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Supplement of

Mekong River flow and hydrological extremes under climate change

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SUPPLEMENT 1

2

3

S1 Calculating discharge biases and Nash Sutcliffe efficiency indices 4

Relative bias equation: 5

$$RB = \frac{Si}{Oi}$$

Where: 6

RB: Relative biases 7

Si: Simulated value of yearly river flow or Q5 or Q95 8

Oi: Observed value of yearly river flow or Q5 or Q95 9

Nash-Sutcliffe efficiency equation: 10

NSE = 1 -
$$\frac{\sum_{i=1}^{n} (Oi - Si)^2}{\sum_{i=1}^{n} (Oi - \bar{O})^2}$$

Where: 12

NSE: Nash-Sutcliffe efficiency index 13

Si: Simulated daily river discharge 14

Oi: Observed daily river discharge 15

Ō: Mean value of observed daily river discharge

References

16

17

- Nash, J., Sutcliffe, J.V. (1970) River flow forecasting through conceptual models part I—A 18
- discussion of principles. J Hydrol 10 (3):282-290 19

S2 Supplementary results

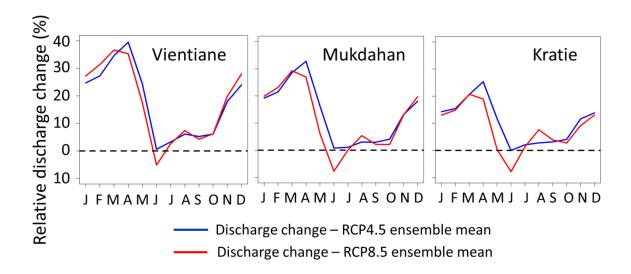


Figure S2. Relative monthly discharge change (%) under climate change