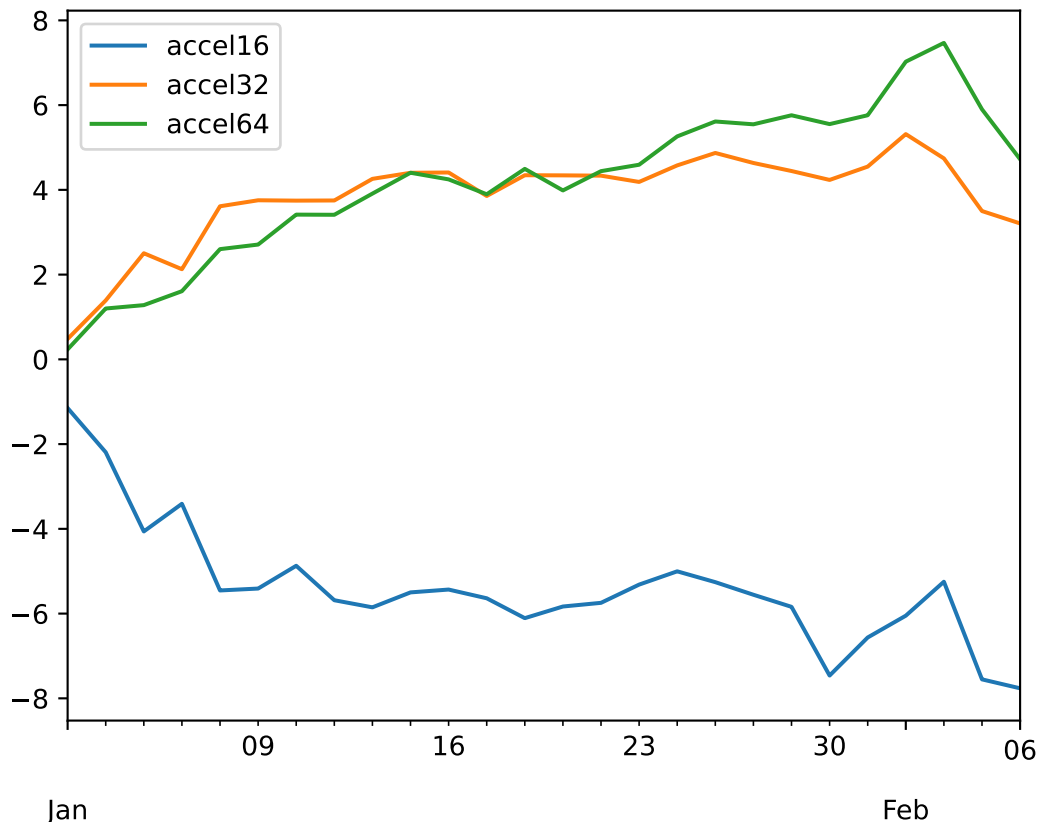
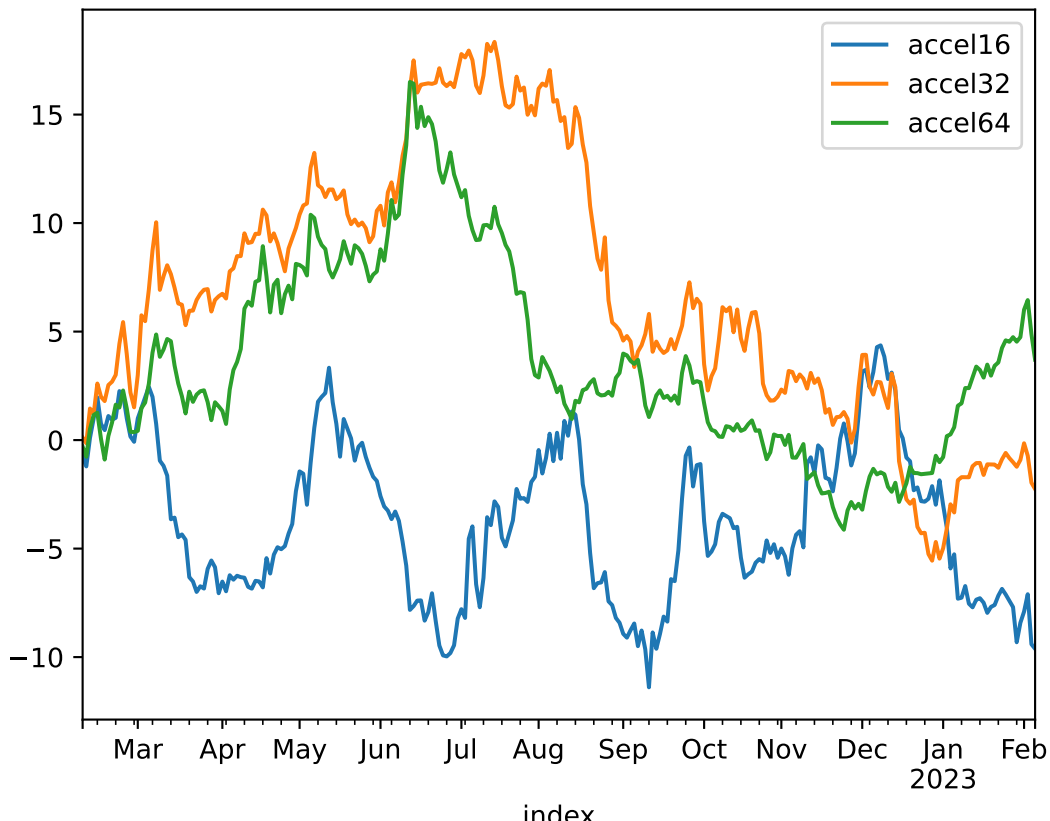


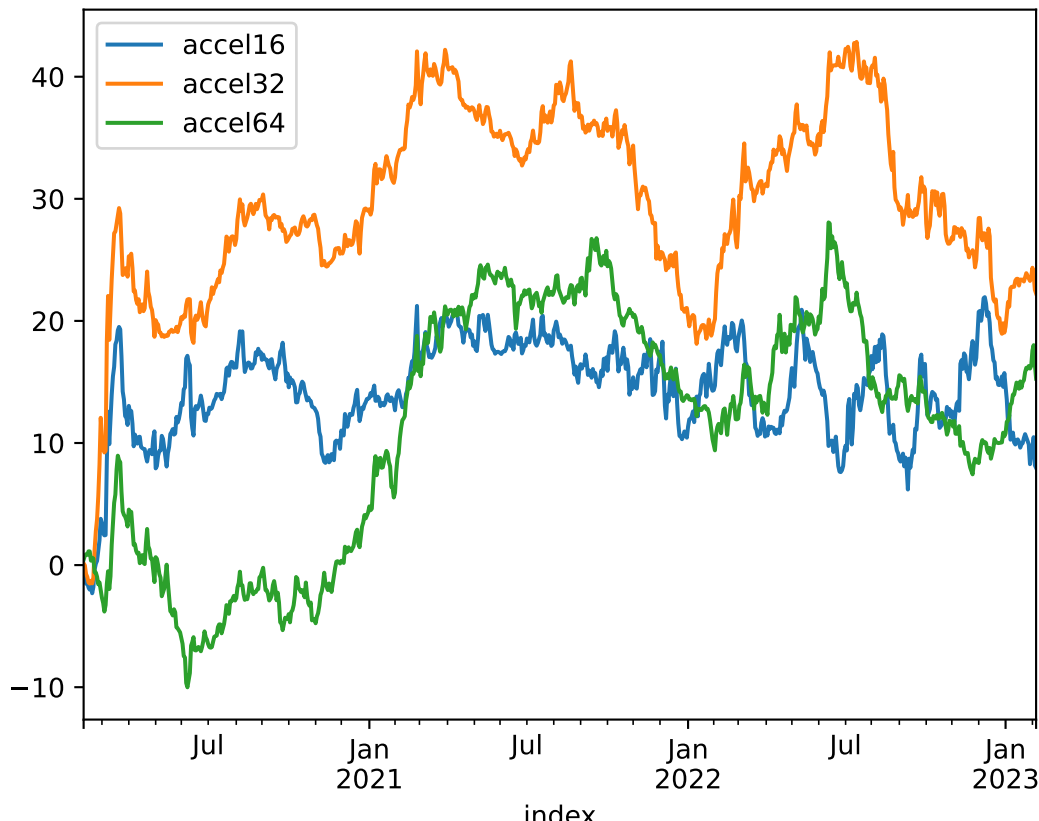
Total Trading Rule P&L for period 'YTD'  
ann. mean {'accel16': -76.438, 'accel32': 31.583, 'accel64': 46.497}  
ann. std {'accel16': 14.26, 'accel32': 9.129, 'accel64': 9.902}  
ann. SR {'accel16': -5.36, 'accel32': 3.46, 'accel64': 4.7}



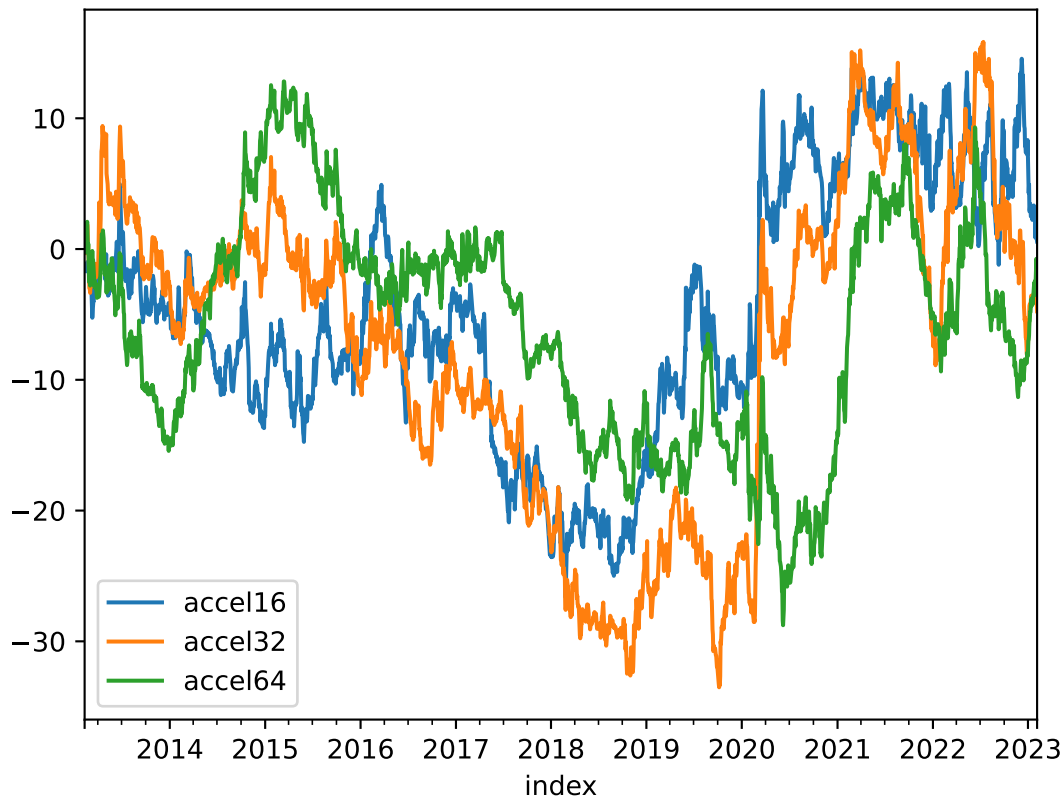
Total Trading Rule P&L for period '1Y'  
ann. mean {'accel16': -9.469, 'accel32': -2.22, 'accel64': 3.649}  
ann. std {'accel16': 16.136, 'accel32': 14.403, 'accel64': 11.824}  
ann. SR {'accel16': -0.59, 'accel32': -0.15, 'accel64': 0.31}



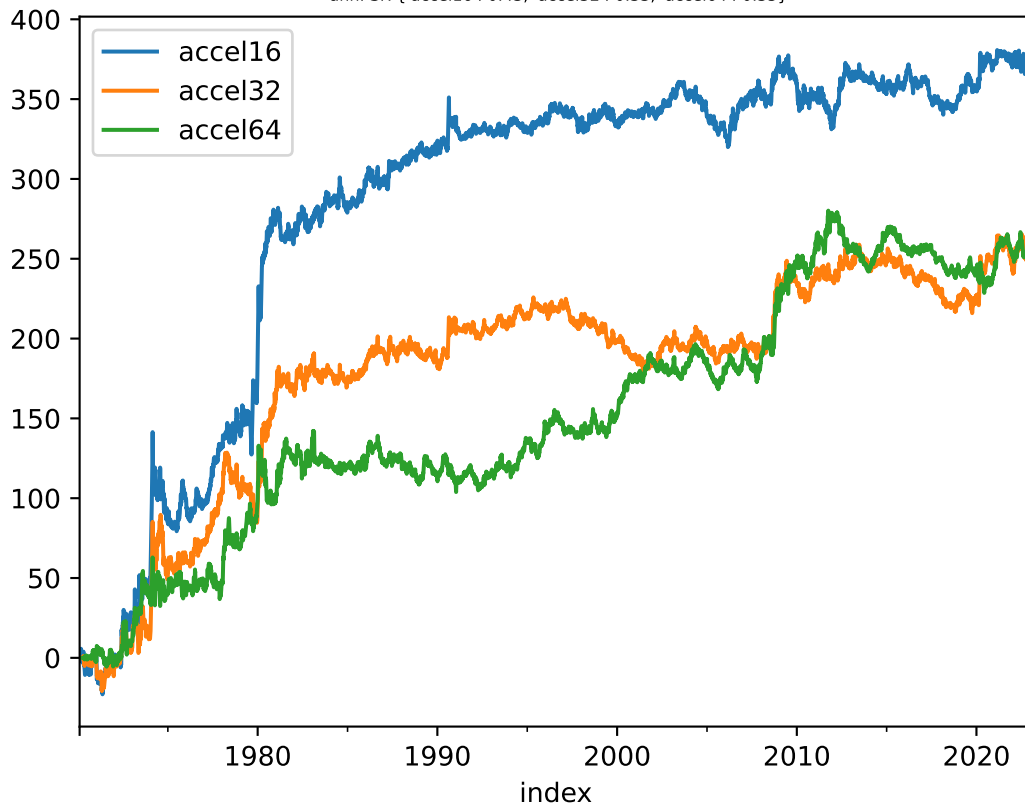
Total Trading Rule P&L for period '3Y'  
ann. mean {'accel16': 2.611, 'accel32': 7.293, 'accel64': 5.005}  
ann. std {'accel16': 14.837, 'accel32': 14.29, 'accel64': 11.41}  
ann. SR {'accel16': 0.18, 'accel32': 0.51, 'accel64': 0.44}



Total Trading Rule P&L for period '10Y'  
ann. mean {'accel16': 0.056, 'accel32': -0.468, 'accel64': -0.343}  
ann. std {'accel16': 11.97, 'accel32': 11.188, 'accel64': 9.606}  
ann. SR {'accel16': 0.0, 'accel32': -0.04, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'  
ann. mean {'accel16': 6.802, 'accel32': 4.529, 'accel64': 4.7}  
ann. std {'accel16': 15.696, 'accel32': 13.782, 'accel64': 13.302}  
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

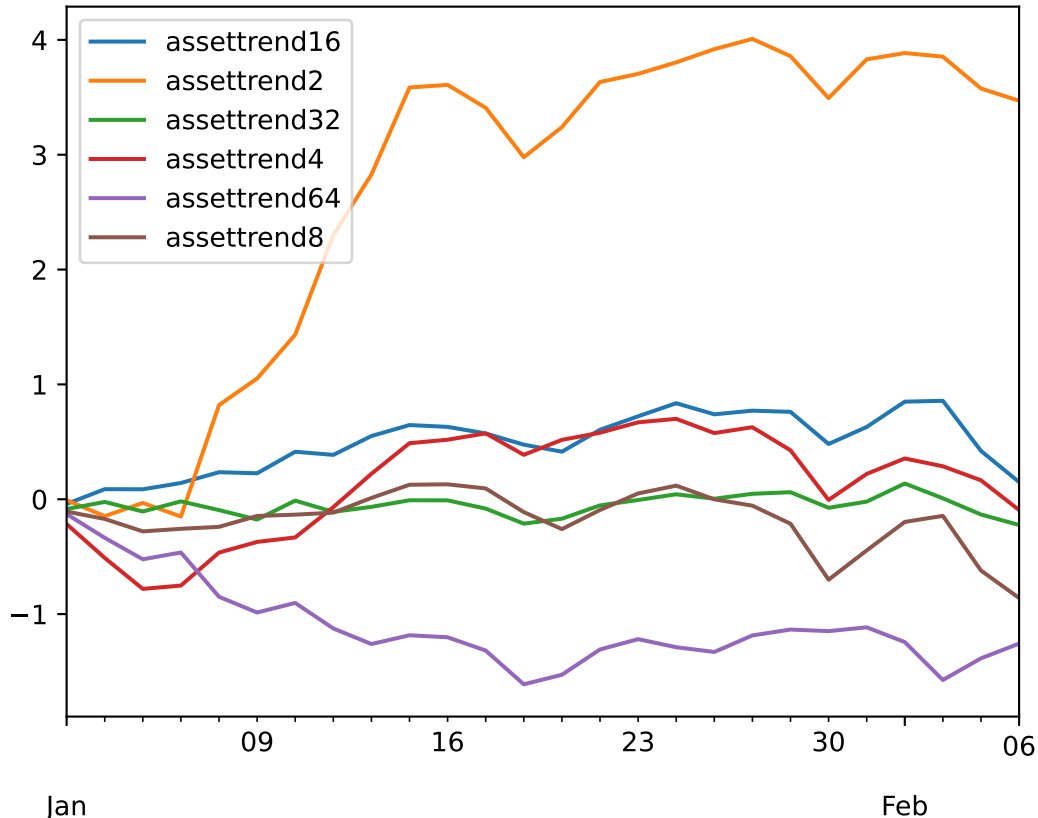


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 1.476, 'assettrend2': 34.167, 'assettrend32': -2.204, 'assettrend4': -0.927, 'assettrend64': -12.377, 'assettrend8': -8.466}

ann. std {'assettrend16': 2.488, 'assettrend2': 5.704, 'assettrend32': 1.484, 'assettrend4': 3.192, 'assettrend64': 2.594, 'assettrend8': 2.951}

ann. SR {'assettrend16': 0.59, 'assettrend2': 5.99, 'assettrend32': -1.49, 'assettrend4': -0.29, 'assettrend64': -4.77, 'assettrend8': -2.87}

