Screening summary of the CUED program

The CUED program is developed and maintained by:

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1 Information

The data presented in this PDF is a collection of the data produced by all parameter combinations. It is not new data but only presented in a cohesive form to make it easier to see parametric dependencies.

2 Screening results parallel Emission

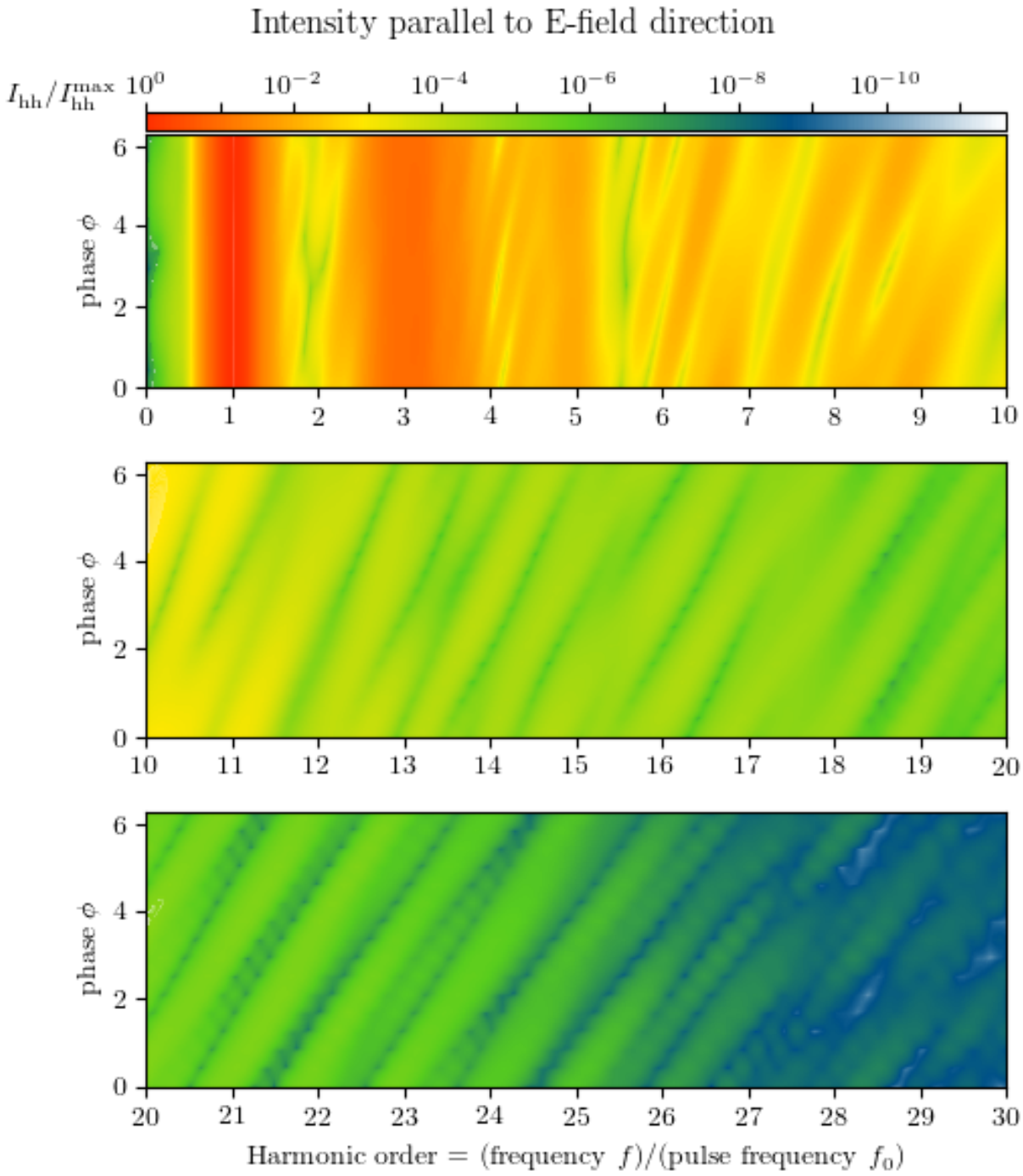

Figure 1: Screening plot of phase against frequency. The maximum intensity in electric field direction is $I_{hh}^{max} = 3.5959 \times 10^{-16}$ [a.u.].

