

Annexe X

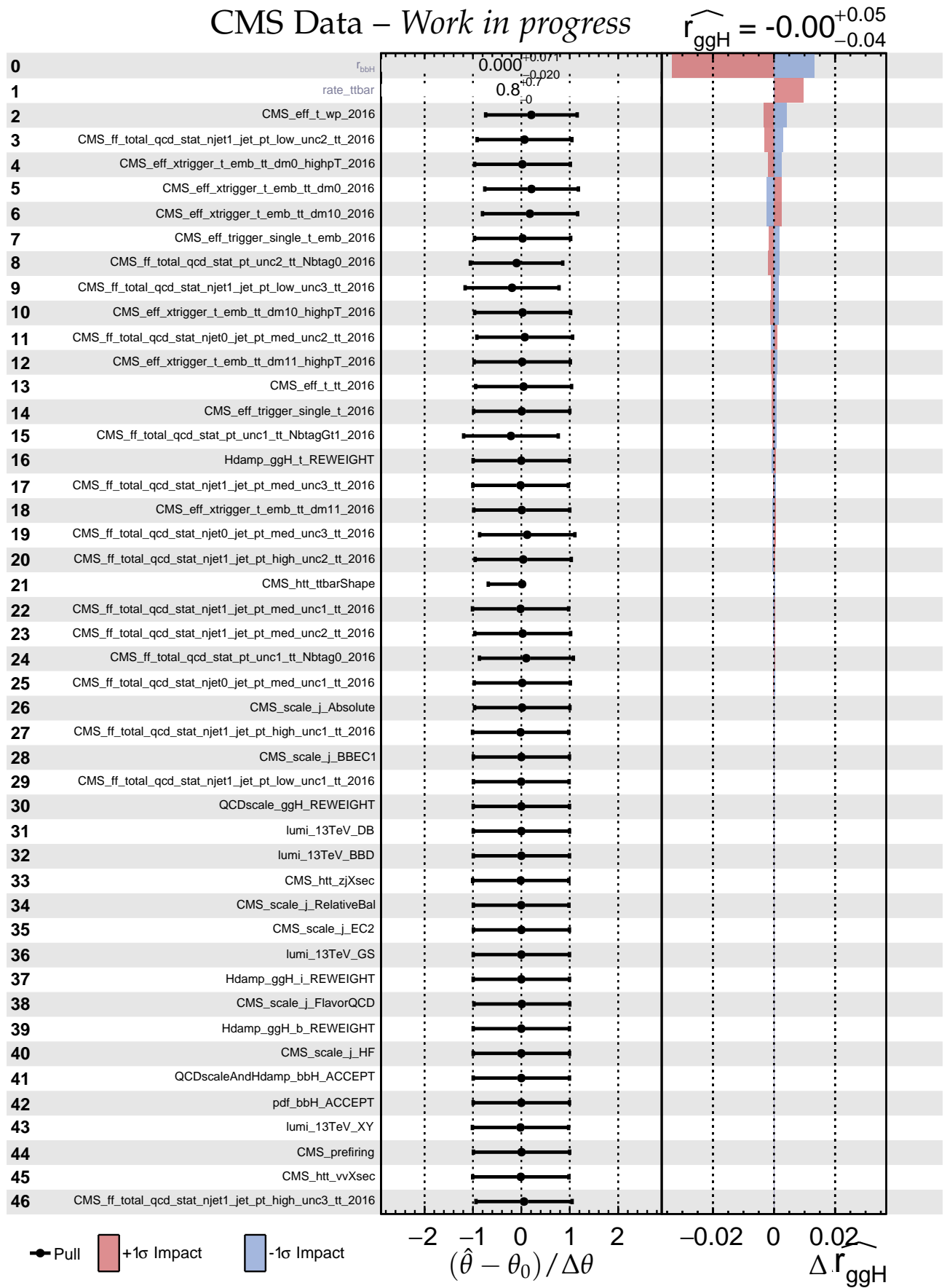
Ajustement des paramètres de nuisance – $H \rightarrow \tau\tau$

Les paramètres de nuisance introduits au chapitre 4 sont ajustés par COMBINE, l'outil de combinaison statistique utilisé par la collaboration CMS basé sur ROOSTATS [1].

Dans cette annexe, les valeurs prises par ces paramètres après ajustement pour l'obtention des limites d'exclusion indépendantes du modèle $\hat{\theta}$ (*pulls*) ainsi que l'incertitude sur cette valeur sont donnés en termes de nombre de déviations standard $\Delta\theta$ par rapport à la valeur nominale θ_0 . Leur effet sur le paramètre d'intérêt, en l'occurrence le modificateur d'intensité du signal $\mu = r_{ggH}$, est donné par les bandes rouges et bleues. Elles correspondent respectivement aux effets corrélé et anti-corrélé du paramètre de nuisance sur μ ($\pm 1\sigma$ impact).

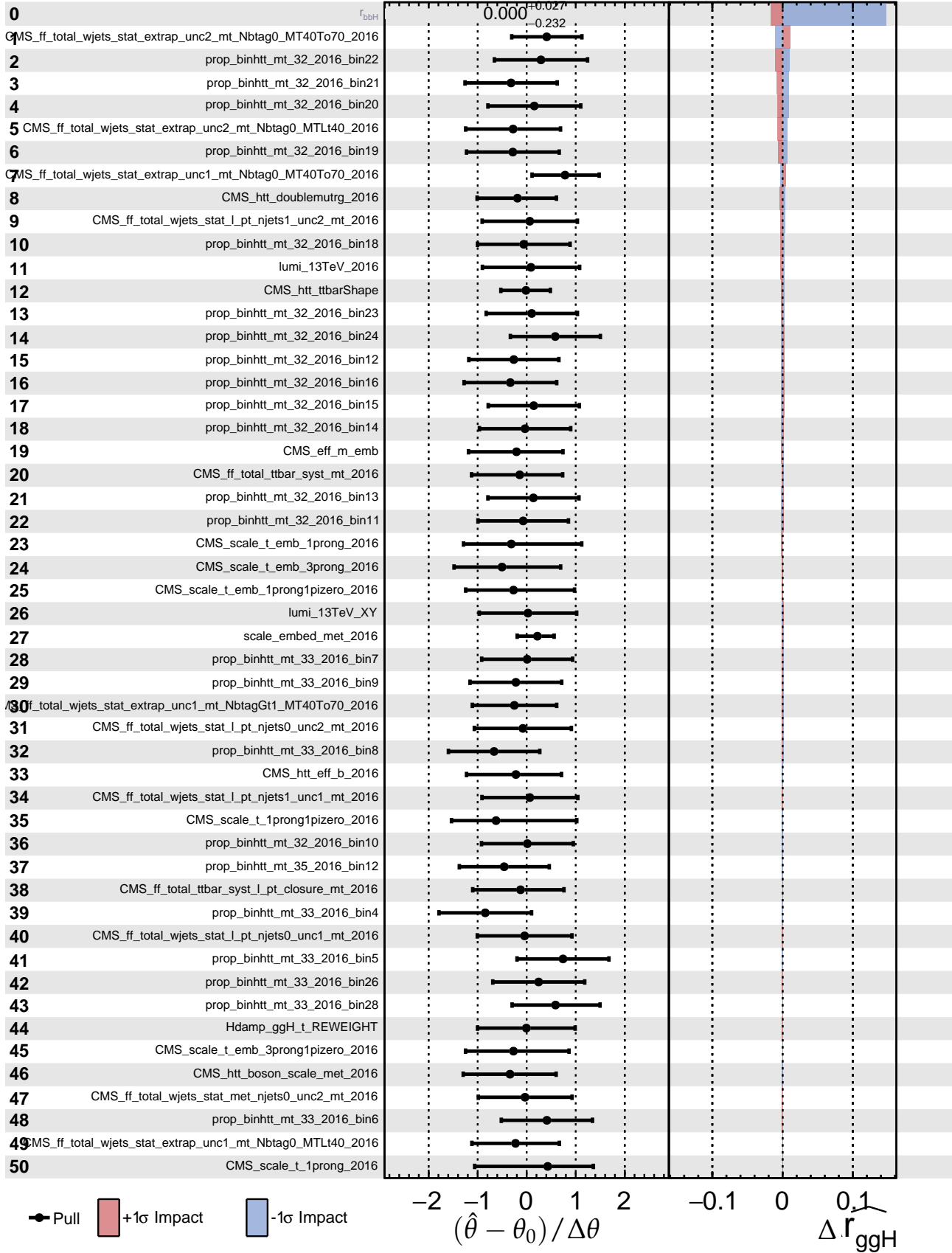
Références

- [1] L. MONETA & coll. « The RooStats Project ». *13th International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT2010)*. 2010. URL : http://pos.sissa.it/archive/conferences/093/057/ACAT2010_057.pdf.



CMS Data – Work in progress

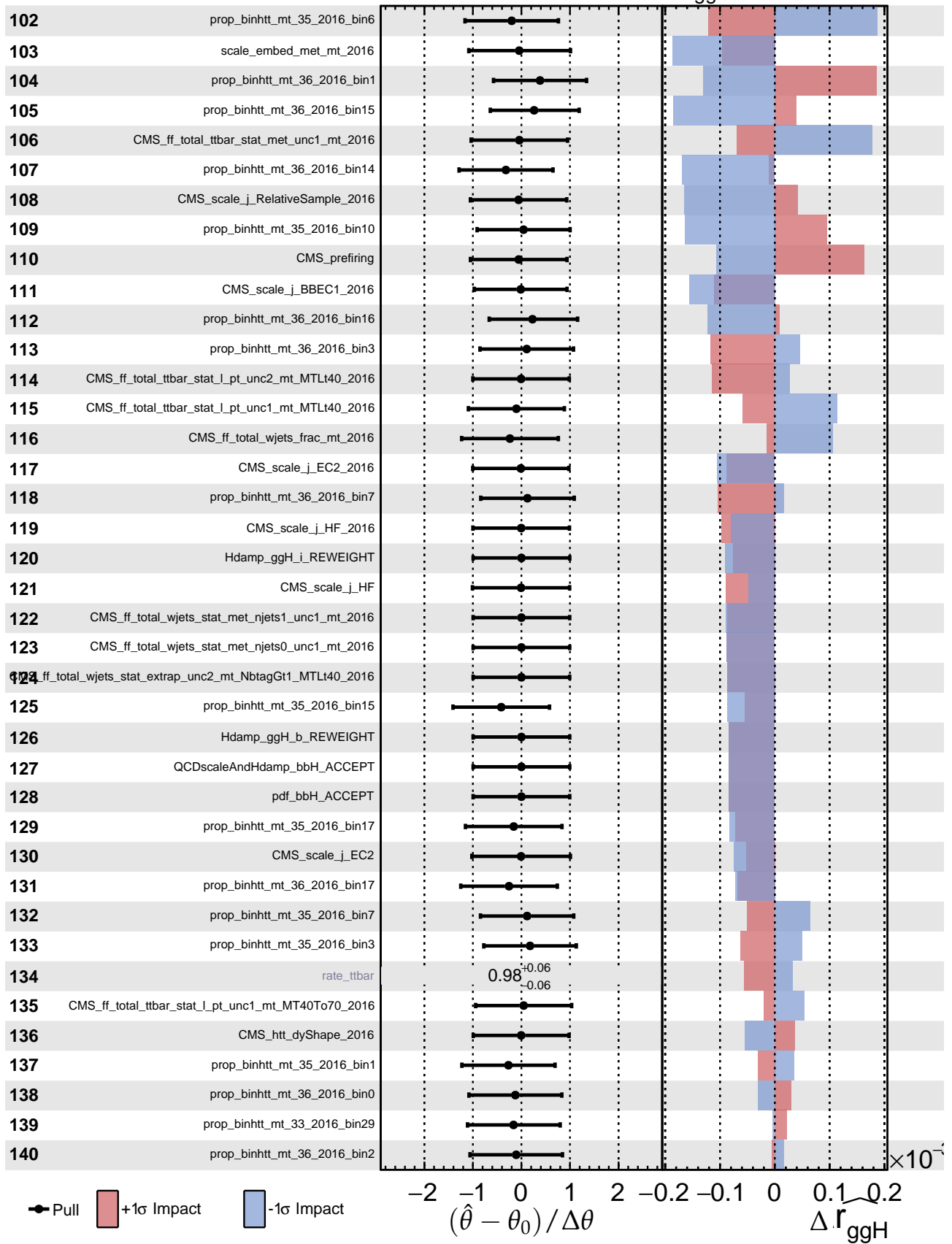
$$\hat{r}_{\text{ggH}} = -0.07^{+0.05}_{-0.05}$$





