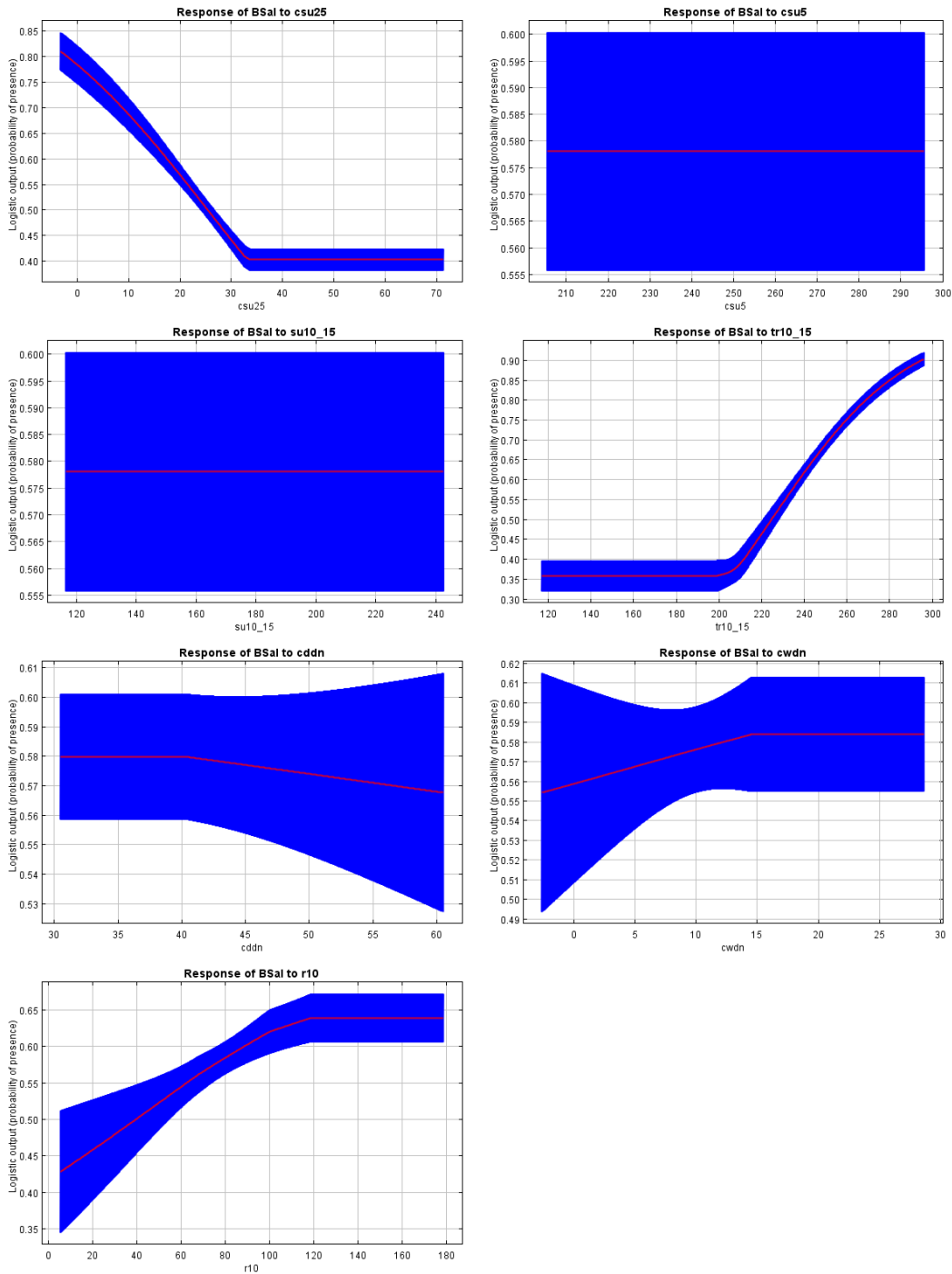