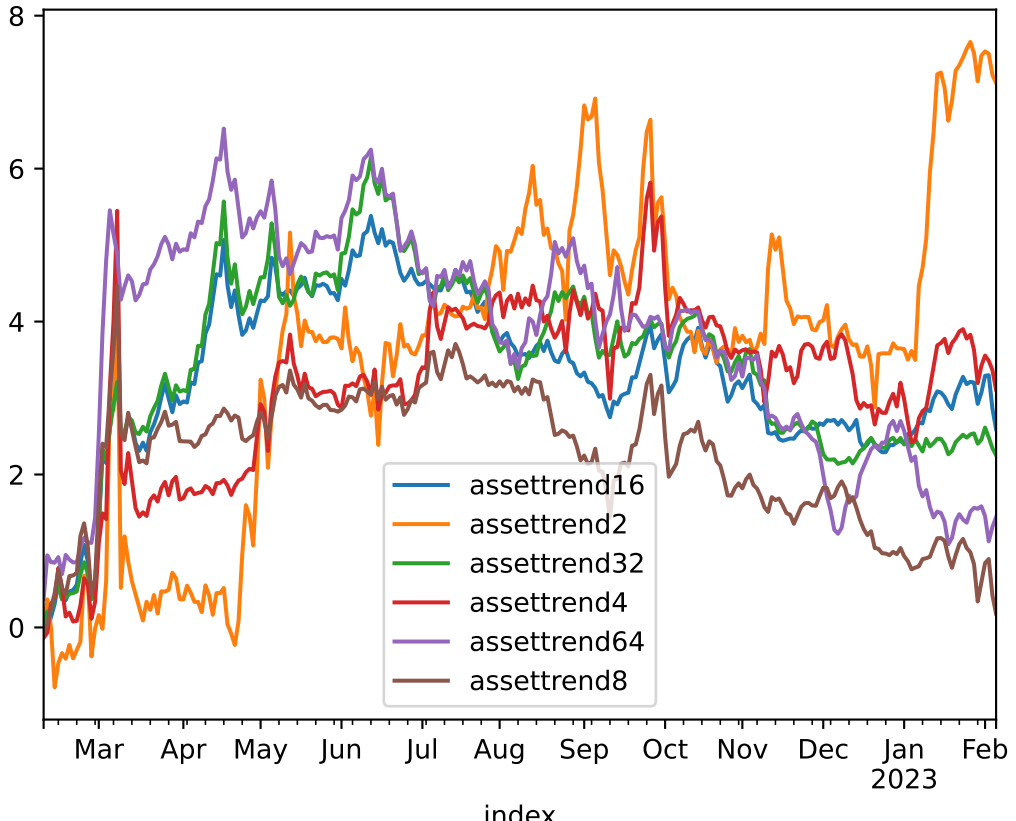


### Total Trading Rule P&L for period '1Y'

ann. mean {'assetrend16': 2.551, 'assetrend2': 7.009, 'assetrend32': 2.219, 'assetrend4': 3.059, 'assetrend64': 1.42, 'assetrend8': 0.177}

ann. std {'assetrend16': 2.996, 'assetrend2': 7.56, 'assetrend32': 3.179, 'assetrend4': 5.585, 'assetrend64': 3.753, 'assetrend8': 3.697}

ann. SR {'assetrend16': 0.85, 'assetrend2': 0.93, 'assetrend32': 0.7, 'assetrend4': 0.55, 'assetrend64': 0.38, 'assetrend8': 0.05}

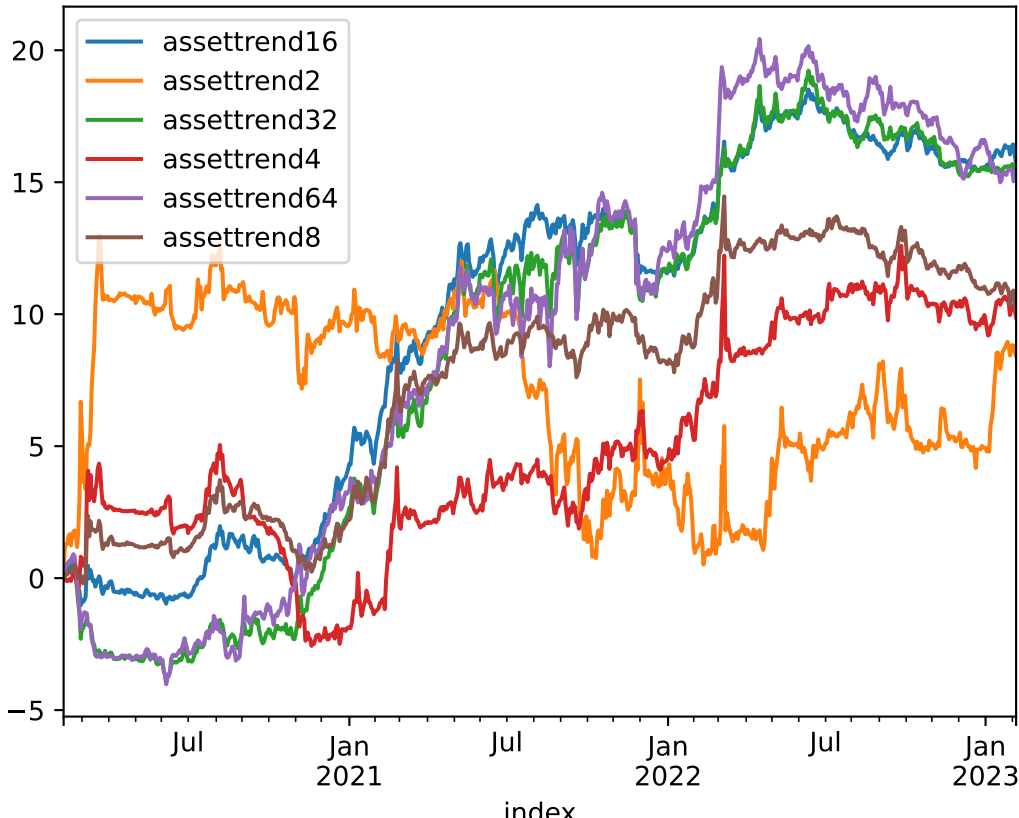


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.153, 'assettrend2': 2.758, 'assettrend32': 5.026, 'assettrend4': 3.238, 'assettrend64': 5.031, 'assettrend8': 3.338}

ann. std {'assettrend16': 3.53, 'assettrend2': 7.671, 'assettrend32': 4.33, 'assettrend4': 5.279, 'assettrend64': 5.121, 'assettrend8': 3.73}

ann. SR {'assettrend16': 1.46, 'assettrend2': 0.36, 'assettrend32': 1.16, 'assettrend4': 0.61, 'assettrend64': 0.98, 'assettrend8': 0.89}



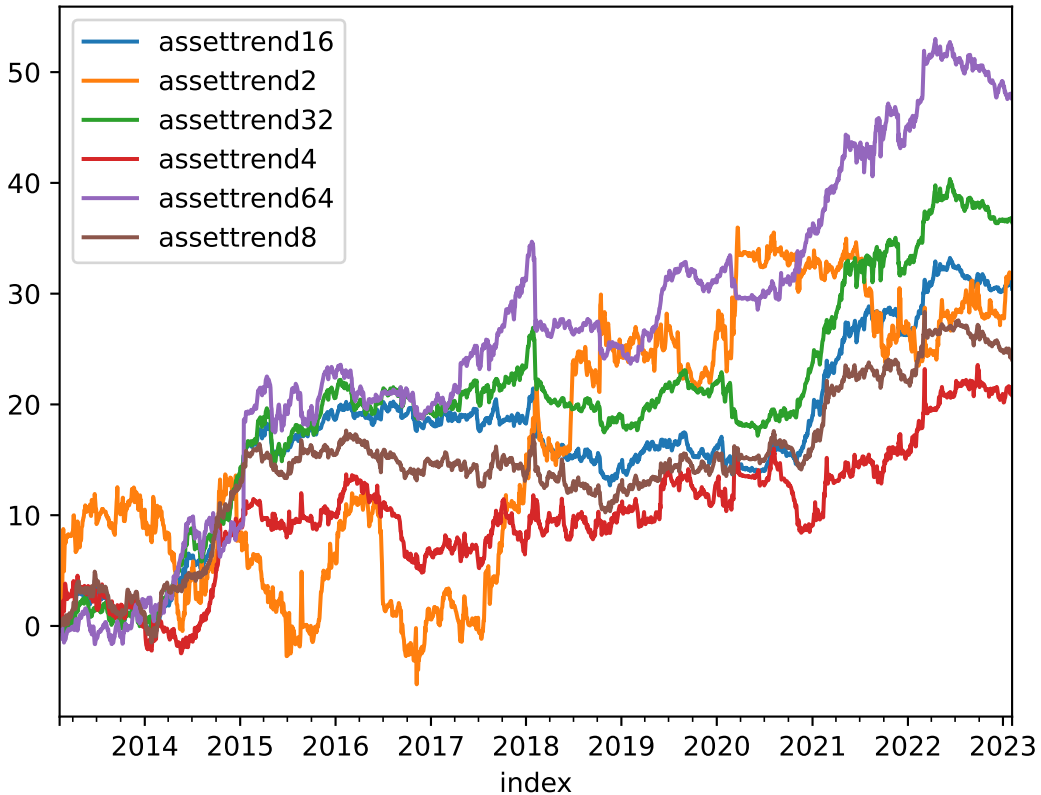


### Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.989, 'assettrend2': 3.082, 'assettrend32': 3.581, 'assettrend4': 2.048, 'assettrend64': 4.705, 'assettrend8': 2.363}

ann. std {'assettrend16': 3.261, 'assettrend2': 8.393, 'assettrend32': 3.727, 'assettrend4': 5.003, 'assettrend64': 5.32, 'assettrend8': 3.565}

ann. SR {'assettrend16': 0.92, 'assettrend2': 0.37, 'assettrend32': 0.96, 'assettrend4': 0.41, 'assettrend64': 0.88, 'assettrend8': 0.66}

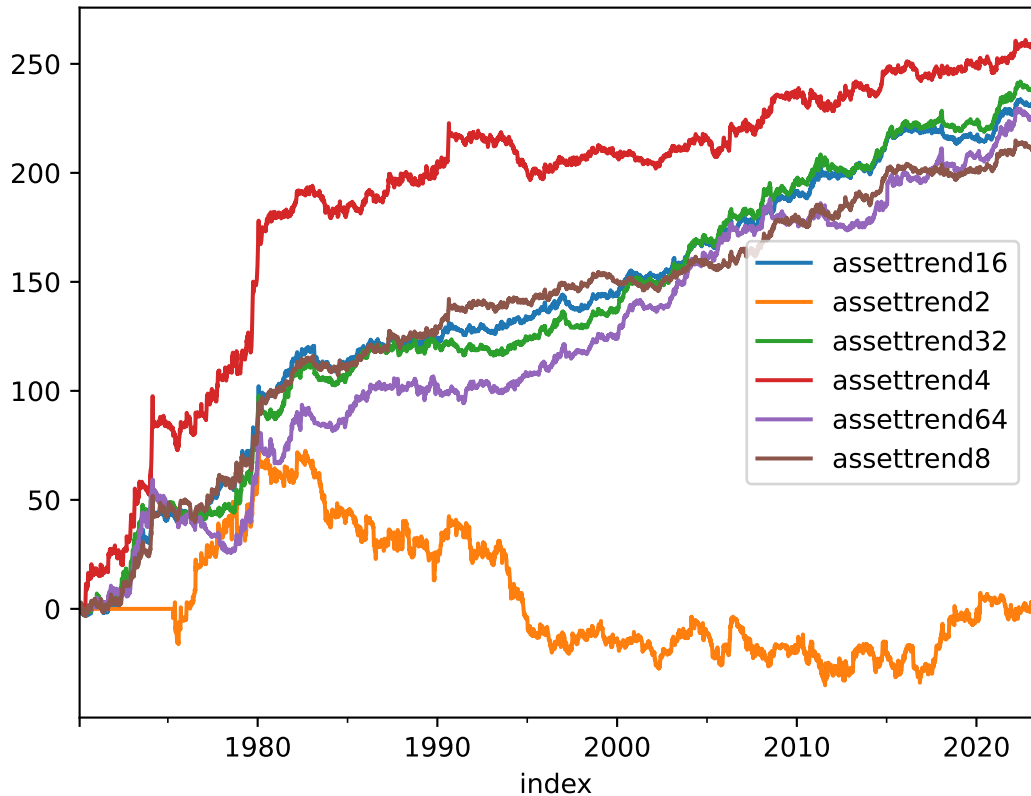


# Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.276, 'assettrend2': 0.051, 'assettrend32': 4.406, 'assettrend4': 4.781, 'assettrend64': 4.156, 'assettrend8': 3.899}

ann. std {'assettrend16': 4.646, 'assettrend2': 10.023, 'assettrend32': 4.872, 'assettrend4': 7.342, 'assettrend64': 5.453, 'assettrend8': 5.023}

ann. SR {'assettrend16': 0.92, 'assettrend2': 0.01, 'assettrend32': 0.9, 'assettrend4': 0.65, 'assettrend64': 0.76, 'assettrend8': 0.78}

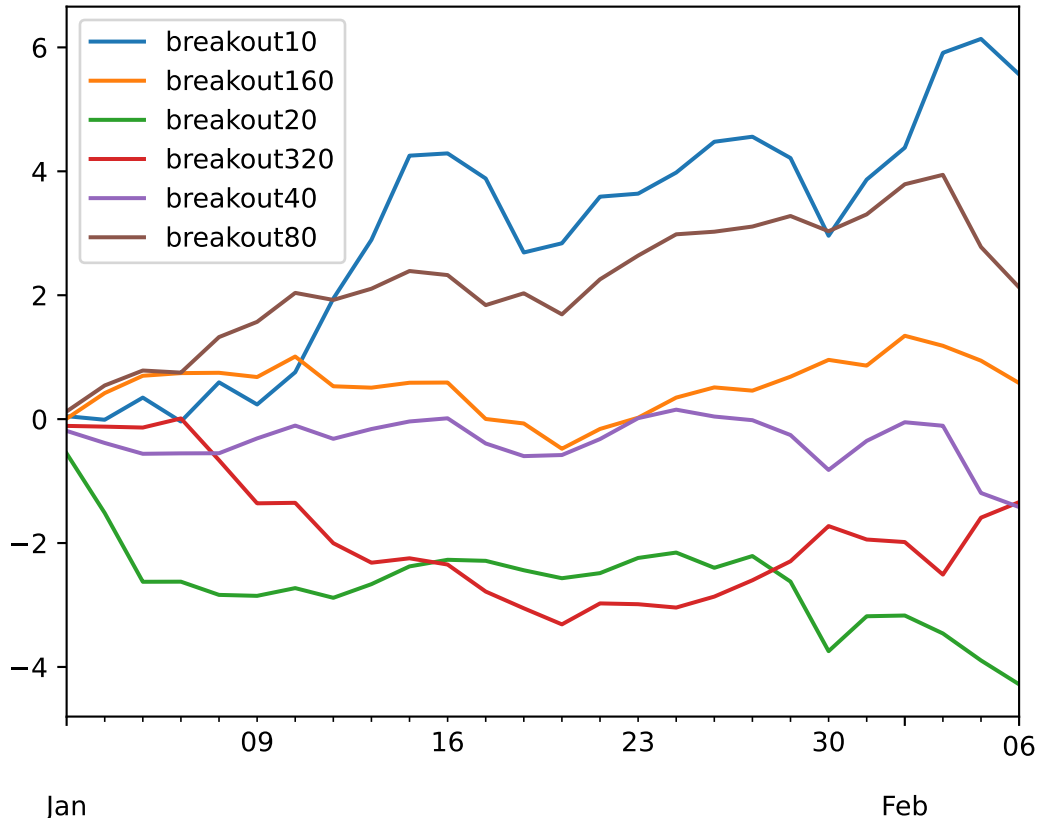


# Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 54.786, 'breakout160': 5.733, 'breakout20': -42.142, 'breakout320': -13.191, 'breakout40': -13.968, 'breakout80': 20.944}

ann. std {'breakout10': 11.133, 'breakout160': 4.475, 'breakout20': 6.688, 'breakout320': 6.105, 'breakout40': 5.115, 'breakout80': 6.4}

ann. SR {'breakout10': 4.92, 'breakout160': 1.28, 'breakout20': -6.3, 'breakout320': -2.16, 'breakout40': -2.73, 'breakout80': 3.27}

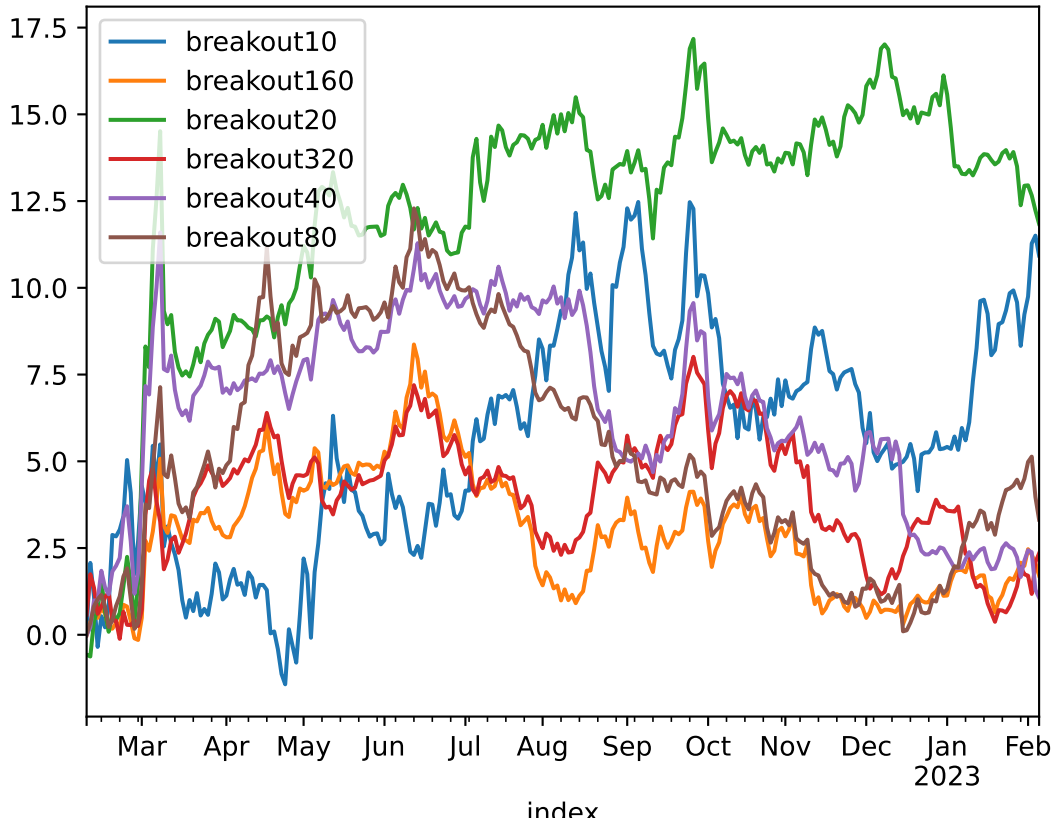


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 10.763, 'breakout160': 1.678, 'breakout20': 11.662, 'breakout320': 2.311, 'breakout40': 1.052, 'breakout80': 3.268}

