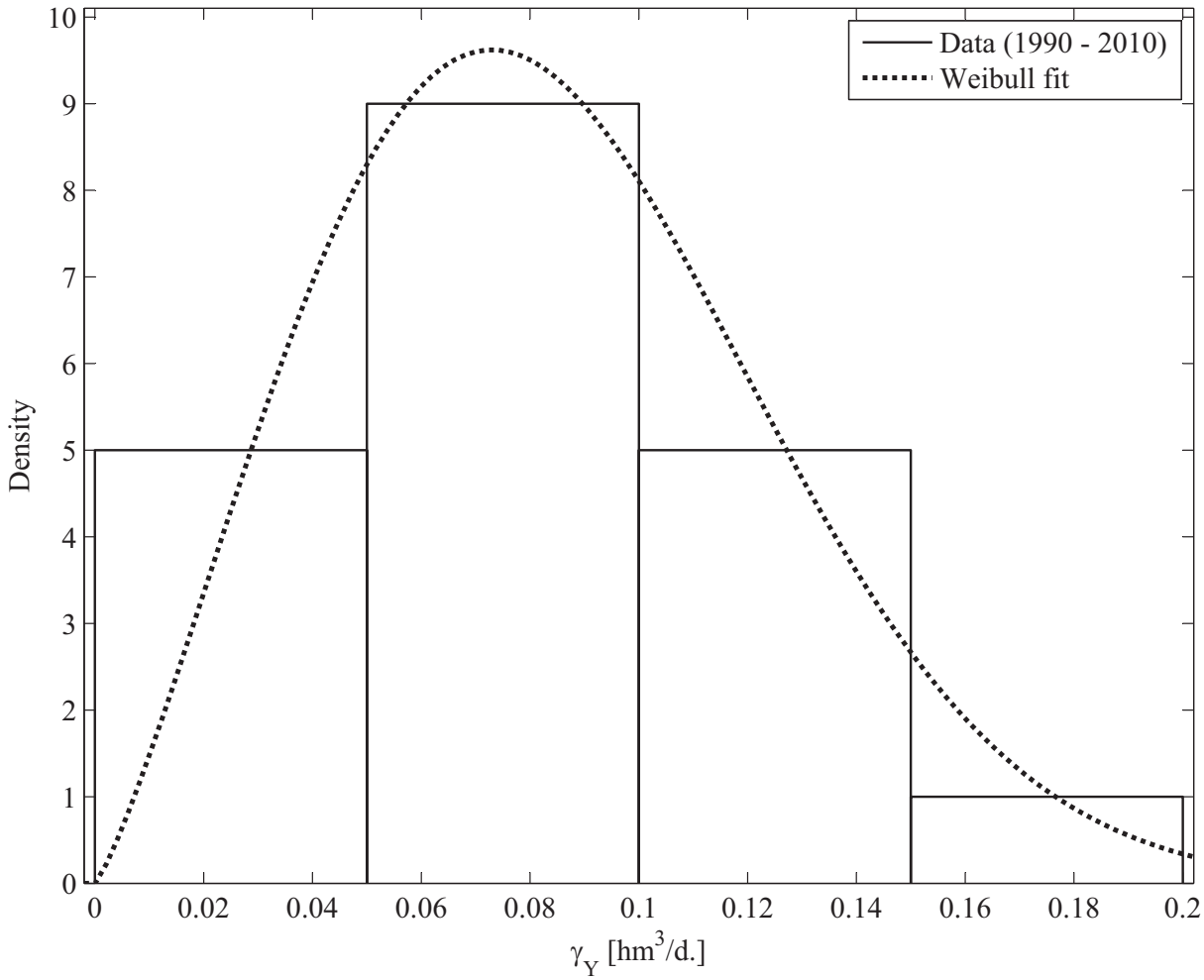
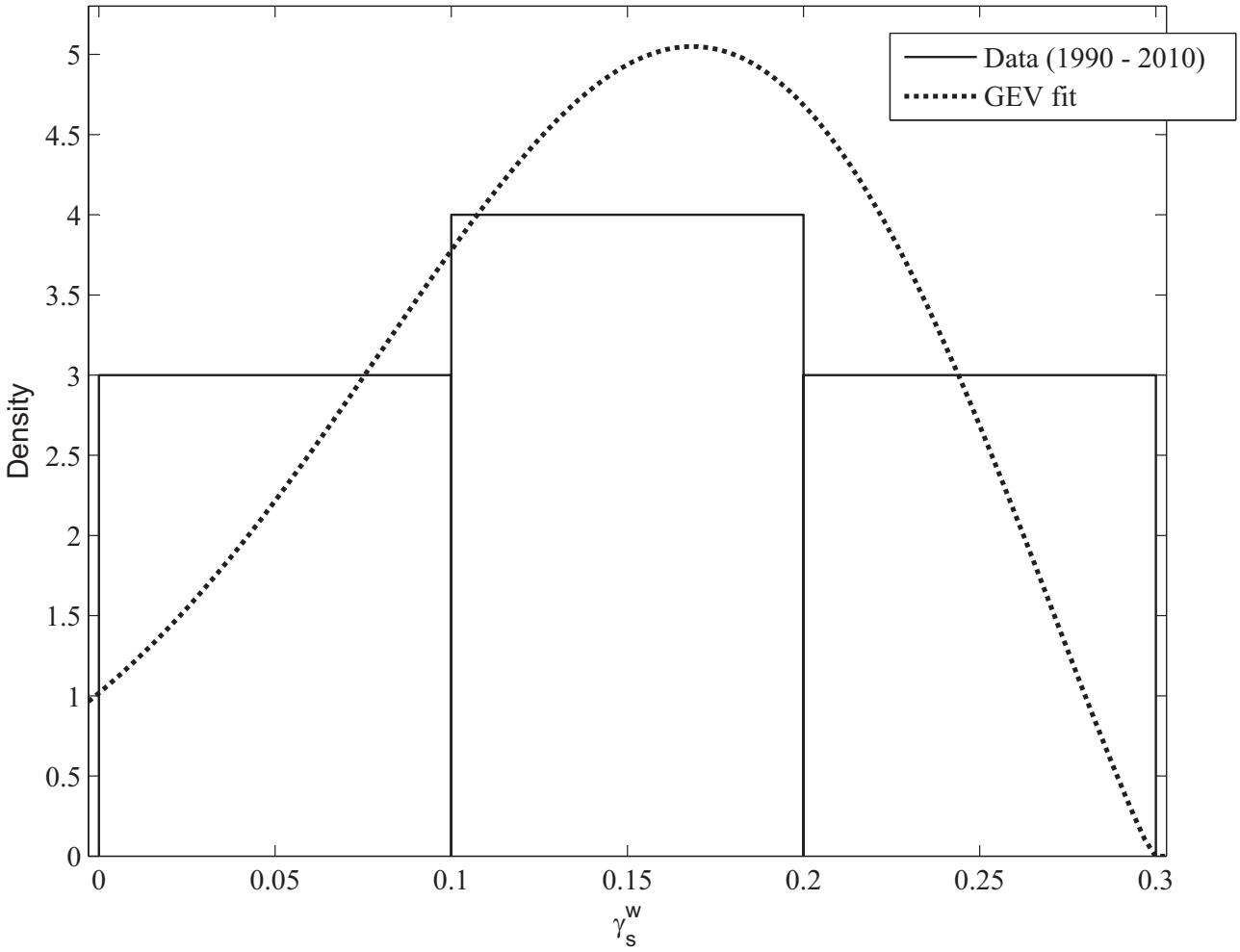
