

原媛, 母艳梅, 邓钰洁, 李鑫豪, 姜晓燕, 高圣杰, 查天山, 贾昕 (2022). 植被覆盖度和物候变化对典型黑沙蒿灌丛生态系统总初级生产力的影响. 植物生态学报, 46, 162-175. DOI: 10.17521/cjpe.2020.0387

Yuan Y, Mu YM, Deng YJ, Li XH, Jiang XY, Gao SJ, Zha TS, Jia X (2022). Effects of land cover and phenology changes on the gross primary productivity in an *Artemisia ordosica* shrubland. *Chinese Journal of Plant Ecology*, 46, 162-175. DOI: 10.17521/cjpe.2020.0387

<https://www.plant-ecology.com/CN/10.17521/cjpe.2020.0387>

附录I 宁夏毛乌素沙地归一化差异植被指数(NDVI)、生长季长度(LOS)以及植被光合模型(VPM)模拟年度总初级生产力(GPP)与年平均气温(MAT)和年降水量(AP)之间的关系

Supplement I Relationship between normalized differences vegetation index (NDVI), the length of the growing season (LOS), vegetation photosynthesis model (VPM) simulated annual gross primary productivity (GPP) and mean annual air temperature (MAT), annual precipitation (AP) in Mau Us Desert in Ningxia

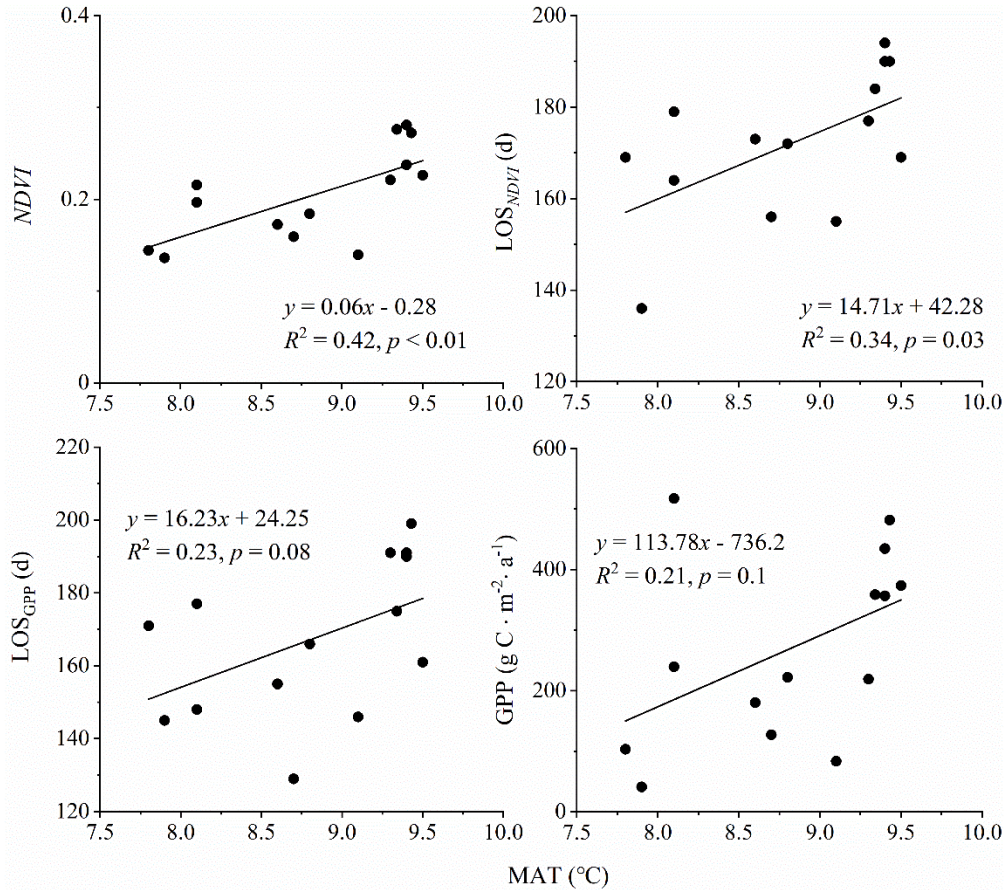


图 A NDVI、LOS 以及 VPM 模拟 GPP 与 MAT 之间的关系。

Fig. A Relationship between NDVI, LOS, VPM simulated GPP and MAT.

