

Cross Check the GUI

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Cross check the GUI

To cross-check the GUI as of December 2020, we compared the GUI with ifo-models.

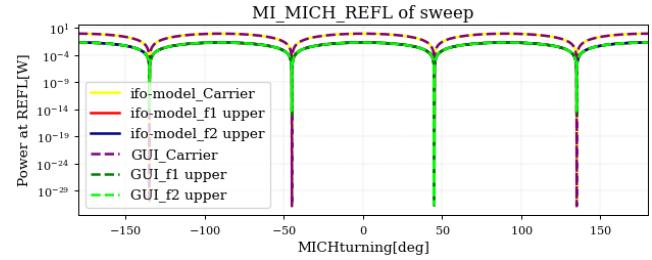
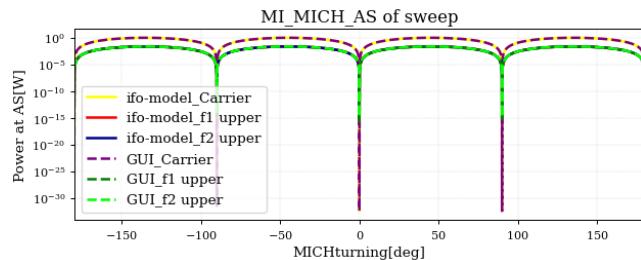
Using both of kat files, same signals in a same conditions were calculated and plotted together.

The GUI and ifo-models agreed

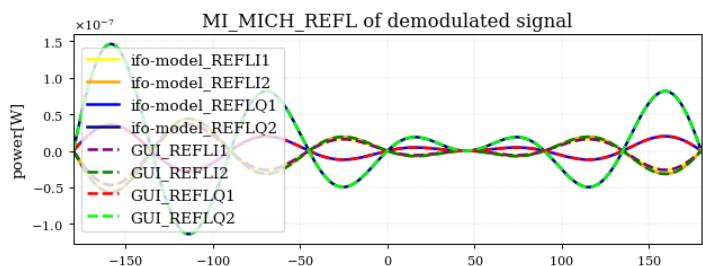
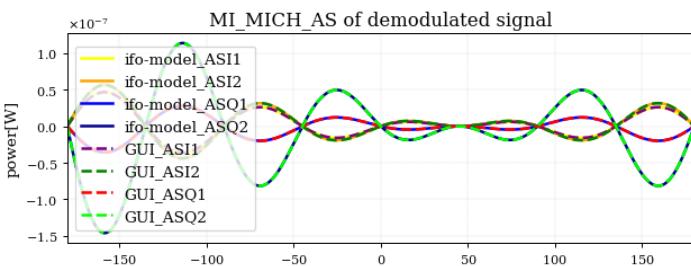
Checked list

Checked list	
interferometer configuration	MI(Michelson interferometer), FPMI(Fabry-Perot MI), PRFPMI(Power recycling Fabry-Perot MI), DRFPMI(Dual recycling Fabry-Perot MI)
simulation mode	Sweep, Transfer function
PD type	Amplitude detector, Demodulated signal
DoF	MICH(in the case MI,FPMI,PRFPMI, DRFPMI), DARM, CARM(in the case FPMI,PRFPMI, DRFPMI), PRCL(in the case PRFPMI, DRFPMI), SRCL(in the case DRFPMI)
port	REFL, AS(in the case MI,FPMI,PRFPMI, DRFPMI), TMSX, TMSY(in the case FPMI,PRFPMI, DRFPMI), POP(in the case PRFPMI, DRFPMI), POS(in the case DRFPMI)

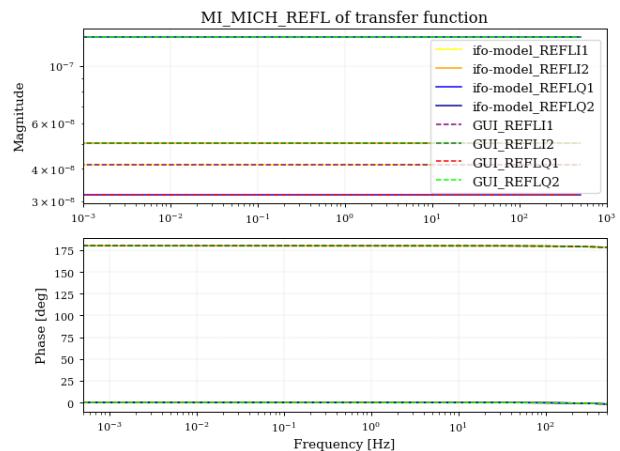
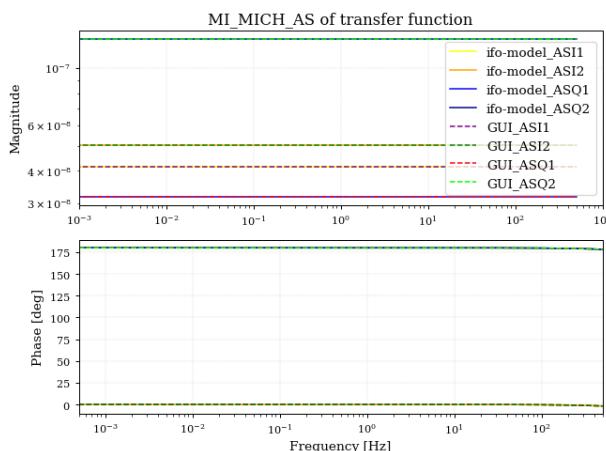
- Sweep(Amplitude detector)



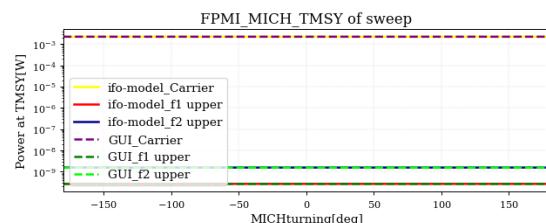
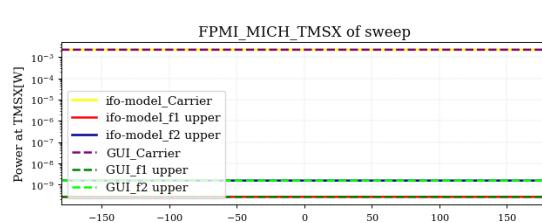
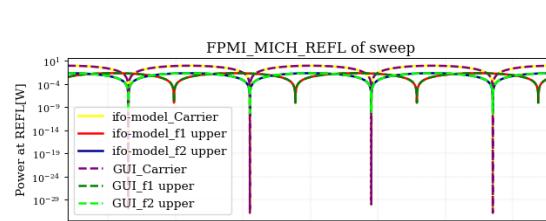
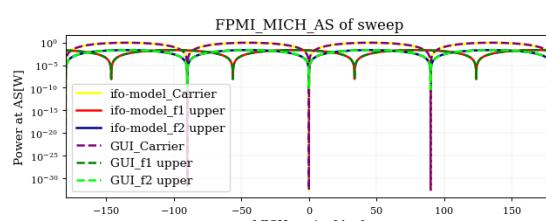
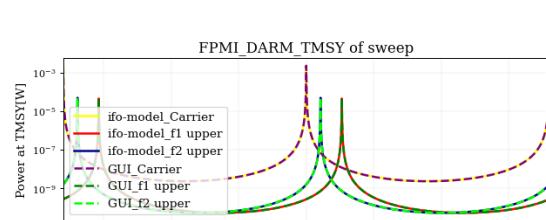
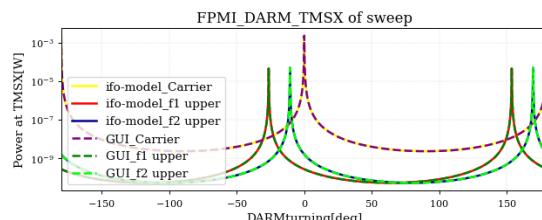
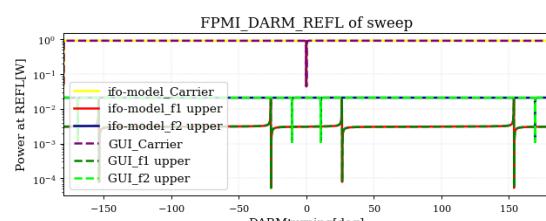
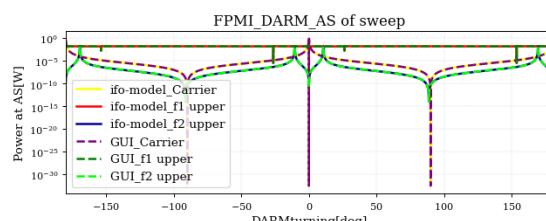
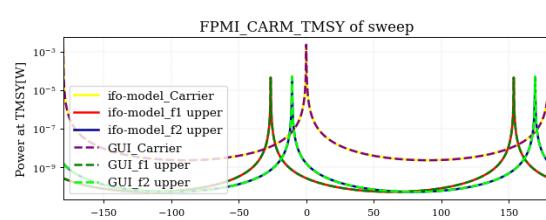
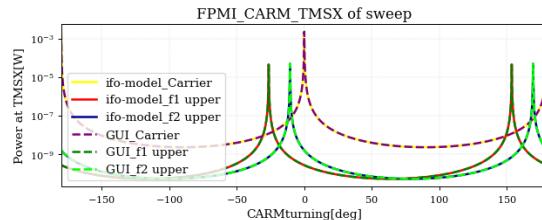
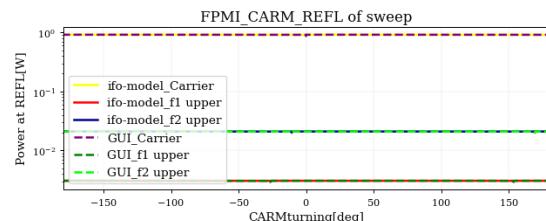
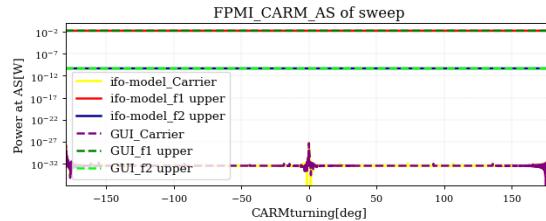
- Demodulated signal