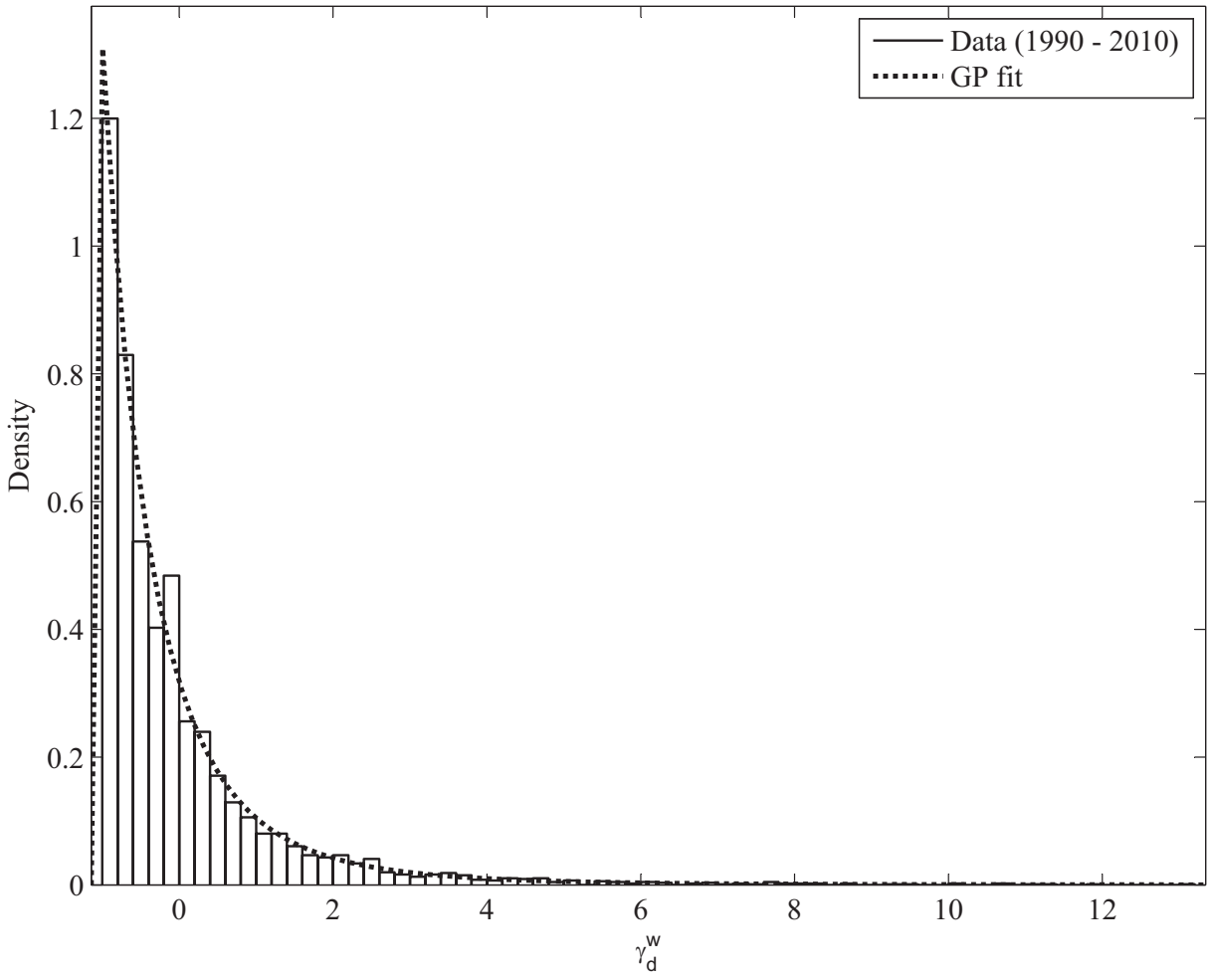
Statistical distributions of inflow characteristics
(zero values and flood values excluded): annual mean



