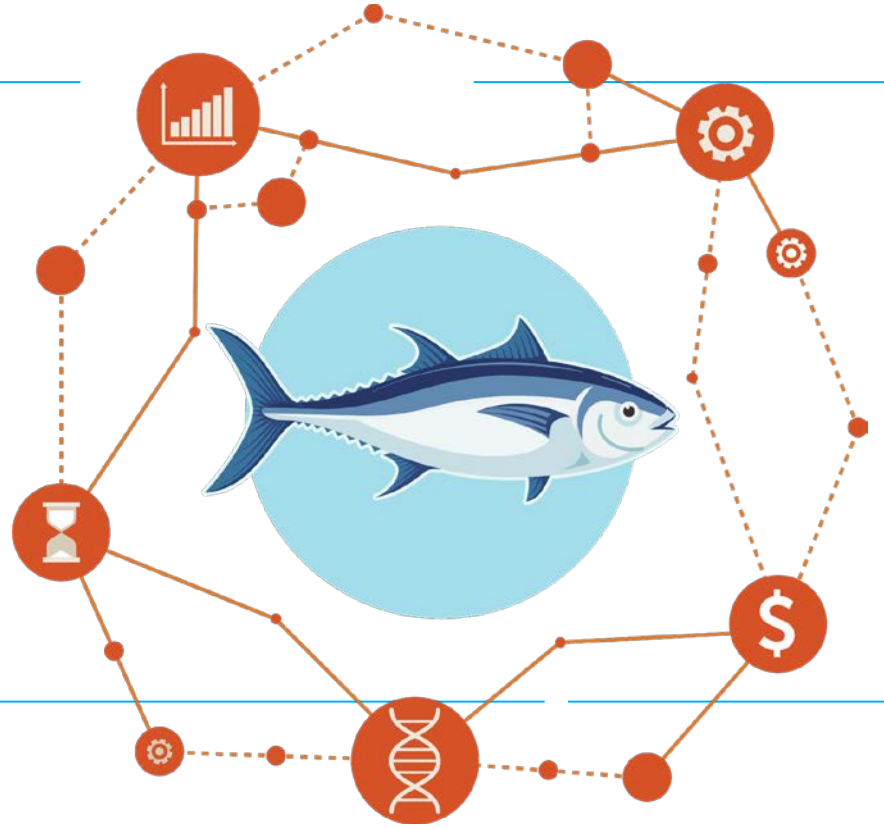
# BFT Management Strategy Evaluation (MSE)



## Additional material
## Panel 2 Intersessional
## 14 October 2022

*References*


1. Splash Page: https://iccat.github.io/abft-mse/ with Shiny Apps and quilt plots
2. Decision Guide (PA2_BFT_MSE_OCT_02_ENG) Atlantic Bluefin Tuna MSE – Final Results & Decision Guide Package
3. SCRS_2022_169. Results, features, and interpretations of the four remaining BFT MSE candidate management procedures

# BR

## Primary Performance Quilt Plot

CSV Excel

| CMP | Type | Tuning | Variant | West | | | | | East | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | |
| BR5a | BR | 5 | a | 0.6 | 2.77 | 2.43 | 8.81 | 0.42 | 0.6 | 51.97 | 41.42 | 15.6 | 0.45 | 0.27 |
| BR6a | BR | 6 | a | 0.71 | 2.57 | 2.2 | 8.21 | 0.45 | 0.7 | 46.49 | 38.13 | 14.63 | 0.51 | 0.27 |
| BR5c | BR | 5 | c | 0.6 | 2.74 | 2.46 | 10.49 | 0.4 | 0.6 | 48.37 | 41.28 | 18.65 | 0.41 | 0.68 |
| BR6b | BR | 6 | b | 0.7 | 2.55 | 2.18 | 9.75 | 0.43 | 0.7 | 43.27 | 37.2 | 17.14 | 0.44 | 0.71 |
| BR5b | BR | 5 | b | 0.6 | 2.7 | 2.4 | 10.37 | 0.4 | 0.6 | 47.75 | 41.17 | 17.96 | 0.38 | 0.72 |

## Secondary Performance Quilt Plot (East / Eastern)

CSV Excel

| CMP | Type | Tuning | Variant | East | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| BR5a | BR | 5 | a | 40.57 | 47.63 | 1.21 | 1.15 | 0.44 | 0.27 | 0.38 | 0.11 | 0.93 | 0.88 | 0.52 |
| BR6a | BR | 6 | a | 40.57 | 44.29 | 1.34 | 1.29 | 0.58 | 0.33 | 0.43 | 0.06 | 0.97 | 0.92 | 0.13 |
| BR5c | BR | 5 | c | 40.57 | 48.45 | 1.25 | 1.21 | 0.33 | 0.21 | 0.33 | 0.13 | 0.89 | 0.85 | 0.67 |
| BR6b | BR | 6 | b | 40.57 | 41.81 | 1.38 | 1.35 | 0.42 | 0.25 | 0.36 | 0.08 | 0.93 | 0.87 | 0.41 |
| BR5b | BR | 5 | b | 40.57 | 48.09 | 1.26 | 1.22 | 0.25 | 0.17 | 0.3 | 0.15 | 0.87 | 0.82 | 0.82 |

## Secondary Performance Quilt Plot (West / Western)

CSV Excel

| CMP | Type | Tuning | Variant | West | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| BR5a | BR | 5 | a | 2.69 | 2.46 | 1.37 | 1.33 | 0.46 | 0.2 | 0.29 | 0.18 | 0.86 | 0.85 | 0.66 |
| BR6a | BR | 6 | a | 2.69 | 2.38 | 1.5 | 1.47 | 0.54 | 0.2 | 0.3 | 0.09 | 0.94 | 0.92 | 0.1 |
| BR5c | BR | 5 | c | 2.69 | 2.64 | 1.4 | 1.37 | 0.43 | 0.19 | 0.27 | 0.18 | 0.87 | 0.83 | 0.72 |
| BR6b | BR | 6 | b | 2.69 | 2.11 | 1.53 | 1.51 | 0.46 | 0.18 | 0.28 | 0.09 | 0.94 | 0.92 | 0.31 |
| BR5b | BR | 5 | b | 2.69 | 2.43 | 1.42 | 1.39 | 0.38 | 0.17 | 0.27 | 0.17 | 0.87 | 0.84 | 0.82 |

# FO

Primary Performance Quilt Plot

CSV Excel

| CMP | Type | Tuning | Variant | West | | | | | East | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | |
| FO5a | FO | 5 | a | 0.61 | 2.89 | 2.59 | 14.86 | 0.4 | 0.6 | 46.88 | 37.19 | 16.68 | 0.45 | 0.28 |
| FO6a | FO | 6 | a | 0.71 | 2.66 | 2.37 | 15.03 | 0.41 | 0.7 | 42.71 | 33.46 | 16.45 | 0.52 | 0.37 |
| FO5c | FO | 5 | c | 0.62 | 2.59 | 2.51 | 17.41 | 0.42 | 0.62 | 47.15 | 37.75 | 19.85 | 0.41 | 0.54 |
| FO6b | FO | 6 | b | 0.71 | 2.43 | 2.3 | 17.27 | 0.42 | 0.7 | 43.08 | 34.46 | 19.13 | 0.46 | 0.66 |
| FO5b | FO | 5 | b | 0.61 | 2.59 | 2.51 | 17.12 | 0.4 | 0.6 | 47.15 | 38.29 | 19.35 | 0.37 | 0.7 |

Secondary Performance Quilt Plot (East / Eastern)

CSV Excel

| CMP | Type | Tuning | Variant | East | | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| FO5a | FO | 5 | a | 38.29 | 43.88 | 1.39 | 1.35 | 0.3 | 0.25 | 0.36 | 0.25 | 0.8 | 0.83 | 0.65 |
| FO6a | FO | 6 | a | 38.29 | 38.87 | 1.52 | 1.49 | 0.45 | 0.34 | 0.45 | 0.13 | 0.9 | 0.89 | 0.11 |
| FO5c | FO | 5 | c | 38.29 | 44.51 | 1.39 | 1.35 | 0.25 | 0.21 | 0.33 | 0.22 | 0.81 | 0.81 | 0.69 |
| FO6b | FO | 6 | b | 38.29 | 40.19 | 1.49 | 1.46 | 0.35 | 0.26 | 0.37 | 0.13 | 0.89 | 0.87 | 0.3 |
| FO5b | FO | 5 | b | 38.29 | 44.97 | 1.36 | 1.33 | 0.18 | 0.16 | 0.28 | 0.24 | 0.78 | 0.79 | 0.88 |

Secondary Performance Quilt Plot (West / Western)

CSV Excel

| CMP | Type | Tuning | Variant | West | | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| FO5a | FO | 5 | a | 2.96 | 2.81 | 1.37 | 1.31 | 0.37 | 0.16 | 0.25 | 0.19 | 0.86 | 0.88 | 0.74 |
| FO6a | FO | 6 | a | 2.96 | 2.55 | 1.48 | 1.45 | 0.42 | 0.16 | 0.25 | 0.08 | 0.94 | 0.93 | 0.28 |
| FO5c | FO | 5 | c | 2.96 | 2.68 | 1.4 | 1.36 | 0.38 | 0.18 | 0.27 | 0.17 | 0.87 | 0.88 | 0.51 |
| FO6b | FO | 6 | b | 2.96 | 2.44 | 1.5 | 1.47 | 0.38 | 0.15 | 0.25 | 0.08 | 0.94 | 0.93 | 0.35 |
| FO5b | FO | 5 | b | 2.96 | 2.7 | 1.39 | 1.34 | 0.31 | 0.14 | 0.25 | 0.19 | 0.85 | 0.87 | 0.88 |

# LW

## Primary Performance Quilt Plot

CSV Excel

| CMP | Type | Tuning | Variant | West | | | | | East | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | |
| LW5a | LW | 5 | a | 0.6 | 2.41 | 2.25 | 16.52 | 0.48 | 0.6 | 43.96 | 36.33 | 18.35 | 0.45 | 0.25 |
| LW6a | LW | 6 | a | 0.7 | 2.04 | 1.97 | 16.5 | 0.5 | 0.7 | 38.41 | 32.08 | 17.68 | 0.51 | 0.33 |
| LW5c | LW | 5 | c | 0.6 | 2.22 | 2.22 | 17.74 | 0.47 | 0.6 | 47.09 | 37.88 | 20.25 | 0.39 | 0.65 |
| LW5b | LW | 5 | b | 0.6 | 2.21 | 2.22 | 17.34 | 0.46 | 0.6 | 45.02 | 37.04 | 19.72 | 0.37 | 0.66 |
| LW6b | LW | 6 | b | 0.7 | 2.02 | 1.97 | 17.42 | 0.47 | 0.7 | 37.94 | 32.22 | 19.08 | 0.44 | 0.74 |

## Secondary Performance Quilt Plot (East / Eastern)

CSV Excel

| CMP | Type | Tuning | Variant | East | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| LW5a | LW | 5 | a | 43.2 | 40.46 | 1.33 | 1.3 | 0.41 | 0.27 | 0.37 | 0.18 | 0.87 | 0.87 | 0.61 |
| LW6a | LW | 6 | a | 43.2 | 34.79 | 1.48 | 1.47 | 0.51 | 0.32 | 0.43 | 0.09 | 0.94 | 0.91 | 0.13 |
| LW5c | LW | 5 | c | 43.2 | 43.16 | 1.29 | 1.24 | 0.31 | 0.19 | 0.3 | 0.16 | 0.87 | 0.85 | 0.8 |
| LW5b | LW | 5 | b | 43.2 | 41.73 | 1.3 | 1.26 | 0.28 | 0.18 | 0.28 | 0.17 | 0.86 | 0.84 | 0.88 |
| LW6b | LW | 6 | b | 43.2 | 35.78 | 1.46 | 1.42 | 0.41 | 0.23 | 0.35 | 0.07 | 0.94 | 0.89 | 0.34 |

## Secondary Performance Quilt Plot (West / Western)

CSV Excel

| CMP | Type | Tuning | Variant | West | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| LW5a | LW | 5 | a | 2.45 | 2.39 | 1.41 | 1.37 | 0.48 | 0.22 | 0.32 | 0.21 | 0.85 | 0.86 | 0.65 |
| LW6a | LW | 6 | a | 2.45 | 2.07 | 1.56 | 1.54 | 0.55 | 0.23 | 0.33 | 0.12 | 0.93 | 0.92 | 0.13 |
| LW5c | LW | 5 | c | 2.45 | 2.36 | 1.44 | 1.4 | 0.49 | 0.22 | 0.32 | 0.21 | 0.85 | 0.84 | 0.64 |
| LW5b | LW | 5 | b | 2.45 | 2.36 | 1.43 | 1.4 | 0.43 | 0.2 | 0.3 | 0.21 | 0.84 | 0.84 | 0.87 |
| LW6b | LW | 6 | b | 2.45 | 2.06 | 1.57 | 1.56 | 0.49 | 0.21 | 0.3 | 0.12 | 0.93 | 0.91 | 0.37 |

# TC

| CMP | Type | Tuning | Variant | West | | | | | East | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | PGK (Mean) | AvC10 (50%) | AvC30 (50%) | VarC (50%) | LD (15%) | |
| TC5a | TC | 5 | a | 0.6 | 2.67 | 2.4 | 7.51 | 0.4 | 0.6 | 41.07 | 36.18 | 10.01 | 0.41 | 0.28 |
| TC6a | TC | 6 | a | 0.71 | 2.37 | 2.13 | 7.09 | 0.45 | 0.7 | 36.33 | 32.27 | 9.41 | 0.49 | 0.3 |
| TC6c | TC | 6 | c | 0.71 | 2.33 | 2.1 | 8.24 | 0.43 | 0.71 | 36.25 | 32 | 11.11 | 0.44 | 0.67 |
| TC6b | TC | 6 | b | 0.71 | 2.33 | 2.1 | 8.22 | 0.43 | 0.71 | 35.89 | 31.69 | 11.05 | 0.43 | 0.68 |
| TC5c | TC | 5 | c | 0.6 | 2.6 | 2.39 | 8.53 | 0.37 | 0.6 | 40.4 | 36.01 | 11.9 | 0.35 | 0.69 |
| TC5b | TC | 5 | b | 0.61 | 2.59 | 2.38 | 8.49 | 0.37 | 0.6 | 40.12 | 35.76 | 11.84 | 0.34 | 0.71 |

Secondary Performance Quilt Plot (East / Eastern)

CSV Excel

| CMP | Type | Tuning | Variant | East | | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| TC5a | TC | 5 | a | 41.28 | 39.02 | 1.38 | 1.36 | 0.38 | 0.24 | 0.35 | 0.18 | 0.85 | 0.83 | 0.67 |
| TC6a | TC | 6 | a | 38.91 | 34.38 | 1.52 | 1.51 | 0.49 | 0.32 | 0.42 | 0.09 | 0.93 | 0.89 | 0.17 |
| TC6c | TC | 6 | c | 38.5 | 34.24 | 1.55 | 1.54 | 0.43 | 0.26 | 0.36 | 0.08 | 0.93 | 0.87 | 0.27 |
| TC6b | TC | 6 | b | 38.29 | 33.86 | 1.56 | 1.55 | 0.42 | 0.25 | 0.35 | 0.07 | 0.93 | 0.87 | 0.27 |
| TC5c | TC | 5 | c | 40.94 | 38.74 | 1.41 | 1.39 | 0.3 | 0.18 | 0.27 | 0.17 | 0.84 | 0.81 | 0.81 |
| TC5b | TC | 5 | b | 40.78 | 38.43 | 1.42 | 1.39 | 0.26 | 0.16 | 0.26 | 0.17 | 0.84 | 0.81 | 0.85 |

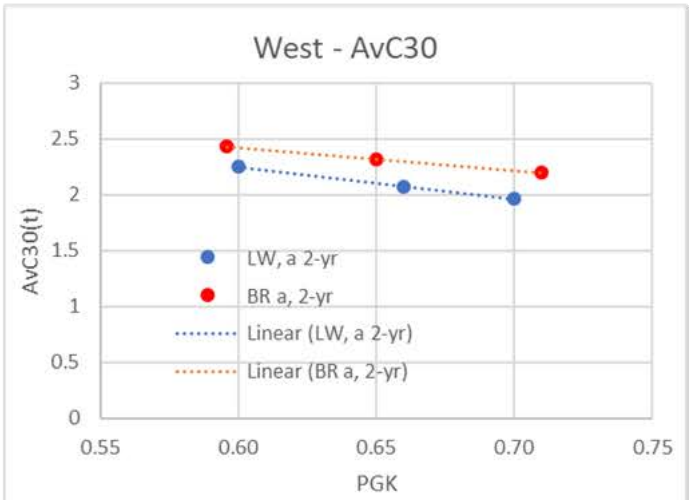
Secondary Performance Quilt Plot (West / Western)

