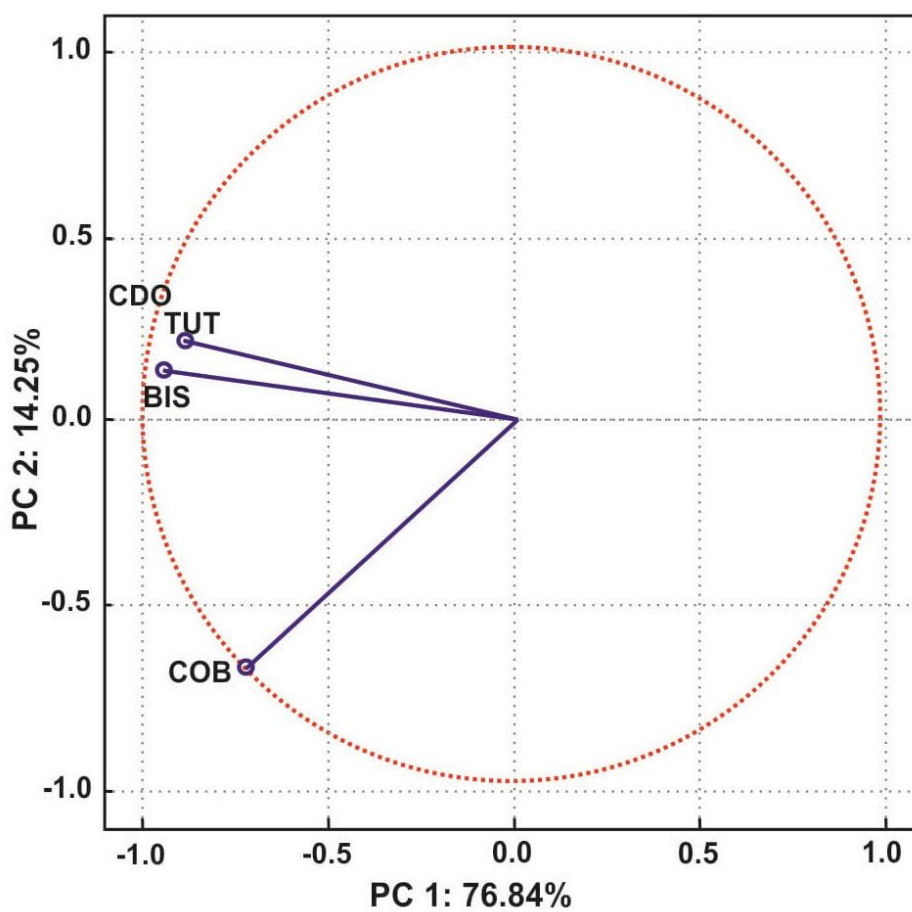


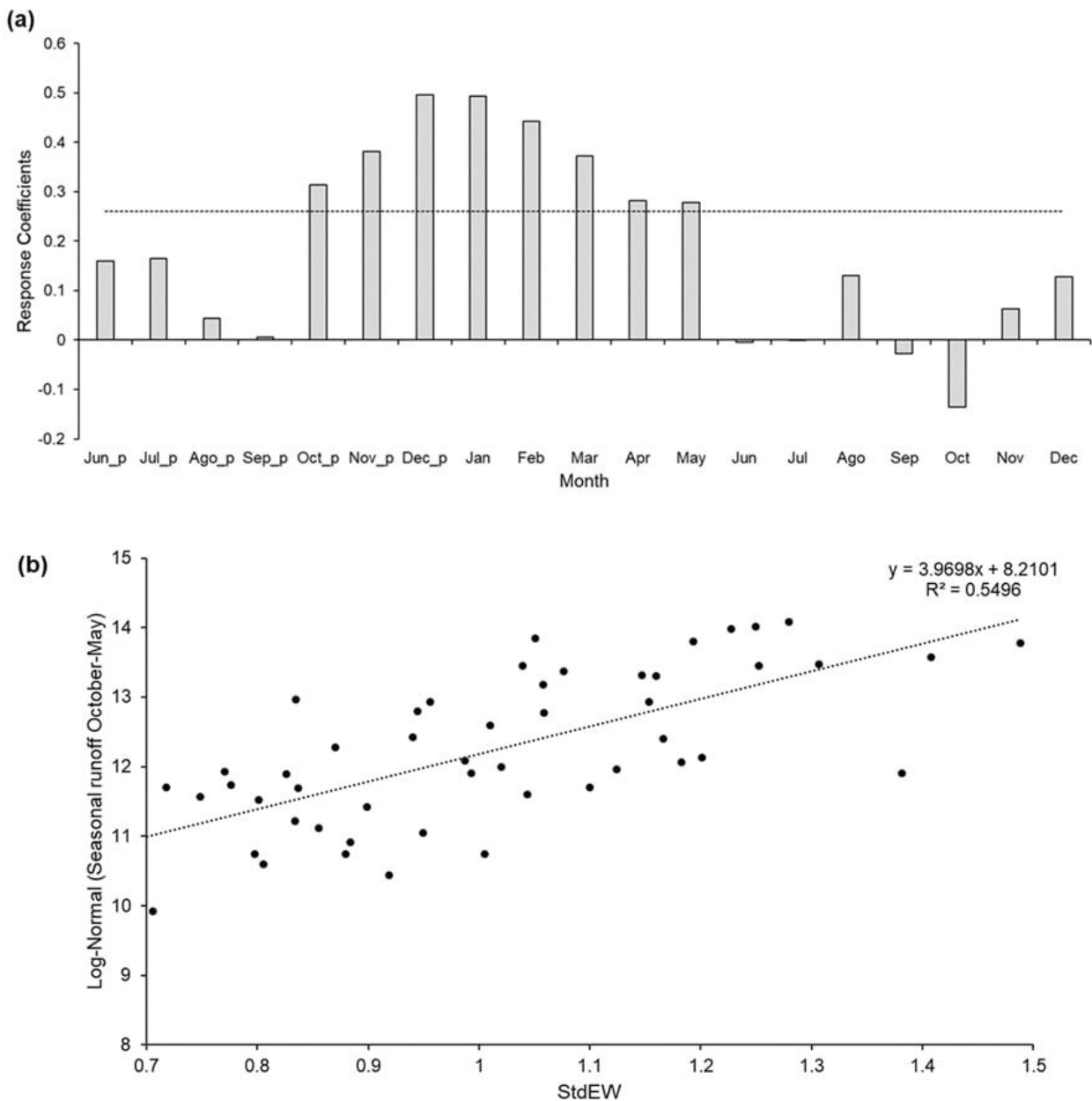
## Supplementary Material

**Fig. S1** - Principal Component Analysis with the four dendrochronological series of stdRW in the Mayo river basin.



**Runoff reconstruction and climatic influence with tree rings, in the Mayo river basin, Sonora, Mexico**

**Fig. S2** - (a) Response function analysis between the tree-ring chronology COB stdEW and monthly runoff. The values out of the horizontal lines are significant (95%). (b) Relationship between Log-Normal seasonal runoff October-May and stdEW series of COB.



**Fig. S3** - Relationship between reconstructed runoff and (a) SOI rec, (b) PDO, (c) PDSI, (d) SPEI.

