03/18/2022

Aaryan

Recap

- Exploring how errF affects the accuracy and spread of the predictions
- What I found:
  - For some sets the accuracy of the predictions are not dependant errF (near horizontal line) while for some other sets the accuracy fluctuates wildly (no real pattern)

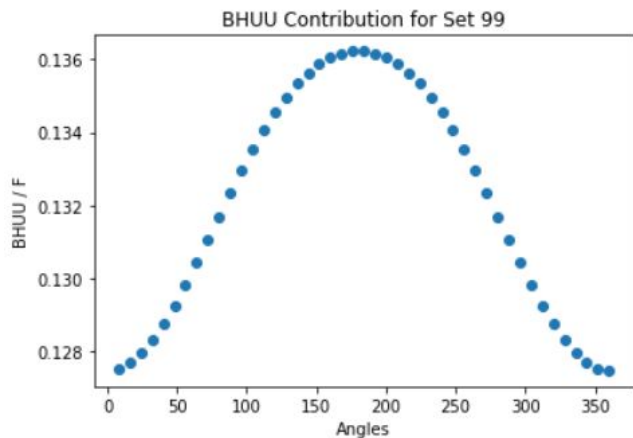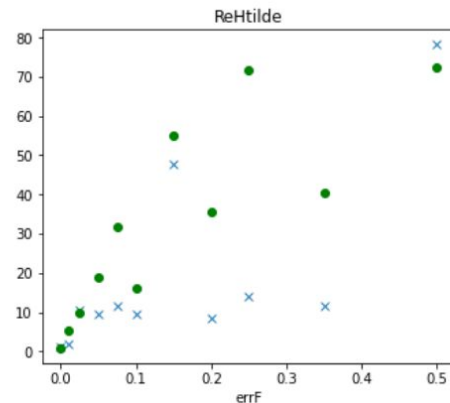- Percent Composition of BHUU term has no effect on the Accuracy v ErrF