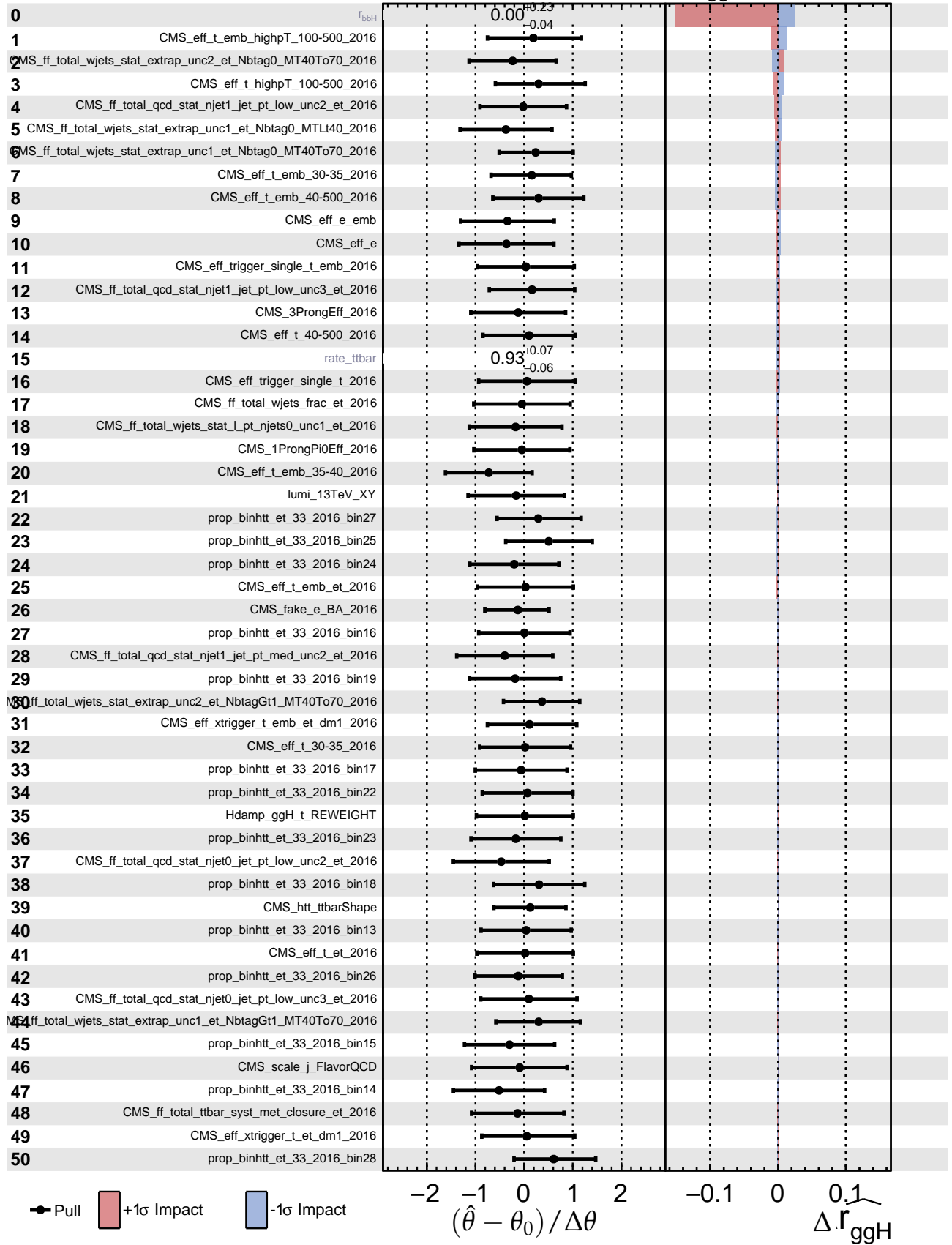
CMS Data – Work in progress

$$\hat{r}_{\text{ggH}} = -0.07^{+0.05}_{-0.05}$$



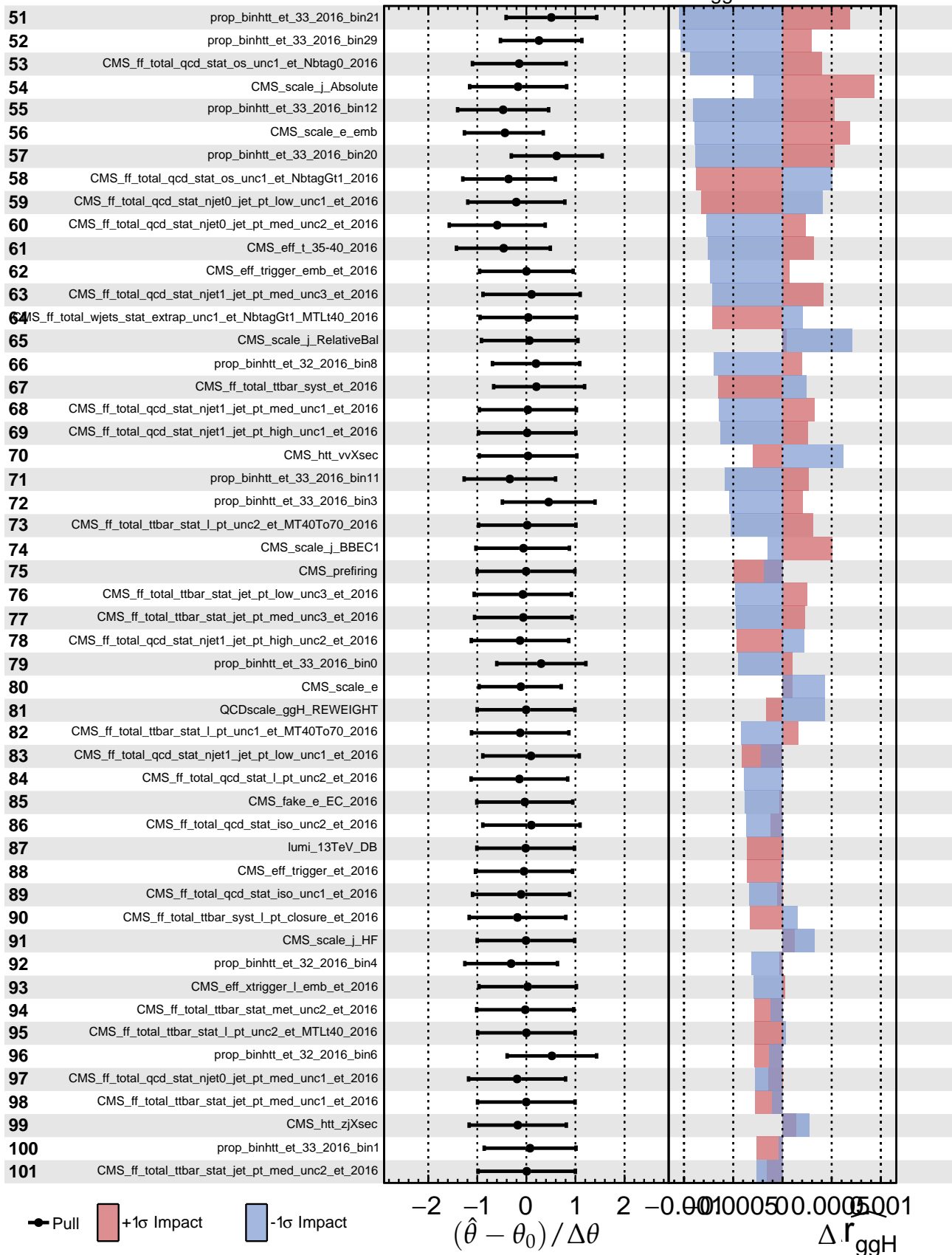
CMS Data – *Work in progress*

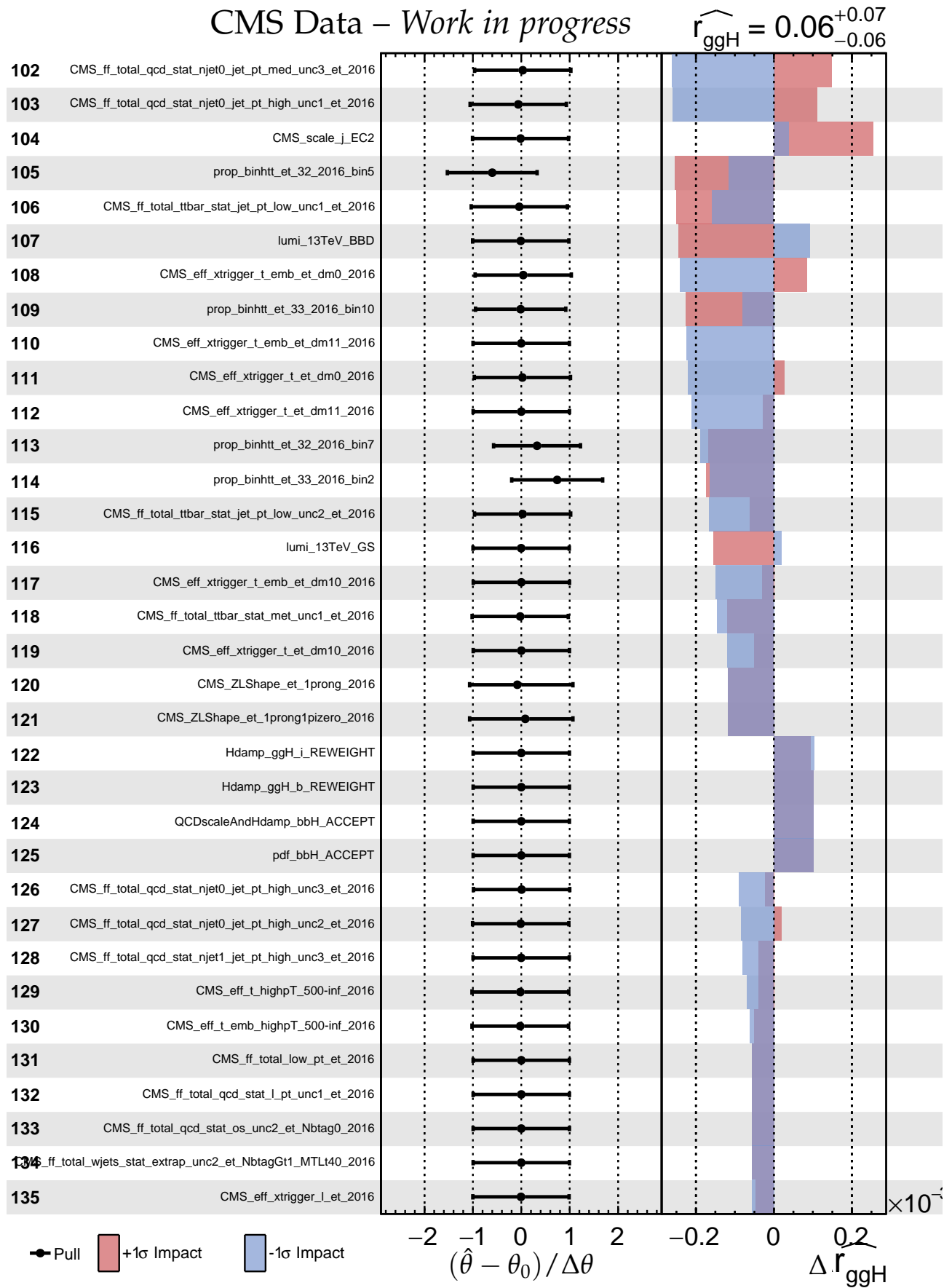
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$



CMS Data – Work in progress

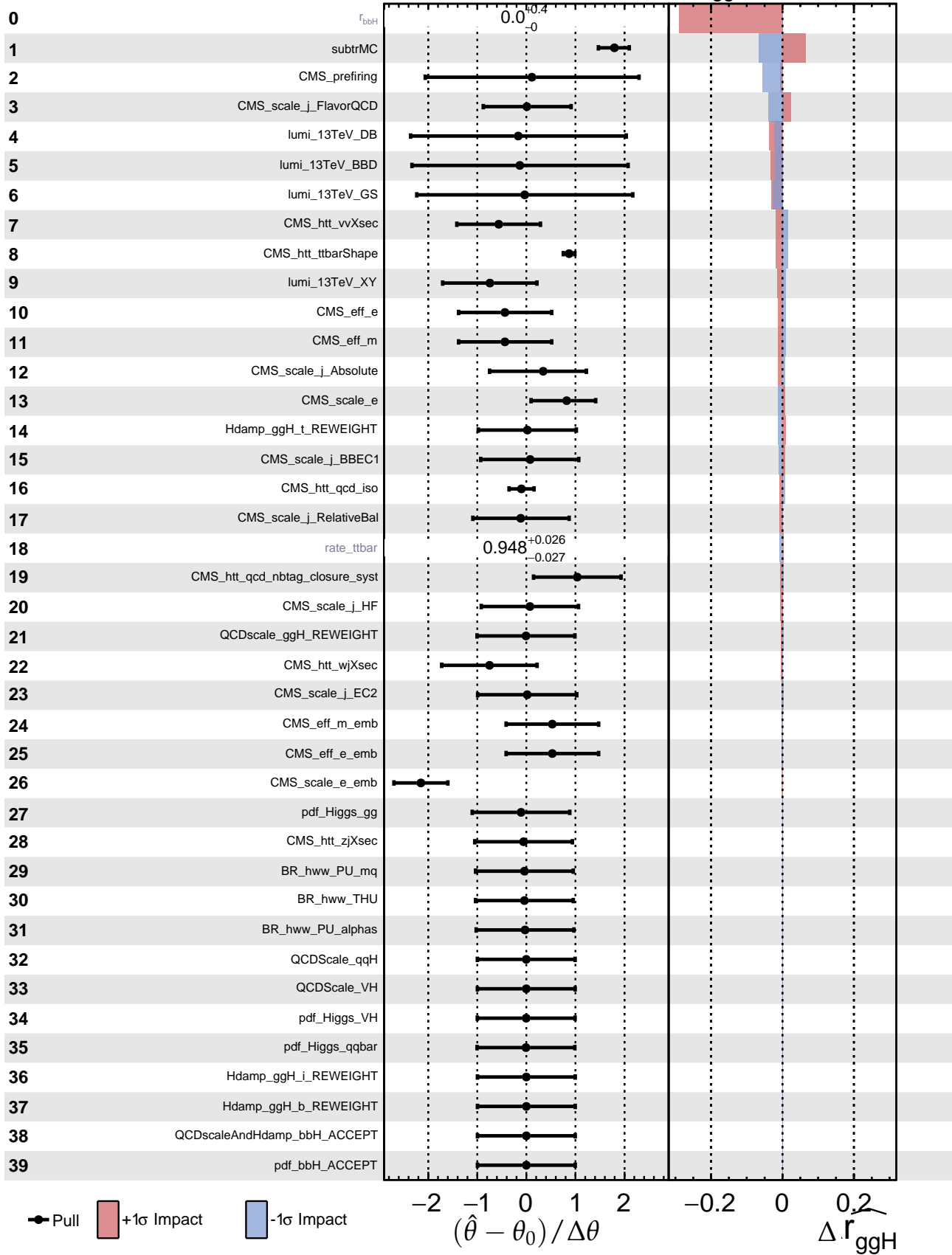
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$

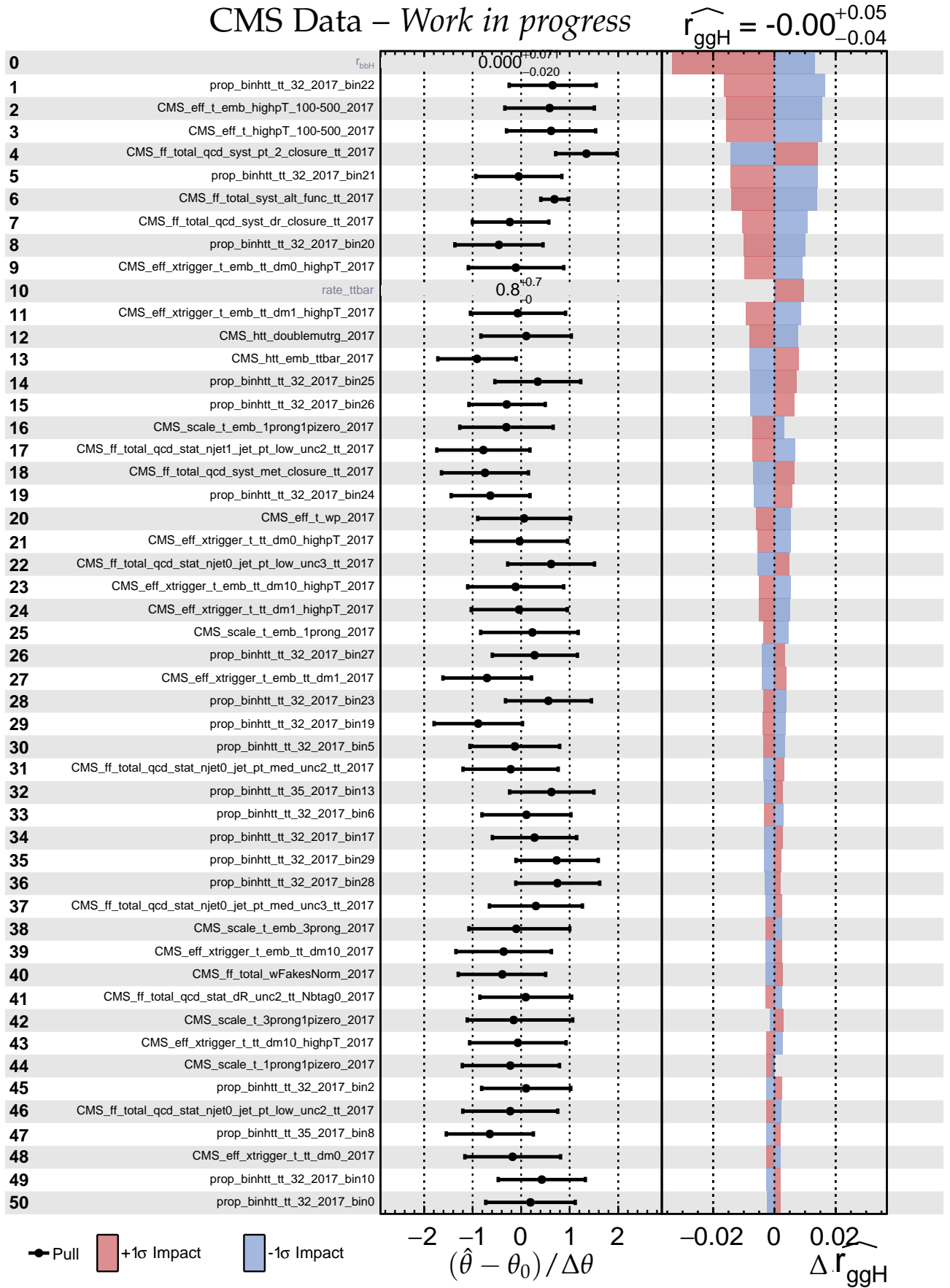




CMS Data – Work in progress

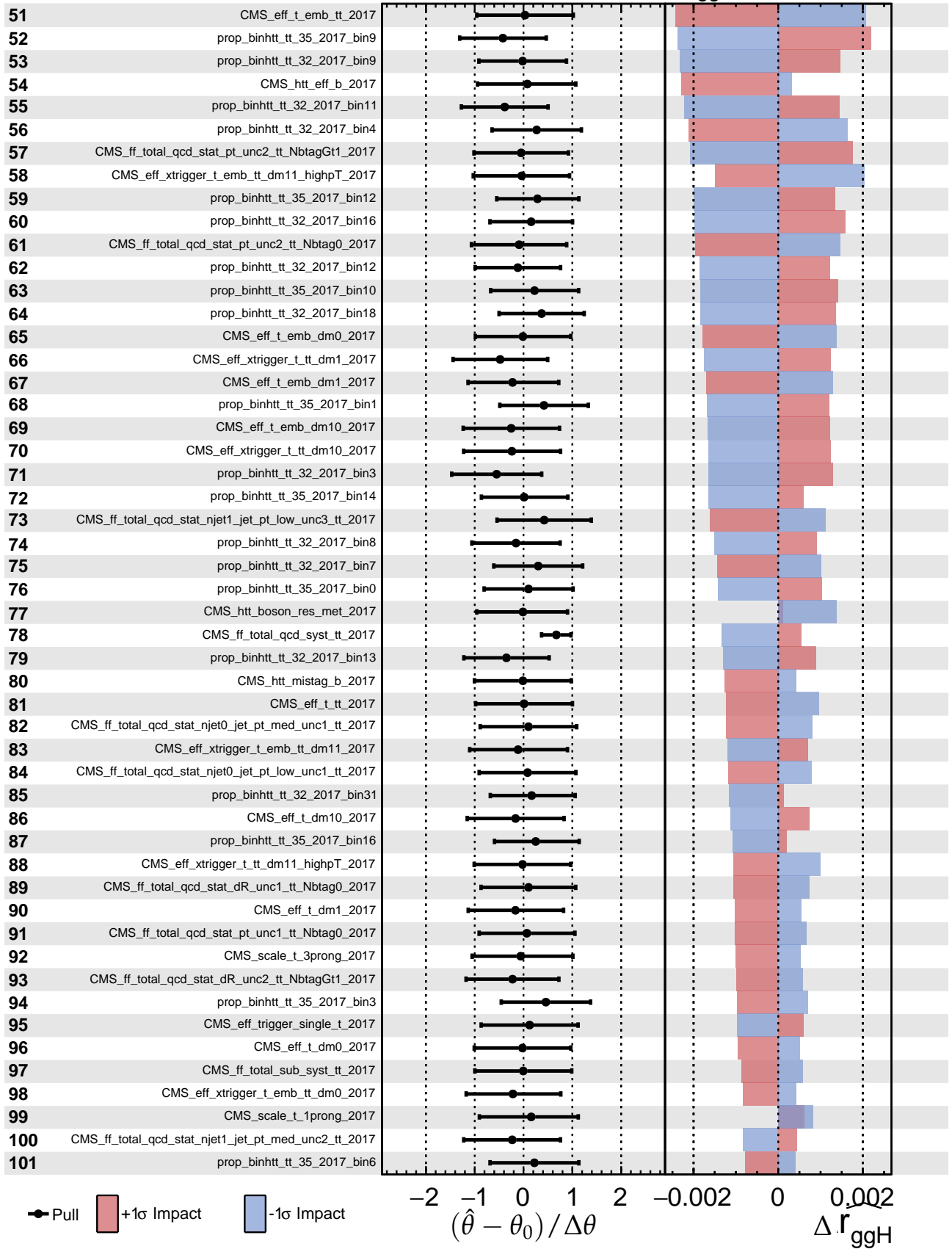
$$\hat{r}_{\text{ggH}} = 0.13^{+0.22}_{-0.23}$$