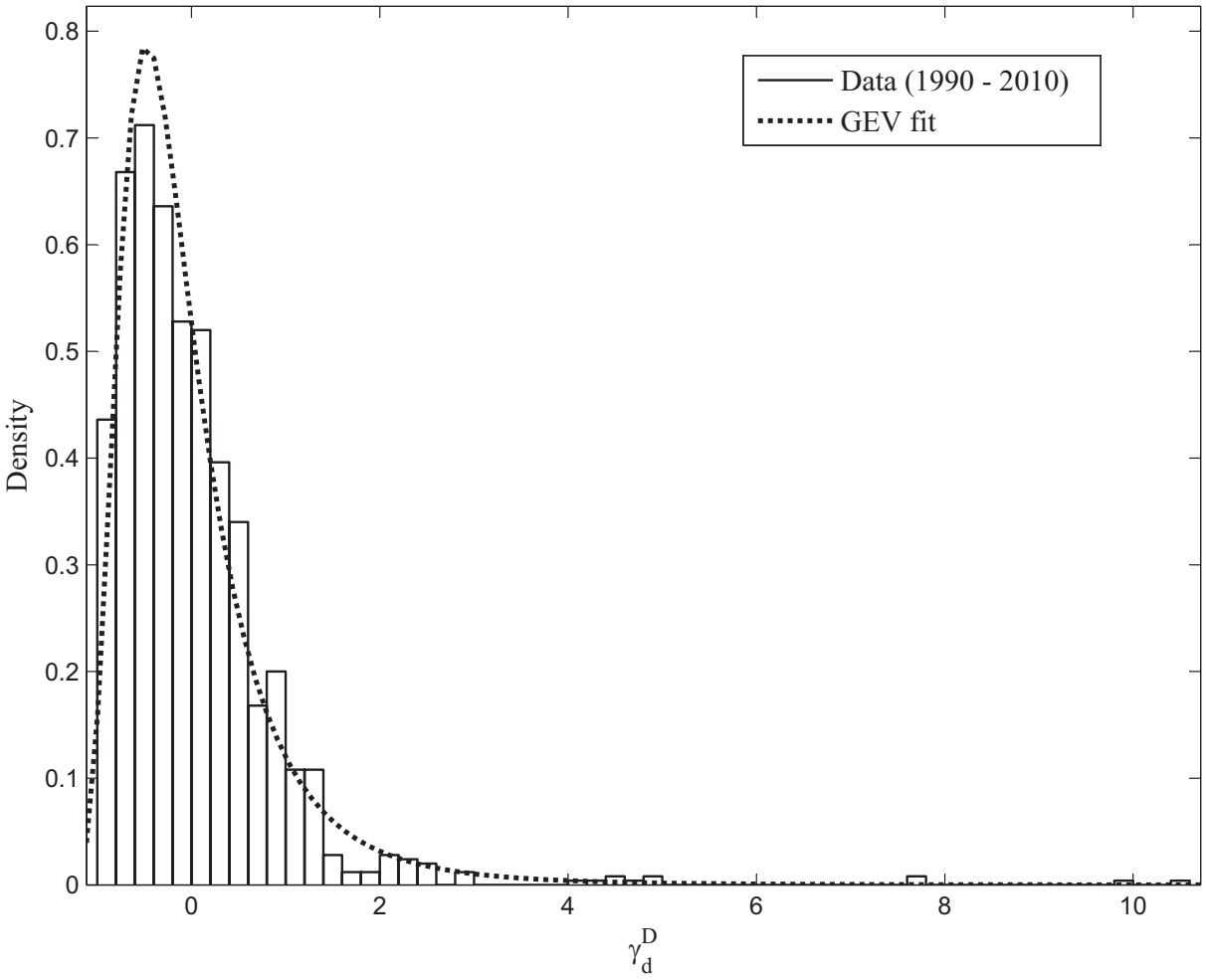
Statistical distributions of inflow characteristics
(zero values and flood values excluded):
relative seasonal deviation during the wet season



