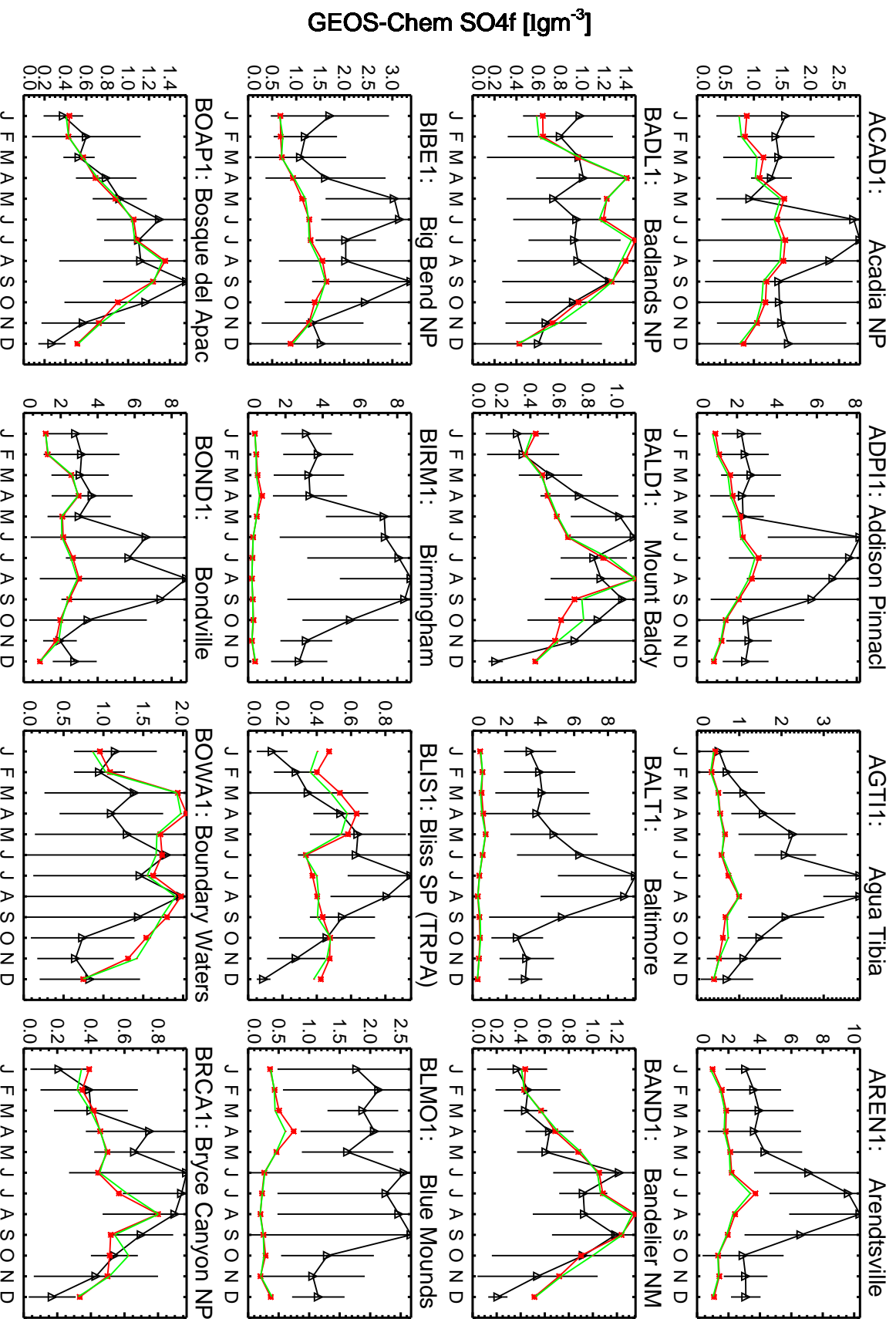
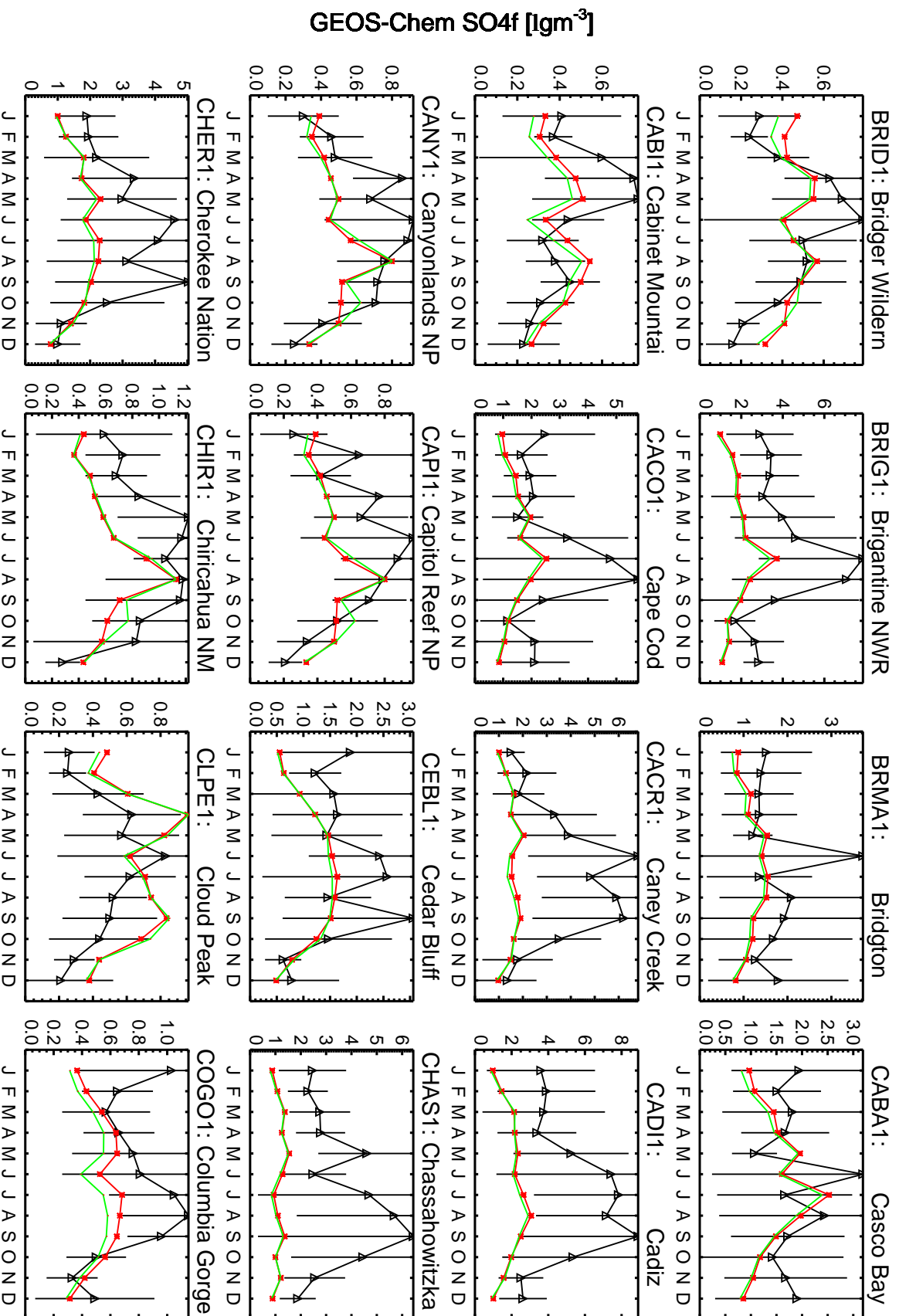


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



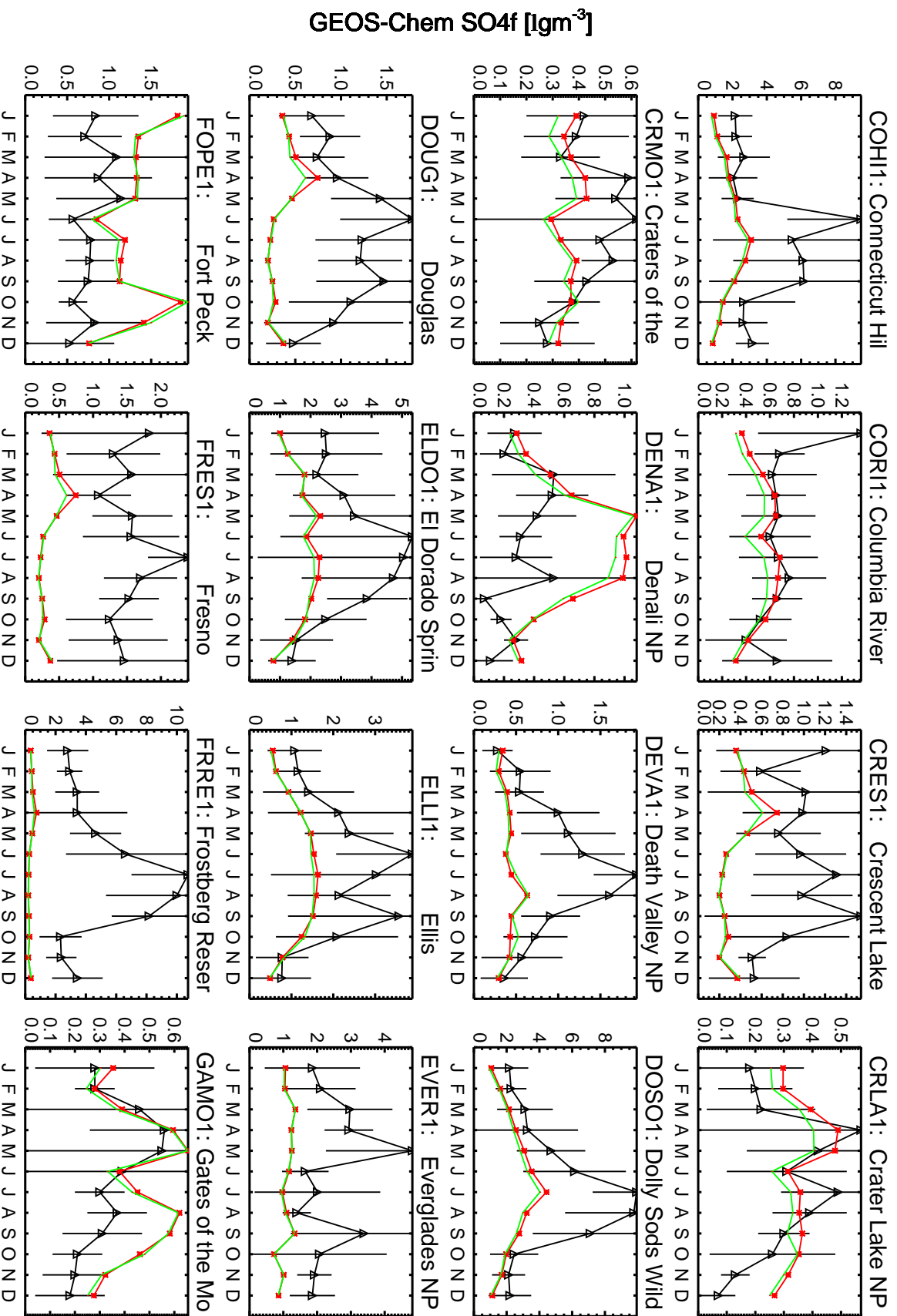
IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



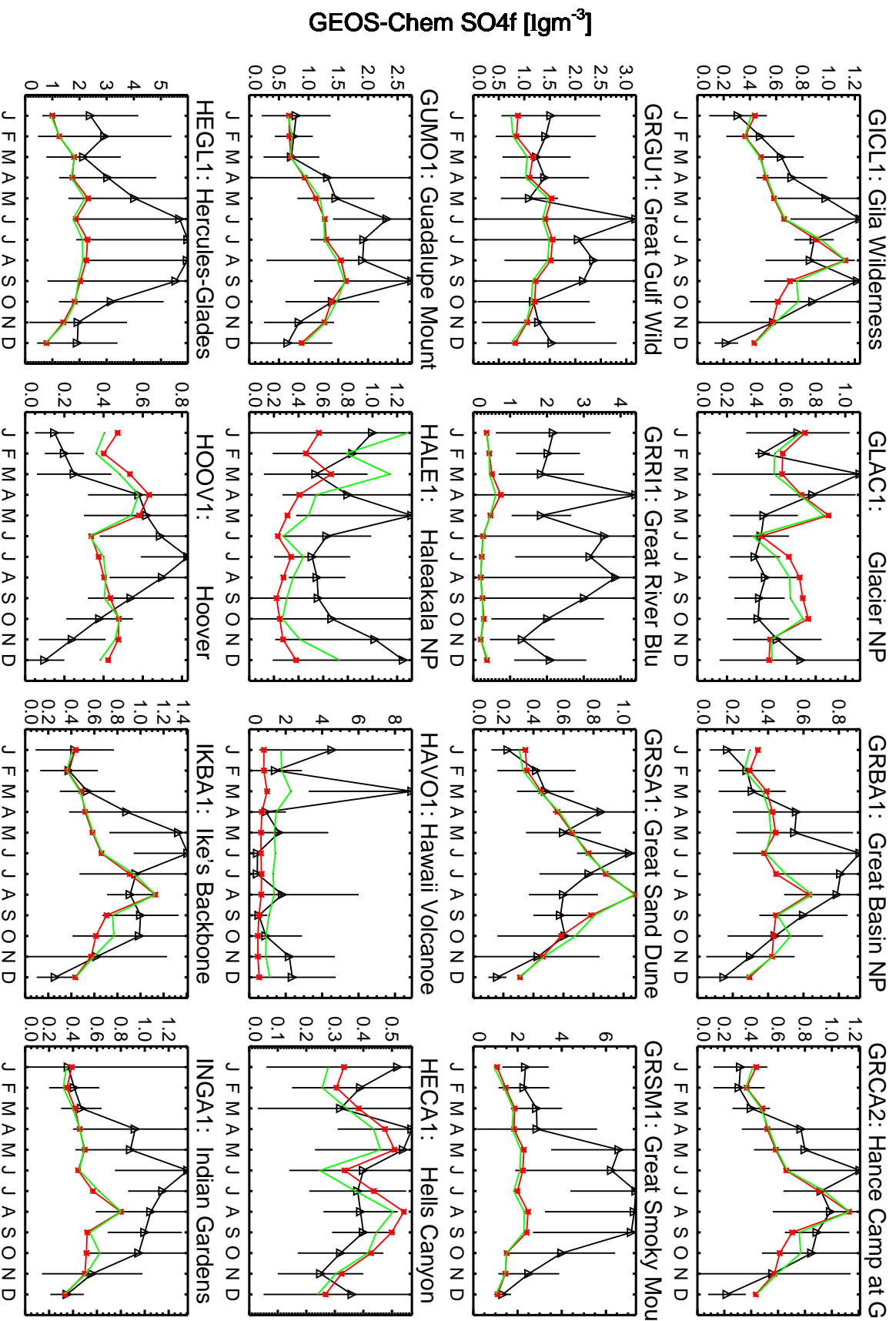
IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



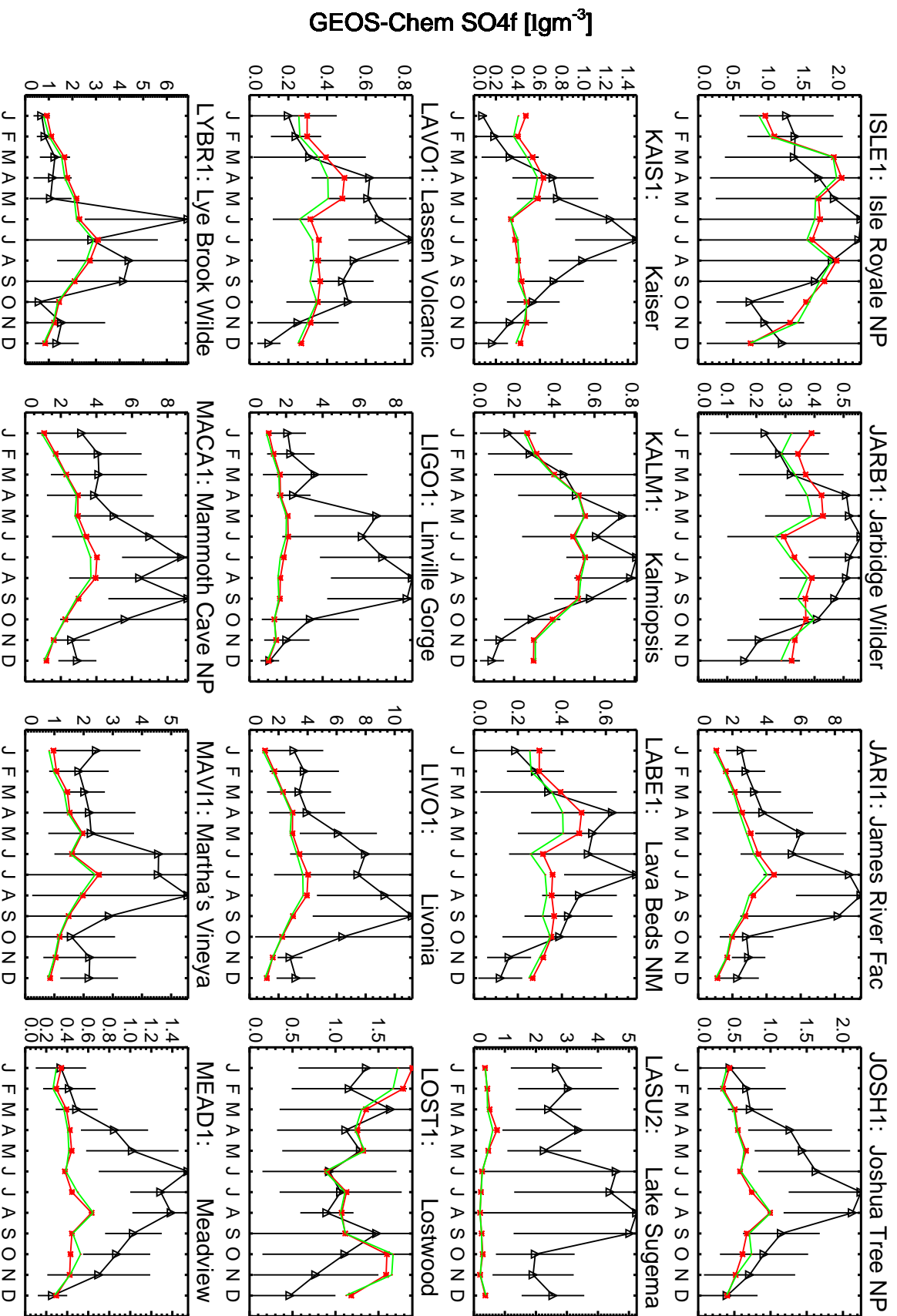
IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