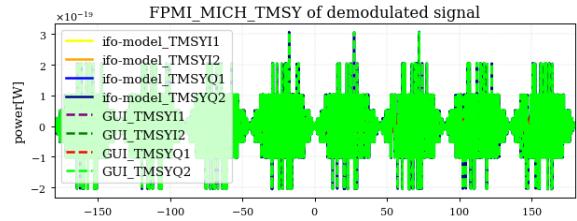
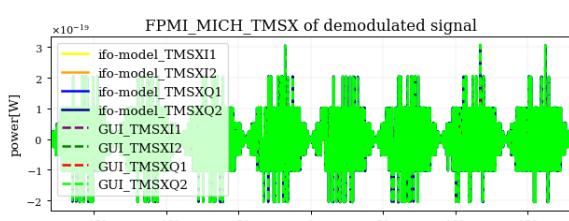
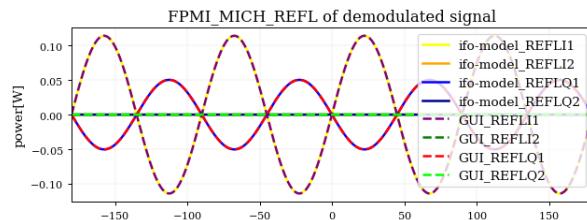
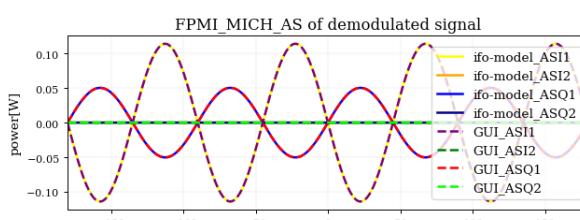
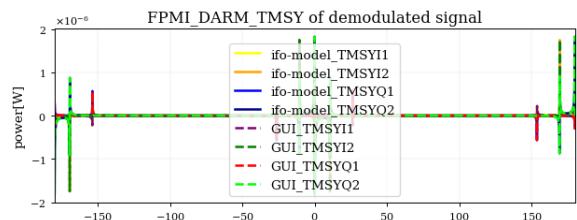
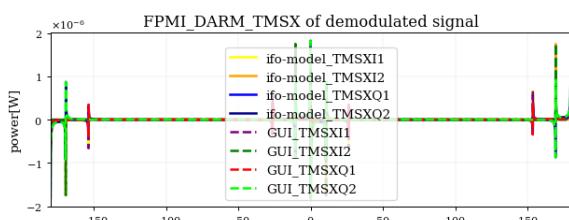
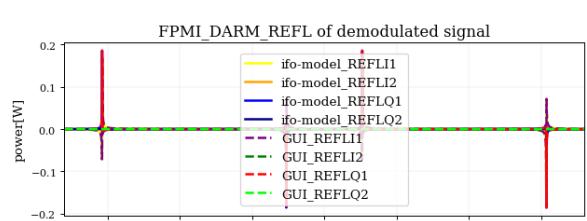
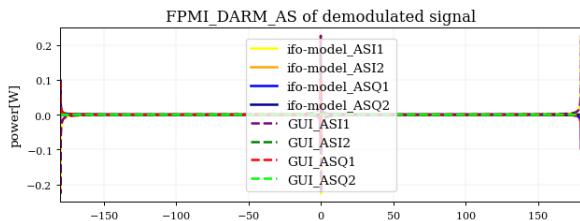
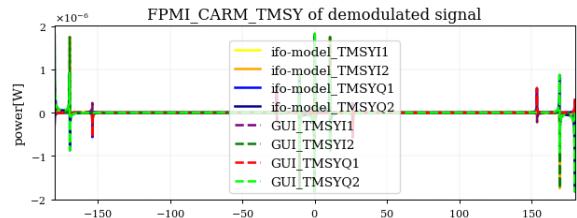
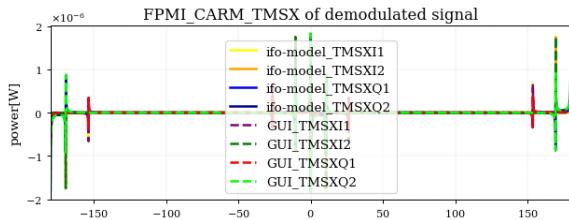
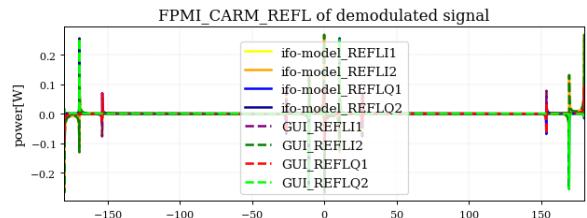
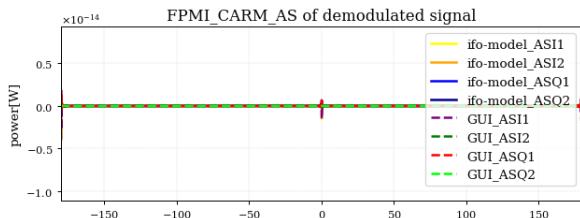