Statistical distributions of inflow characteristics
(zero values and flood values excluded):
relative daily deviation during the wet season



Statistical distributions of inflow characteristics
(zero values and flood values excluded):
relative daily deviation during the dry season



Statistical distributions of inflow characteristics (zero values and flood values excluded)

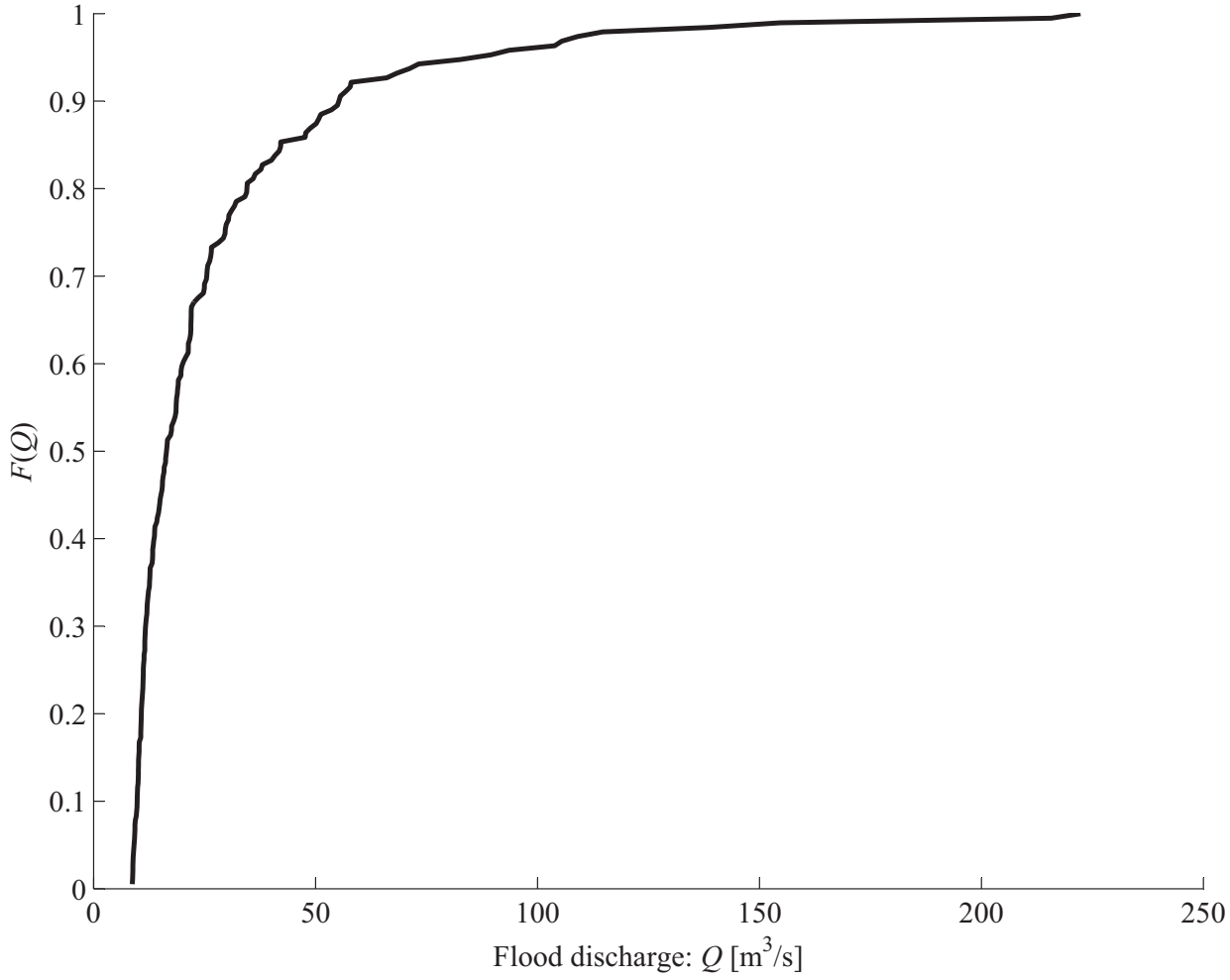
Table 1: Parameters of statistical distributions.

Variable	**Distribution**	**Parameters**
Annual mean inflow: $\gamma_Y = \langle Q \rangle_Y$	Weibull	$a = 0.0957$ $b = 2.2150$
Wet seasonal variation: $\gamma_s^w = \dfrac{\Delta Q_S^W}{\langle Q \rangle_Y}$	Generalized Extreme Value	$k = -0.4711$ $\sigma = 0.0833$ $\mu = 0.1226$
Daily variation (wet season): $\gamma_d^W = \dfrac{\Delta Q_d^W}{\langle Q \rangle_S^W}$	Generalized Pareto	$k = 0.2443$ $\sigma = 0.7581$ $\theta = -1$
Daily variation (dry season): $\gamma_d^D = \dfrac{\Delta Q_d^D}{\langle Q \rangle_S^D}$	Generalized Extreme Value	$k = 0.2035$ $\sigma = 0.4761$ $\mu = -0.3925$

