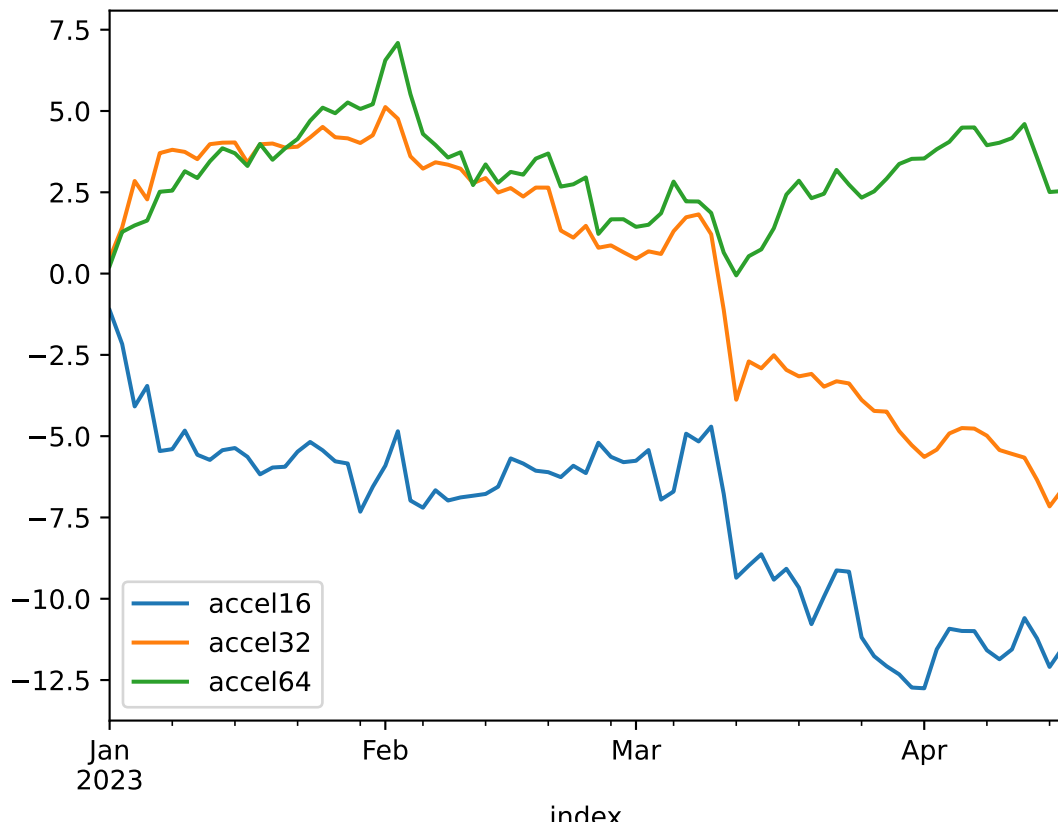
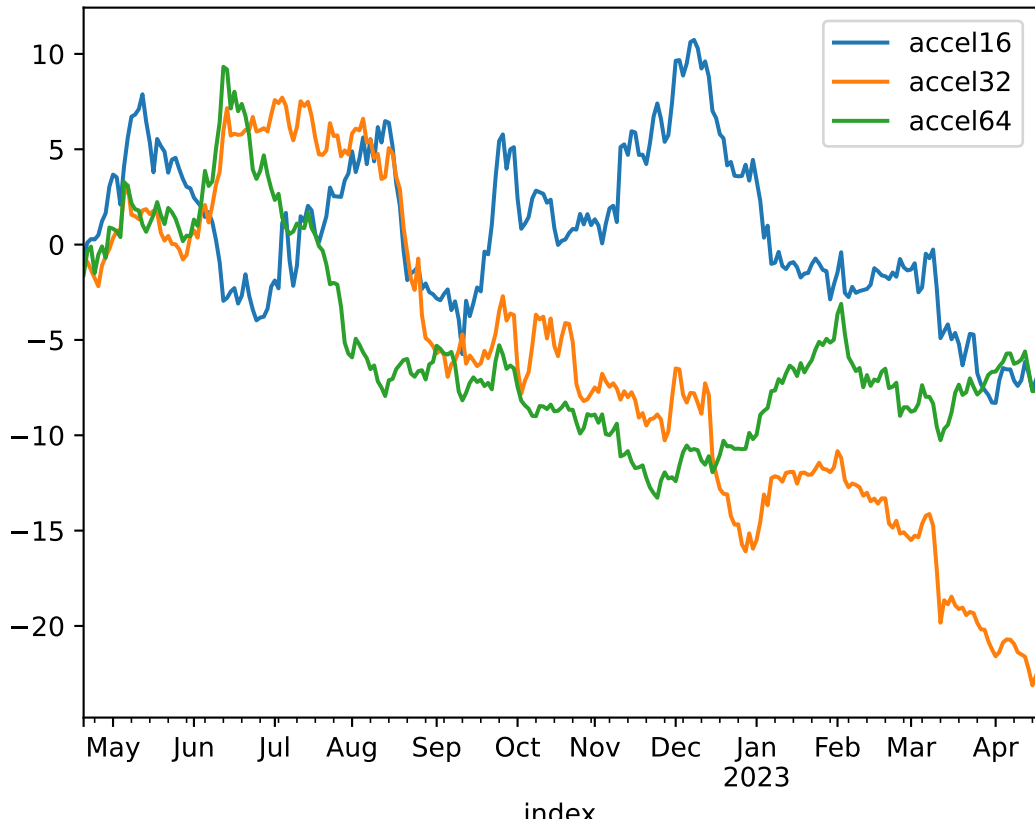


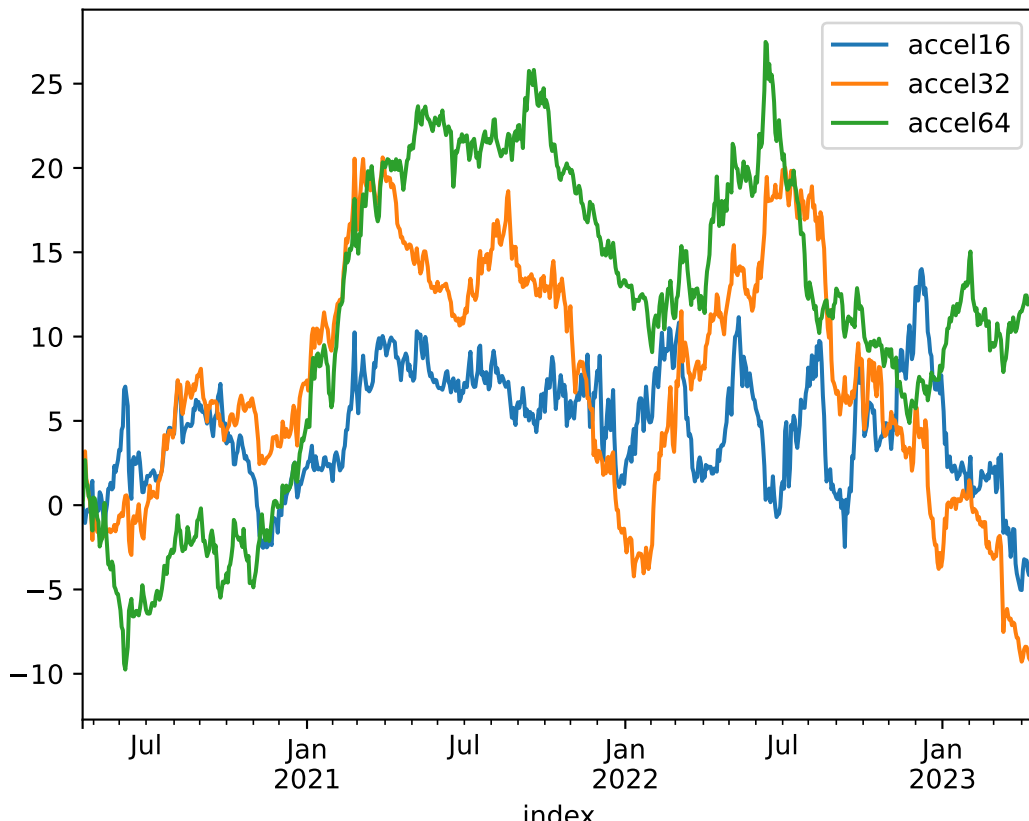
Total Trading Rule P&L for period 'YTD'  
ann. mean {'accel16': -38.347, 'accel32': -22.107, 'accel64': 8.441}  
ann. std {'accel16': 13.284, 'accel32': 10.217, 'accel64': 9.65}  
ann. SR {'accel16': -2.89, 'accel32': -2.16, 'accel64': 0.87}



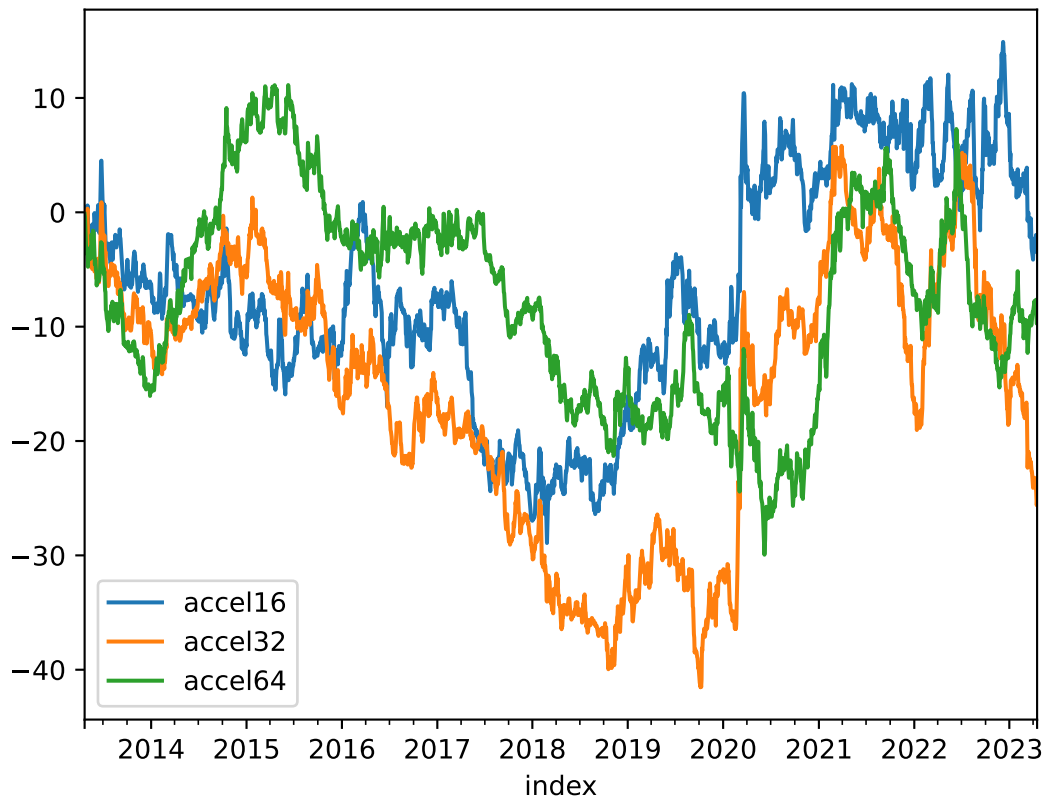
Total Trading Rule P&L for period '1Y'  
ann. mean {'accel16': -6.978, 'accel32': -22.255, 'accel64': -7.545}  
ann. std {'accel16': 16.067, 'accel32': 13.07, 'accel64': 11.063}  
ann. SR {'accel16': -0.43, 'accel32': -1.7, 'accel64': -0.68}



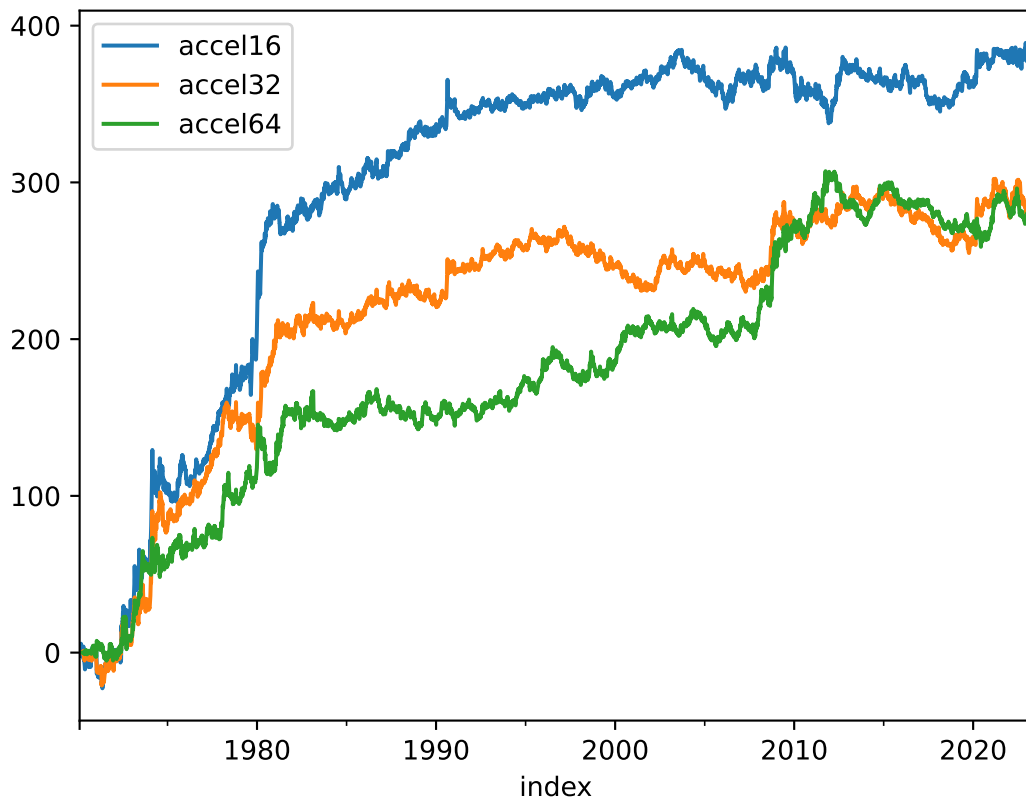
Total Trading Rule P&L for period '3Y'  
ann. mean {'accel16': -1.25, 'accel32': -3.369, 'accel64': 3.434}  
ann. std {'accel16': 13.644, 'accel32': 11.859, 'accel64': 10.697}  
ann. SR {'accel16': -0.09, 'accel32': -0.28, 'accel64': 0.32}



Total Trading Rule P&L for period '10Y'  
ann. mean {'accel16': -0.287, 'accel32': -2.465, 'accel64': -0.953}  
ann. std {'accel16': 11.71, 'accel32': 10.689, 'accel64': 9.342}  
ann. SR {'accel16': -0.02, 'accel32': -0.23, 'accel64': -0.1}