Set 12

Set 12

ReH · ReE · ReHtilde

BHUU Contribution for Set 12

Absolute Contribution of Interference+DVCS term for Set 12
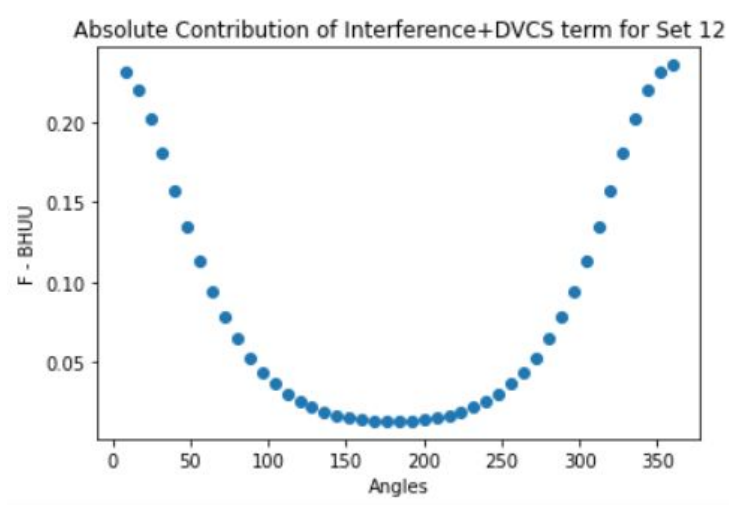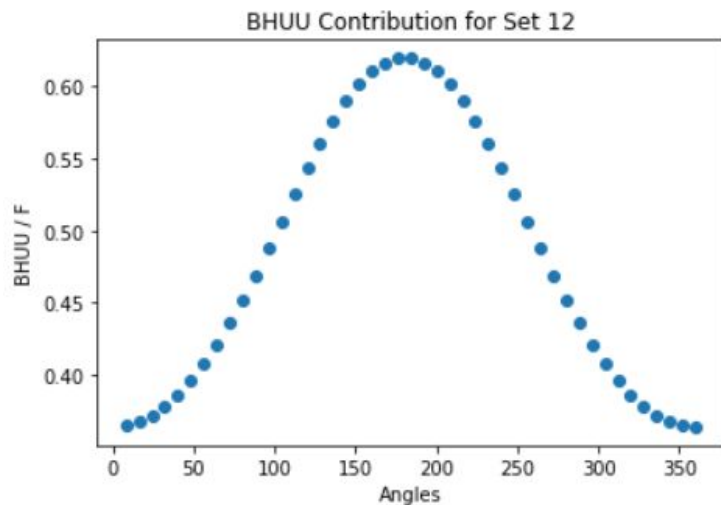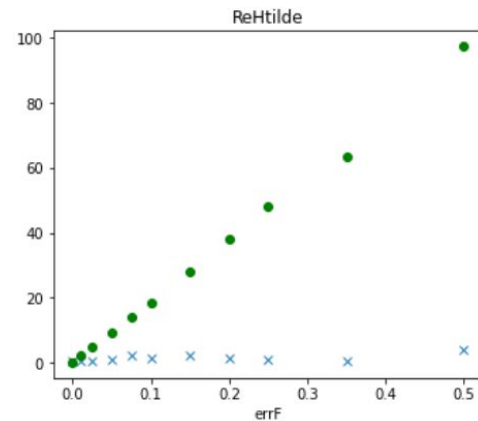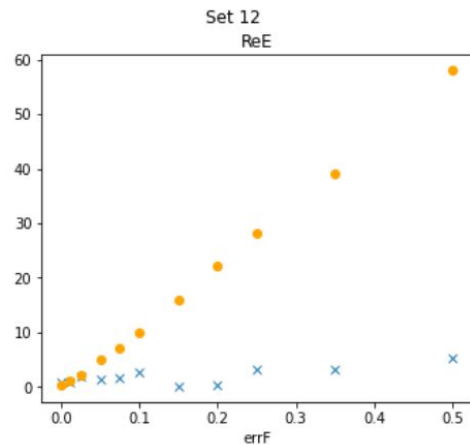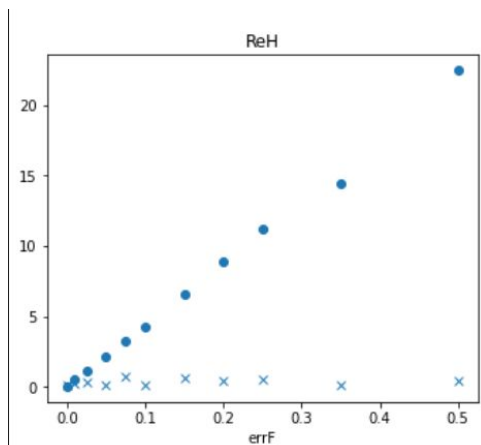
Set 99