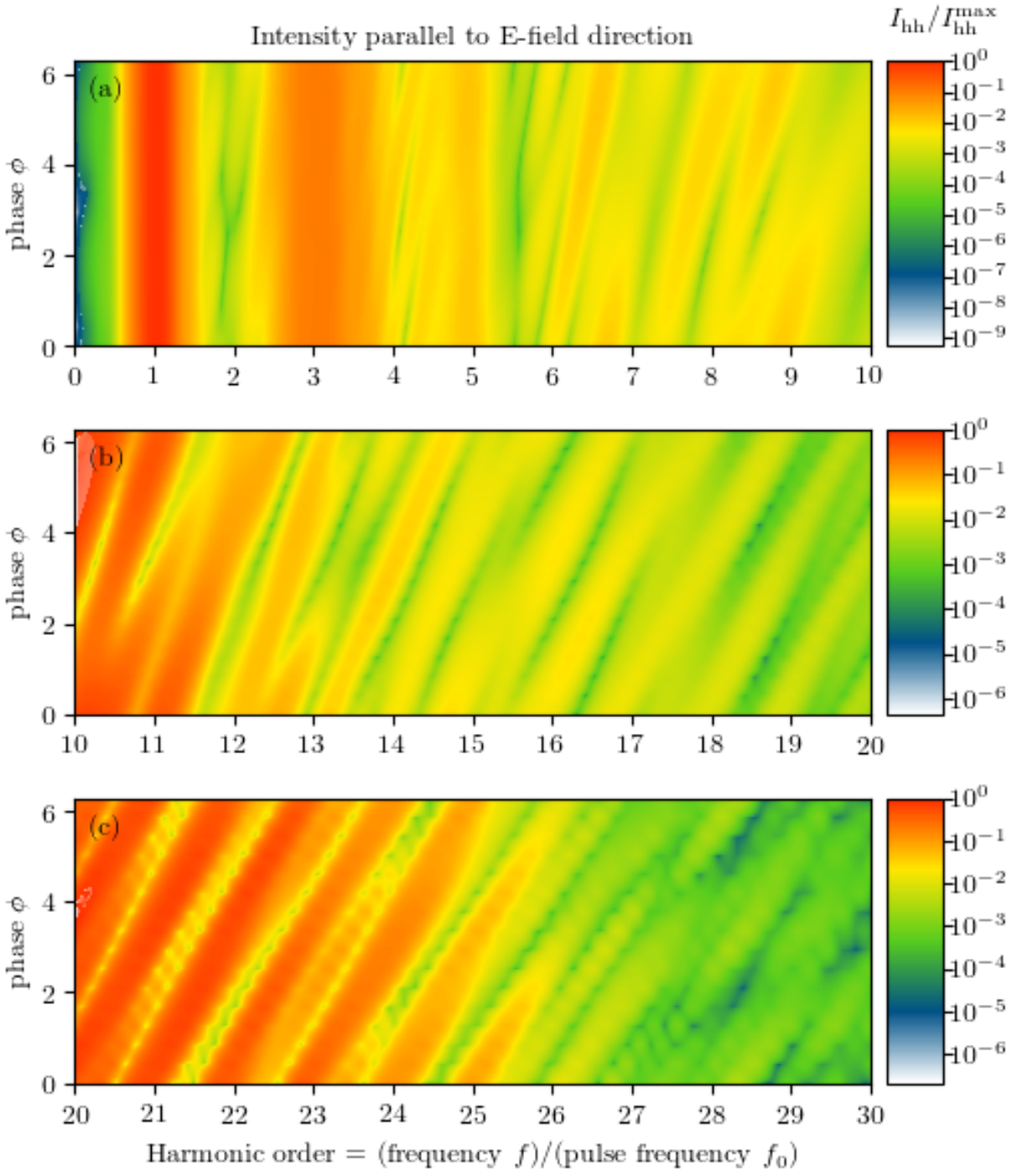

Figure 2: This plot is a repetition of fig. 1 with individual color highlighting per higher harmonic region. The maximum intensity in electric field direction for the plots is (a): $I_{\mathrm{hh}}^{\mathrm{max}} = 3.5959 \times 10^{-16}$ [a.u.], (b): $I_{\mathrm{hh}}^{\mathrm{max}} = 6.1428 \times 10^{-19}$ [a.u.] and (c): $I_{\mathrm{hh}}^{\mathrm{max}} = 3.9938 \times 10^{-21}$ [a.u.].