Total Trading Rule P&L for period '99Y'  
ann. mean {'accel16': 6.845, 'accel32': 5.005, 'accel64': 5.148}  
ann. std {'accel16': 14.131, 'accel32': 12.455, 'accel64': 12.105}  
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

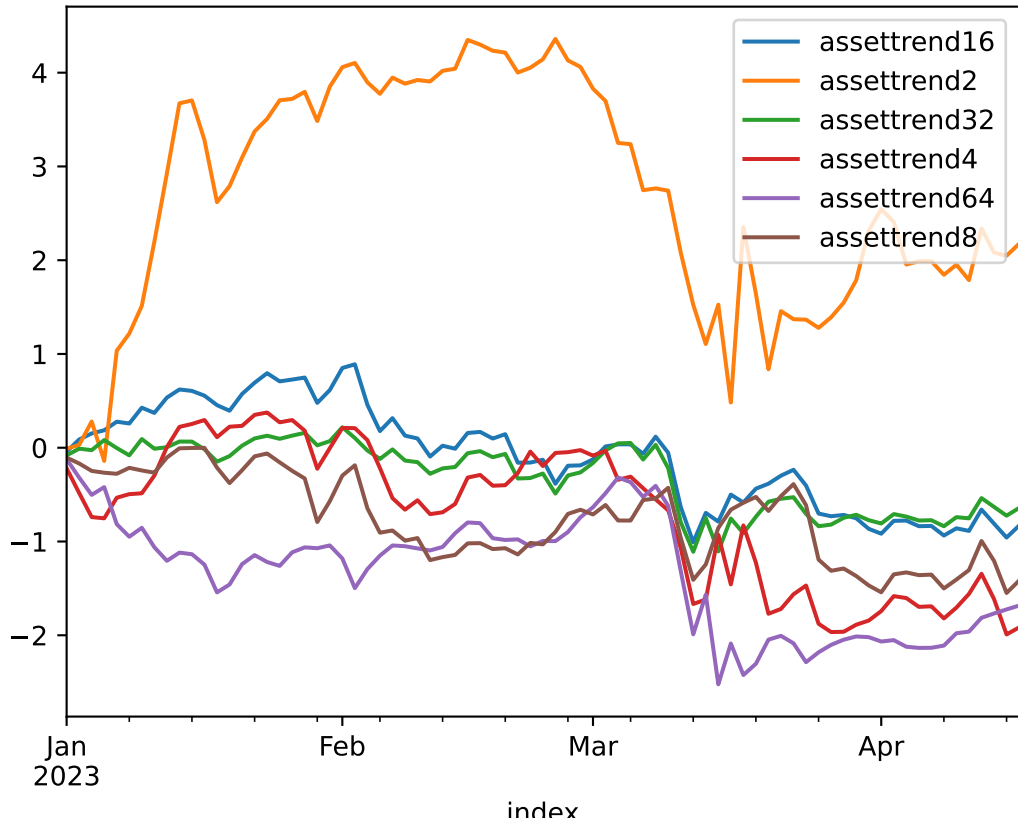


# Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -2.761, 'assettrend2': 7.234, 'assettrend32': -2.135, 'assettrend4': -6.372, 'assettrend64': -5.597, 'assettrend8': -4.711}

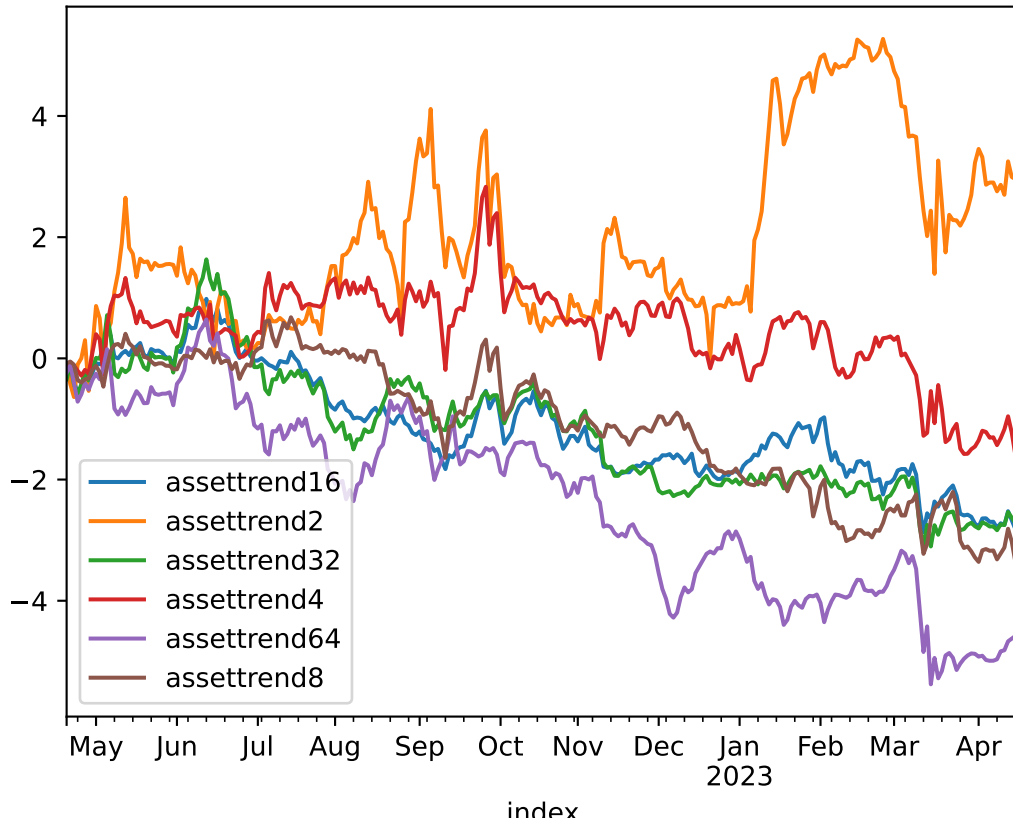
ann. std {'assettrend16': 2.605, 'assettrend2': 6.774, 'assettrend32': 2.348, 'assettrend4': 3.685, 'assettrend64': 3.431, 'assettrend8': 2.974}

ann. SR {'assettrend16': -1.06, 'assettrend2': 1.07, 'assettrend32': -0.91, 'assettrend4': -1.73, 'assettrend64': -1.63, 'assettrend8': -1.58}



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

ann. mean {'assettrend16': -2.651, 'assettrend2': 3.04, 'assettrend32': -2.6, 'assettrend4': -1.505, 'assettrend64': -4.469, 'assettrend8': -3.184}  
ann. std {'assettrend16': 2.346, 'assettrend2': 6.429, 'assettrend32': 2.682, 'assettrend4': 3.972, 'assettrend64': 3.178, 'assettrend8': 2.664}  
ann. SR {'assettrend16': -1.13, 'assettrend2': 0.47, 'assettrend32': -0.97, 'assettrend4': -0.38, 'assettrend64': -1.41, 'assettrend8': -1.2}

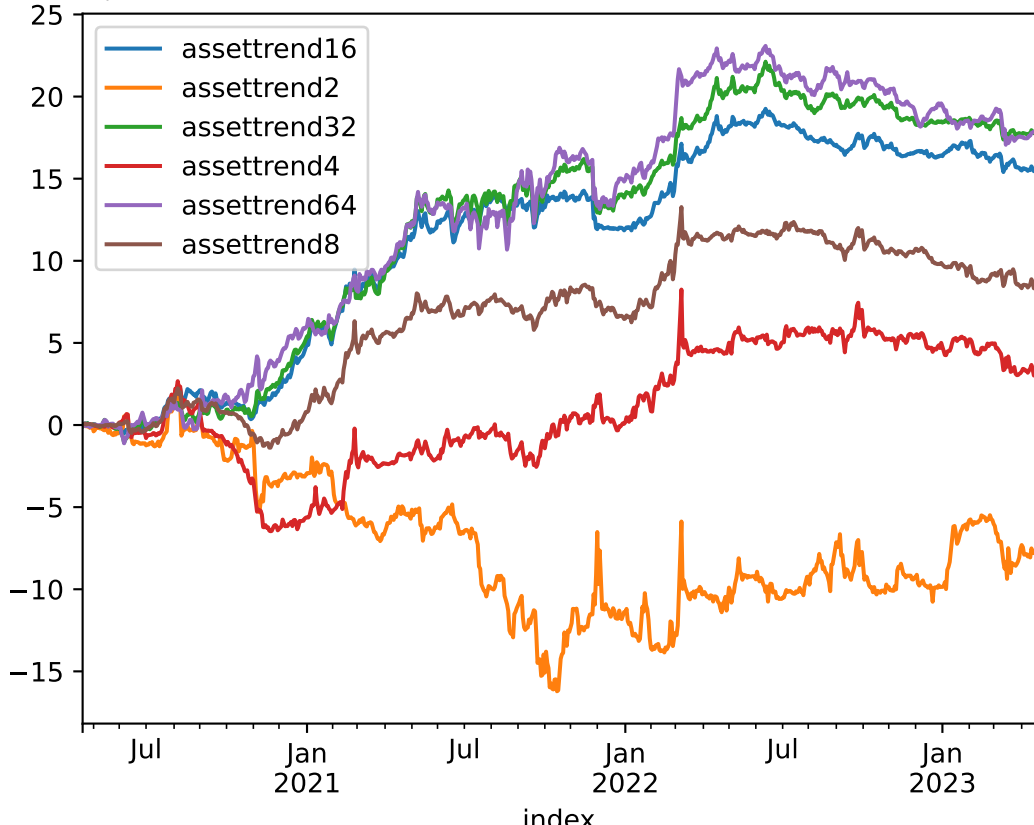


# Total Trading Rule P&L for period '3Y'

ann. mean {'assetrend16': 5.101, 'assetrend2': -2.513, 'assetrend32': 5.844, 'assetrend4': 1.011, 'assetrend64': 5.861, 'assetrend8': 2.768}

ann. std {'assetrend16': 3.405, 'assetrend2': 7.795, 'assetrend32': 4.119, 'assetrend4': 4.937, 'assetrend64': 4.992, 'assetrend8': 3.514}

ann. SR {'assetrend16': 1.5, 'assetrend2': -0.32, 'assetrend32': 1.42, 'assetrend4': 0.2, 'assetrend64': 1.17, 'assetrend8': 0.79}



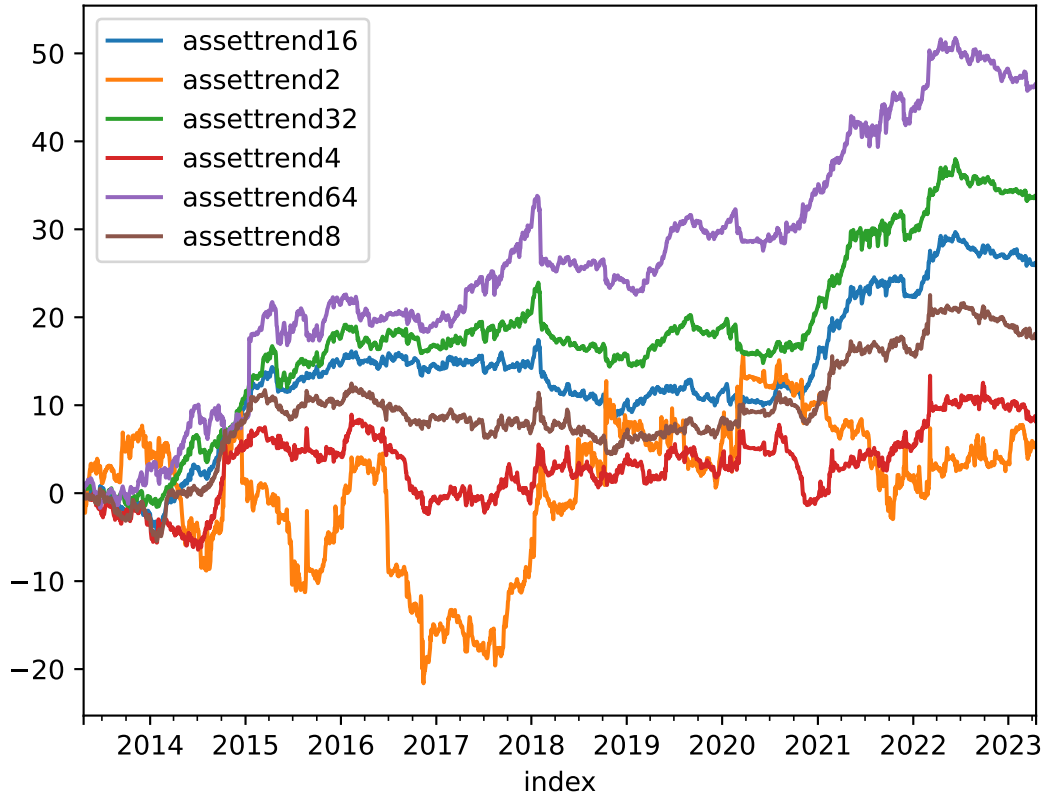


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.555, 'assettrend2': 0.548, 'assettrend32': 3.311, 'assettrend4': 0.805, 'assettrend64': 4.574, 'assettrend8': 1.739}

ann. std {'assettrend16': 3.153, 'assettrend2': 9.791, 'assettrend32': 3.589, 'assettrend4': 4.968, 'assettrend64': 5.191, 'assettrend8': 3.454}

ann. SR {'assettrend16': 0.81, 'assettrend2': 0.06, 'assettrend32': 0.92, 'assettrend4': 0.16, 'assettrend64': 0.88, 'assettrend8': 0.5}

