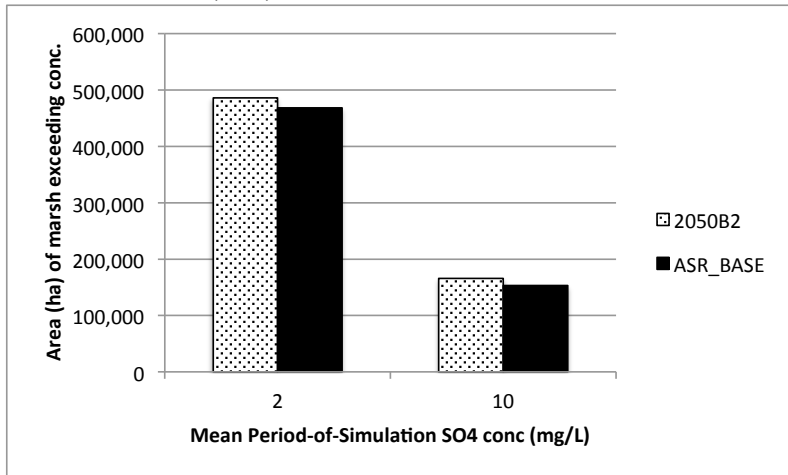


**Summary: CERP ASR Project, Everglades landscape sulfate responses.**

The following pages summarize the marsh-area data found in each of the multiple ELM Performance Measure map graphics. Those map graphics quantitatively compare each ASR Project Alternative (ALT2C, ALT2V, ALT4V) to the Base run relevant to this project (ASR\_BASE - i.e., the CERP0 flows without additional ASR). In addition, the first bar graph page compares the CERP ASR\_BASE to the future-without-CERP base (2050B2).

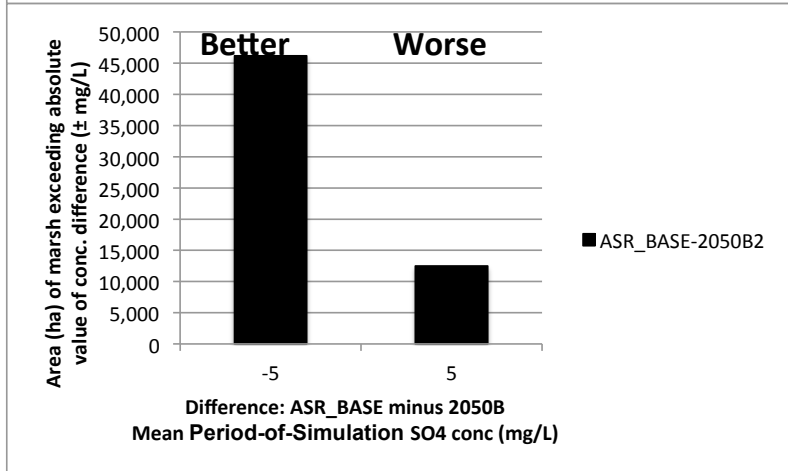
Please refer to other documents on the ELM ASR project web page (<http://ecolandmod.ifas.ufl.edu/projects/ELMreg500mASR>) for full documentation of these simulations.

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Period of Simulation (POS) mean.



For the **two Bases** only, shows area of marsh that exceeds two selected concentration criteria values.