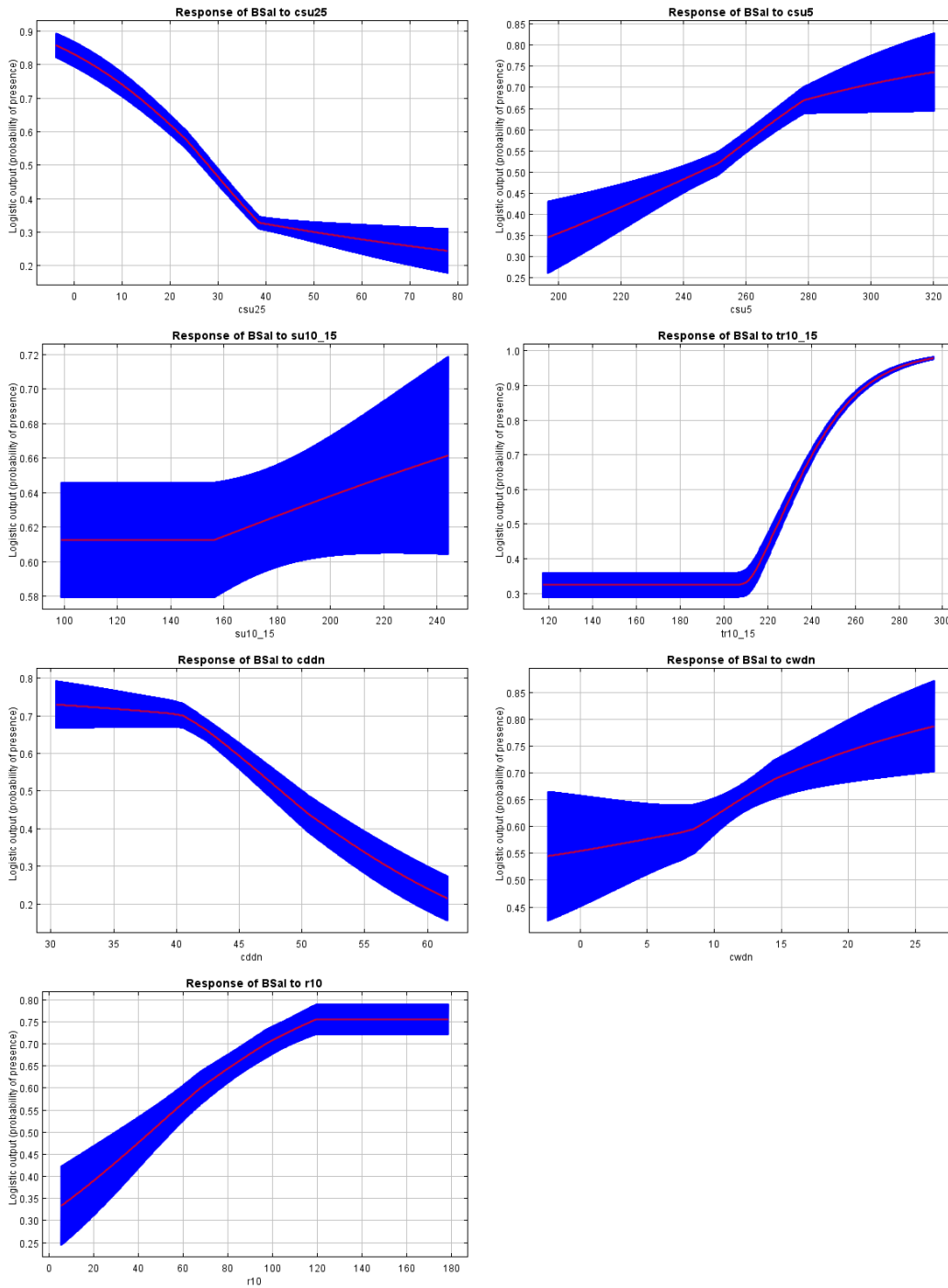