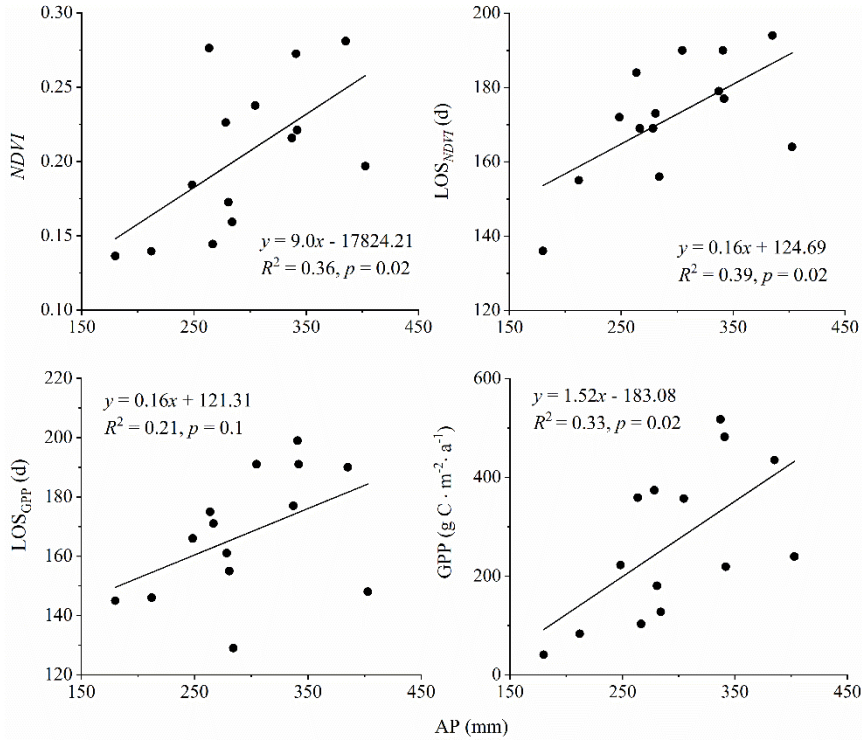


图 B $NDVI$ 、 LOS 以及 VPM 模拟 GPP 与 AP 之间的关系。
 Fig. B Relationship between $NDVI$, LOS , VPM simulated GPP and AP.

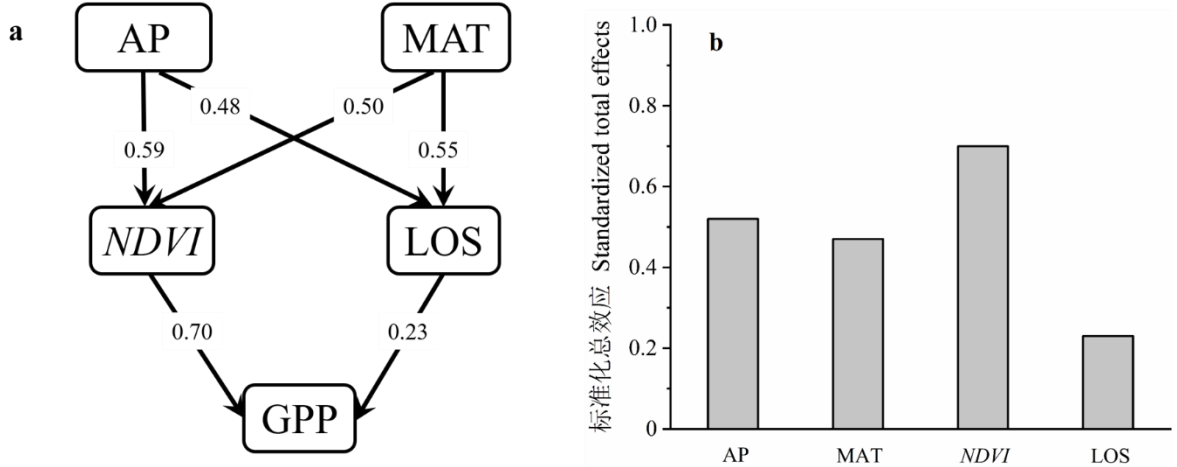
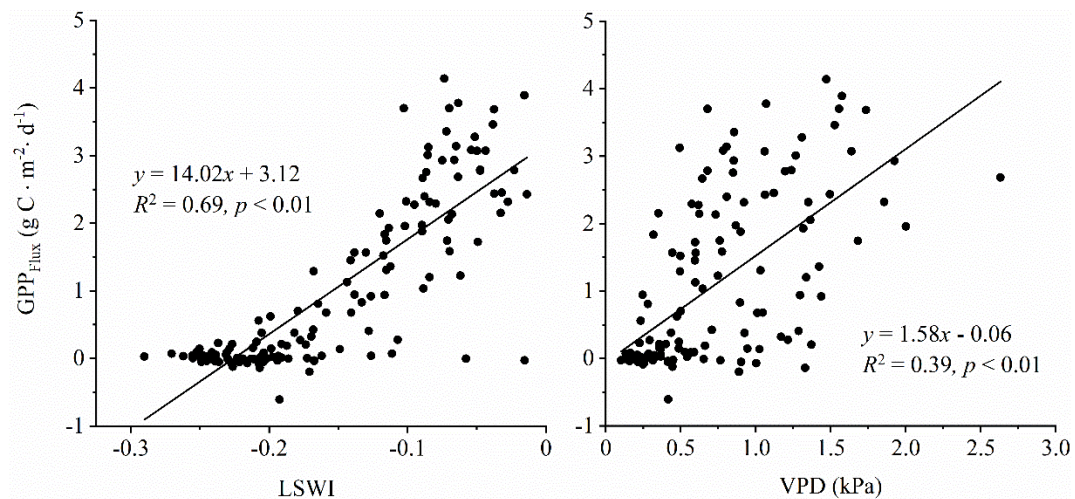


图 C AP、MAT、 $NDVI$ 和 LOS 对 VPM 模拟 GPP 影响的结构方程模型(a)和标准化总效应(b)。箭头旁边的数字是标准化路径系数(γ), 实线箭头代表模型中的正效应。模型中所有路径均显著($p < 0.05$)。

Fig. C Structural equation model (a) and standardized total effect (b) of AP, MAT, $NDVI$, and LOS on VPM simulated GPP. Numbers beside arrows are standardized path coefficients (γ), the solid arrows represent the positive effects in a fitted structural equation model, respectively. All paths in this model are significant ($p < 0.05$).



图D GPP_{Flux}与水分胁迫因子相关性分析。LSWI, 陆表水分指数; VPD, 饱和水汽压差。

Fig. D Correlation analysis of GPP_{Flux} with the water stress factors. LSWI, land surface moisture index; VPD, vapor pressure deficit.