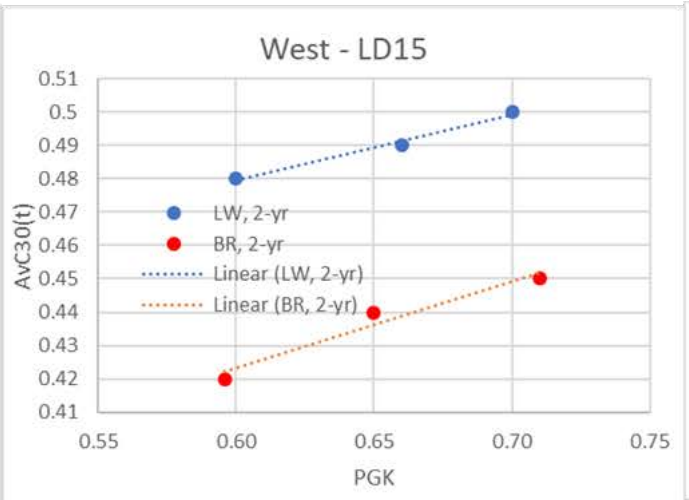
CSV Excel

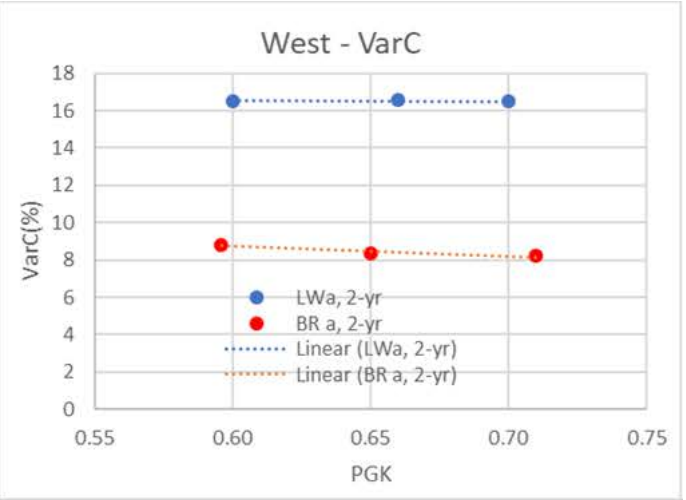
| CMP | Type | Tuning | Variant | West | | | | | | | | | | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C1 (50%) | AvC20 (50%) | AvgBr (50%) | Br20 (50%) | Br30 (5%) | LD (5%) | LD (10%) | POF (Mean) | PNRK (Mean) | OFT (P>0) | |
| TC5a | TC | 5 | a | 2.65 | 2.53 | 1.44 | 1.43 | 0.35 | 0.17 | 0.26 | 0.24 | 0.81 | 0.87 | 0.74 |
| TC6a | TC | 6 | a | 2.5 | 2.23 | 1.56 | 1.57 | 0.46 | 0.21 | 0.3 | 0.12 | 0.91 | 0.92 | 0.2 |
| TC6c | TC | 6 | c | 2.47 | 2.2 | 1.59 | 1.59 | 0.4 | 0.19 | 0.28 | 0.1 | 0.93 | 0.93 | 0.21 |
| TC6b | TC | 6 | b | 2.46 | 2.2 | 1.59 | 1.6 | 0.4 | 0.18 | 0.28 | 0.11 | 0.92 | 0.93 | 0.24 |
| TC5c | TC | 5 | c | 2.62 | 2.5 | 1.46 | 1.45 | 0.3 | 0.14 | 0.23 | 0.22 | 0.83 | 0.87 | 0.81 |
| TC5b | TC | 5 | b | 2.62 | 2.49 | 1.46 | 1.45 | 0.28 | 0.13 | 0.23 | 0.22 | 0.83 | 0.87 | 0.84 |

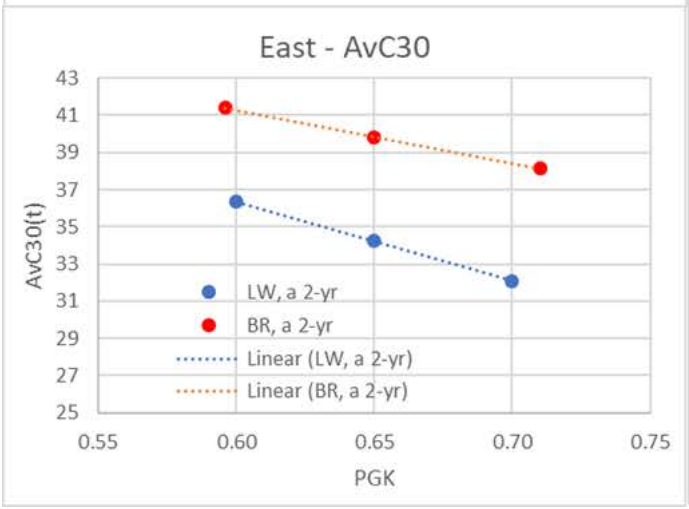
# Decision point 2: Performance of PGK65% is halfway between 60 and 70%

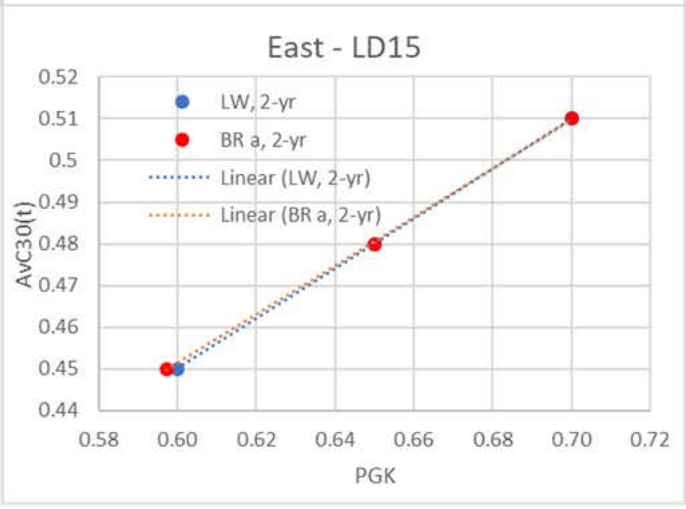
Relationship between PGK and key performance statistics is linear and PGK65 is nearly halfway between PGK60 and PGK70 for both BR (2-year) and LW. For BR 3-year interval results are similar.

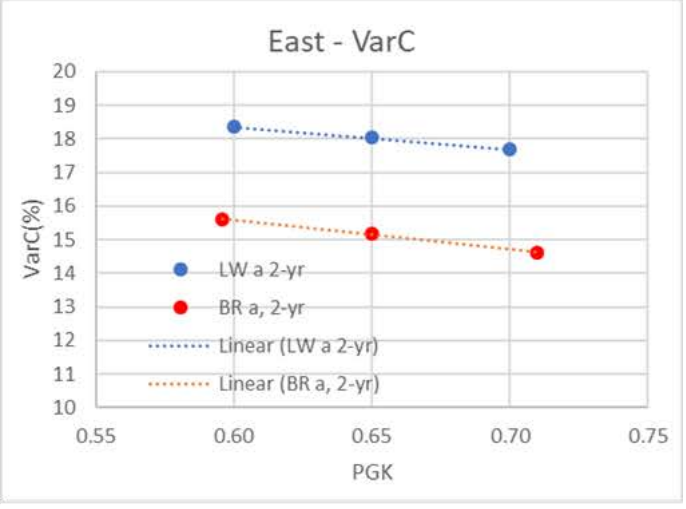



Panel 2 could choose between 60 and 70, results could be seen by interpolation

# Possible additional Decision point: Minimum TAC change

*BR tested with min TAC change of 100t - West and 1000 t - East*

*Panel 2 can choose any minimum TAC change or none at all, it could be different between East and West; results will be nearly identical to existing MPs except for higher VarC*

| | TAC inter. | PKG | Br30 | LD*15% | LD*10% | AvC30 | C1 | VarC |
|---|---|---|---|---|---|---|---|---|
| **EAST** | | | | | | | | |
| New package - 0.6 vs 0.7 PKG and 2 vs 3 yr intervals | | | | | | | | |
| BR5a | 2 | **0.60** | 1.17 (0.44; 2.15) | 0.45 | 0.38 | 41.42 (12.29; 75.35) | 40.57 | 15.60 (8.73; 22.76) |
| BR5b | 3 | **0.60** | 1.17 (0.25; 2.22) | 0.38 | 0.30 | 41.17 (13.20; 71.21) | 40.57 | 17.96 (10.00; 25.71) |
| BR6a | 2 | **0.70** | 1.32 (0.58; 2.34) | 0.51 | 0.43 | 38.13 (11.77; 68.21) | 40.57 | 14.63 (7.55; 22.58) |
| BR6b | 3 | **0.70** | 1.34 (0.42; 2.42) | 0.44 | 0.36 | 37.20 (12.73; 64.07) | 40.57 | 17.14 (8.29; 25.78) |
| WITH MIN CHANGE = 1000mt | | | | | | | | |
| BR5a | 2 | 0.60 | 1.18 (0.44; 2.16) | 0.45 | 0.38 | 41.33 (11.24; 75.38) | 40.57 | 15.98 (8.95; 26.12) |
| BR5b | 3 | 0.60 | 1.16 (0.25; 2.22) | 0.38 | 0.29 | 41.17 (12.99; 71.21) | 40.57 | 18.31 (10.03; 26.66) |
| BR6a | 2 | 0.70 | 1.32 (0.58; 2.34) | 0.51 | 0.43 | 38.08 (10.95; 68.21) | 40.57 | 15.18 (7.68; 25.78) |
| BR6b | 3 | 0.70 | 1.34 (0.41; 2.43) | 0.44 | 0.36 | 37.28 (12.65; 64.07) | 40.57 | 17.57 (8.33; 27.37) |
| Percentage change | | | | | | | | |
| BR5a | 2 | 0.00 | -0.85 (0.00; -0.47) | 0.00 | 0.00 | 0.22 (8.54; -0.04) | 0.00 | -2.44 (2.52; -14.76) |
| BR5b | 3 | 0.00 | 0.85 (0.00; 0.00) | 0.00 | 3.33 | 0.00 (1.59; 0.00) | 0.00 | -1.95 (0.30; -3.70) |
| BR6a | 2 | 0.00 | 0.00 (0.00; 0.00) | 0.00 | 0.00 | 0.13 (6.97; 0.00) | 0.00 | -3.76 (1.72; -14.17) |
| BR6b | 3 | 0.00 | 0.00 (2.38; -0.41) | 0.00 | 0.00 | -0.22 (0.63; 0.00) | 0.00 | -2.51 (0.48; -6.17) |
| **WEST** | | | | | | | | |
| New package - 0.6 vs 0.7 PKG and 2 vs 3 yr intervals | | | | | | | | |
| BR5a | 2 | **0.60** | 1.25 (0.46; 2.37) | 0.42 | 0.29 | 2.43 (0.90; 3.60) | 2.69 | 8.81 (4.95; 21.38) |
| BR5b | 3 | **0.60** | 1.28 (0.38; 2.40) | 0.40 | 0.27 | 2.40 (0.94; 3.53) | 2.69 | 10.37 (5.51; 24.16) |
| BR6a | 2 | **0.71** | 1.41 (0.54; 2.53) | 0.45 | 0.30 | 2.20 (0.87; 3.27) | 2.69 | 8.21 (4.72; 21.07) |
| BR6b | 3 | **0.70** | 1.45 (0.46; 2.57) | 0.43 | 0.28 | 2.18 (0.91; 3.20) | 2.69 | 9.75 (5.20; 24.86) |
| WITH MIN CHANGE = 100mt | | | | | | | | |
| BR5a | 2 | **0.60** | 1.25 (0.46; 2.37) | 0.42 | 0.28 | 2.44 (0.81; 3.61) | 2.73 | 10.00 (4.70; 30.00) |
| BR5b | 3 | **0.61** | 1.27 (0.38; 2.40) | 0.40 | 0.26 | 2.41 (0.91; 3.54) | 2.73 | 10.95 (4.79; 28.94) |
| BR6a | 2 | **0.71** | 1.42 (0.55; 2.53) | 0.45 | 0.29 | 2.20 (0.81; 3.27) | 2.73 | 9.61 (4.28; 30.00) |
| BR6b | 3 | **0.70** | 1.44 (0.45; 2.58) | 0.43 | 0.27 | 2.19 (0.91; 3.20) | 2.73 | 10.97 (4.40; 30.00) |
| Percentage change | | | | | | | | |
| BR5a | 2 | 0.00 | 0.00 (0.00; 0.00) | 0.00 | 3.45 | -0.41 (0.00; -0.28) | -1.49 | -13.51 (5.05; -40.32) |
| BR5b | 3 | -1.67 | 0.78 (0.00; 0.00) | 0.00 | 3.70 | -0.42 (0.19; -0.28) | -1.49 | -5.59 (13.07; -19.78) |
| BR6a | 2 | 0.00 | -0.71 -(1.85; 0.00) | 0.00 | 3.33 | 0.00 (6.90; 0.00) | -1.49 | -17.05 (9.32; -42.38) |
| BR6b | 3 | 0.00 | 0.69 (2.17; -0.39) | 0.00 | 3.57 | -0.46 (0.00; 0.00) | -1.49 | -12.51 (15.38; -20.68) |

# Percent of years for which TAC change is greater than 30% (for 60% PGK and +20/-35)

| | E | W |
|---|---|---|
| BR5c | 6.5% | 1.9% |
| FO5c | 6.3% | 4.8% |
| TC5c | 2.0% | 0.6% |
| LW5c | 7.4% | 4.3% |

East

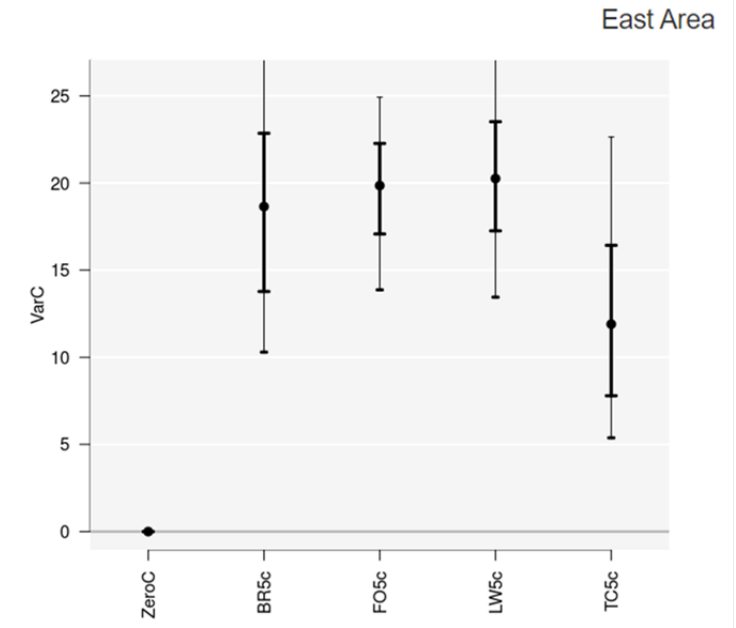
CSV Excel

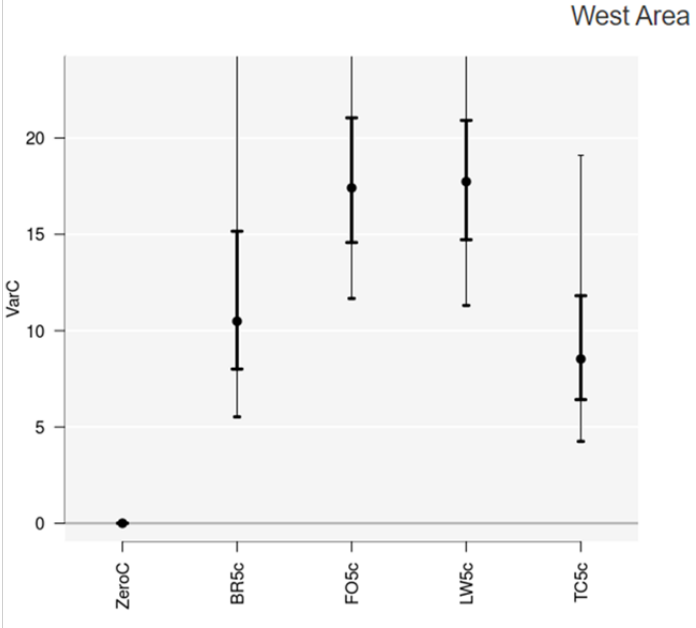
| | VarC 2.5 % | VarC 50 % | VarC 97.5 % |
|---|---|---|---|
| ZeroC | 0 | 0 | 0 |
| BR5c | 9.52 | 18.65 | 28.96 |
| FO5c | 12.97 | 19.85 | 25.97 |
| LW5c | 12.42 | 20.25 | 28.76 |
| TC5c | 4.67 | 11.9 | 23.85 |