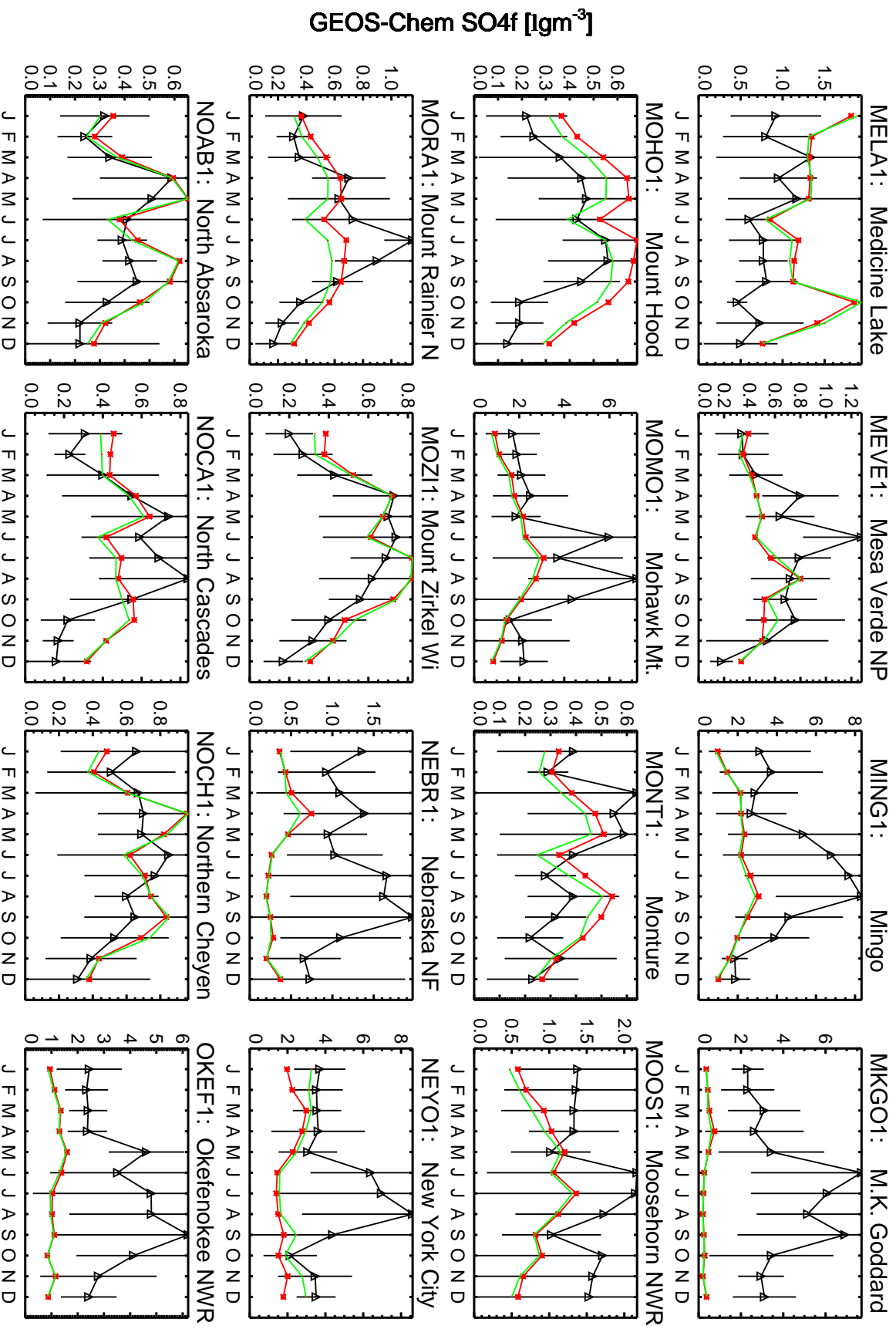
IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



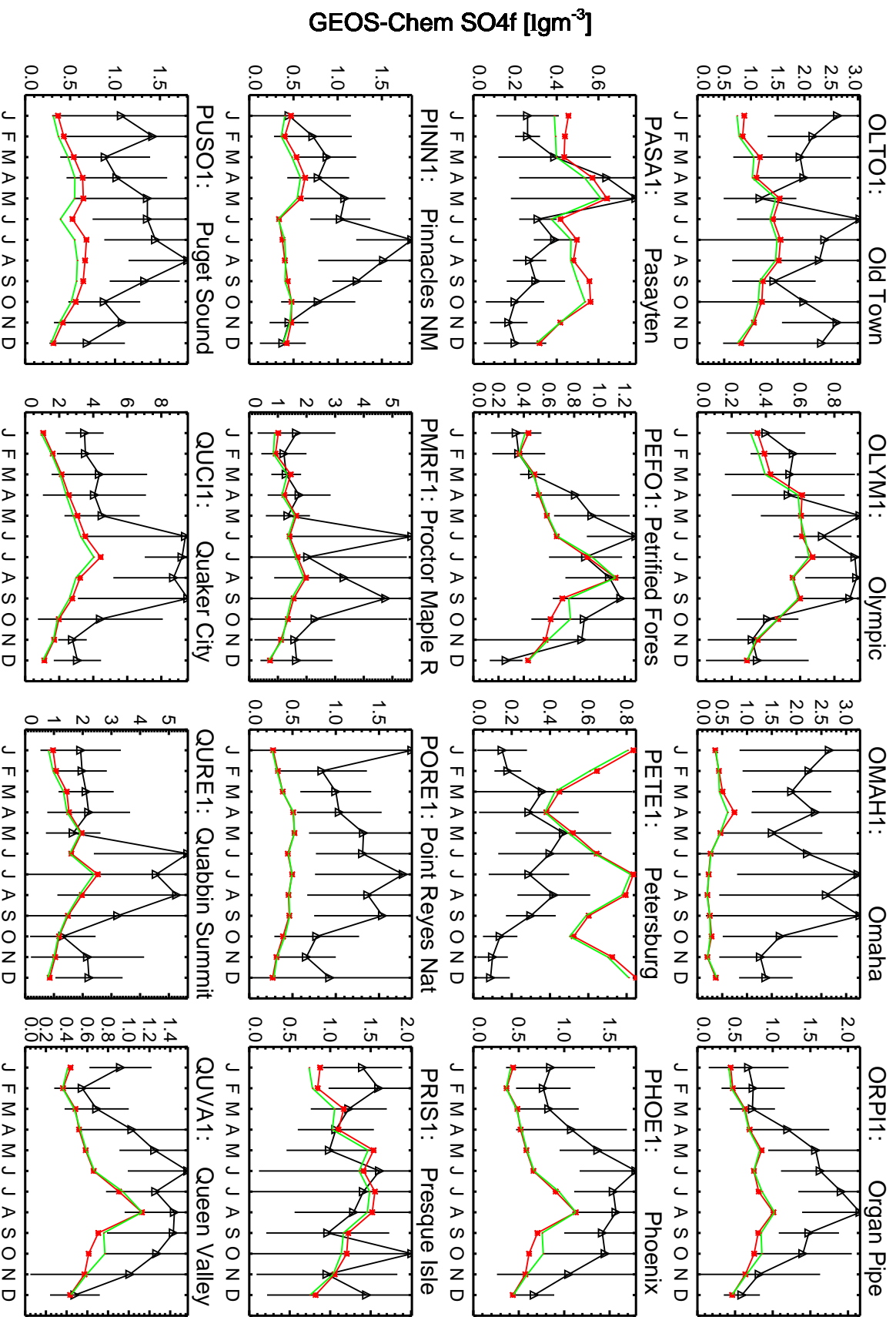
IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

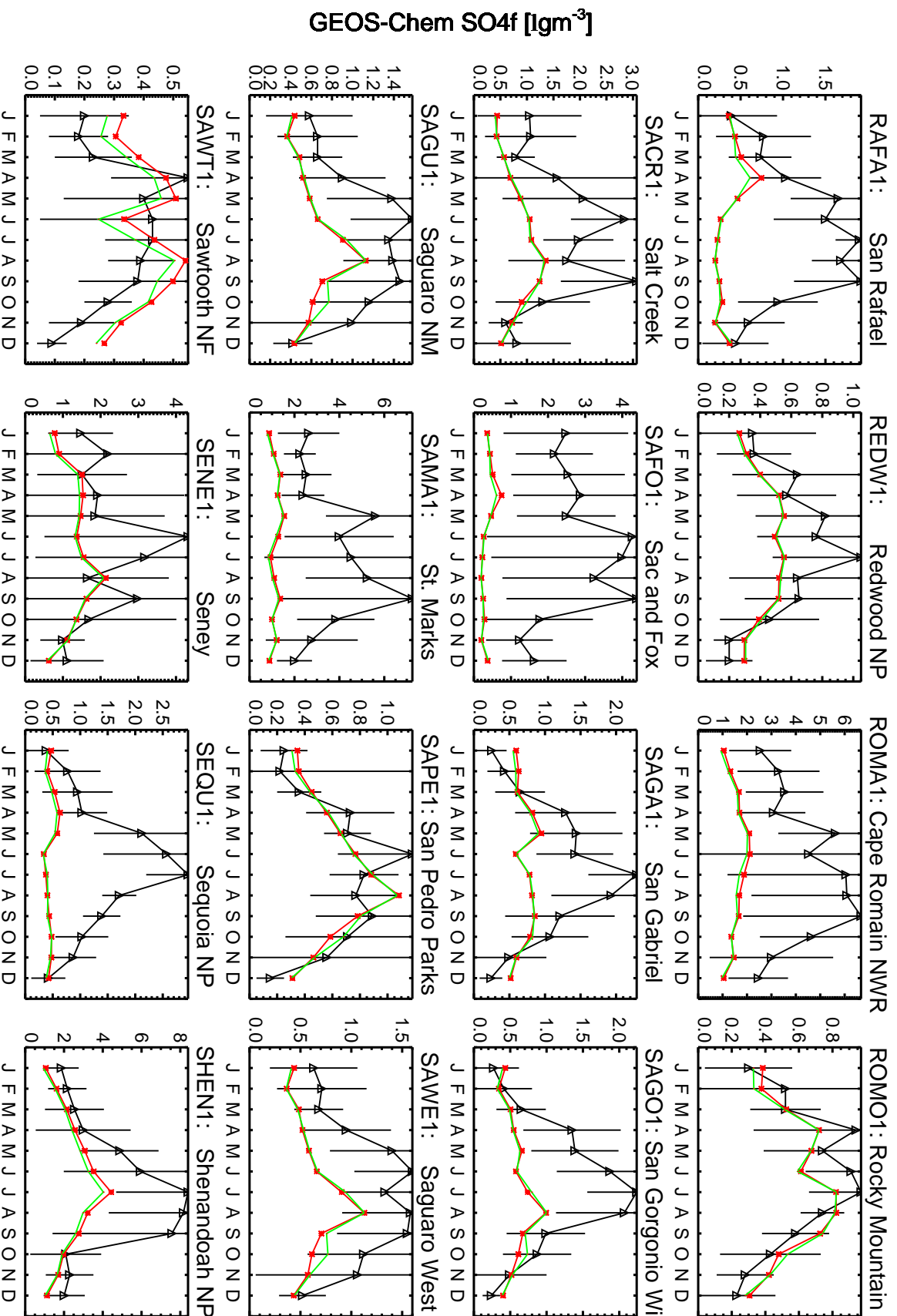
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]



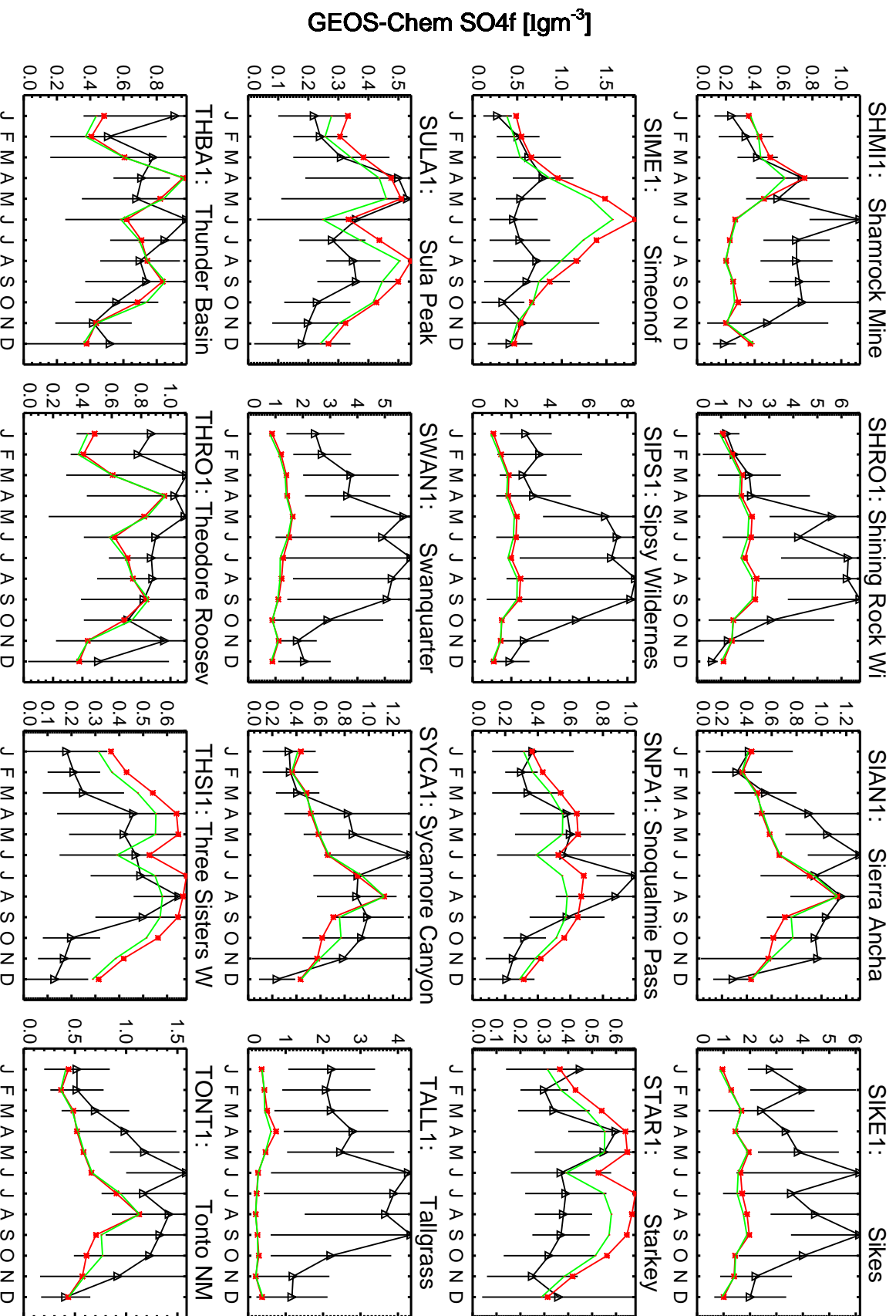
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

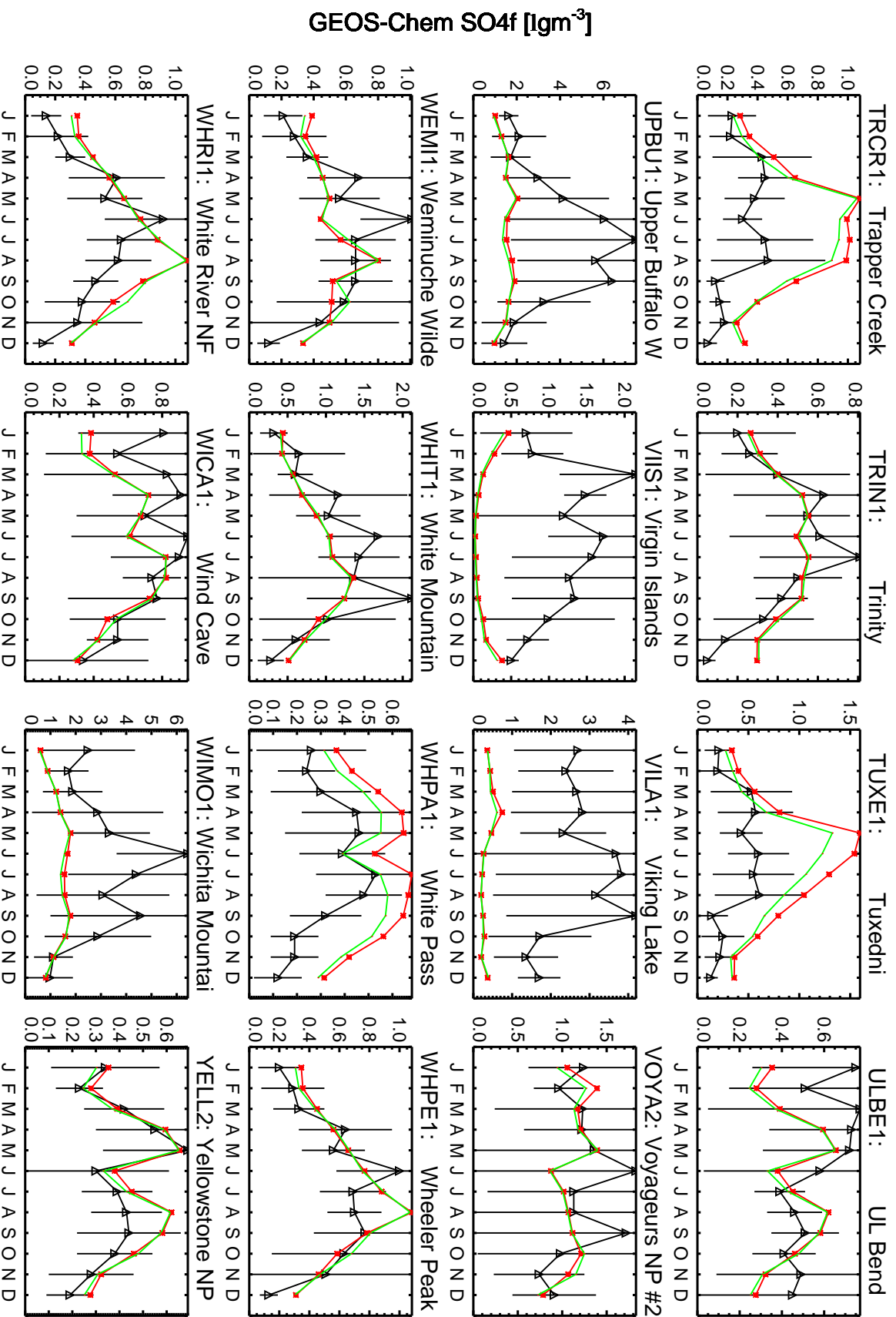


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



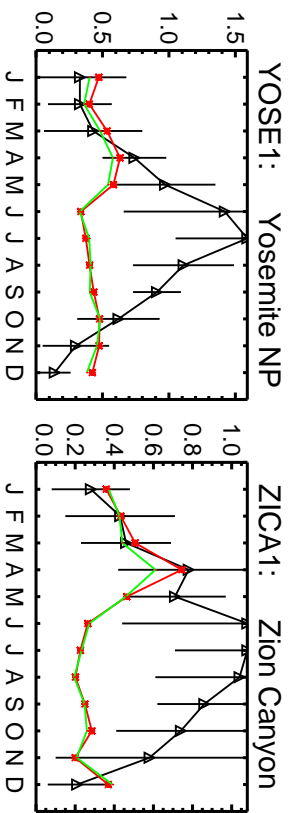
IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