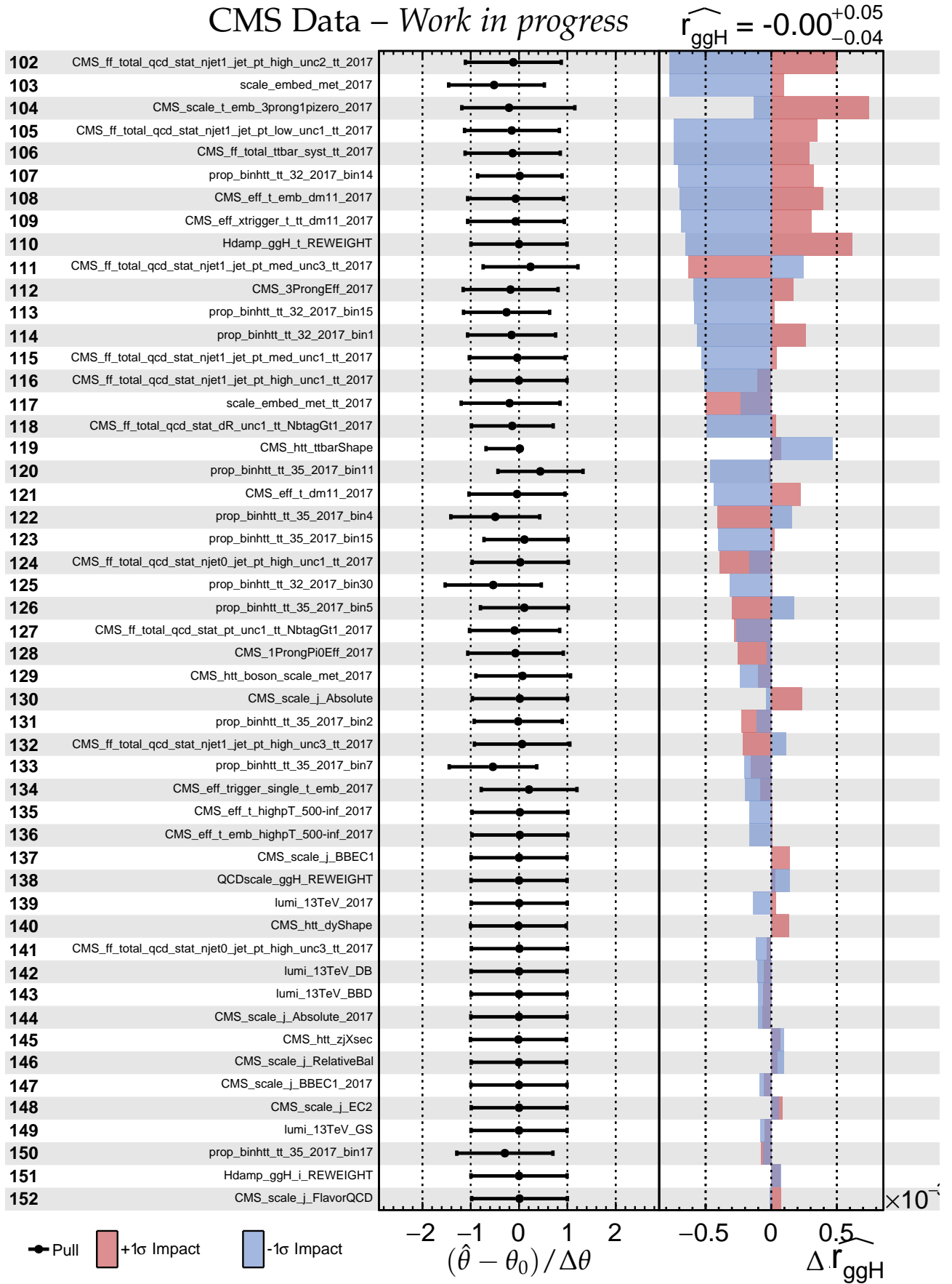




CMS Data – Work in progress

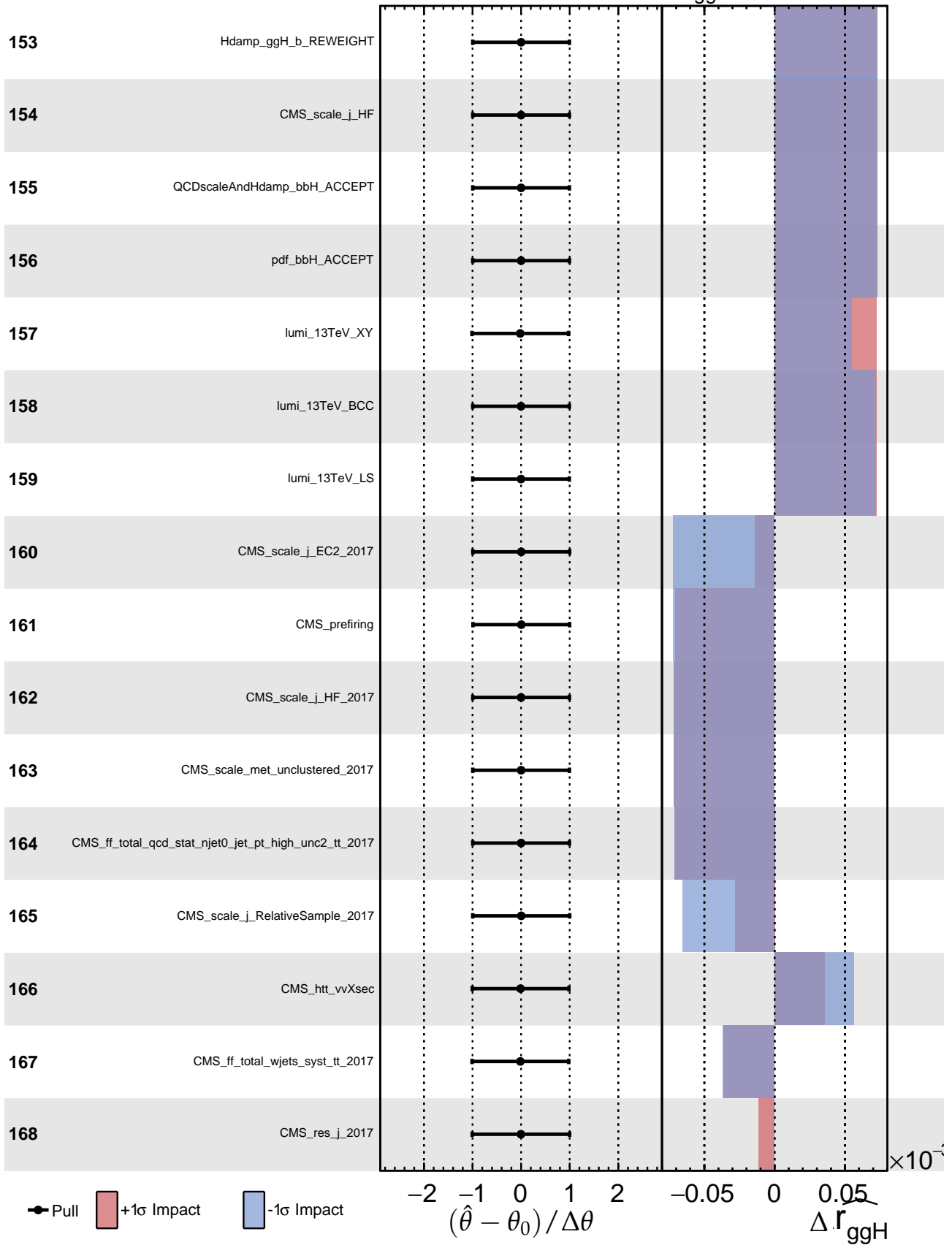
$$\widehat{r_{ggH}} = -0.00^{+0.05}_{-0.04}$$

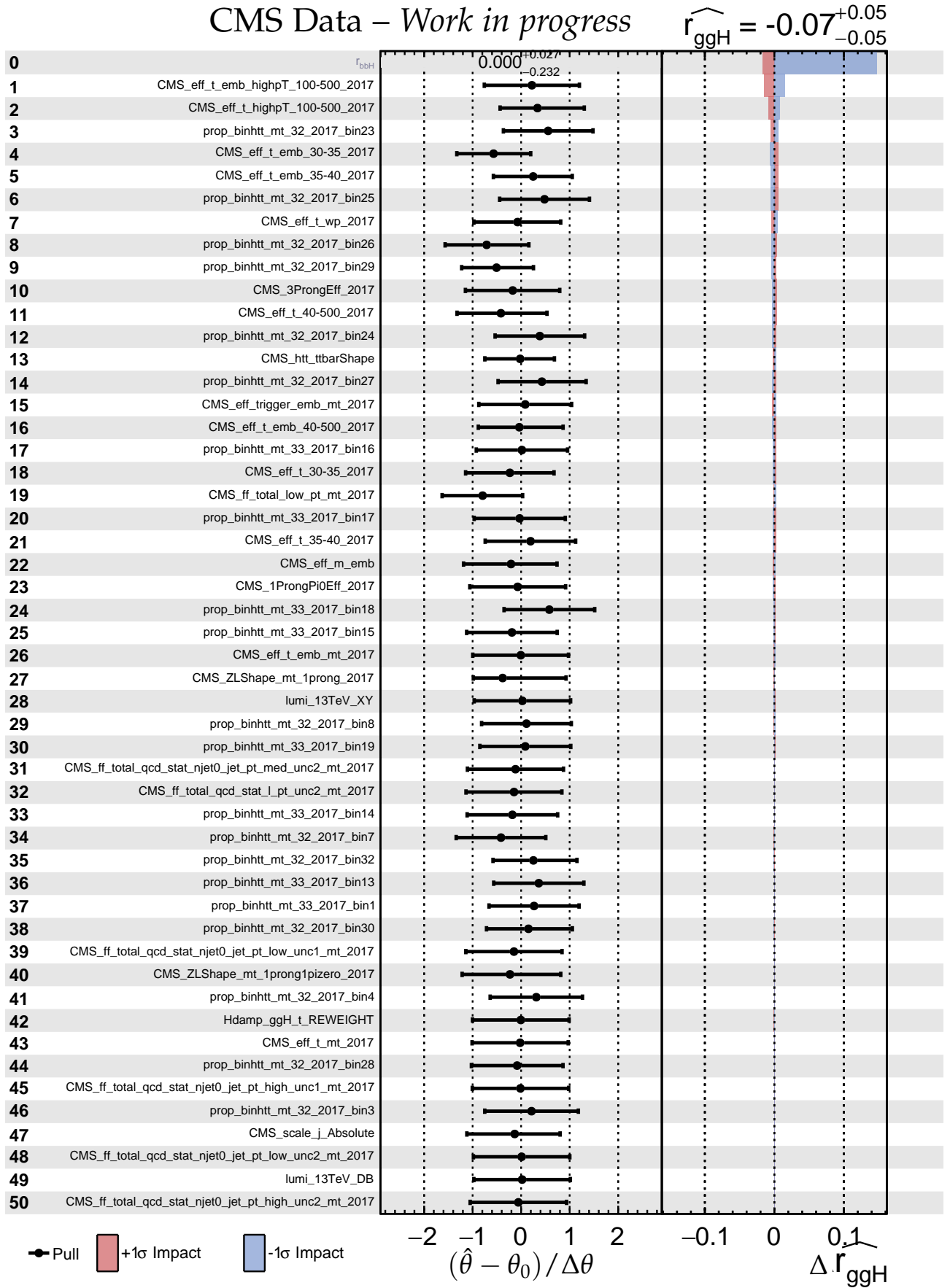




CMS Data – *Work in progress*

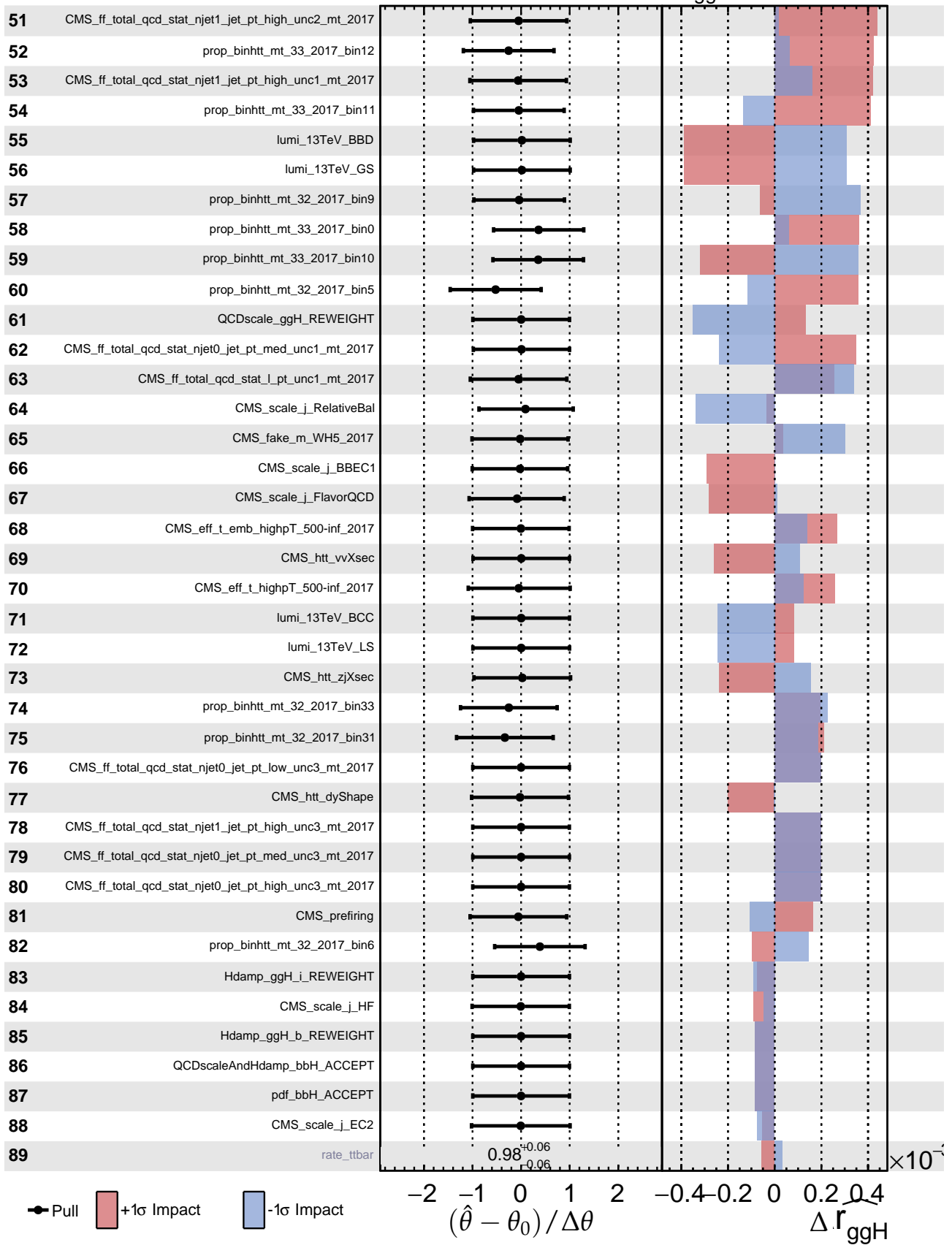
$$\hat{r}_{\text{ggH}} = -0.00^{+0.05}_{-0.04}$$