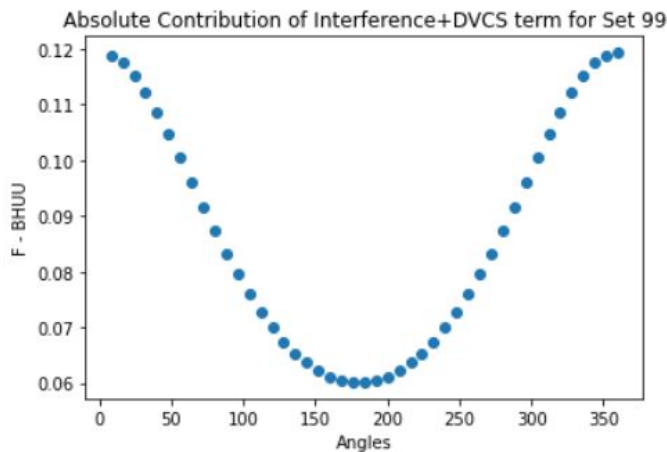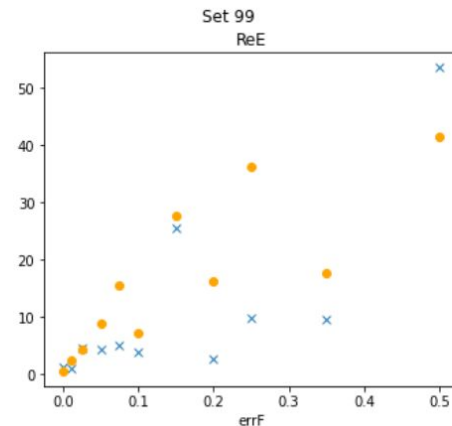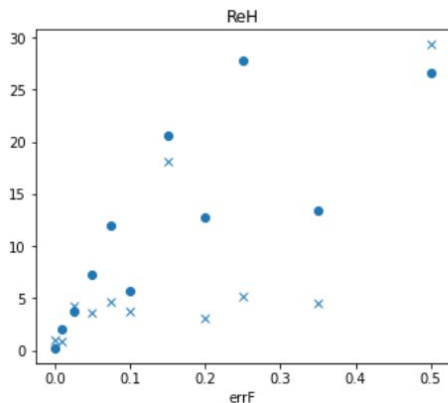
Less of a disparity from lowest point to highest compared to set 11
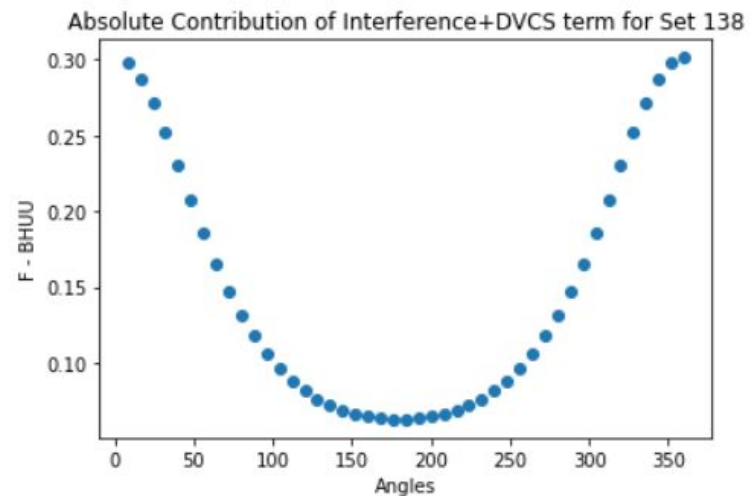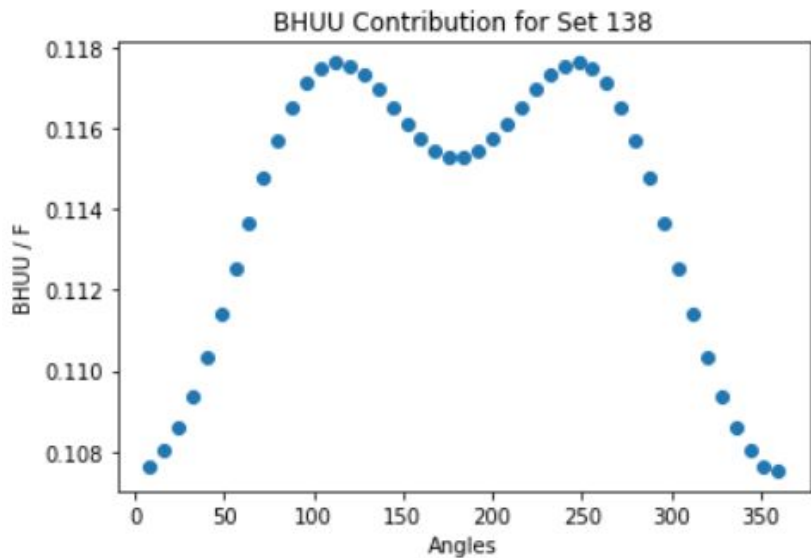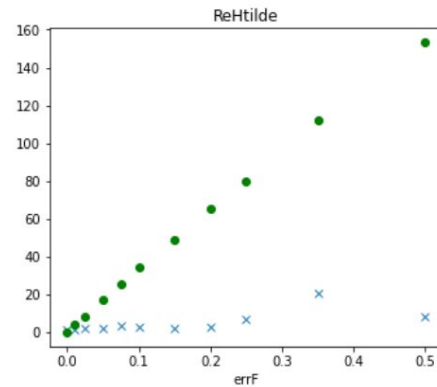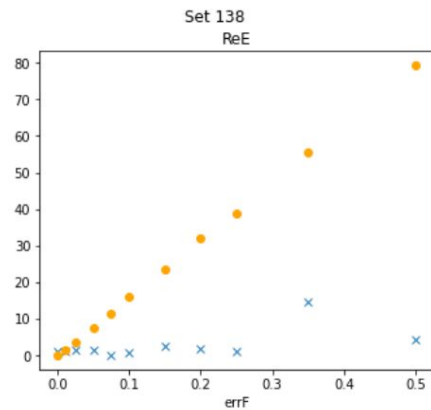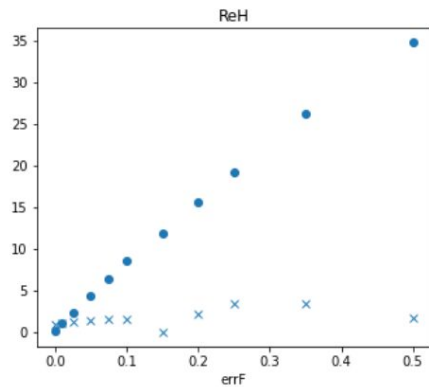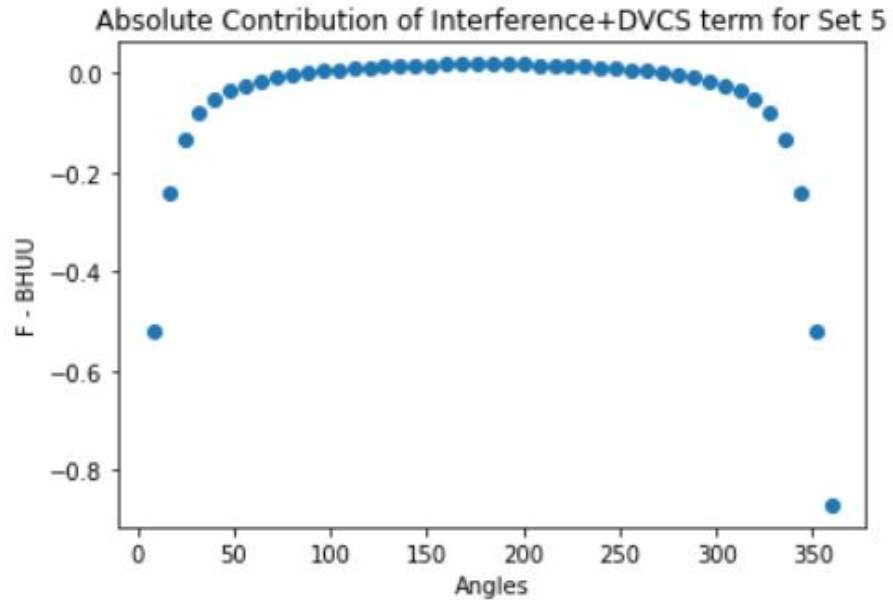
Set 138