IMPROVE SO<sub>4</sub>f [ $\mu\text{g m}^{-3}$ ]

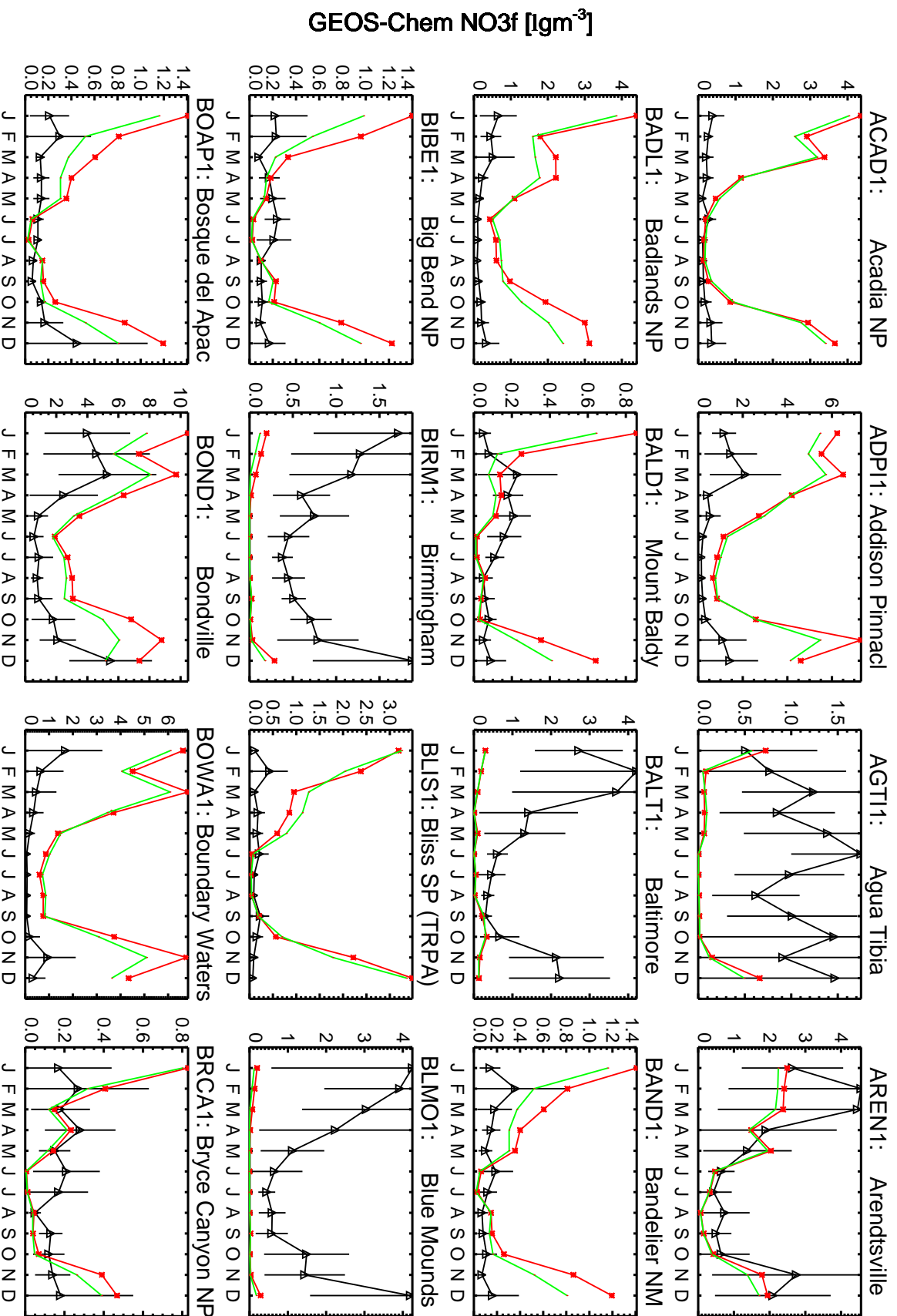
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



GEOS-Chem SO4f [ $\mu\text{g m}^{-3}$ ]

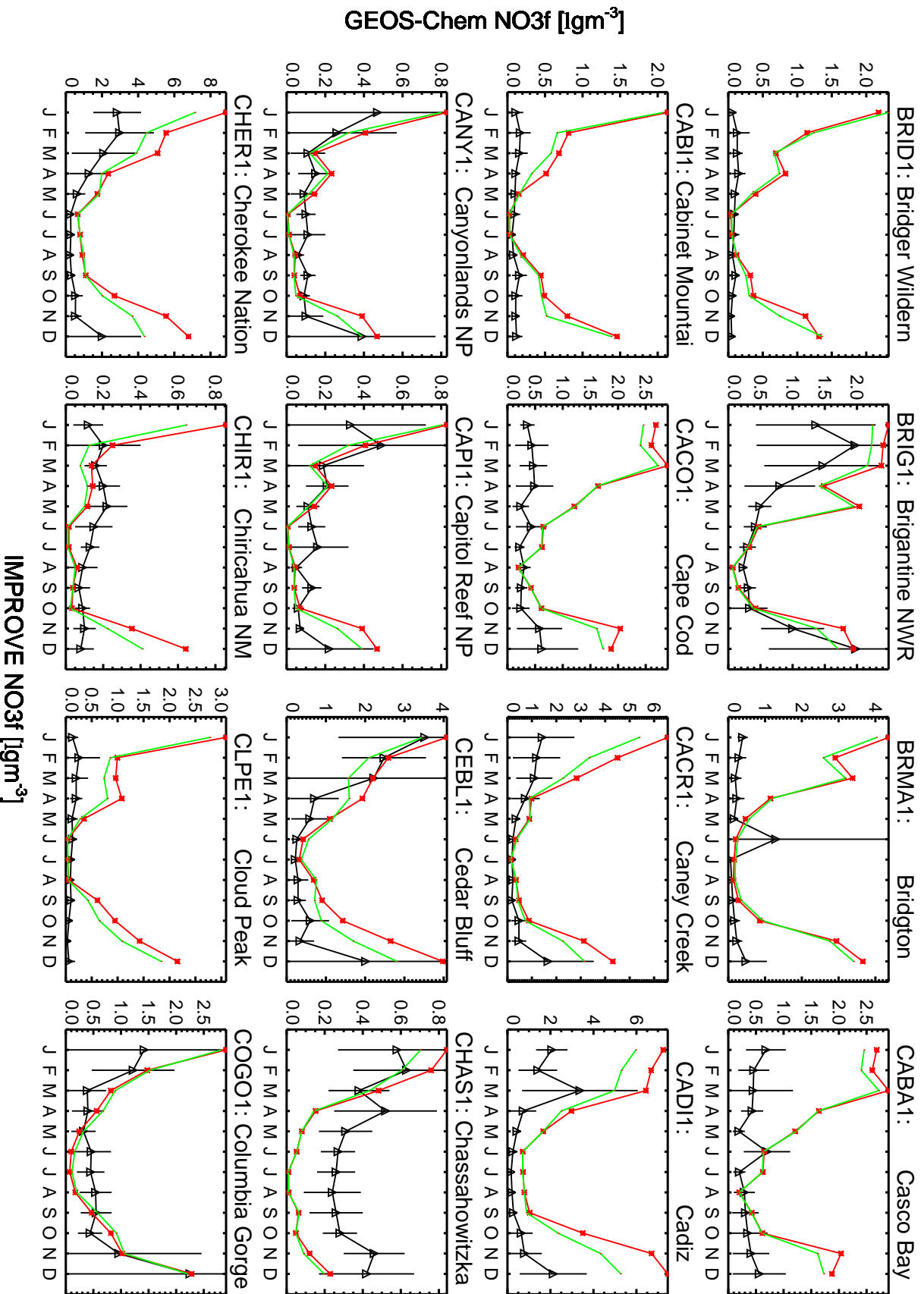
IMPROVE SO4f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



IMPROVE NO<sub>3</sub>f [ $\mu\text{g m}^{-3}$ ]

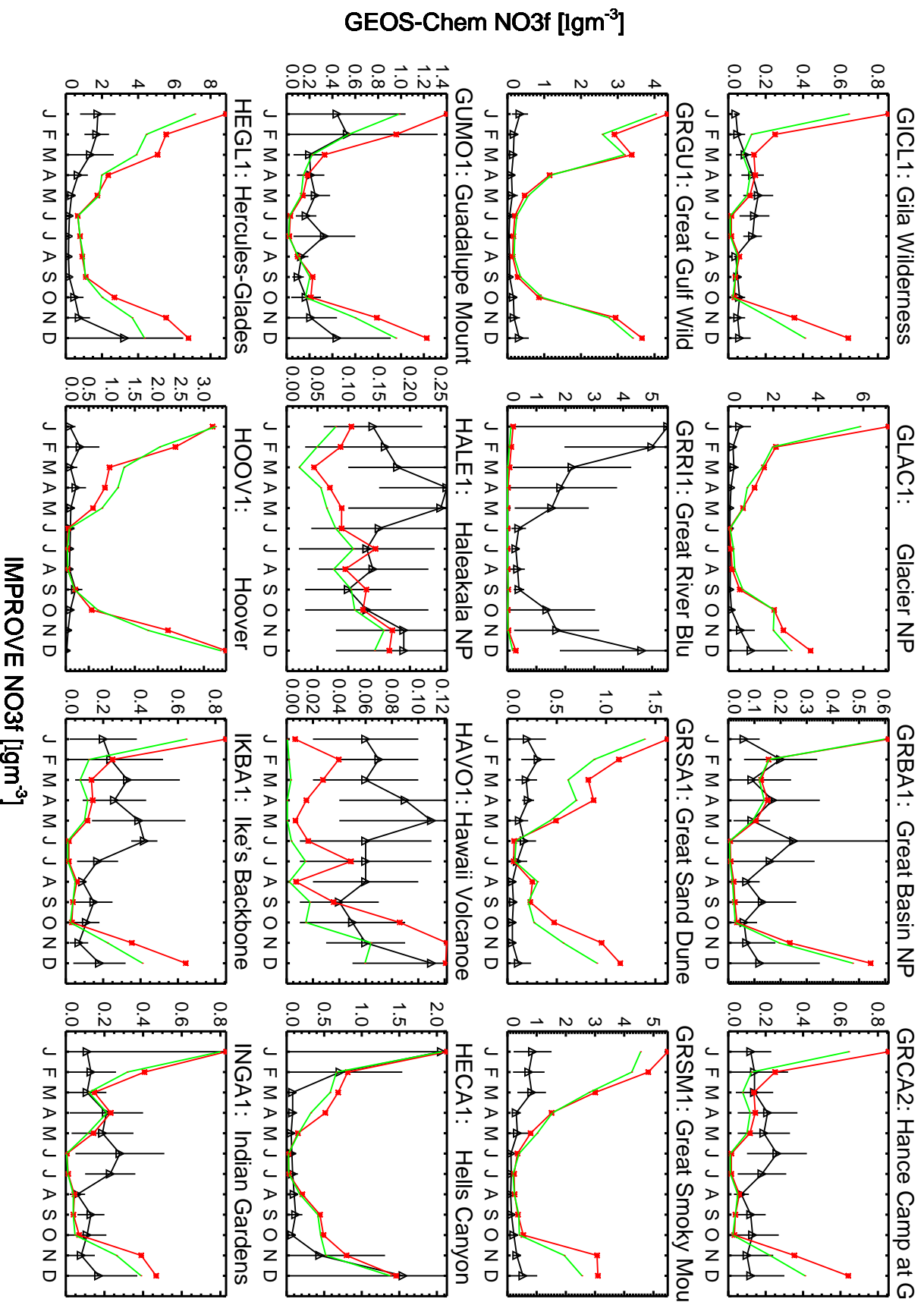
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



IMPROVE NO<sub>3</sub>f [ $\mu\text{g m}^{-3}$ ]