West

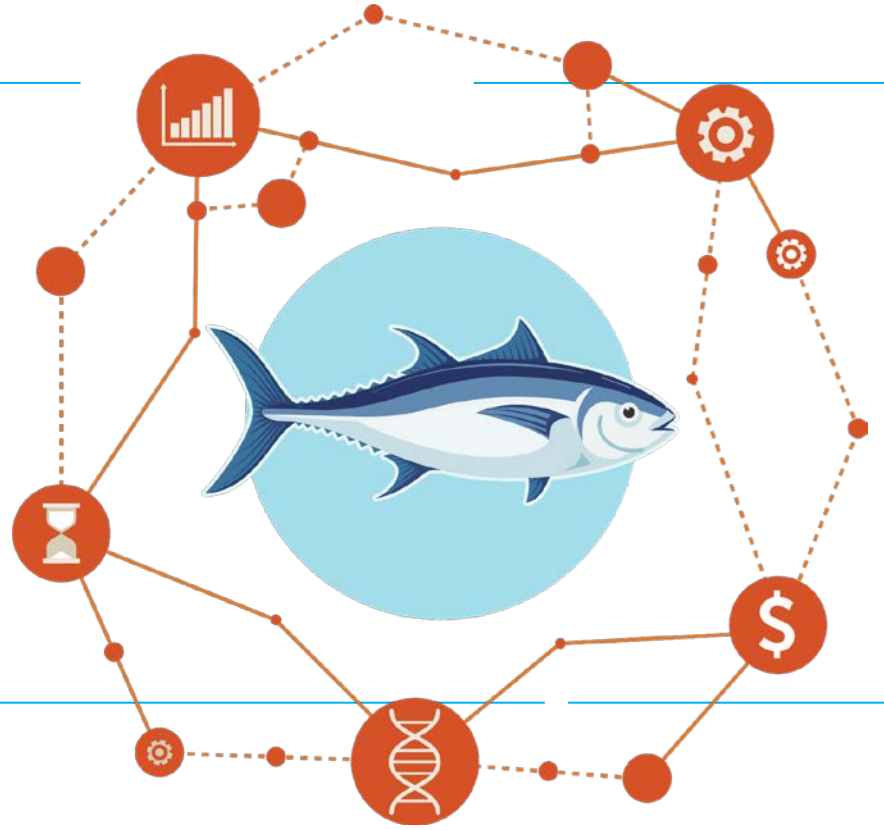
CSV Excel

| | VarC 2.5 % | VarC 50 % | VarC 97.5 % |
|---|---|---|---|
| ZeroC | 0 | 0 | 0 |
| BR5c | 4.99 | 10.49 | 26.32 |
| FO5c | 10.87 | 17.41 | 26.64 |
| LW5c | 10.42 | 17.74 | 26.62 |
| TC5c | 3.72 | 8.53 | 21.19 |



# BFT Management Strategy Evaluation (MSE)



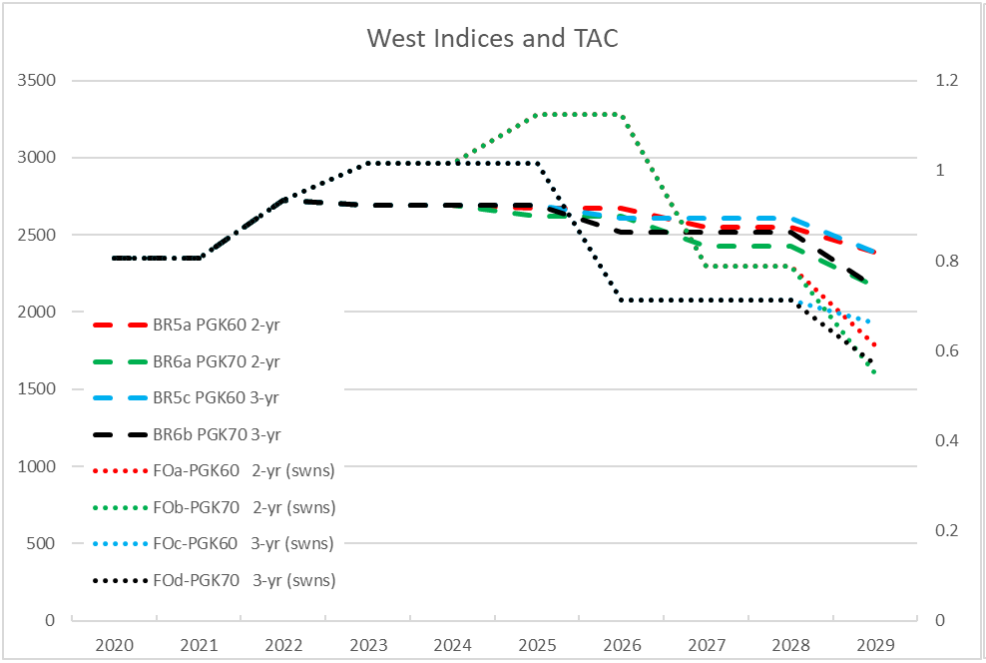
## Additional material
## Panel 2 Intersessional
## 14 October 2022

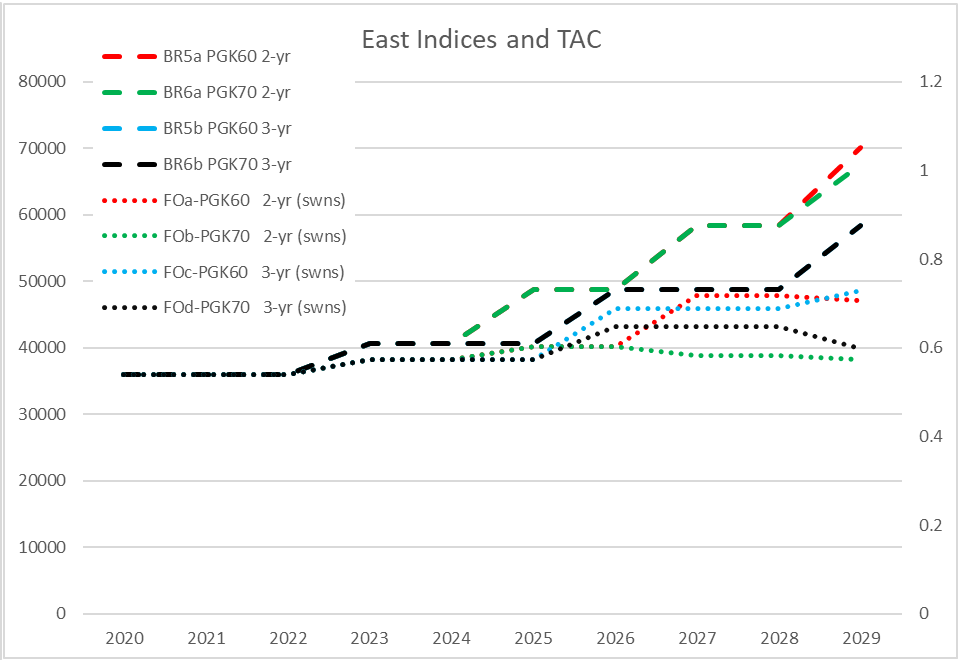
*References*

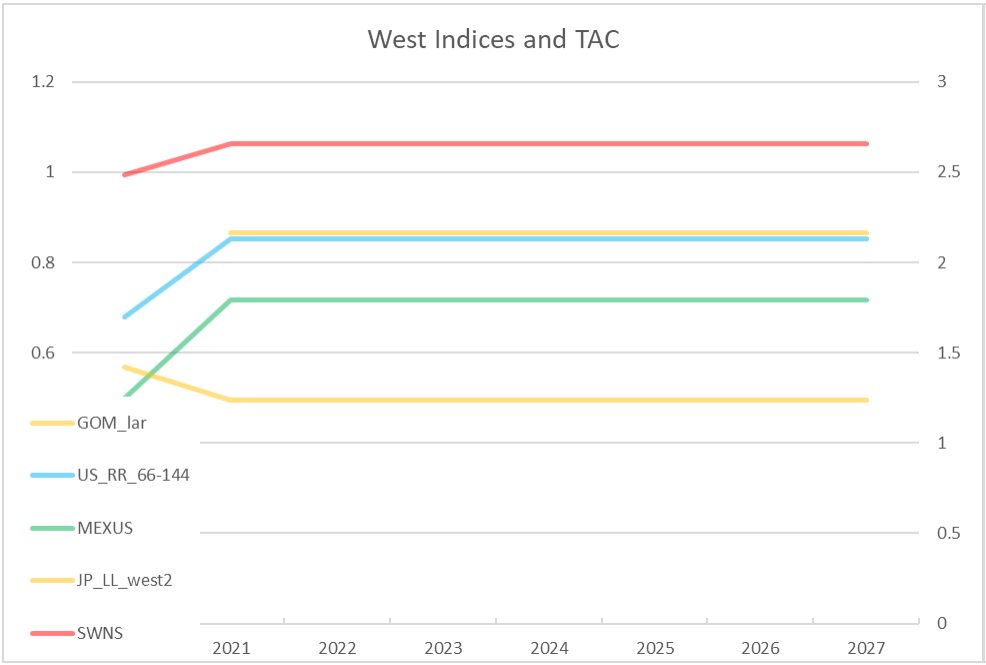

1. Splash Page: https://iccat.github.io/abft-mse/ with Shiny Apps and quilt plots
2. Decision Guide (PA2_BFT_MSE_OCT_02_ENG) Atlantic Bluefin Tuna MSE – Final Results & Decision Guide Package
3. SCRS_2022_169. Results, features, and interpretations of the four remaining BFT MSE candidate management procedures

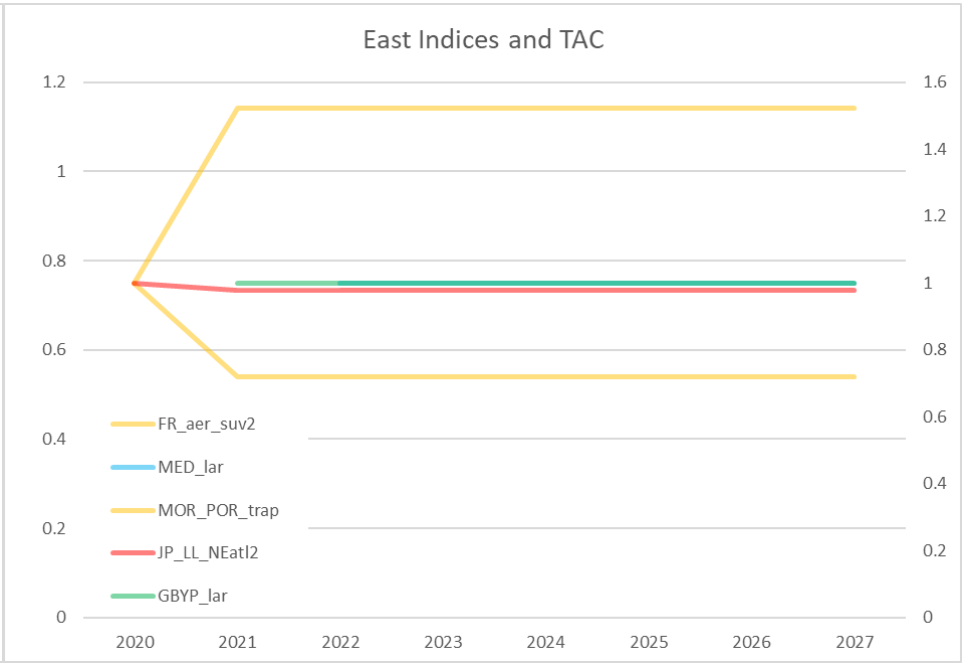
# Other Slides/
# Autres diapositives/
# Otras diapositivas