- Transfer function

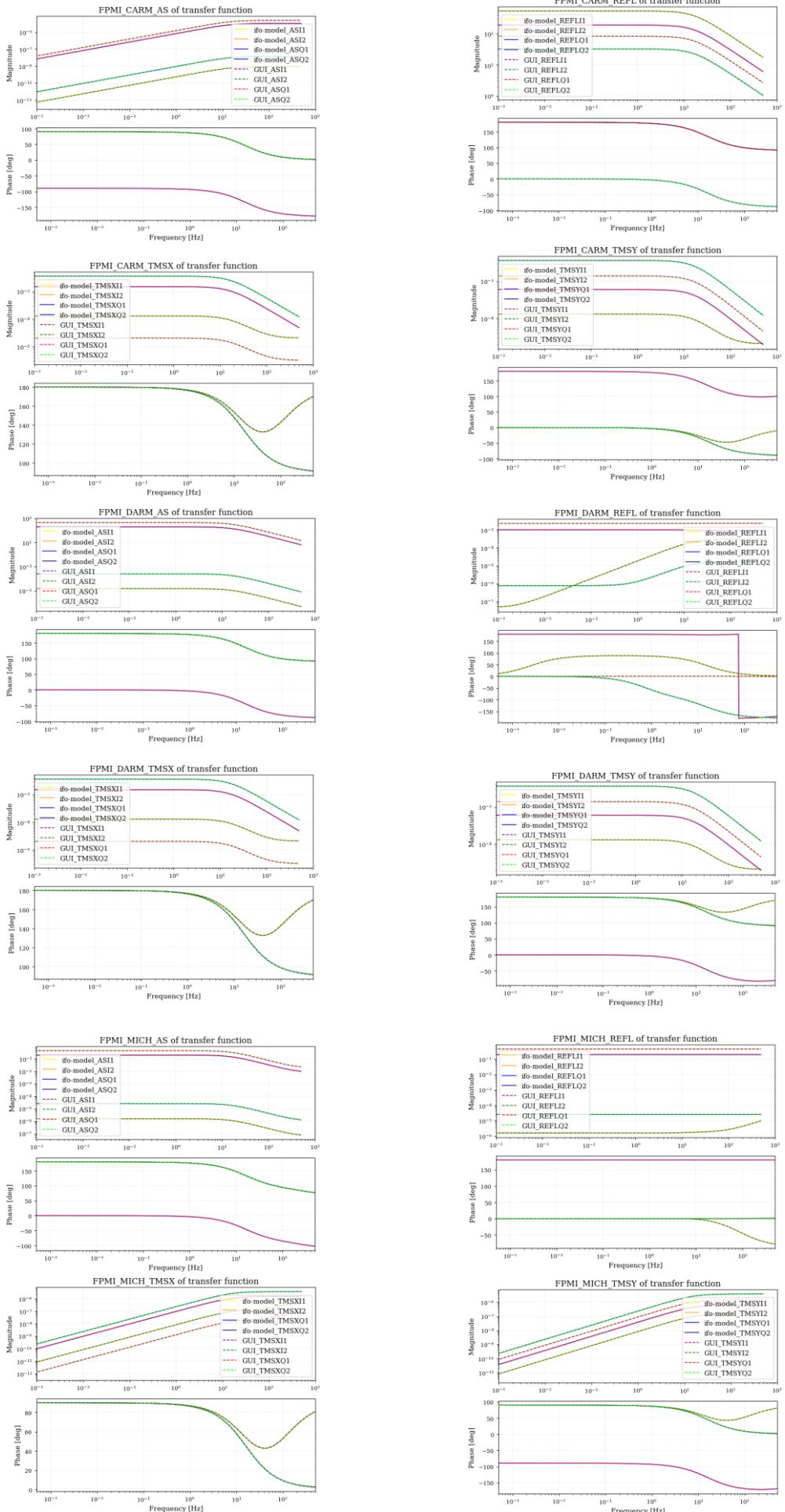


- Sweep(Amplitude detector)