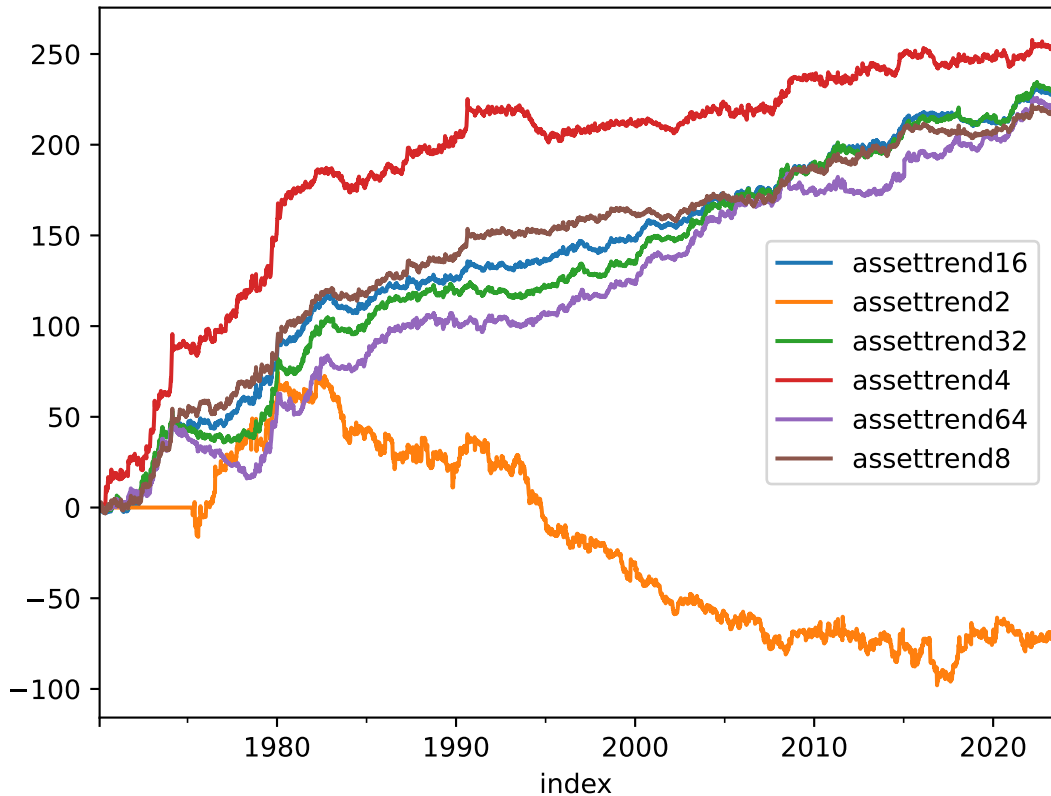


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.201, 'assettrend2': -1.306, 'assettrend32': 4.247, 'assettrend4': 4.659, 'assettrend8': 3.999}

ann. std {'assettrend16': 4.304, 'assettrend2': 10.261, 'assettrend32': 4.495, 'assettrend4': 6.548, 'assettrend64': 4.996, 'assettrend8': 4.634}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

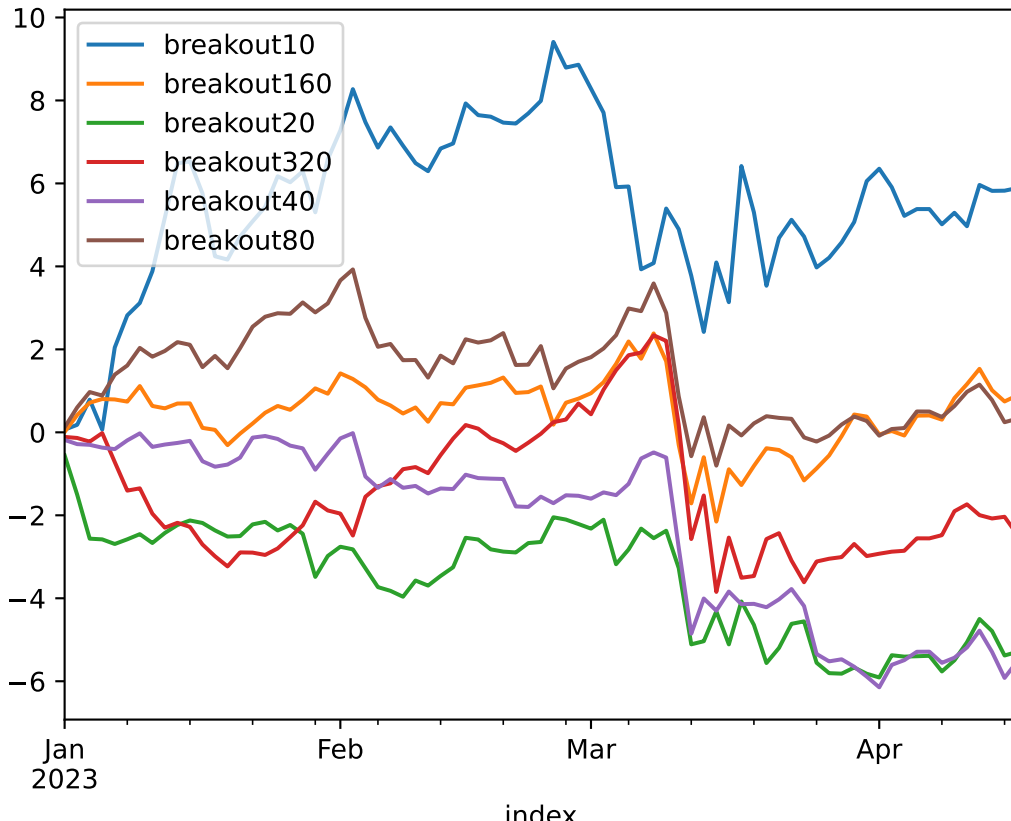


# Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 19.574, 'breakout160': 2.952, 'breakout20': -17.601, 'breakout320': -8.179, 'breakout40': -18.363, 'breakout80': 1.089}

ann. std {'breakout10': 14.262, 'breakout160': 8.107, 'breakout20': 7.739, 'breakout320': 9.913, 'breakout40': 7.538, 'breakout80': 8.178}

ann. SR {'breakout10': 1.37, 'breakout160': 0.36, 'breakout20': -2.27, 'breakout320': -0.83, 'breakout40': -2.44, 'breakout80': 0.13}

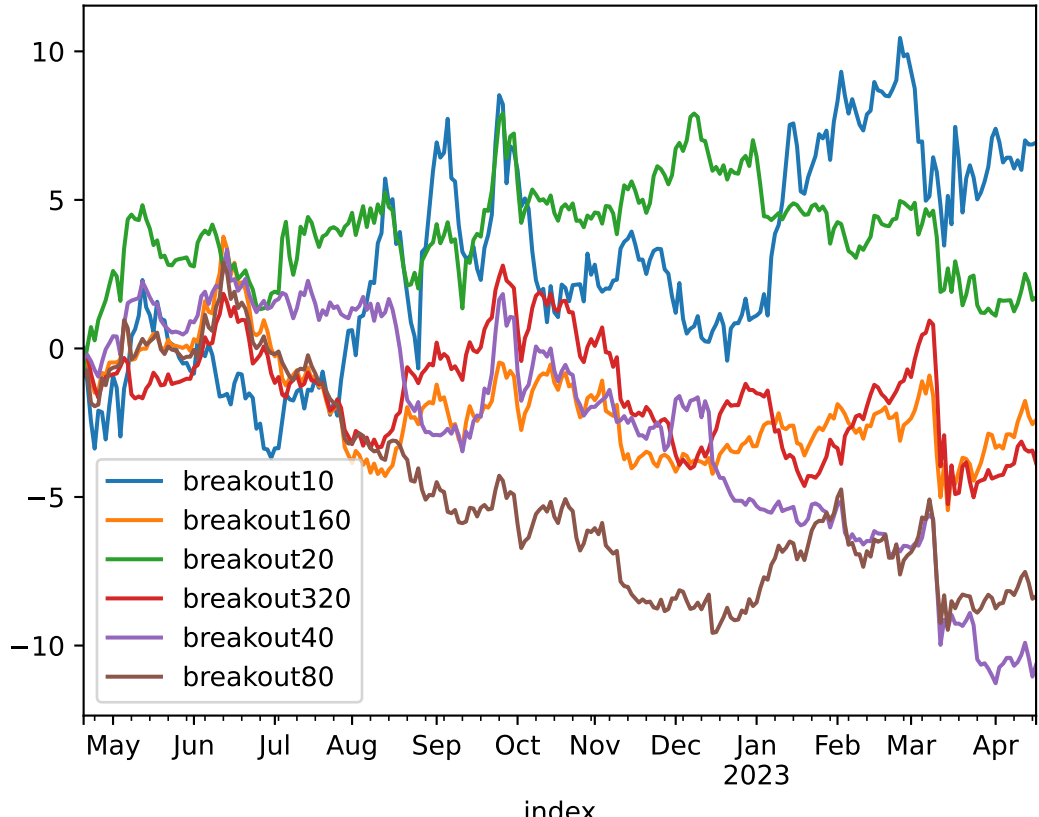


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 6.822, 'breakout160': -2.37, 'breakout20': 1.69, 'breakout320': -3.799, 'breakout40': -8.215, 'breakout80': -8.215}

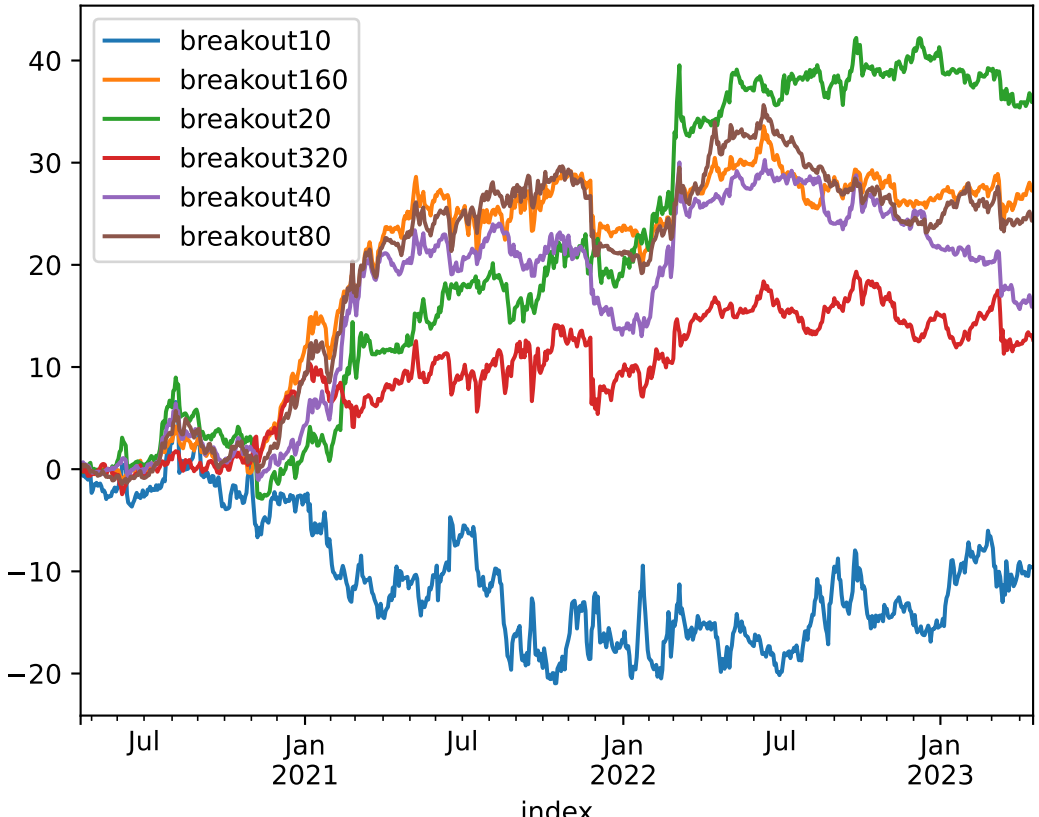
ann. std {'breakout10': 13.535, 'breakout160': 7.096, 'breakout20': 8.633, 'breakout320': 7.565, 'breakout40': 7.236, 'breakout80': 6.926}

ann. SR {'breakout10': 0.5, 'breakout160': -0.33, 'breakout20': 0.2, 'breakout320': -0.5, 'breakout40': -1.45, 'breakout80': -1.19}



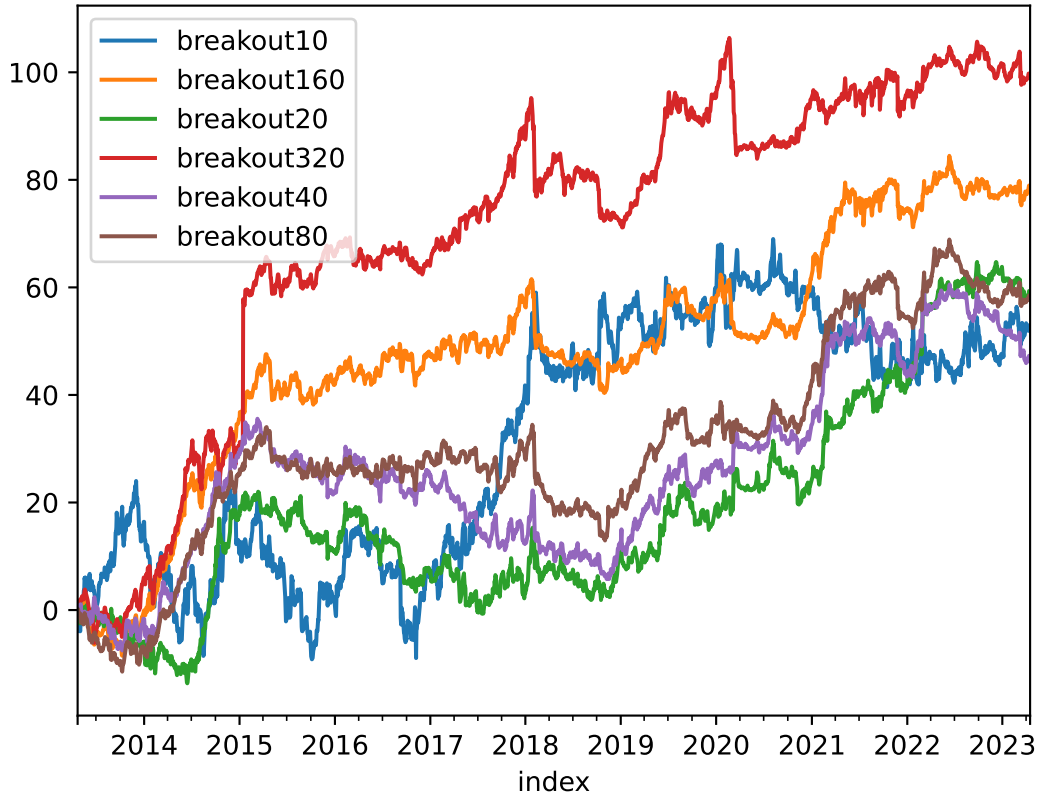
# Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.124, 'breakout160': 8.97, 'breakout20': 11.789, 'breakout320': 4.152, 'breakout40': 5.333, 'breakout80': 7.987}  
 ann. std {'breakout10': 15.05, 'breakout160': 9.173, 'breakout20': 11.02, 'breakout320': 9.894, 'breakout40': 9.468, 'breakout80': 8.906}  
 ann. SR {'breakout10': -0.21, 'breakout160': 0.98, 'breakout20': 1.07, 'breakout320': 0.42, 'breakout40': 0.56, 'breakout80': 0.9}



