1 Supplementary material

The following supplementary material is included

- Fig. 1, showing confidence regions for (x_+, y_+) and (x_-, y_-) obtained in the Run 1 measurement [1], in this measurement, and for the combination of these two results described in Sect. 8 of the main paper.

- Fig. 2, showing the distribution of the invariant mass of the B^+ (B^-) meson in Dalitz bin number -4 ($+4$) for $B \to Dh$ candidates in the downstream K^0_S category, where $D \to K^0_S\pi^+\pi^-$. The projections show the result of the fit to extract *CP* parameters, described in Sect. 6 of the main paper. *CP* violation is visible in the different heights of the $B^\pm \to DK^\pm$ signal peaks.

References

[1] LHCb collaboration, R. Aaij *et al.*, *Measurement of the CKM angle γ using $B^\pm \to DK^\pm$ with $D \to K^0_S\pi^+\pi^-$, $K^0_S K^+K^-$ decays*, JHEP **10** (2014) 097, arXiv:1408.2748.

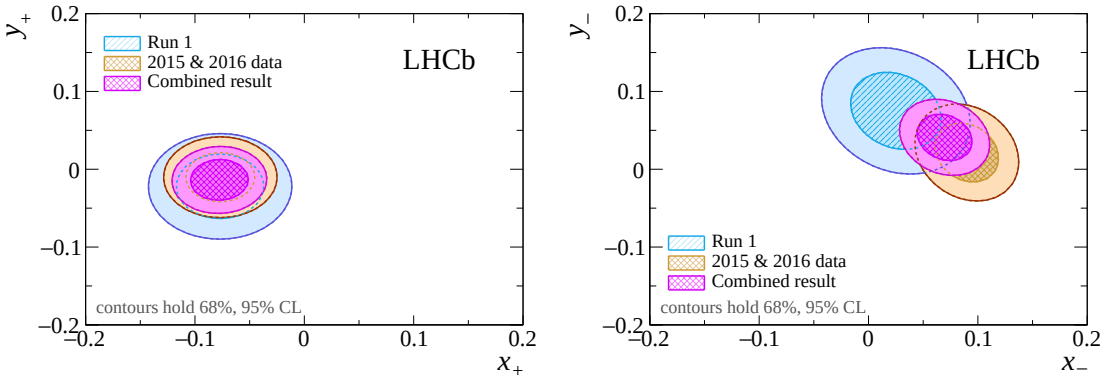

Figure 1: Two-dimensional 68.3 % and 95.5 % confidence regions for (x_+, y_+) and (x_-, y_-) obtained in the Run 1 measurement [1], in this measurement, and for the combination of these two results described in Sect. 8 of the main paper.

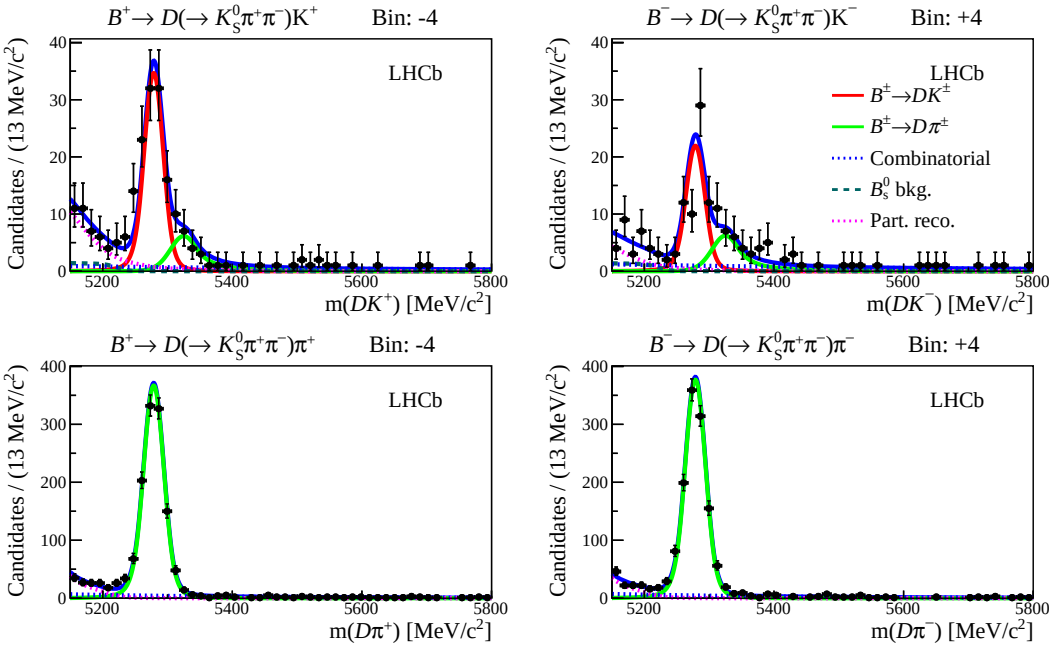

Figure 2: Distribution of the invariant mass of the B^+ (B^-) meson in Dalitz bin number -4 ($+4$) for $B \to Dh$ candidates in the downstream K^0_S category, where $D \to K^0_S\pi^+\pi^-$. The projections show the result of the fit to extract *CP* parameters, described in Sect. 6 of the main paper. *CP* violation is visible in the different heights of the $B^\pm \to DK^\pm$ signal peaks. The B^0_s background shape is shown separately in these plots, because it is treated differently from the other partly reconstructed backgrounds in the Dalitz-plot binned fit.