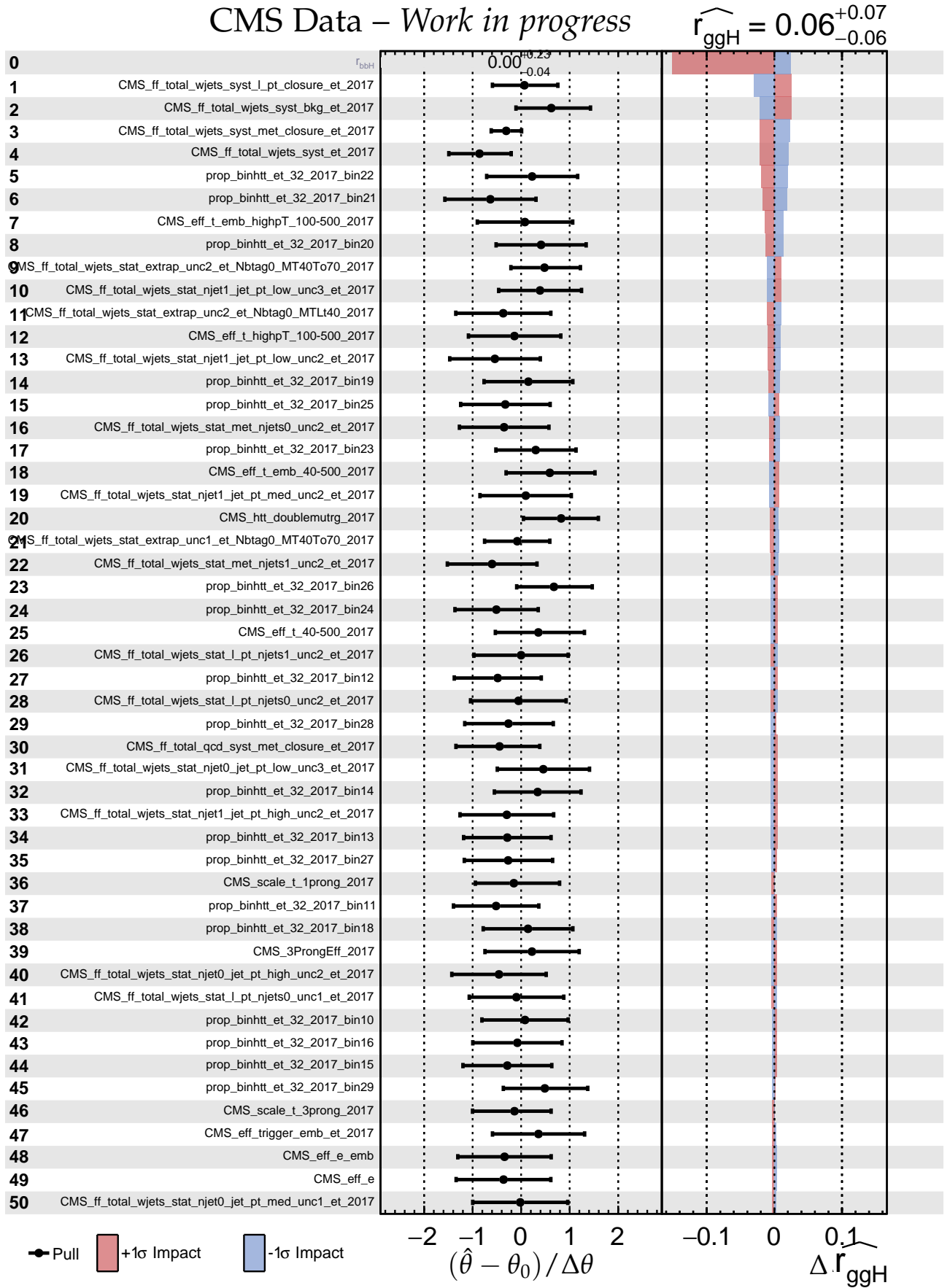




CMS Data – Work in progress

$$\hat{r}_{\text{ggH}} = -0.07^{+0.05}_{-0.05}$$

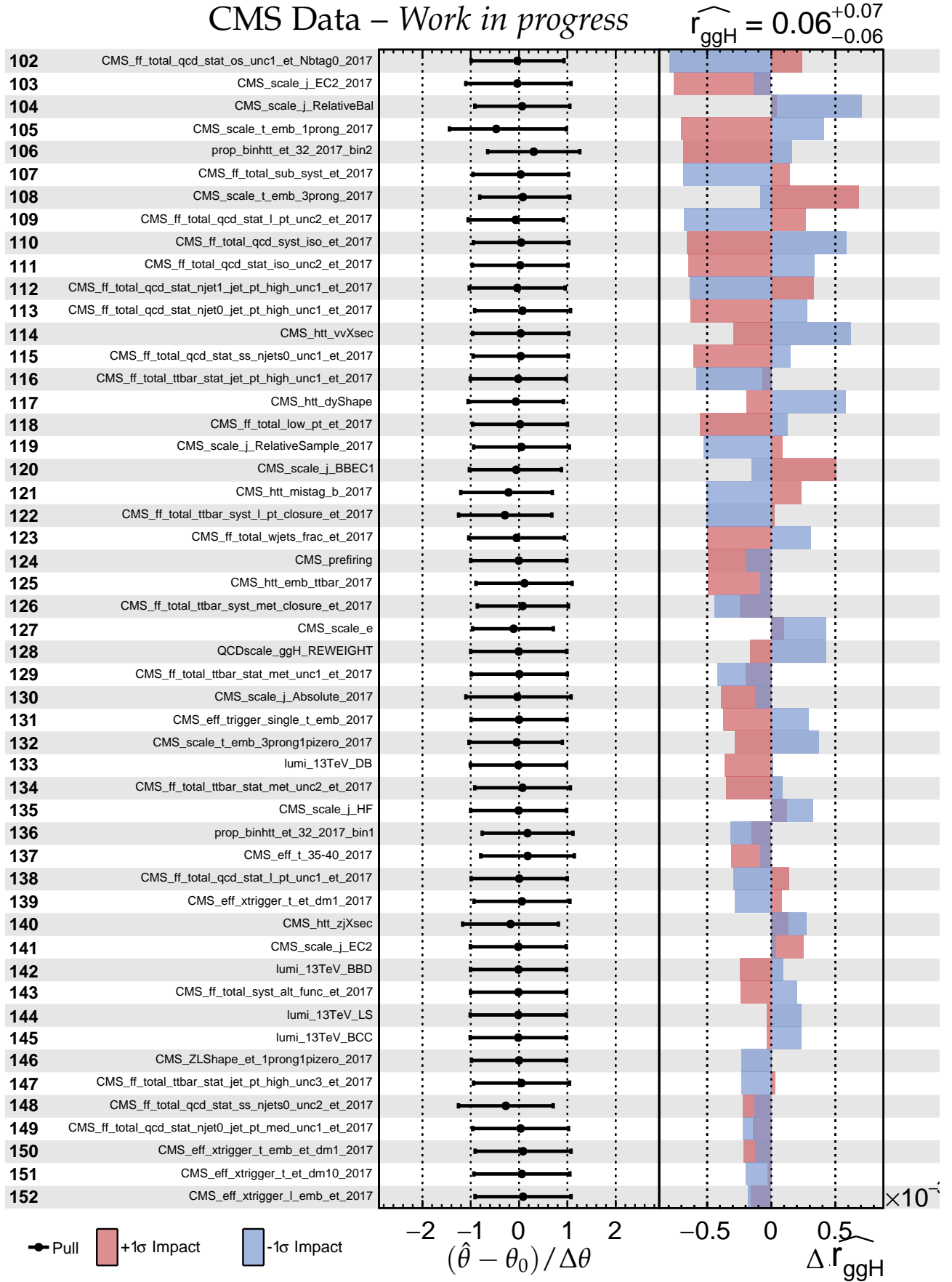




CMS Data – Work in progress

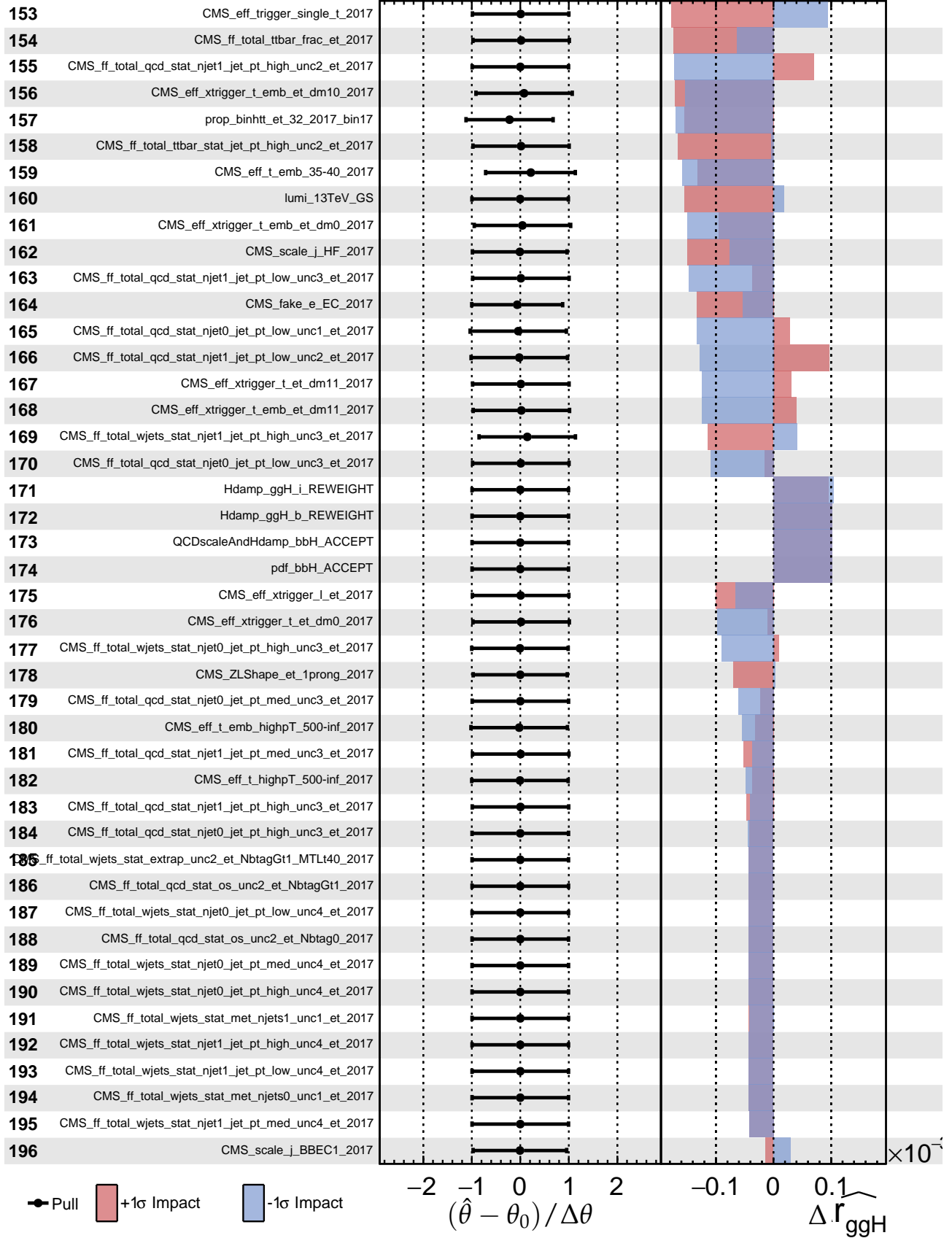
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$

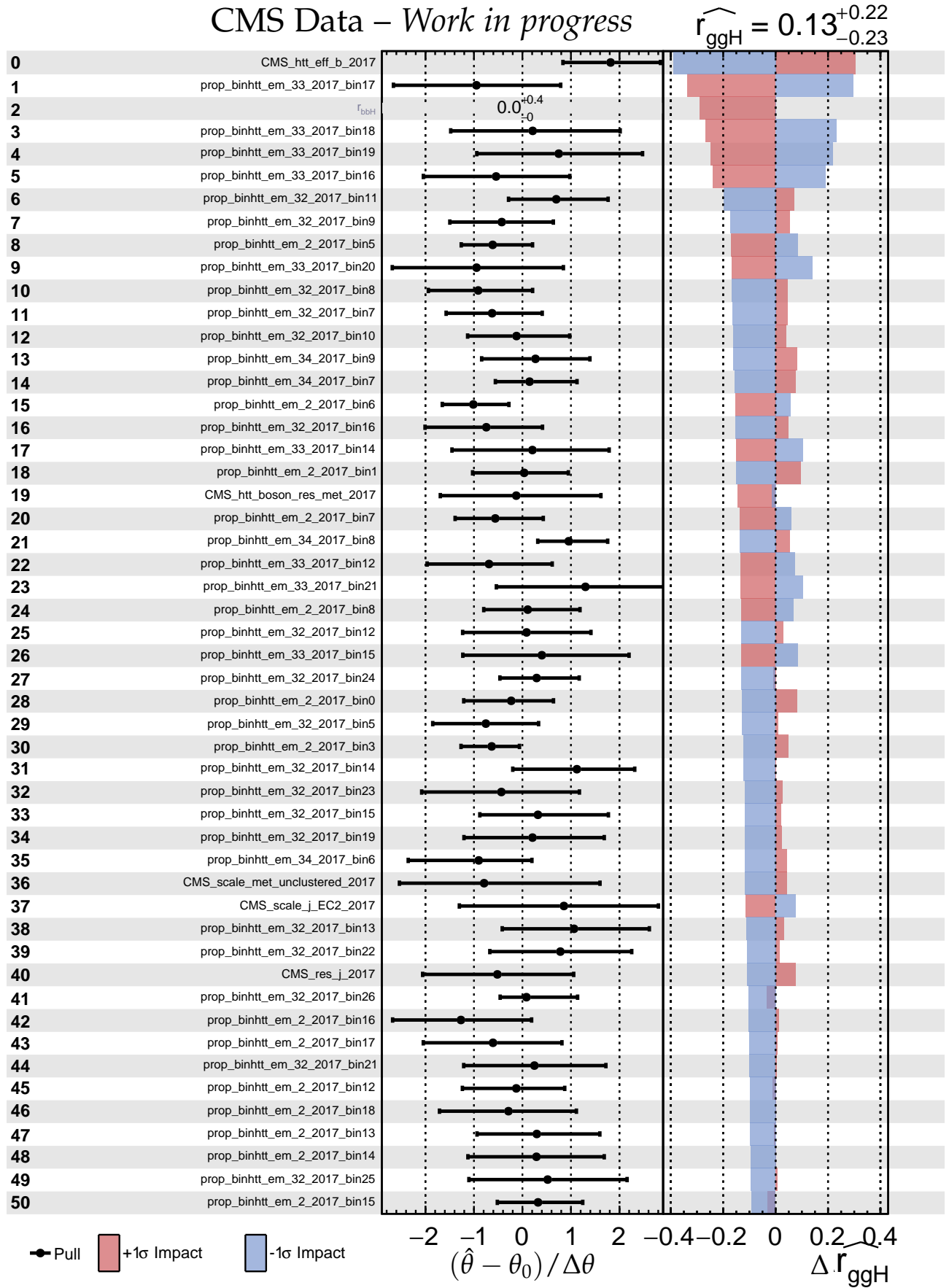




CMS Data – Work in progress

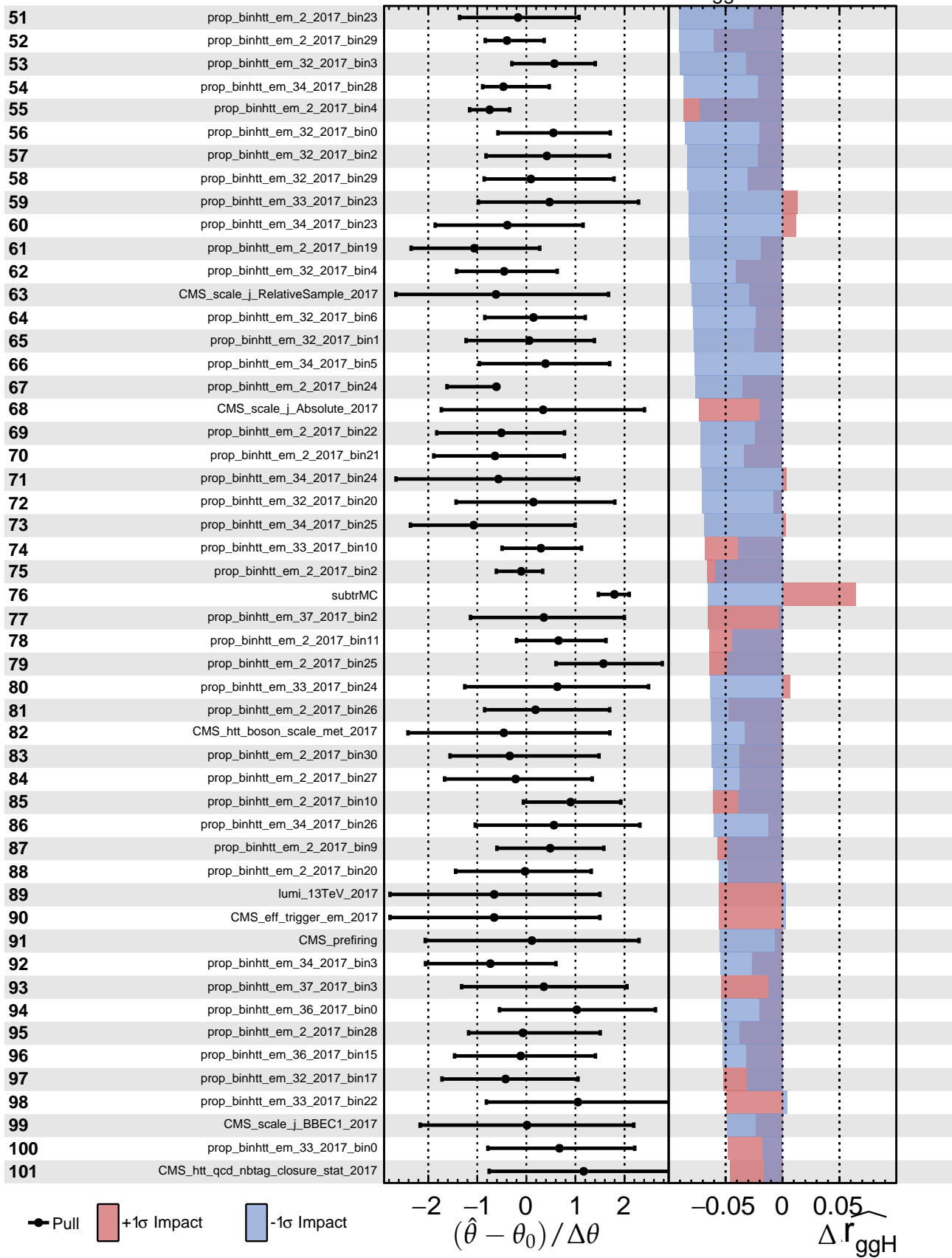
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$

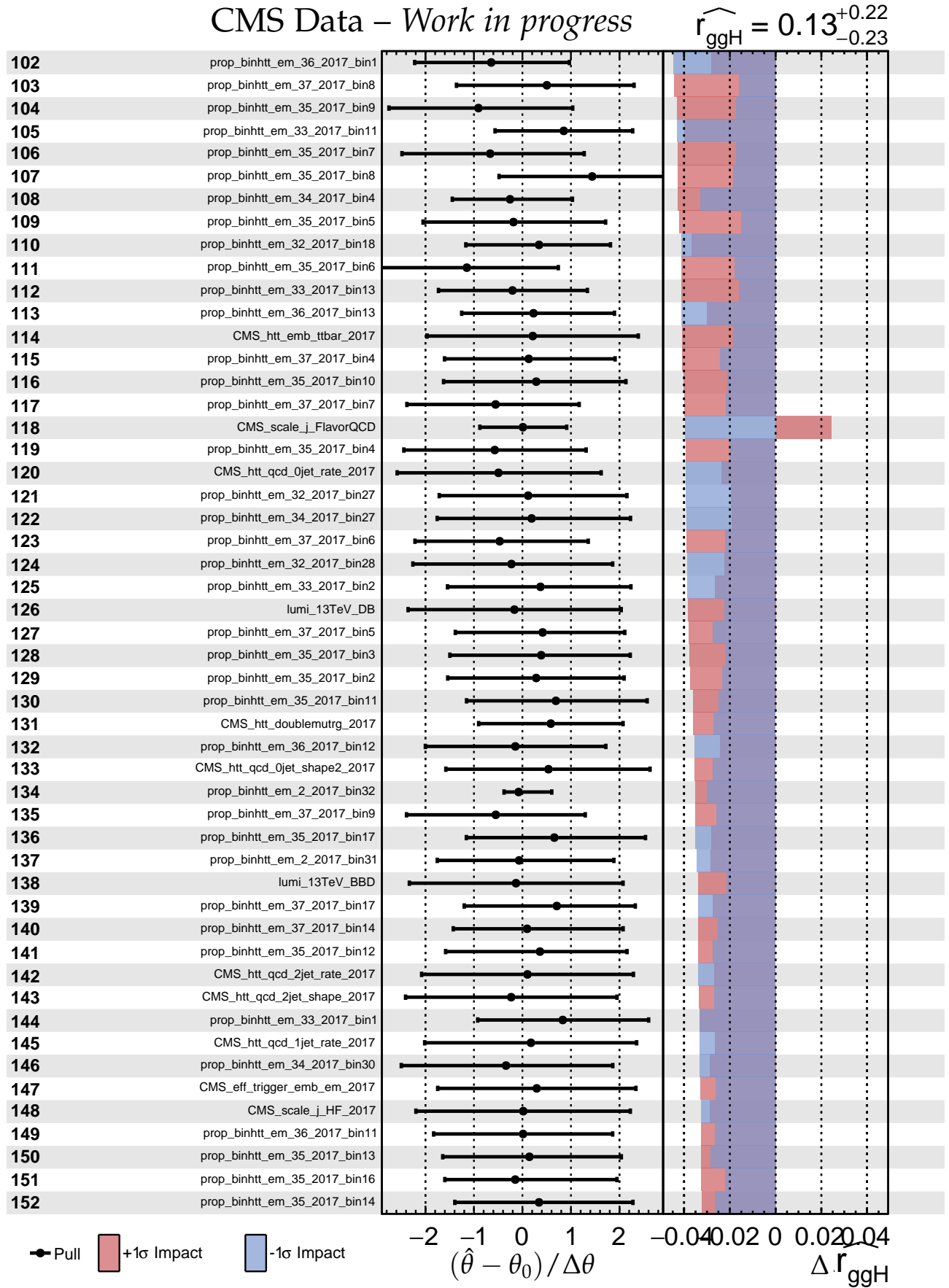




CMS Data – *Work in progress*

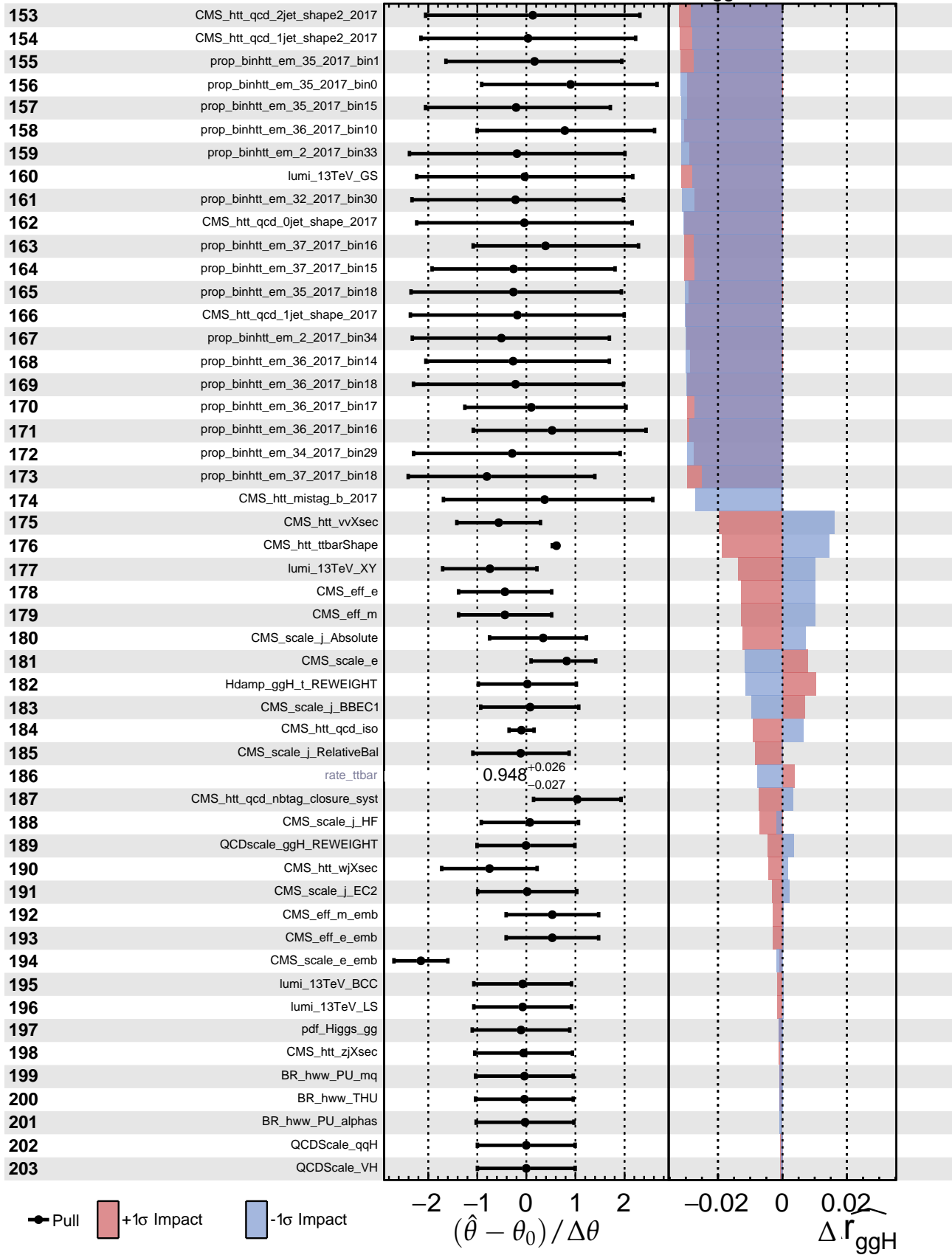
$$\hat{r}_{\text{ggH}} = 0.13^{+0.22}_{-0.23}$$