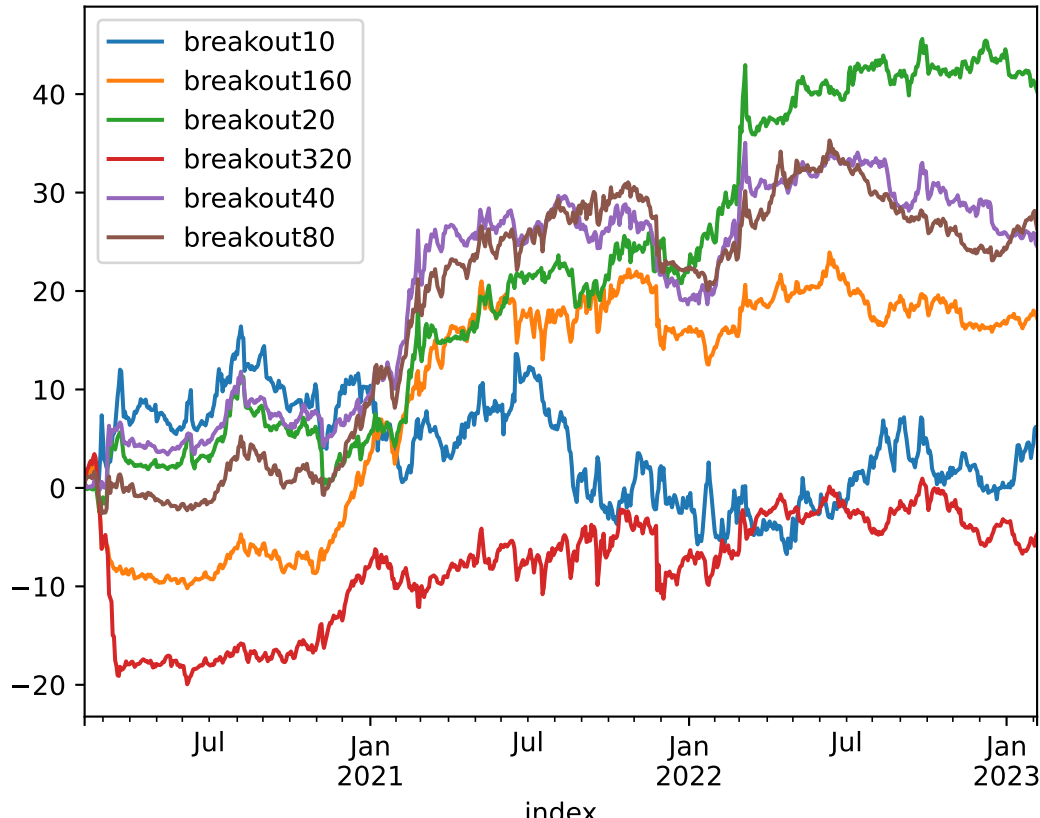
ann. std {'breakout10': 12.835, 'breakout160': 6.871, 'breakout20': 11.593, 'breakout320': 7.036, 'breakout40': 9.29, 'breakout80': 7.939}

ann. SR {'breakout10': 0.84, 'breakout160': 0.24, 'breakout20': 1.01, 'breakout320': 0.33, 'breakout40': 0.11, 'breakout80': 0.41}



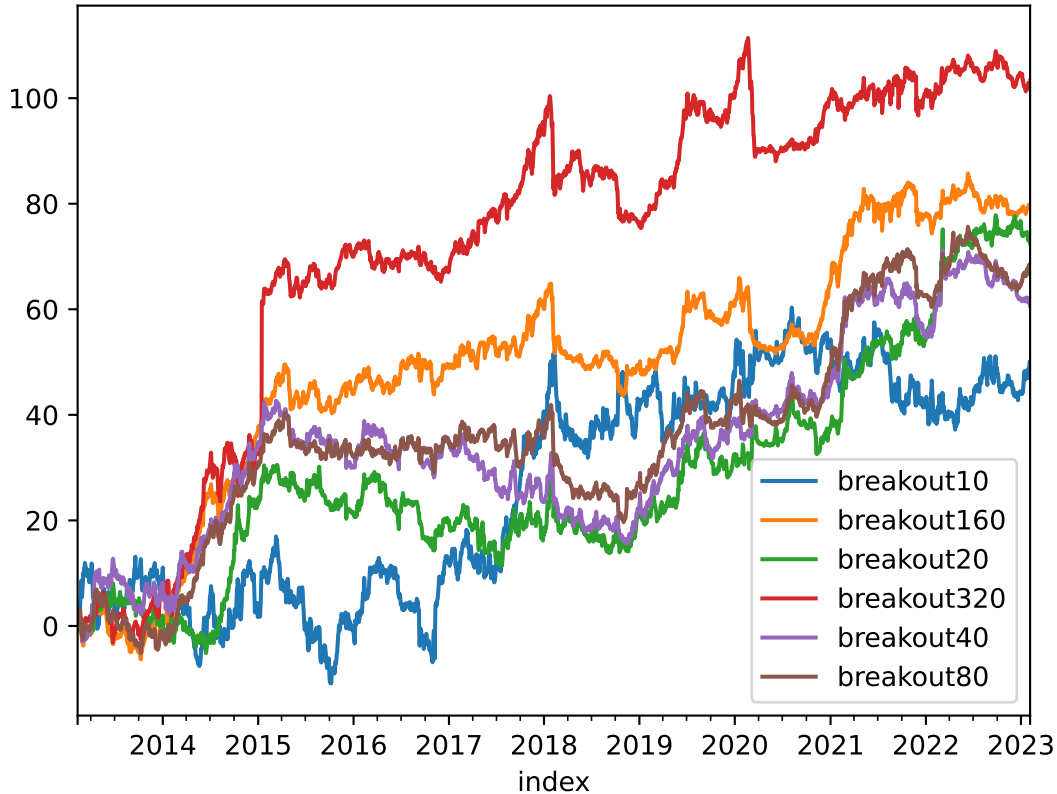
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 1.847, 'breakout160': 5.658, 'breakout20': 13.203, 'breakout320': -1.546, 'breakout40': 8.041, 'breakout80': 8.63}  
ann. std {'breakout10': 13.953, 'breakout160': 9.468, 'breakout20': 11.359, 'breakout320': 10.588, 'breakout40': 9.895, 'breakout80': 9.257}  
ann. SR {'breakout10': 0.13, 'breakout160': 0.6, 'breakout20': 1.16, 'breakout320': -0.15, 'breakout40': 0.81, 'breakout80': 0.93}



Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.866, 'breakout160': 7.767, 'breakout20': 7.118, 'breakout320': 10.14, 'breakout80': 6.549}  
ann. std {'breakout10': 15.688, 'breakout160': 9.096, 'breakout20': 11.155, 'breakout320': 13.334, 'breakout40': 9.732, 'breakout80': 8.994}  
ann. SR {'breakout10': 0.31, 'breakout160': 0.85, 'breakout20': 0.64, 'breakout320': 0.76, 'breakout40': 0.61, 'breakout80': 0.73}

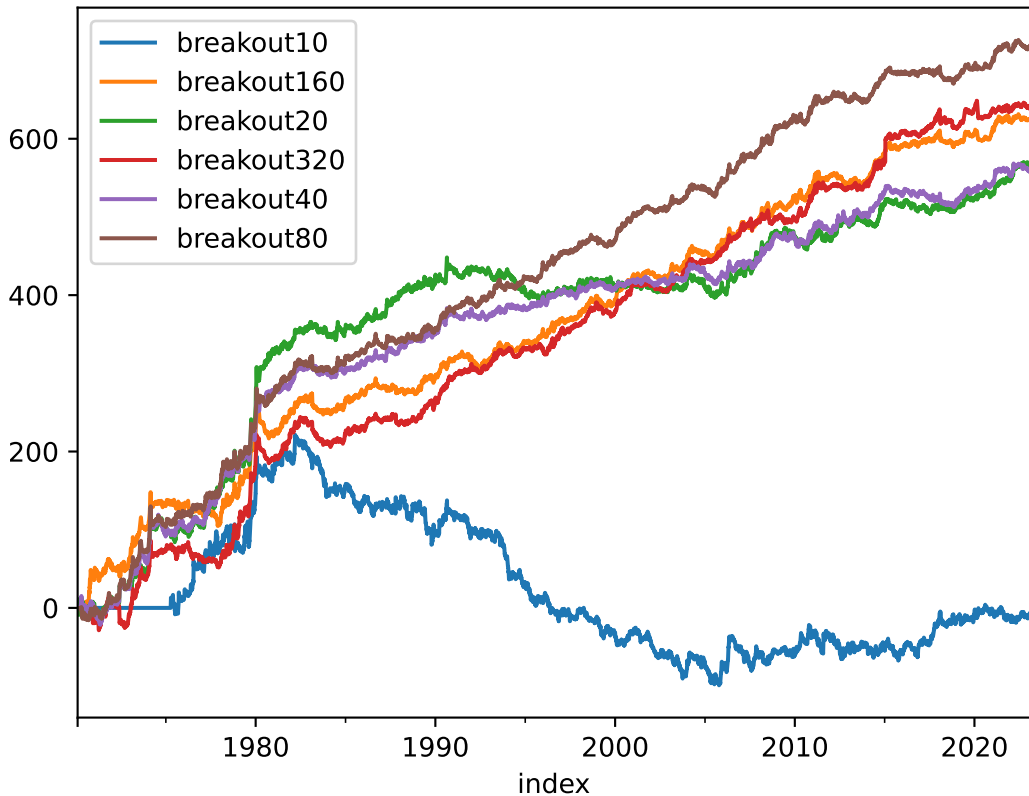


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.124, 'breakout160': 11.566, 'breakout20': 10.457, 'breakout320': 11.856, 'breakout40': 10.326, 'breakout80': 13.28}

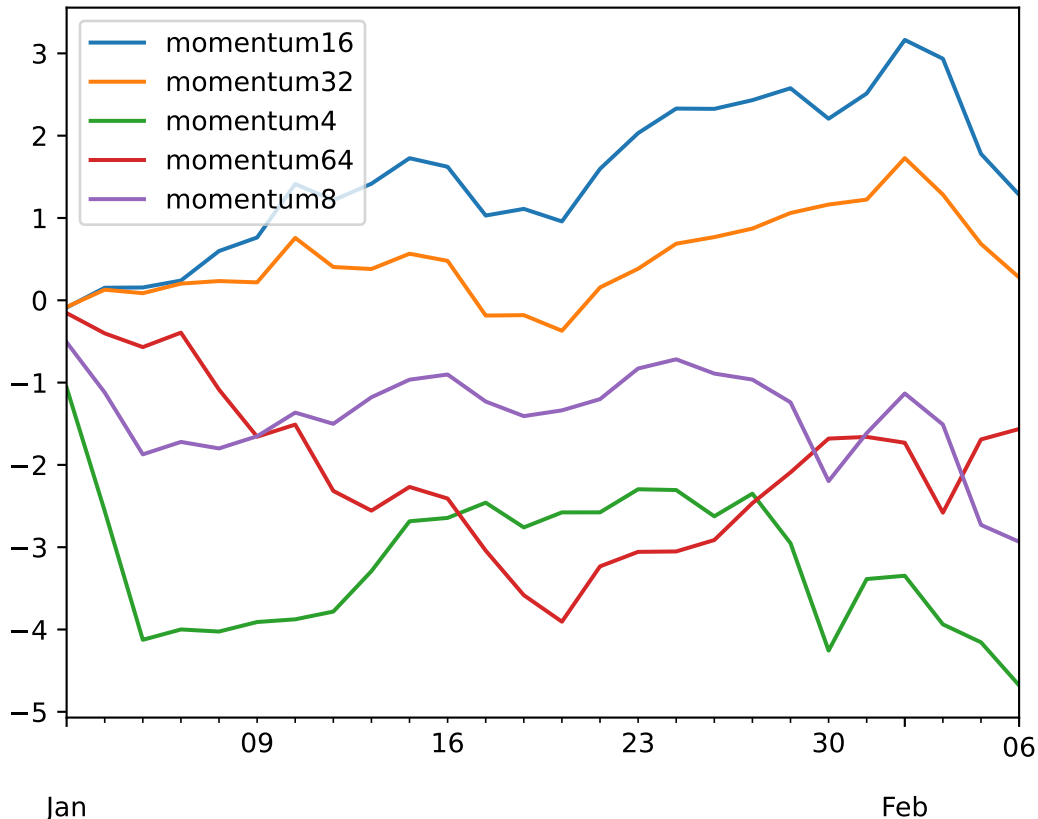
ann. std {'breakout10': 20.775, 'breakout160': 12.463, 'breakout20': 16.041, 'breakout320': 13.019, 'breakout40': 13.199, 'breakout80': 12.719}

ann. SR {'breakout10': -0.01, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}



# Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 12.628, 'momentum32': 2.73, 'momentum4': -46.06, 'momentum64': -15.397, 'momentum8': -28.884}  
 ann. std {'momentum16': 6.528, 'momentum32': 5.027, 'momentum4': 9.883, 'momentum64': 7.178, 'momentum8': 6.98}  
 ann. SR {'momentum16': 1.93, 'momentum32': 0.54, 'momentum4': -4.66, 'momentum64': -2.15, 'momentum8': -4.14}



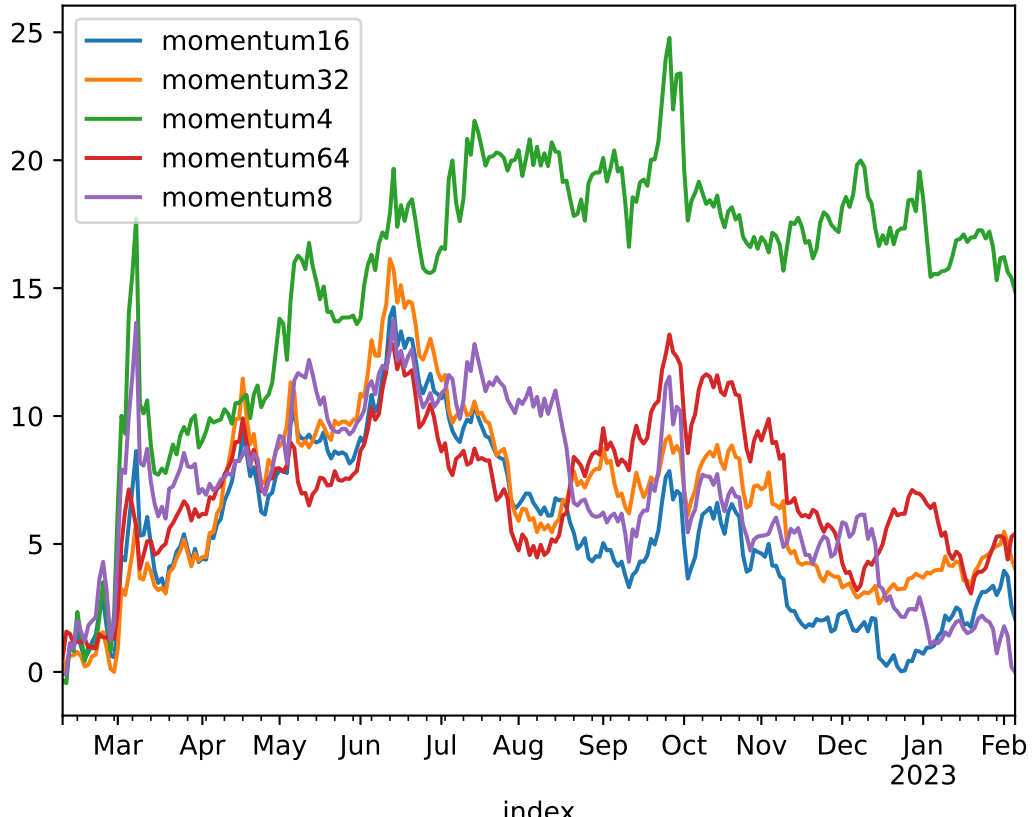


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.044, 'momentum32': 3.972, 'momentum4': 14.654, 'momentum64': 5.322, 'momentum8': -0.015}

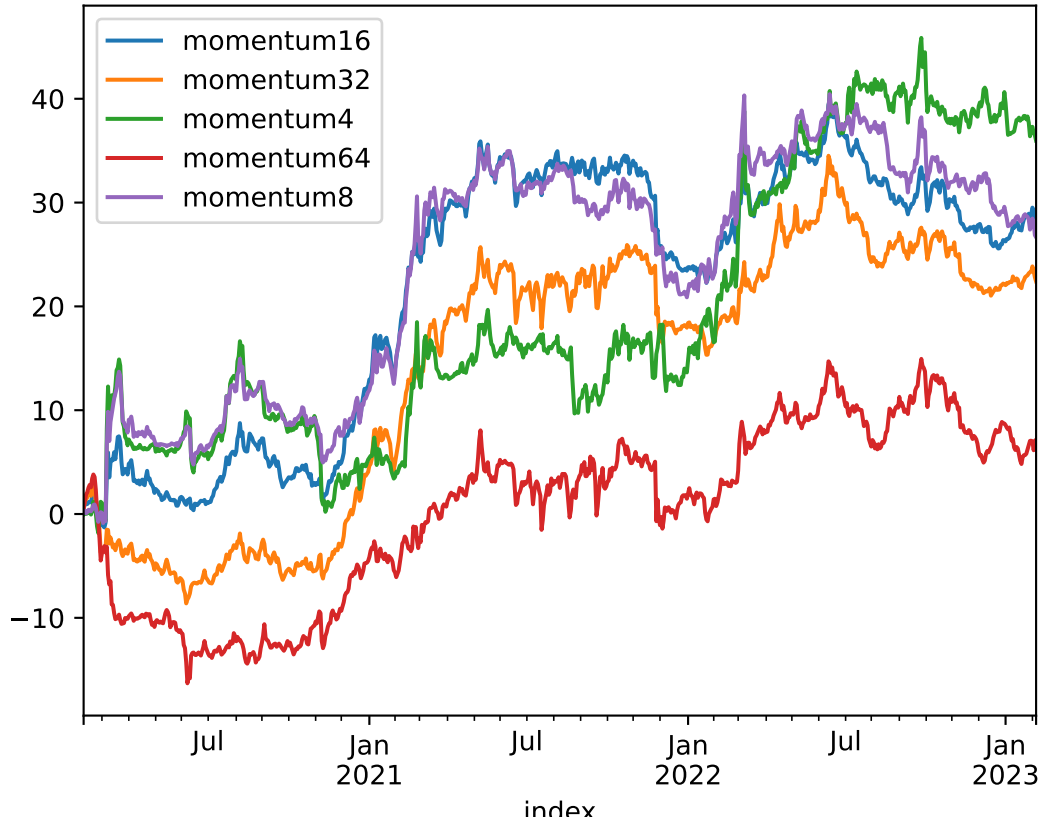
ann. std {'momentum16': 10.014, 'momentum32': 9.528, 'momentum4': 16.867, 'momentum64': 9.254, 'momentum8': 12.782}

ann. SR {'momentum16': 0.2, 'momentum32': 0.42, 'momentum4': 0.87, 'momentum64': 0.58, 'momentum8': -0.0}