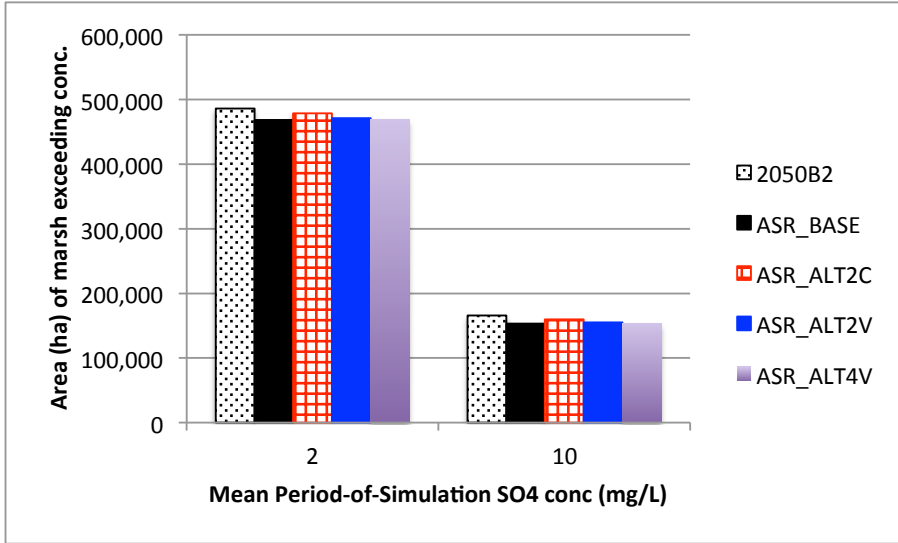
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between the 2050B2 (w/o CERP) and the ASR\_BASE (CERP).*



For future base (2050B2) relative to the CERP base (ASR\_BASE), shows area of marsh that has lower (negative difference) conc. relative to 2050B2, and area of marsh that has a higher (positive difference) conc. relative to 2050B2.

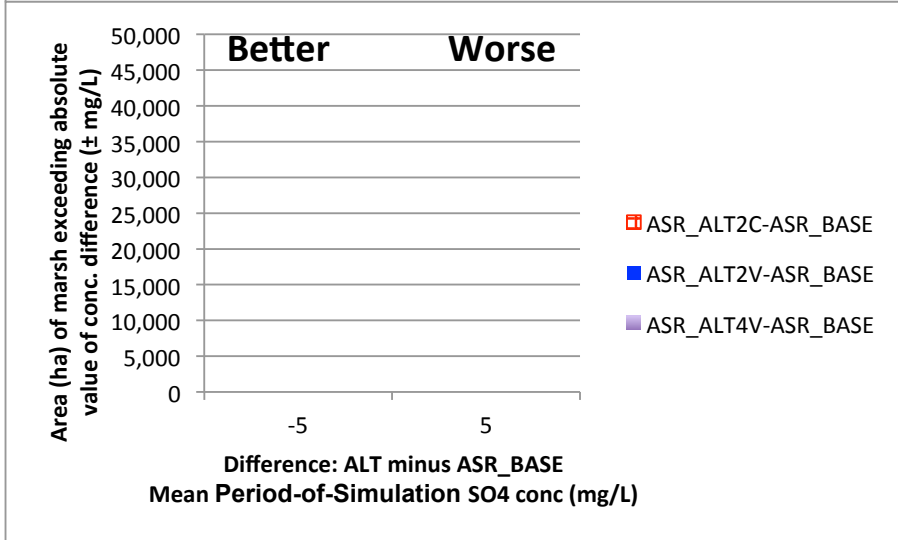
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Period of Simulation (POS) mean.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

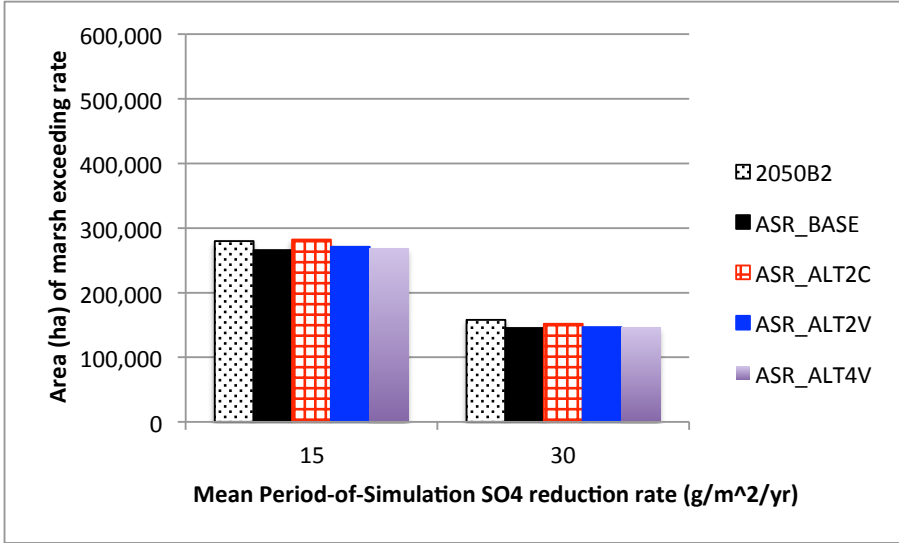
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