3 Screening results orthogonal Emission

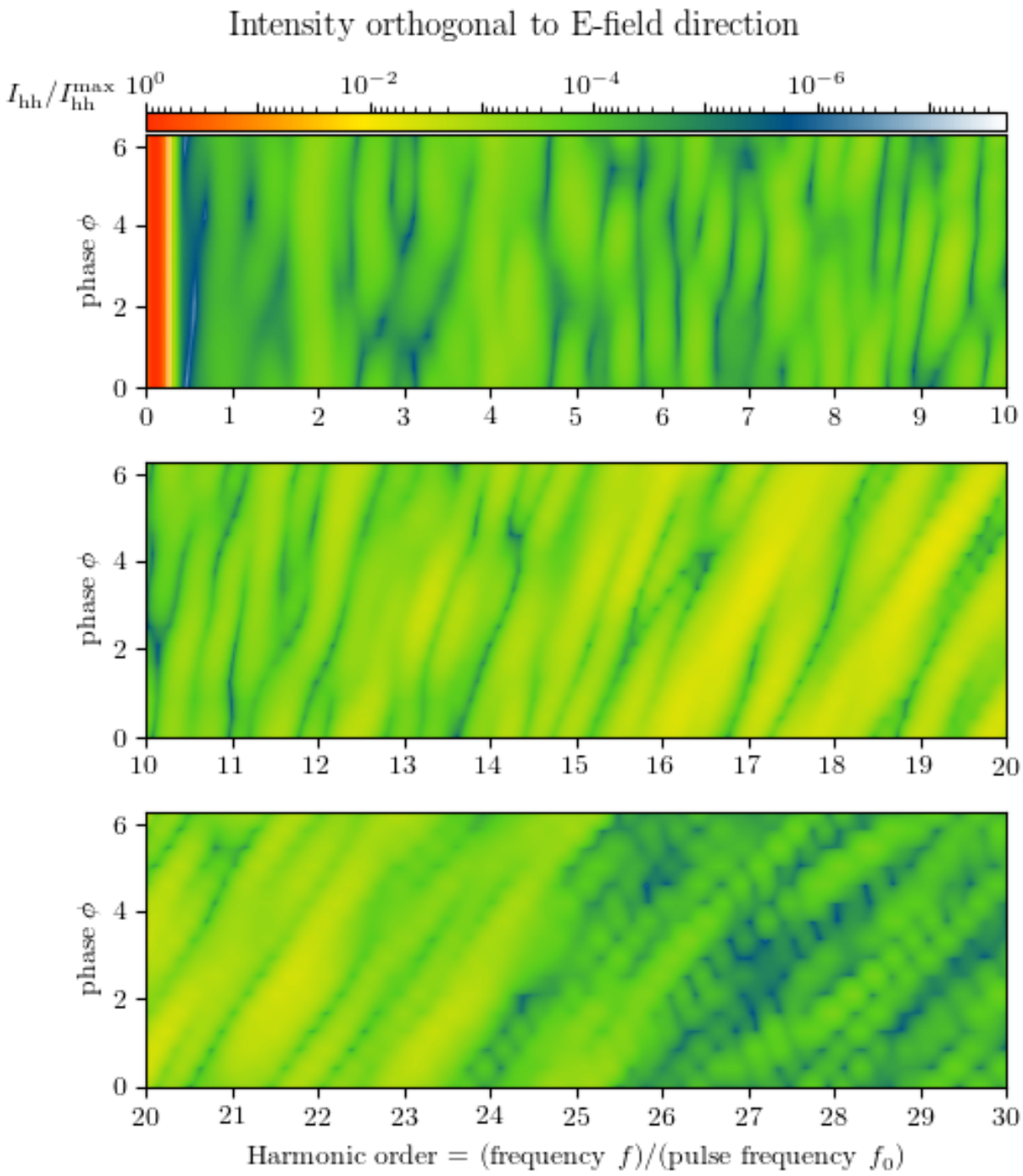

Figure 3: Screening plot of phase against frequency. The maximum intensity orthogonal to the electric field direction is $I_{hh}^{max} = 5.9174 \times 10^{-22}$ [a.u.].