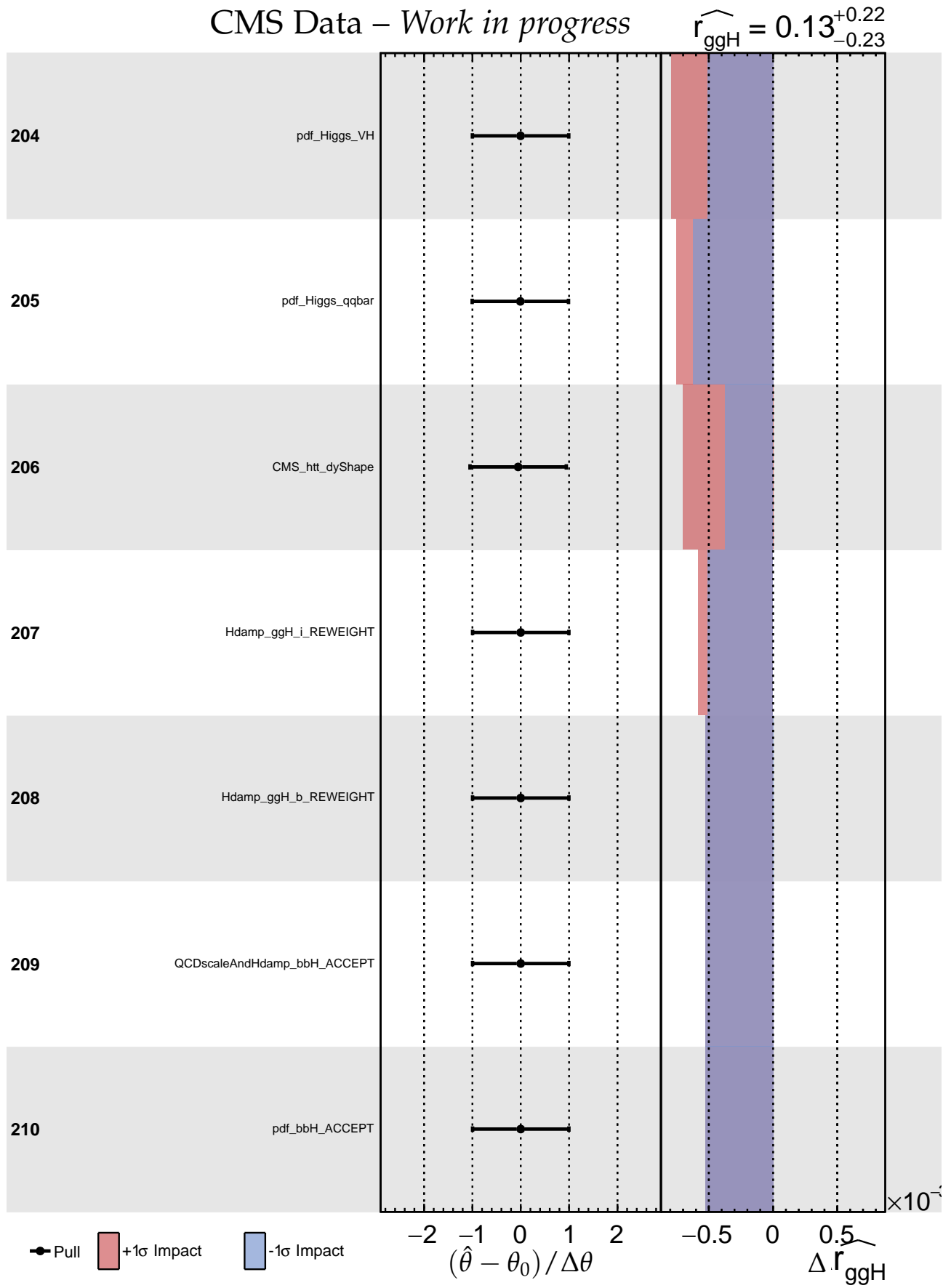




CMS Data – Work in progress

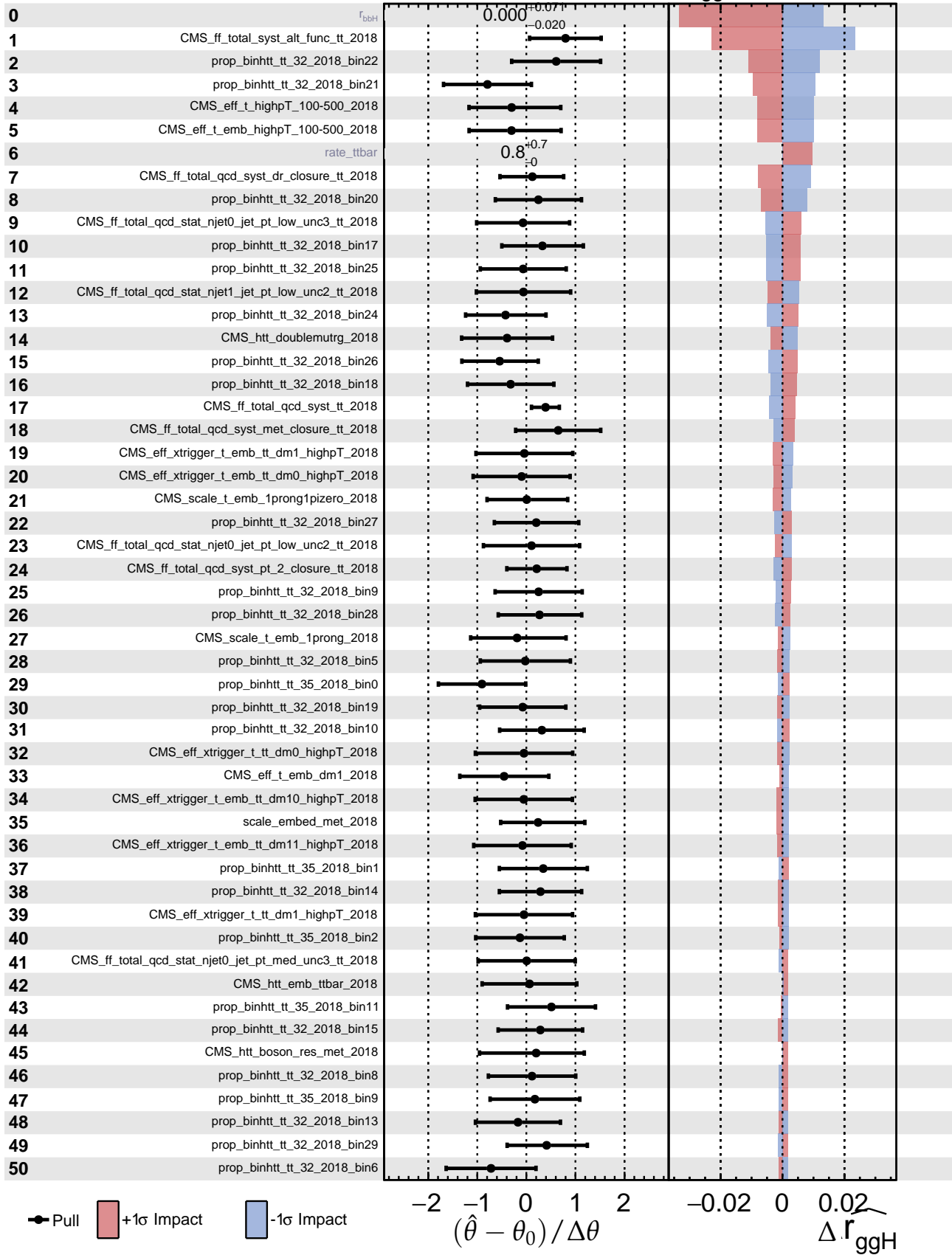
$$\hat{r}_{\text{ggH}} = 0.13^{+0.22}_{-0.23}$$

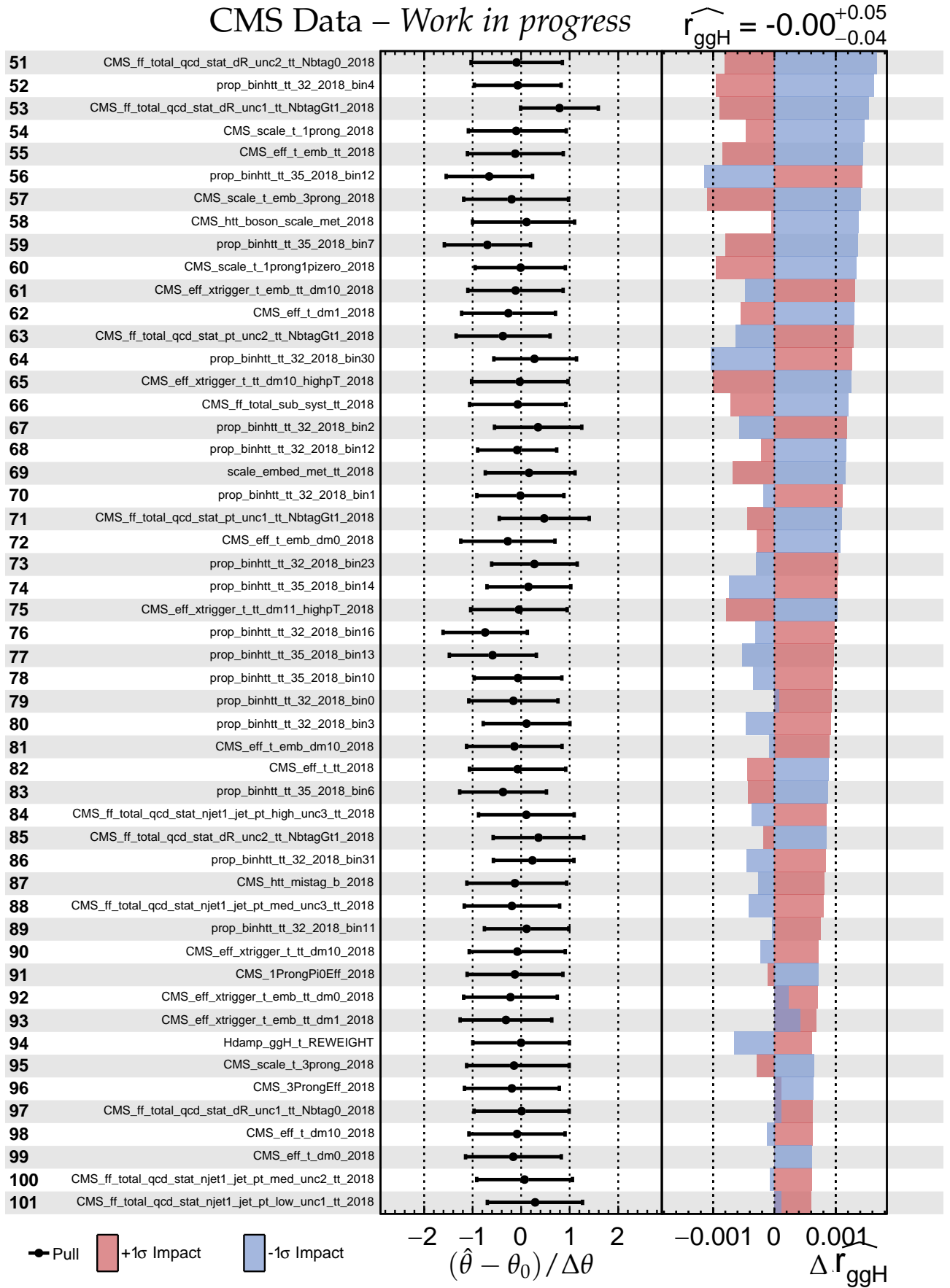




CMS Data – Work in progress

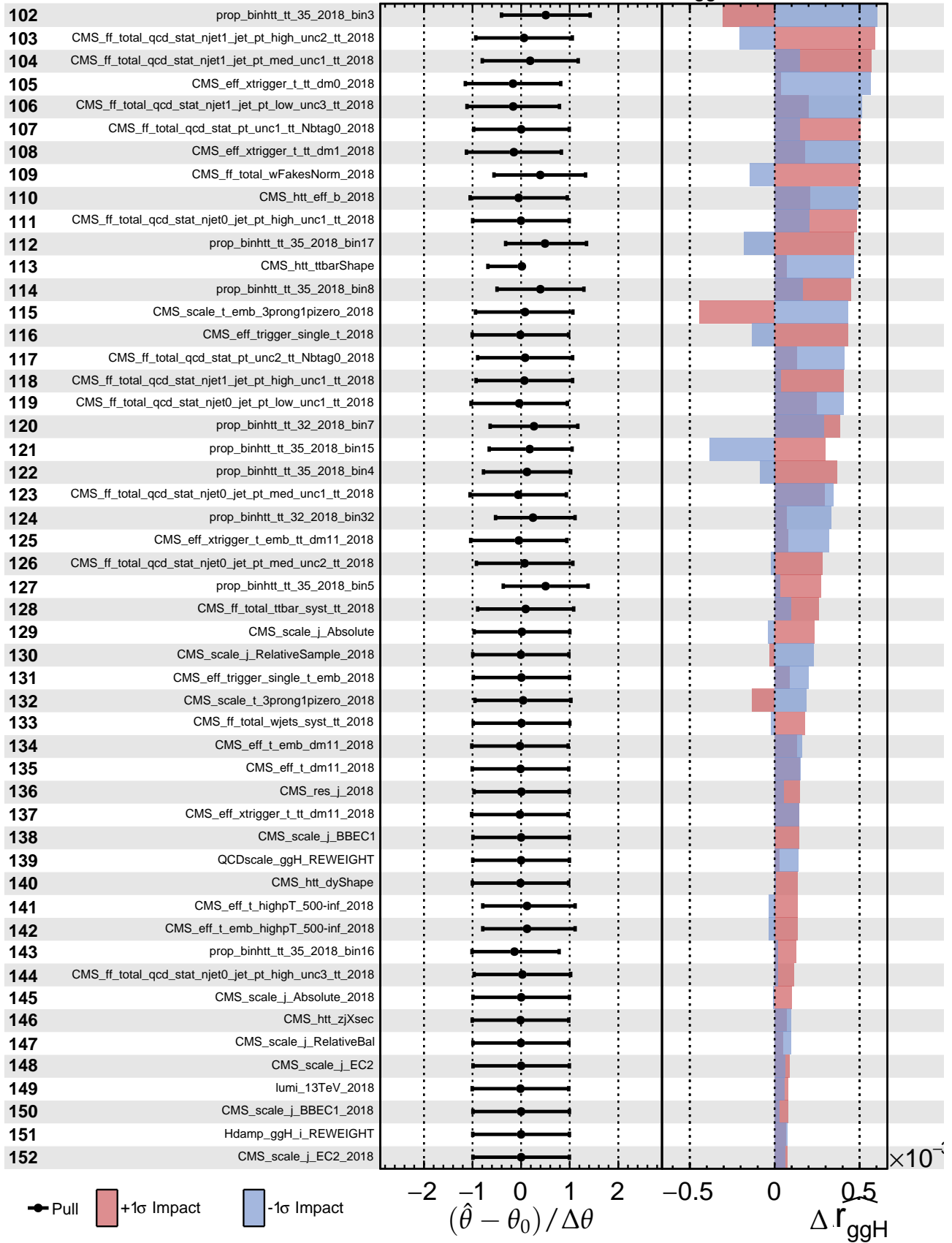
$$\hat{r}_{\text{ggH}} = -0.00^{+0.05}_{-0.04}$$