# Constant indices

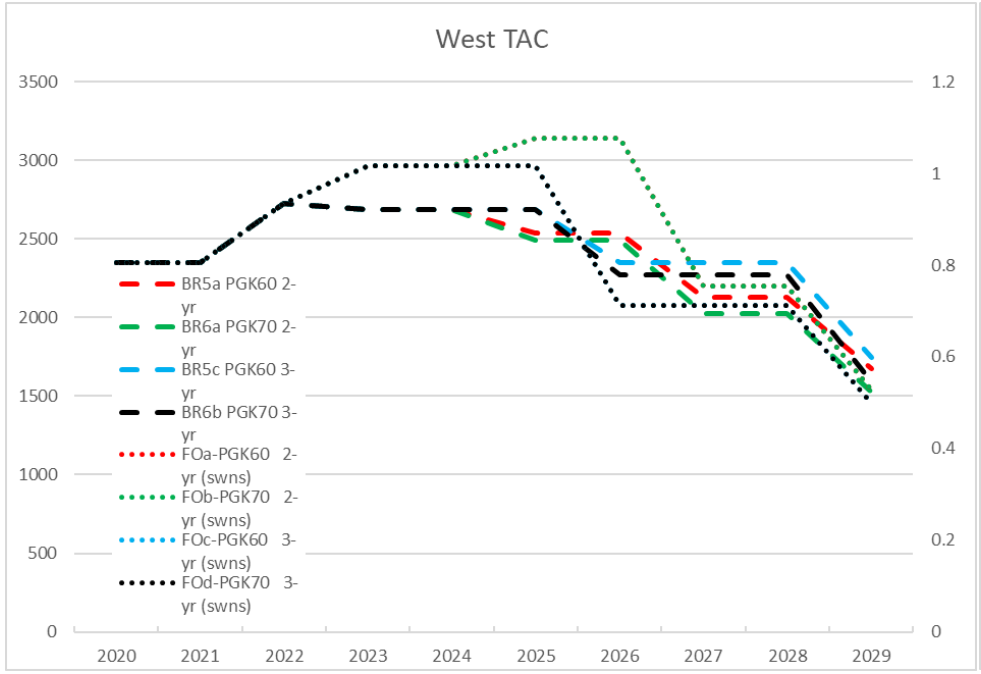


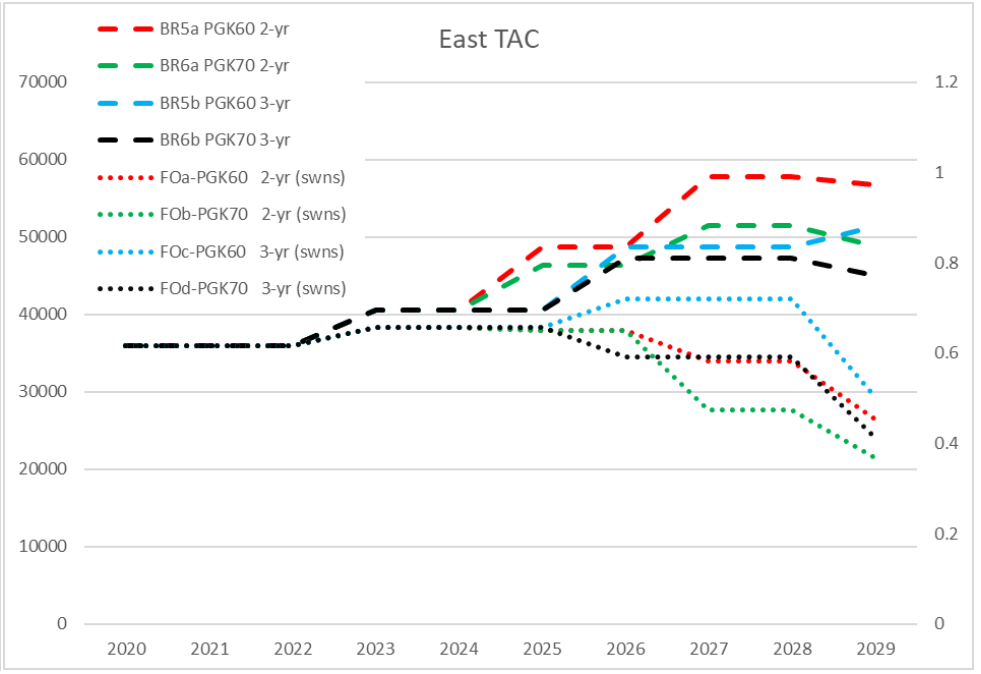



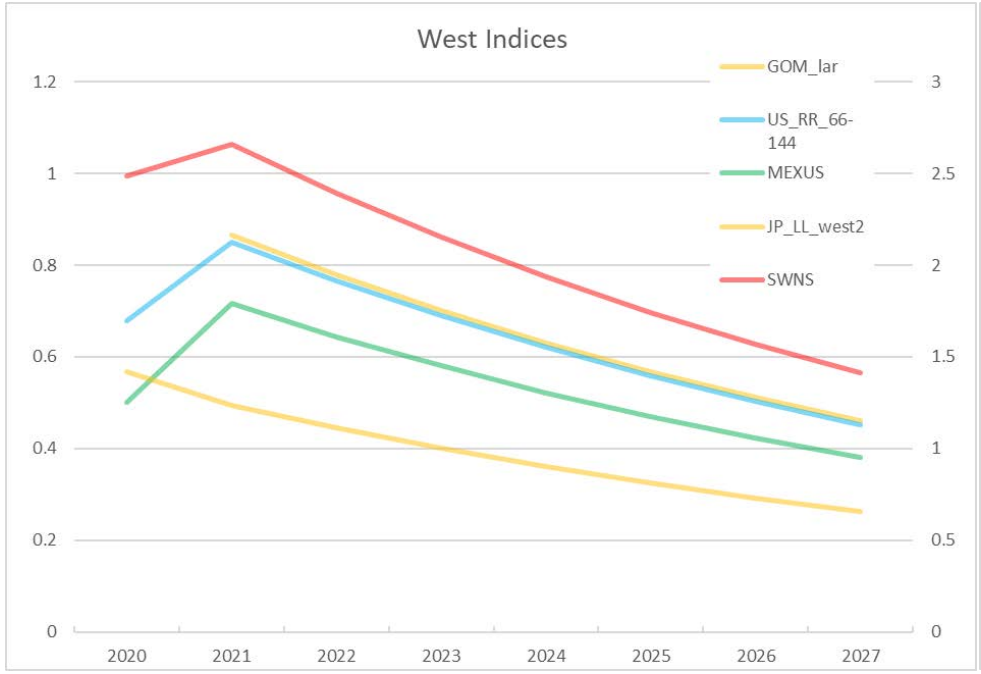



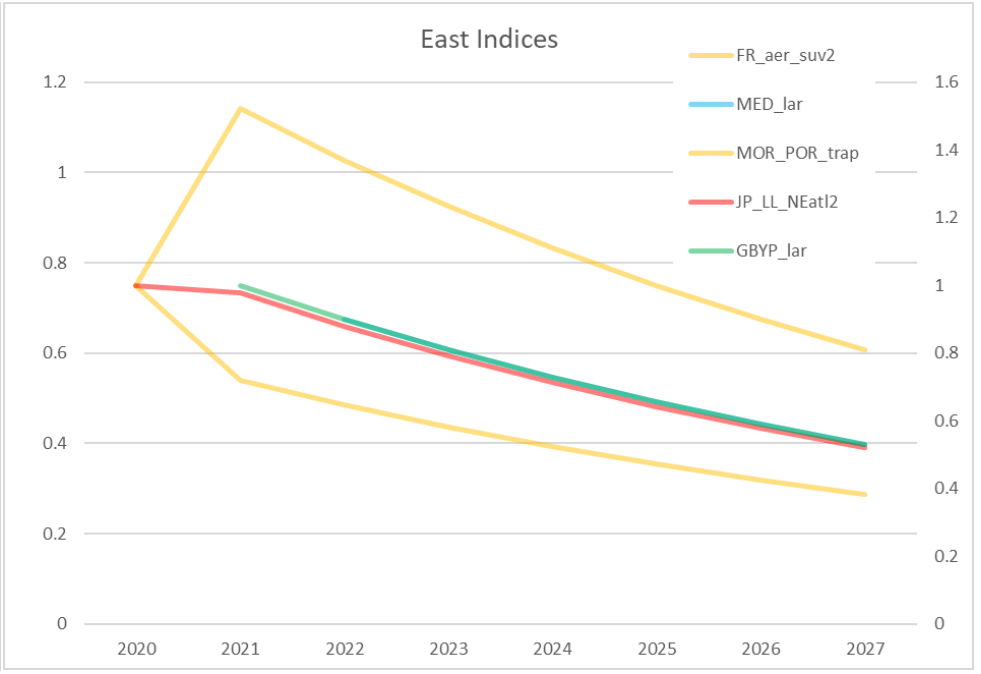



# Decreasing indices – 10% decrease each year

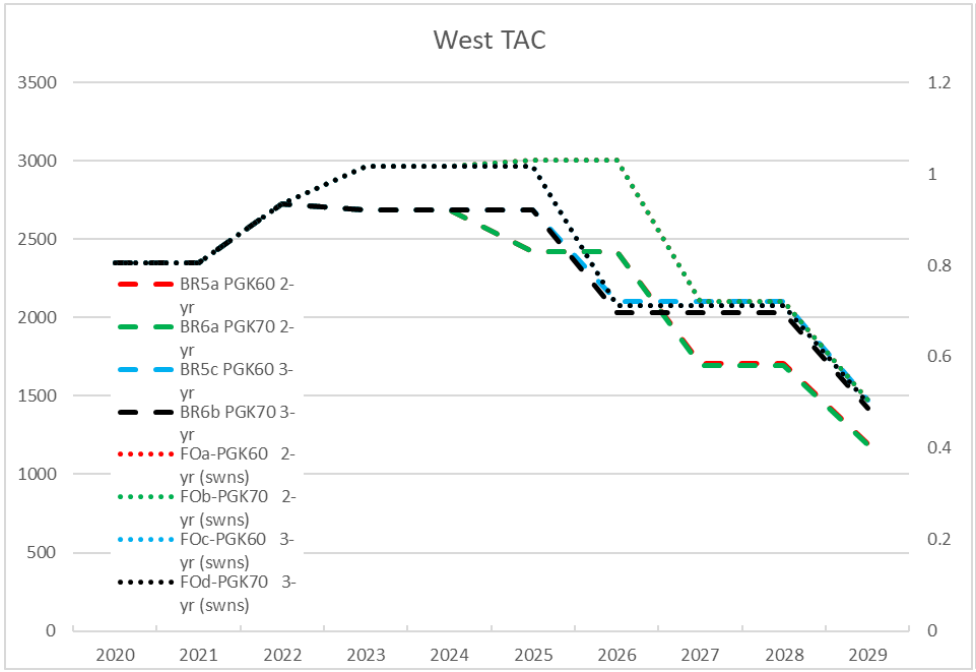


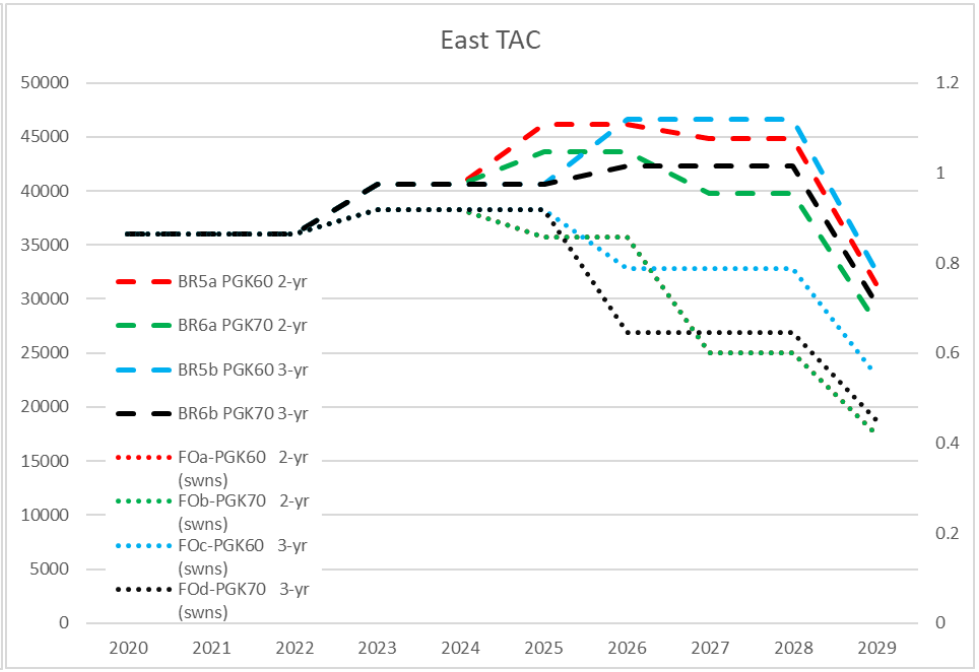



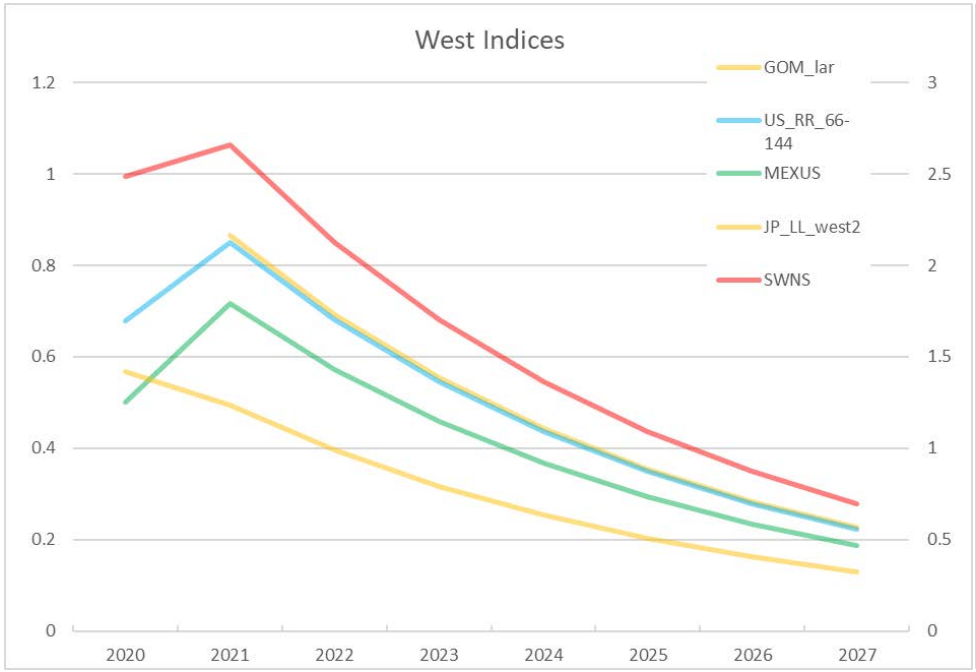



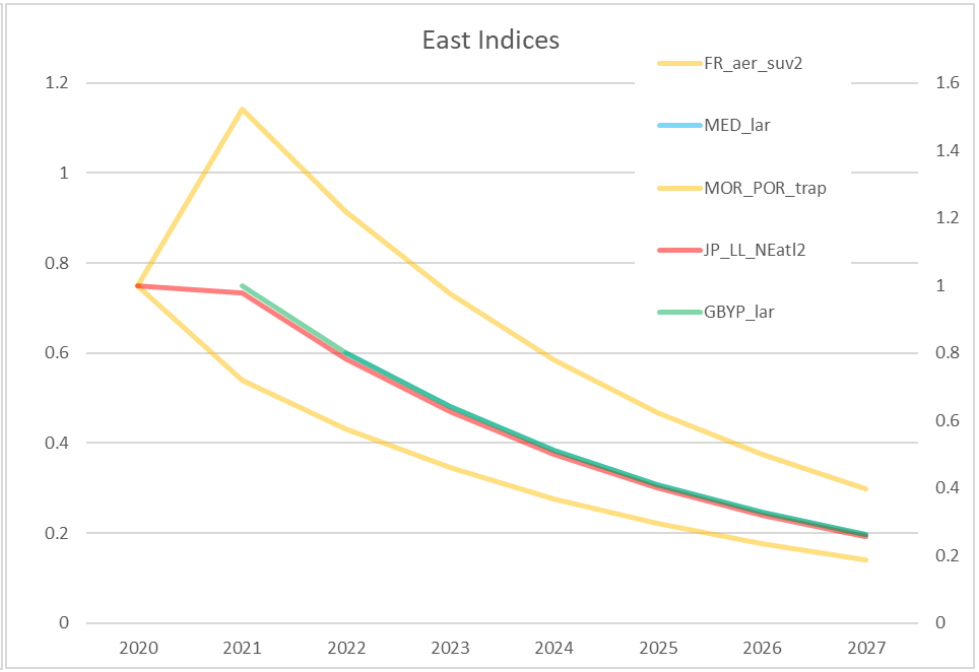



# Decreasing indices – 20% decrease each year

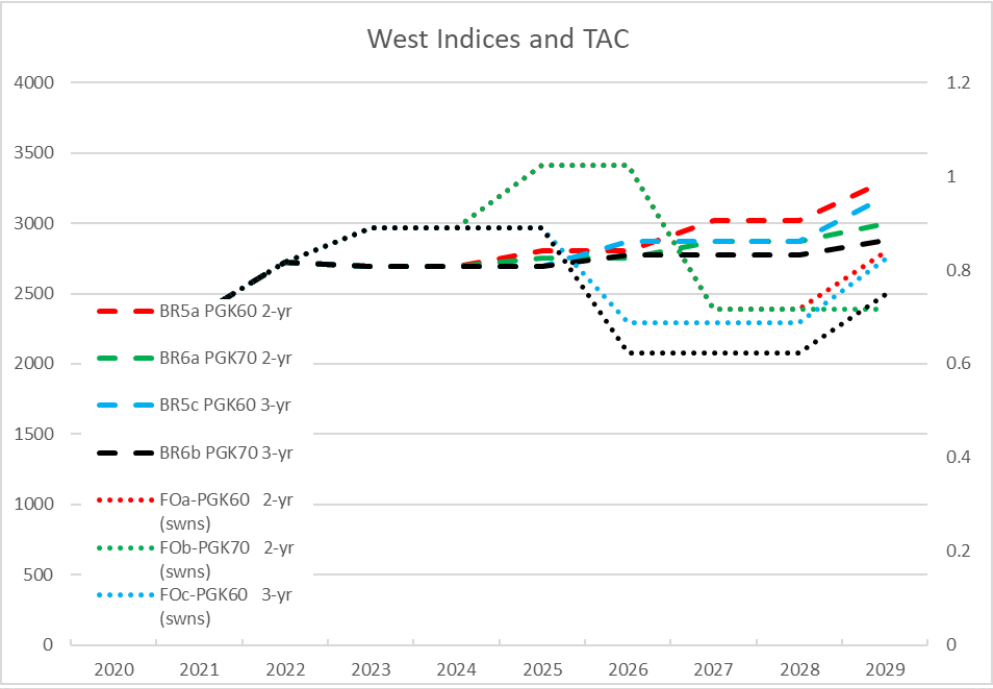


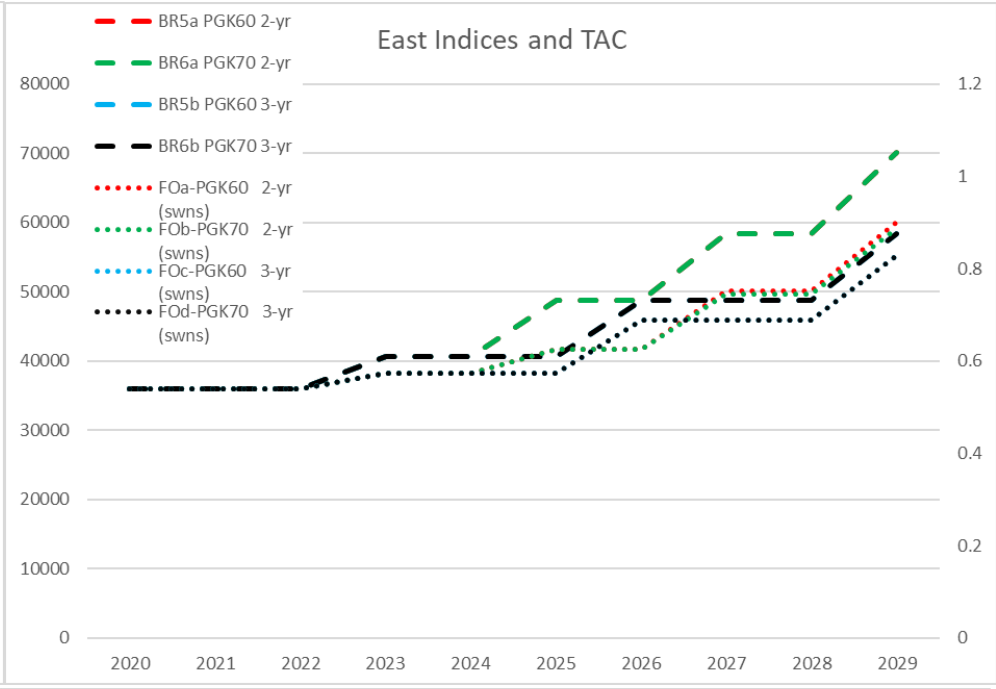