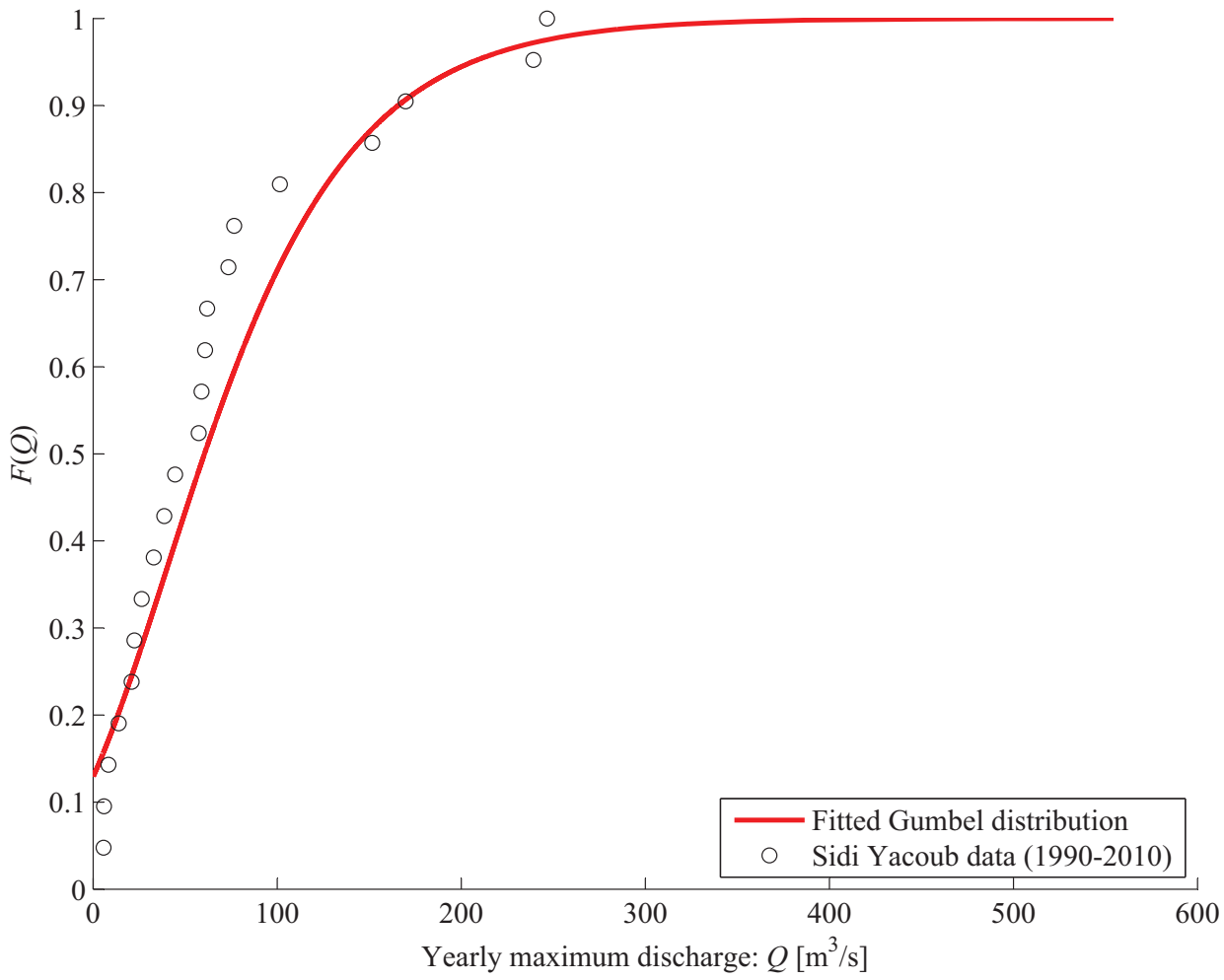
Table 2: Comparison of statistical parameters from data and from fitted distributions.

	Mean		Variance		Skewness		Kurtosis	
	Data	Fit	Data	Fit	Data	Fit	Data	Fit
$\langle Q \rangle_Y$	0.0844	0.0845	0.0018	0.0016	0.5150	0.5168	2.1425	3.1099
ΔQ_S^W	0.1428	0.1430	0.0064	0.0060	-0.1420	-0.5625	2.1252	3.1449
ΔQ_d^W	0	0.0030	1.7454	1.9678	3.4757	5.3616	20.7939	58.7064
ΔQ_d^D	0	0.0004	0.8283	0.7708	4.3582	3.2400	39.2239	26.5785