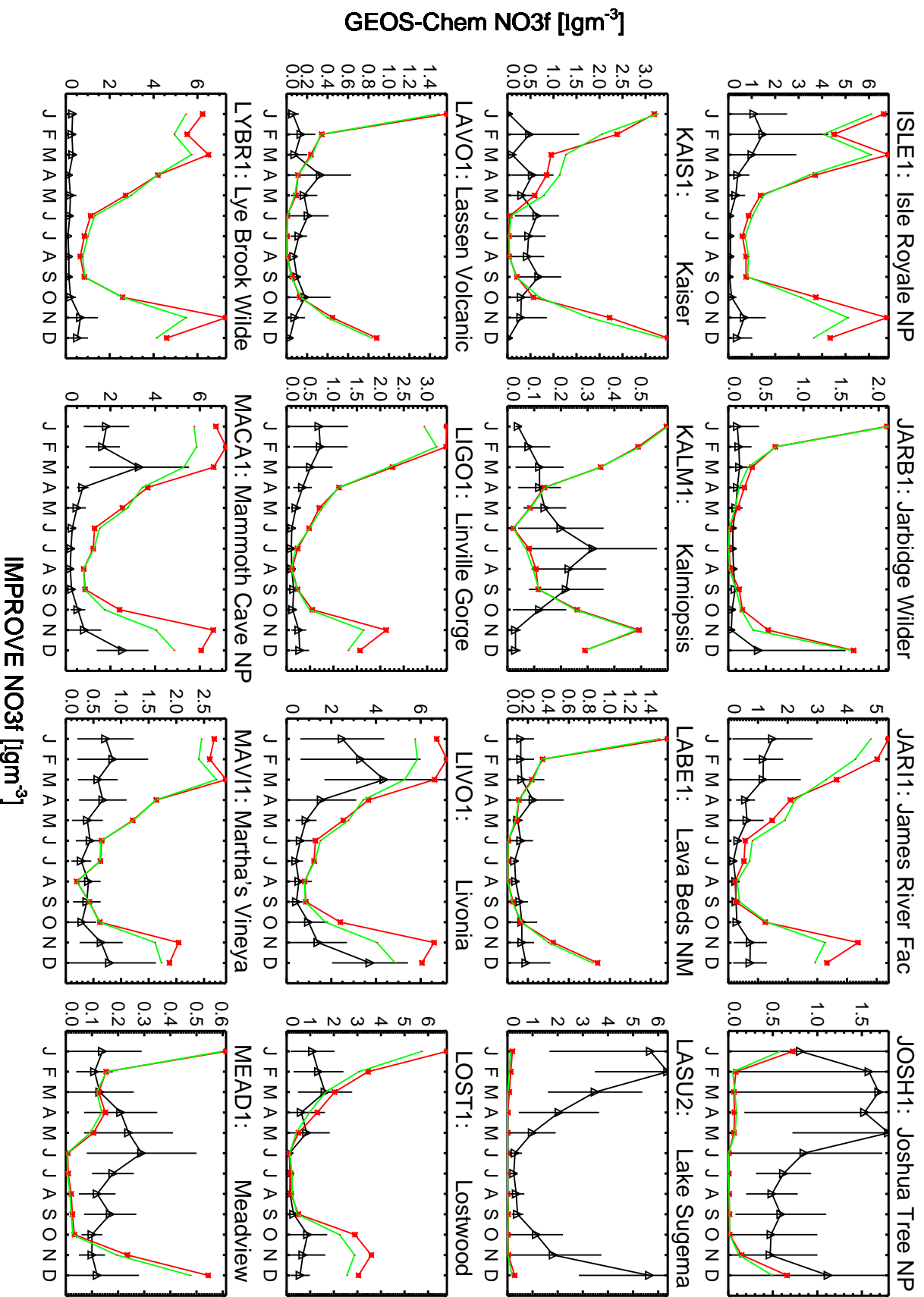


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



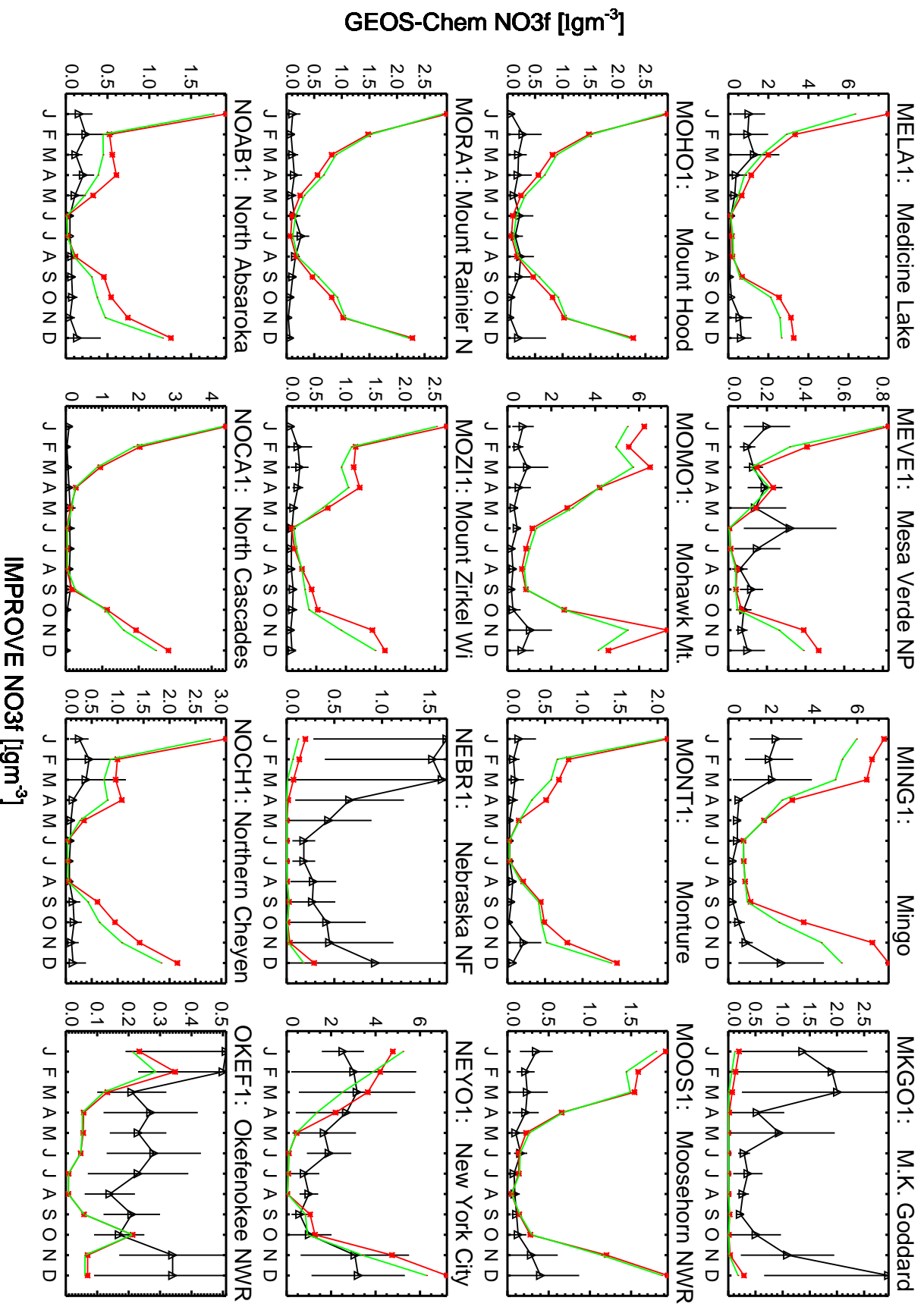


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

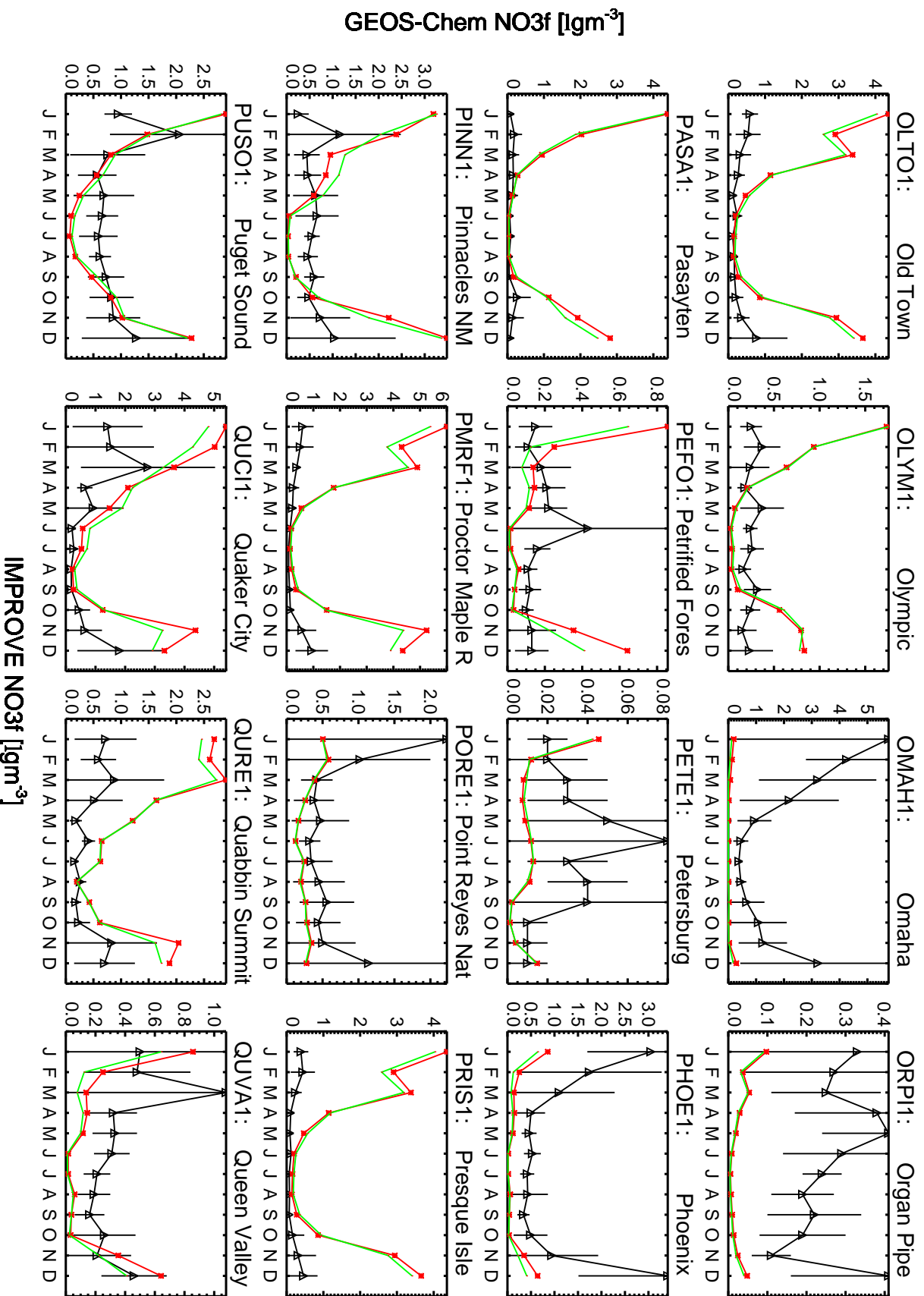


IMPROVE NO<sub>3</sub>f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

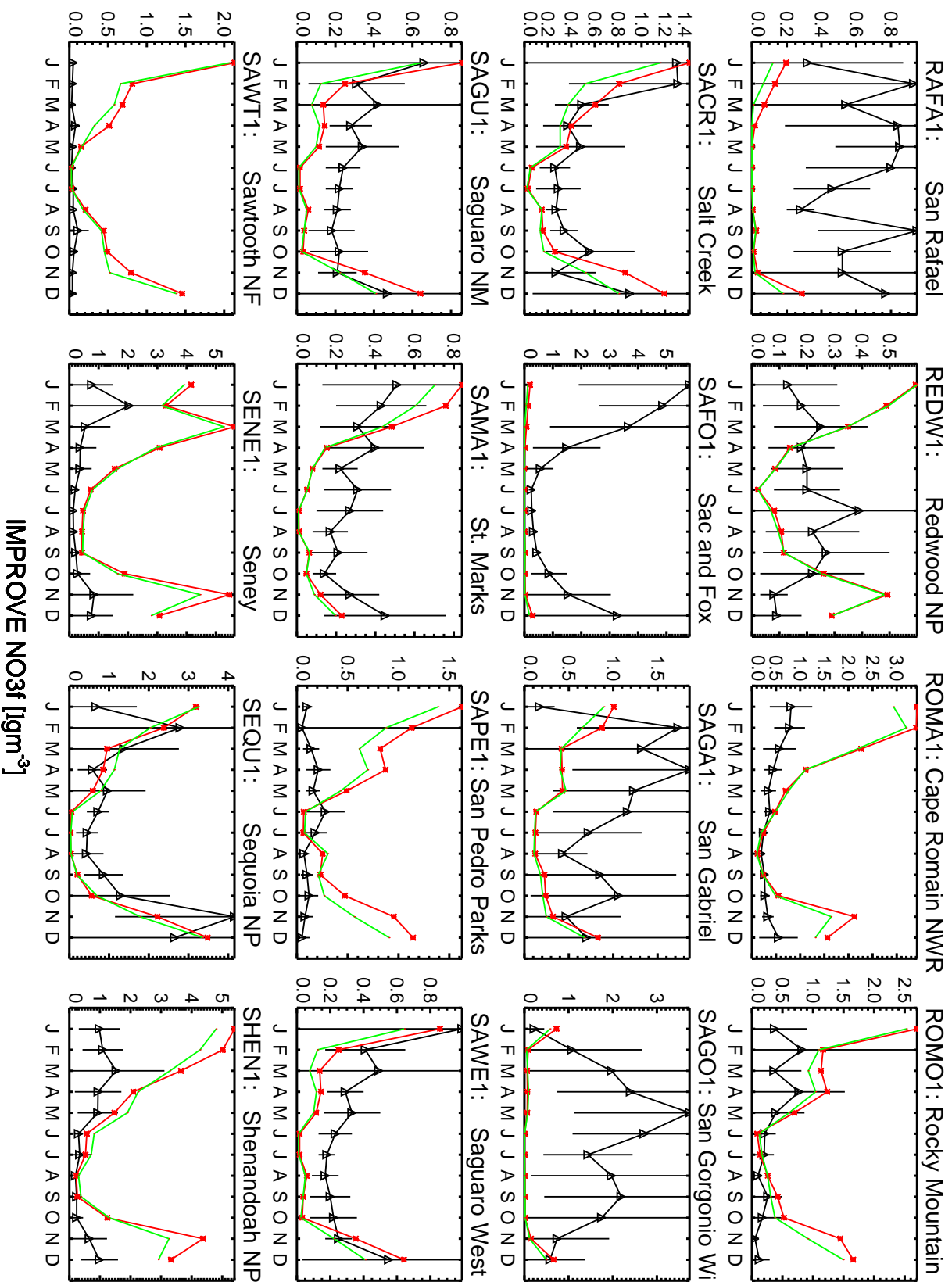


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



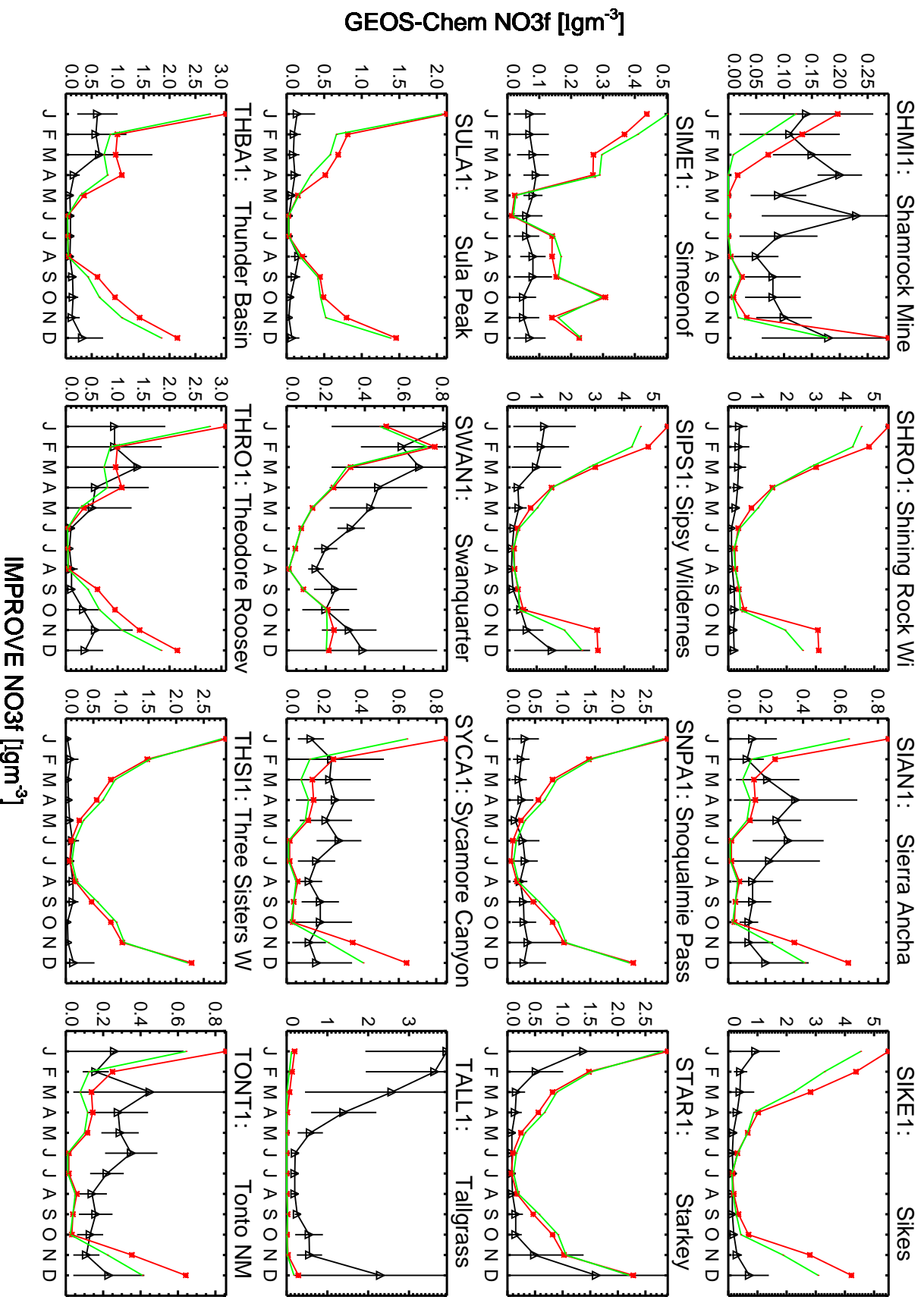
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

GEOS-Chem NO3f [ $\mu\text{g m}^{-3}$ ]

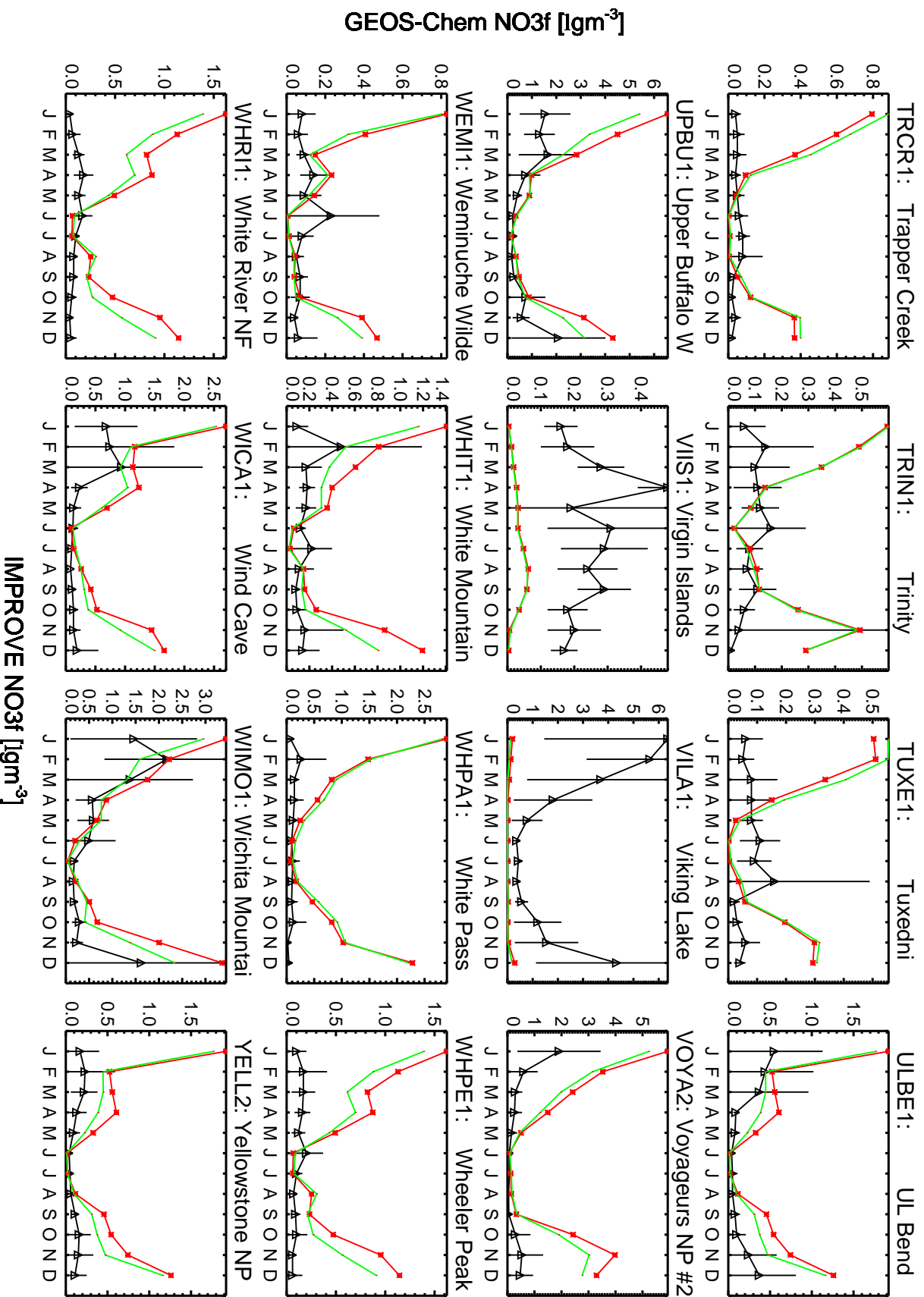


IMPROVE NO3f [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

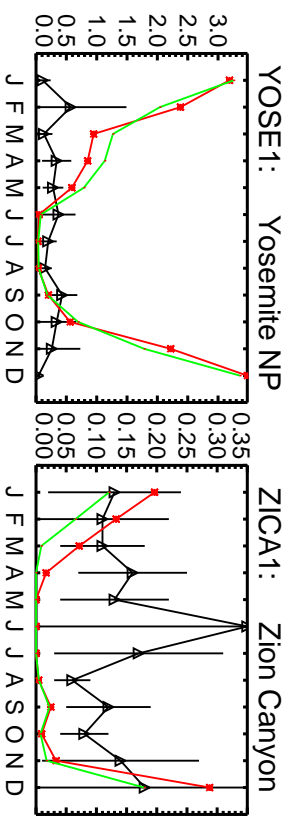


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



GEOS-Chem NO<sub>3</sub>f [µg m<sup>-3</sup>]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

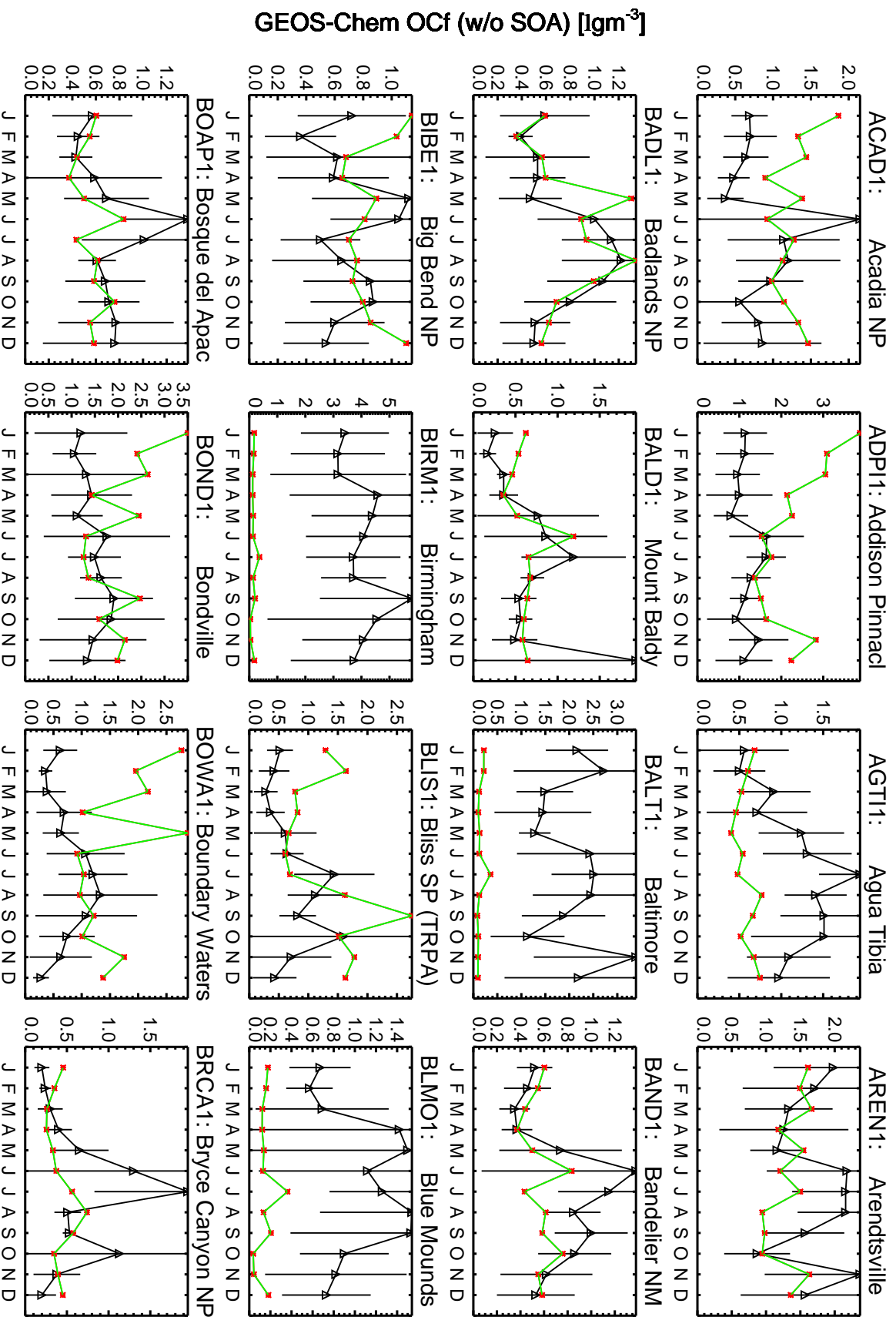


GEOS-Chem NO<sub>3</sub>f [ $\mu\text{g m}^{-3}$ ]