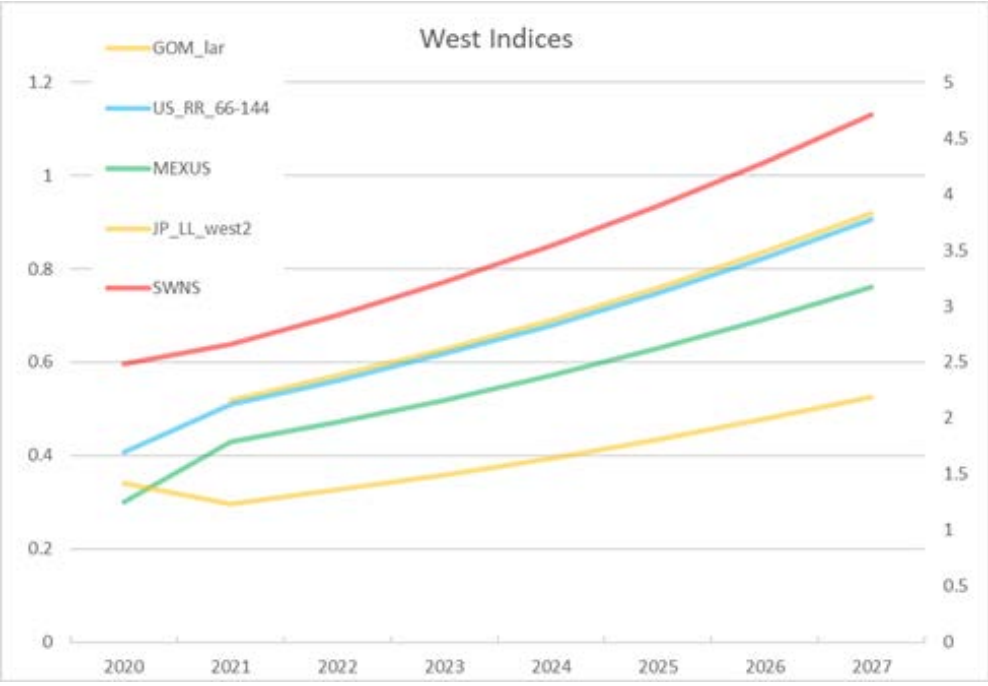



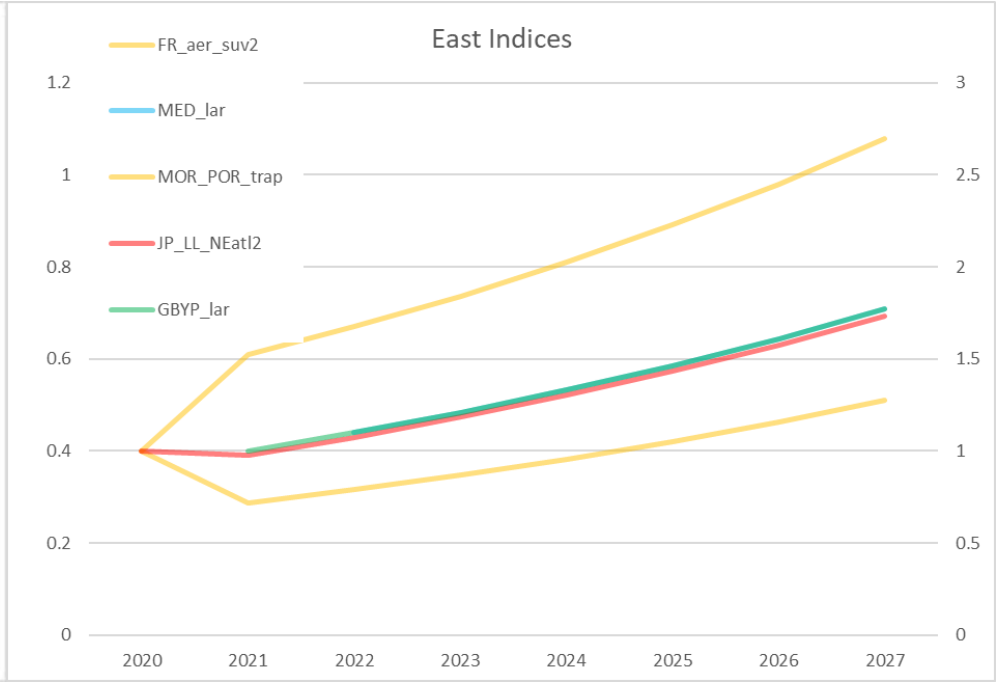



Decreasing indices – 10% increase each year



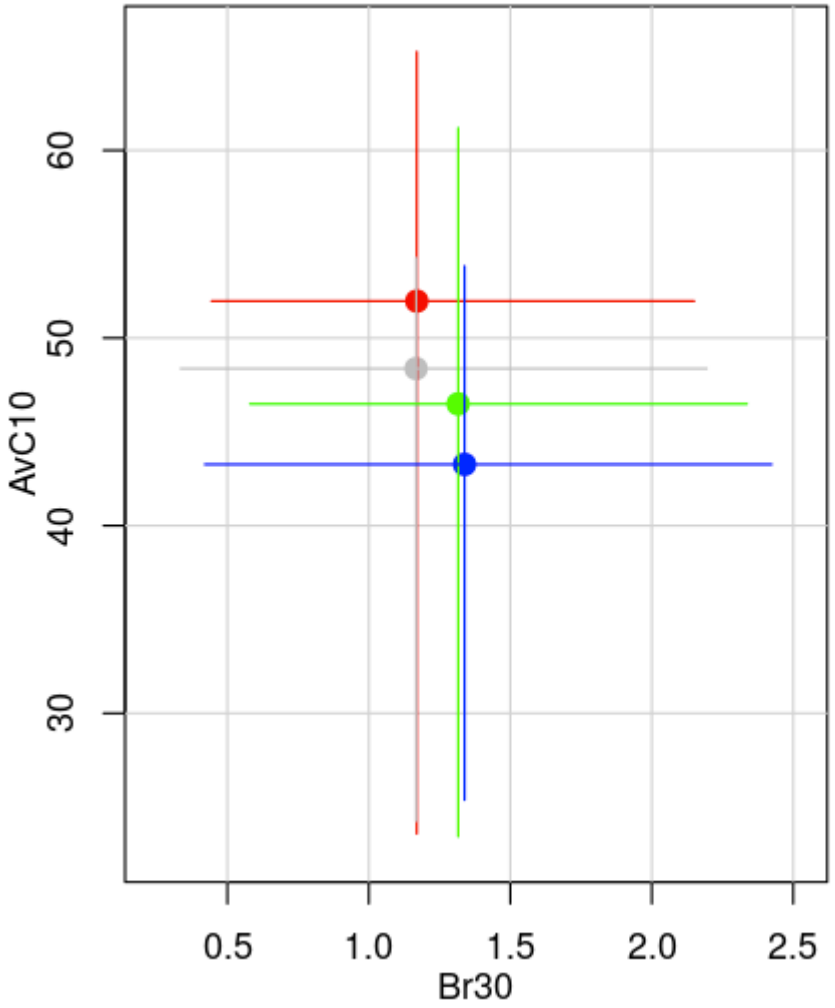



# Trade-off of Br30 vs. AvC10 for BR CMP

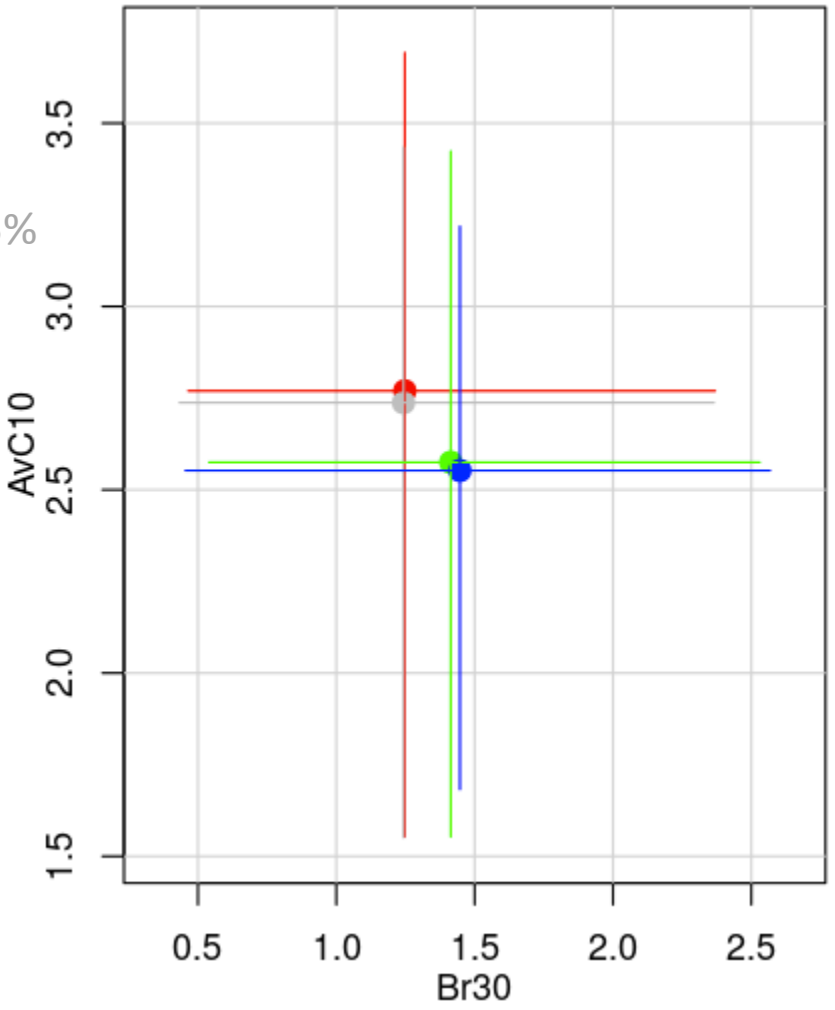
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

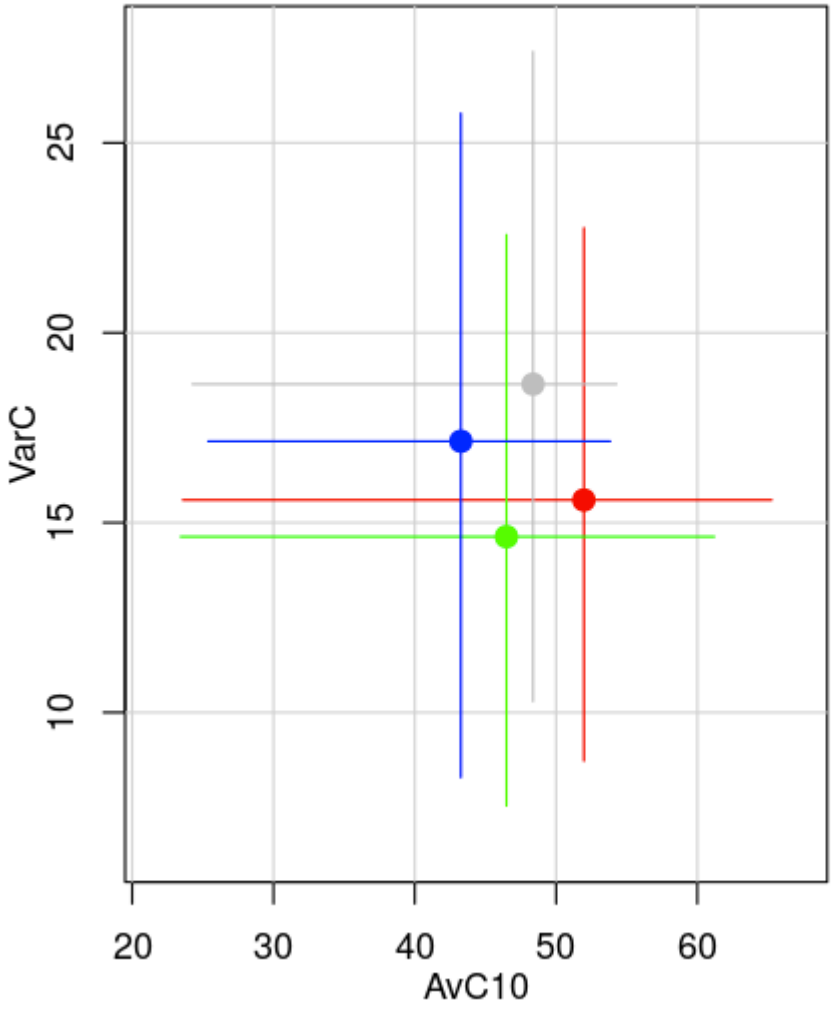
BR5a
BR5c
BR6a
BR6b

West



# Trade-off of AvC10 vs. VarC for BR CMP

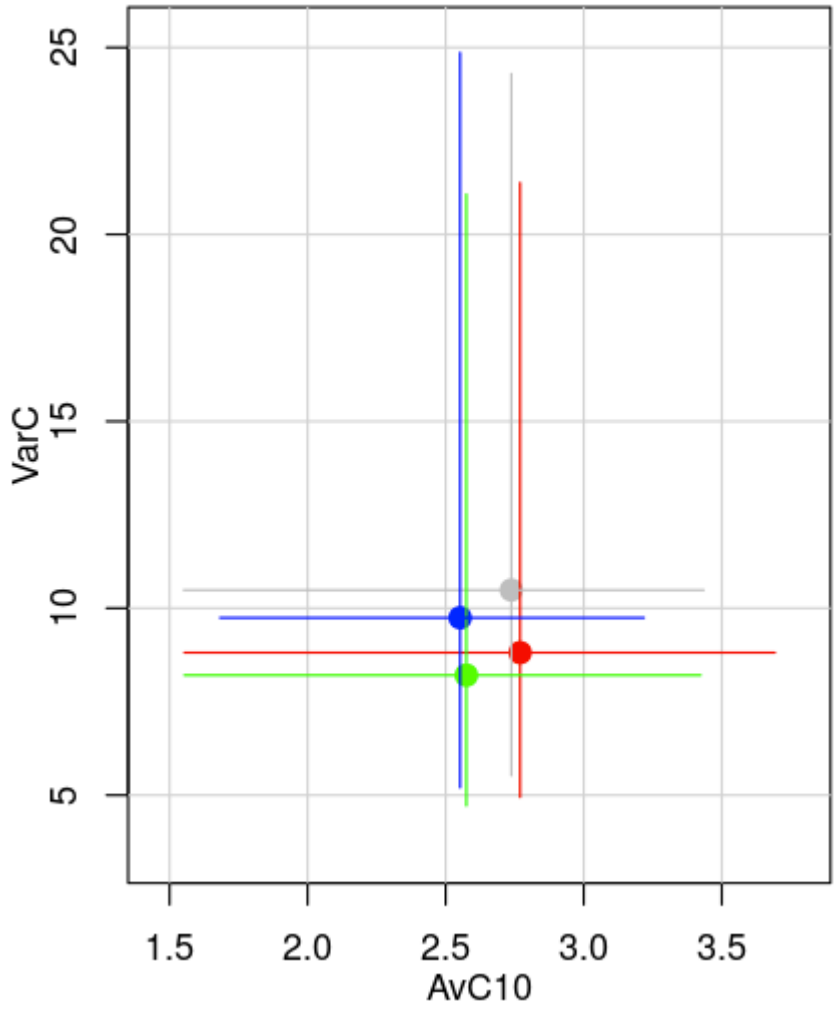
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

