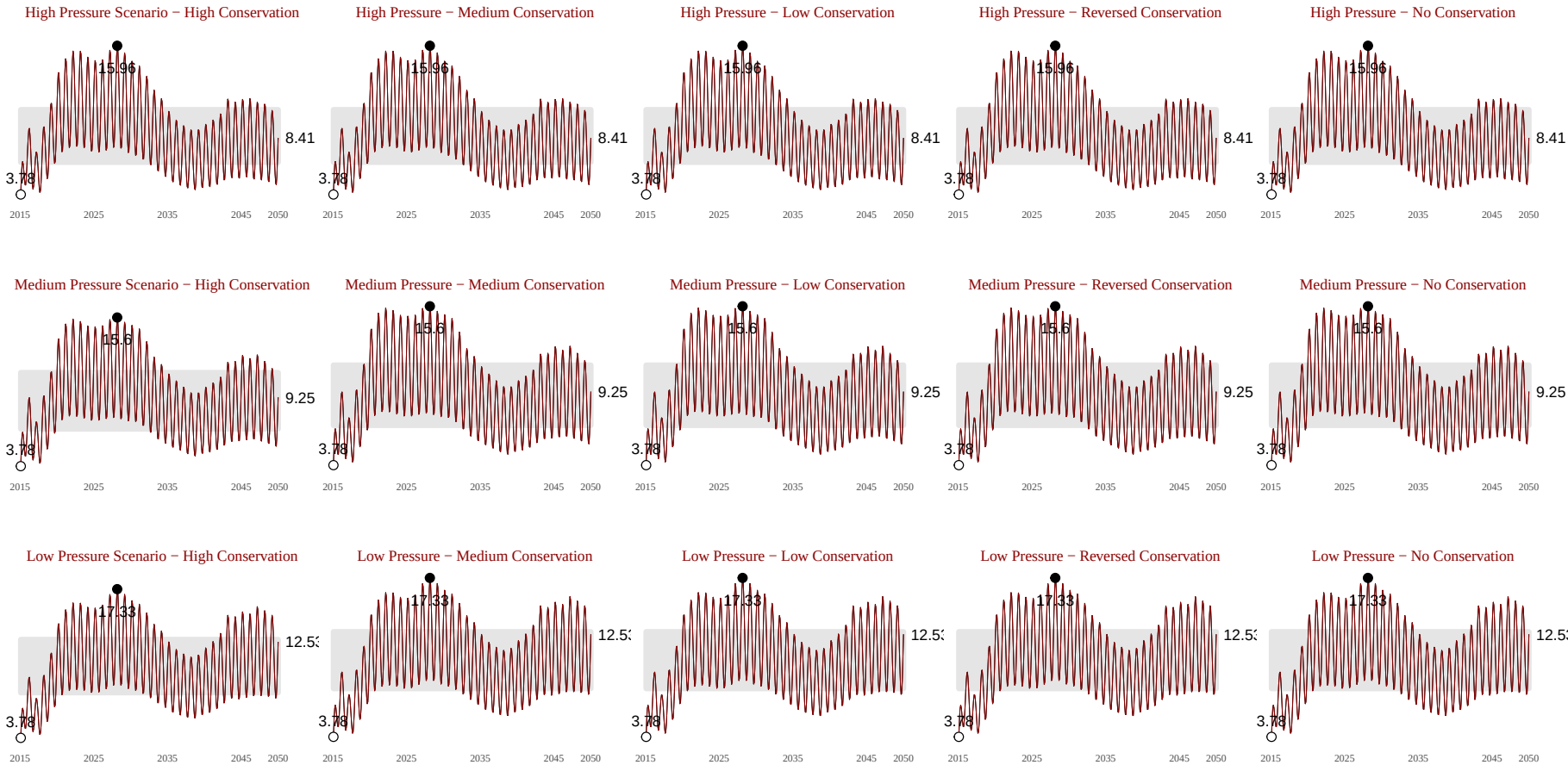Terestrial inputs