Notable Observations Sets 1-16

```
Best Fit Lines if ErrF is in Percent
ReH Acc Best Fit: -0.002x + 1.6026
ReE Acc Best Fit: 0.0668x + 11.9102
ReHtilde Acc Best Fit: 0.0001x + 2.3054
```
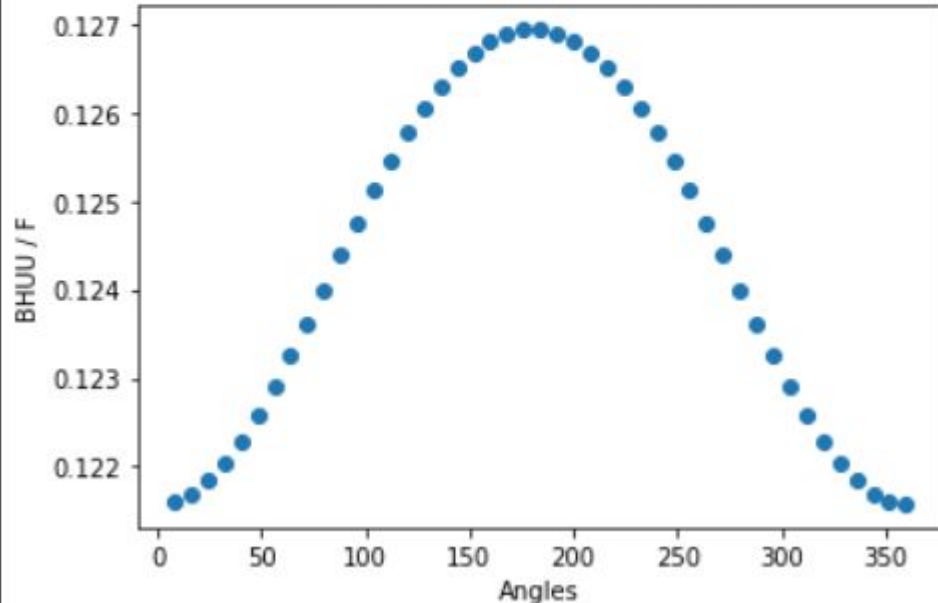