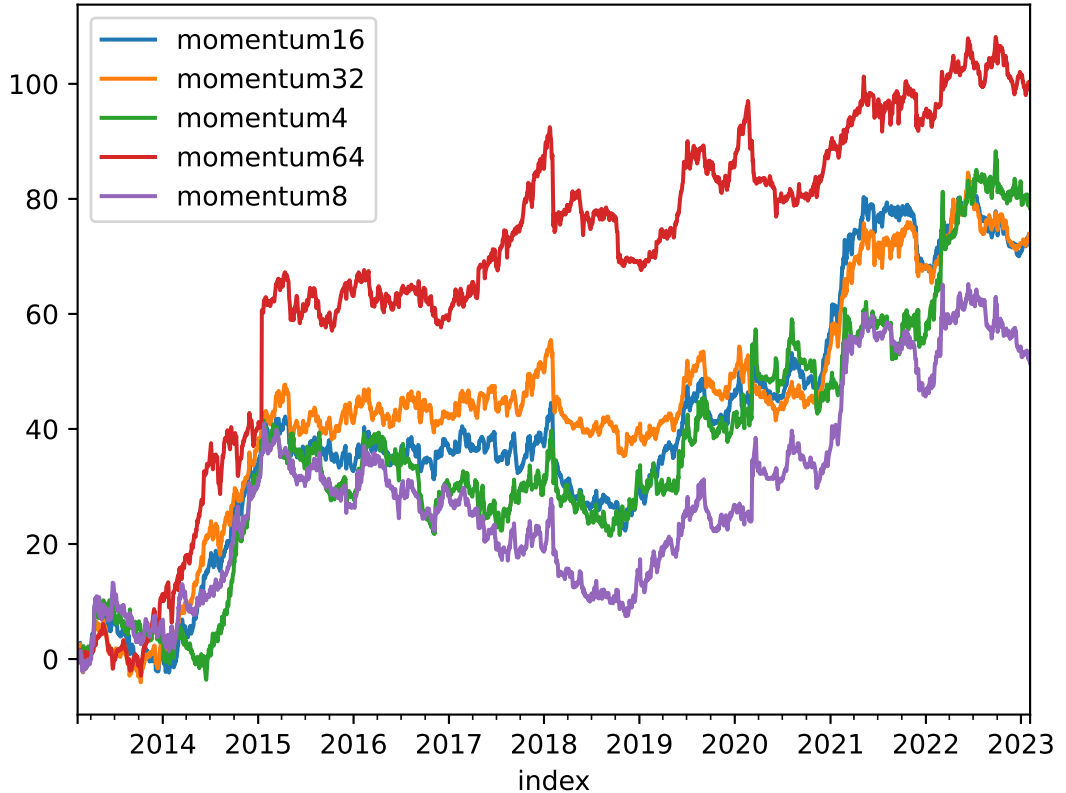
# Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 9.057, 'momentum32': 7.343, 'momentum4': 11.789, 'momentum64': 2.347, 'momentum8': 8.739}  
ann. std {'momentum16': 10.85, 'momentum32': 10.644, 'momentum4': 15.863, 'momentum64': 10.858, 'momentum8': 12.698}  
ann. SR {'momentum16': 0.83, 'momentum32': 0.69, 'momentum4': 0.74, 'momentum64': 0.22, 'momentum8': 0.69}



Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.077, 'momentum32': 7.118, 'momentum4': 7.698, 'momentum64': 9.857, 'momentum8': 5.049}  
ann. std {'momentum16': 9.915, 'momentum32': 9.476, 'momentum4': 13.688, 'momentum64': 12.014, 'momentum8': 11.269}  
ann. SR {'momentum16': 0.71, 'momentum32': 0.75, 'momentum4': 0.56, 'momentum64': 0.82, 'momentum8': 0.45}

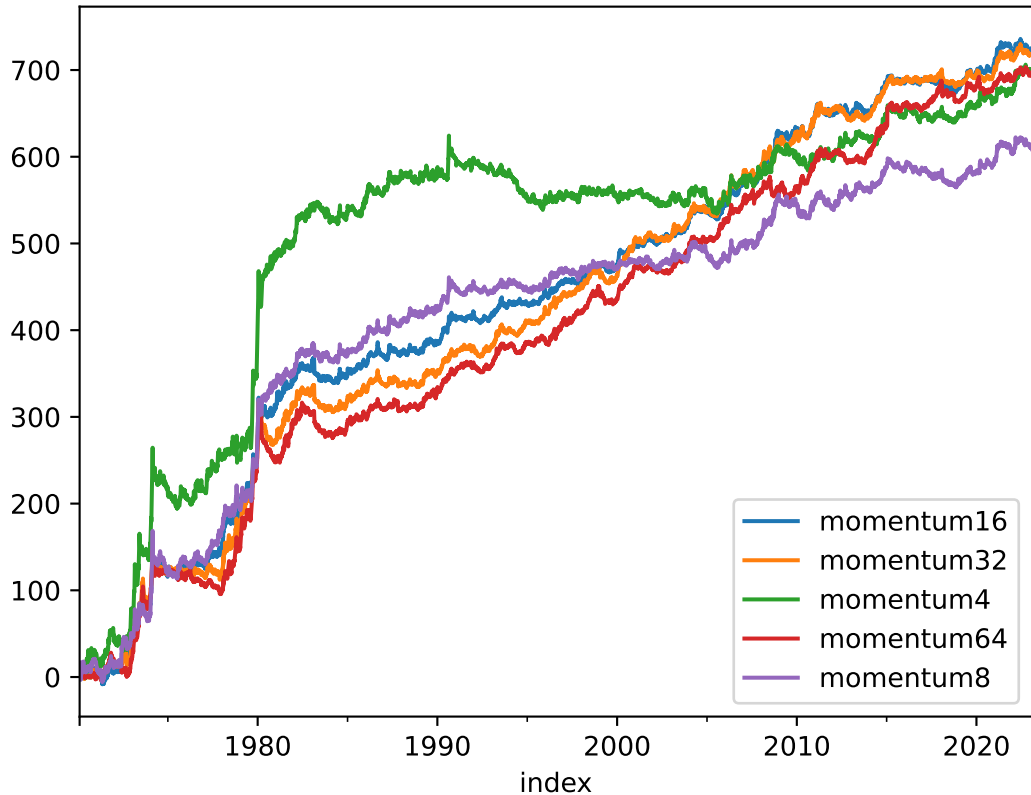


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.396, 'momentum32': 13.288, 'momentum4': 12.889, 'momentum64': 12.875, 'momentum8': 11.268}

ann. std {'momentum16': 14.188, 'momentum32': 13.809, 'momentum4': 20.047, 'momentum64': 13.445, 'momentum8': 15.834}

ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71}

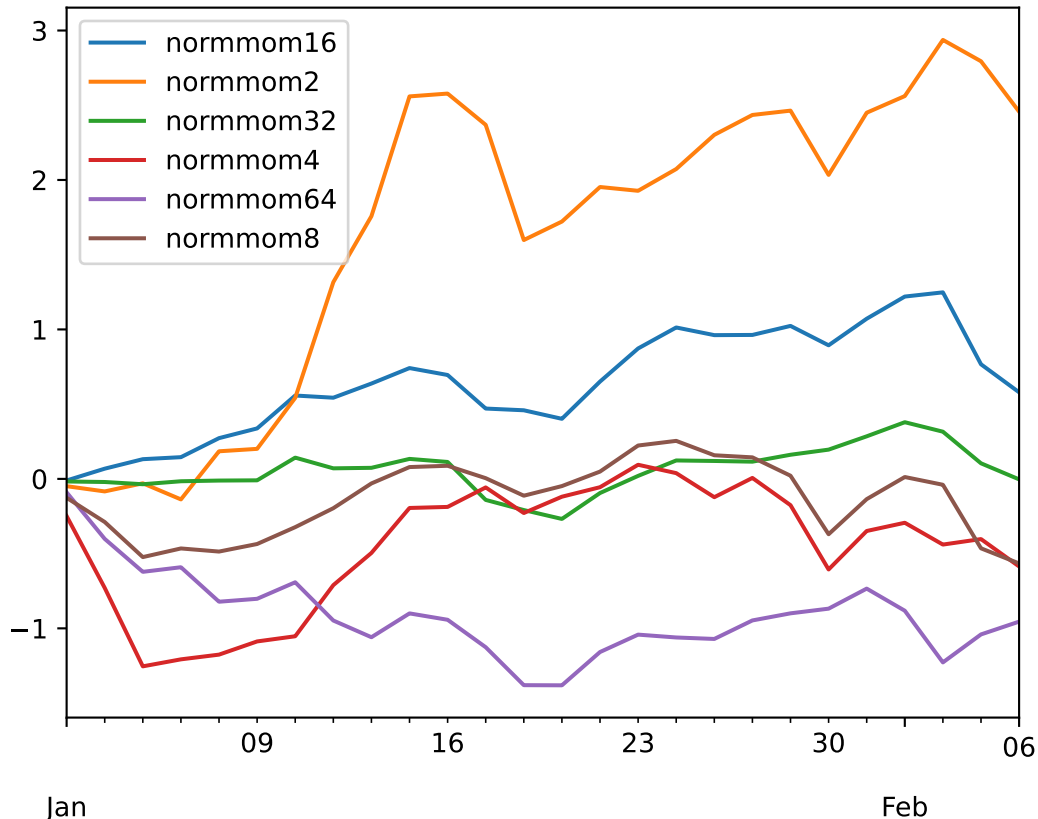


# Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 5.705, 'normmom2': 24.194, 'normmom32': -0.032, 'normmom4': -5.767, 'normmom64': -9.403, 'normmom8': -5.569}

ann. std {'normmom16': 2.515, 'normmom2': 5.438, 'normmom32': 1.568, 'normmom4': 3.642, 'normmom64': 2.625, 'normmom8': 2.627}

ann. SR {'normmom16': 2.27, 'normmom2': 4.45, 'normmom32': -0.02, 'normmom4': -1.58, 'normmom64': -3.58, 'normmom8': -2.12}

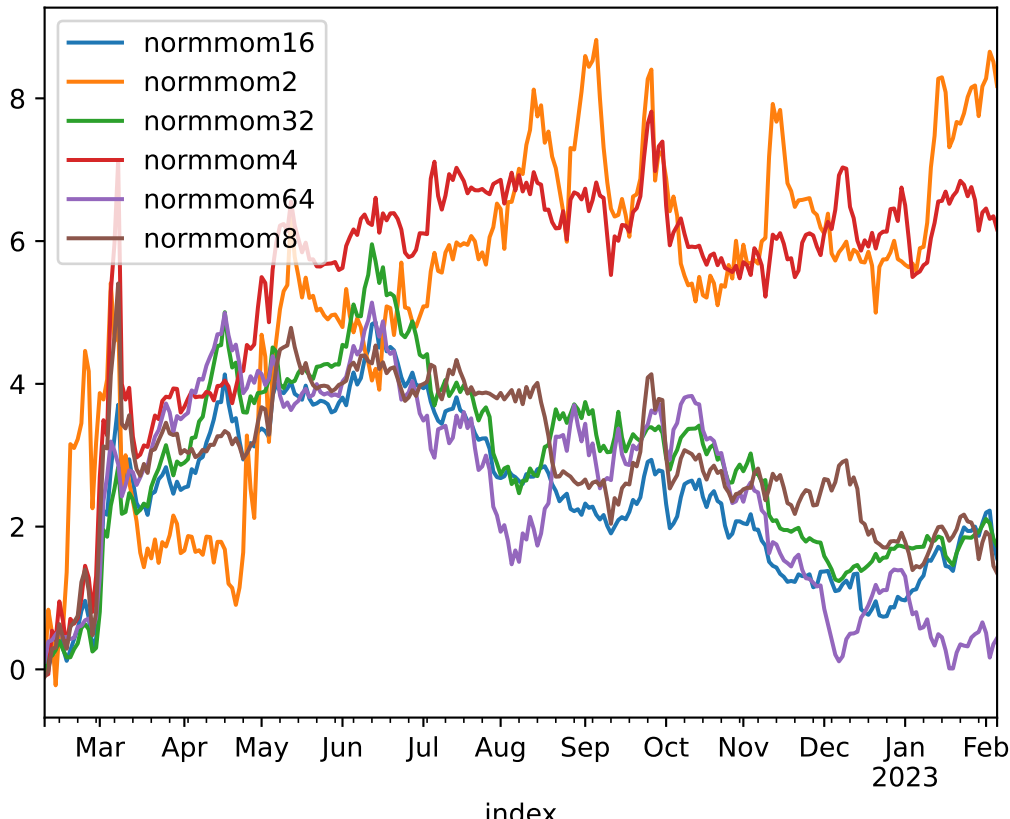


# Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 1.532, 'normmom2': 8.048, 'normmom32': 1.698, 'normmom4': 6.07, 'normmom64': 0.431, 'normmom8': 1.328}

ann. std {'normmom16': 3.11, 'normmom2': 7.609, 'normmom32': 3.058, 'normmom4': 5.841, 'normmom64': 3.392, 'normmom8': 4.121}

ann. SR {'normmom16': 0.49, 'normmom2': 1.06, 'normmom32': 0.56, 'normmom4': 1.04, 'normmom64': 0.13, 'normmom8': 0.32}

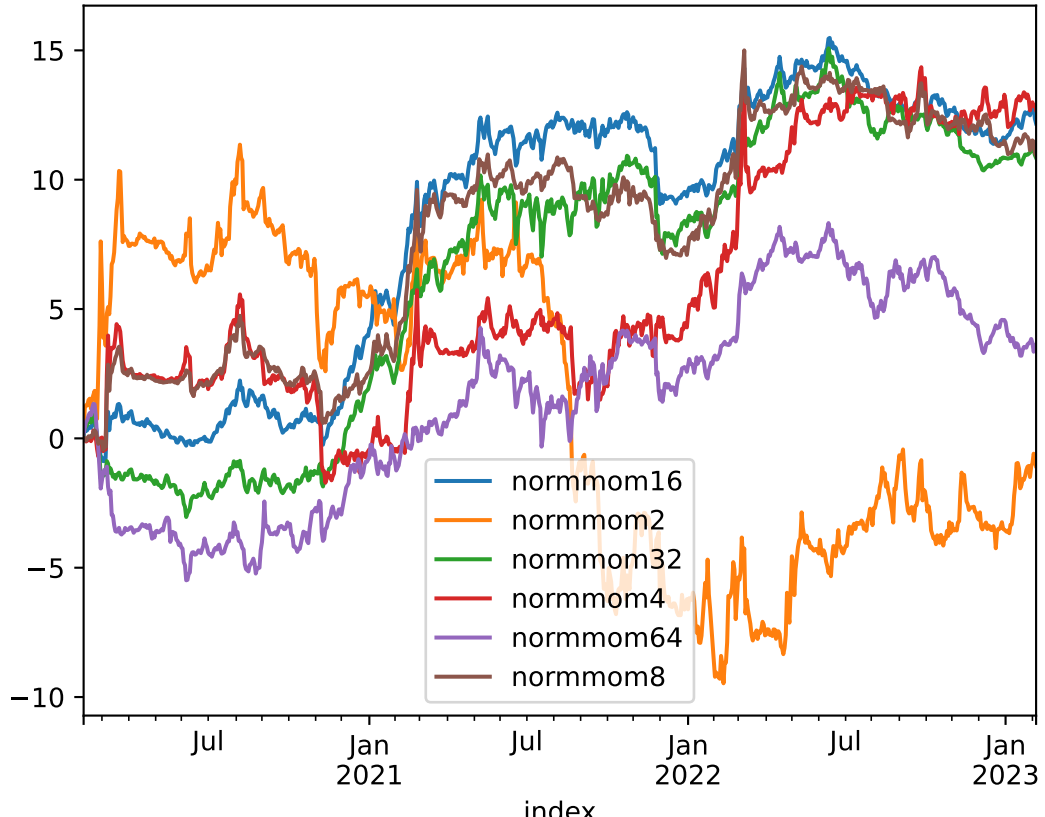


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.99, 'normmom2': -0.351, 'normmom32': 3.555, 'normmom4': 4.163, 'normmom64': 1.187, 'normmom8': 3.587}

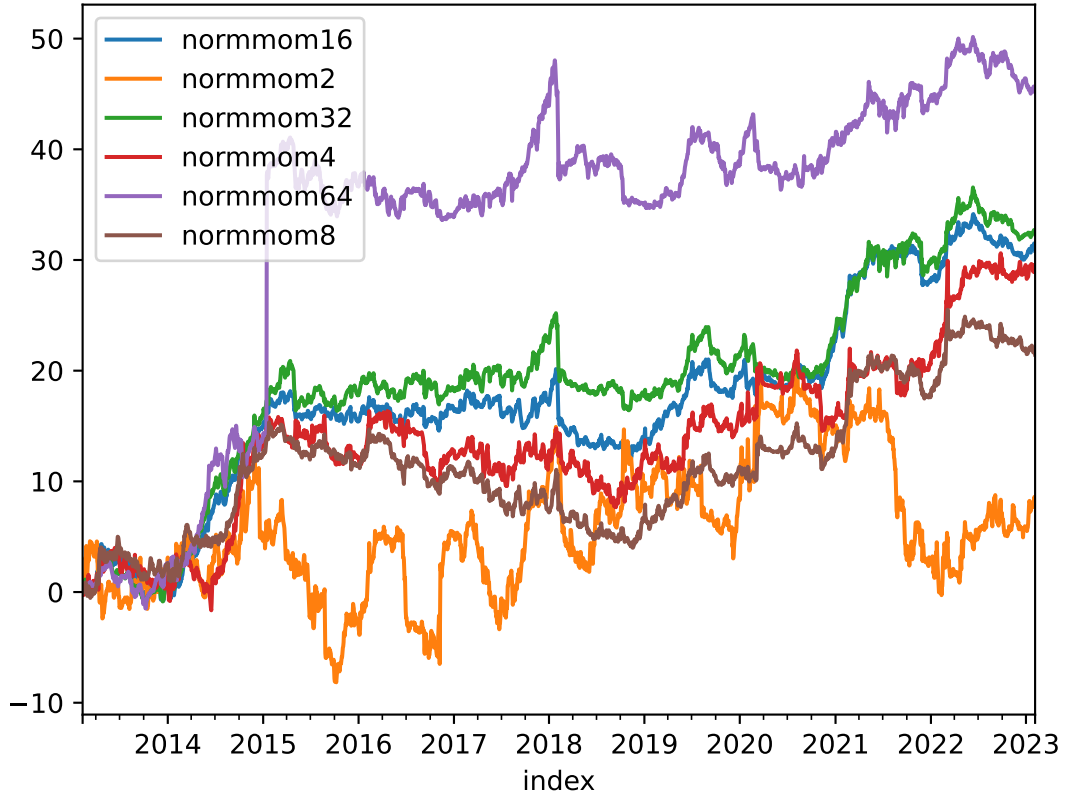
ann. std {'normmom16': 3.631, 'normmom2': 8.213, 'normmom32': 3.965, 'normmom4': 5.687, 'normmom64': 4.291, 'normmom8': 4.194}

ann. SR {'normmom16': 1.1, 'normmom2': -0.04, 'normmom32': 0.9, 'normmom4': 0.73, 'normmom64': 0.28, 'normmom8': 0.86}



# Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.029, 'normmom2': 0.797, 'normmom32': 3.174, 'normmom4': 2.844, 'normmom64': 4.463, 'normmom8': 2.106}  
ann. std {'normmom16': 3.567, 'normmom2': 9.044, 'normmom32': 3.721, 'normmom4': 5.478, 'normmom64': 8.562, 'normmom8': 4.027}  
ann. SR {'normmom16': 0.85, 'normmom2': 0.09, 'normmom32': 0.85, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.52}