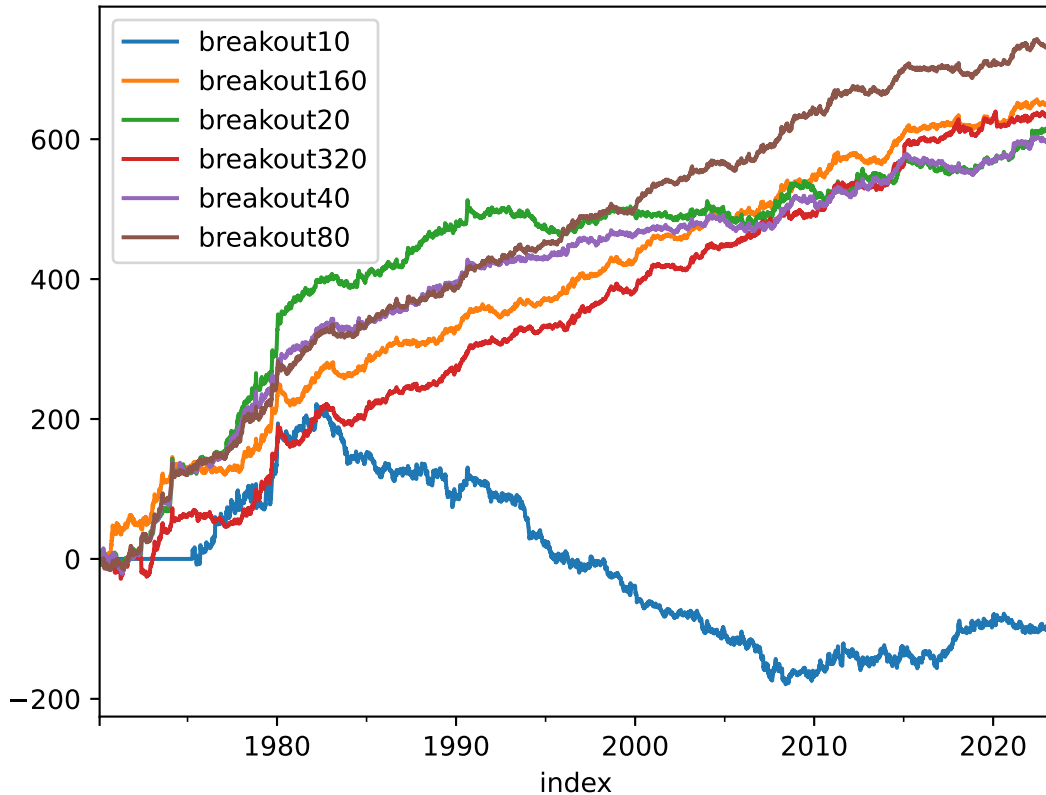
# Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 5.192, 'breakout160': 7.689, 'breakout20': 5.748, 'breakout320': 9.726, 'breakout40': 4.57, 'breakout80': 5.662}  
ann. std {'breakout10': 17.82, 'breakout160': 8.875, 'breakout20': 11.091, 'breakout320': 13.086, 'breakout40': 9.395, 'breakout80': 8.738}  
ann. SR {'breakout10': 0.29, 'breakout160': 0.87, 'breakout20': 0.52, 'breakout320': 0.74, 'breakout40': 0.49, 'breakout80': 0.65}



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

ann. mean {'breakout10': -1.74, 'breakout160': 12.003, 'breakout20': 11.229, 'breakout320': 11.661, 'breakout40': 10.876, 'breakout80': 13.502}  
 ann. std {'breakout10': 21.322, 'breakout160': 11.531, 'breakout20': 14.892, 'breakout320': 12.116, 'breakout40': 12.113, 'breakout80': 11.719}  
 ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

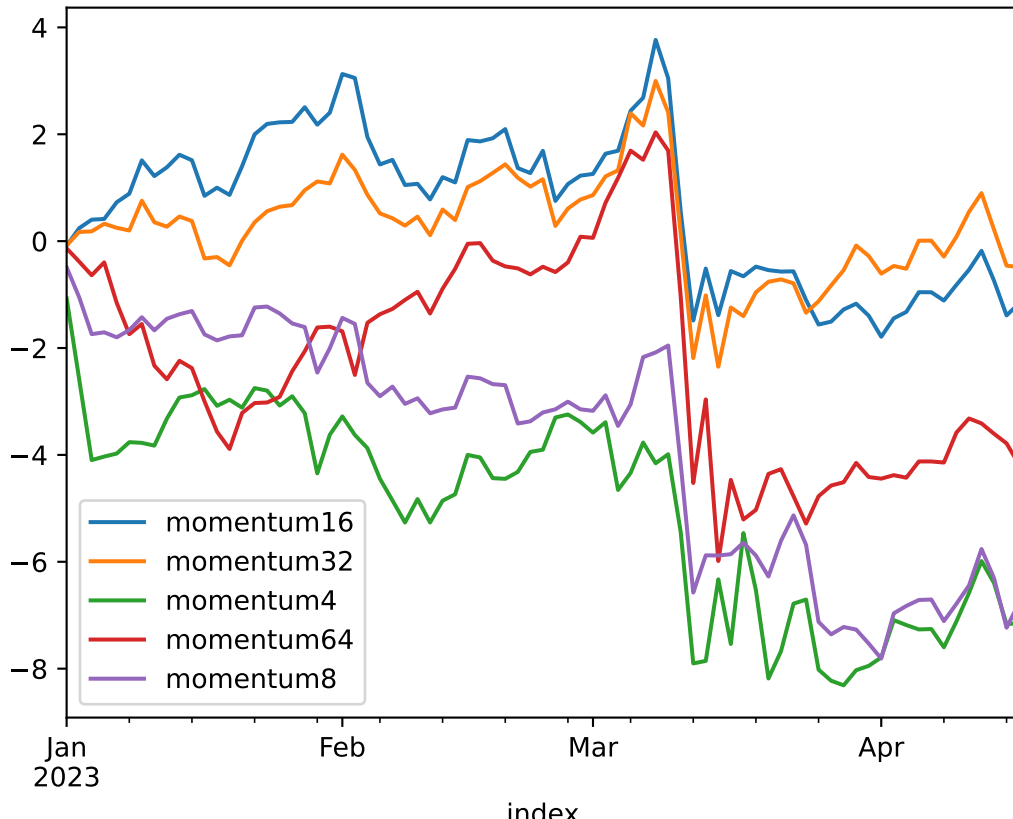


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -3.874, 'momentum32': -1.619, 'momentum4': -23.753, 'momentum64': -13.91, 'momentum8': -22.51}

ann. std {'momentum16': 9.086, 'momentum32': 9.087, 'momentum4': 11.345, 'momentum64': 12.198, 'momentum8': 8.988}

ann. SR {'momentum16': -0.43, 'momentum32': -0.18, 'momentum4': -2.09, 'momentum64': -1.14, 'momentum8': -2.5}



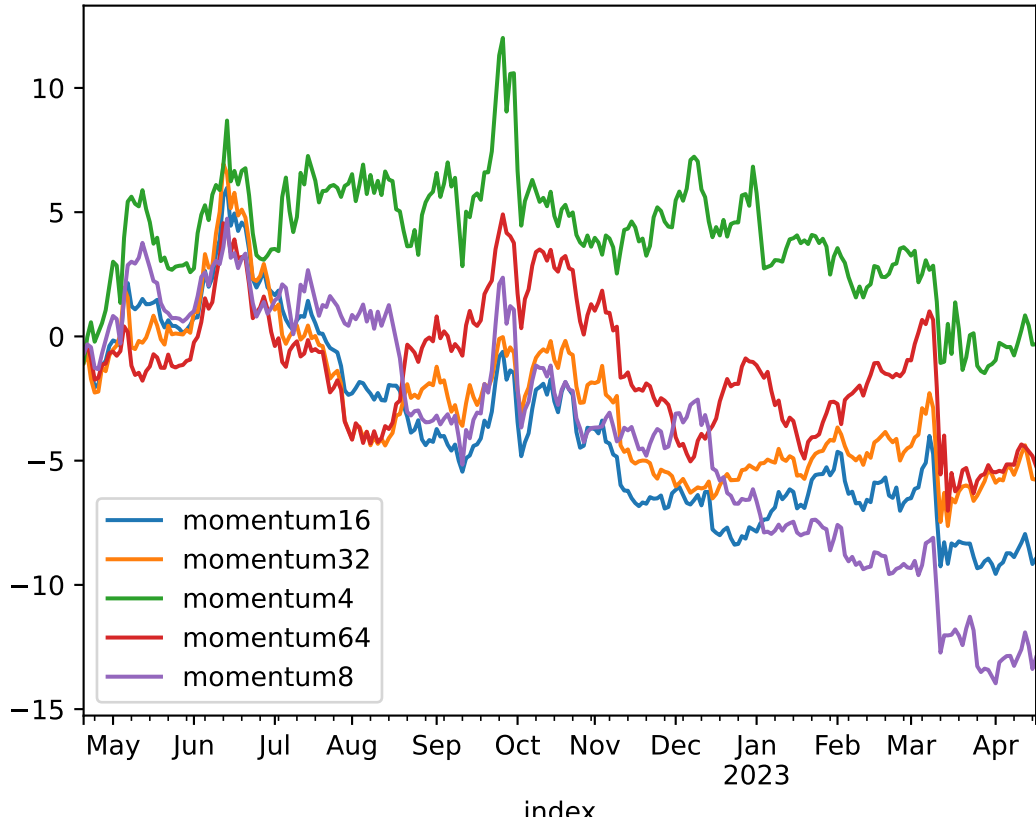


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -8.798, 'momentum32': -5.679, 'momentum4': -0.306, 'momentum64': -5.132, 'momentum8': -12.722}

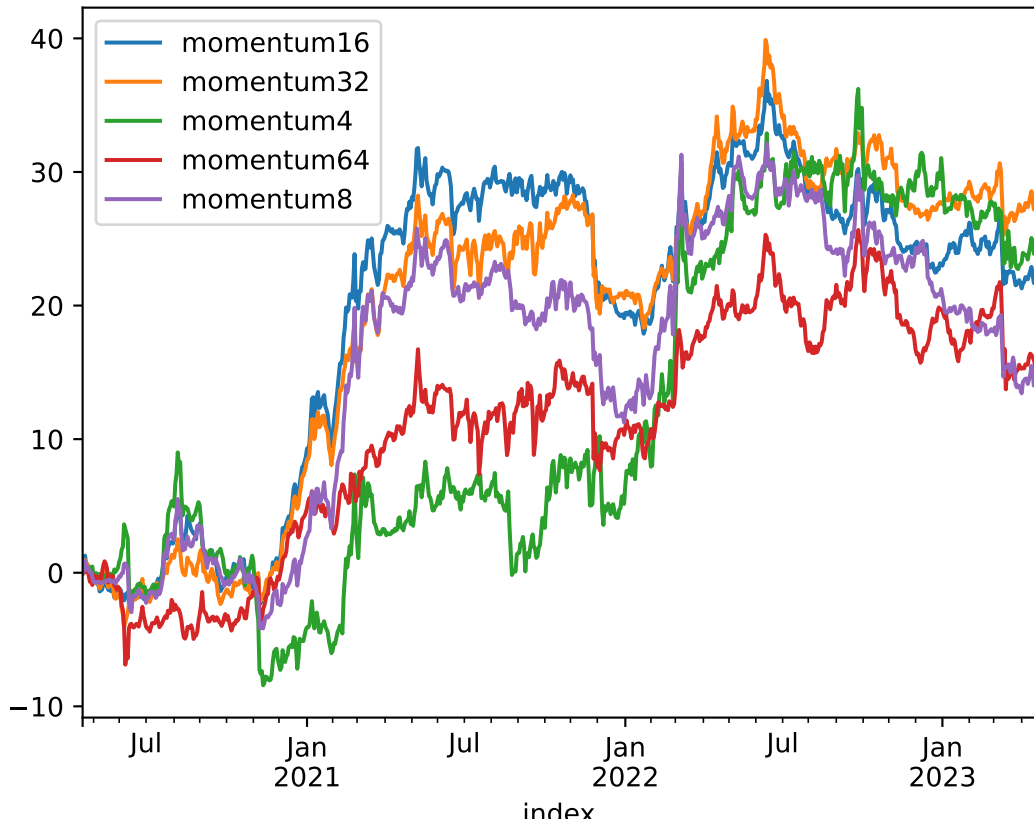
ann. std {'momentum16': 8.921, 'momentum32': 9.416, 'momentum4': 13.595, 'momentum64': 10.316, 'momentum8': 10.087}

ann. SR {'momentum16': -0.99, 'momentum32': -0.6, 'momentum4': -0.02, 'momentum64': -0.5, 'momentum8': -1.26}



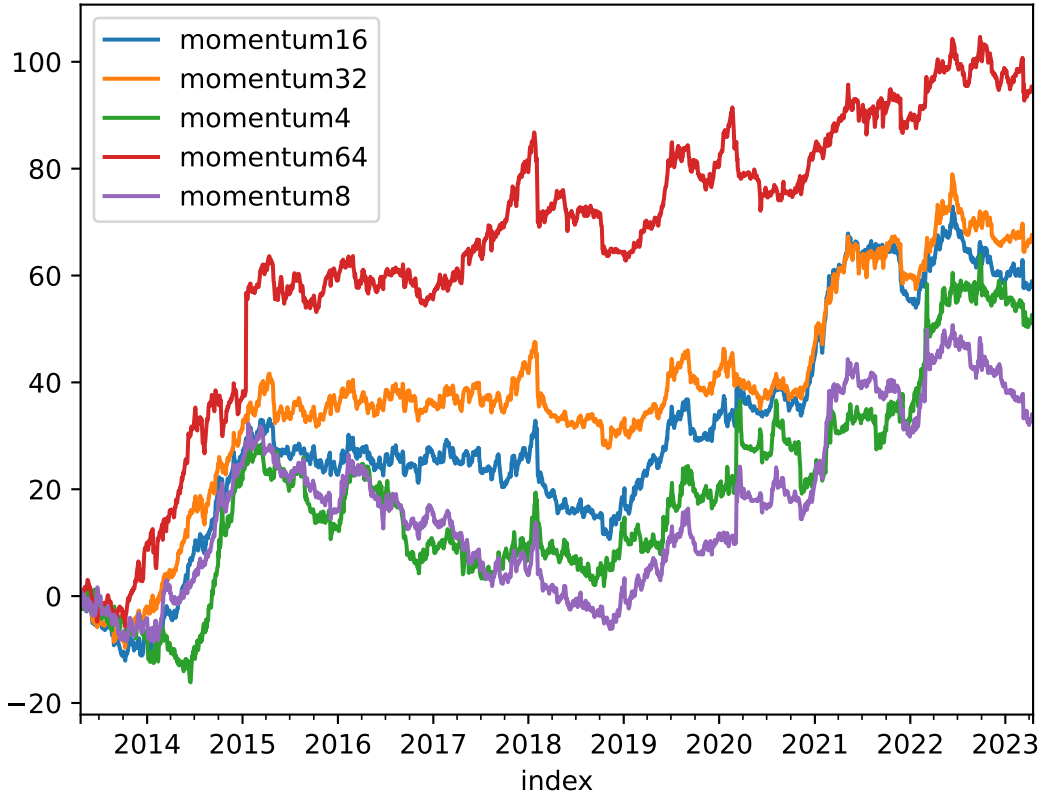
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.173, 'momentum32': 8.895, 'momentum4': 7.823, 'momentum64': 5.085, 'momentum8': 4.737}  
ann. std {'momentum16': 10.149, 'momentum32': 10.402, 'momentum4': 14.611, 'momentum64': 10.825, 'momentum8': 11.415}  
ann. SR {'momentum16': 0.71, 'momentum32': 0.86, 'momentum4': 0.54, 'momentum64': 0.47, 'momentum8': 0.42}