## **S4 Figures**



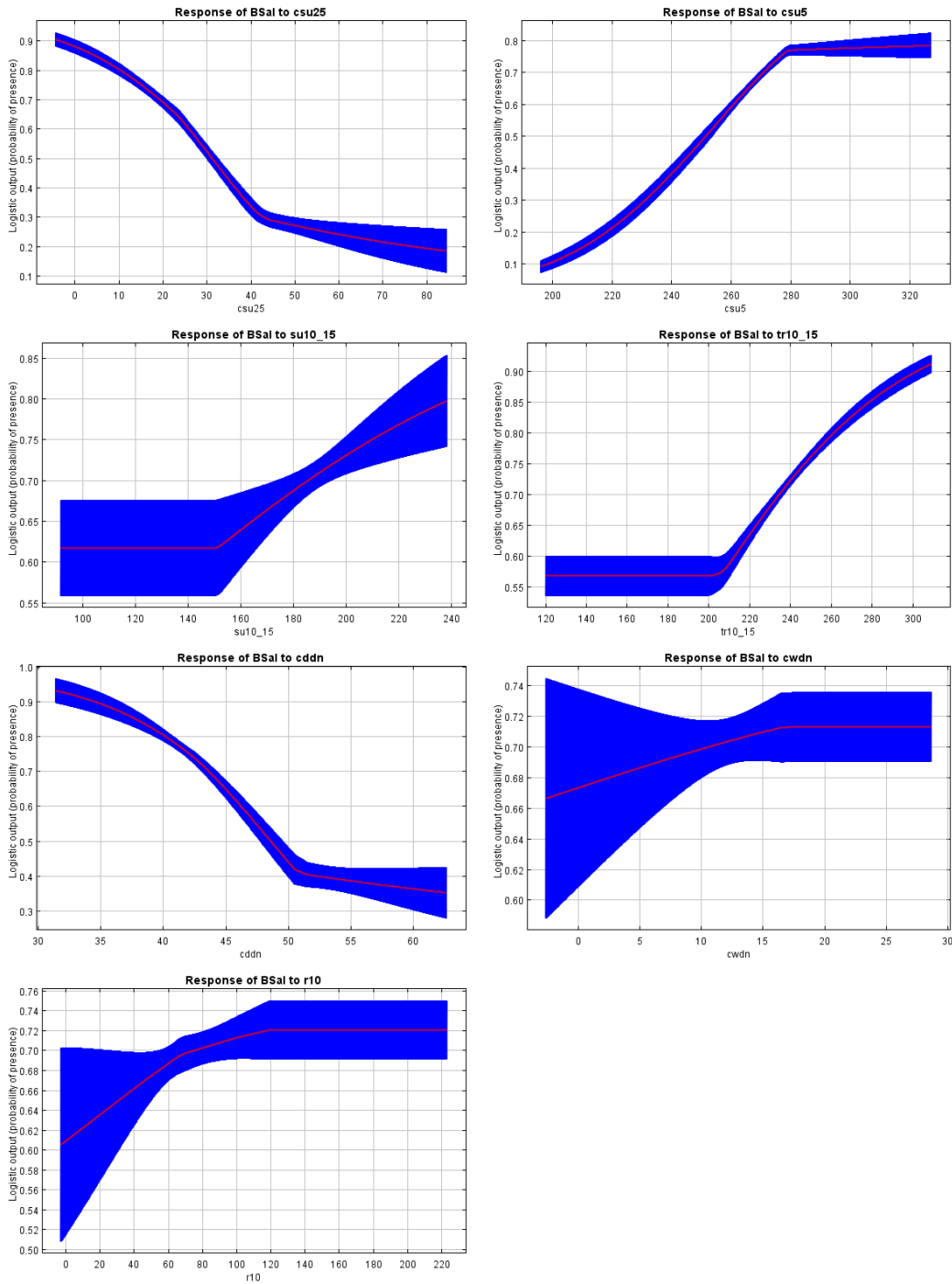
**S2 Fig A. ECA<sub>70</sub> response curves.**

Exemplary mean responses of the 14 cross-validation runs  $\pm$  one standard deviation for one replicate run of the ECA<sub>70</sub> model. The curves show the logistic output as a function of each variable, while all other variables are kept at their average value. Note different scales on the y-axis.