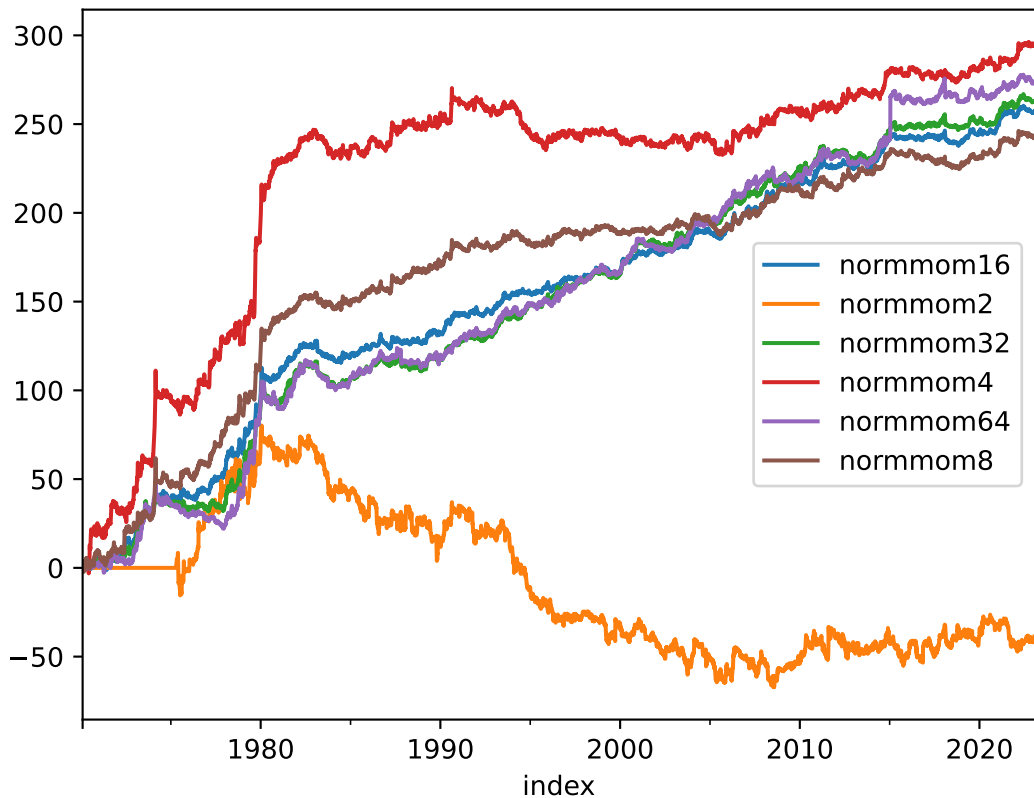


# Total Trading Rule P&L for period '99Y'

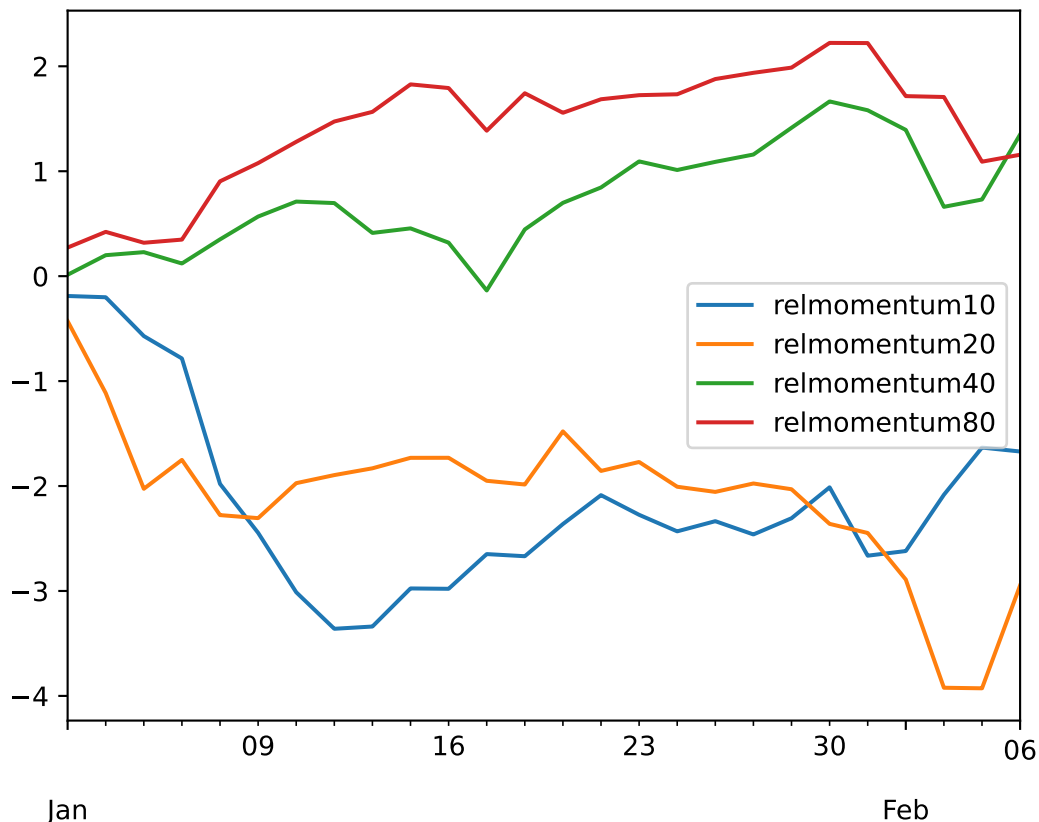
ann. mean {'normmom16': 4.758, 'normmom2': -0.718, 'normmom32': 4.863, 'normmom4': 5.454, 'normmom64': 5.056, 'normmom8': 4.482}

ann. std {'normmom16': 4.909, 'normmom2': 11.173, 'normmom32': 4.975, 'normmom4': 8.308, 'normmom64': 6.292, 'normmom8': 5.914}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.66, 'normmom64': 0.8, 'normmom8': 0.76}



Total Trading Rule P&L for period 'YTD'  
ann. mean {'relmomentum10': -16.452, 'relmomentum20': -29.02, 'relmomentum40': 13.291, 'relmomentum80': 11.393}  
ann. std {'relmomentum10': 6.176, 'relmomentum20': 6.785, 'relmomentum40': 4.533, 'relmomentum80': 4.074}  
ann. SR {'relmomentum10': -2.66, 'relmomentum20': -4.28, 'relmomentum40': 2.93, 'relmomentum80': 2.8}

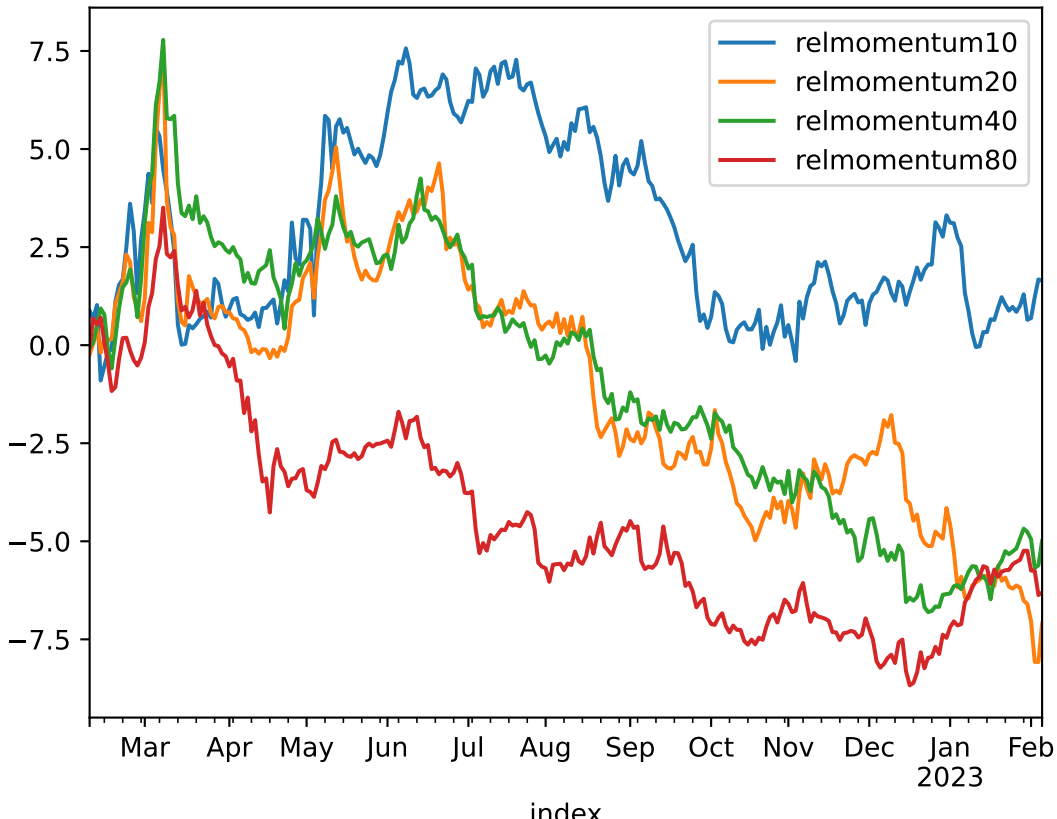


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.614, 'relmomentum20': -6.99, 'relmomentum40': -4.917, 'relmomentum80': -6.208}

ann. std {'relmomentum10': 8.994, 'relmomentum20': 8.48, 'relmomentum40': 6.708, 'relmomentum80': 5.667}

ann. SR {'relmomentum10': 0.18, 'relmomentum20': -0.82, 'relmomentum40': -0.73, 'relmomentum80': -1.1}

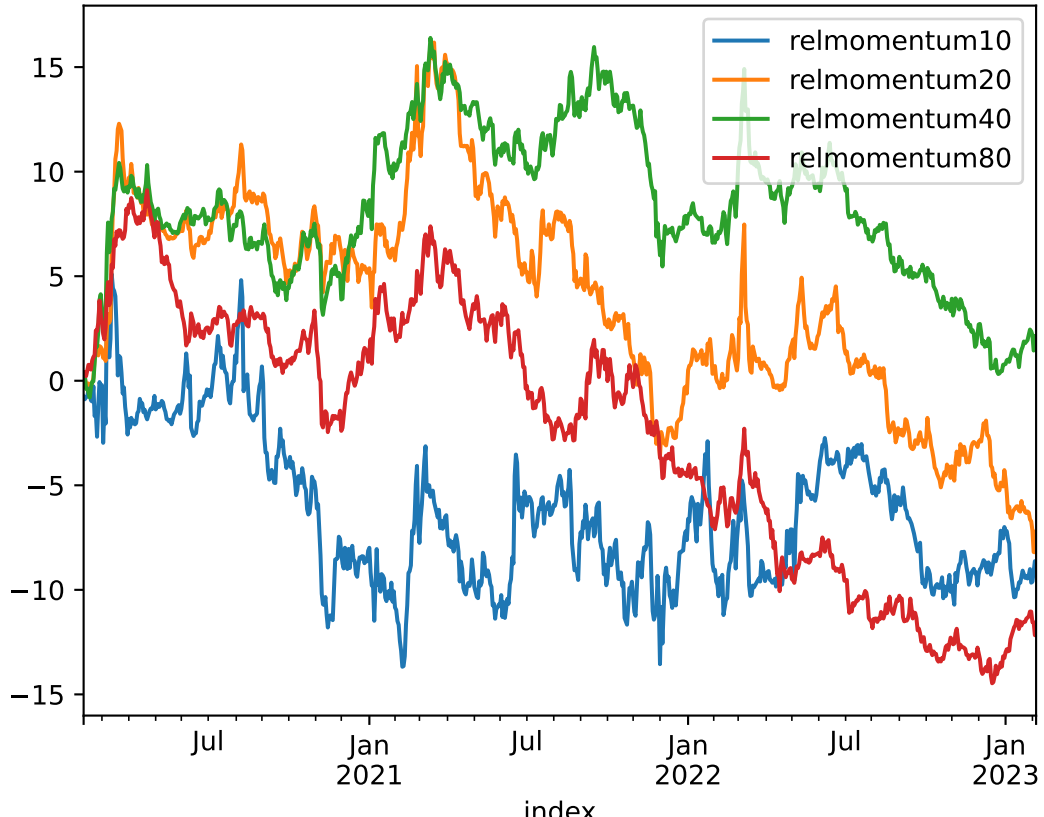


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.841, 'relmomentum20': -2.367, 'relmomentum40': 0.7, 'relmomentum80': -3.967}

ann. std {'relmomentum10': 12.207, 'relmomentum20': 8.913, 'relmomentum40': 7.439, 'relmomentum80': 6.866}

ann. SR {'relmomentum10': -0.23, 'relmomentum20': -0.27, 'relmomentum40': 0.09, 'relmomentum80': -0.58}

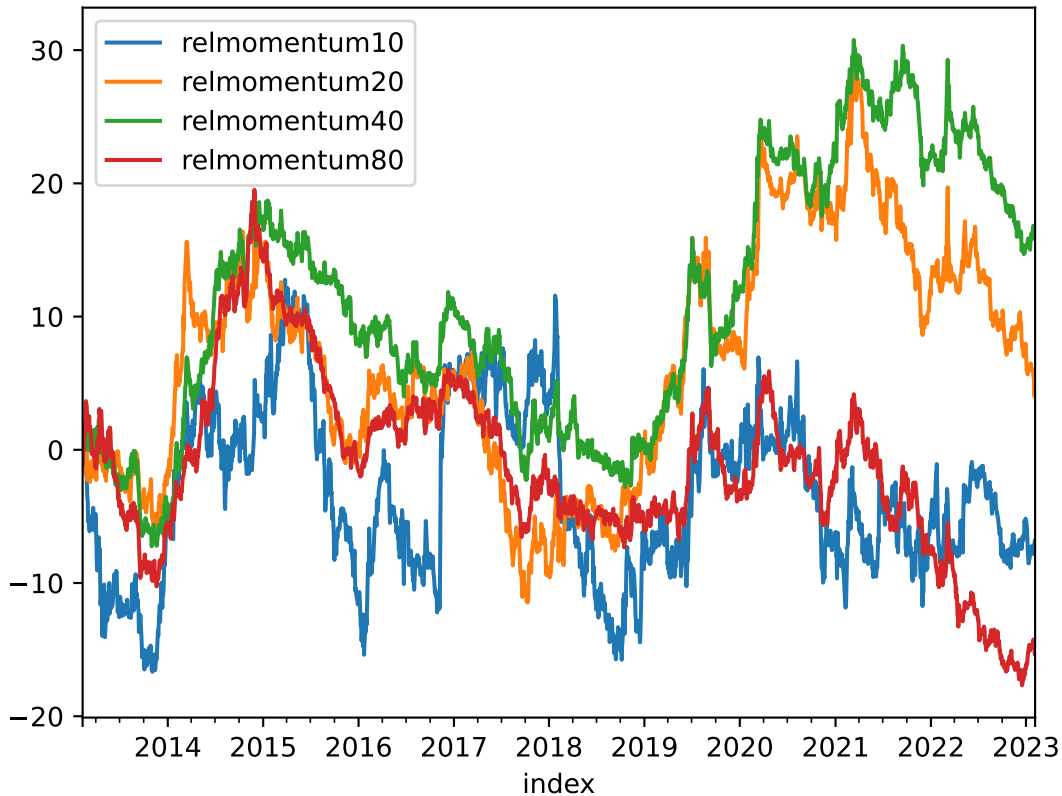


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.671, 'relmomentum20': 0.493, 'relmomentum40': 1.621, 'relmomentum80': -1.504}

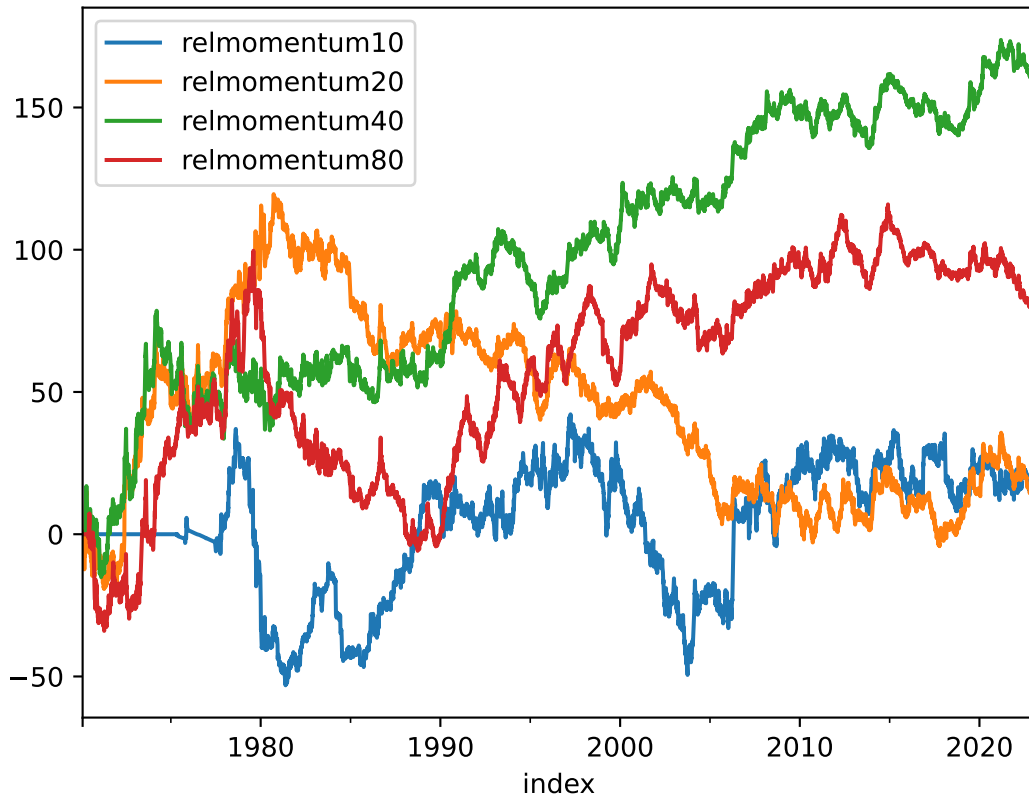
ann. std {'relmomentum10': 12.85, 'relmomentum20': 8.908, 'relmomentum40': 7.291, 'relmomentum80': 6.751}

ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.06, 'relmomentum40': 0.22, 'relmomentum80': -0.22}

