique, Inst. Royal Meteor. Belgique, ser. B, 86.

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