IMPROVE NO<sub>3</sub>f [ $\mu\text{g m}^{-3}$ ]

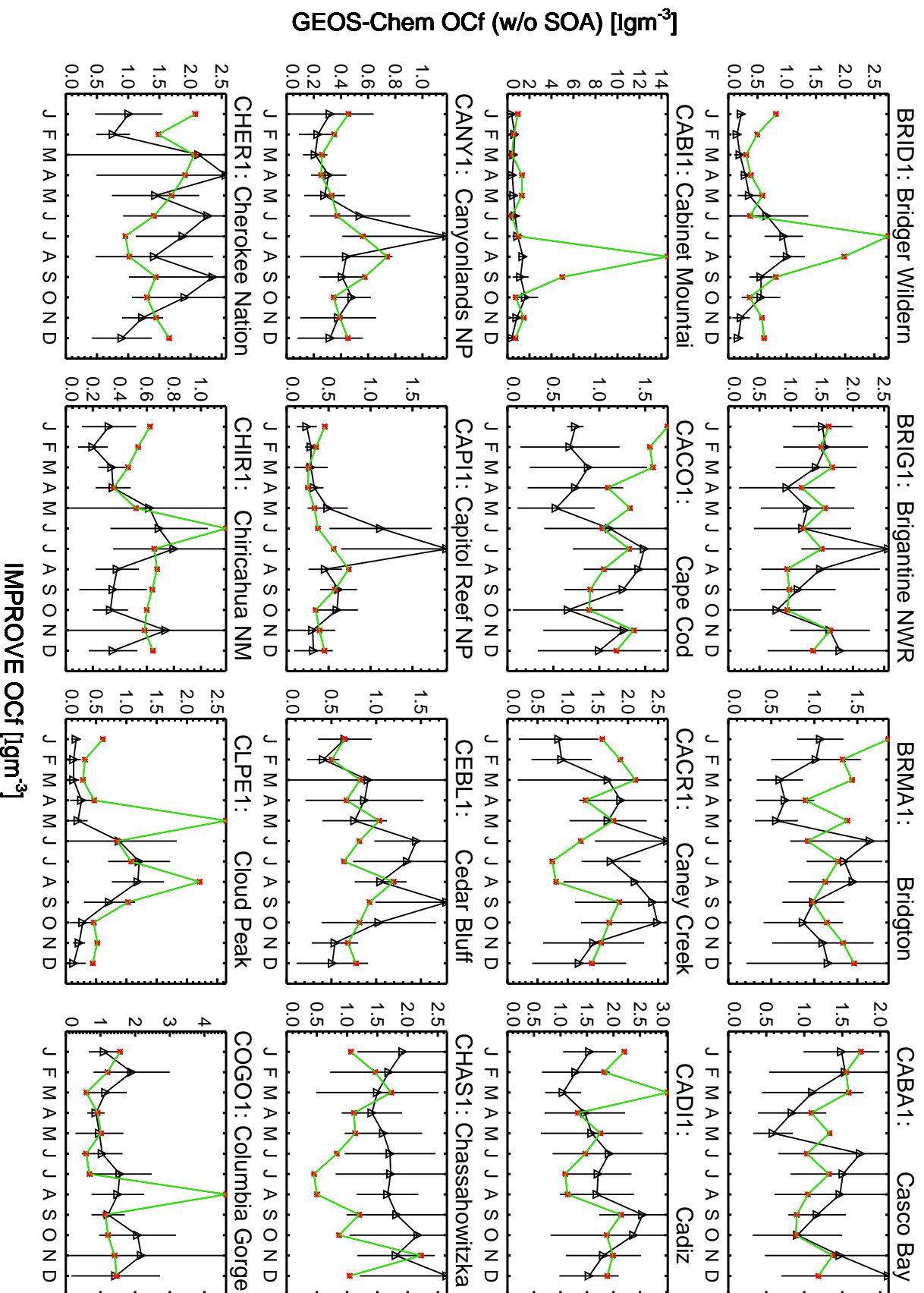


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

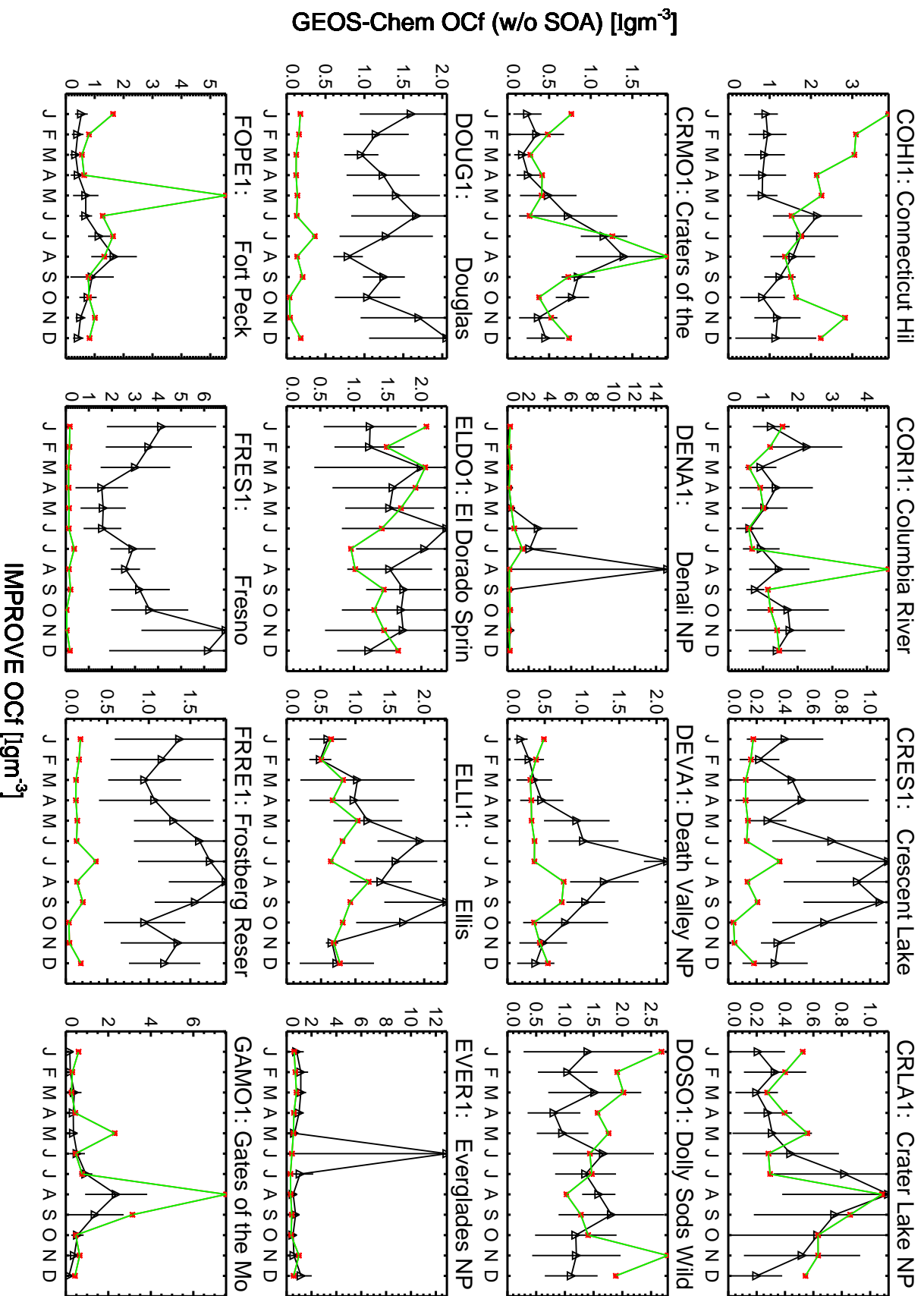


IMPROVE OCf [ $\text{lgm}^{-3}$ ]

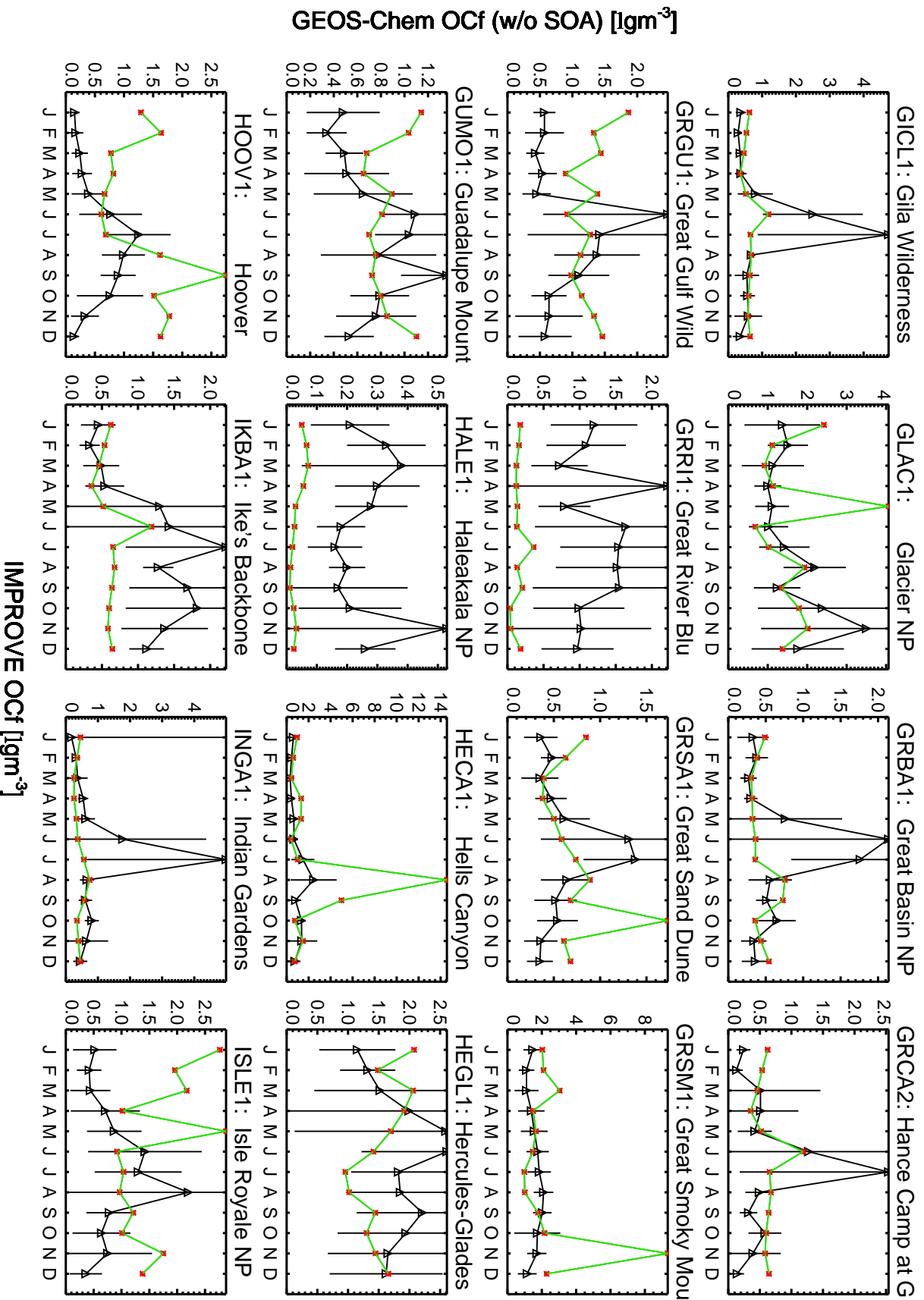
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



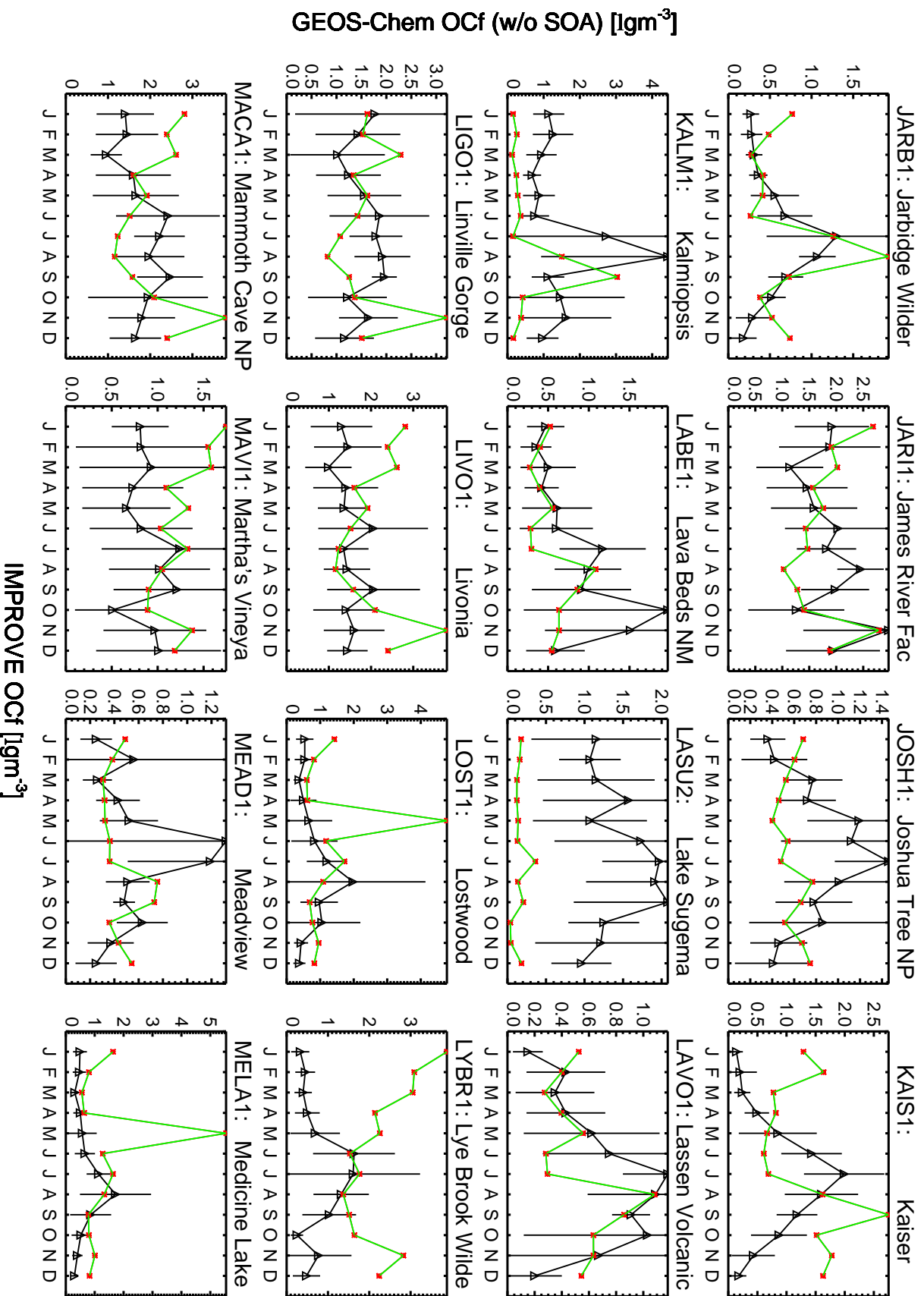
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



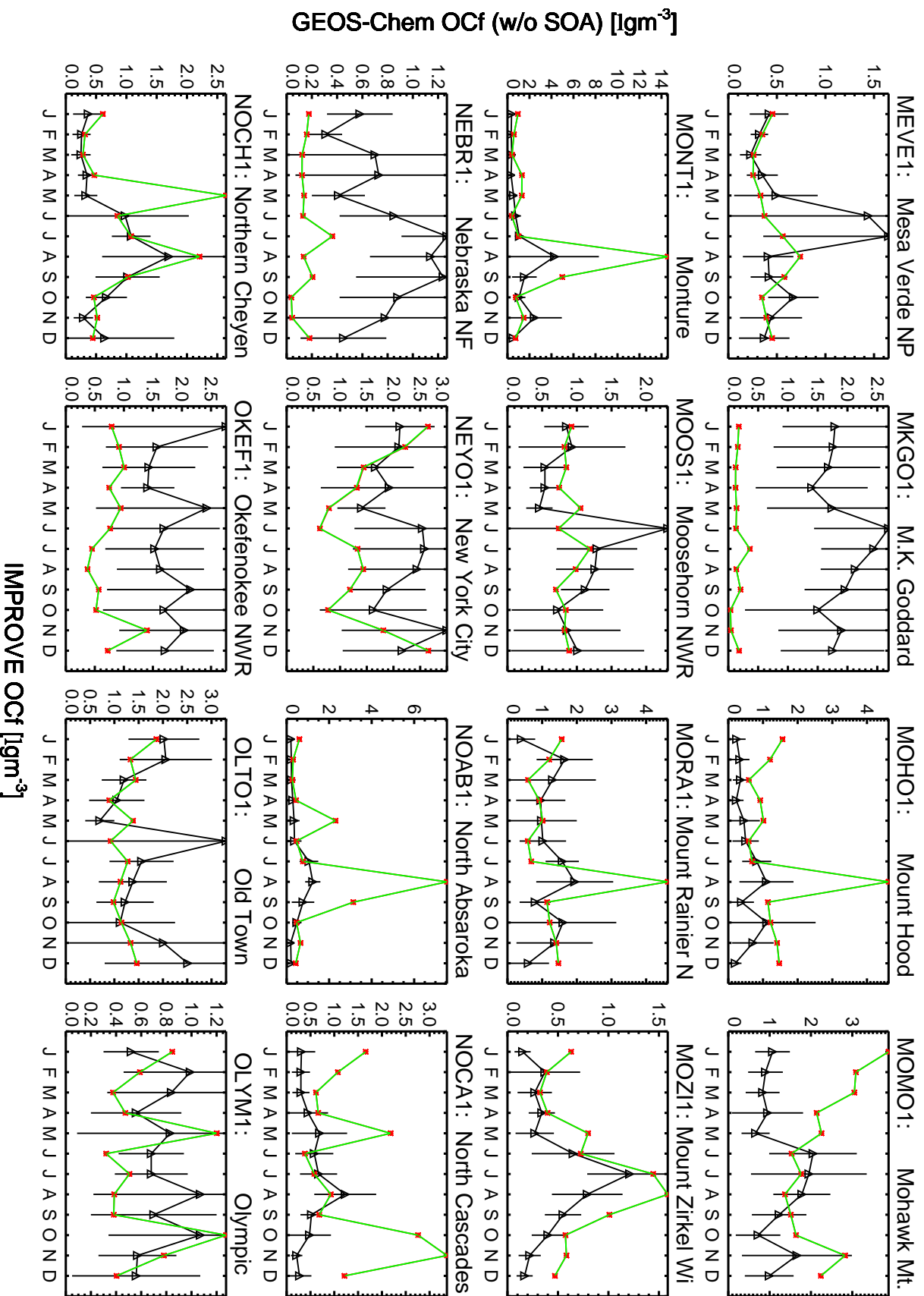
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