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

ann. mean {'momentum16': 5.693, 'momentum32': 6.506, 'momentum4': 5.058, 'momentum64': 9.283, 'momentum8': 3.246}  
ann. std {'momentum16': 9.673, 'momentum32': 9.279, 'momentum4': 13.687, 'momentum64': 11.873, 'momentum8': 10.876}  
ann. SR {'momentum16': 0.59, 'momentum32': 0.7, 'momentum4': 0.37, 'momentum64': 0.78, 'momentum8': 0.3}

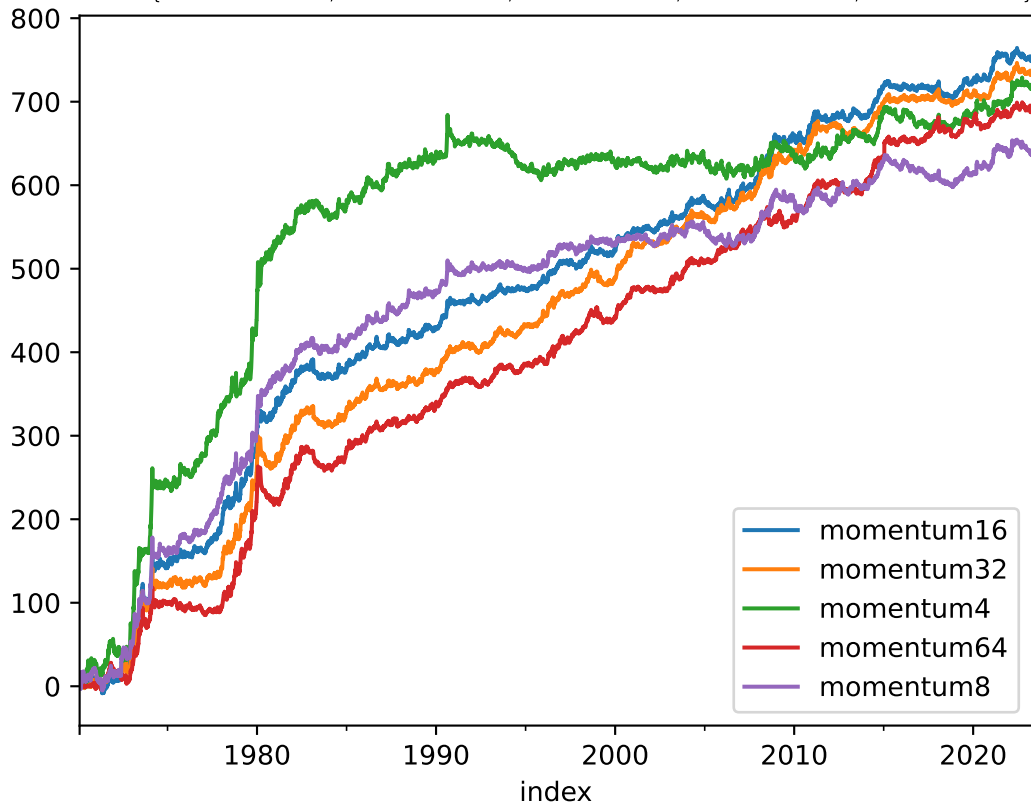


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.823, 'momentum32': 13.533, 'momentum4': 13.216, 'momentum64': 12.711, 'momentum8': 11.747}

ann. std {'momentum16': 13.049, 'momentum32': 12.612, 'momentum4': 17.895, 'momentum64': 12.333, 'momentum8': 14.333}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}

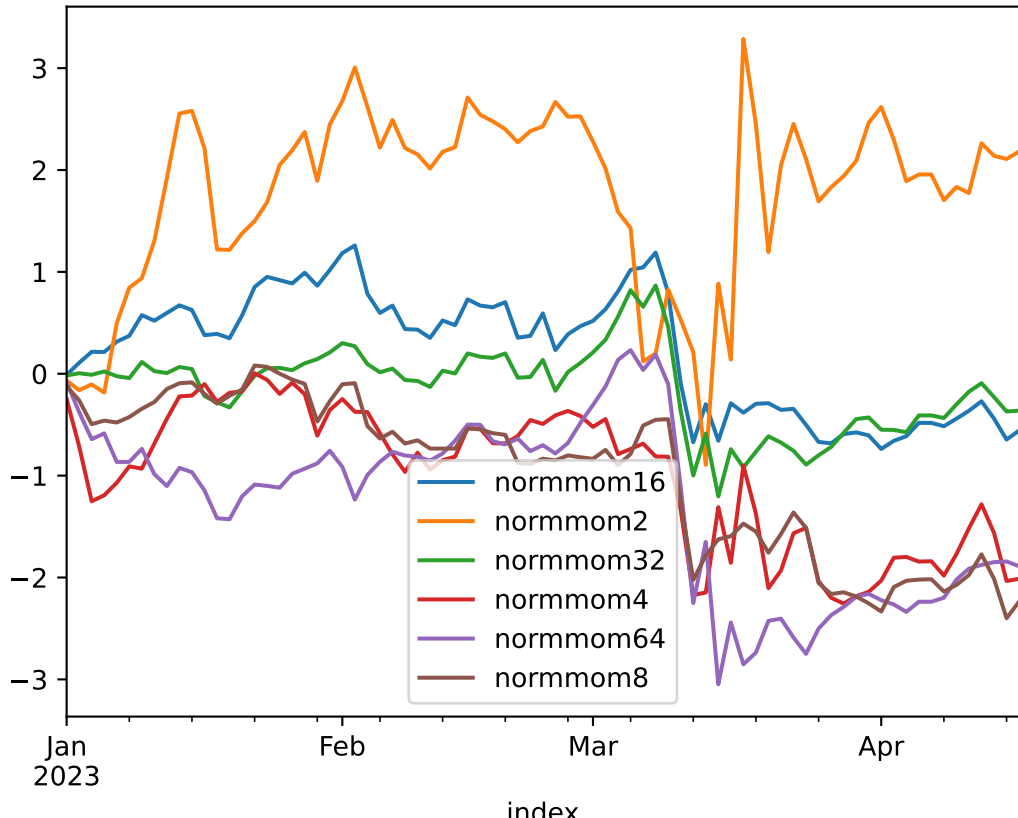


# Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.854, 'normmom2': 7.253, 'normmom32': -1.204, 'normmom4': -6.692, 'normmom64': -6.283, 'normmom8': -7.435}

ann. std {'normmom16': 3.265, 'normmom2': 9.403, 'normmom32': 3.203, 'normmom4': 4.598, 'normmom64': 4.748, 'normmom8': 3.181}

ann. SR {'normmom16': -0.57, 'normmom2': 0.77, 'normmom32': -0.38, 'normmom4': -1.46, 'normmom64': -1.32, 'normmom8': -2.34}

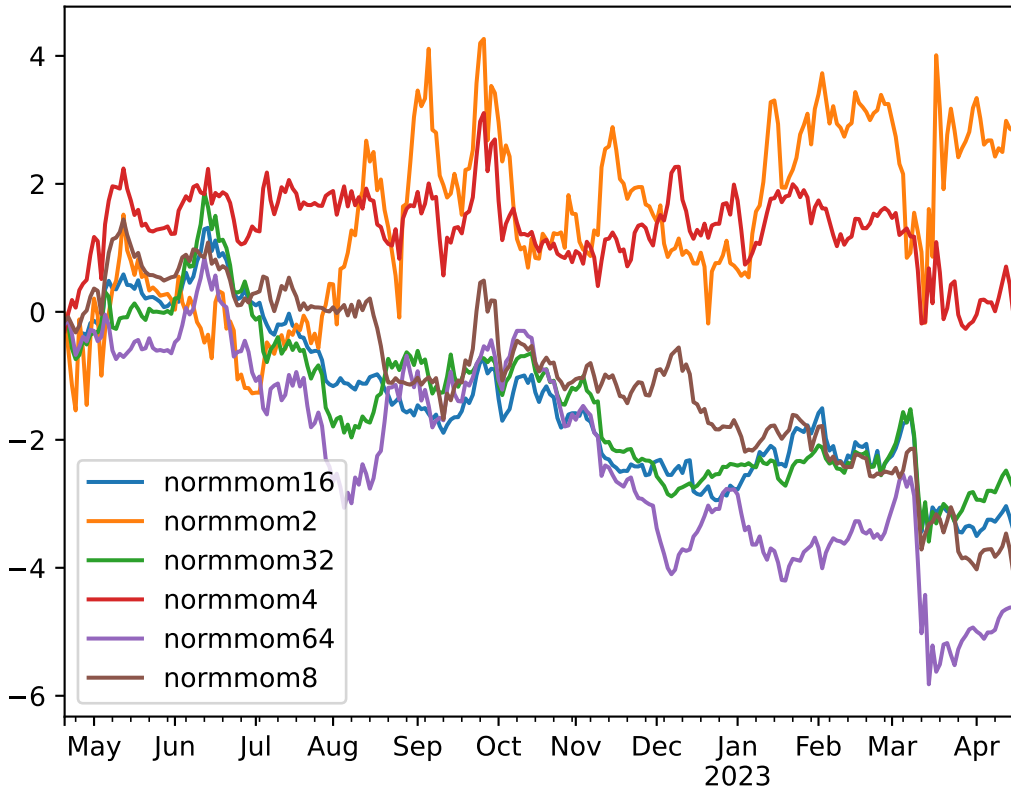


# Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.272, 'normmom2': 2.86, 'normmom32': -2.707, 'normmom4': -0.023, 'normmom64': -4.59, 'normmom8': -3.867}

ann. std {'normmom16': 2.647, 'normmom2': 7.83, 'normmom32': 2.949, 'normmom4': 4.385, 'normmom64': 3.84, 'normmom8': 2.993}

ann. SR {'normmom16': -1.24, 'normmom2': 0.37, 'normmom32': -0.92, 'normmom4': -0.01, 'normmom64': -1.2, 'normmom8': -1.29}



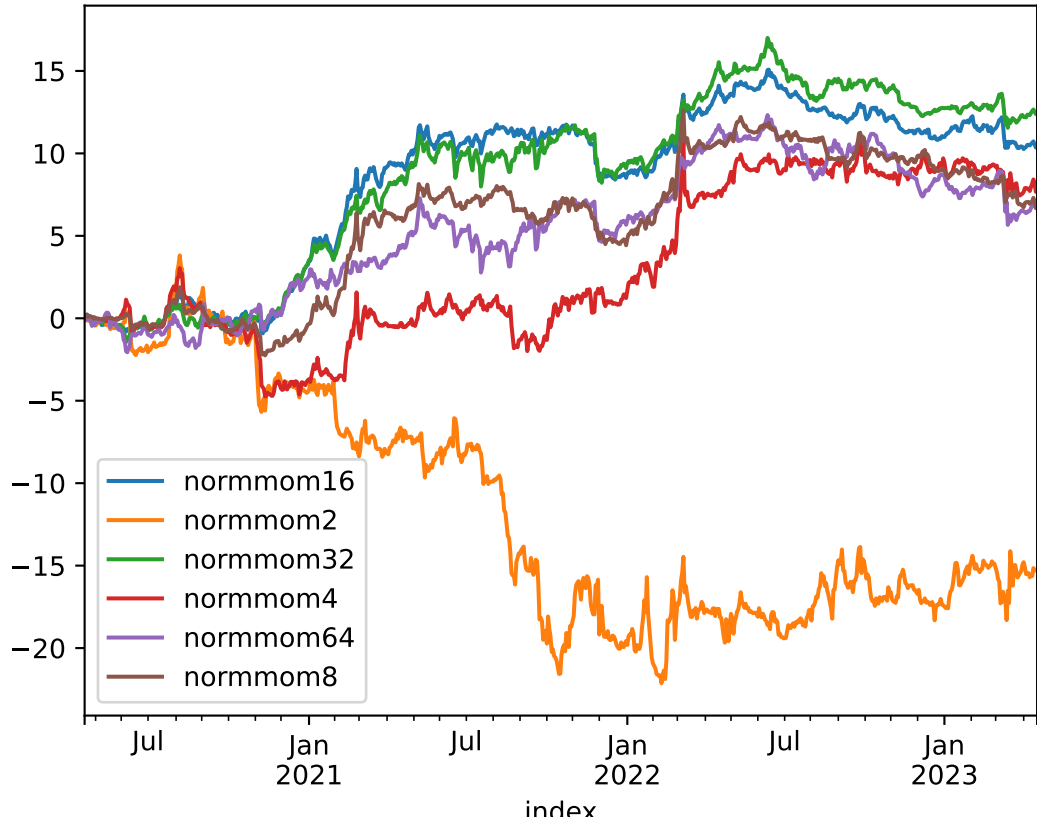
index

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

ann. mean {'normmom16': 3.418, 'normmom2': -4.985, 'normmom32': 4.057, 'normmom4': 2.517, 'normmom64': 2.233, 'normmom8': 2.239}

ann. std {'normmom16': 3.51, 'normmom2': 8.614, 'normmom32': 3.879, 'normmom4': 5.361, 'normmom64': 4.275, 'normmom8': 3.925}

ann. SR {'normmom16': 0.97, 'normmom2': -0.58, 'normmom32': 1.05, 'normmom4': 0.47, 'normmom64': 0.52, 'normmom8': 0.57}