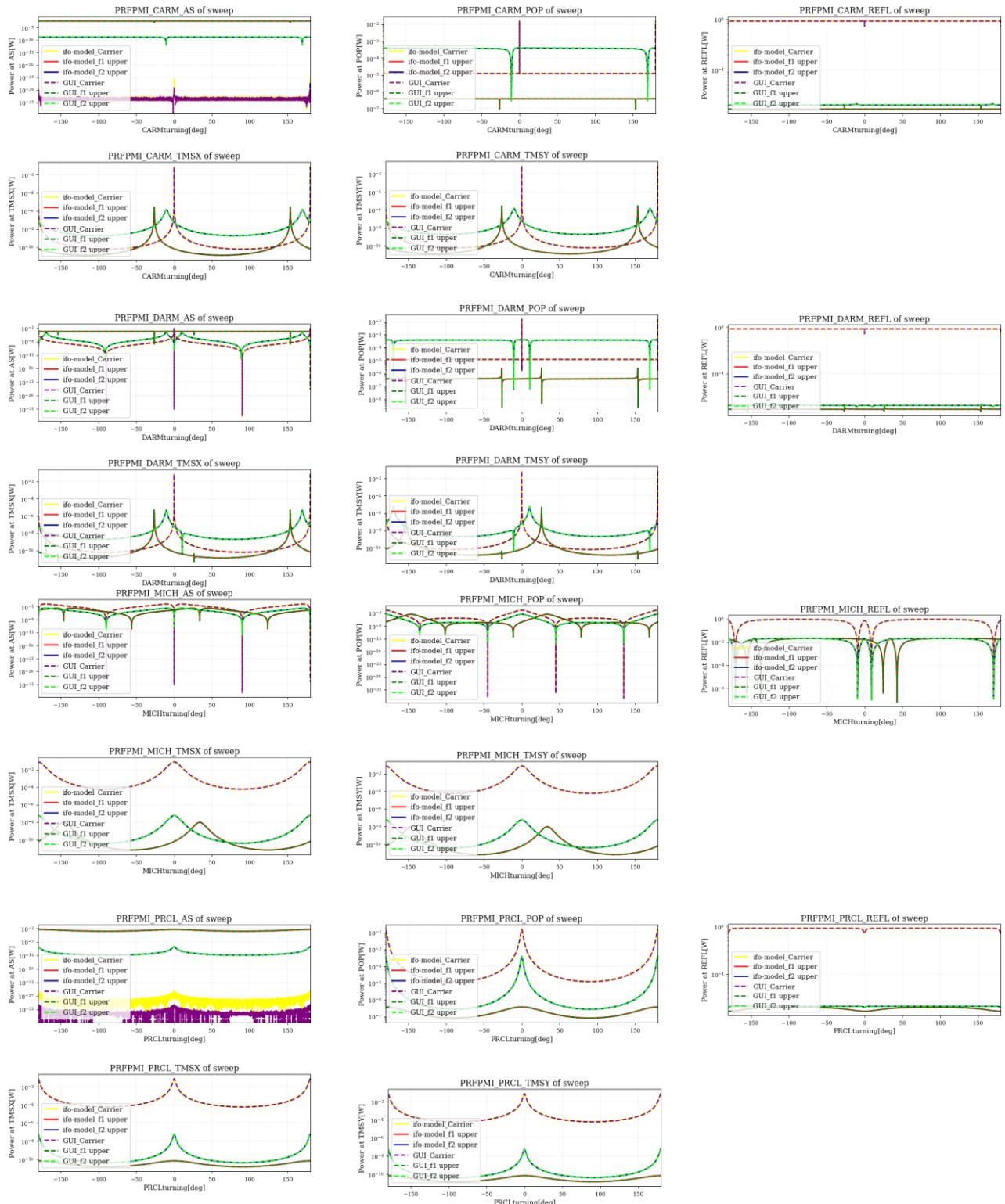


• Transfer function



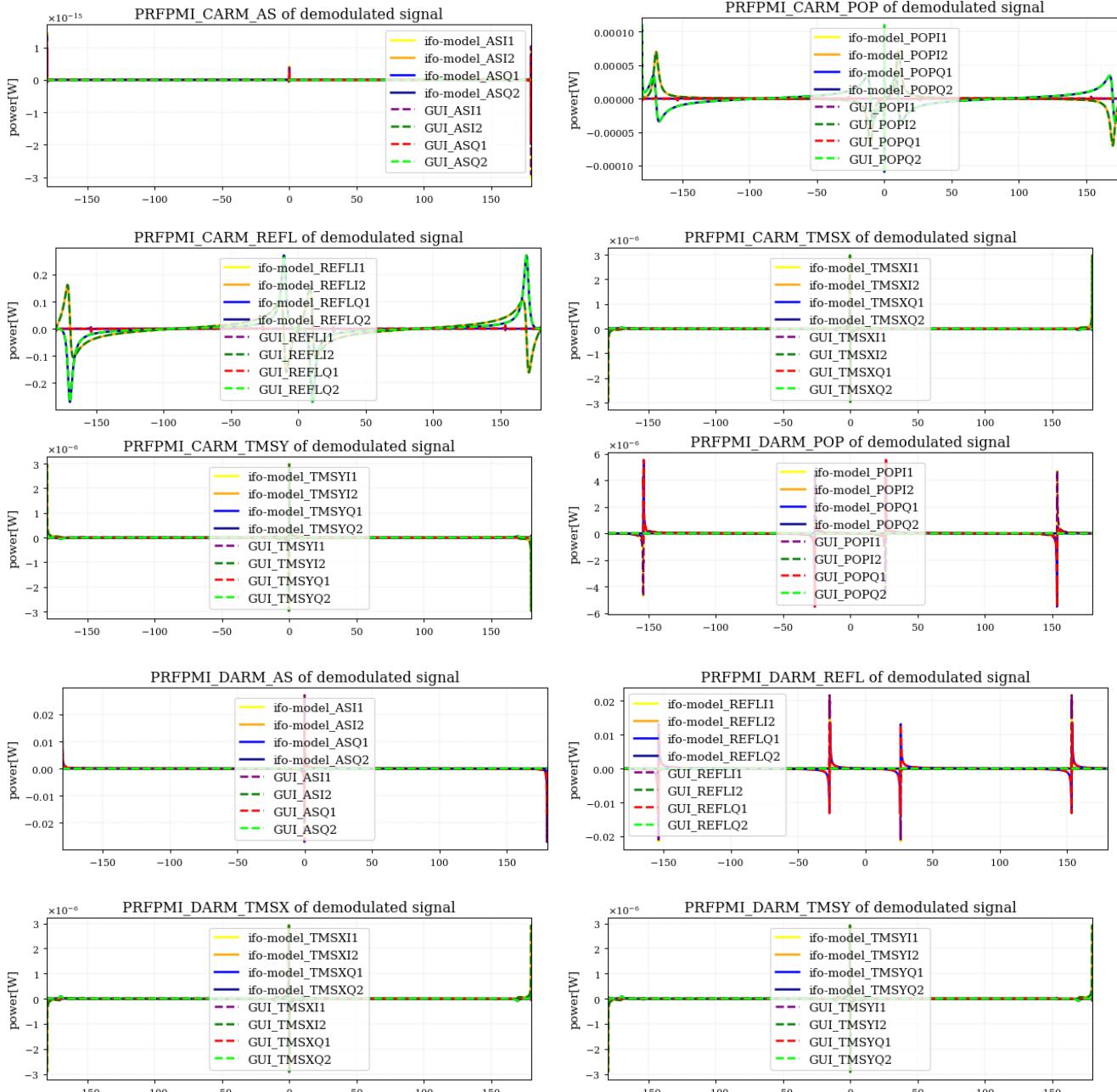
PRFPMI

- Sweep(Amplitude detector)



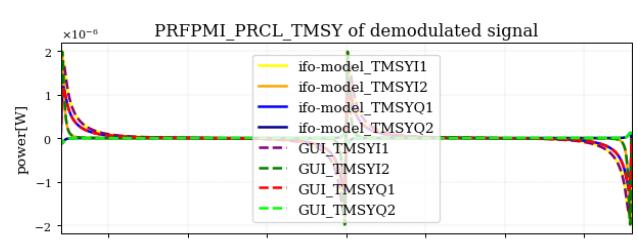
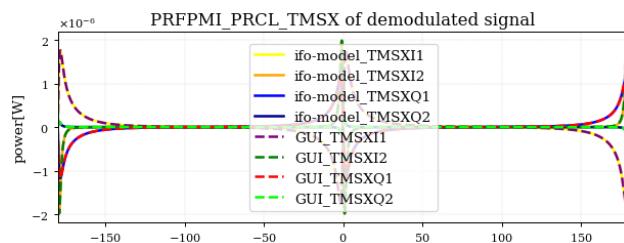
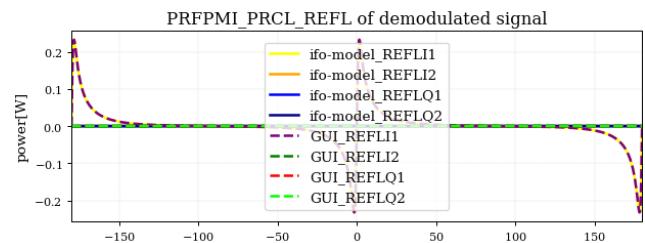
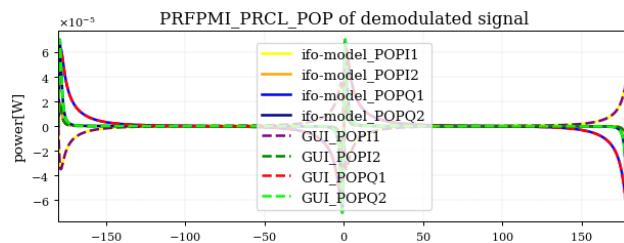
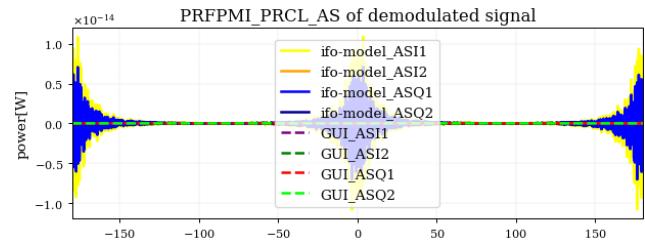
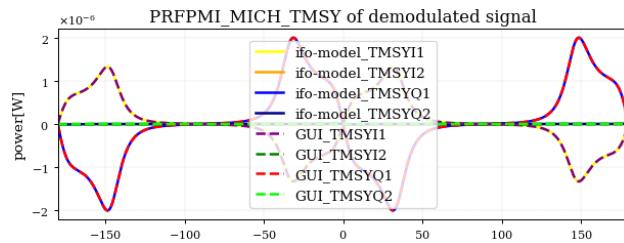
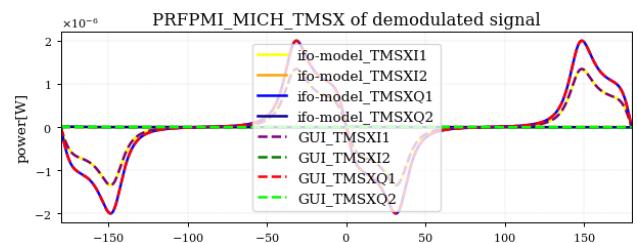
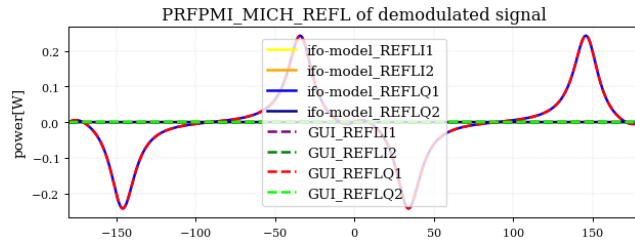
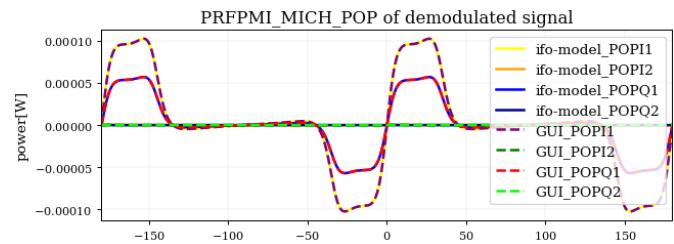
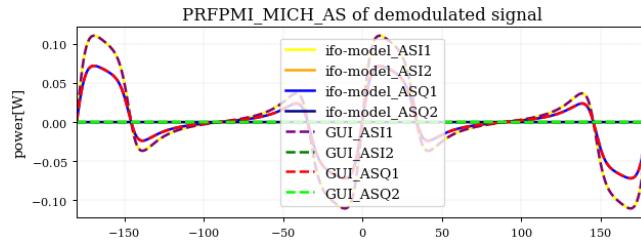
PRFPMI