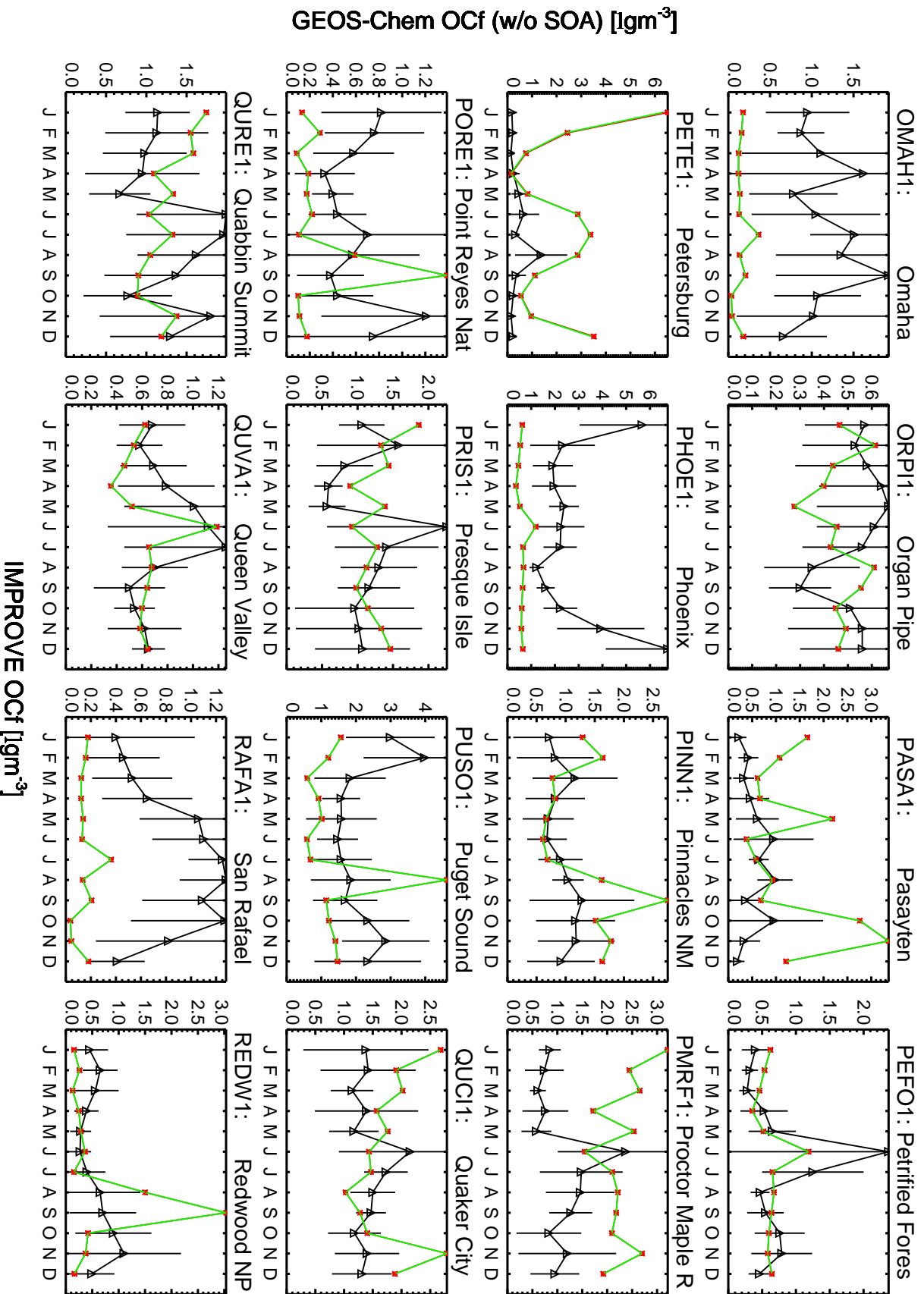


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



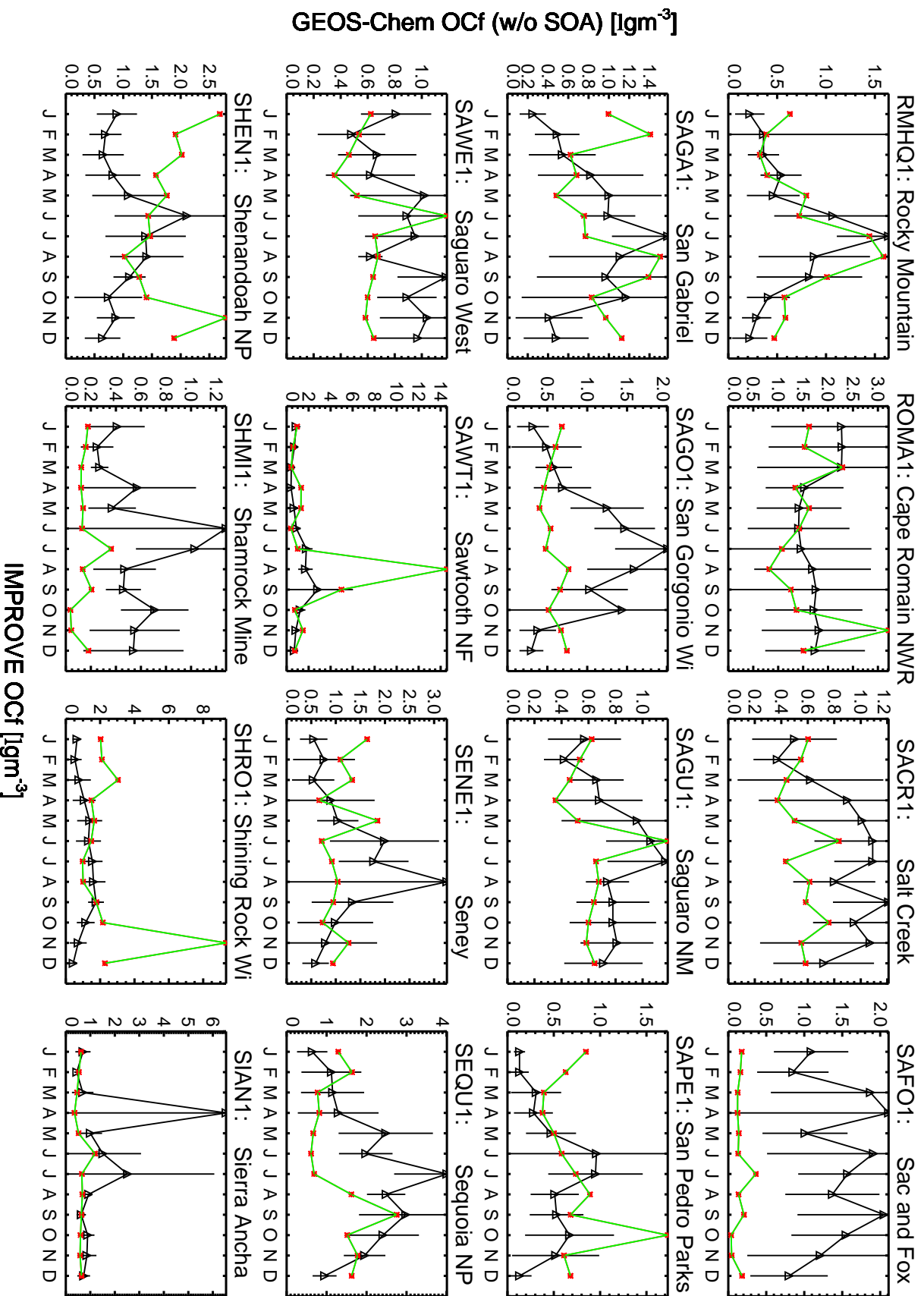
IMPROVE OCf [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

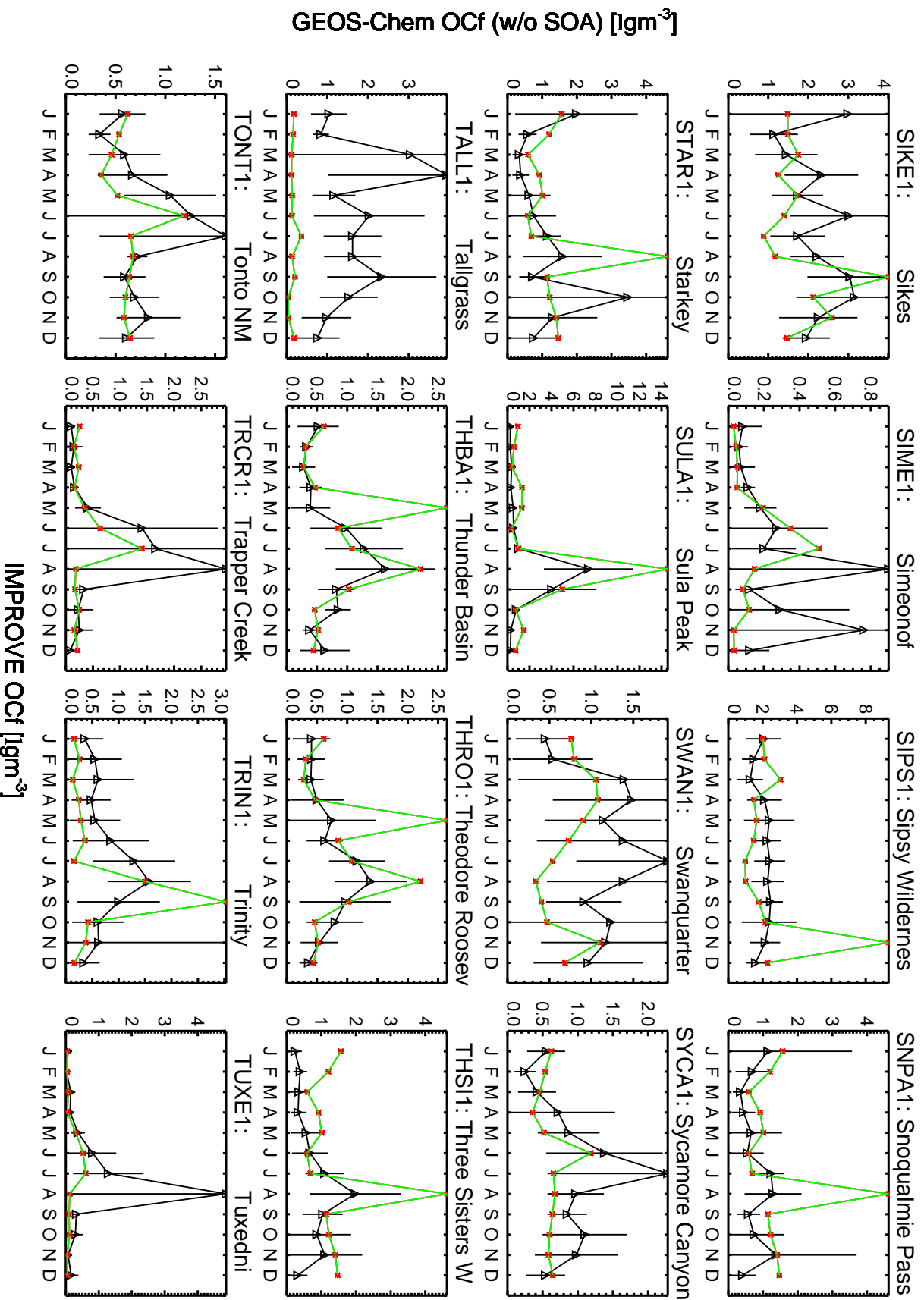




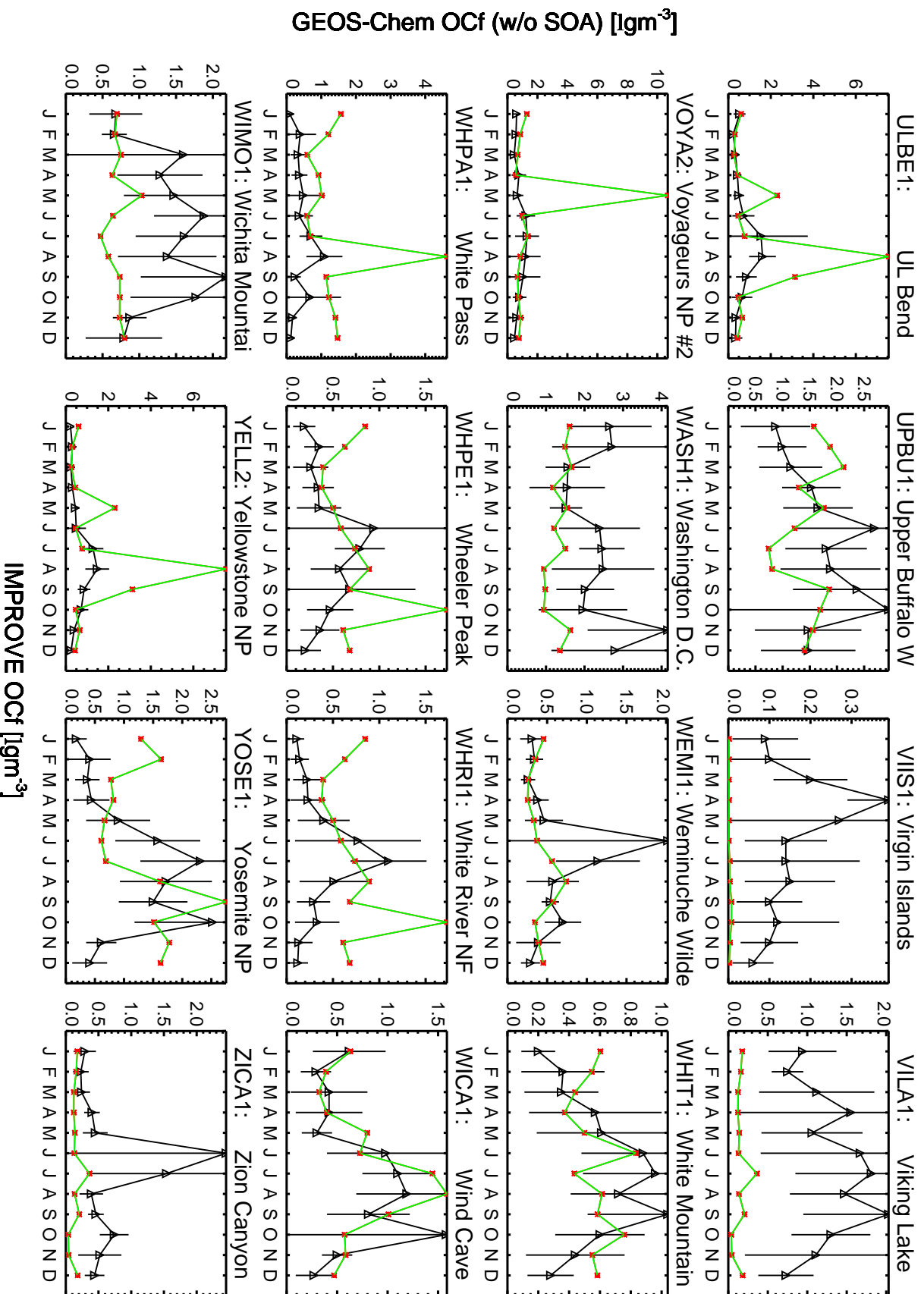
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



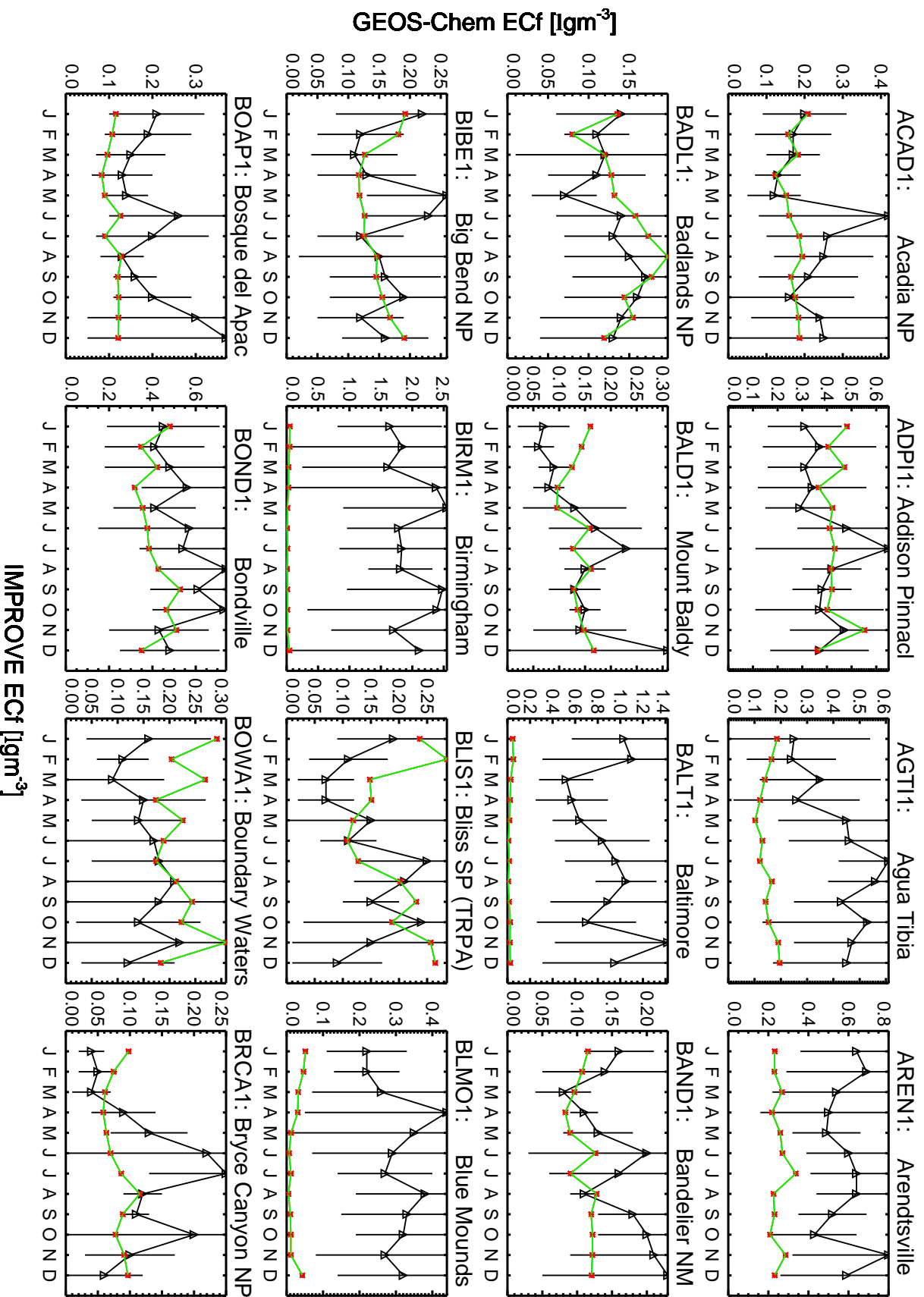
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