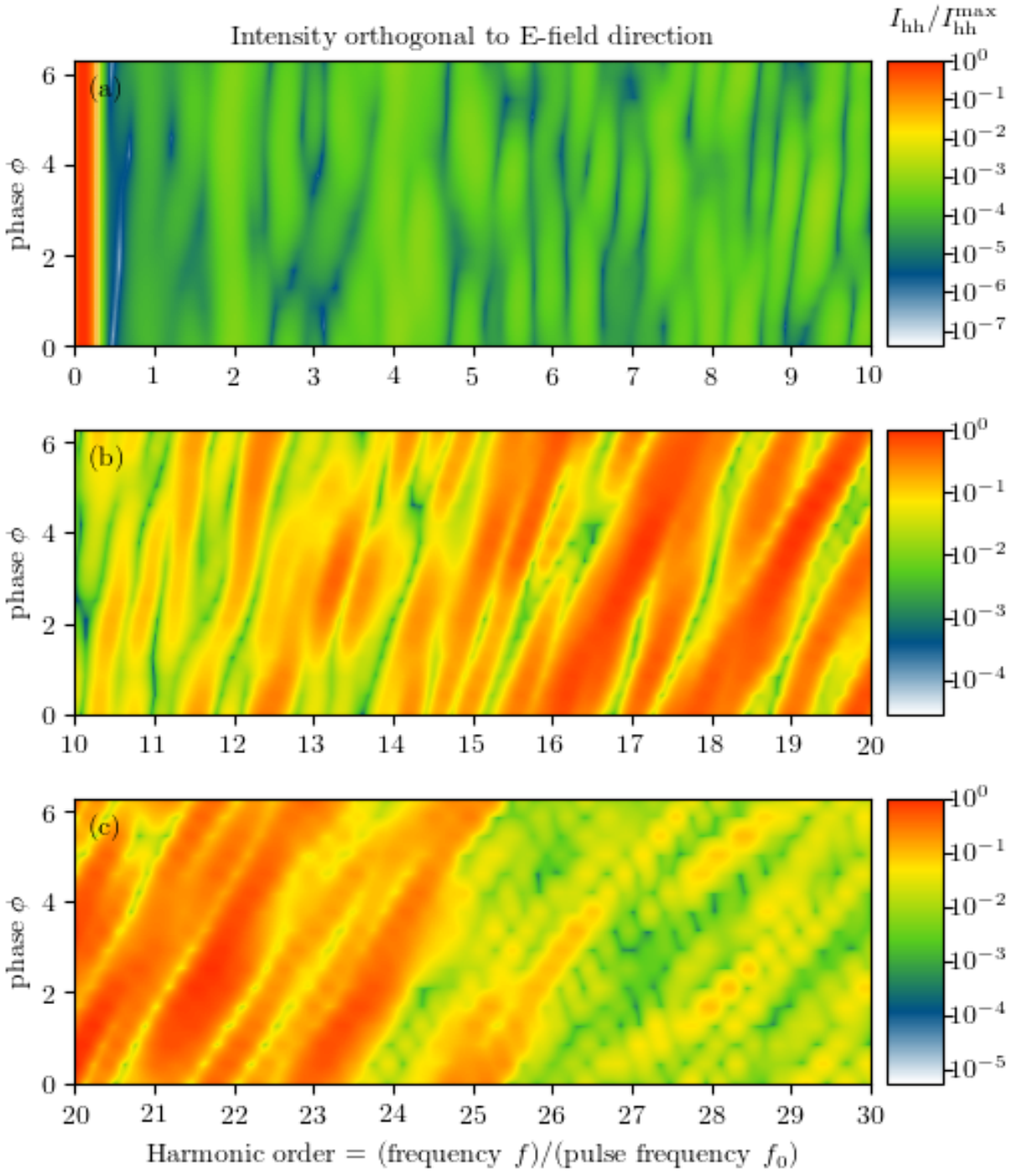

Figure 4: This plot is a repetition of fig. 3 with individual color highlighting per higher harmonic region. The maximum intensity in electric field direction for the plots is (a): $I_{\mathrm{hh}}^{\mathrm{max}} = 5.9174 \times 10^{-22}$ [a.u.], (b): $I_{\mathrm{hh}}^{\mathrm{max}} = 3.6300 \times 10^{-24}$ [a.u.] and (c): $I_{\mathrm{hh}}^{\mathrm{max}} = 2.1707 \times 10^{-24}$ [a.u.].