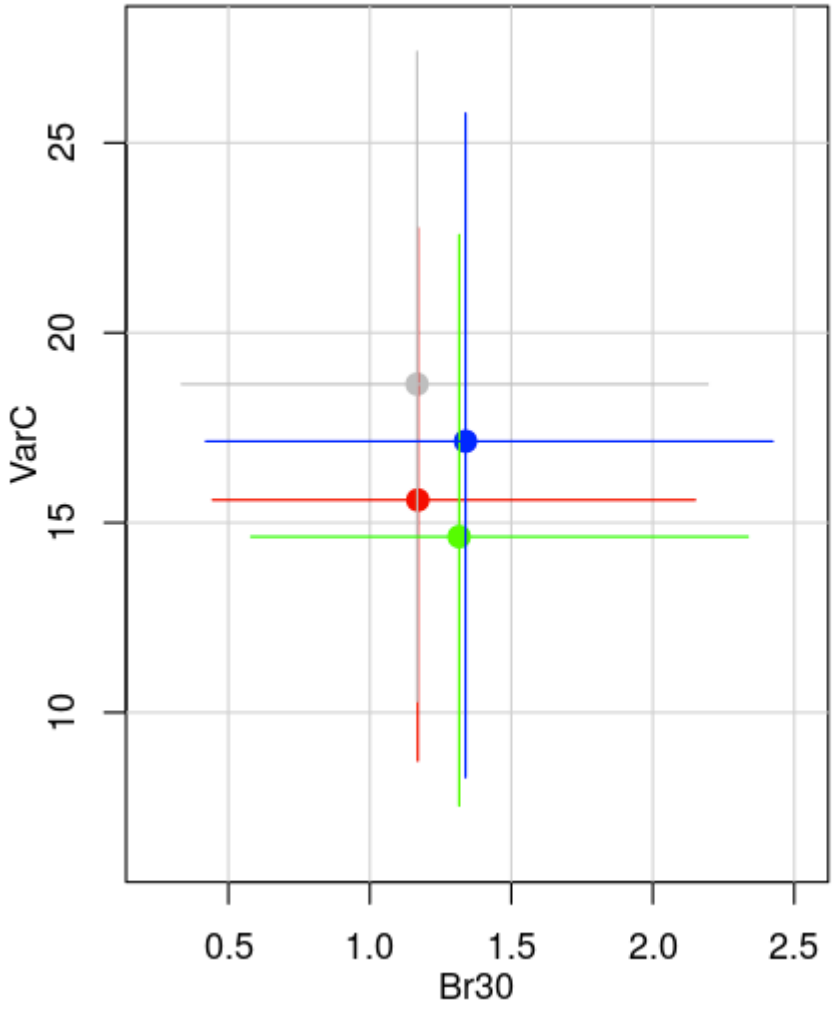
BR5a
BR5c
BR6a
BR6b

West



# Trade-off of Br30 vs. VarC for BR CMP

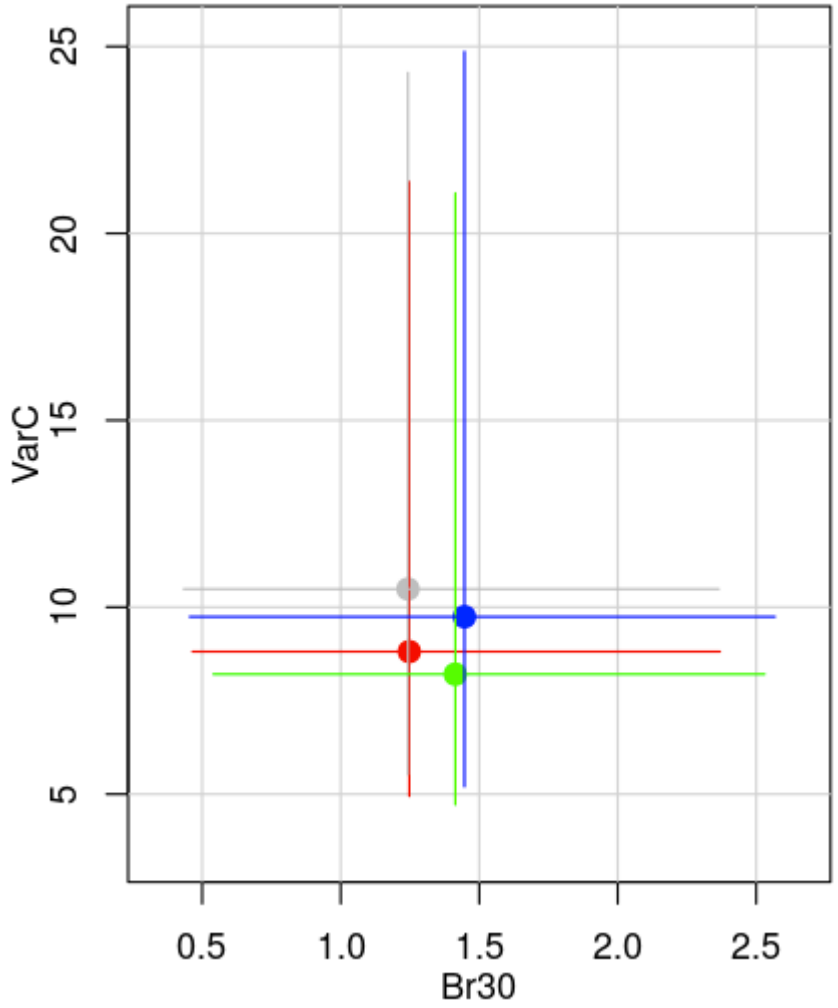
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

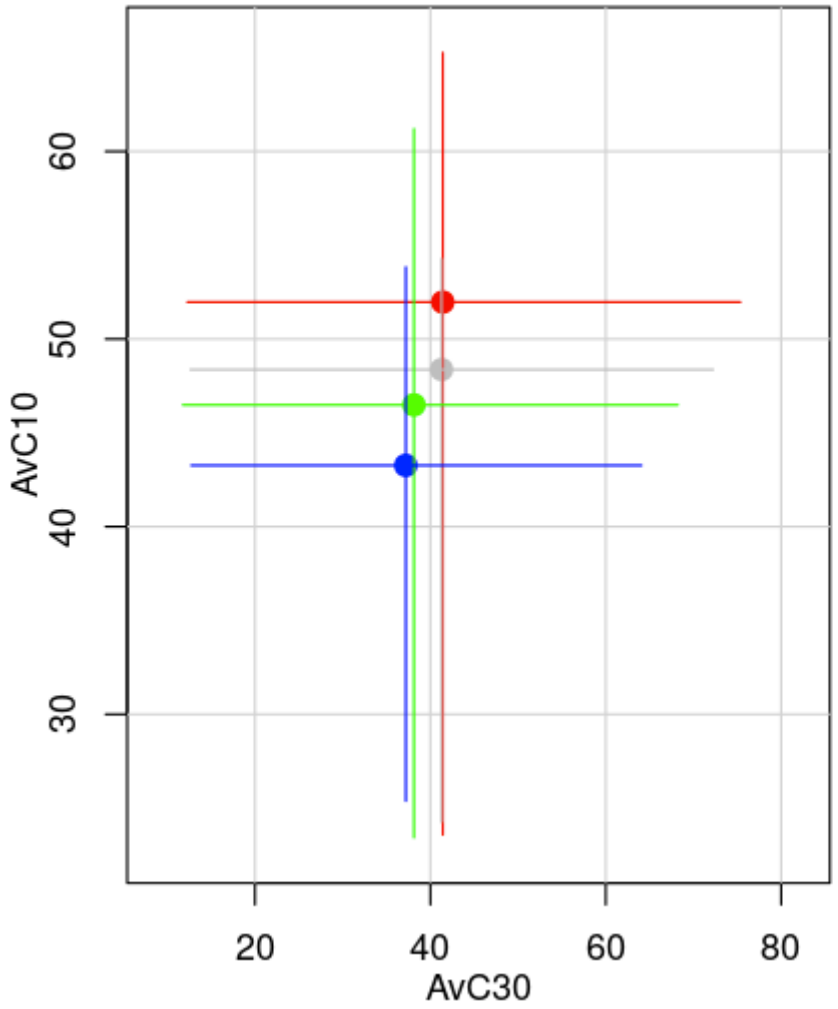
BR5a
BR5c
BR6a
BR6b

West



# Trade-off of AvC30 vs. AvC10 for BR CMP

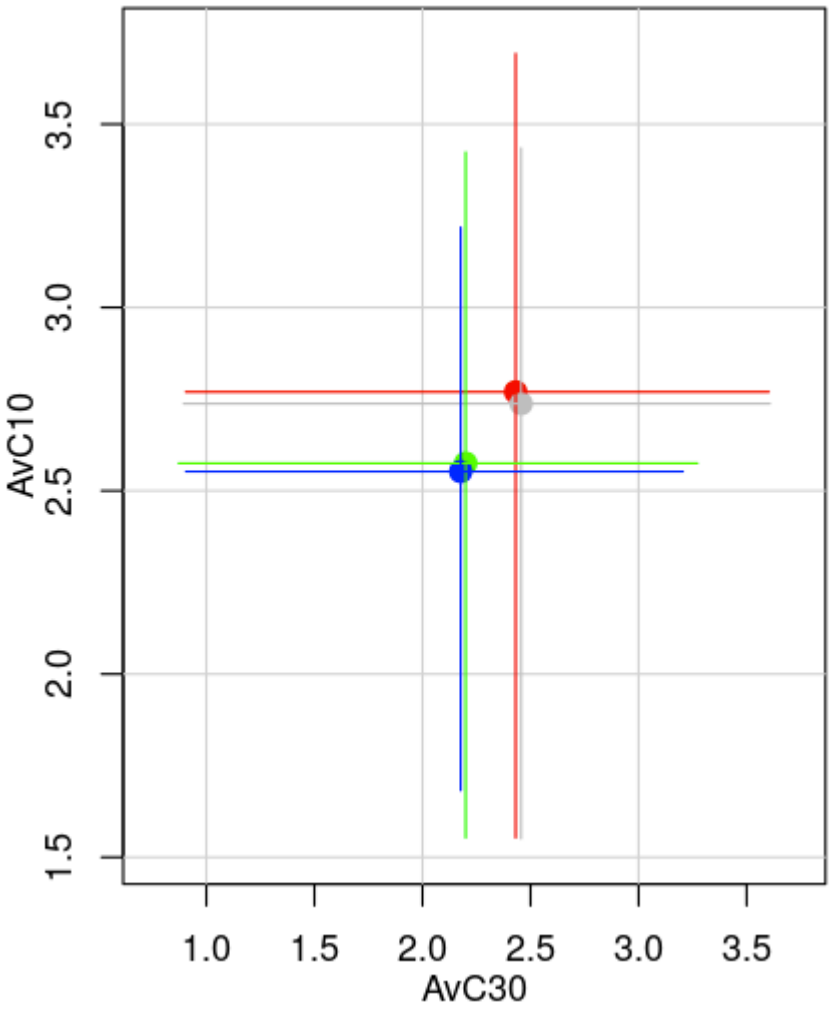
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

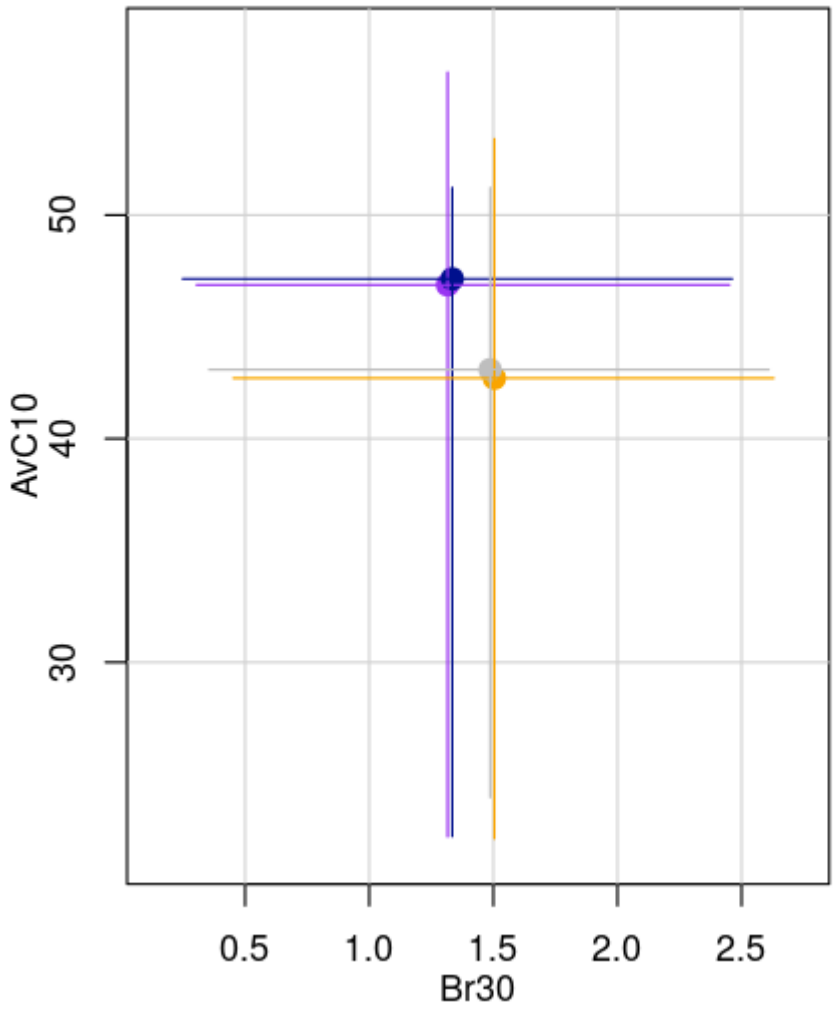
BR5a
BR5c
BR6a
BR6b

West



# Trade-off of Br30 vs. AvC10 for FO CMP

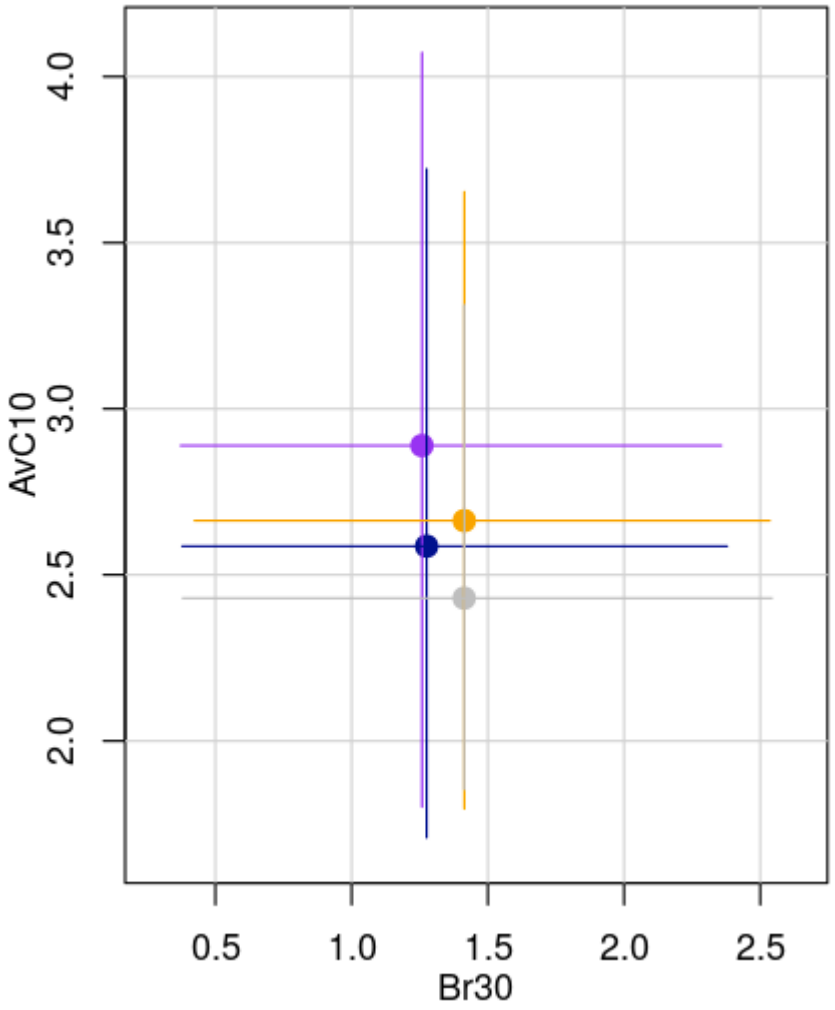
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

