15. pA14 = 1, pA11 = 1, pA17a = 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1

16. pA14 = 1, pA11 = 1, pA17a = 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sE1 = 1; - made everything worse

17. pA14 = 1, pA11 = 1, pA17a = 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sA10 =1; made everything worse

\*\*\* changing D1 to a single array instead of dual \*\*\*: model def = FullModel2019\_A7Removed\_D1singleArray.txt

18. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1; made D1 bad, 18aux still bad

19. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0; made others bad

20. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1;

21. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sA9 = 1;

22. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sA9 = 1, sA10 = 1;

23. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sA9 = 1, sA10 = 1, sC1 = 0;

24. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sA9 = 1, sA10 = 1, sC1 = 0, pA1 = 1;

\*25. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0;- only 18aux still fucked up

26. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, pF1 = 1;- BAD pF1 = 1 makes AIC inf

27. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, pA18a = 1, pA18b = 1; bad- makes AIC inf

28. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA19= 1

29. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA9 = 1,- adding sA9 messes up A14

\*\*30. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1;- sA10 doesn’t change anything but doesn’t make it better either. Though in comparing AICs, this one is lower.

\*\*\*31. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1- didn’t fix 18aux but the AIC is lower than v30

32.pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, sA15 = 1;

33.pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, sA15 = 1, sA9 = 1;

34.pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, sA15 = 1, sA9 = 1, pA1 = 1;

45. 31. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pC1a = 1;

46. 31. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pC1a = 1, pA18a = 1;

\*\*\*\* making 18 a single array- my last ditch effort:

35. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sA18 = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1- with A18 a single array this did NOT work, doesn’t estimate anything

36. pA14, pA11

37. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1;

38. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1-;

39. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pA18 = 1;

40. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pA18 = 1, sA9 = 1;

41. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pA18 = 1, sA9 = 1, sA14 = 1 ;- sA14 = 1 makes AIC inf

42. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pA18 = 1, sA9 = 1, pA1 = 1;

43. 42. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sA10=1, pB2 = 1, pA18 = 1, sA9 = 1, pA1 = 1;

44. pA14 = 1, pA11 = 1, pA17a= 1, sB1 = 0, pA13 = 1, pA15a = 1, sD1 = 0, pA5 = 1, sC1 =0, sA10=1, pB2 = 1, pA18 = 1, sA9 = 1, pC1a = 1; fucks up other things

1/2/19: where I left off:

For the Model where A18 is a single array: the best model was either 40 or 43. For the Model where the A18 is a dual array, the best model was 31. No models converged. I suspect it is bc there are not enough detections at C1 and F1 to estimate parameters.

When A18 was a dual array, A18aux wouldn’t estimate and pF1 was always negative

When I changes A18 to a single, then C1aux wouldn’t estimate, and pF1 continued to stay negative.

Go through this with Gabe, look at the counts for 2017/2018 nd see if you need to re-work the whole model