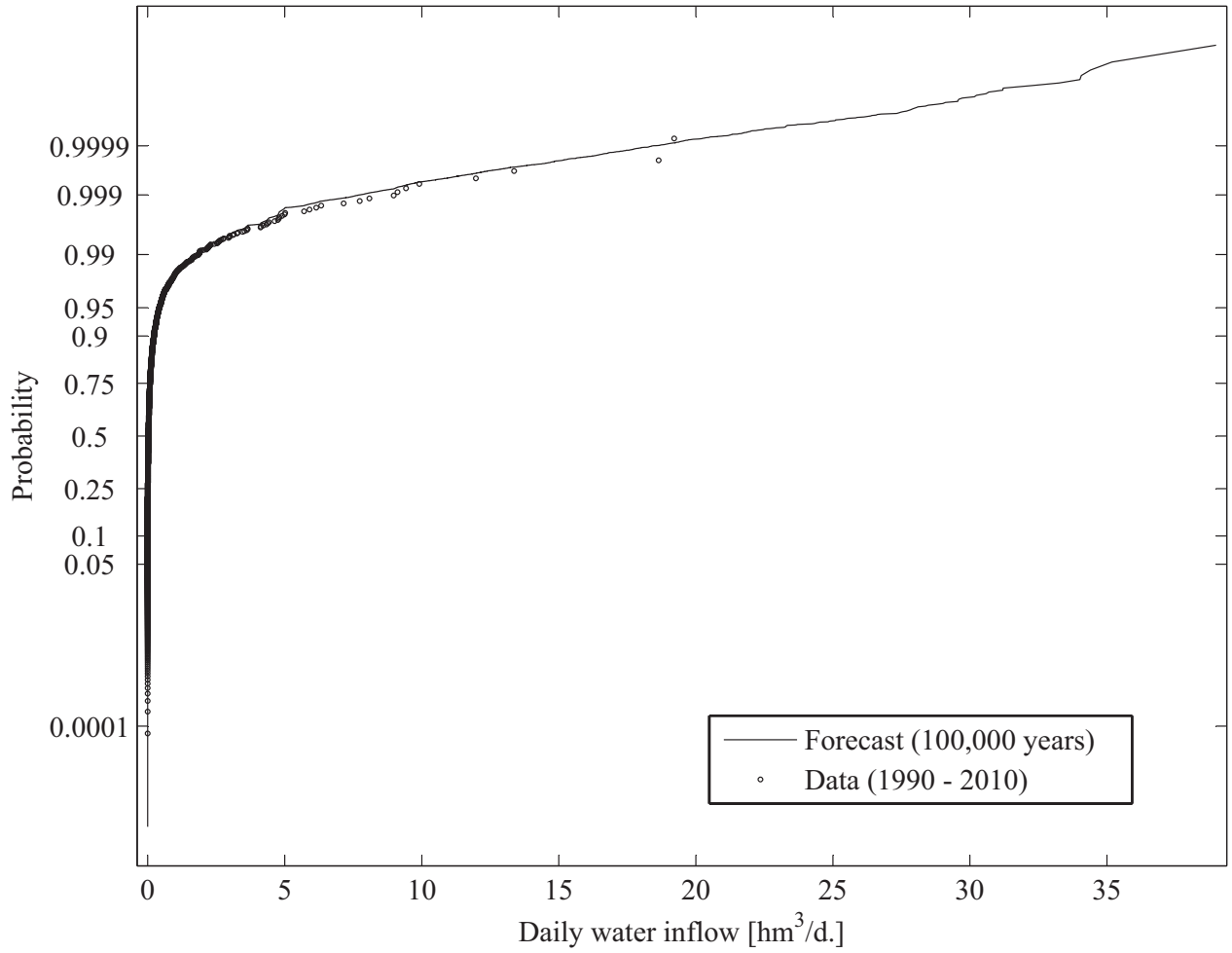
Cumulative distribution function (CDF) used
for the evaluation of flood inflows:
Flood events during the 1990-2010 period