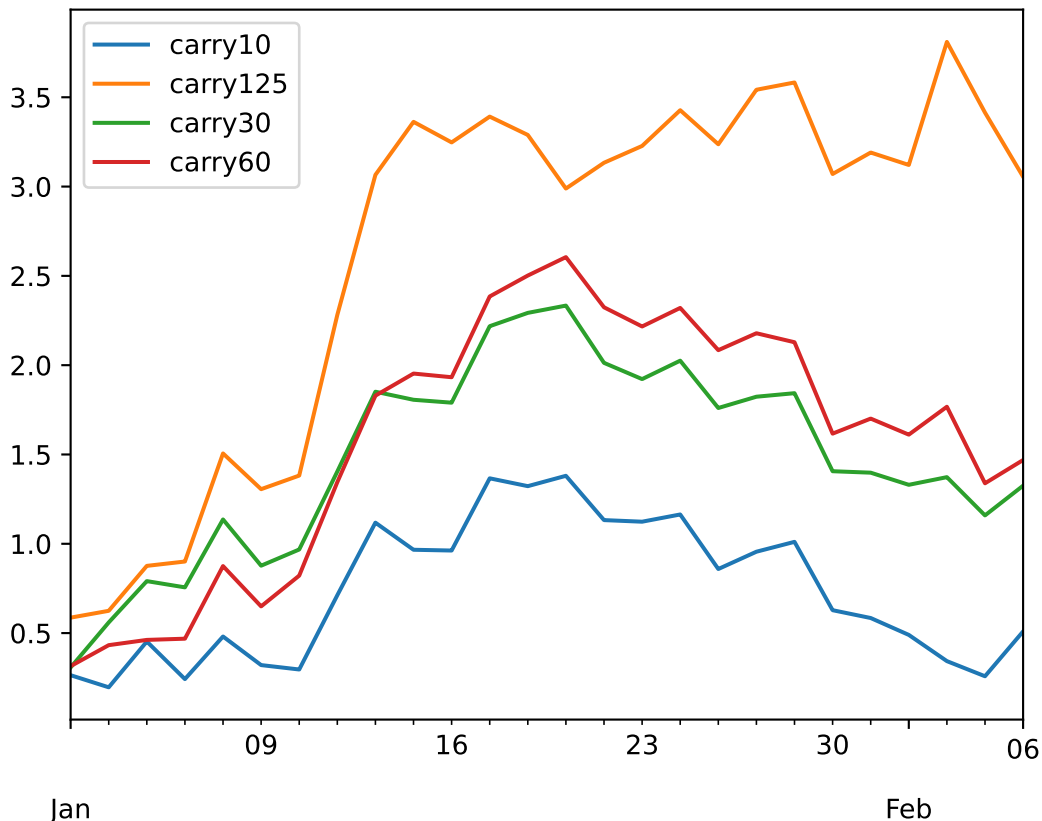


Total Trading Rule P&L for period '99Y'

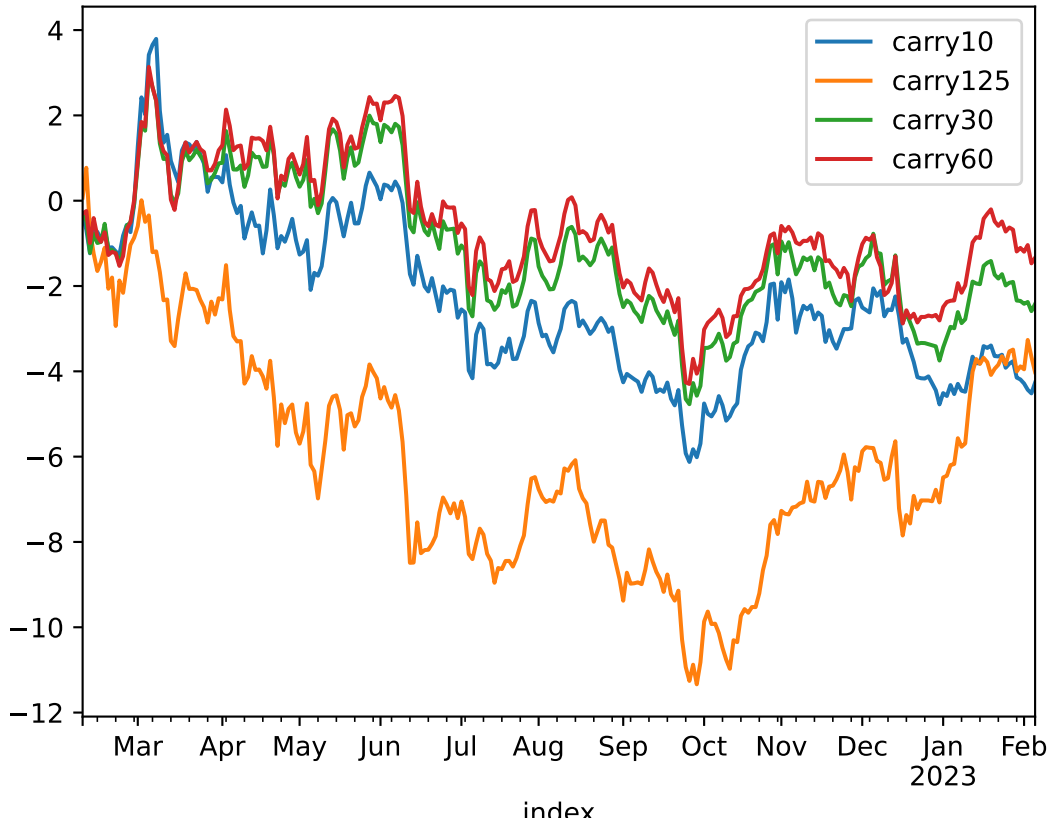
ann. mean {'relmomentum10': 0.315, 'relmomentum20': 0.227, 'relmomentum40': 2.952, 'relmomentum80': 1.501}  
ann. std {'relmomentum10': 13.326, 'relmomentum20': 11.519, 'relmomentum40': 10.784, 'relmomentum80': 11.063}  
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'  
ann. mean {'carry10': 5.013, 'carry125': 30.081, 'carry30': 13.049, 'carry60': 14.463}  
ann. std {'carry10': 3.513, 'carry125': 5.859, 'carry30': 3.807, 'carry60': 4.173}  
ann. SR {'carry10': 1.43, 'carry125': 5.13, 'carry30': 3.43, 'carry60': 3.47}



Total Trading Rule P&L for period '1Y'  
ann. mean {'carry10': -4.2, 'carry125': -3.957, 'carry30': -2.385, 'carry60': -1.318}  
ann. std {'carry10': 6.642, 'carry125': 7.609, 'carry30': 6.367, 'carry60': 6.59}  
ann. SR {'carry10': -0.63, 'carry125': -0.52, 'carry30': -0.37, 'carry60': -0.2}



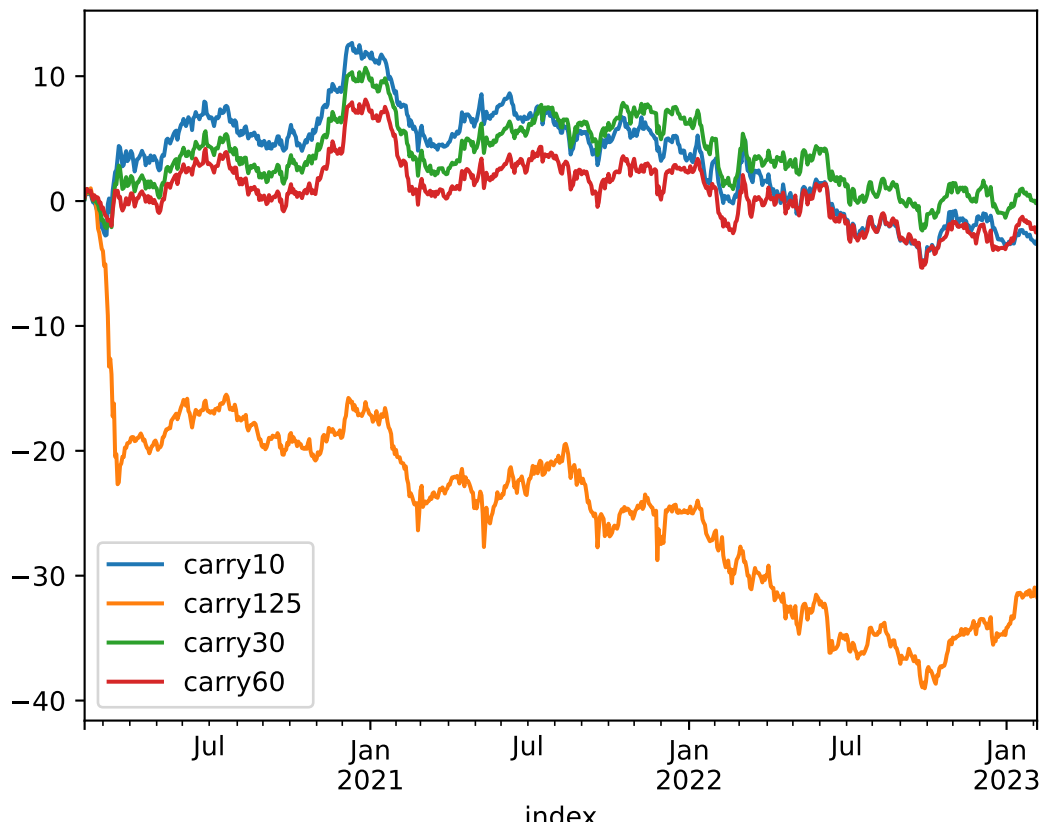


Total Trading Rule P&L for period '3Y'

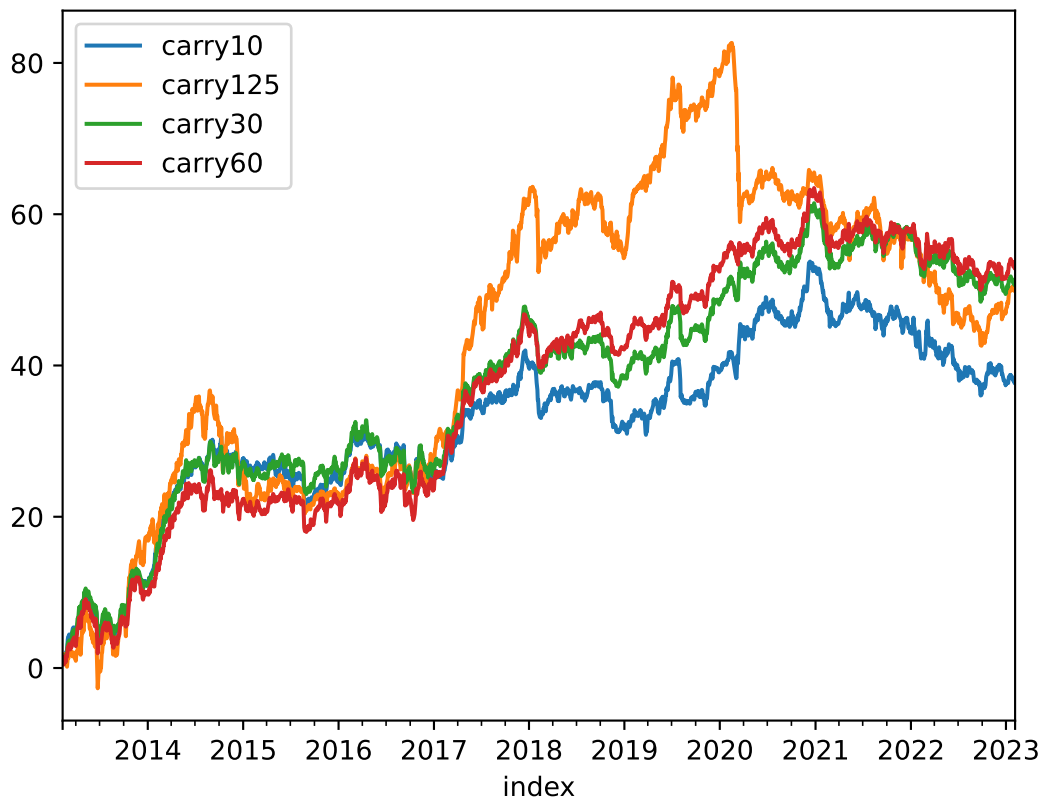
ann. mean {'carry10': -1.046, 'carry125': -10.391, 'carry30': -0.004, 'carry60': -0.783}

ann. std {'carry10': 6.815, 'carry125': 9.39, 'carry30': 6.613, 'carry60': 6.561}

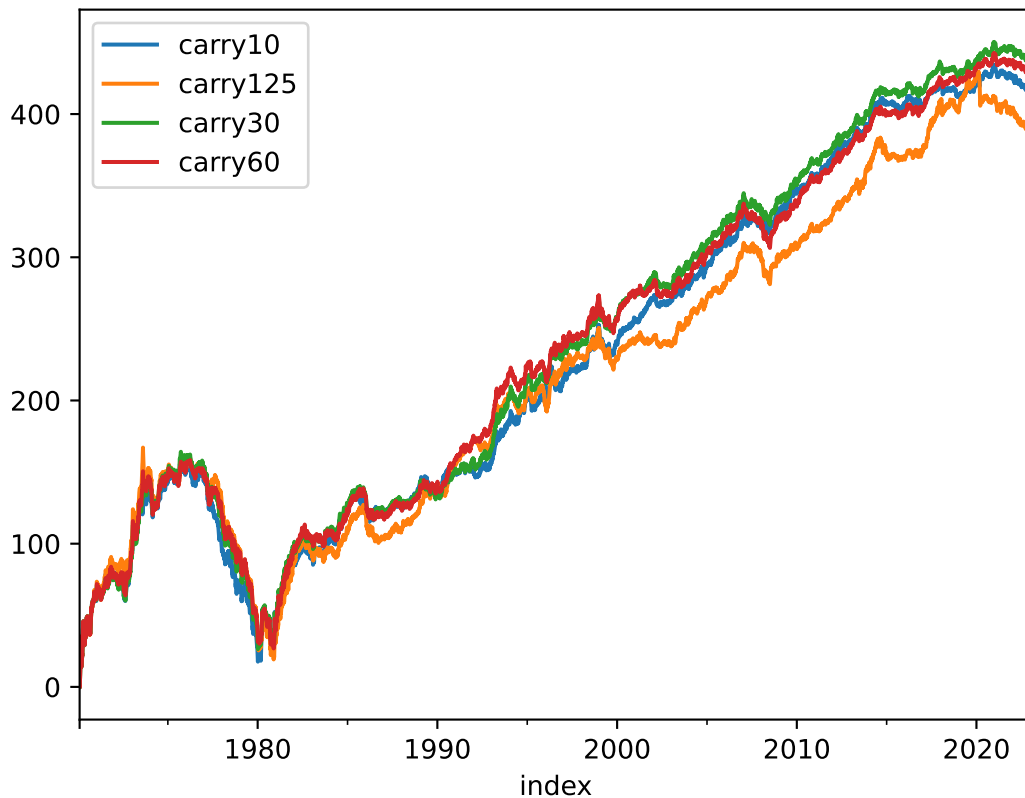
ann. SR {'carry10': -0.15, 'carry125': -1.11, 'carry30': -0.0, 'carry60': -0.12}



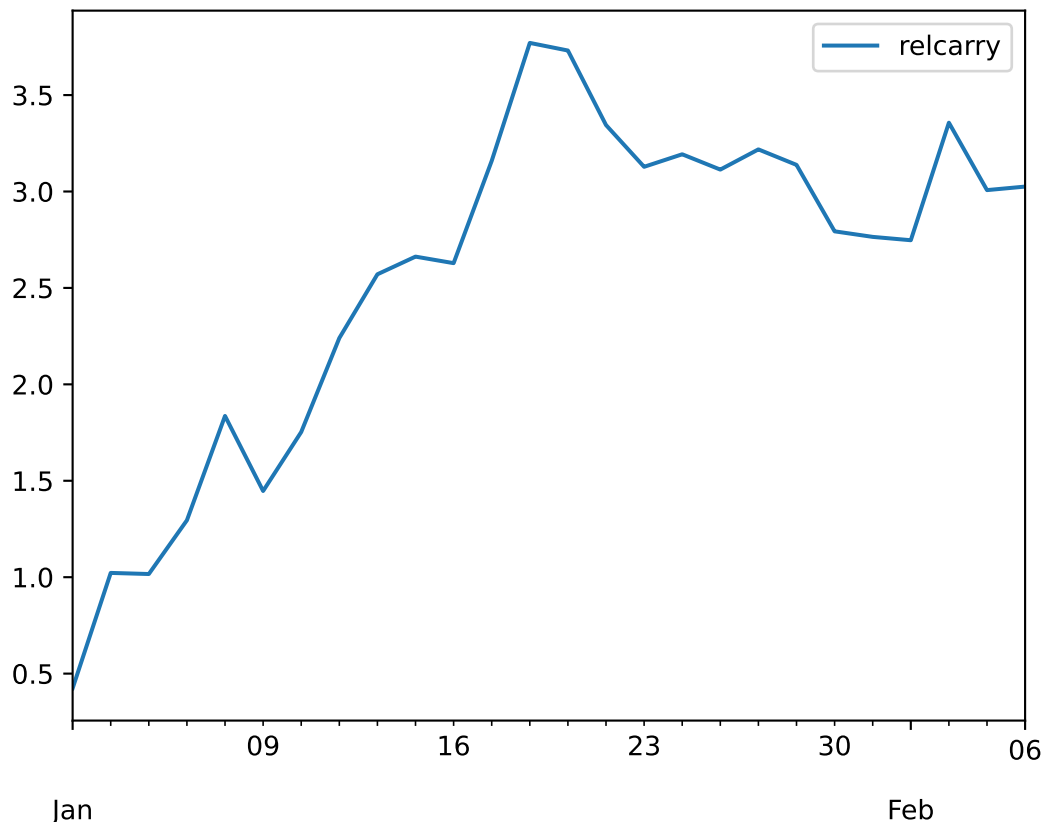
Total Trading Rule P&L for period '10Y'  
ann. mean {'carry10': 3.72, 'carry125': 4.903, 'carry30': 4.986, 'carry60': 5.199}  
ann. std {'carry10': 6.423, 'carry125': 9.123, 'carry30': 6.525, 'carry60': 6.494}  
ann. SR {'carry10': 0.58, 'carry125': 0.54, 'carry30': 0.76, 'carry60': 0.8}



Total Trading Rule P&L for period '99Y'  
ann. mean {'carry10': 7.749, 'carry125': 7.345, 'carry30': 8.139, 'carry60': 7.997}  
ann. std {'carry10': 11.831, 'carry125': 12.065, 'carry30': 11.842, 'carry60': 11.791}  
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



Total Trading Rule P&L for period 'YTD'  
ann. mean {'relcarry': 29.789}  
ann. std {'relcarry': 5.211}  
ann. SR {'relcarry': 5.72}