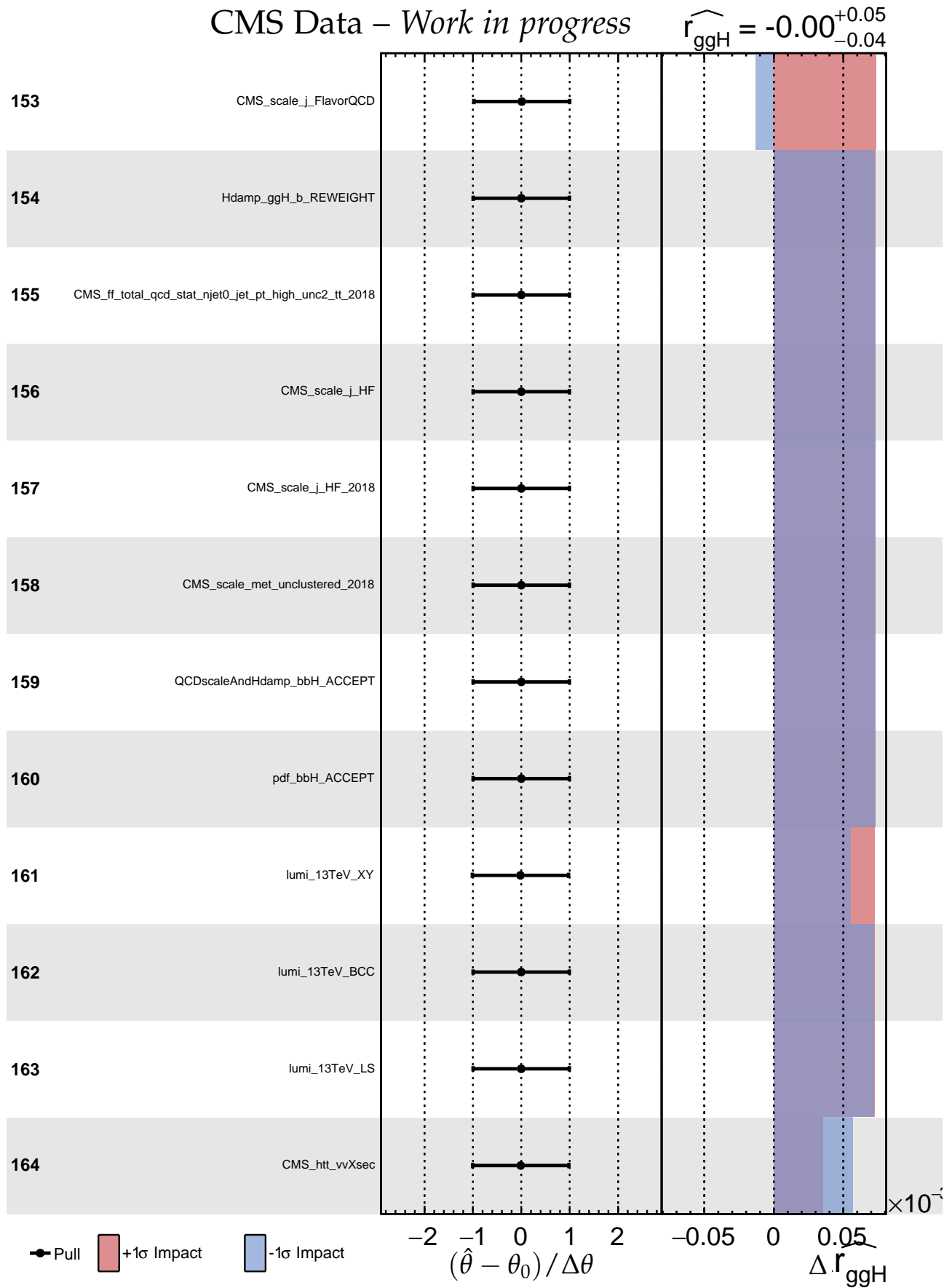




CMS Data – Work in progress

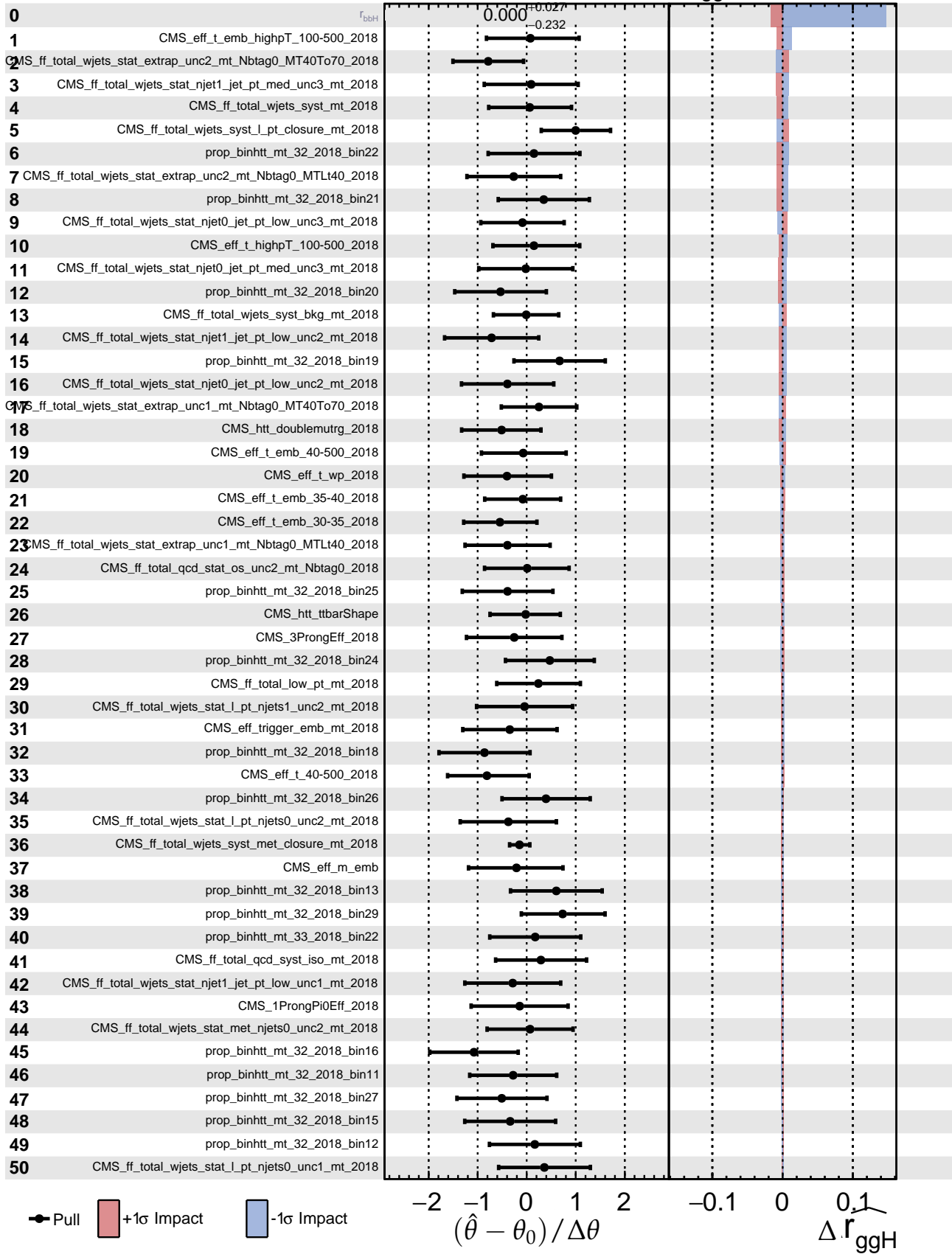
$$\hat{r}_{\text{ggH}} = -0.00^{+0.05}_{-0.04}$$

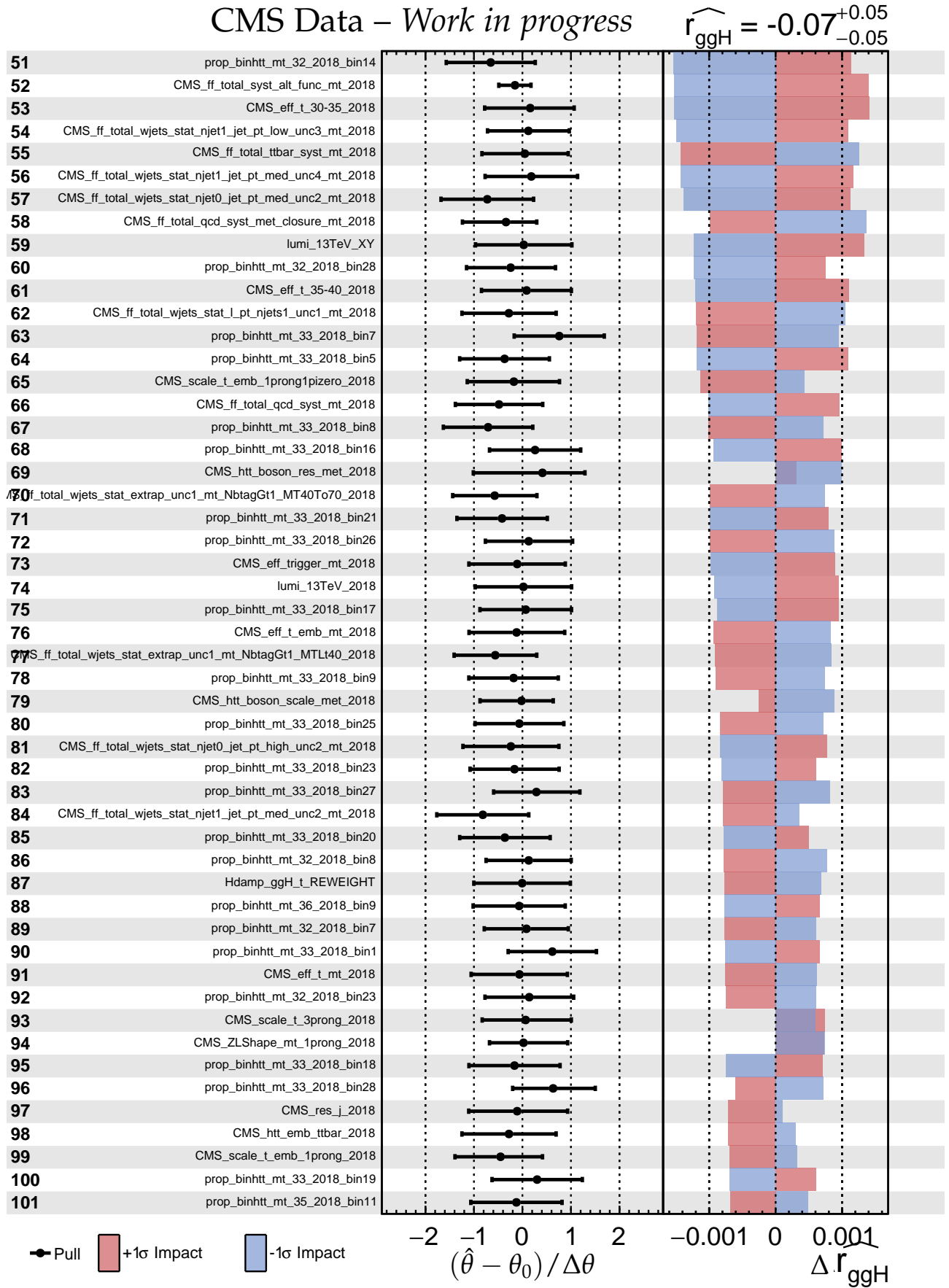




CMS Data – Work in progress

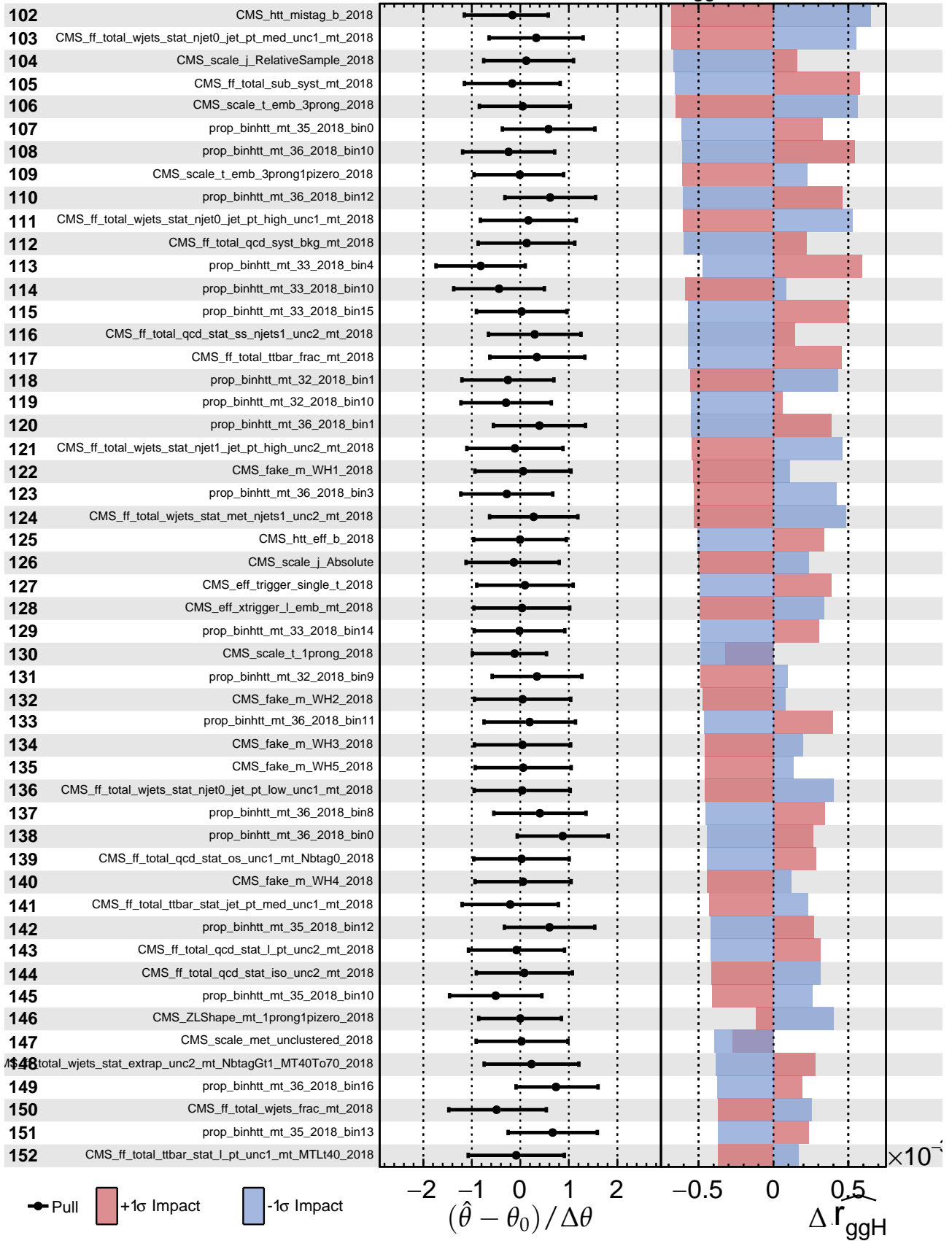
$$\widehat{r_{ggH}} = -0.07^{+0.05}_{-0.05}$$