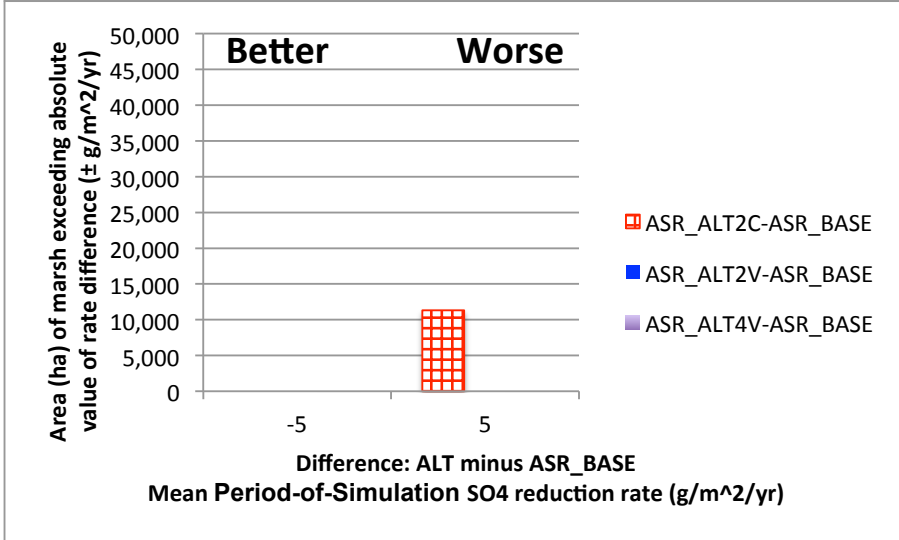
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated SO4 reduction** (loss from water column) rate in the regional domain (total area = 1,039,400 ha).  
 Period of Simulation (POS) mean.



For each Base and Alternative, shows area of marsh that exceeds two selected reduction rate criteria values.

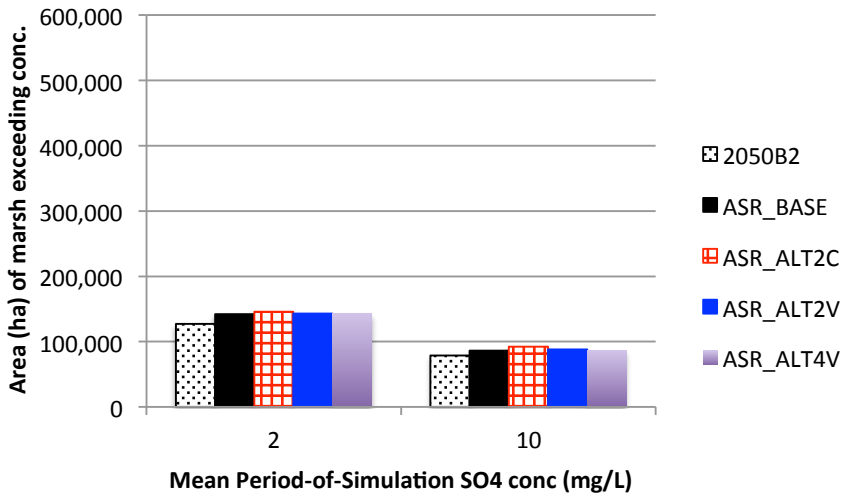
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) rate relative to ASR\_BASE, and area of marsh that has a higher (positive difference) rate relative to ASR\_BASE.