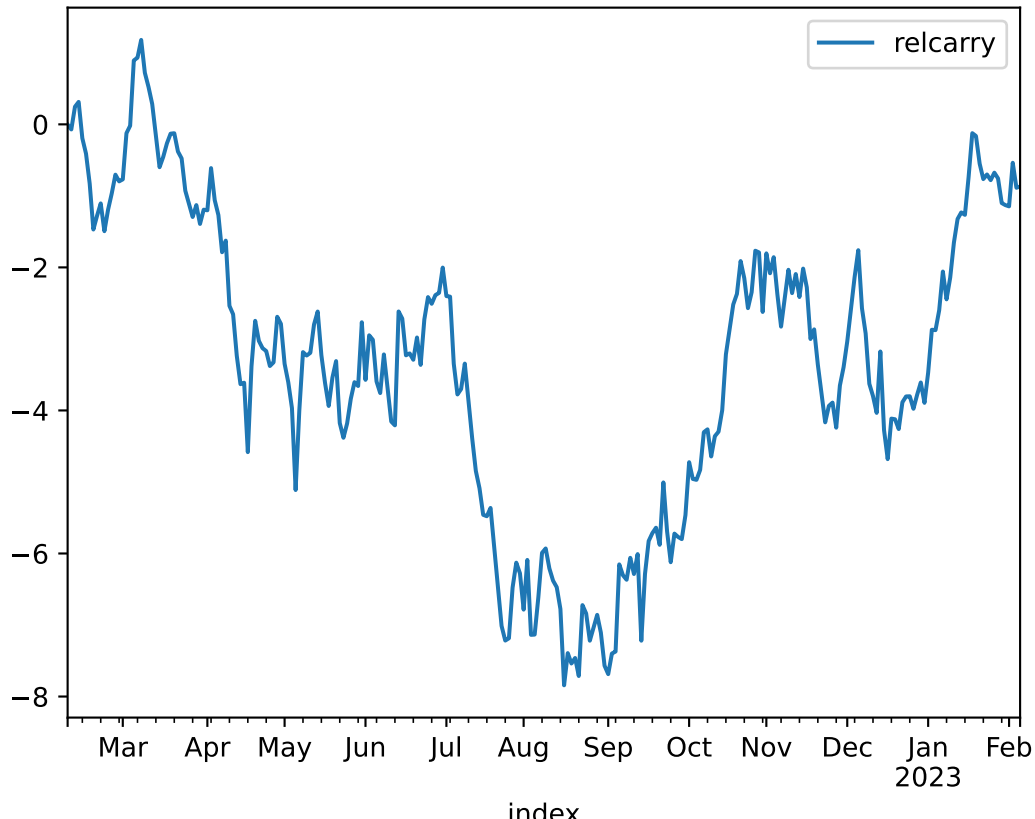


Total Trading Rule P&L for period '1Y'

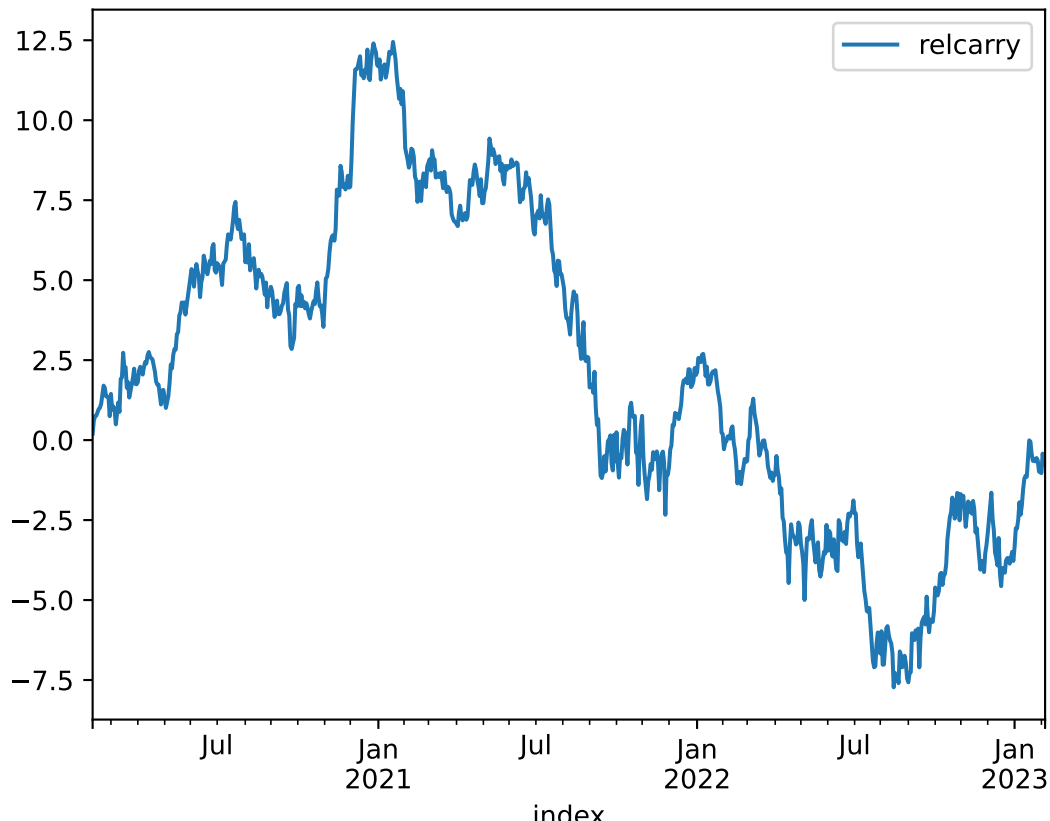
ann. mean {'relcarry': -0.855}

ann. std {'relcarry': 7.232}

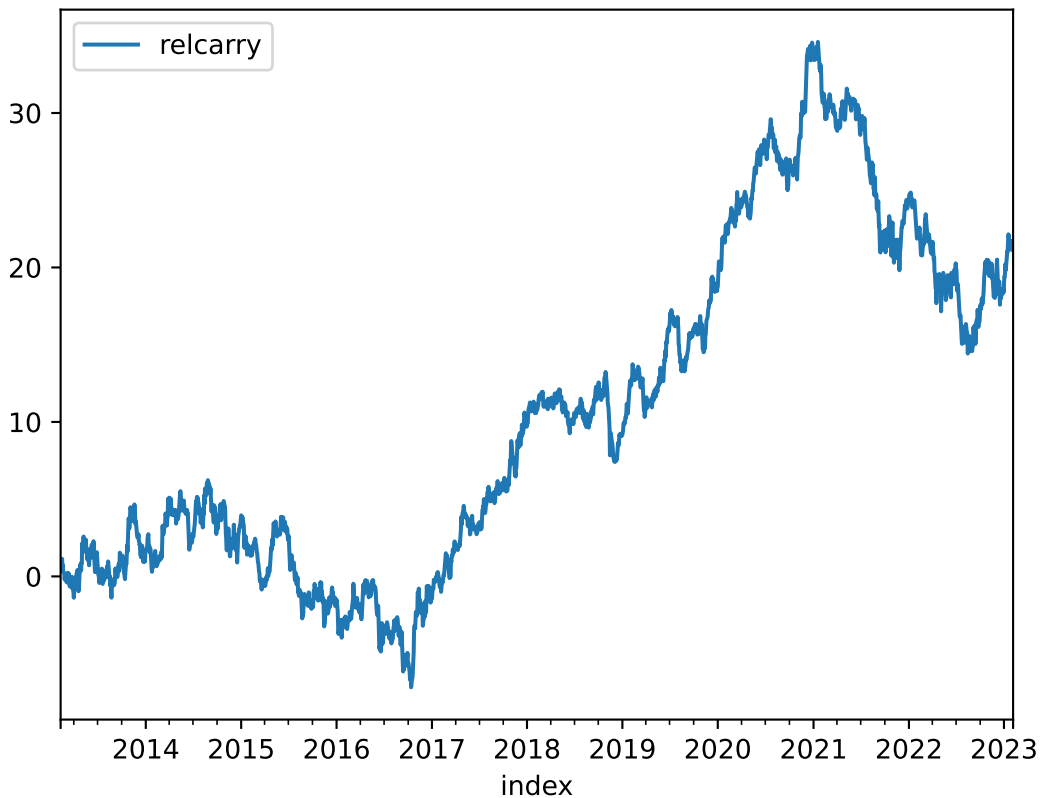
ann. SR {'relcarry': -0.12}



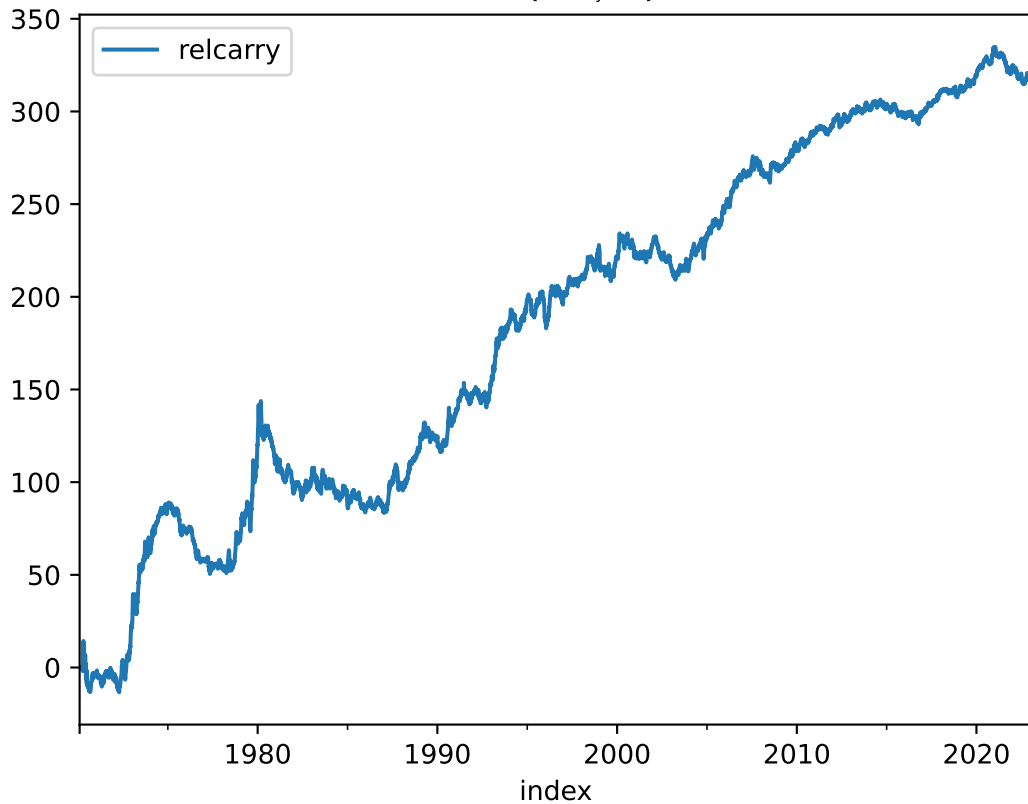
Total Trading Rule P&L for period '3Y'  
ann. mean {'relcarry': -0.247}  
ann. std {'relcarry': 6.847}  
ann. SR {'relcarry': -0.04}



Total Trading Rule P&L for period '10Y'  
ann. mean {'relcarry': 2.102}  
ann. std {'relcarry': 6.014}  
ann. SR {'relcarry': 0.35}

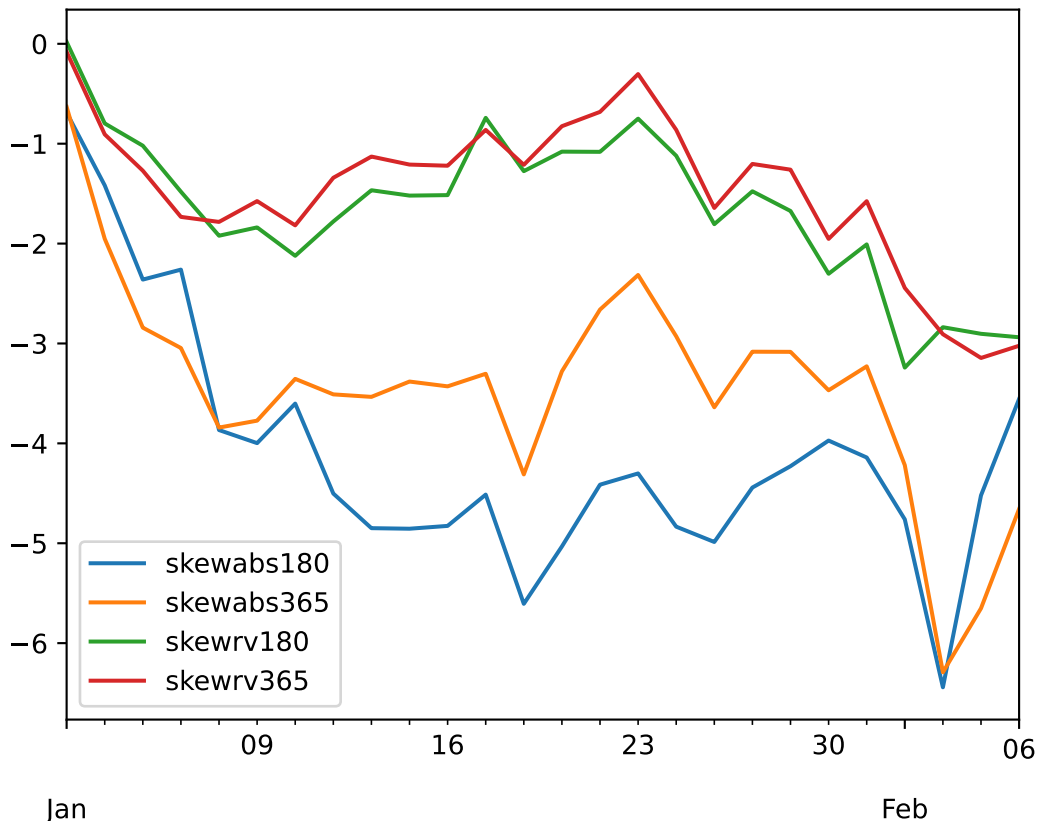


Total Trading Rule P&L for period '99Y'  
ann. mean {'relcarry': 5.953}  
ann. std {'relcarry': 9.883}  
ann. SR {'relcarry': 0.6}

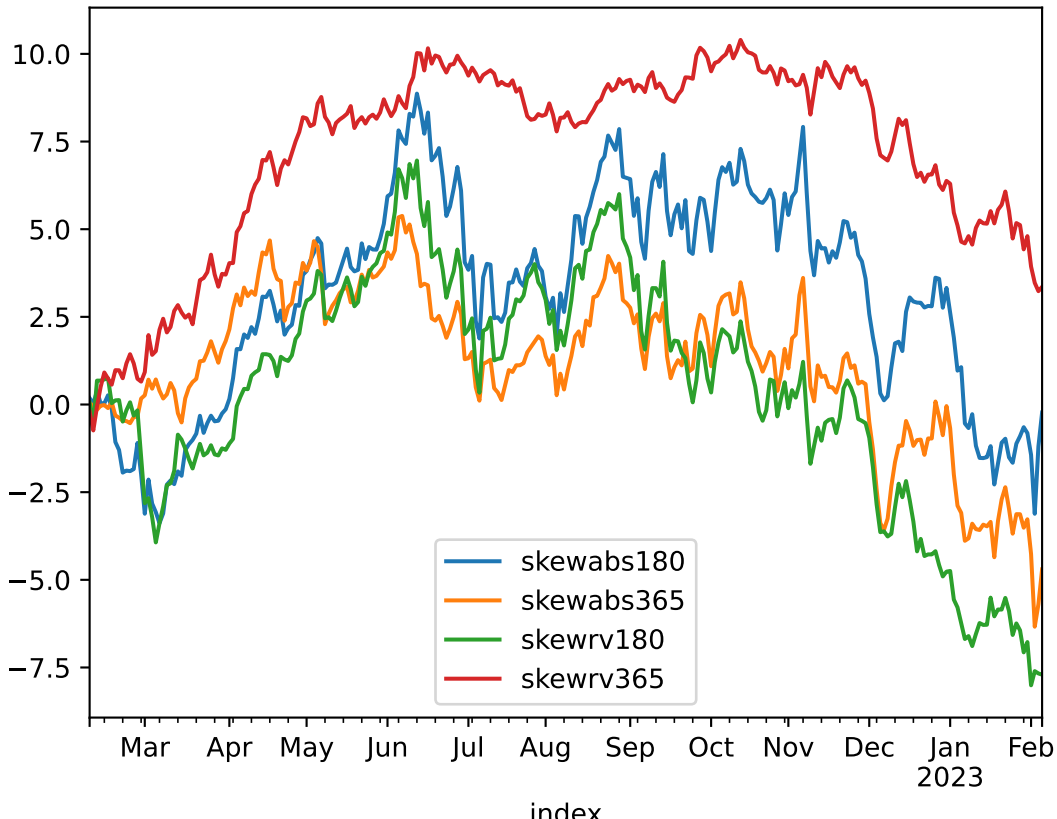




Total Trading Rule P&L for period 'YTD'  
ann. mean {'skewabs180': -35.007, 'skewabs365': -45.854, 'skewrv180': -28.927, 'skewrv365': -29.764}  
ann. std {'skewabs180': 12.68, 'skewabs365': 11.836, 'skewrv180': 7.195, 'skewrv365': 6.724}  
ann. SR {'skewabs180': -2.76, 'skewabs365': -3.87, 'skewrv180': -4.02, 'skewrv365': -4.43}



Total Trading Rule P&L for period '1Y'  
ann. mean {'skewabs180': -0.226, 'skewabs365': -4.63, 'skewrv180': -7.586, 'skewrv365': 3.303}  
ann. std {'skewabs180': 10.496, 'skewabs365': 8.708, 'skewrv180': 9.249, 'skewrv365': 5.327}  
ann. SR {'skewabs180': -0.02, 'skewabs365': -0.53, 'skewrv180': -0.82, 'skewrv365': 0.62}

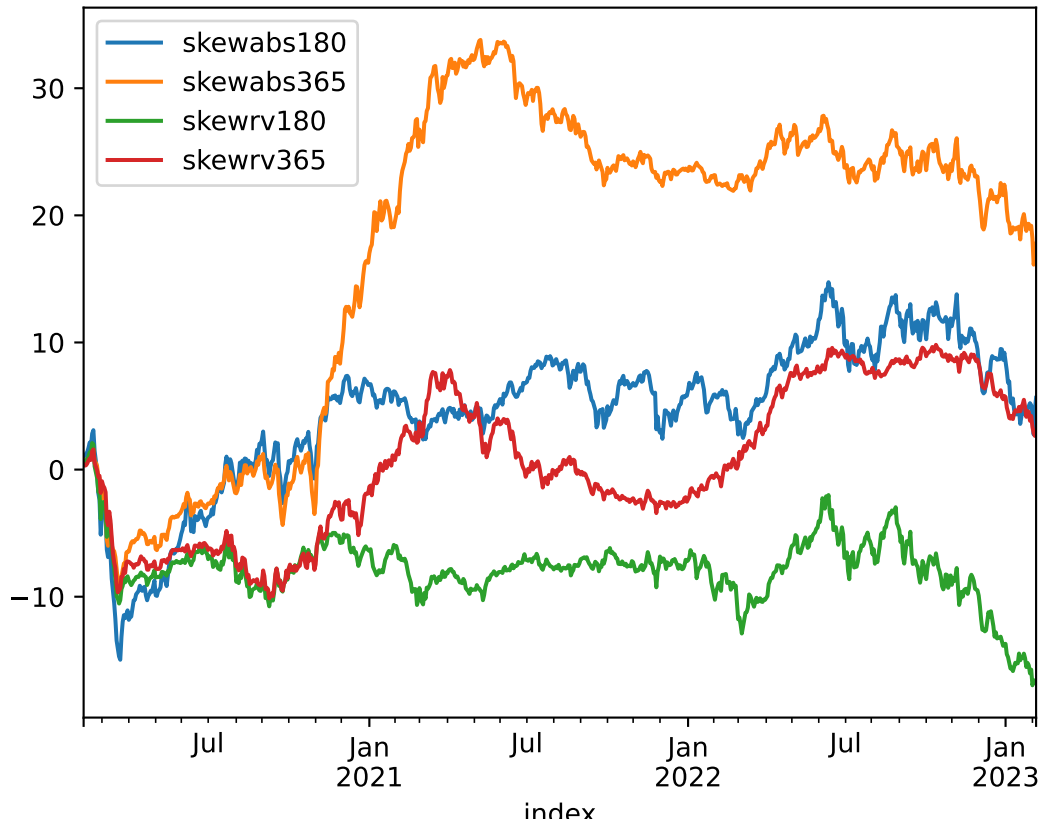


Total Trading Rule P&L for period '3Y'