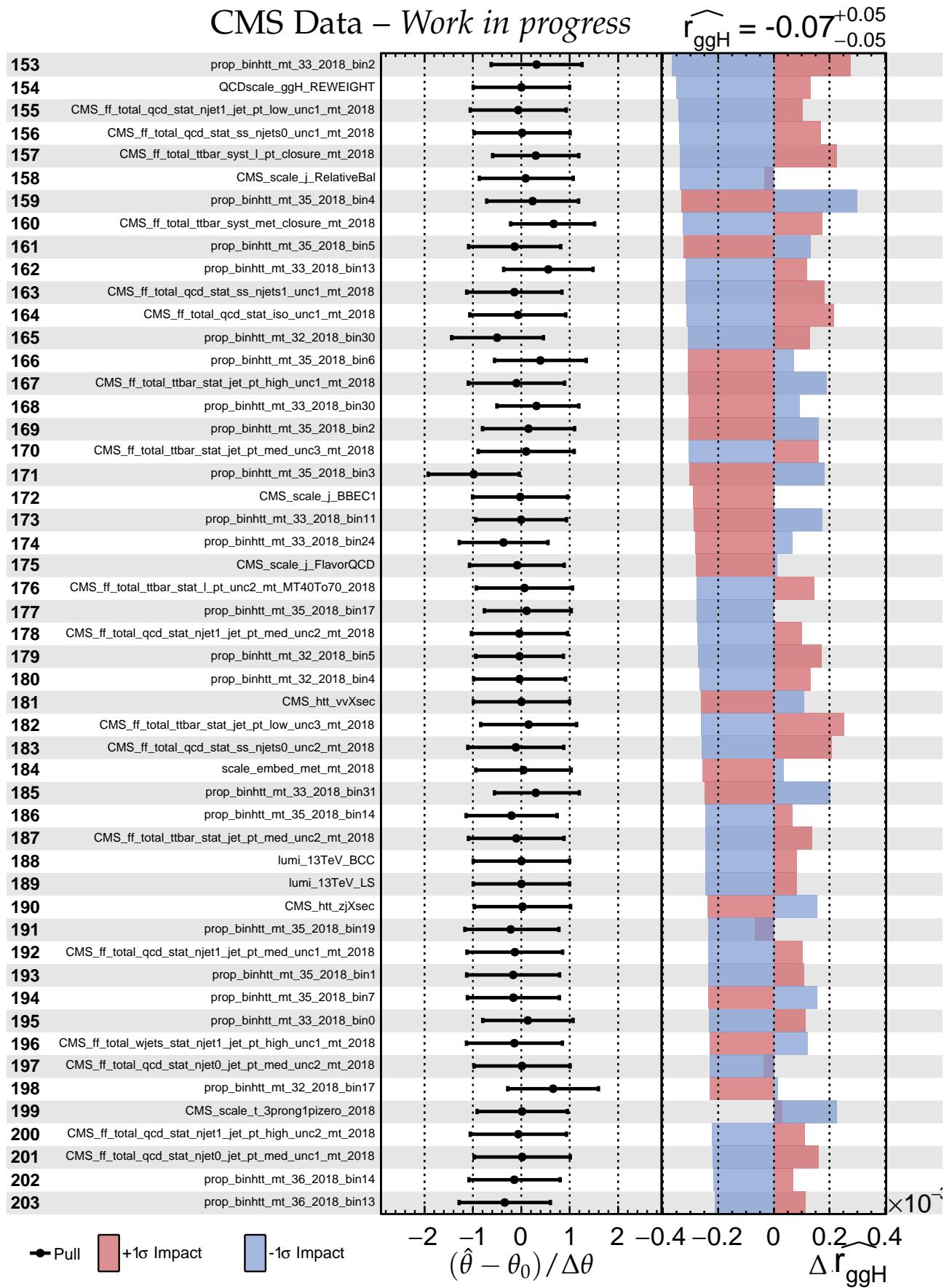




CMS Data – Work in progress

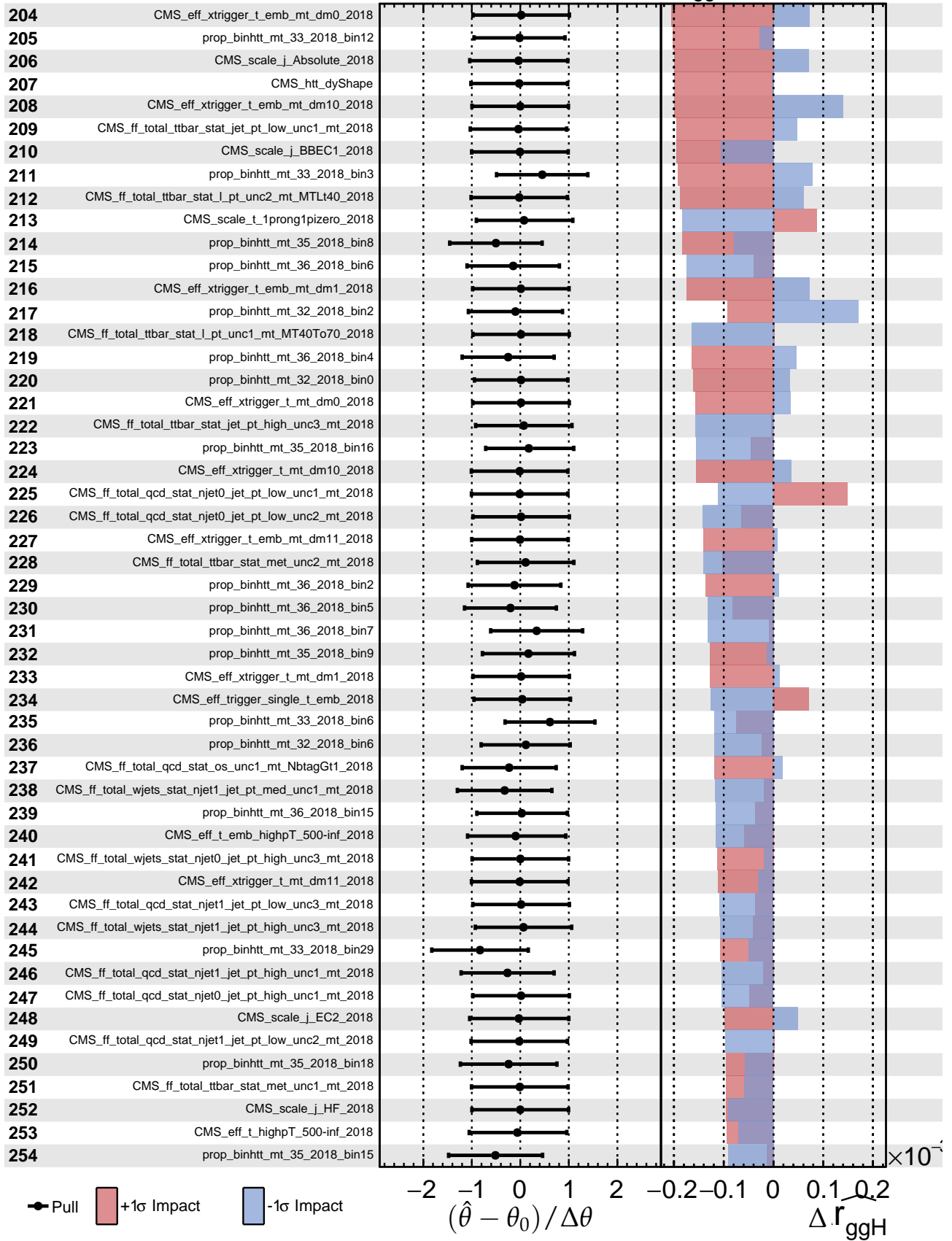
$$\hat{r}_{\text{ggH}} = -0.07^{+0.05}_{-0.05}$$

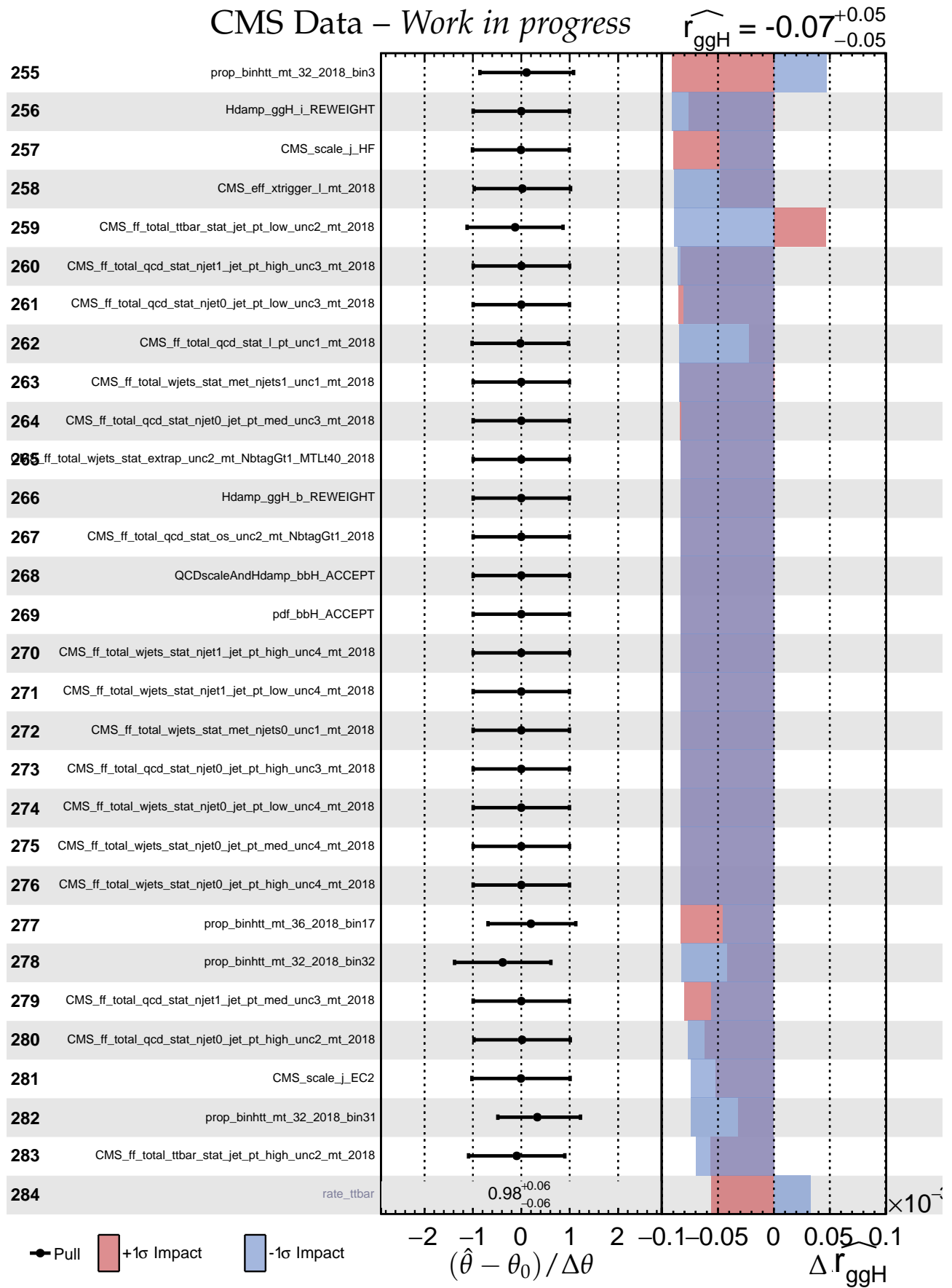




CMS Data – Work in progress

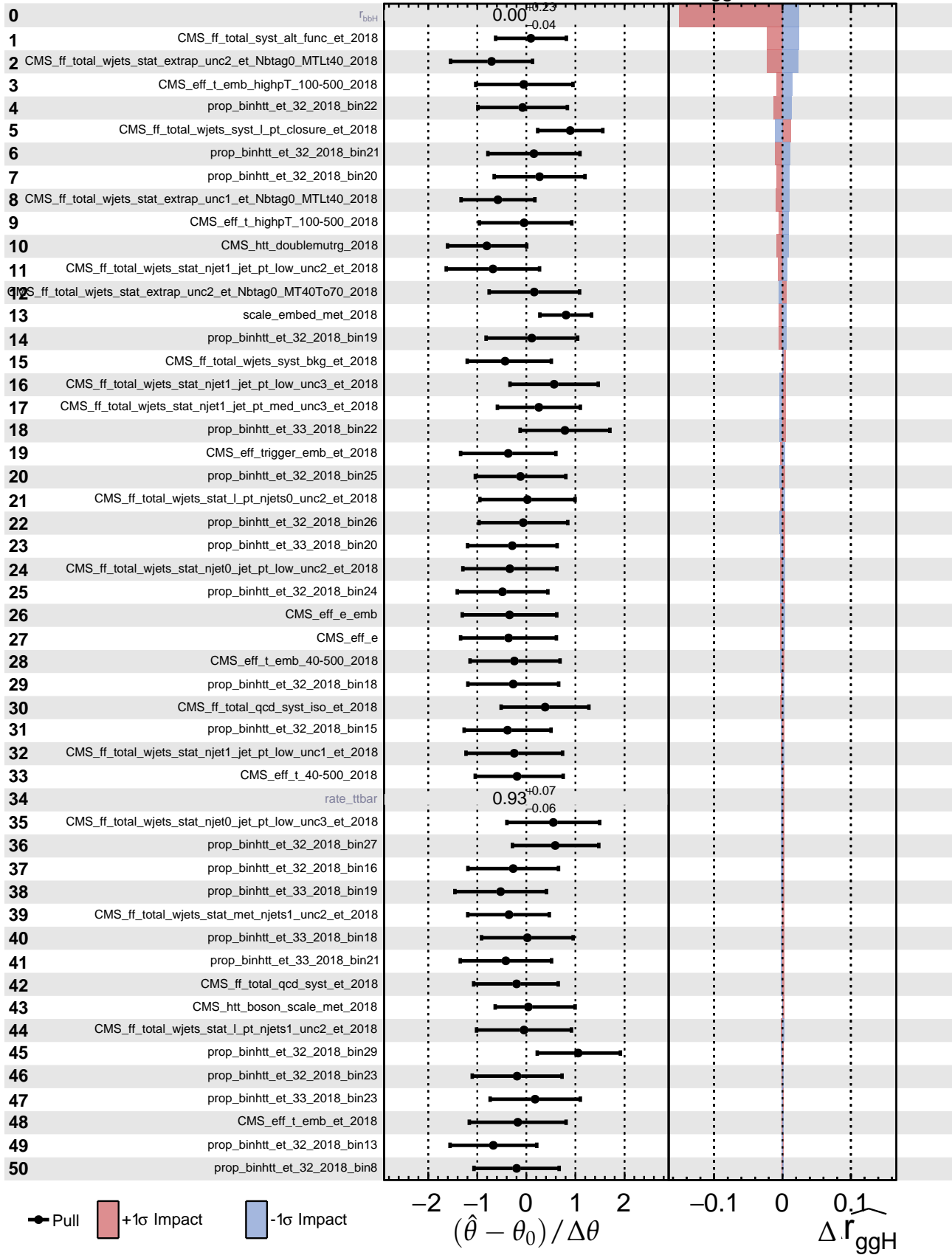
$$\hat{r}_{\text{ggH}} = -0.07^{+0.05}_{-0.05}$$





CMS Data – Work in progress

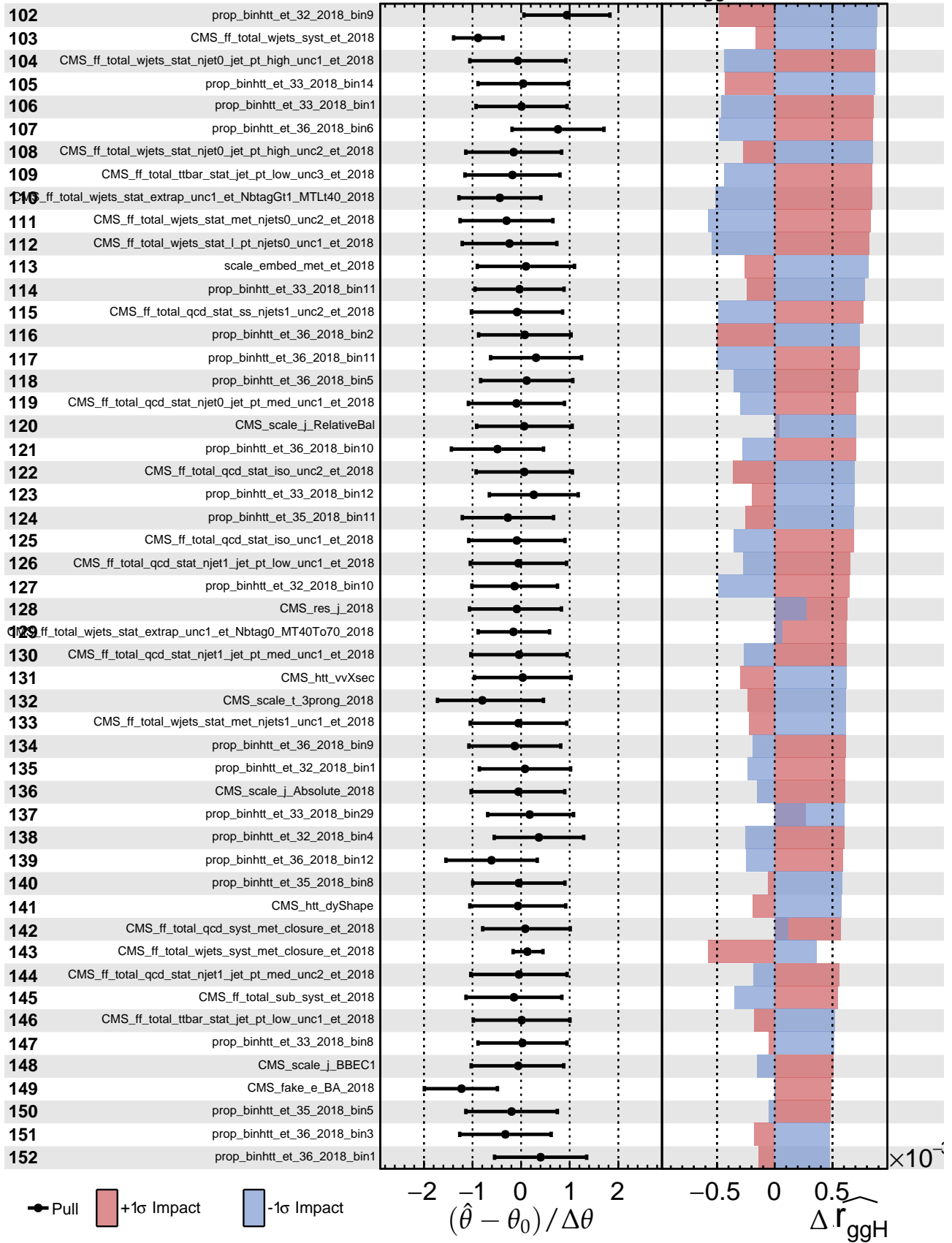
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$