4 Screening results sum of Emissions

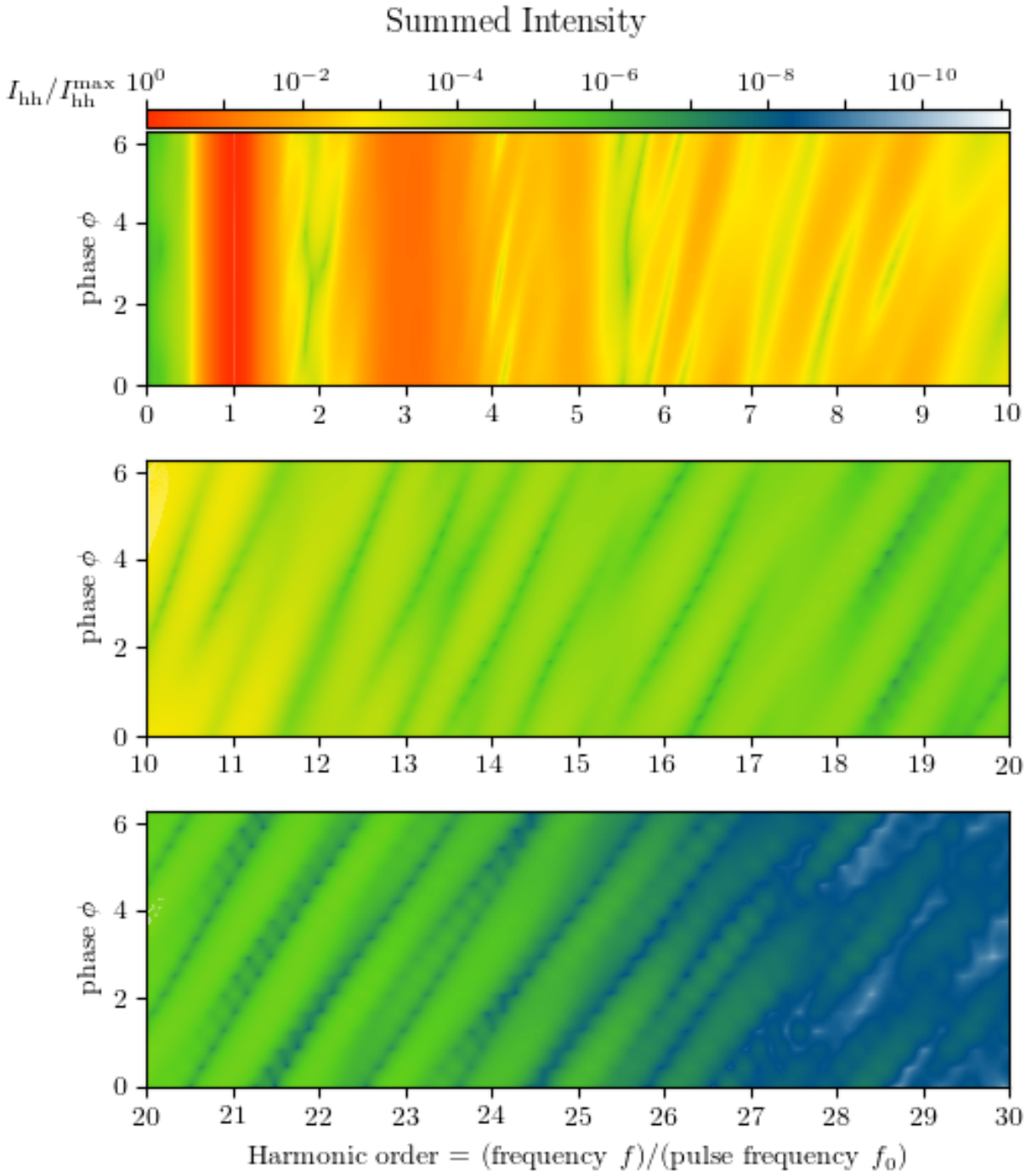

Figure 5: Screening plot of phase against frequency. The maximum intensity orthogonal to the electric field direction is $I_{\mathrm{hh}}^{\mathrm{max}} = 3.5959 \times 10^{-16}$ [a.u.].