- Demodulated signal

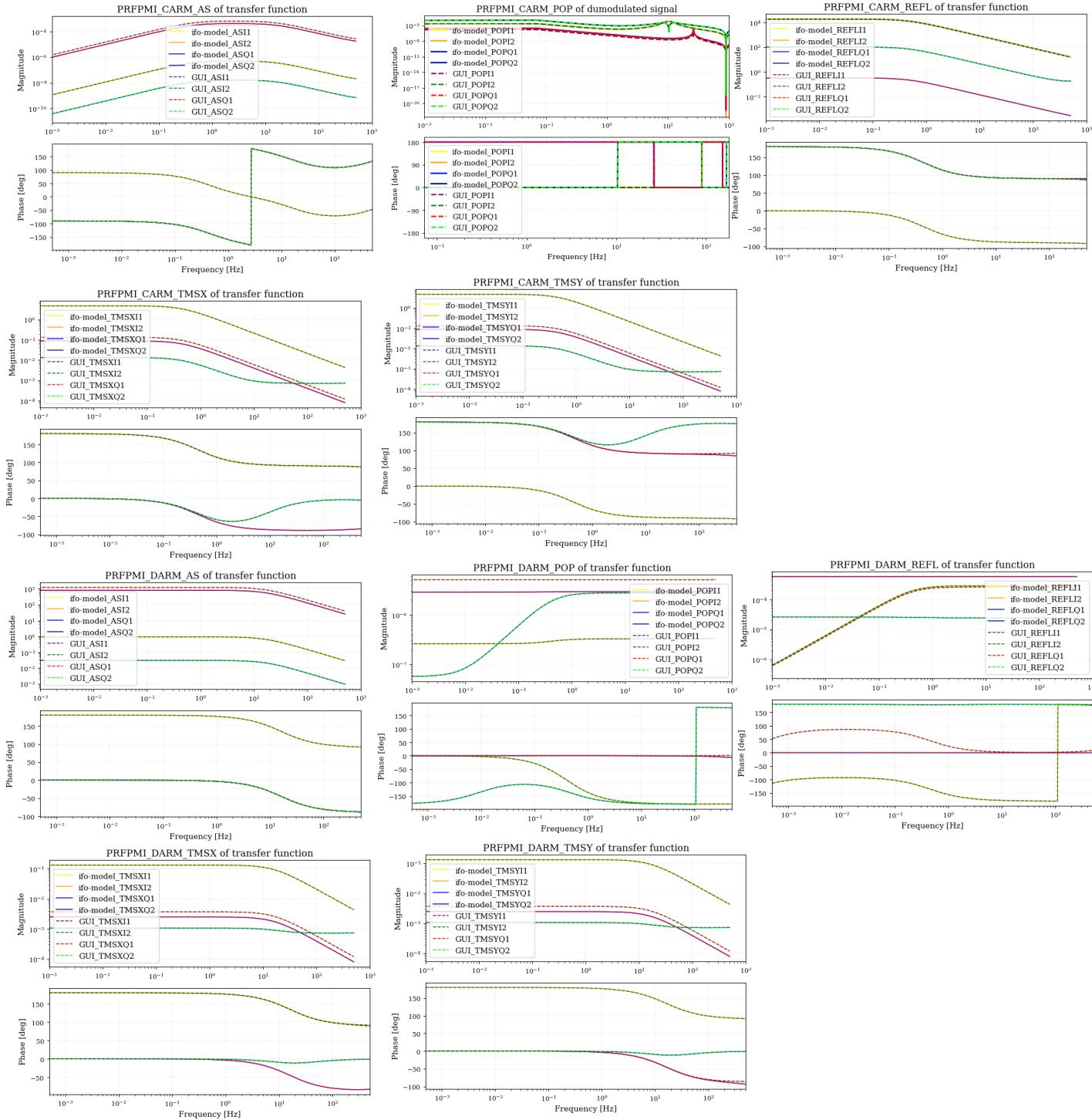


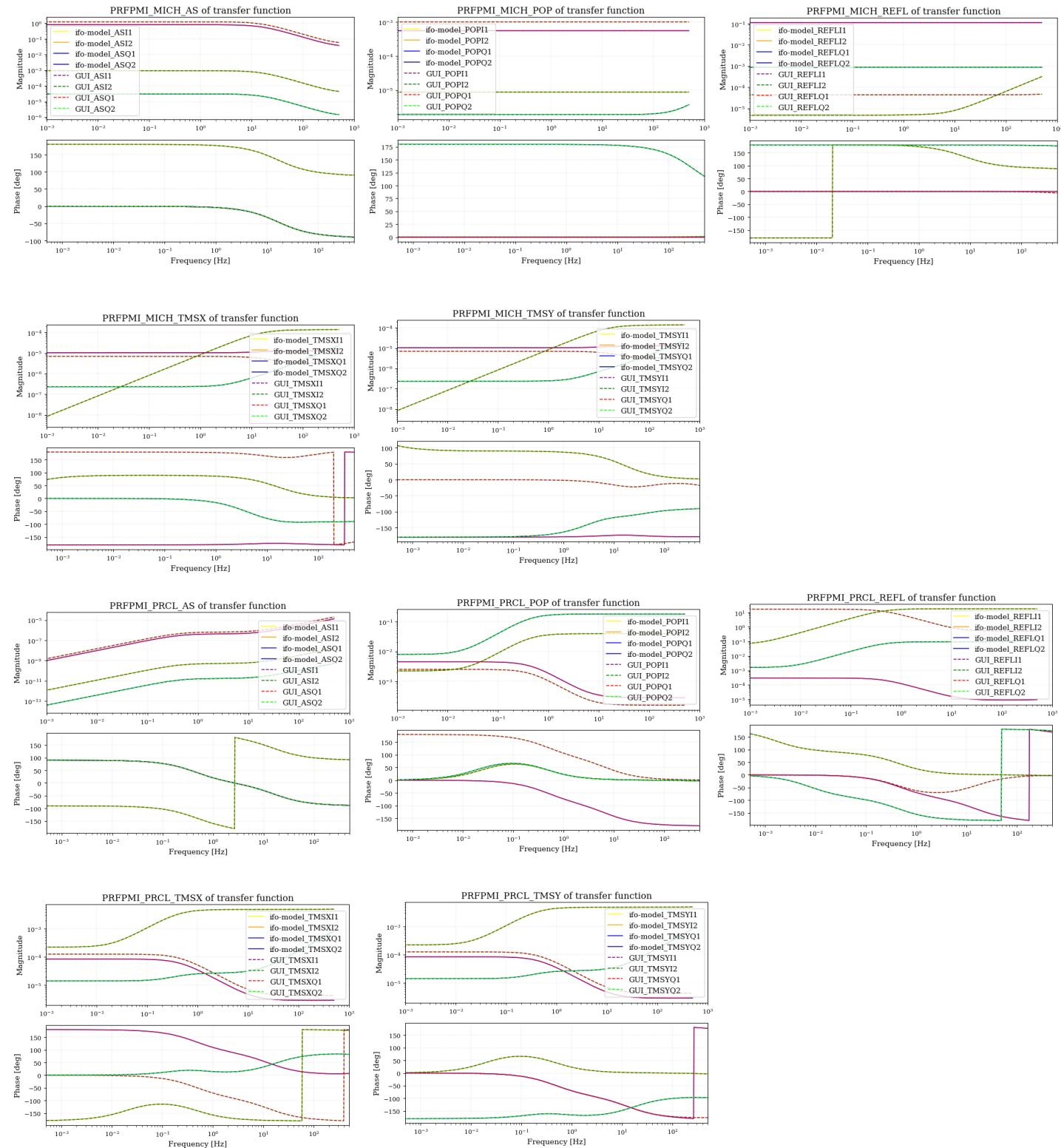
PRFPMI

- Demodulated signal