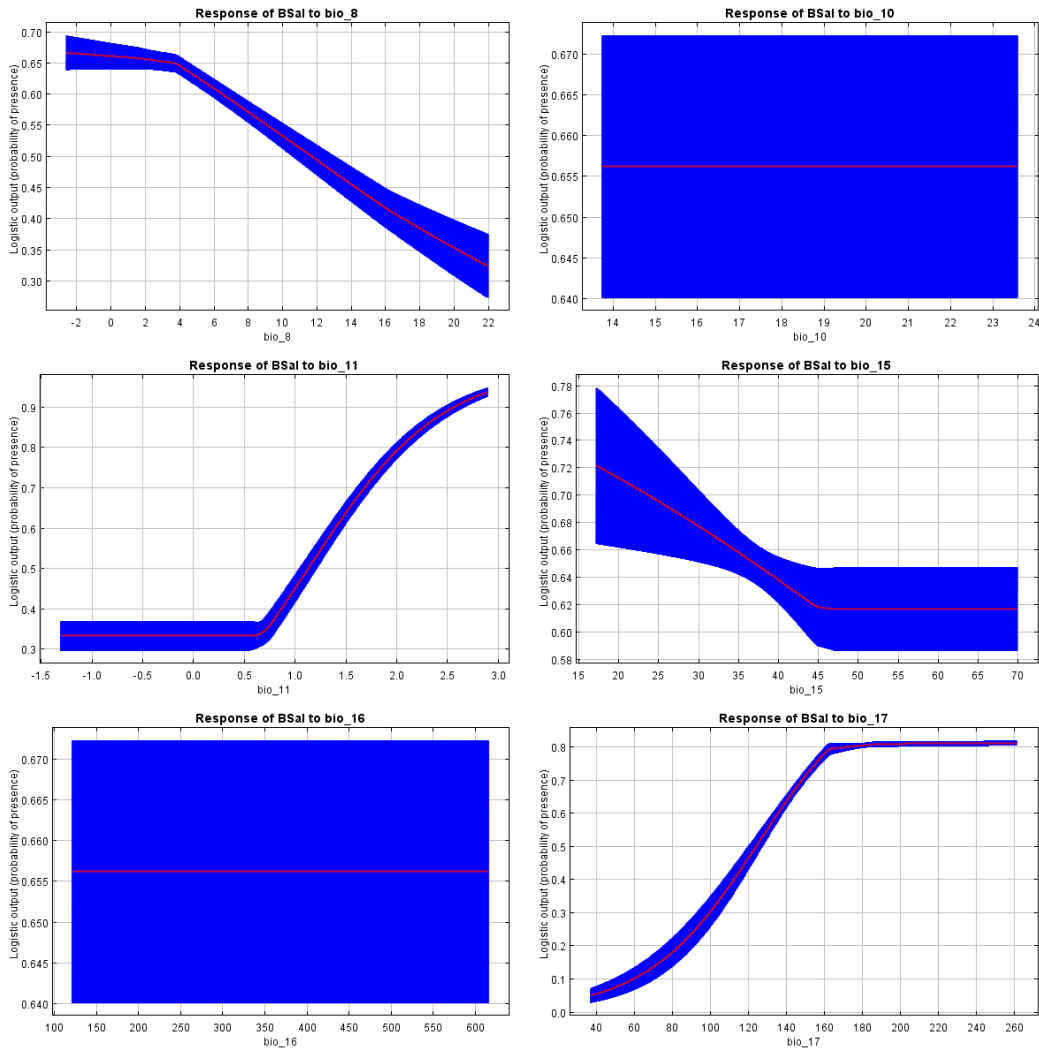
**S2 Fig B. ECA<sub>150</sub> response curves.**

Exemplary mean responses of the 14 cross-validation runs  $\pm$  one standard deviation for one replicate run of the ECA<sub>150</sub> model. The curves show the logistic output as a function of each variable, while all other variables are kept at their average value. Note different scales on the y-axis.



