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(Q_2) []
()

: ()
 $Q_2 = 0.55 A^{0.45}$ ()
A ()

()

[]
 $Q_2 = 214 \cdot Q_m^{0.606}$ ()
 Q_m ()

(Q_2)
() (A)

[]
 $Q_2 = 0.754 A^{0.707}$ ()



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.(t)

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				x	x	y			
			/	/	/	/		/	X,y
			/	/	/	/		/	LOG x,y
			/	/	/	/		/	X,y
			/	/	/	/		/	X,y
			/	/	/	/		/	X,y
			/	/	/	/		/	X,y
			/	/	/	/		/	LOG x,y
			/	/	/	/		/	X,y
			/	/	/	/		/	Logx, LOG y
			/	/	/	/		/	LOGx,LOGy
			/	/	/	/		/	X,y
			/	/	/	/		/	LOGx,LOGy
			/	/	/	/		/	LOGx,LOGy
			/	/	/	/		/	X,y

()

()

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:(Index Flood)

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		(m³/s)						
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$\text{Log } Q_2 = 17.68 + 5.88 \log L_W - 9.5 \log H + 1.5 \log S_r + 2.97 \log S_w$	()
$\log Q_5 = 0.51 + 0.6 L_W - 0.003 H + 0.6 S_r + 0.05 S_w$	()
$\text{Log } Q_{10} = 0.21 + 0.6 L_W - 0.002 H + 0.14 S_r + 0.04 S_w$	()
$\text{Log } Q_{20} = 0.6 L_W + 0.002 H + 0.16 S_r + 0.03 S_w - 0.08$	()
$\text{Log } Q_{25} = 0.14 \log L_W - 0.002 \log H + 0.17 \log S_r + 0.02 \log S_w - 0.17$	()
$Q_{50} = 0.85 A^{1.42}$	()
$Q_{100} = 0.86 A^{1.68}$	()

(S_r) (H) (L_w) (Q_r)

(A) (L_r) (S_w)

/ / / / / /

/

Q_{2.33}

()

) /
A

((Q₂)

Log Q_{2.33} = 0.67 + 0.011 A

() /

/ / / / /

A

H

L_w

S_w

S_r

)

$\text{Log } Q_2 = 215.85 + 75.39 \log A - 47.98$
 $\log L_W + 18.11 \log H + 6.94 \log S_r + 35.17$
 $\log S_w$ ()

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Determination of the Regional Relations of Floods in West Mazandaran

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Abstract

There are various statistical and experimental methods to estimate flood discharge. Acceptability, and an assurance of the results necessitates considering limitations, as well as environmental and hydrological conditions. In this research it is tried to analyze the floods in west of Mazandaran while considering a study of area separation into monotone hydrological units using such different statistical methods as: Index flood, Correlation equation series and Correlation equation method as well as proportions average. Finally, and according to the obtained results, the best regional relations of floods in each monotone unit were determined. The results show that correlation equations series and correlation equations with proportions average are fit to be used in analyzing rivers with rainy-snowy flow regimes and snow-rainy regimes, respectively. In rivers with rainy flow regime, Index flood method is determined as the most appropriate way to analyze the flood.

Keywords: Flow regime, Index flood, Flood, Maximum discharge, Regional relations