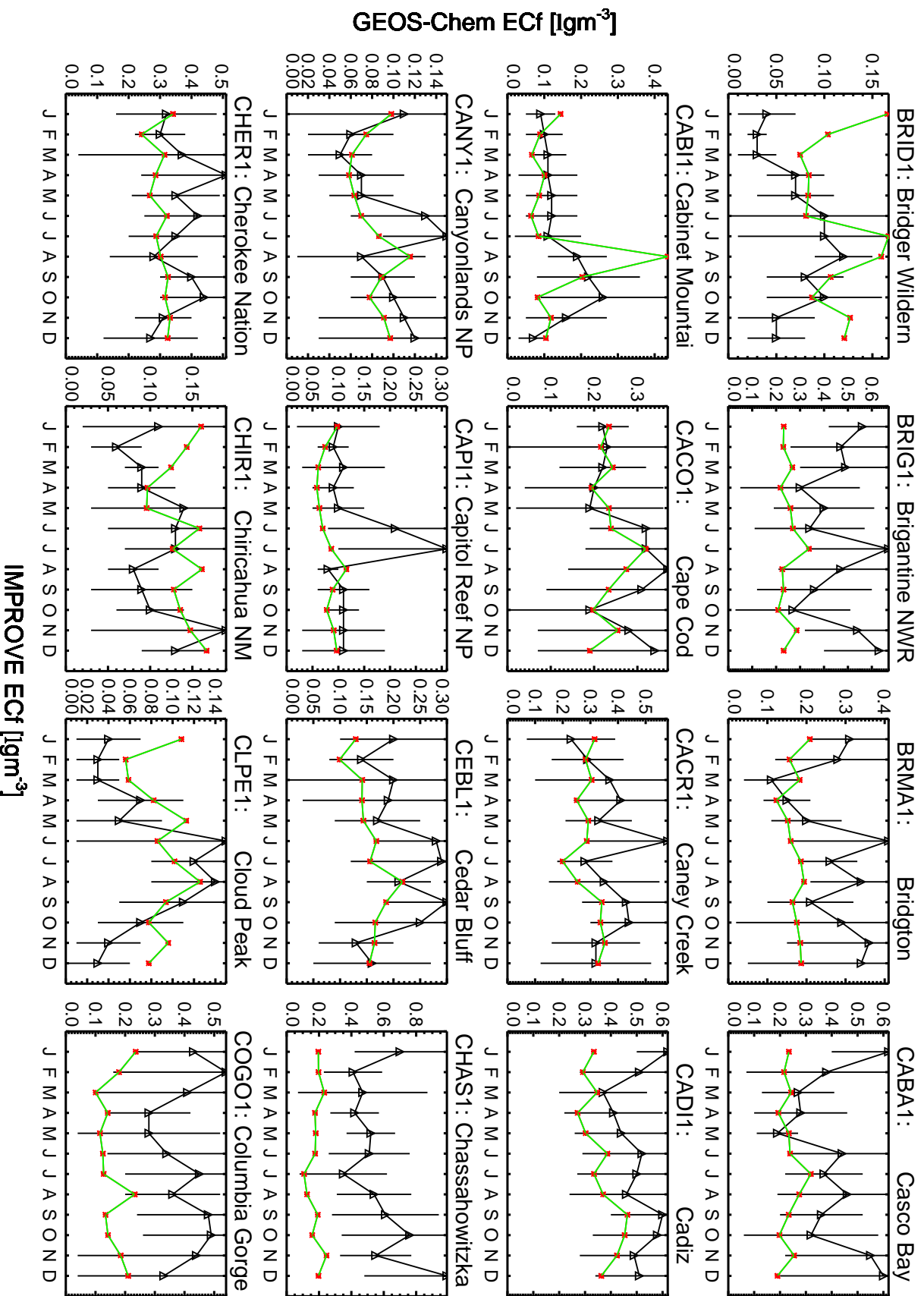
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



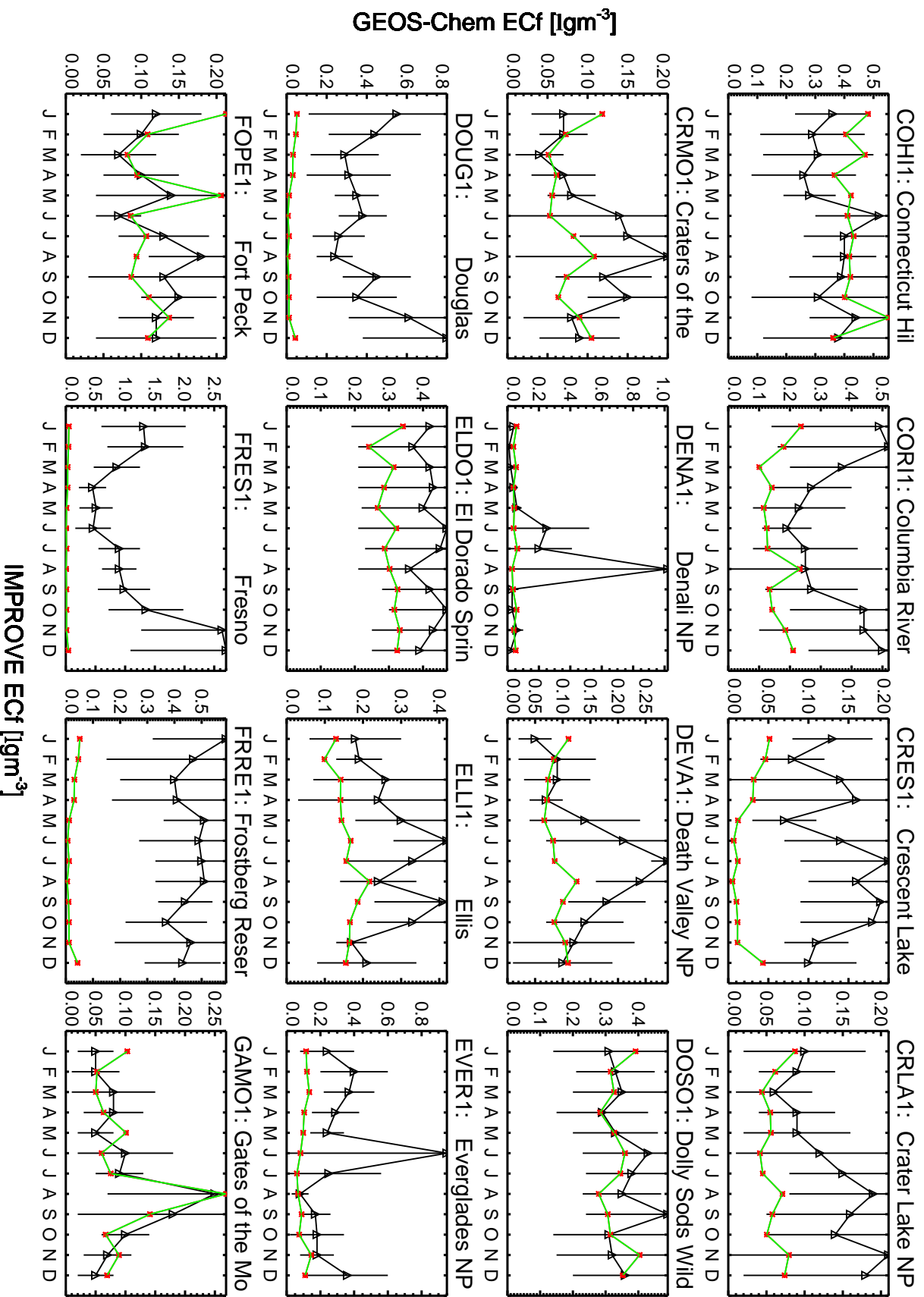
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

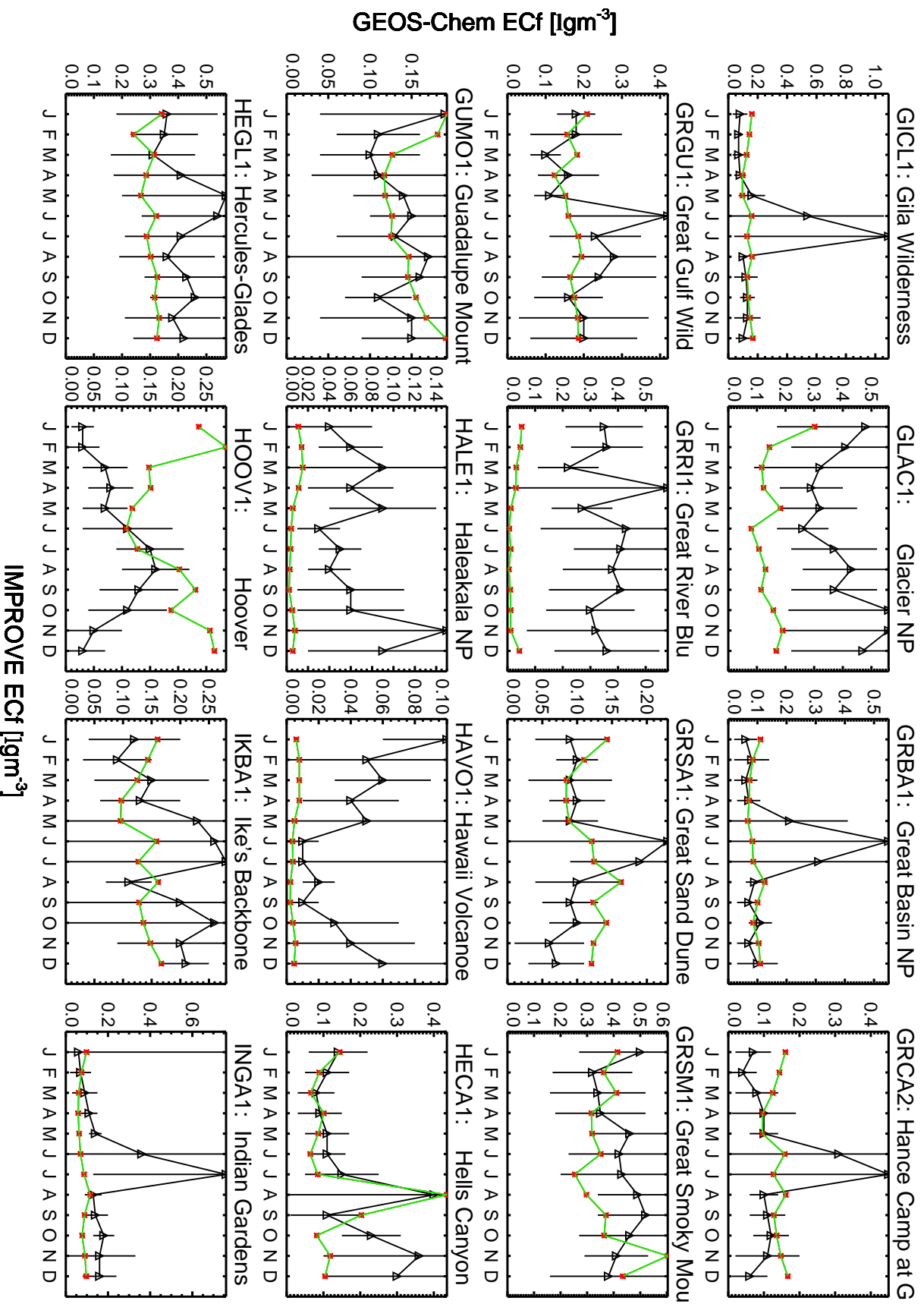


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



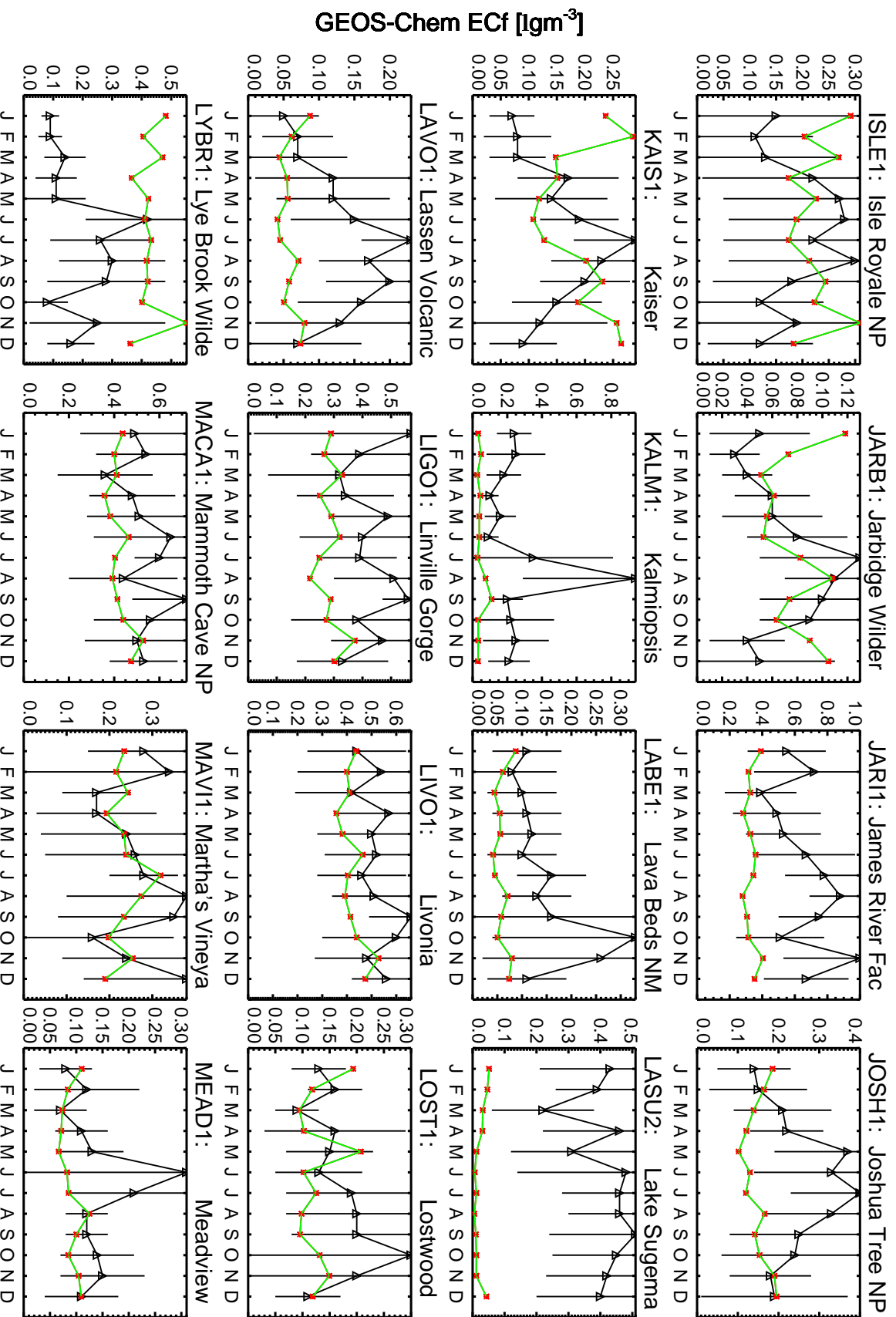
IMPROVE ECf [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