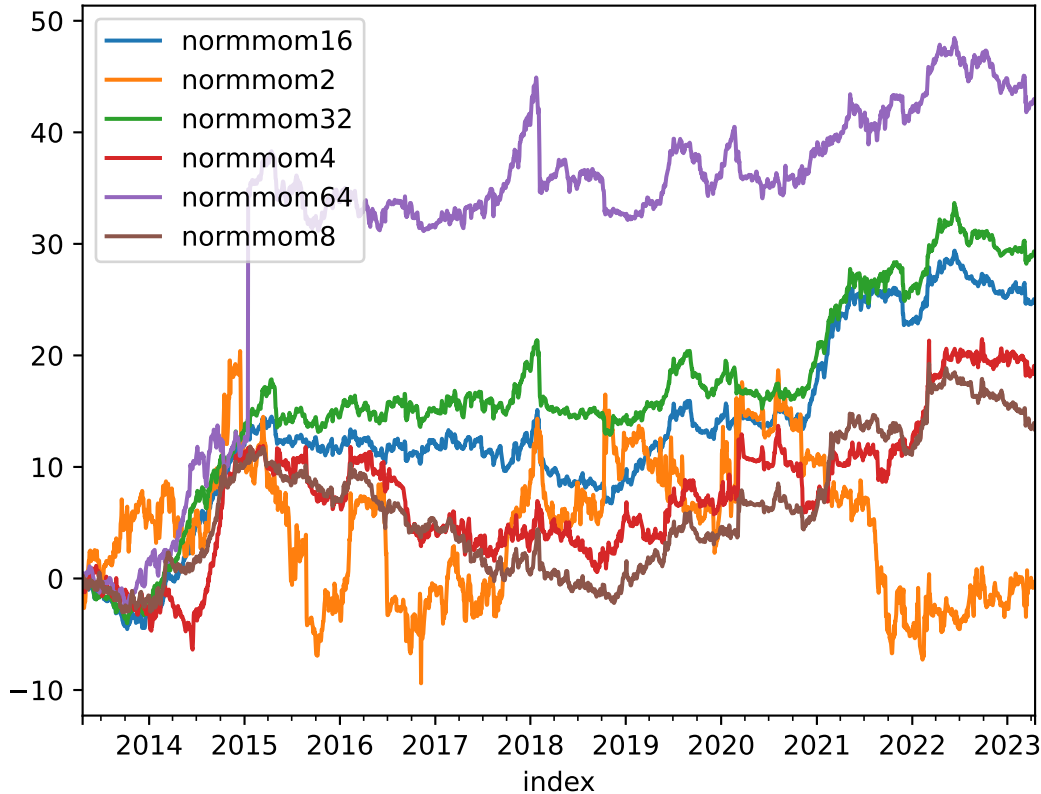


# Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.431, 'normmom2': -0.036, 'normmom32': 2.854, 'normmom4': 1.801, 'normmom64': 4.219, 'normmom8': 1.324}

ann. std {'normmom16': 3.469, 'normmom2': 10.328, 'normmom32': 3.624, 'normmom4': 5.447, 'normmom64': 8.273, 'normmom8': 3.885}

ann. SR {'normmom16': 0.7, 'normmom2': -0.0, 'normmom32': 0.79, 'normmom4': 0.33, 'normmom64': 0.51, 'normmom8': 0.34}



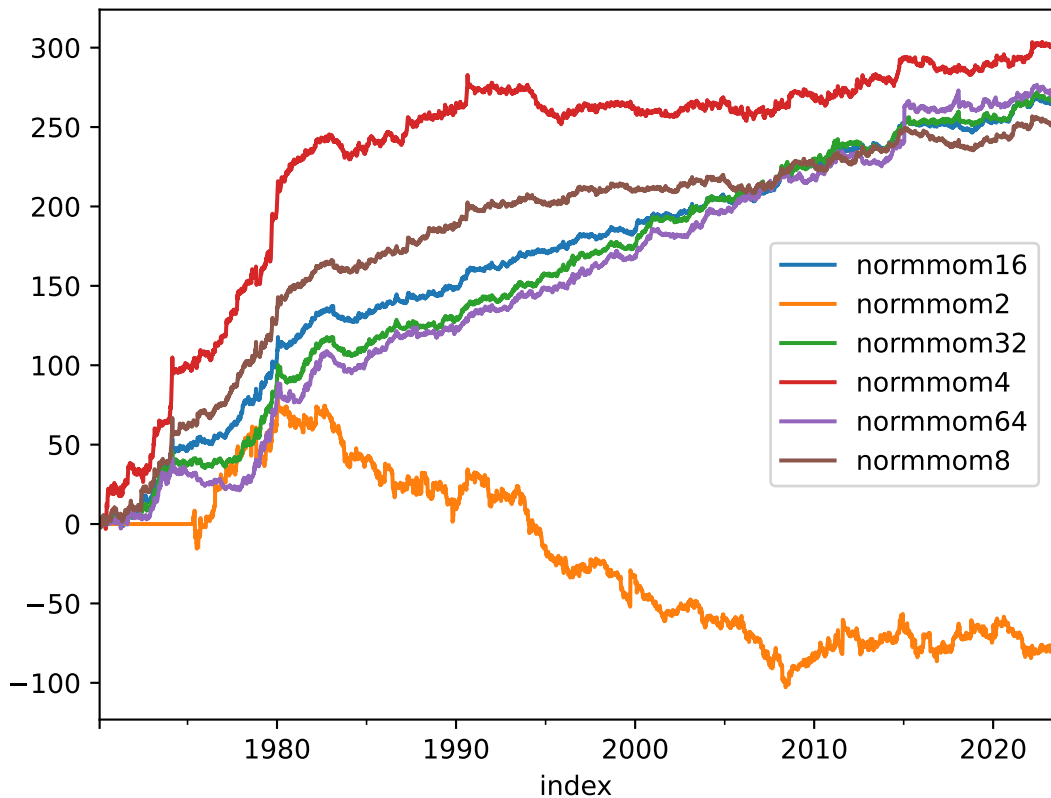


# Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.881, 'normmom2': -1.427, 'normmom32': 4.933, 'normmom4': 5.542, 'normmom64': 5.001, 'normmom8': 4.629}

ann. std {'normmom16': 4.533, 'normmom2': 11.612, 'normmom32': 4.61, 'normmom4': 7.385, 'normmom64': 5.871, 'normmom8': 5.366}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

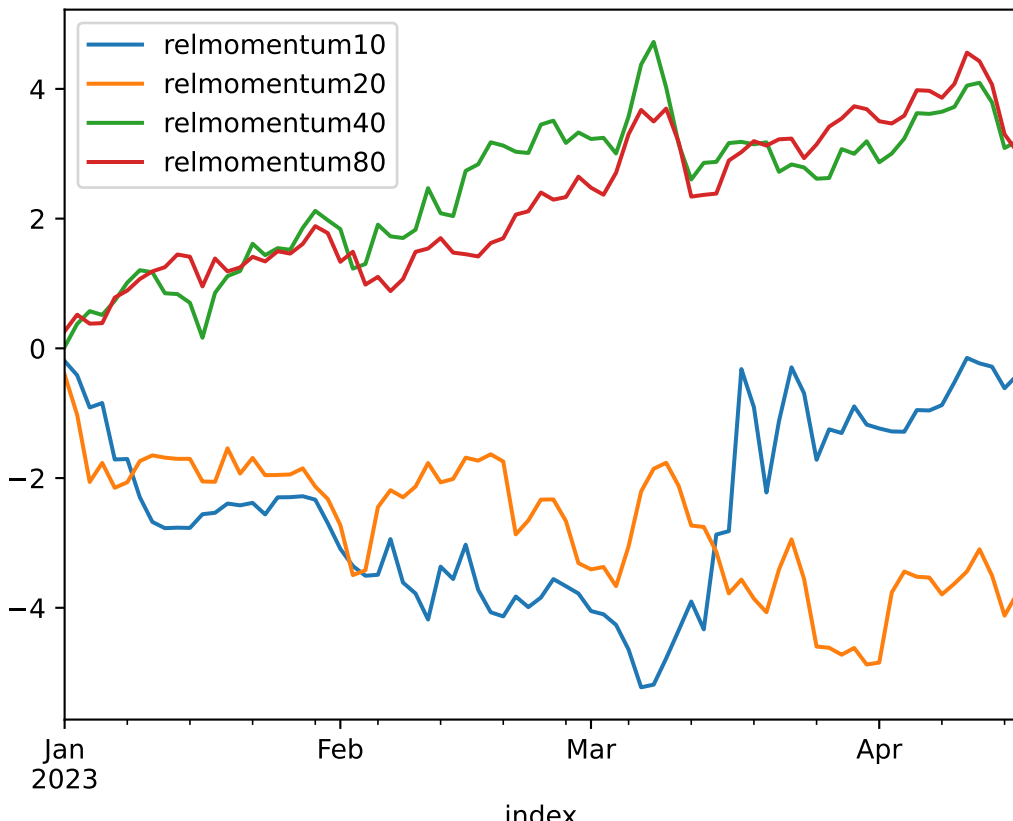


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.381, 'relmomentum20': -12.563, 'relmomentum40': 10.619, 'relmomentum80': 10.082}

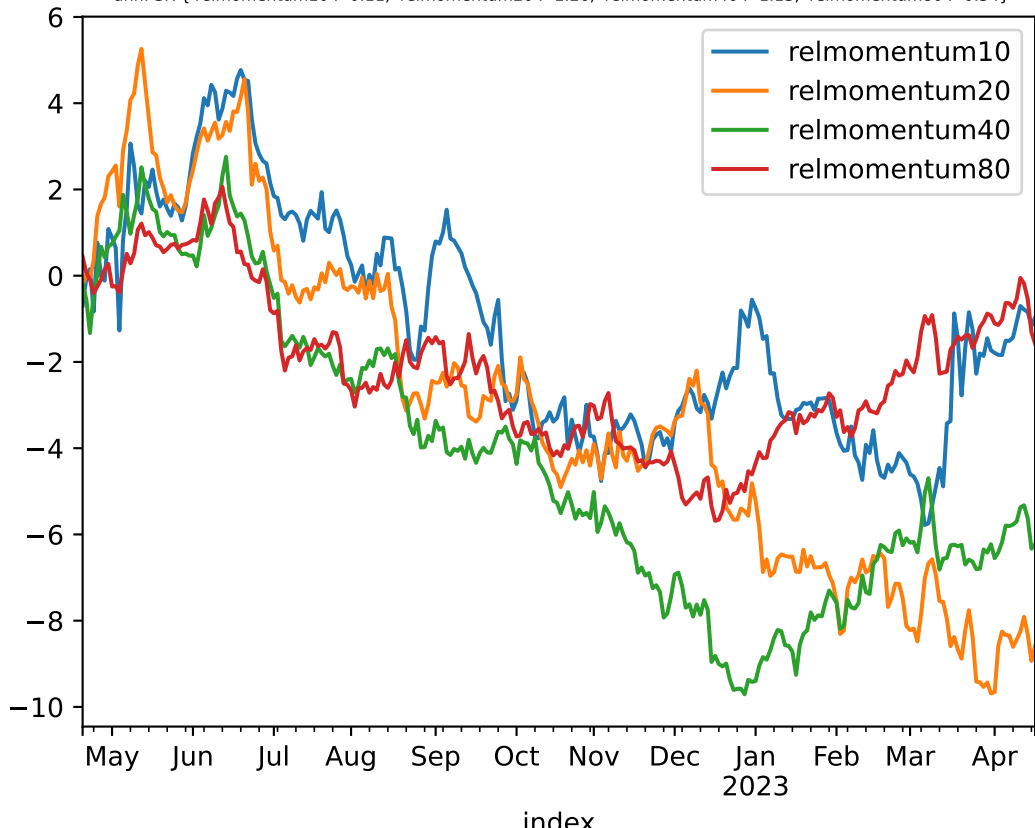
ann. std {'relmomentum10': 8.378, 'relmomentum20': 6.781, 'relmomentum40': 5.297, 'relmomentum80': 4.376}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -1.85, 'relmomentum40': 2.0, 'relmomentum80': 2.3}



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

ann. mean {'relmomentum10': -0.955, 'relmomentum20': -8.459, 'relmomentum40': -6.13, 'relmomentum80': -1.553}  
ann. std {'relmomentum10': 8.32, 'relmomentum20': 6.727, 'relmomentum40': 5.442, 'relmomentum80': 4.556}  
ann. SR {'relmomentum10': -0.11, 'relmomentum20': -1.26, 'relmomentum40': -1.13, 'relmomentum80': -0.34}

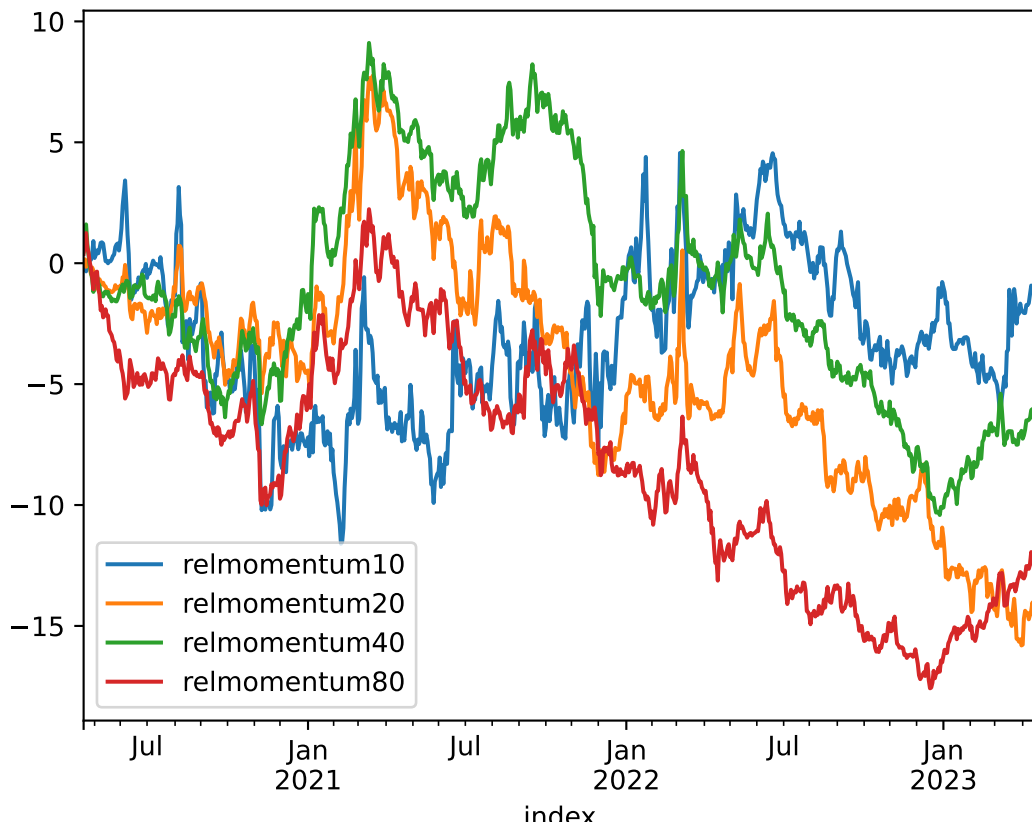


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.39, 'relmomentum20': -4.816, 'relmomentum40': -2.269, 'relmomentum80': -4.41}

ann. std {'relmomentum10': 11.914, 'relmomentum20': 8.34, 'relmomentum40': 6.973, 'relmomentum80': 6.36}

ann. SR {'relmomentum10': -0.03, 'relmomentum20': -0.58, 'relmomentum40': -0.33, 'relmomentum80': -0.69}