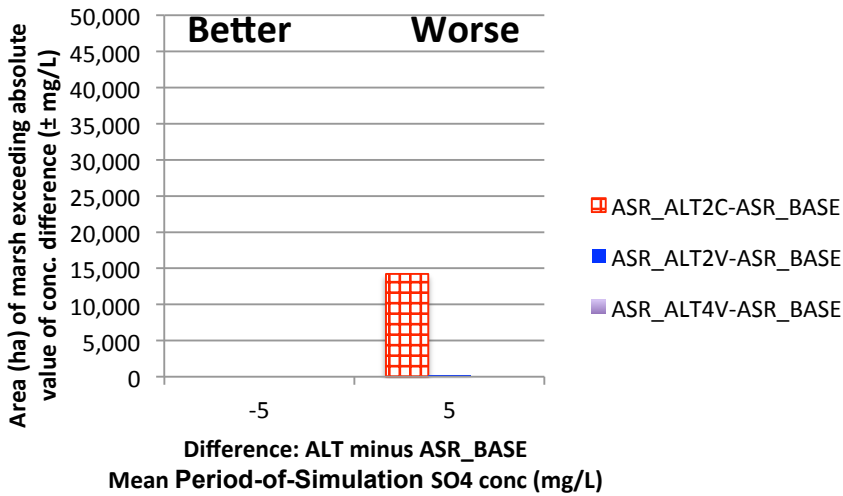
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Mean concentration for ending month of ASR stress: **dry season, above average Lake discharges (May 1974)**.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

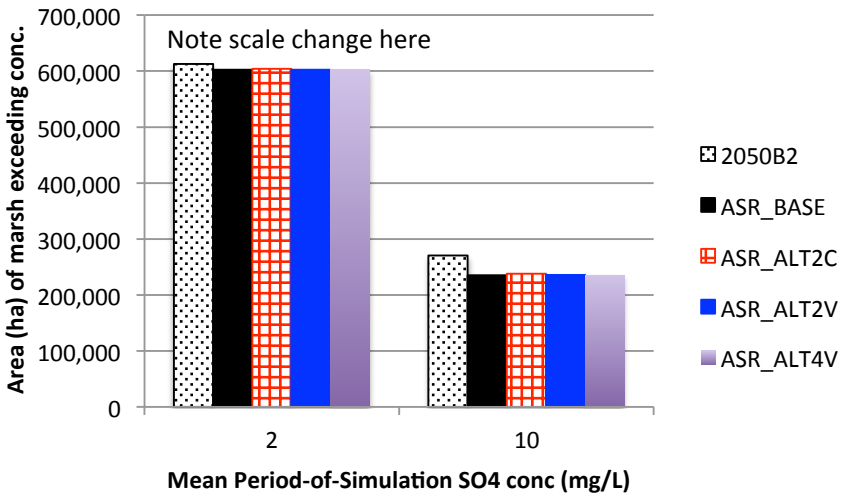
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

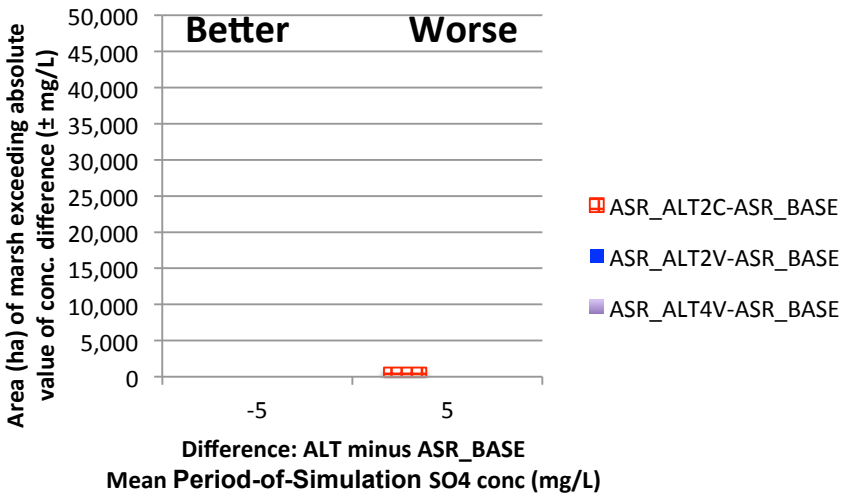
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Mean concentration for ending month of ASR stress: **wet season, above average Lake discharges (Oct 1974)**.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