Absolute Contribution of Interference+DVCS term for Set 5

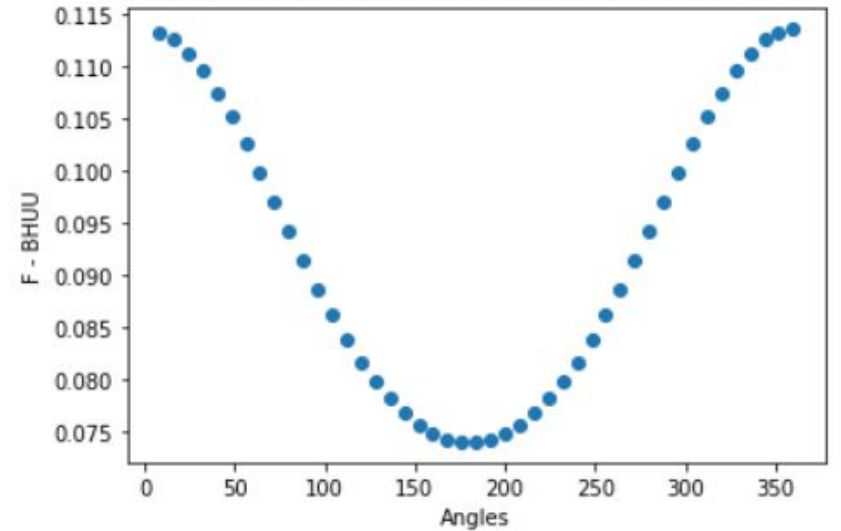Best Fit Lines if ErrF is in Percent
ReH Acc Best Fit: 0.4329x + 3.2944
ReE Acc Best Fit: 0.4597x + 4.5595
ReHtilde Acc Best Fit: 1.032x + 8.5773

BHUU Contribution for Set 6
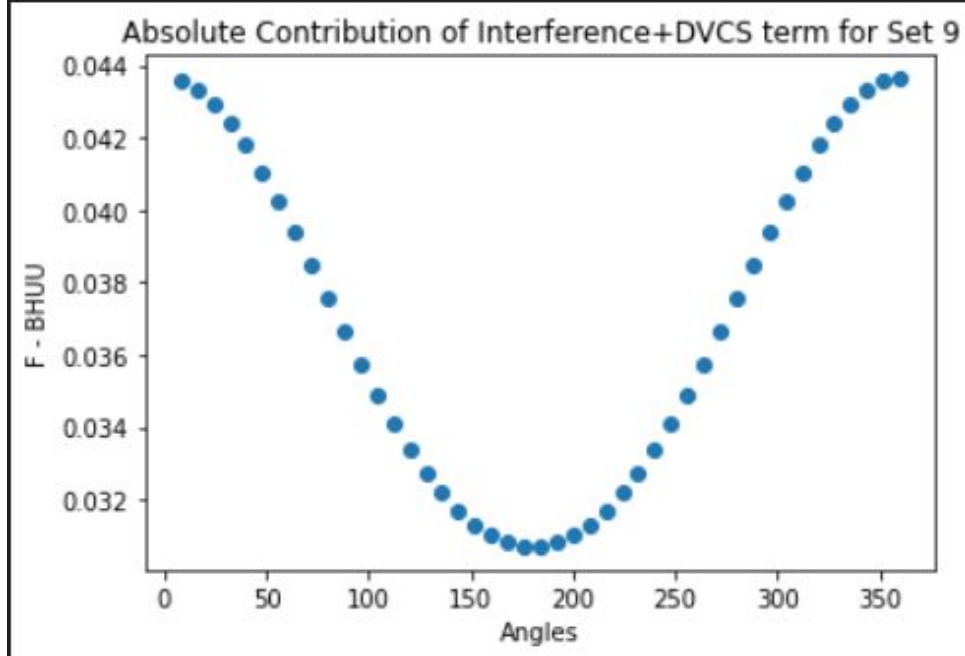
Absolute Contribution of Interference+DVCS term for Set 6

- Really sensitive to errF but F-BHUU term is still small just less spread out

```
Best Fit Lines if ErrF is in Percent
ReH Acc Best Fit: 0.1909x + 2.0459
ReE Acc Best Fit: 0.247x + 2.1351
ReHtilde Acc Best Fit: 0.4496x + 3.1407
```

Absolute Contribution of Interference+DVCS term for Set 9

One of the lowest F-BHUU values but the set is somewhat sensitive to errF compared to some other sets

All Takeaways so Far

- It doesn't seem that the percent contribution of BHUU is related to the sensitivity of the predictions when the error on F is changing

- High F - BHUU terms does not seem to cause more sensitive fits to F