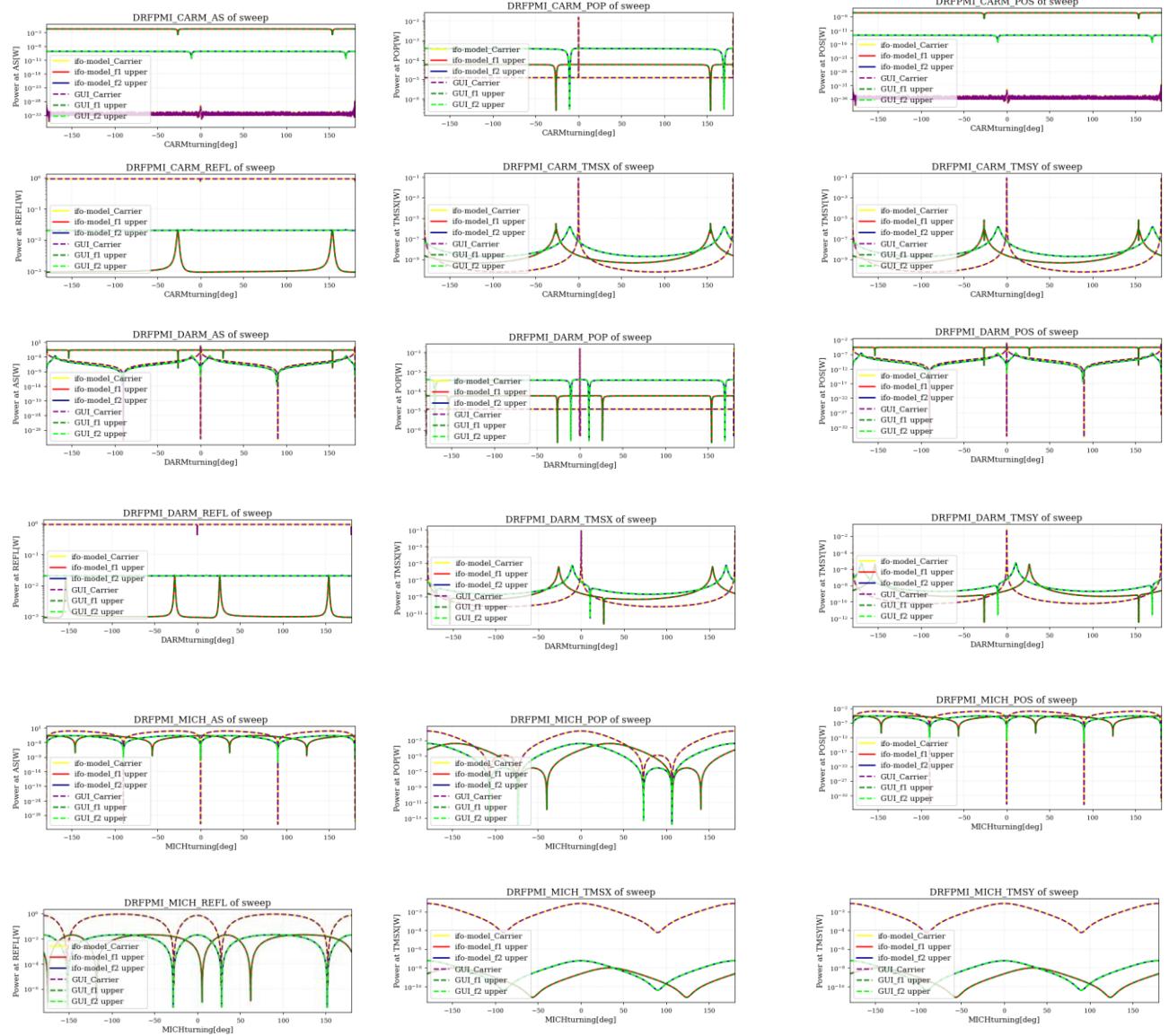


• Transfer function

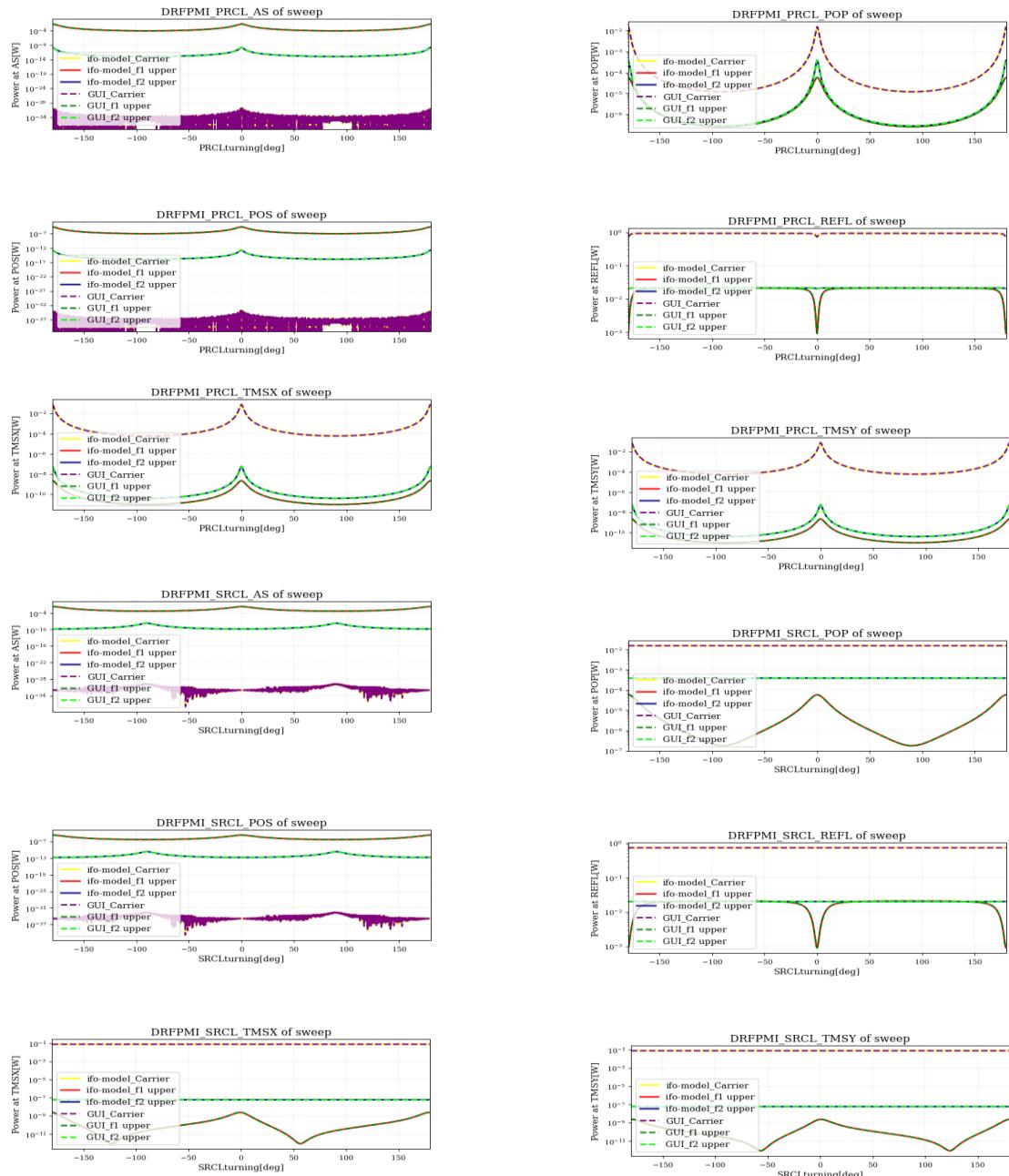




- Sweep(Amplitude detector)