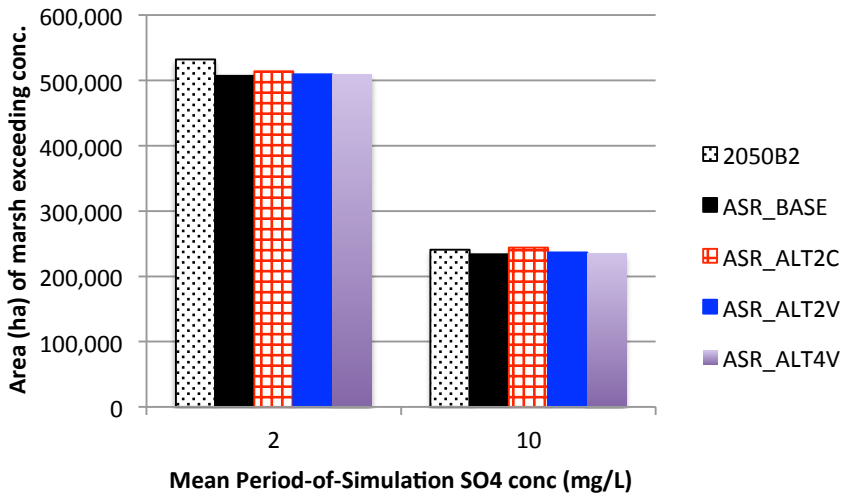
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

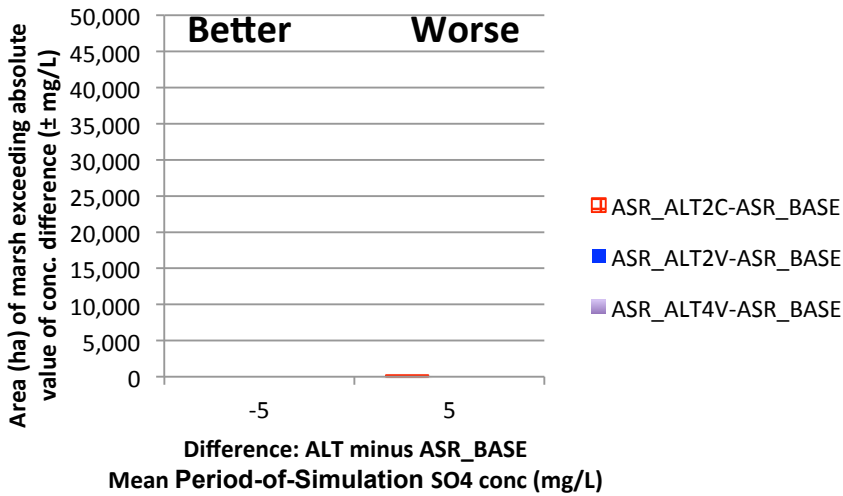
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Mean concentration for ending month of ASR stress: **wet season, below average Lake discharges (Oct 1981)**.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

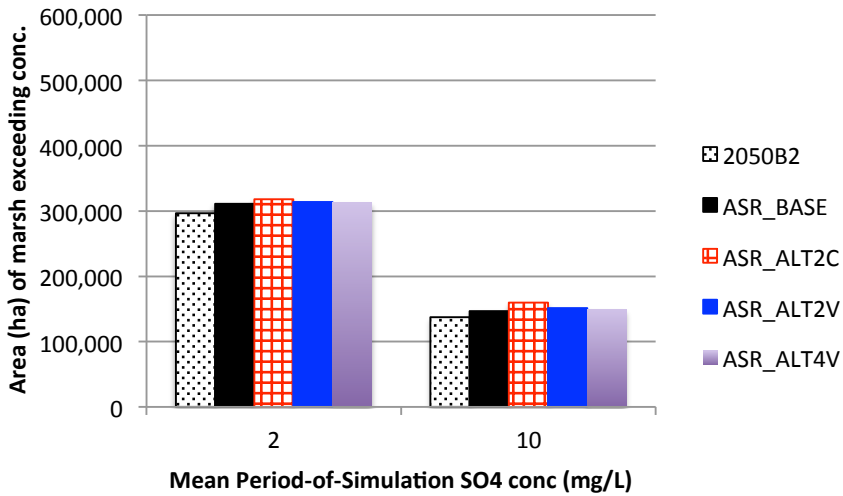
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