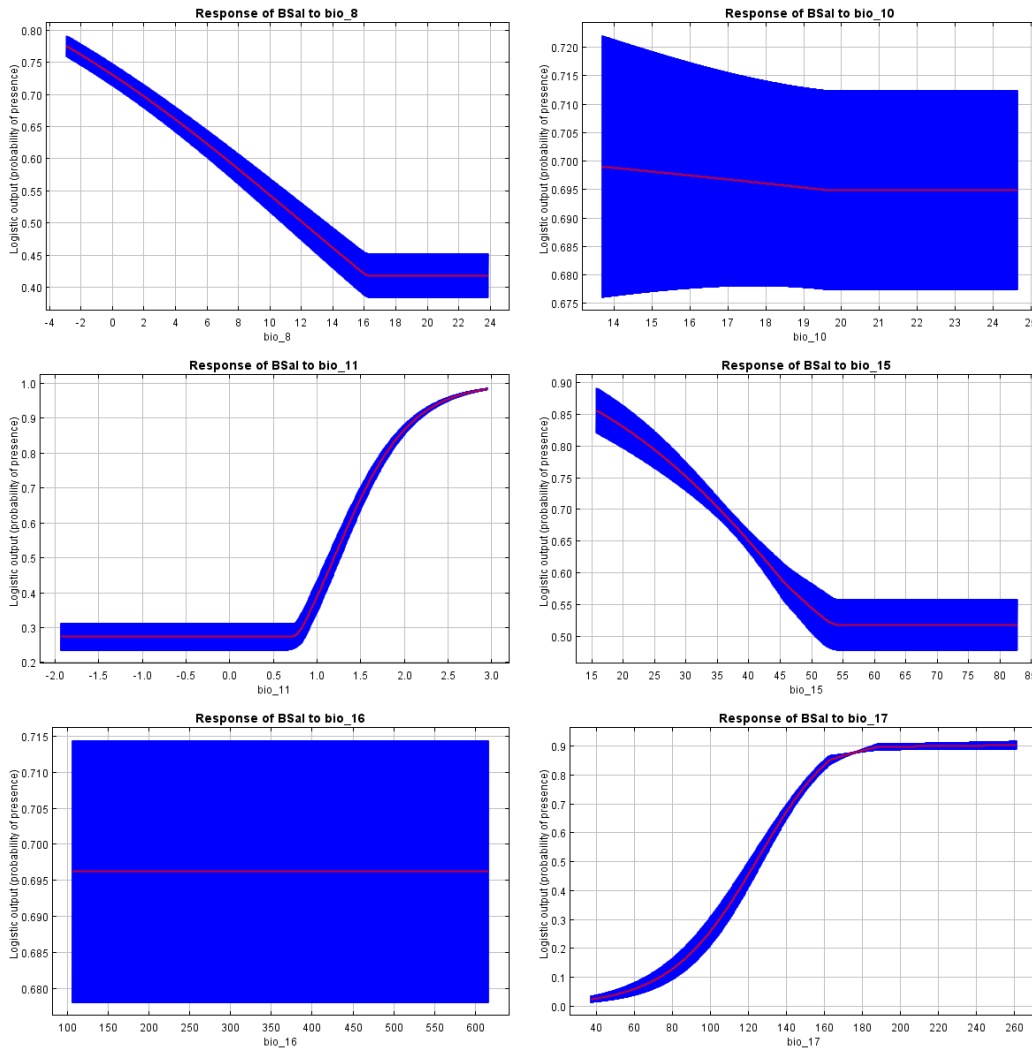
**S2 Fig C. ECA<sub>full</sub> response curves.**

Exemplary mean responses of the 14 cross-validation runs  $\pm$  one standard deviation for one replicate run of the ECA<sub>full</sub> model. The curves show the logistic output as a function of each variable, while all other variables are kept at their average value. Note different scales on the y-axis.