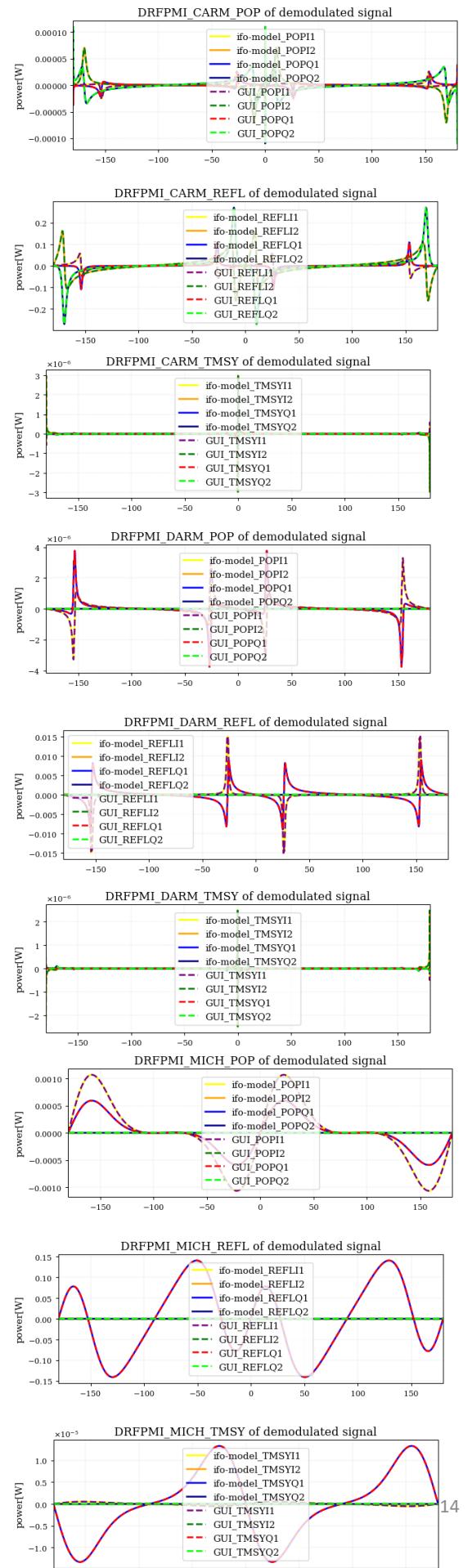
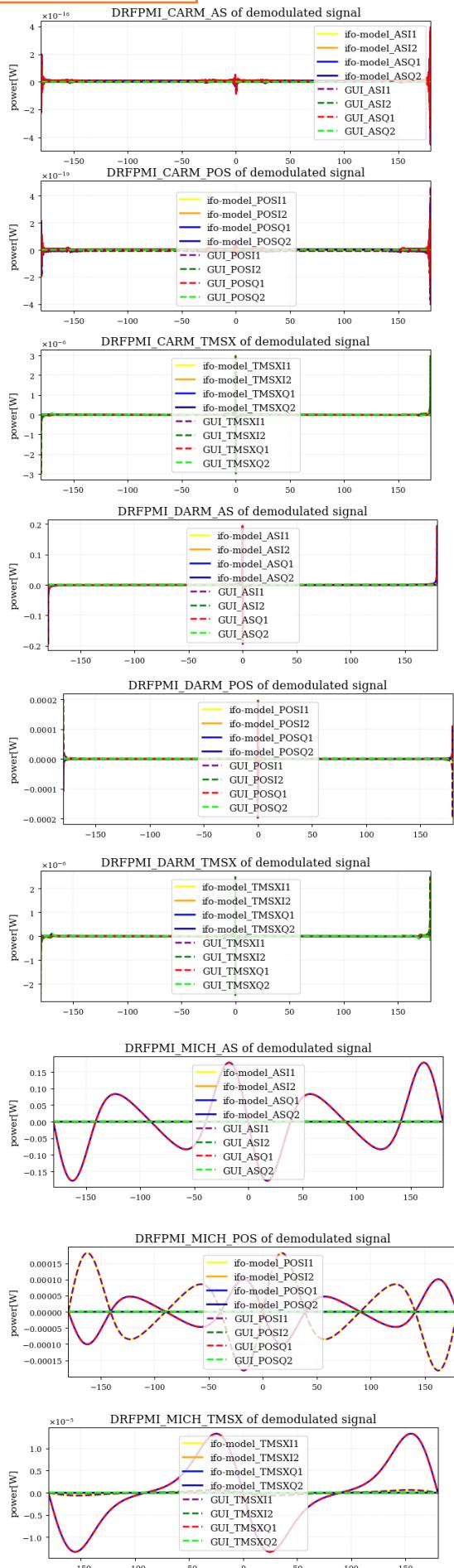


- Sweep(Amplitude detector)