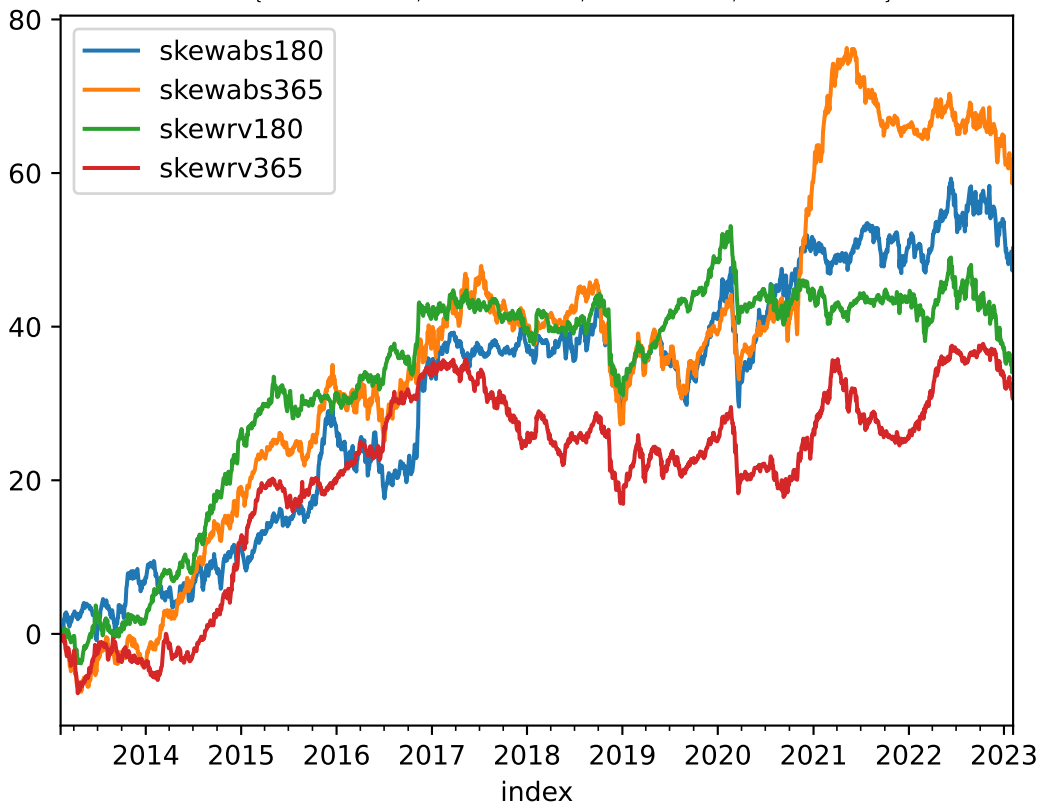
ann. mean {'skewabs180': 1.85, 'skewabs365': 5.82, 'skewrv180': -5.463, 'skewrv365': 0.908}

ann. std {'skewabs180': 9.716, 'skewabs365': 9.019, 'skewrv180': 7.754, 'skewrv365': 6.654}

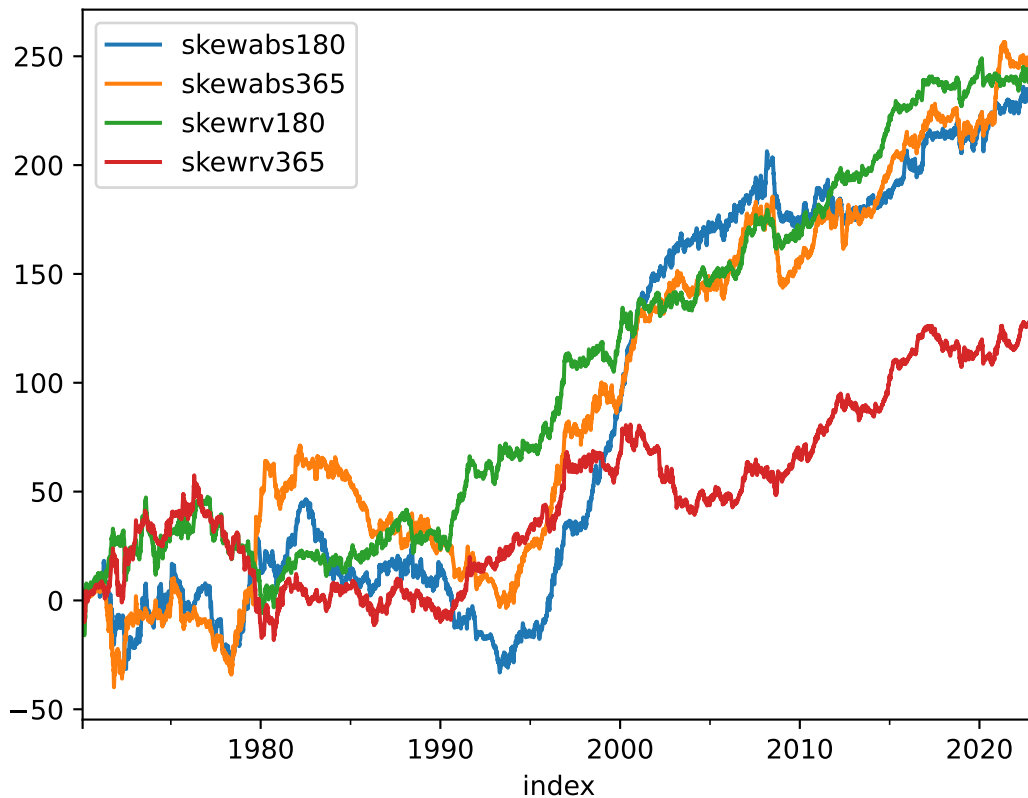
ann. SR {'skewabs180': 0.19, 'skewabs365': 0.65, 'skewrv180': -0.7, 'skewrv365': 0.14}



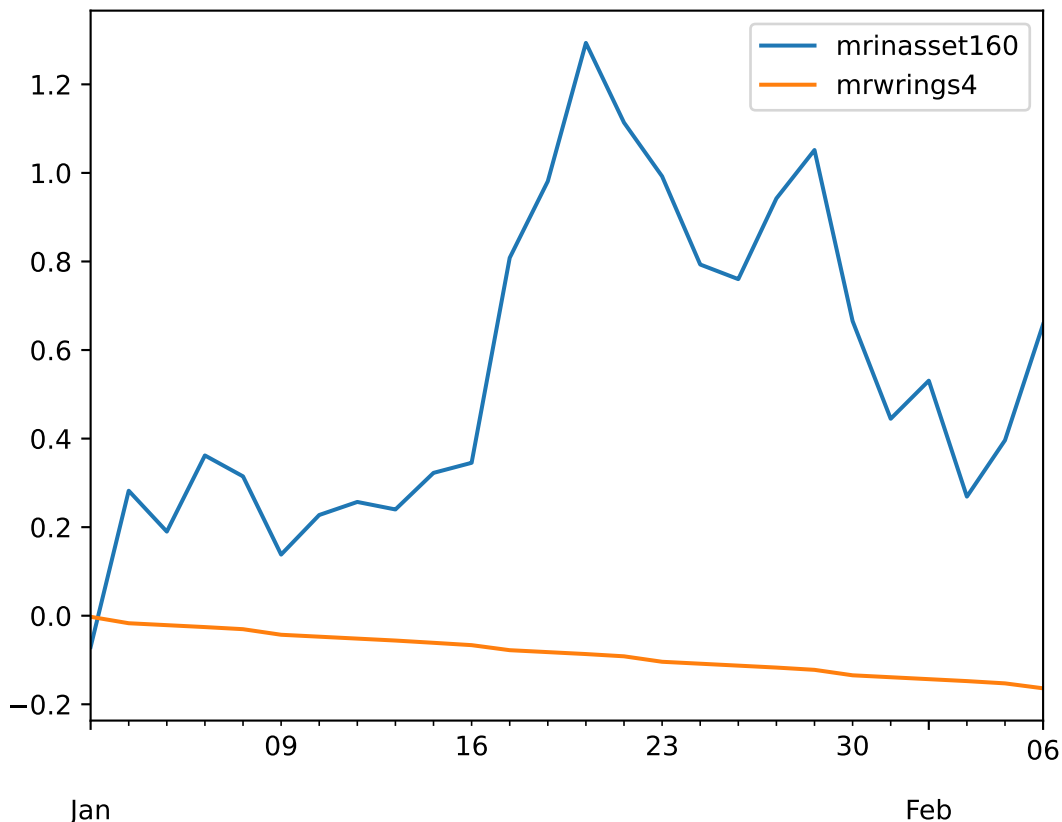
Total Trading Rule P&L for period '10Y'  
ann. mean {'skewabs180': 4.928, 'skewabs365': 5.916, 'skewrv180': 3.373, 'skewrv365': 3.017}  
ann. std {'skewabs180': 8.097, 'skewabs365': 8.052, 'skewrv180': 6.58, 'skewrv365': 6.187}  
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.73, 'skewrv180': 0.51, 'skewrv365': 0.49}



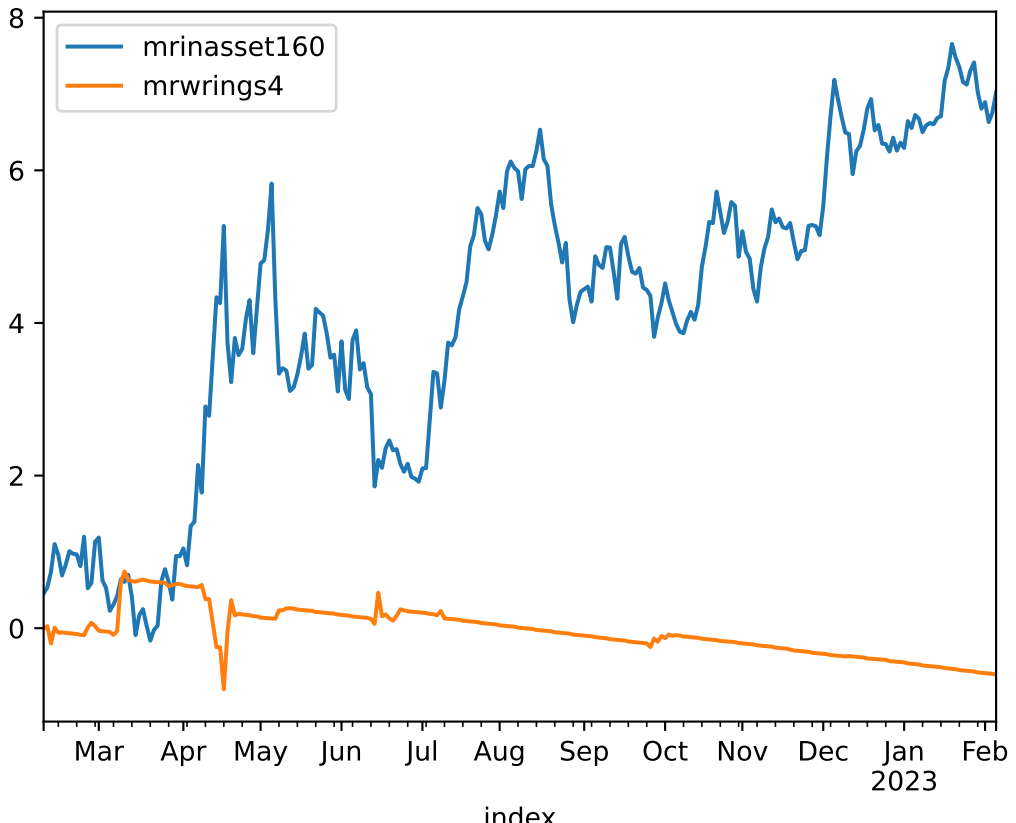
Total Trading Rule P&L for period '99Y'  
ann. mean {'skewabs180': 4.2, 'skewabs365': 4.453, 'skewrv180': 4.264, 'skewrv365': 2.243}  
ann. std {'skewabs180': 10.794, 'skewabs365': 10.301, 'skewrv180': 9.476, 'skewrv365': 8.784}  
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



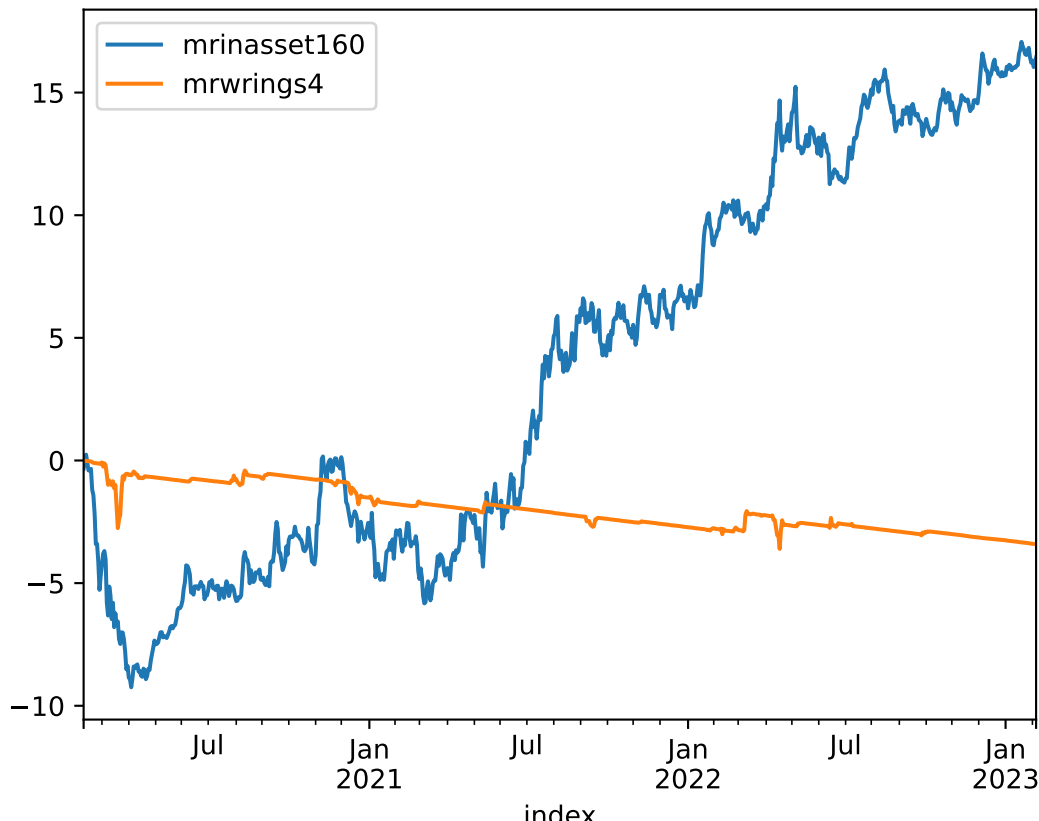
Total Trading Rule P&L for period 'YTD'  
ann. mean {'mrinasset160': 6.479, 'mrwrings4': -1.614}  
ann. std {'mrinasset160': 3.254, 'mrwrings4': 0.056}  
ann. SR {'mrinasset160': 1.99, 'mrwrings4': -28.98}



Total Trading Rule P&L for period '1Y'  
ann. mean {'mrinasset160': 6.913, 'mrwrings4': -0.599}  
ann. std {'mrinasset160': 5.692, 'mrwrings4': 1.483}  
ann. SR {'mrinasset160': 1.21, 'mrwrings4': -0.4}

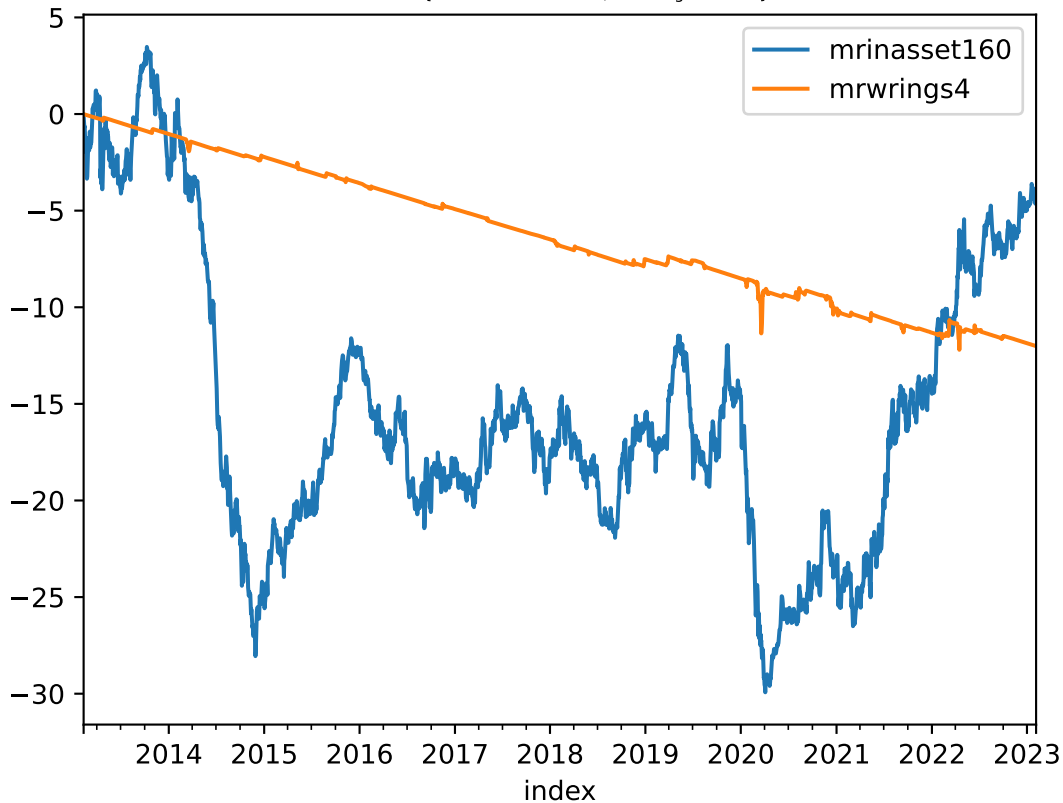


Total Trading Rule P&L for period '3Y'  
ann. mean {'mrinasset160': 5.385, 'mrwrings4': -1.119}  
ann. std {'mrinasset160': 6.711, 'mrwrings4': 1.518}  
ann. SR {'mrinasset160': 0.8, 'mrwrings4': -0.74}





Total Trading Rule P&L for period '10Y'  
ann. mean {'mrinasset160': -0.417, 'mrwrings4': -1.179}  
ann. std {'mrinasset160': 6.557, 'mrwrings4': 0.899}  
ann. SR {'mrinasset160': -0.06, 'mrwrings4': -1.31}



Total Trading Rule P&L for period '99Y'  
ann. mean {'mrinasset160': -3.163, 'mrwrings4': -2.31}  
ann. std {'mrinasset160': 11.166, 'mrwrings4': 2.622}  
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.88}