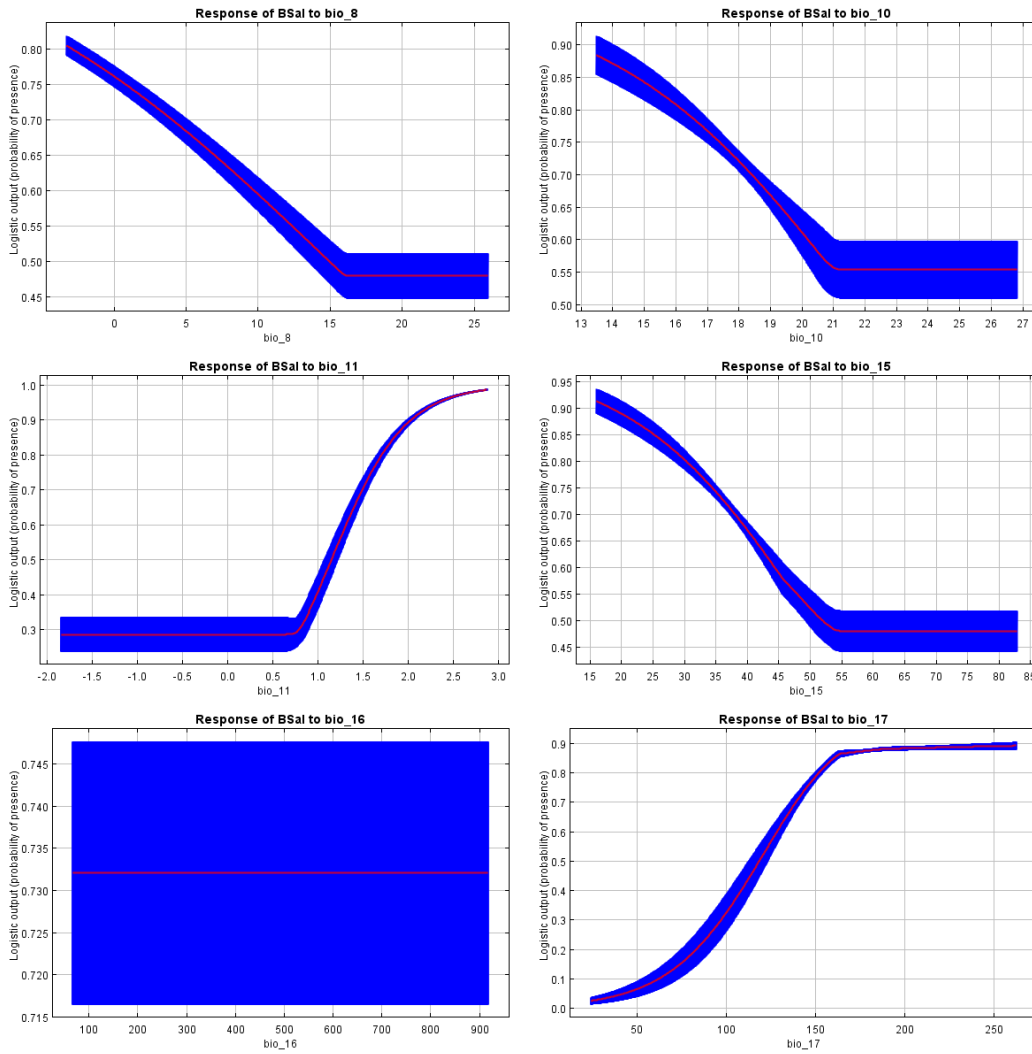
**S2 Fig D. BIO<sub>70</sub> response curves.**

Exemplary mean responses of the 14 cross-validation runs  $\pm$  one standard deviation for one replicate run of the BIO<sub>70</sub> model. The curves show the logistic output as a function of each variable, while all other variables are kept at their average value. Note different scales on the y-axis.



**S2 Fig E. BIO<sub>150</sub> response curves.**

Exemplary mean responses of the 14 cross-validation runs  $\pm$  one standard deviation for one replicate run of the BIO<sub>150</sub> model. The curves show the logistic output as a function of each variable, while all other variables are kept at their average value. Note different scales on the y-axis.



**S2 Fig F. BIO<sub>full</sub> response curves.**

Exemplary mean responses of the 14 cross-validation runs  $\pm$  one standard deviation for one replicate run of the BIO<sub>full</sub> model. The curves show the logistic output as a function of each variable, while all other variables are kept at their average value. Note different scales on the y-axis.