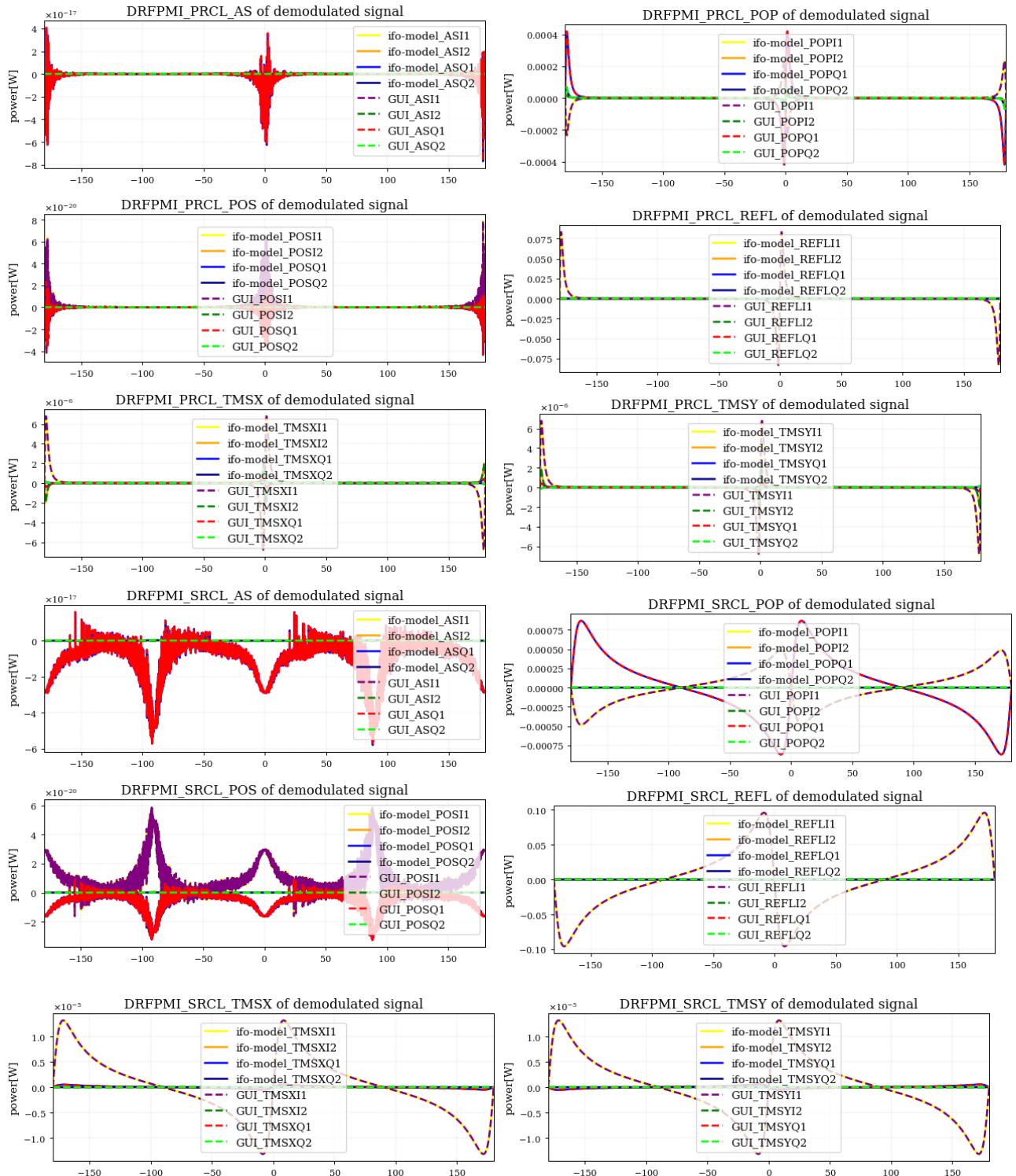


DRFPMI

• Demodulated signal

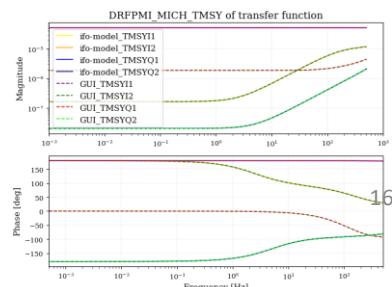
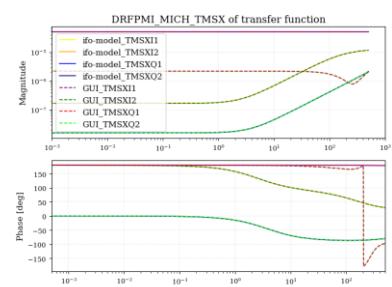
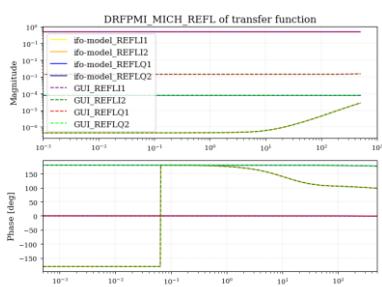
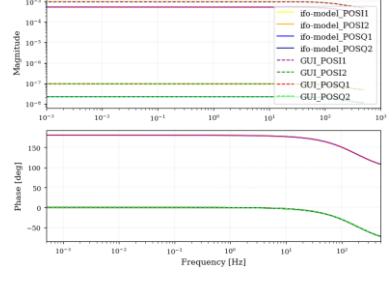
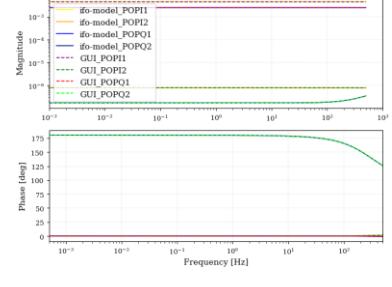
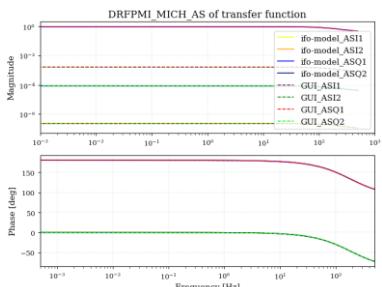
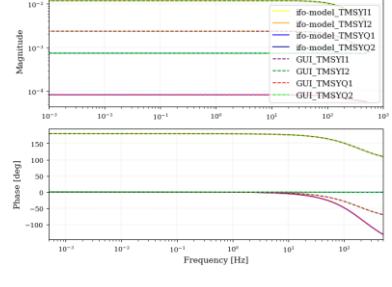
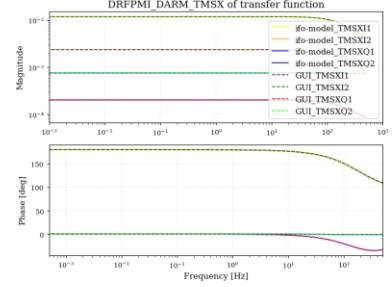
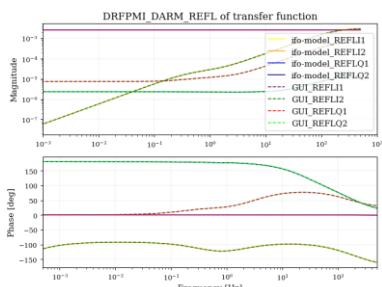
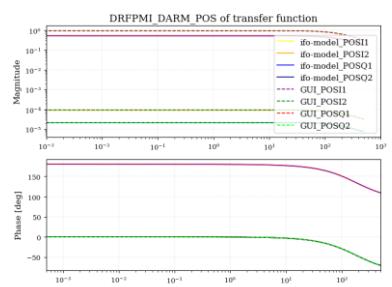
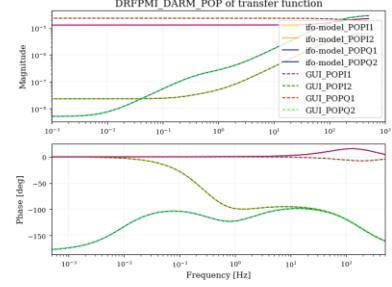
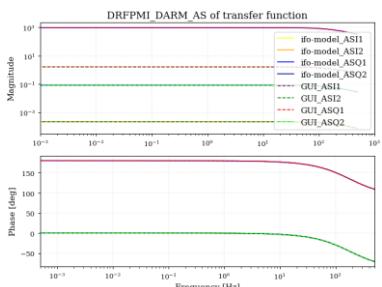
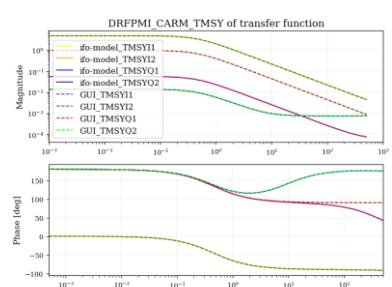
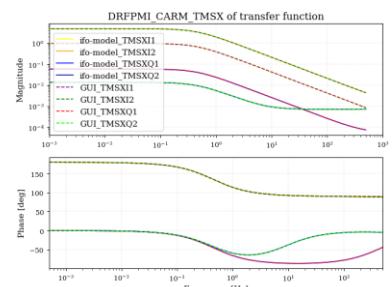
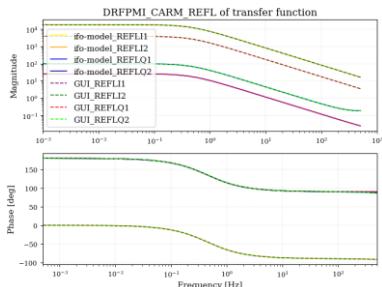
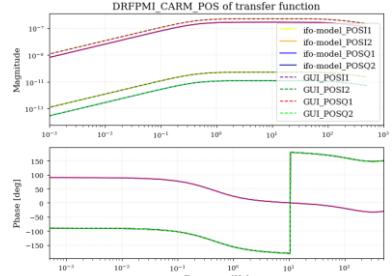
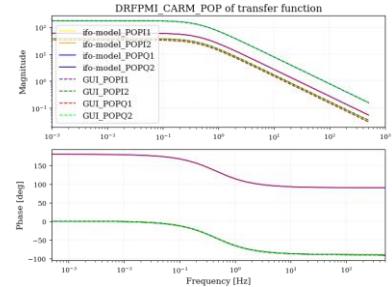
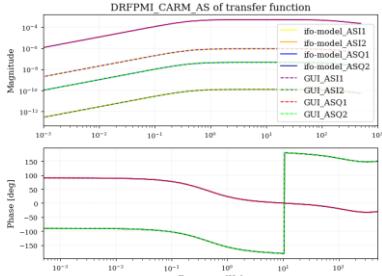


- Demodulated signal



DRFPMI

• Transfer function



DRFPMI

• Transfer function