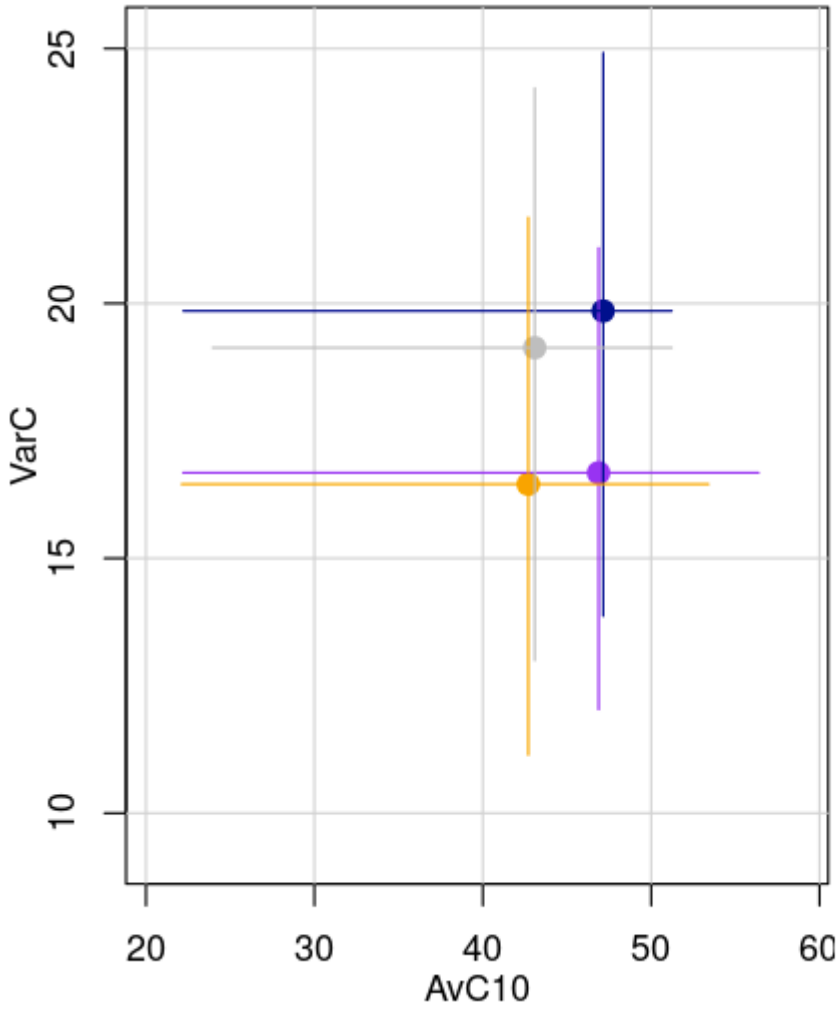
FO5a
FO5c
FO6a
FO6b

West



# Trade-off of AvC10 vs. VarC for FO CMP

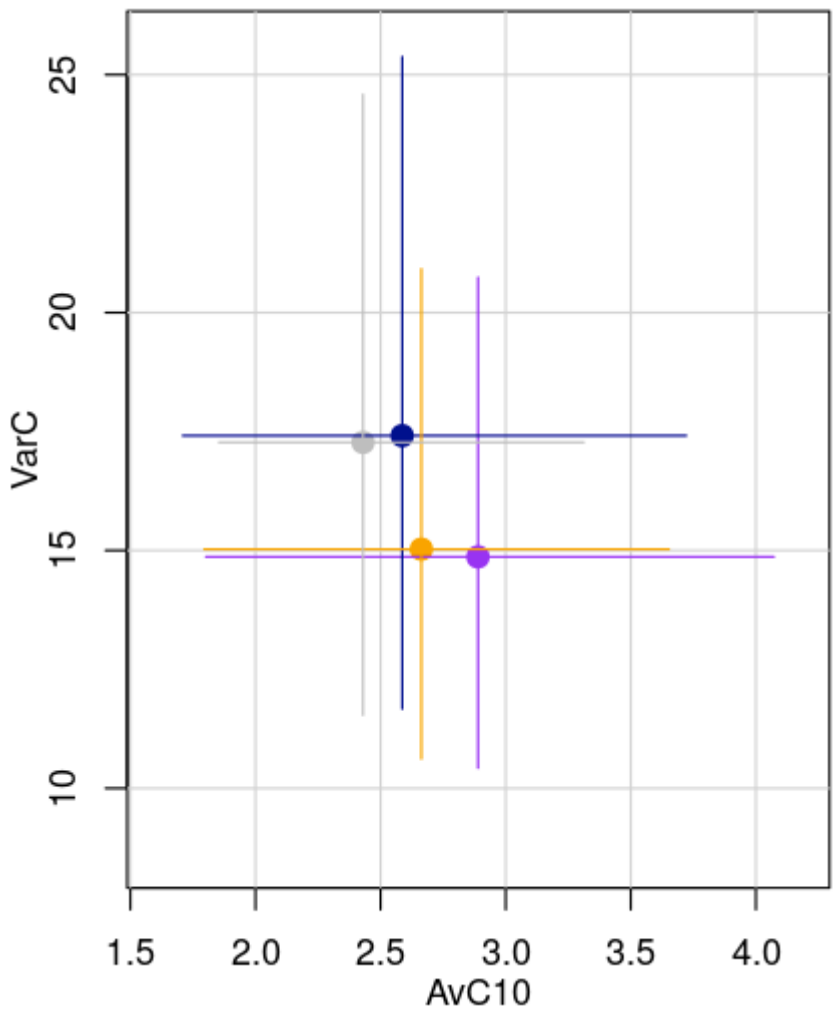
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

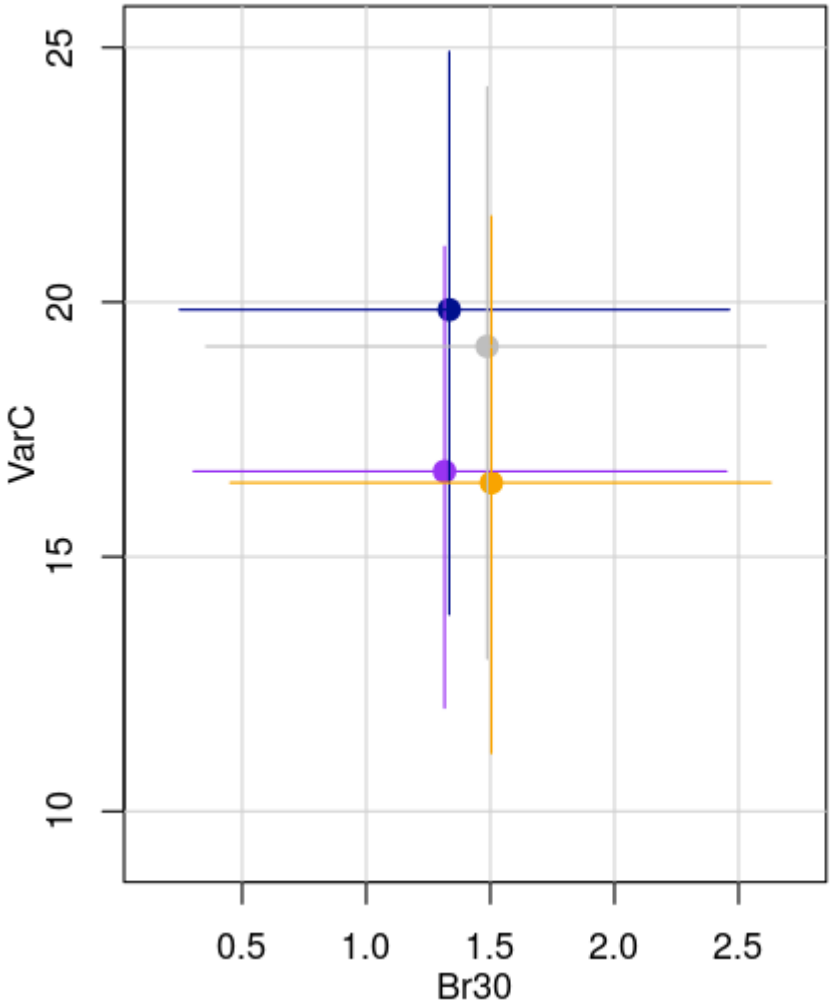
FO5a
FO5c
FO6a
FO6b

West



# Trade-off of Br30 vs. VarC for FO CMP

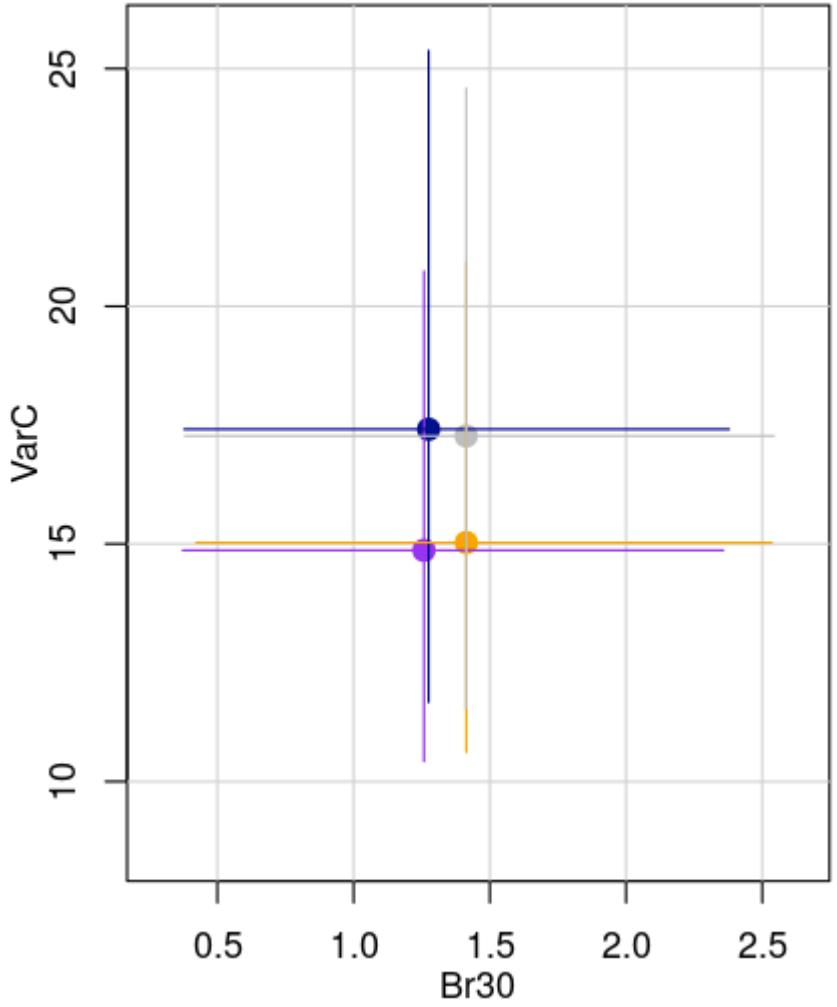
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

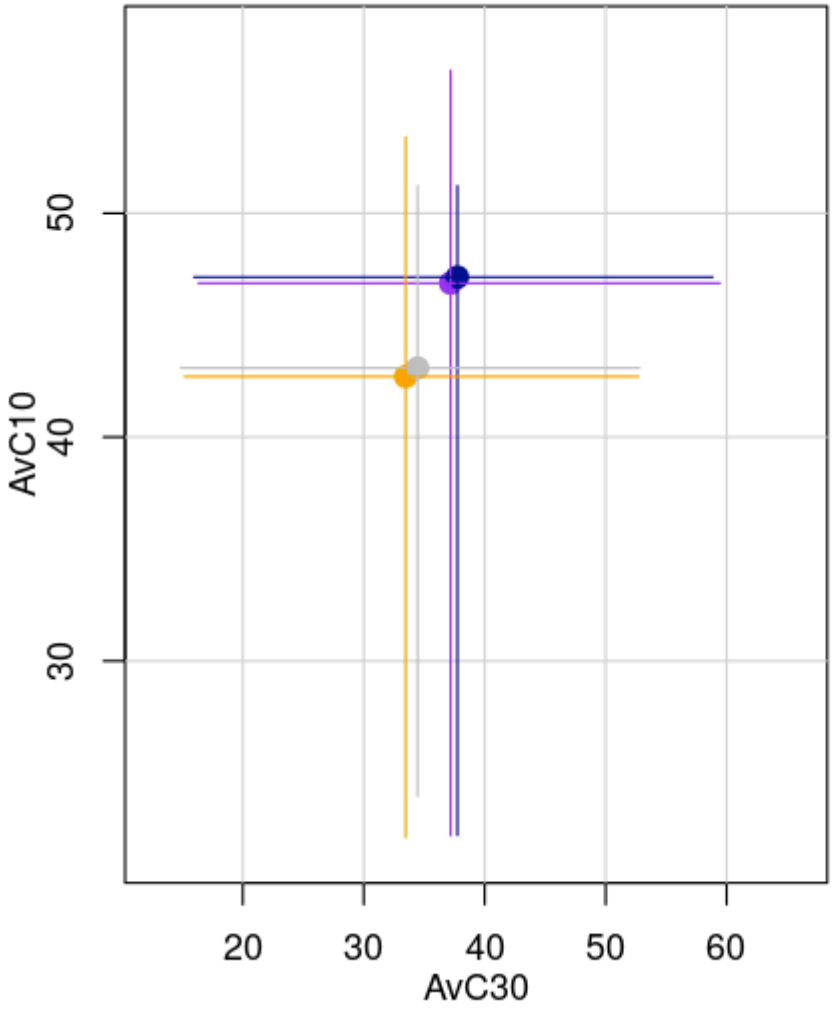
FO5a
FO5c
FO6a
FO6b

West



# Trade-off of AvC30 vs. AvC10 for FO CMP

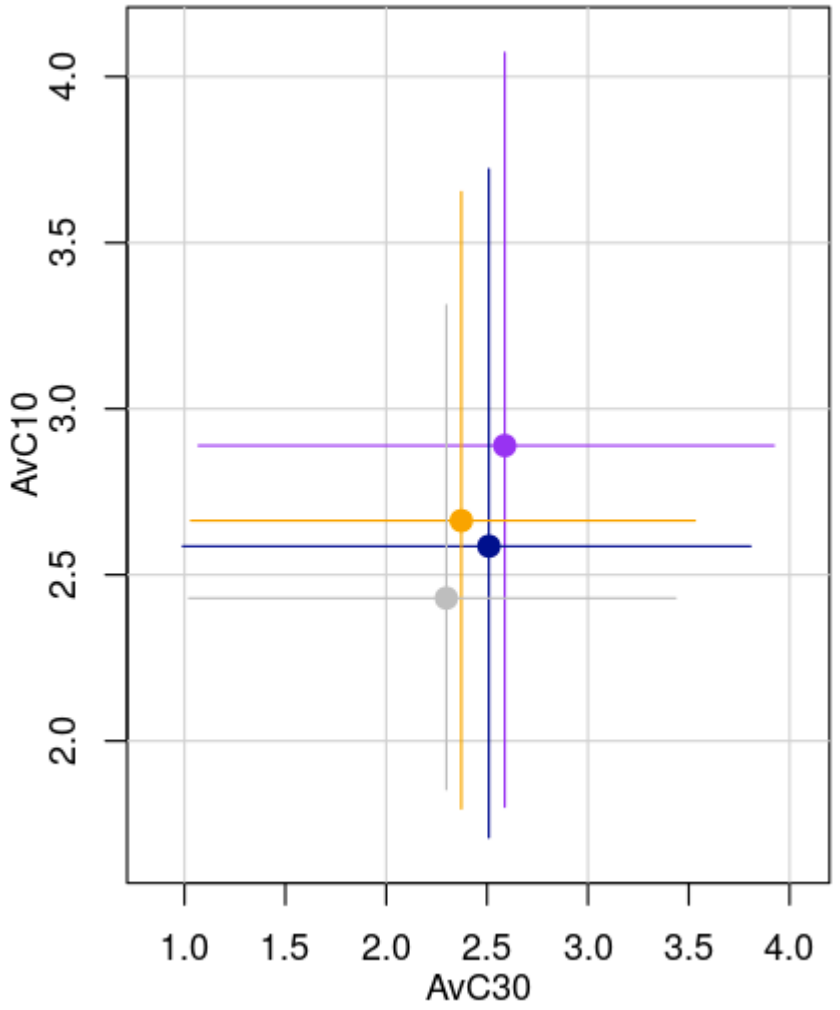
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