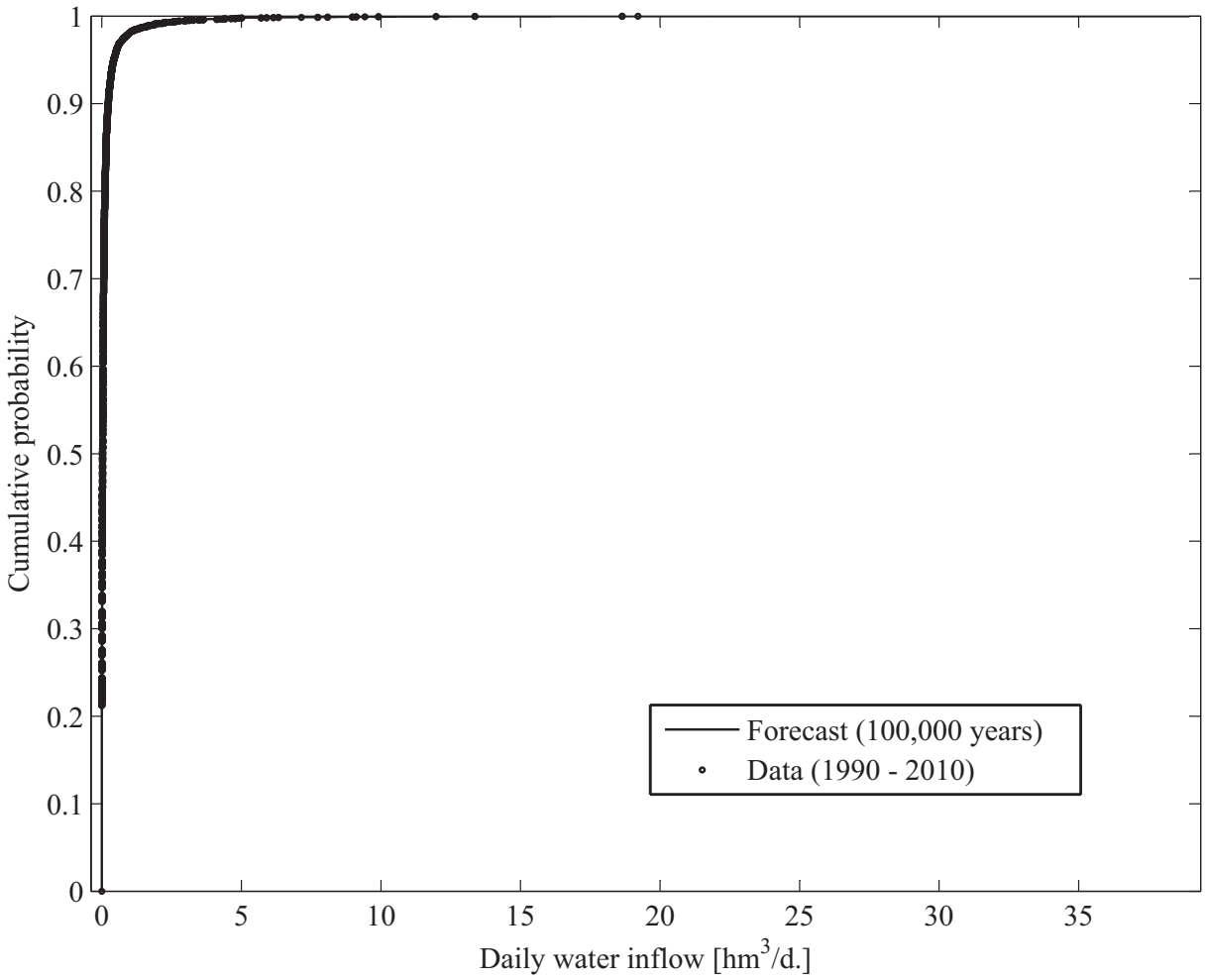
Cumulative distribution function (CDF) used
for the evaluation of flood inflows:
Gumbel distribution for the annual maximum discharges



Verification of the forecasted water inflows:
flood flows and zero flows



Verification of the forecasted water inflows:
"normal" flows



Verification of the forecasted water inflows

Table 3: Comparison between data and forecasted inflows.

Statistical characteristics	Data	100,000 year forecast	Difference (to average date)
Average Inflow [hm³/d]	0.1268	0.1280	+1 %
Standard deviation [hm³/d]	0.5789	0.5527	- 3 %
Mean wet season inflow [hm³/d]	0.1711	0.1658	- 3 %
Mean dry season inflow [hm³/d]	0.0237	0.0407	+66 %