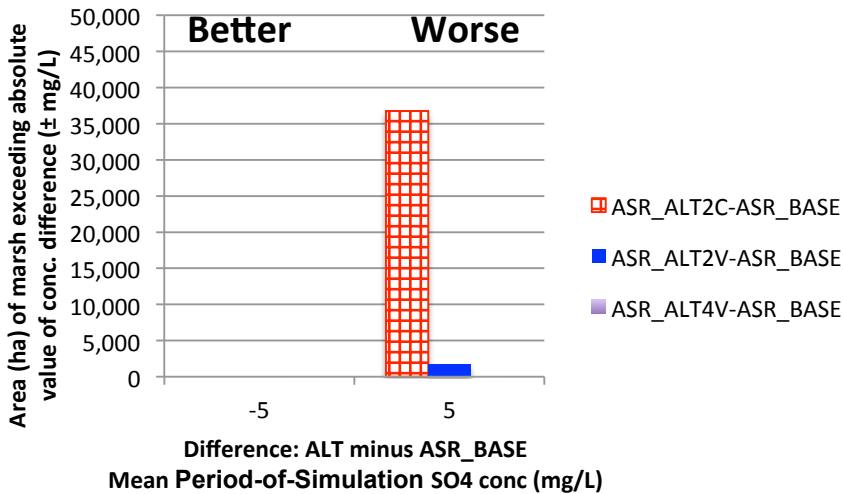
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Mean concentration for ending month of ASR stress: **dry season, below average Lake discharges (May 1982)**.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*

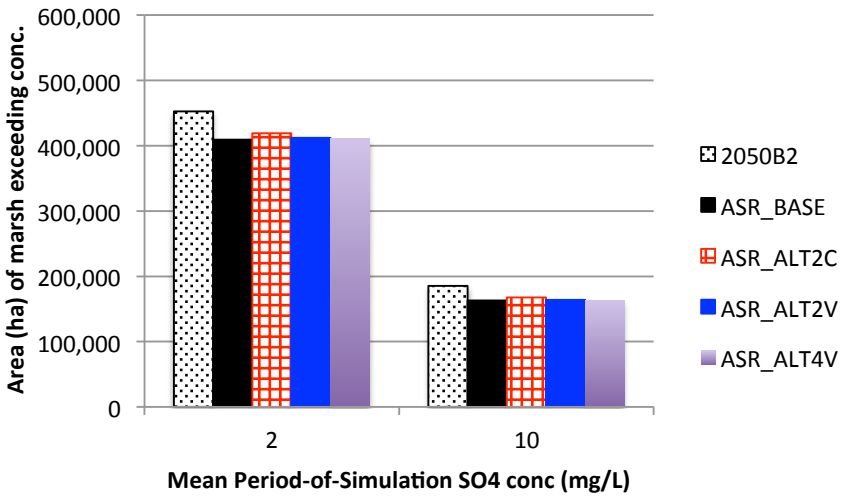


For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

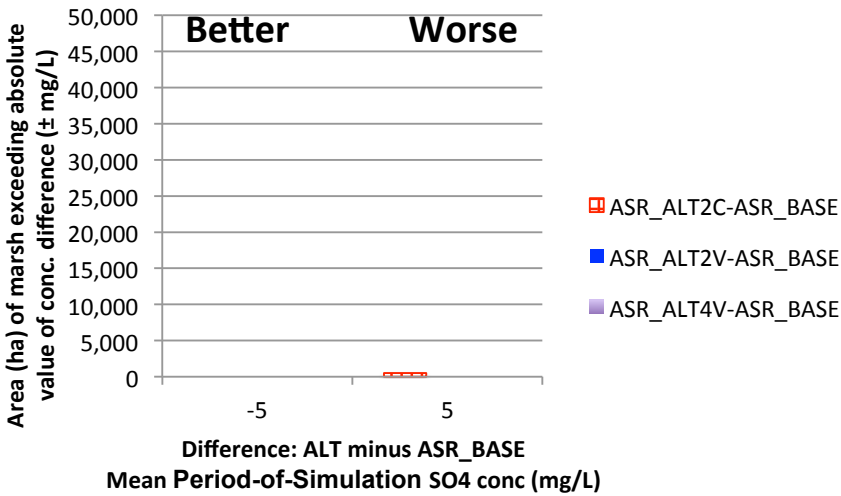


**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Mean concentration for ending month of ASR stress: **wet season, average Lake discharges (Oct 1989)**.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