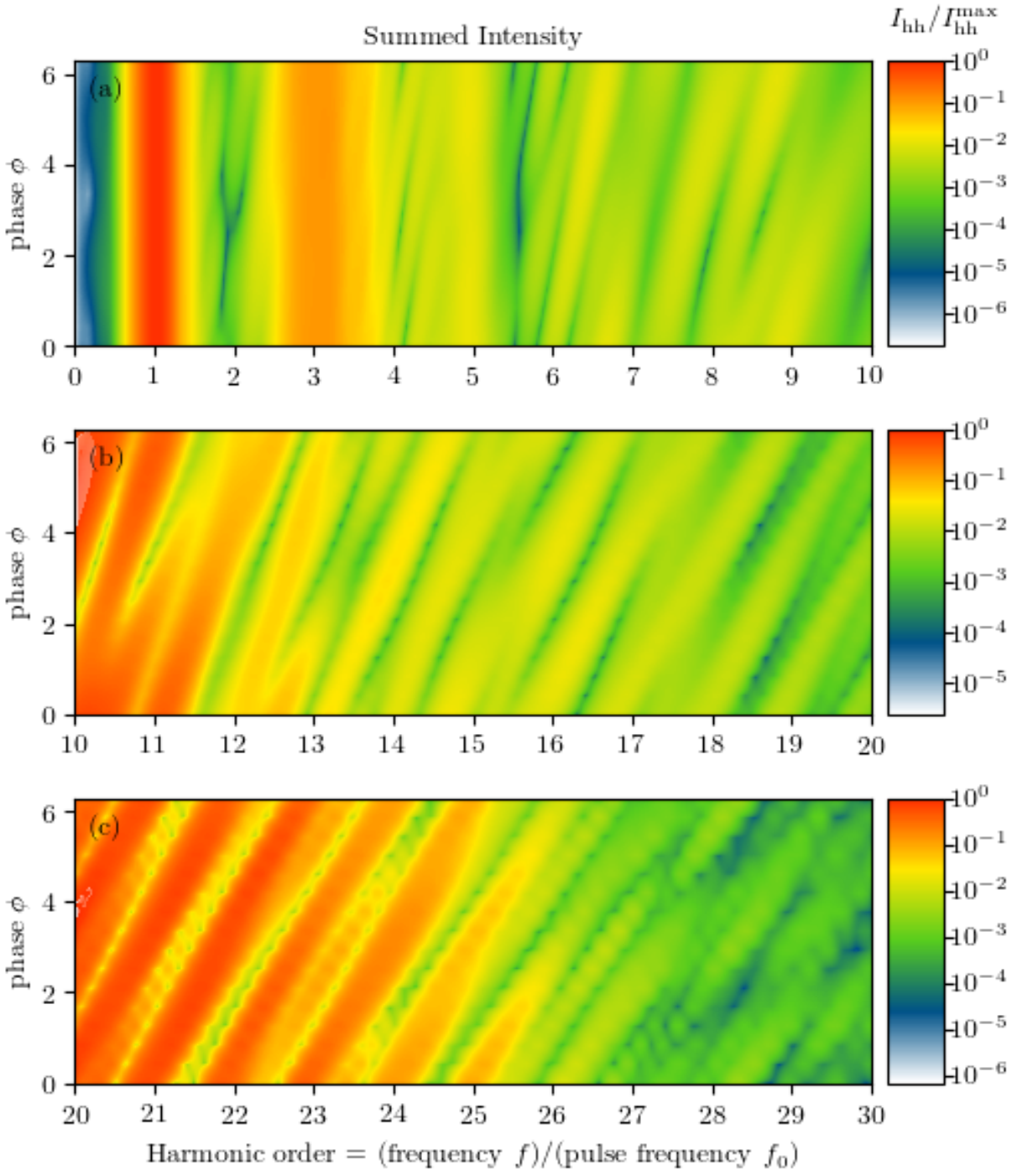

Figure 6: This plot is a repetition of fig. 5 with individual color highlighting per higher harmonic region. The maximum intensity in electric field direction for the plots is (a): $I_{\mathrm{hh}}^{\mathrm{max}} = 3.5959 \times 10^{-16}$ [a.u.], (b): $I_{\mathrm{hh}}^{\mathrm{max}} = 6.1428 \times 10^{-19}$ [a.u.] and (c): $I_{\mathrm{hh}}^{\mathrm{max}} = 3.9951 \times 10^{-21}$ [a.u.].

5 References

When using the CUED software package, please reference to CUED by citing the following publication:

[1] J. Wilhelm, P. Grössing, A. Seith, J. Crewse, M. Nitsch, L. Weigl, C. Schmid, and F. Evers, *Semiconductor-Bloch Formalism: Derivation and Application to High-Harmonic Generation from Dirac Fermions*, Phys. Rev. B **103**, 125419 (2021).