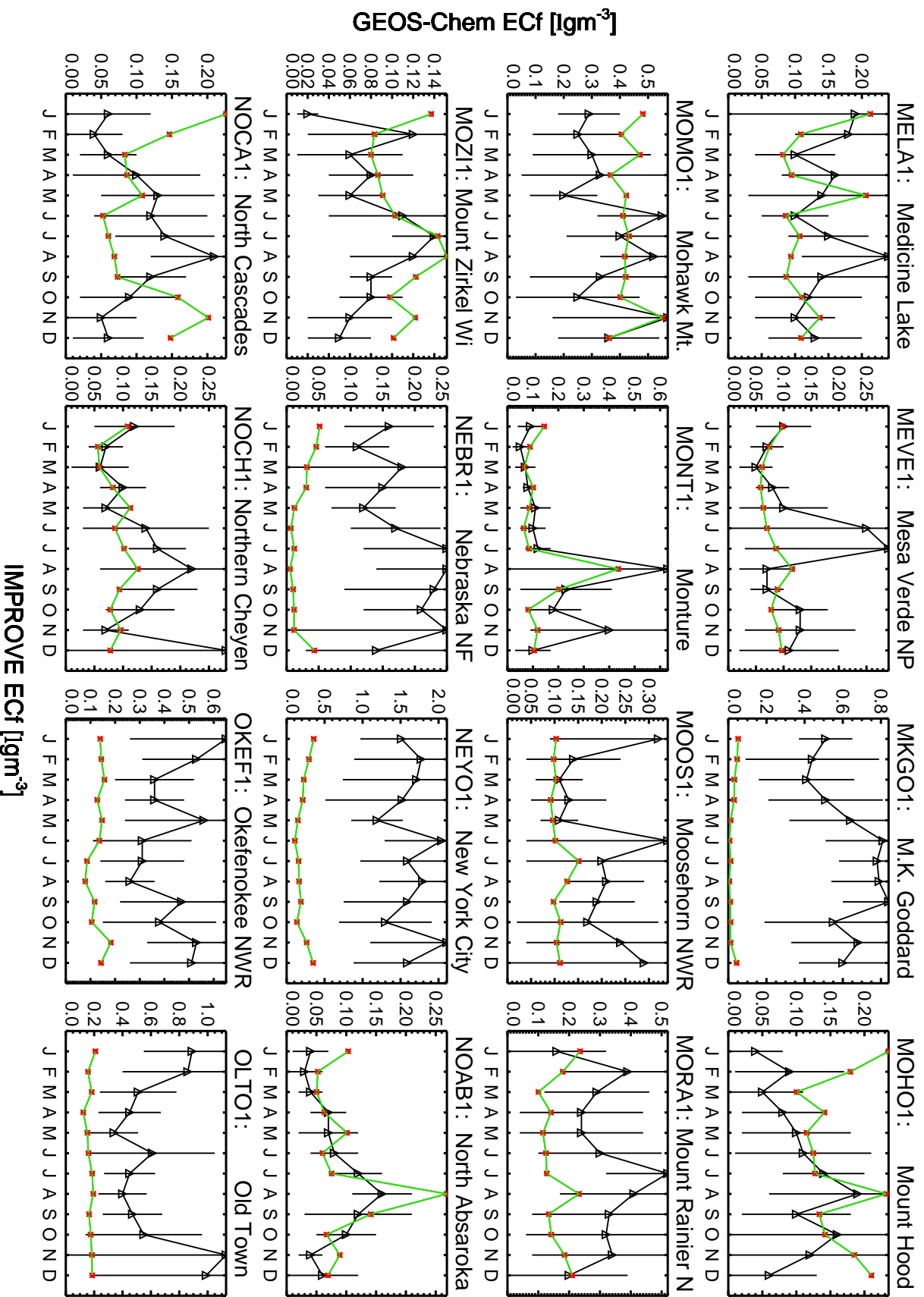


Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



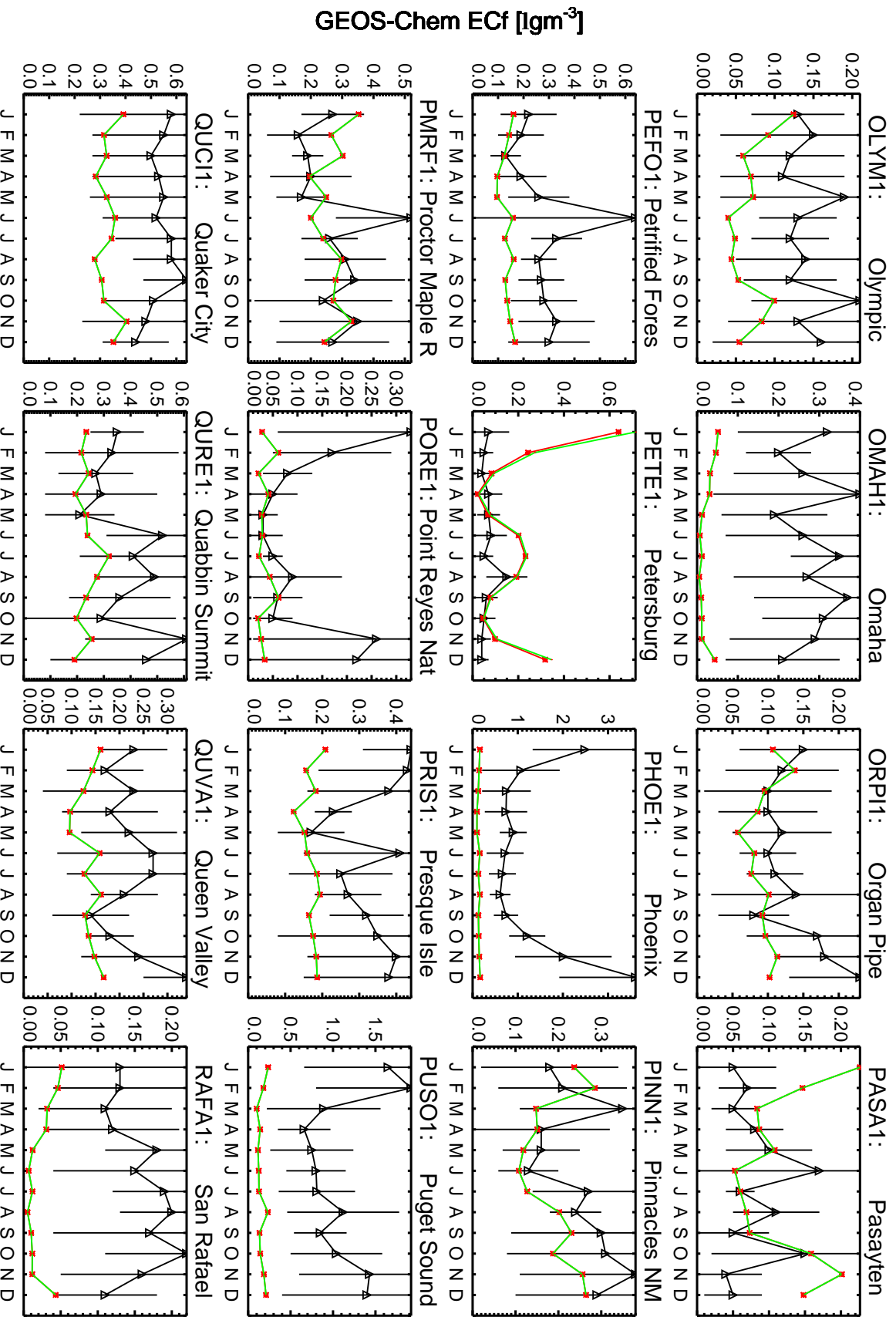
IMPROVE ECf [ $\mu\text{g m}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



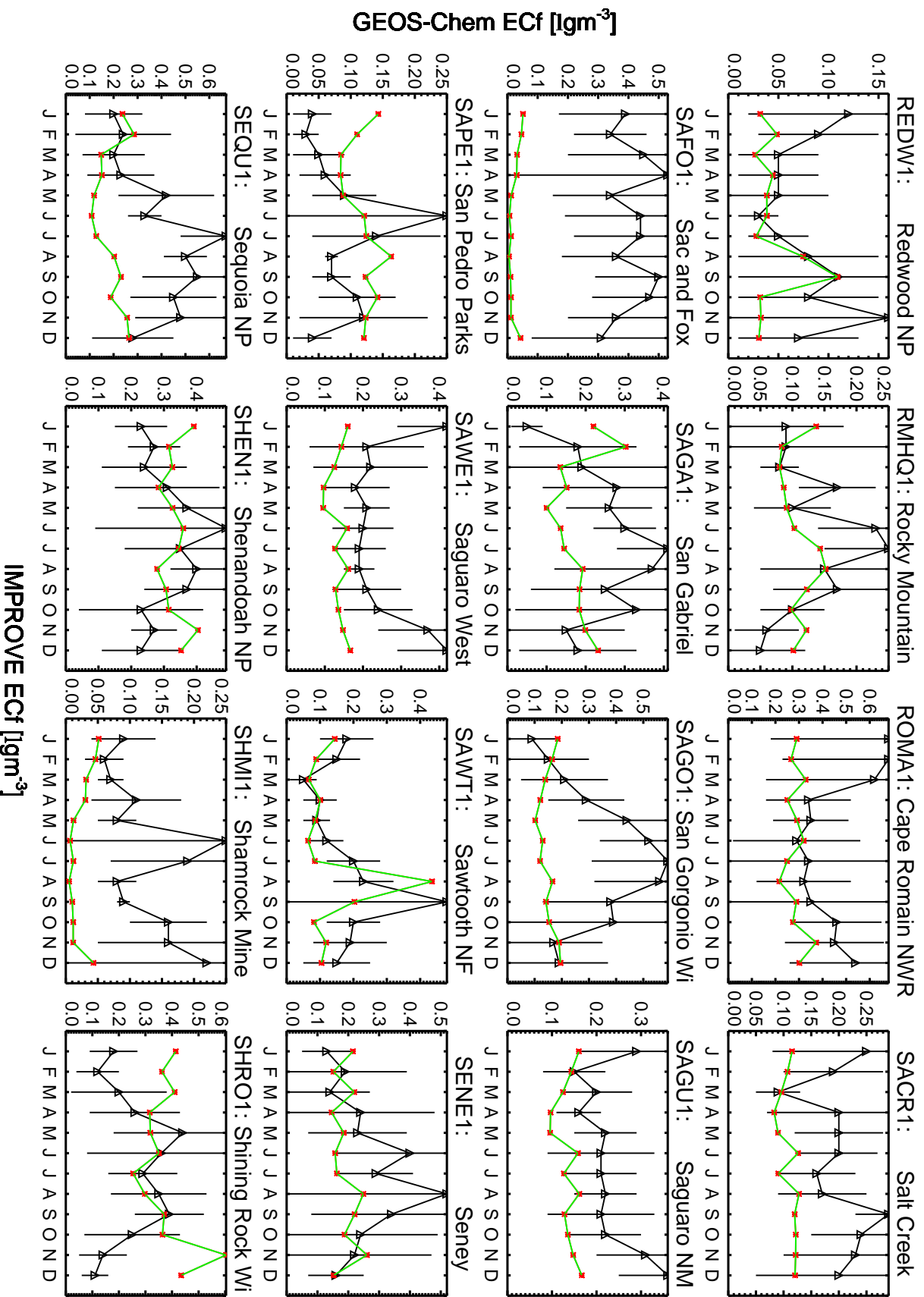
IMPROVE ECf [ $\mu\text{gm}^{-3}$ ]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)

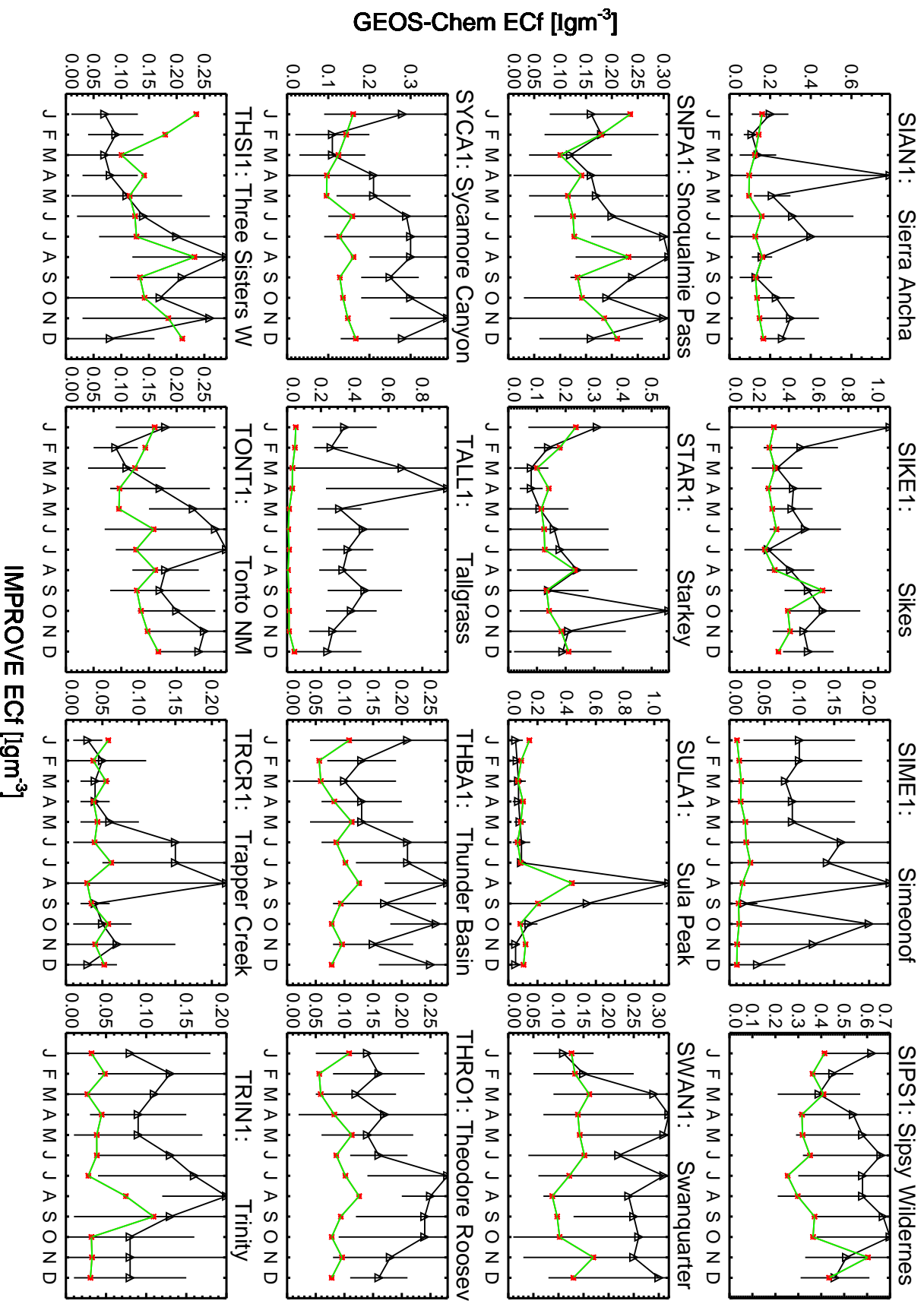


IMPROVE ECf [ $\mu\text{g m}^{-3}$ ]

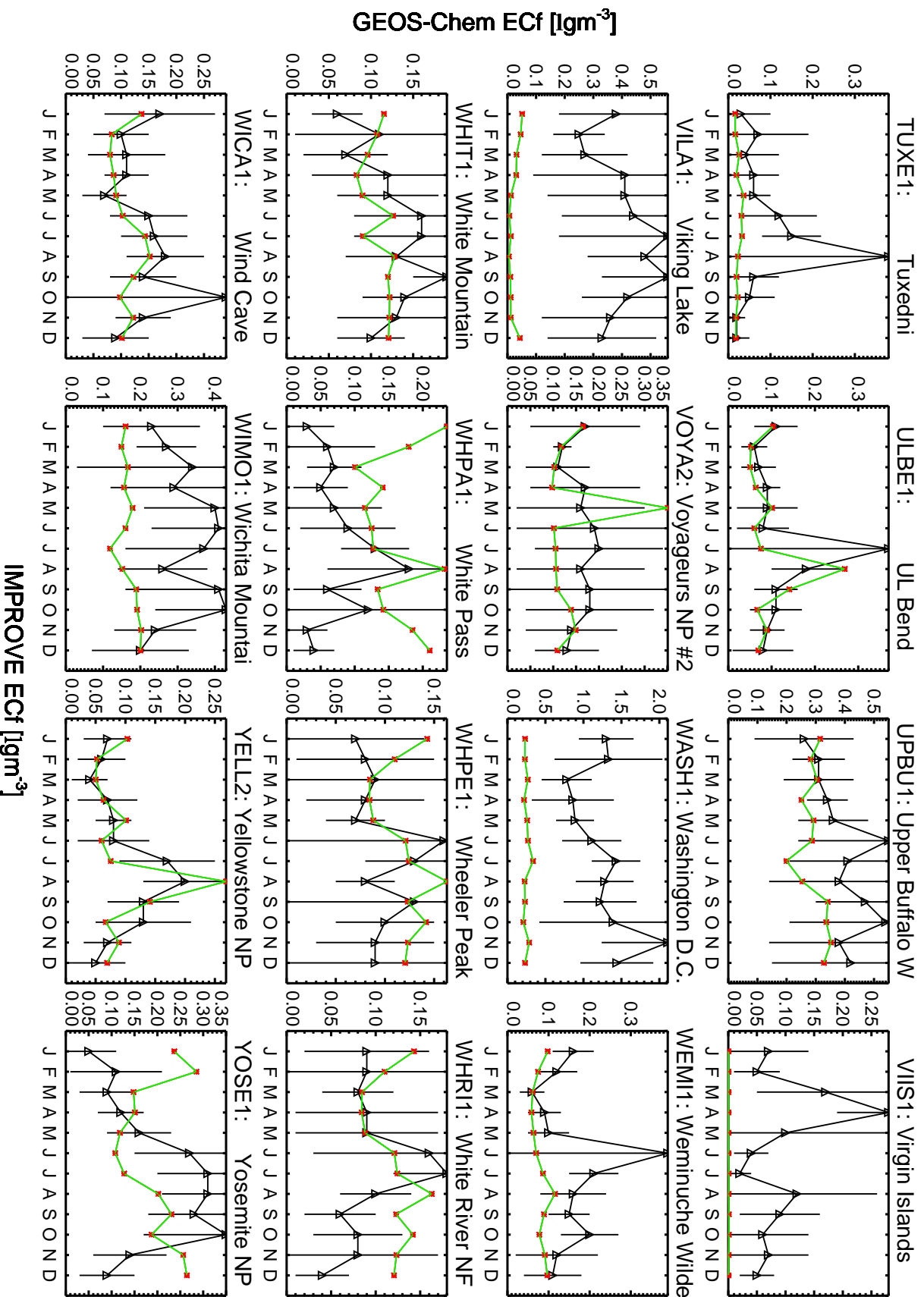
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



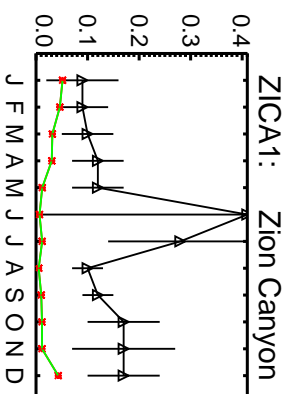
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



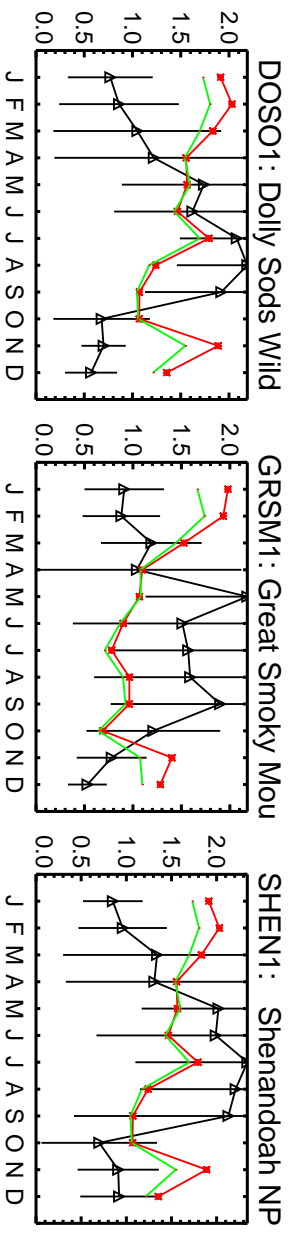
Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



GEOS-Chem ECf [lgm<sup>-3</sup>]

IMPROVE ECf [lgm<sup>-3</sup>]

Red: GC\_12.4.0 (2016); Green: GC\_12.6.0 (2016)



GEOS-Chem NH<sub>4</sub>f [ $lgm^{-3}$ ]

IMPROVE NH<sub>4</sub>f [ $lgm^{-3}$ ]