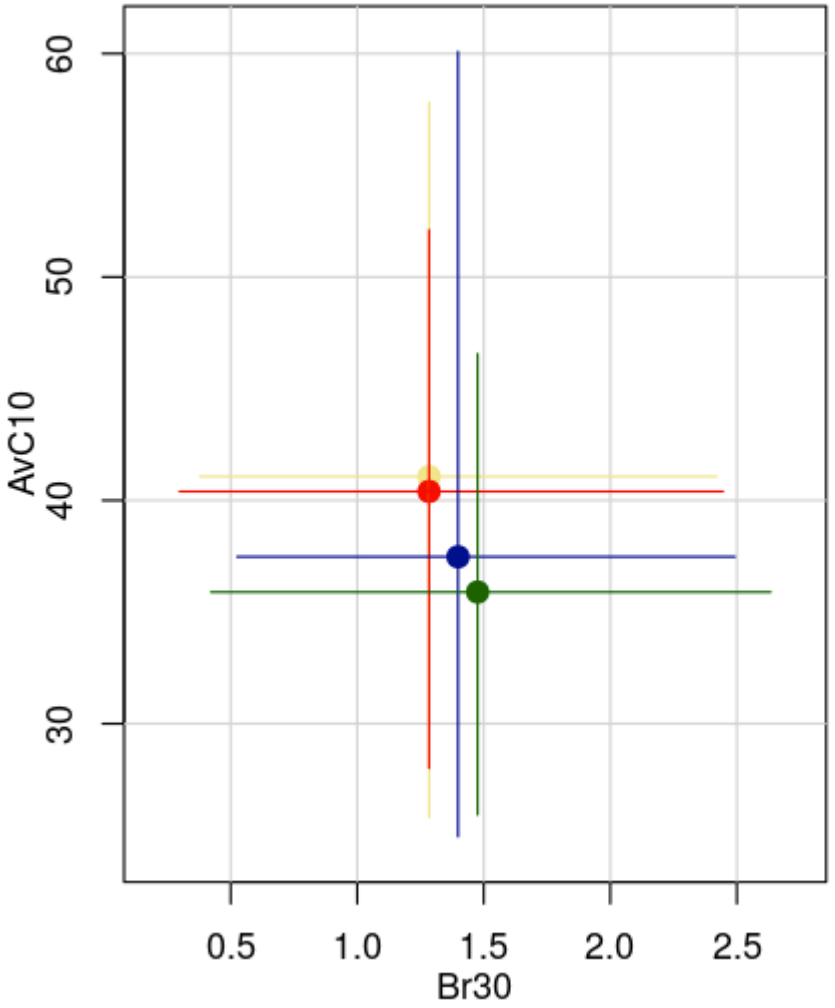
FO5a
FO5c
FO6a
FO6b

West



# Trade-off of Br30 vs. AvC10 for TC CMP

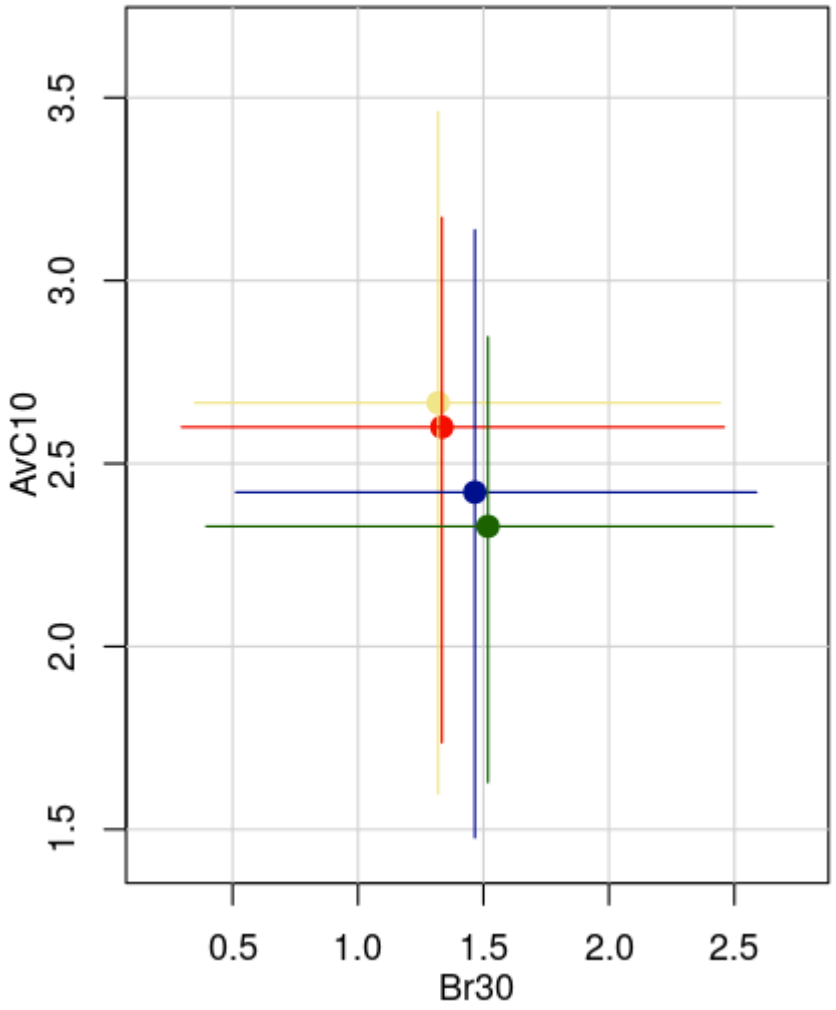
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

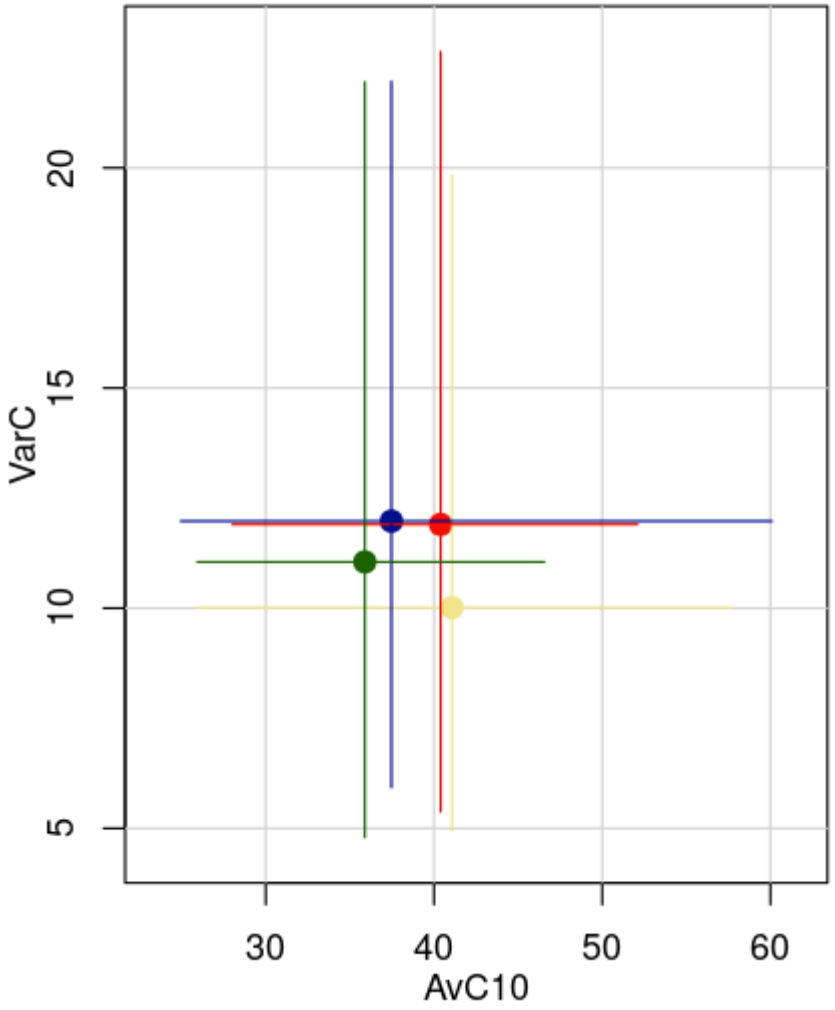
TC5a
TC5c
TK6a
TC6b

West



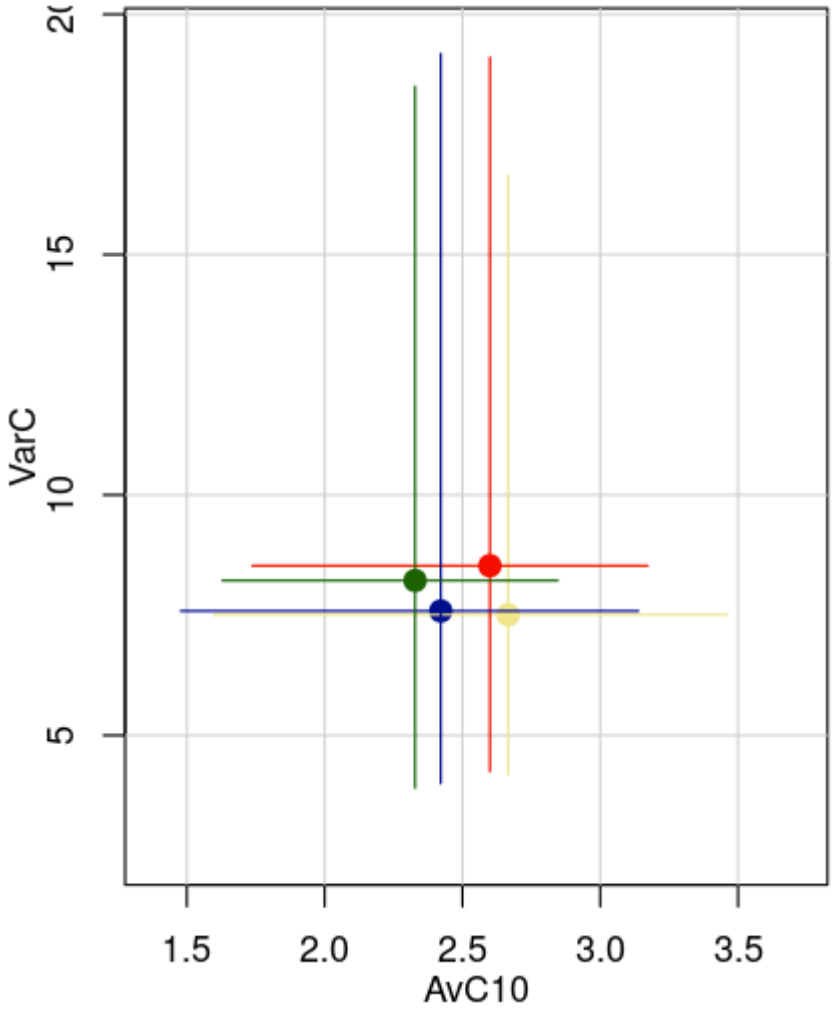
# Trade-off of AvC10 vs. VarC for TC CMP

East



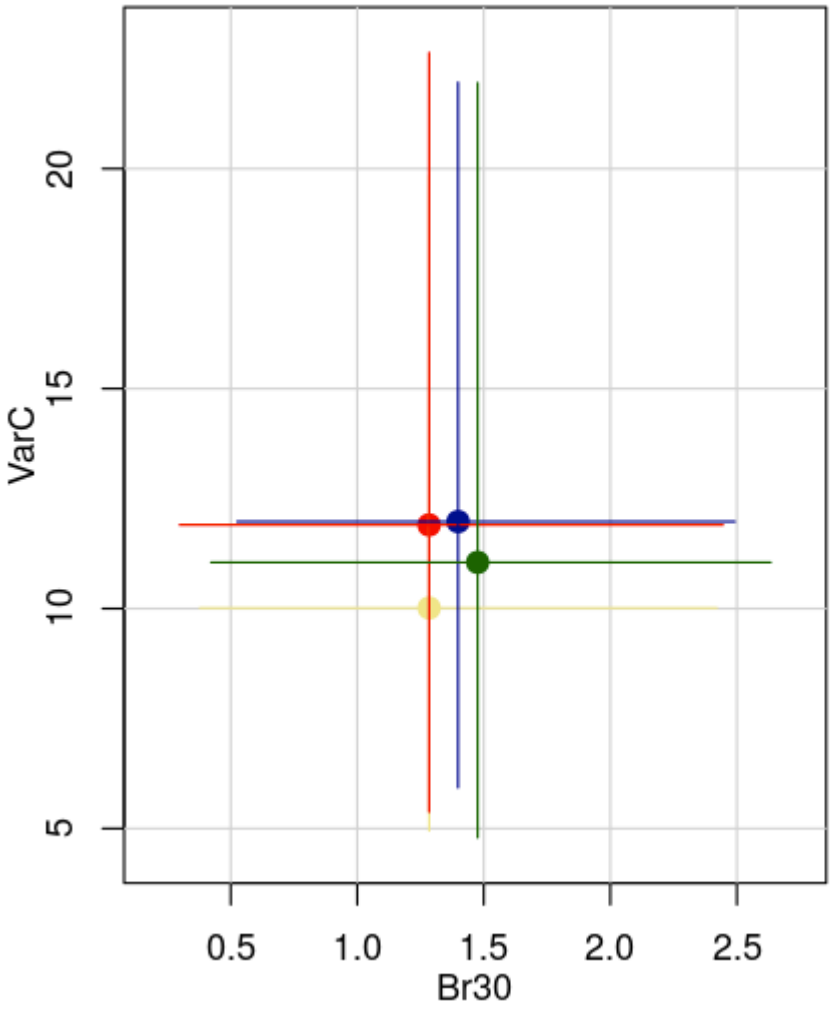

PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

West



# Trade-off of Br30 vs. VarC for TC CMP

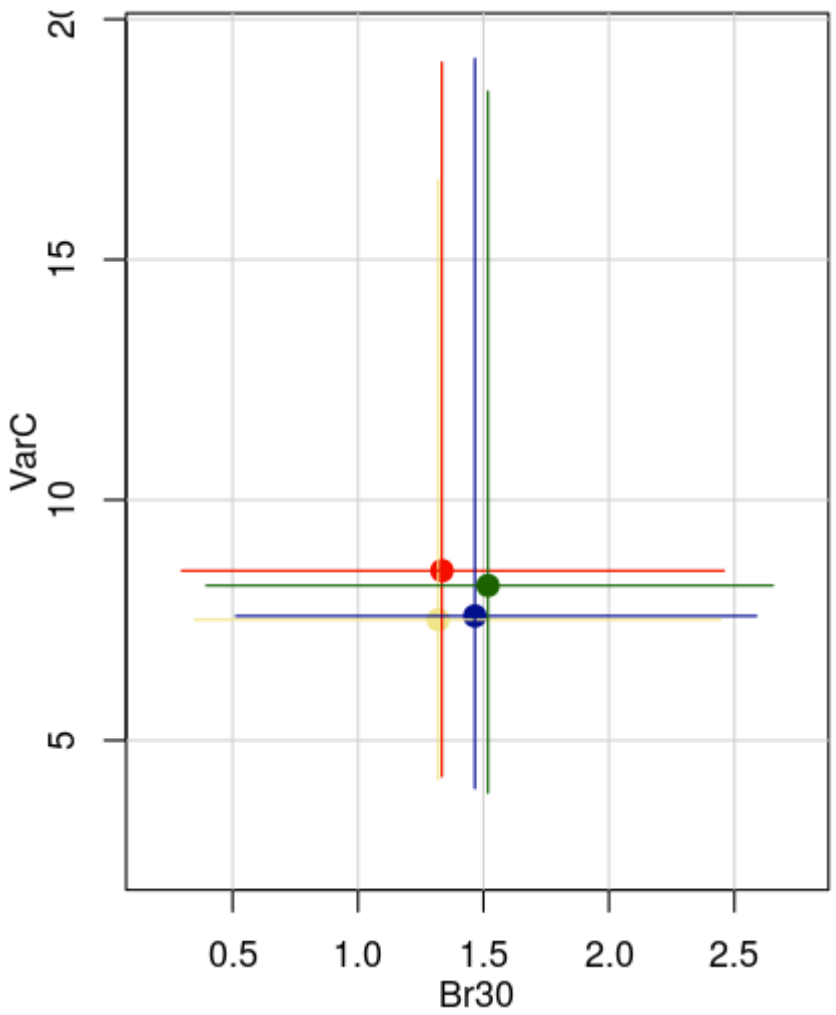
East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

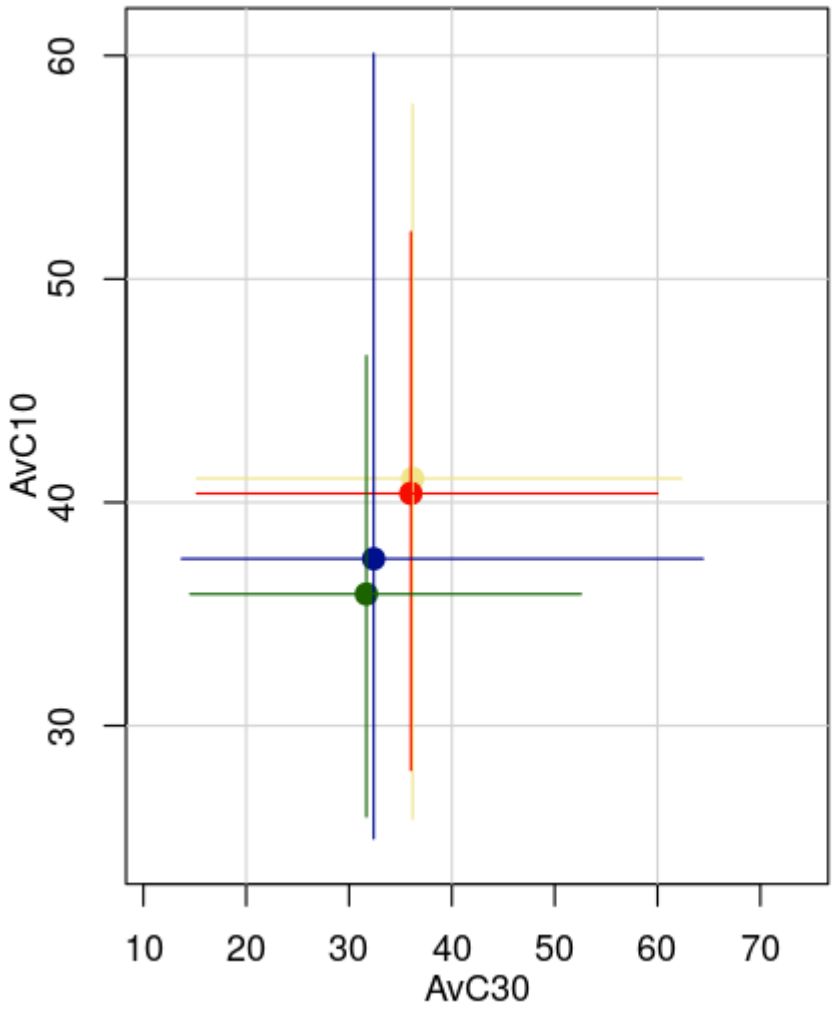
TC5a
TC5c
TK6a
TC6b

West



# Trade-off of AvC30 vs. AvC10 for TC CMP

East




PGK60, 2-yr
PGK60, 3-yr, -35%
PGK70, 2-yr
PGK70, 3-yr

TC5a
TC5c
TK6a
TC6b

West