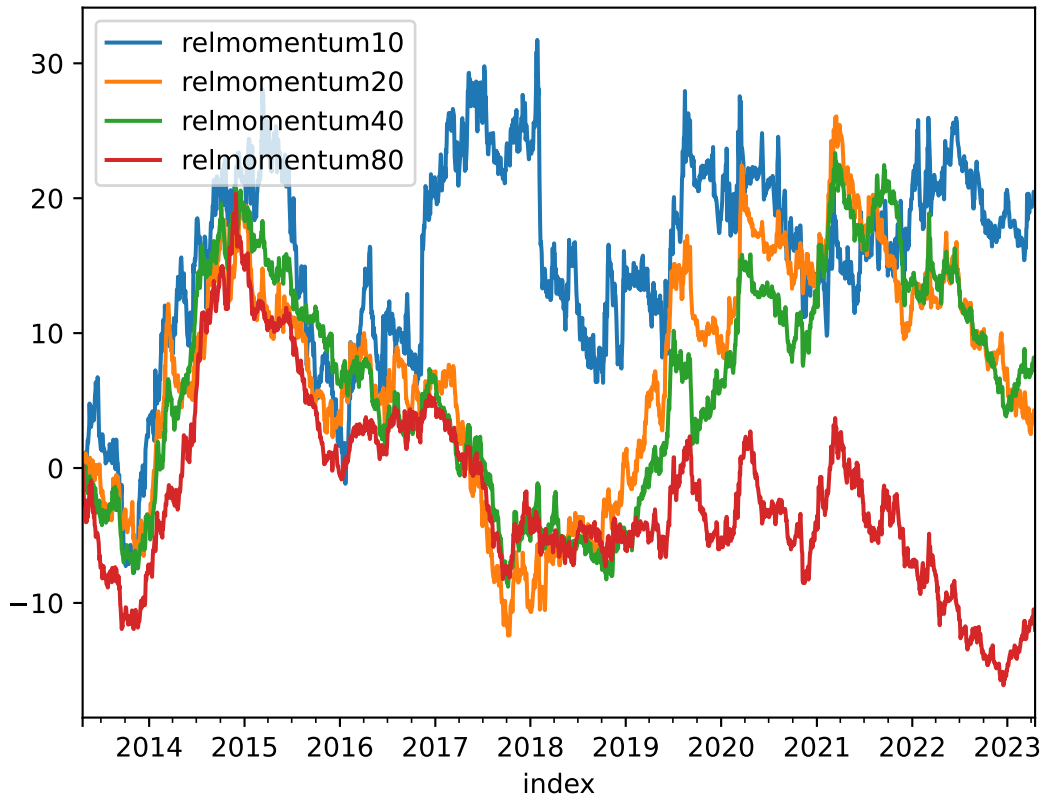


Total Trading Rule P&L for period '10Y'

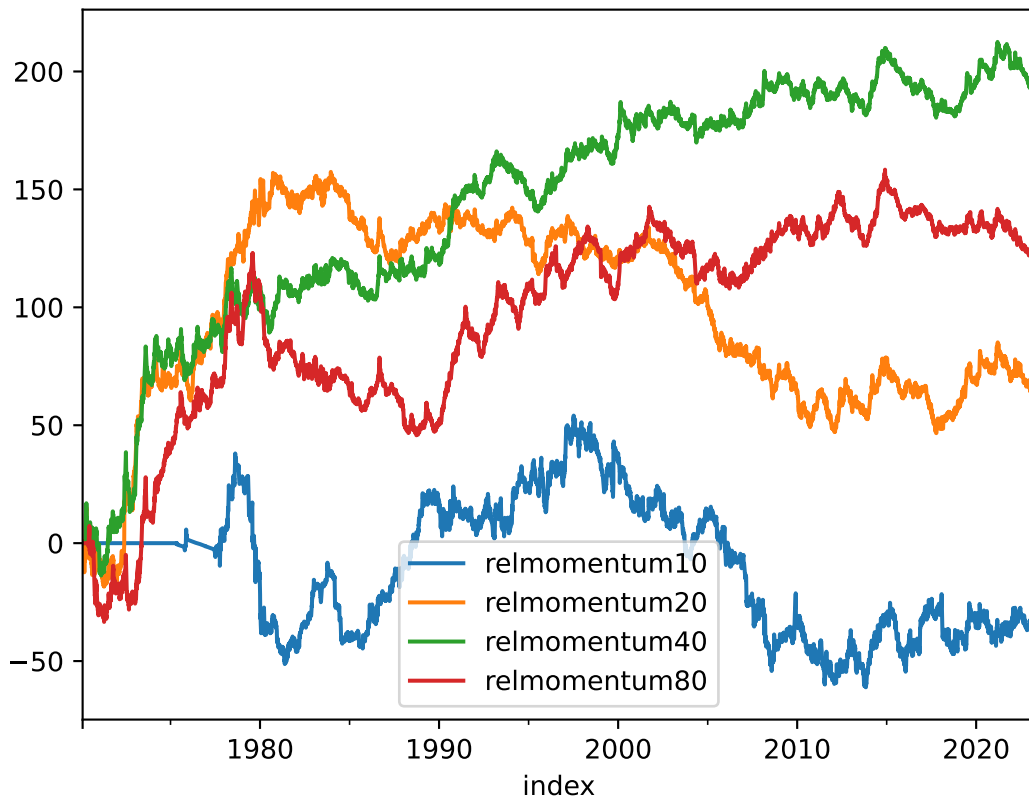
ann. mean {'relmomentum10': 1.985, 'relmomentum20': 0.354, 'relmomentum40': 0.717, 'relmomentum80': -1.178}

ann. std {'relmomentum10': 13.421, 'relmomentum20': 8.577, 'relmomentum40': 7.005, 'relmomentum80': 6.401}

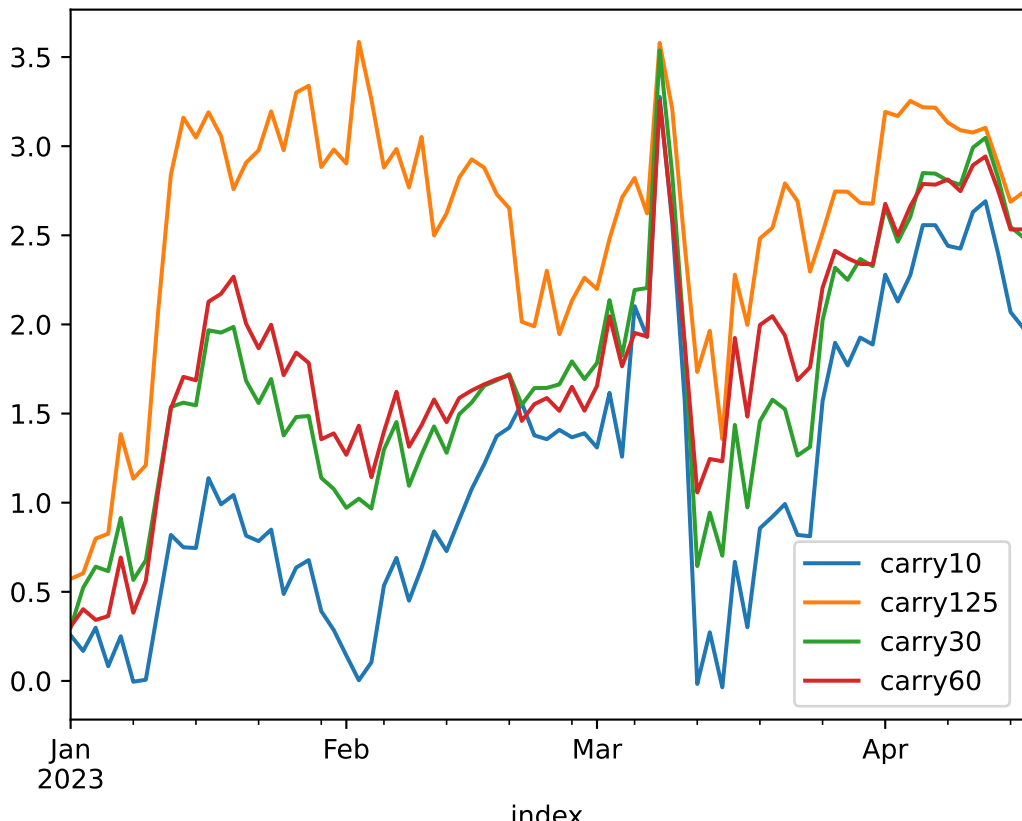
ann. SR {'relmomentum10': 0.15, 'relmomentum20': 0.04, 'relmomentum40': 0.1, 'relmomentum80': -0.18}



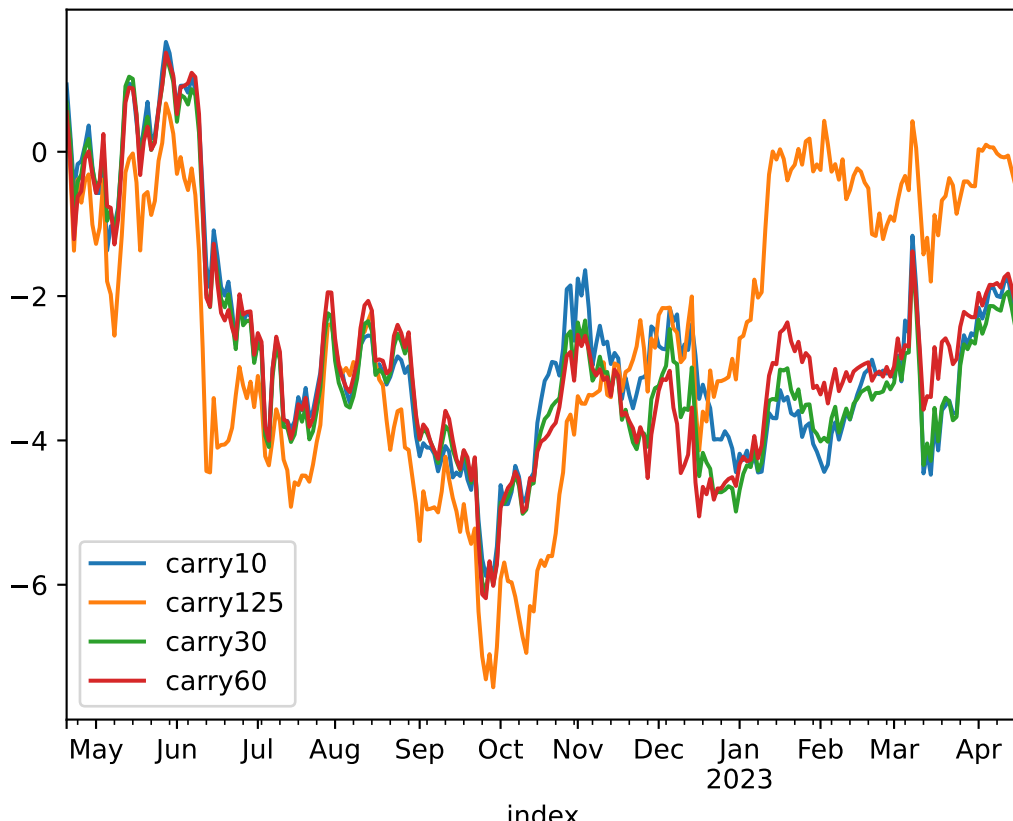
Total Trading Rule P&L for period '99Y'  
ann. mean {'relmomentum10': -0.611, 'relmomentum20': 1.156, 'relmomentum40': 3.624, 'relmomentum80': 2.325}  
ann. std {'relmomentum10': 13.392, 'relmomentum20': 10.47, 'relmomentum40': 9.64, 'relmomentum80': 9.785}  
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'  
ann. mean {'carry10': 6.587, 'carry125': 9.111, 'carry30': 8.279, 'carry60': 8.424}  
ann. std {'carry10': 6.03, 'carry125': 5.582, 'carry30': 5.51, 'carry60': 4.904}  
ann. SR {'carry10': 1.09, 'carry125': 1.63, 'carry30': 1.5, 'carry60': 1.72}



Total Trading Rule P&L for period '1Y'  
ann. mean {'carry10': -2.421, 'carry125': -0.409, 'carry30': -2.457, 'carry60': -2.065}  
ann. std {'carry10': 6.216, 'carry125': 6.939, 'carry30': 6.164, 'carry60': 6.169}  
ann. SR {'carry10': -0.39, 'carry125': -0.06, 'carry30': -0.4, 'carry60': -0.33}



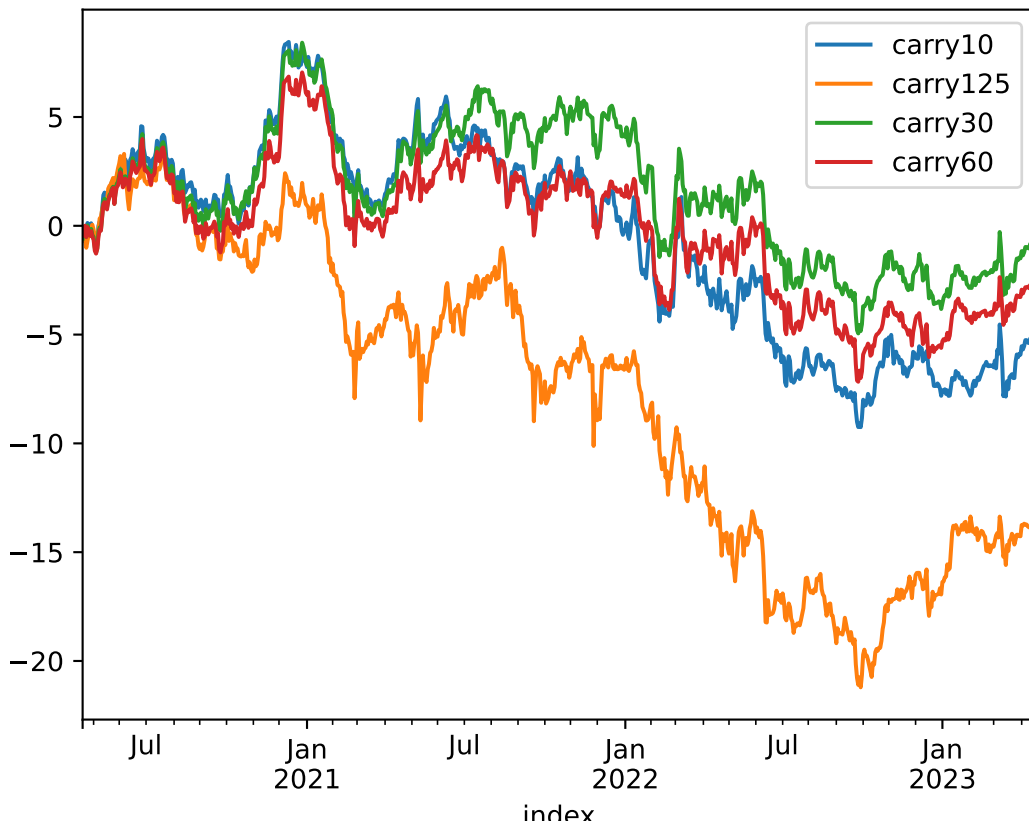


Total Trading Rule P&L for period '3Y'