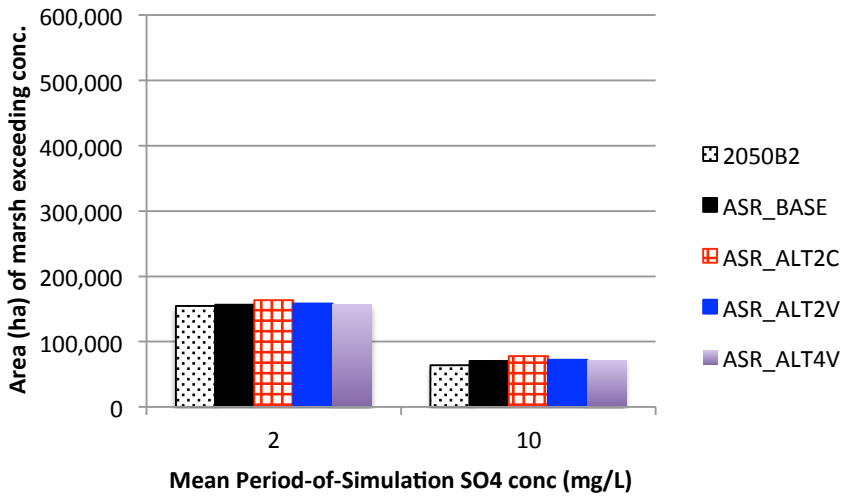
*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

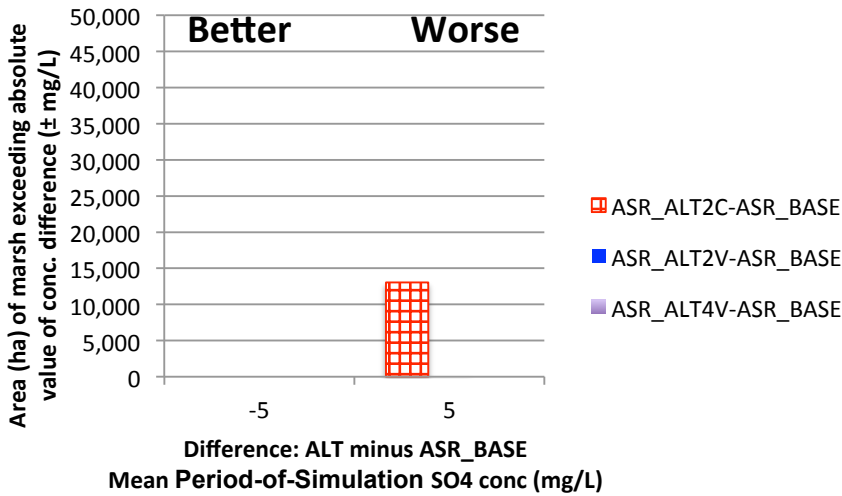
*Note that the difference criteria are different from the above threshold criteria. These difference criteria are used as another relative-comparison metric.*

**Simulated surface water SO4 concentration** in the regional domain (total area = 1,039,400 ha).  
 Mean concentration for ending month of ASR stress: **dry season, average Lake discharges (May 1990)**.



For each Base and Alternative, shows area of marsh that exceeds two selected concentration criteria values.

*Note that the areas summed here do not necessarily reflect direct spatial differences among simulations, whereas the below summaries of difference maps reflect direct cell-cell comparisons between each Alternative and the ASR\_BASE.*



For each Alternative relative to ASR\_BASE, shows area of marsh that has a lower (negative difference) conc. relative to ASR\_BASE, and area of marsh that has a higher (positive difference) conc. relative to ASR\_BASE.

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