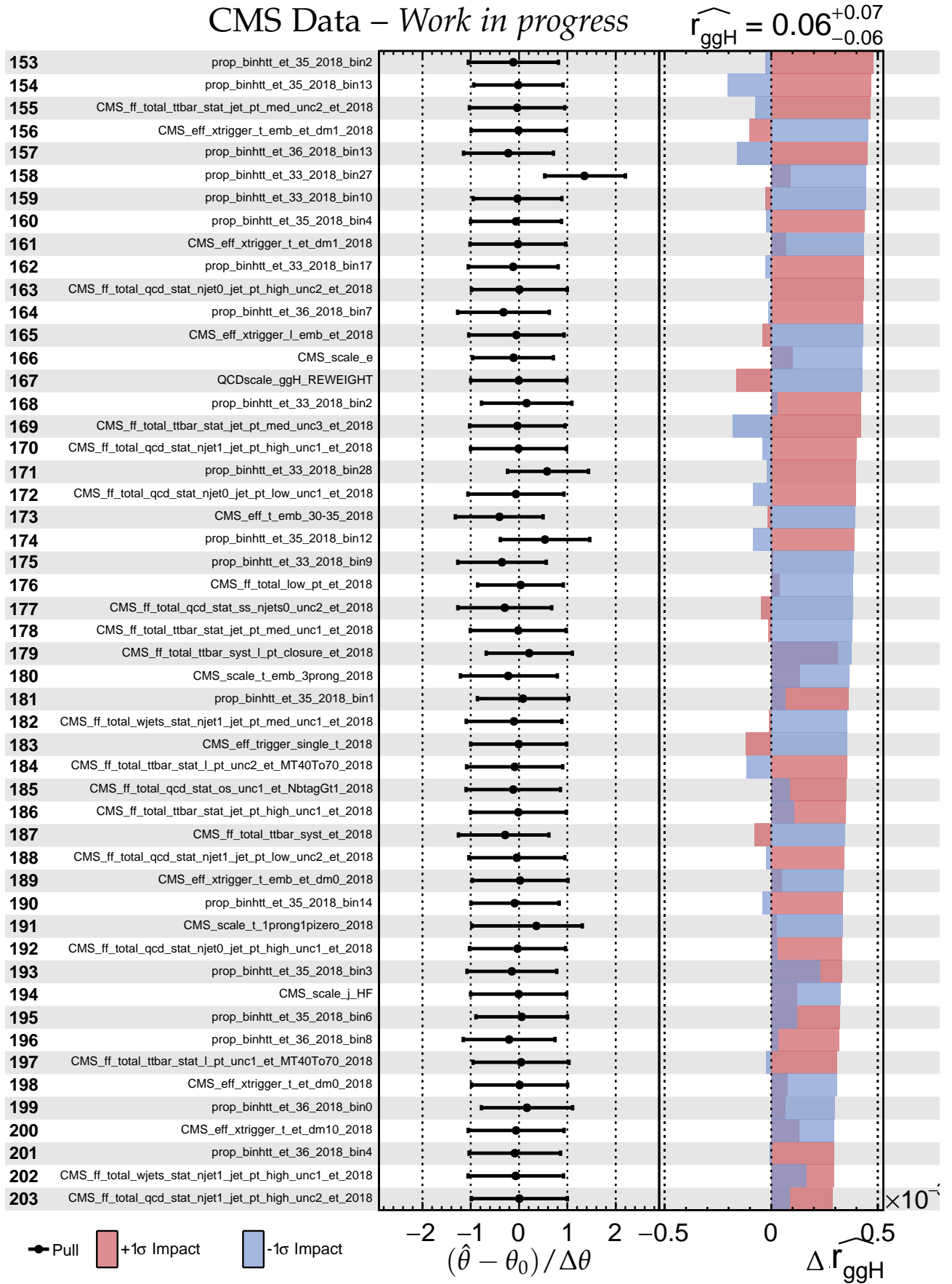




CMS Data – Work in progress

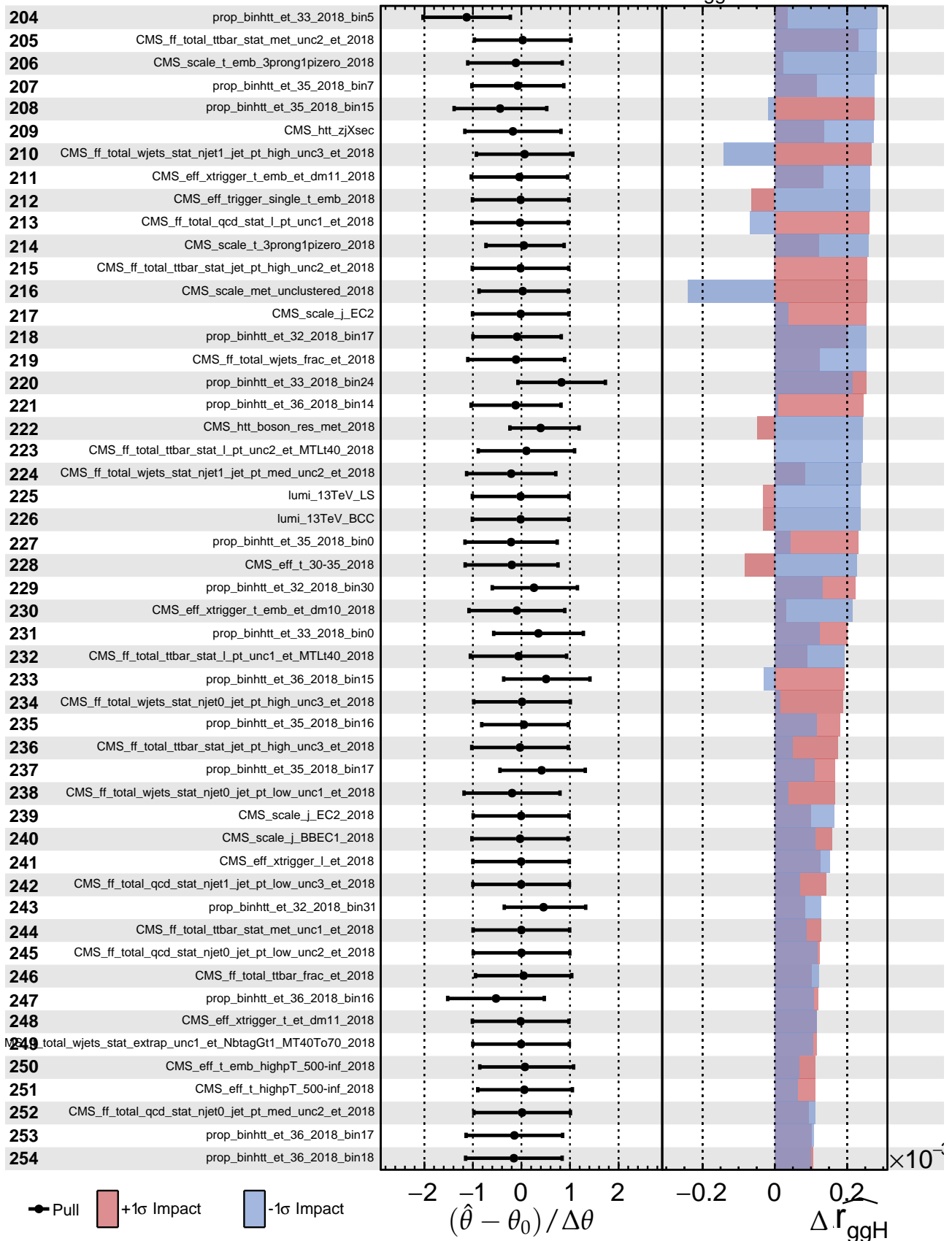
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$

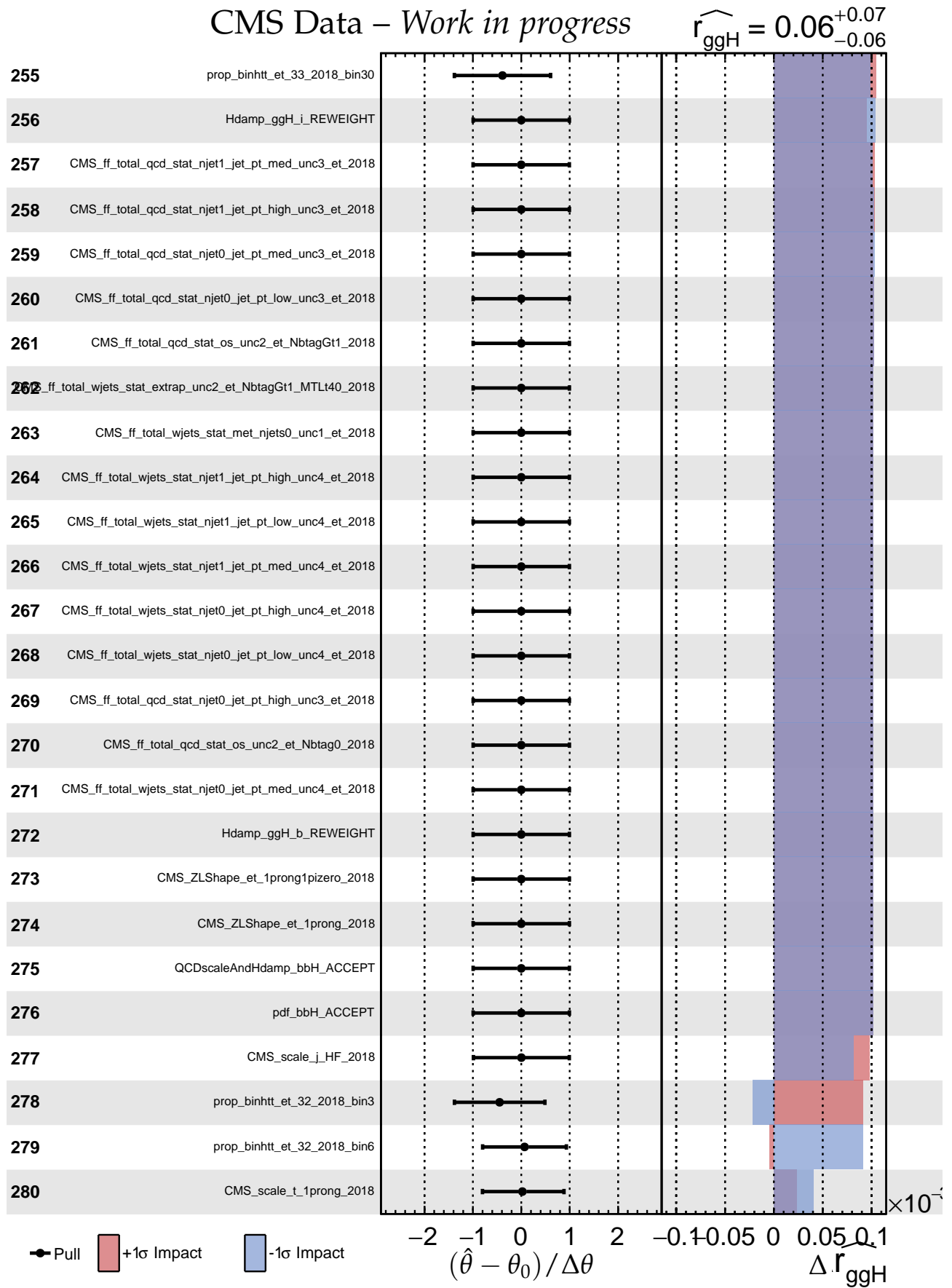




CMS Data – Work in progress

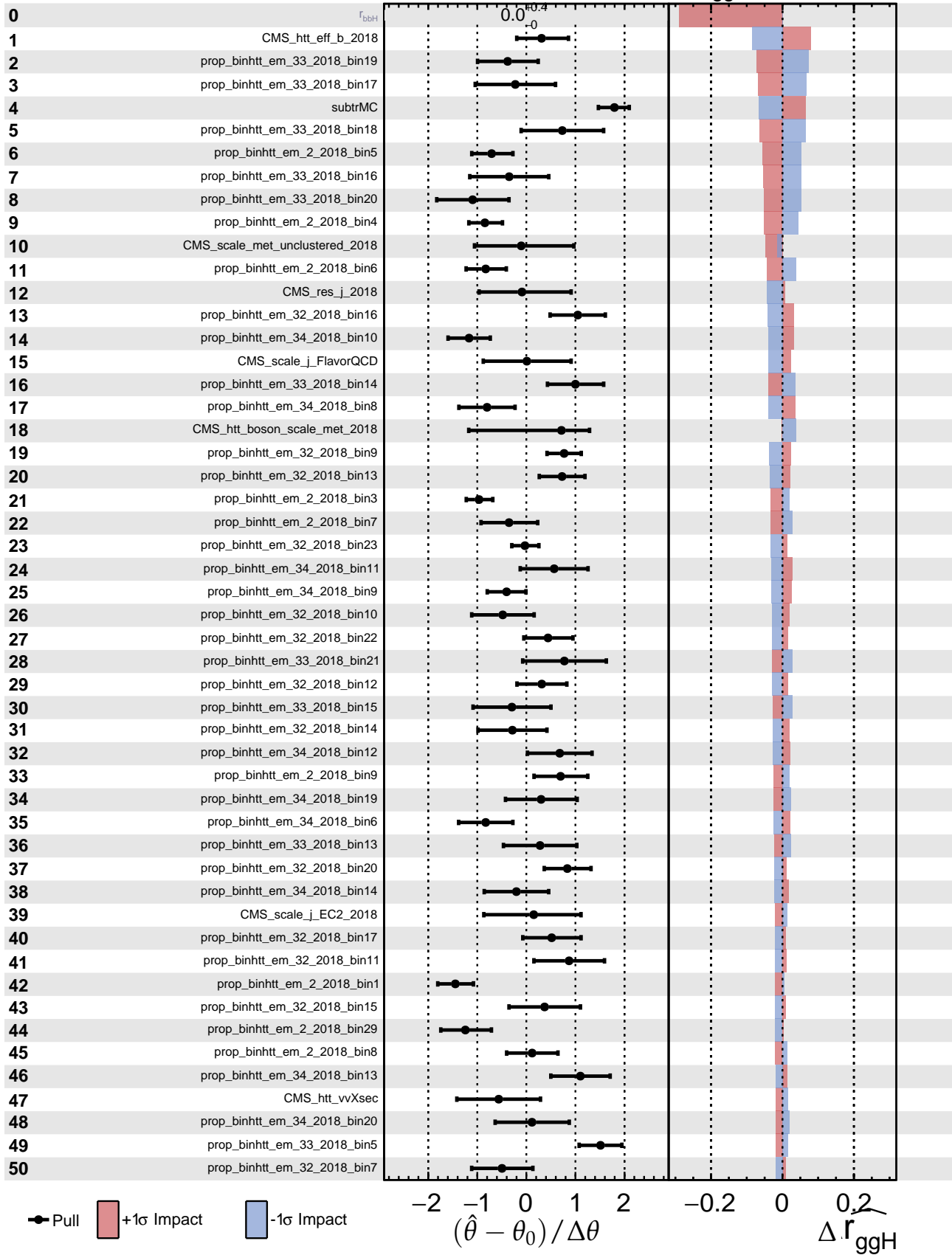
$$\hat{r}_{\text{ggH}} = 0.06^{+0.07}_{-0.06}$$





CMS Data – Work in progress

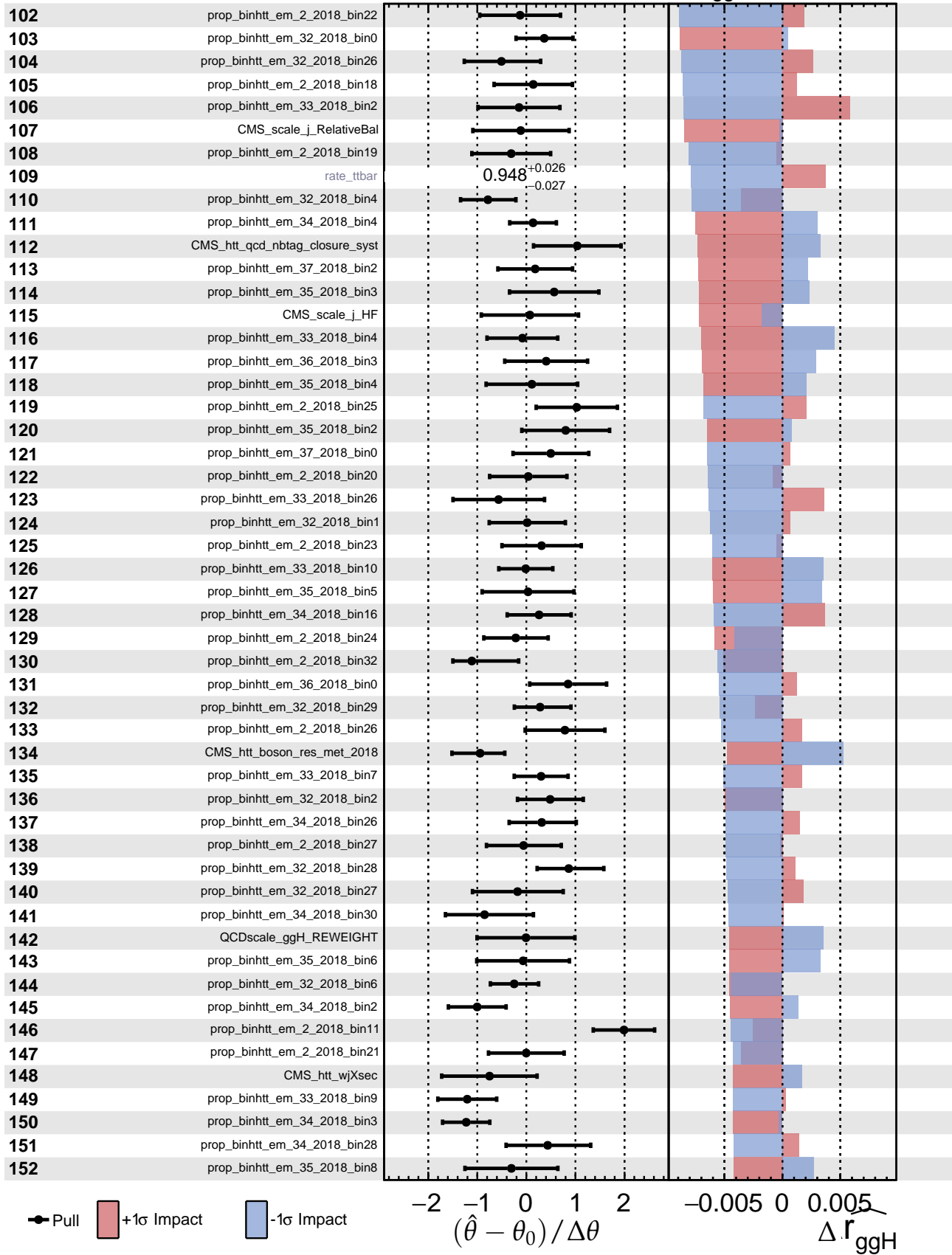
$$\hat{r}_{\text{ggH}} = 0.13^{+0.22}_{-0.23}$$

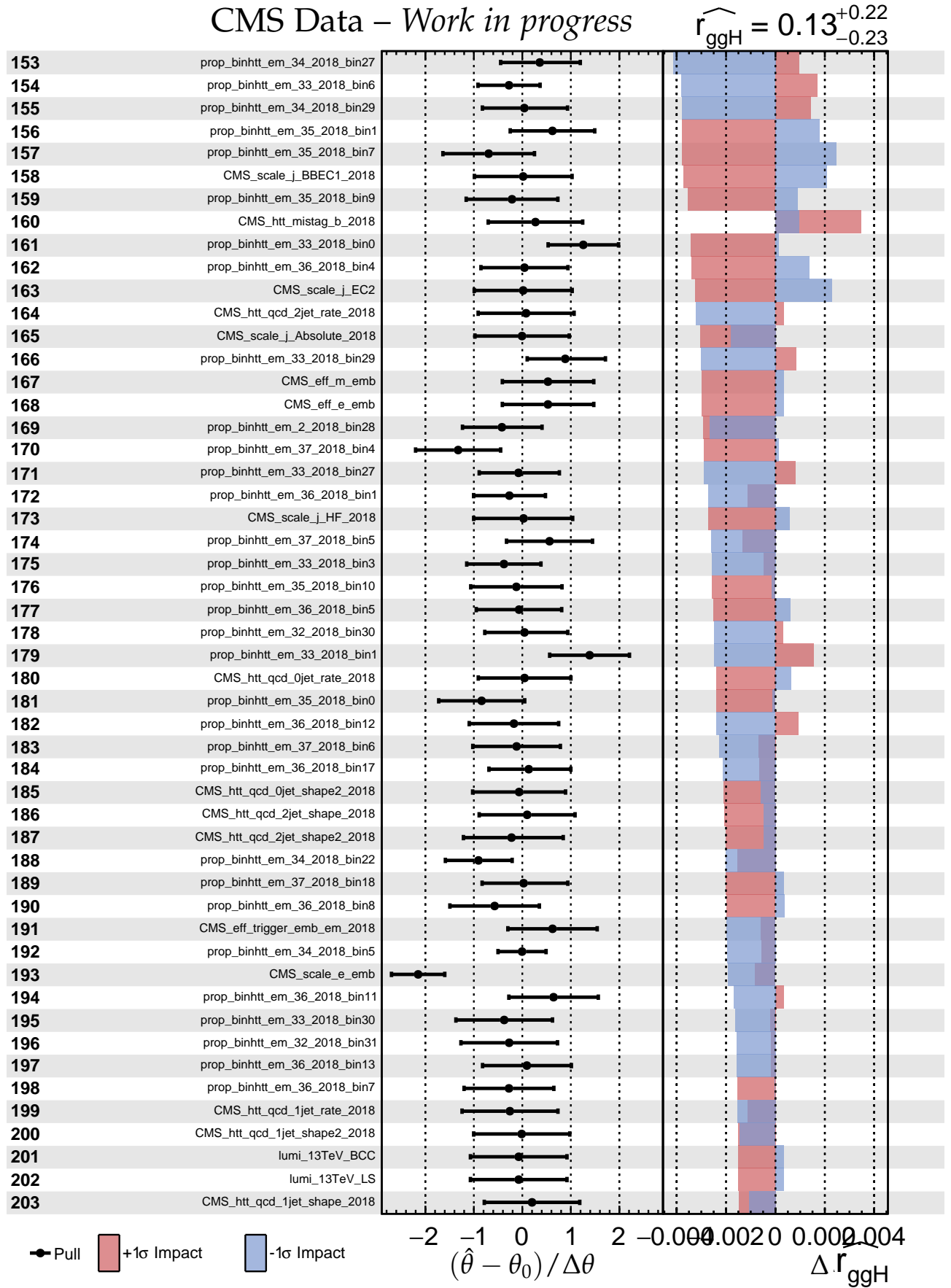




CMS Data – Work in progress

$$\hat{r}_{\text{ggH}} = 0.13^{+0.22}_{-0.23}$$





CMS Data – *Work in progress*

$$\hat{r}_{\text{ggH}} = 0.13^{+0.22}_{-0.23}$$