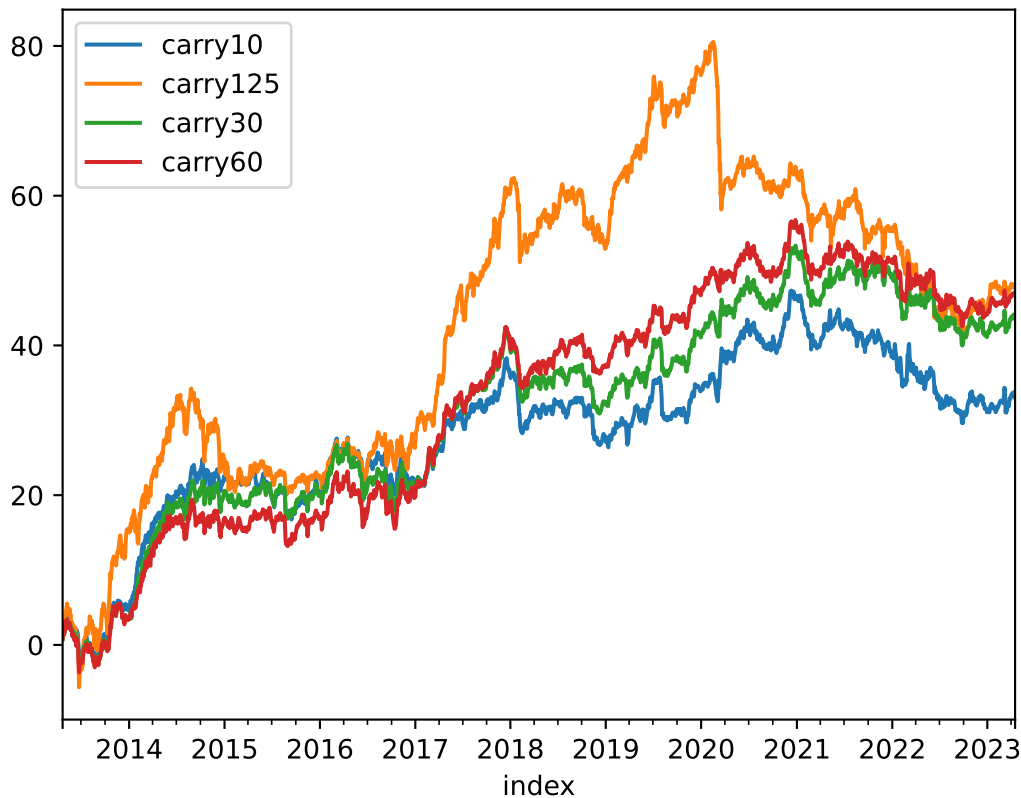
ann. mean {'carry10': -1.909, 'carry125': -4.65, 'carry30': -0.437, 'carry60': -1.008}

ann. std {'carry10': 6.571, 'carry125': 7.994, 'carry30': 6.496, 'carry60': 6.475}

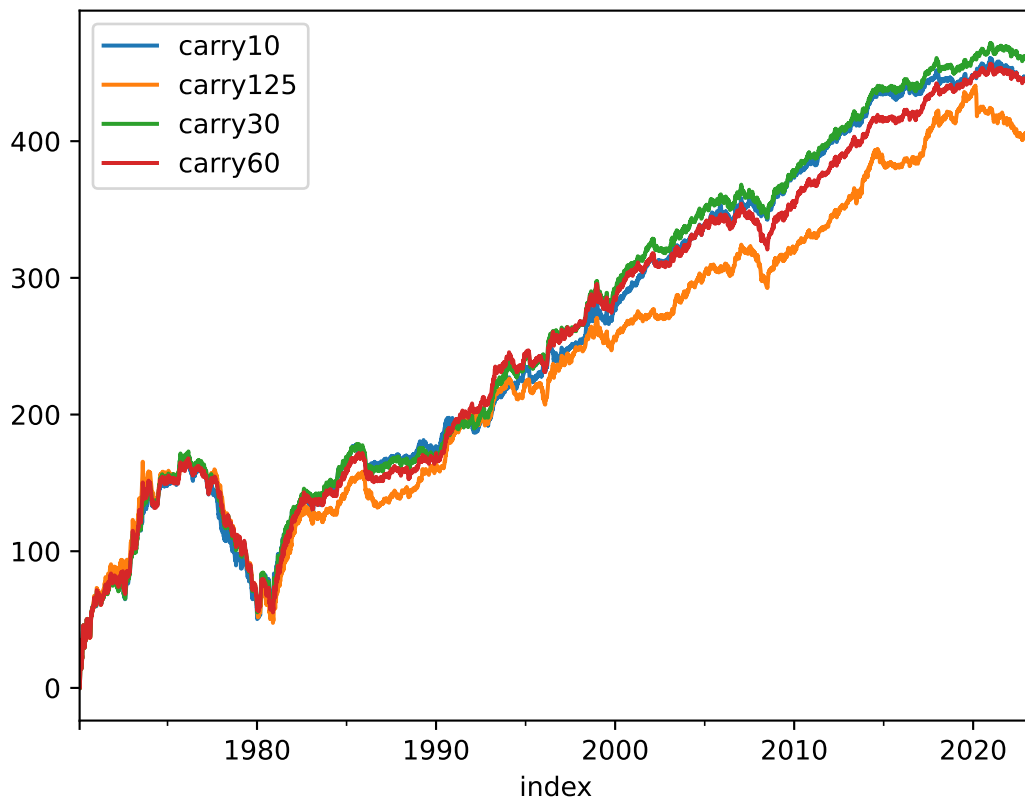
ann. SR {'carry10': -0.29, 'carry125': -0.58, 'carry30': -0.07, 'carry60': -0.16}



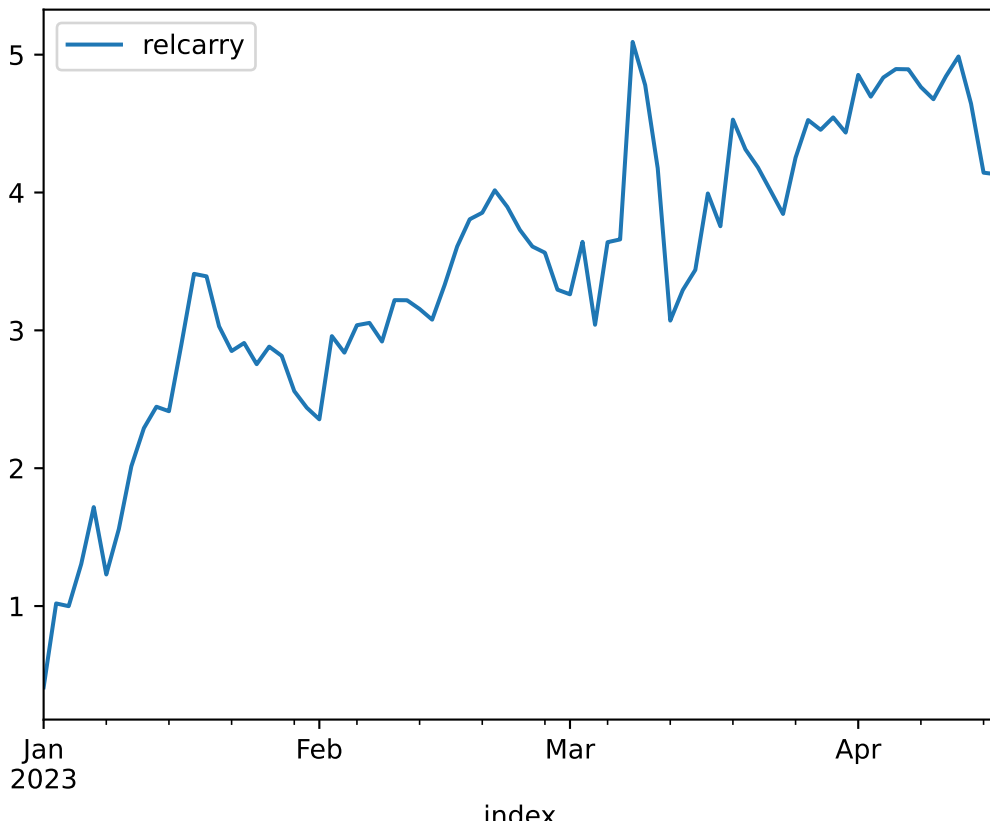
Total Trading Rule P&L for period '10Y'  
ann. mean {'carry10': 3.246, 'carry125': 4.684, 'carry30': 4.281, 'carry60': 4.579}  
ann. std {'carry10': 6.37, 'carry125': 8.969, 'carry30': 6.462, 'carry60': 6.415}  
ann. SR {'carry10': 0.51, 'carry125': 0.52, 'carry30': 0.66, 'carry60': 0.71}



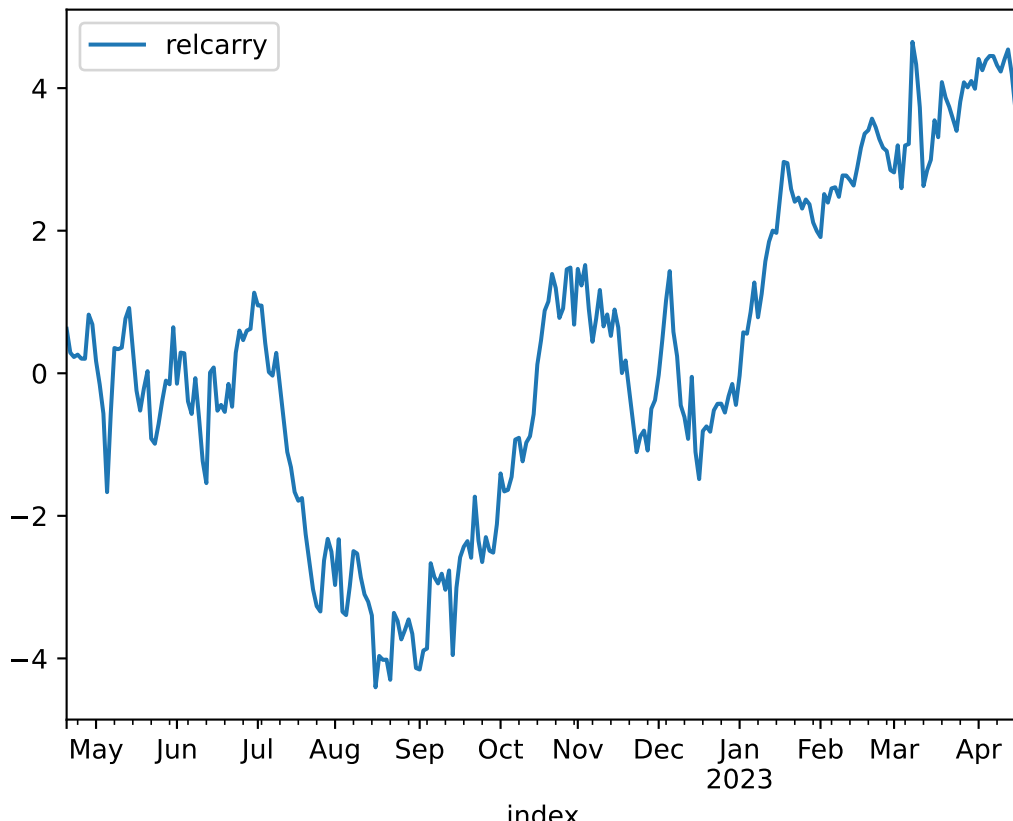
Total Trading Rule P&L for period '99Y'  
ann. mean {'carry10': 8.235, 'carry125': 7.521, 'carry30': 8.523, 'carry60': 8.234}  
ann. std {'carry10': 11.203, 'carry125': 11.56, 'carry30': 11.26, 'carry60': 11.263}  
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



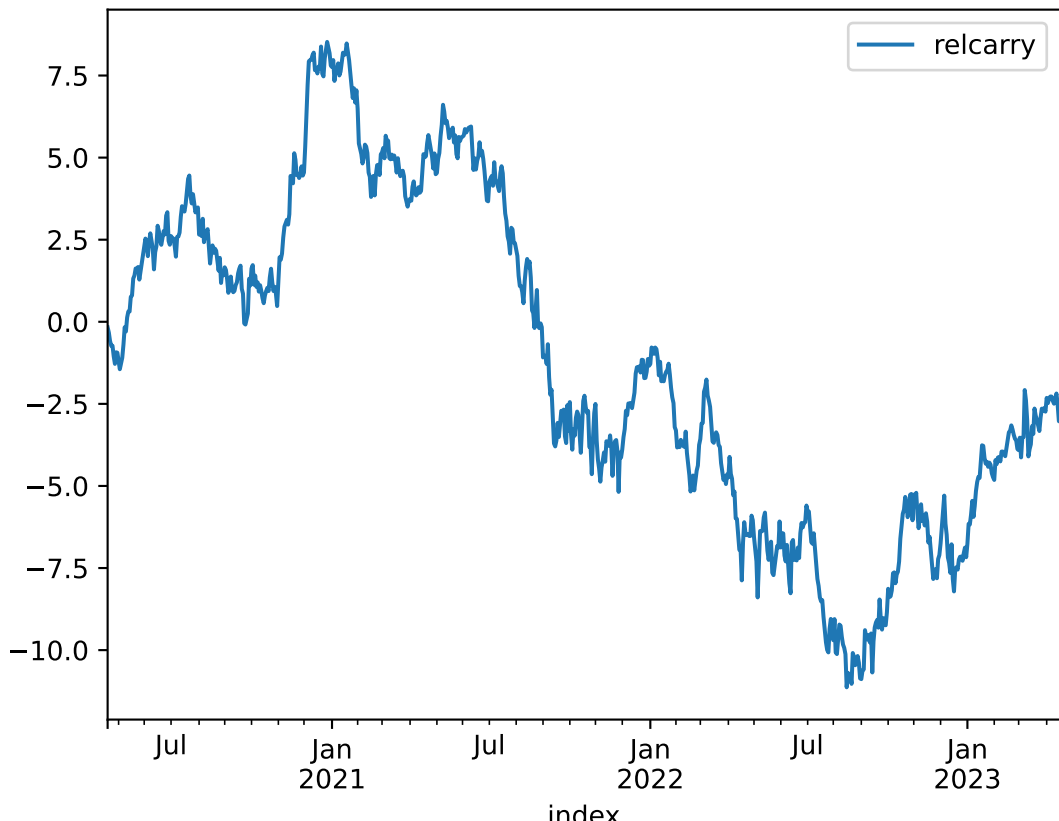
Total Trading Rule P&L for period 'YTD'  
ann. mean {'relcarry': 13.739}  
ann. std {'relcarry': 5.686}  
ann. SR {'relcarry': 2.42}



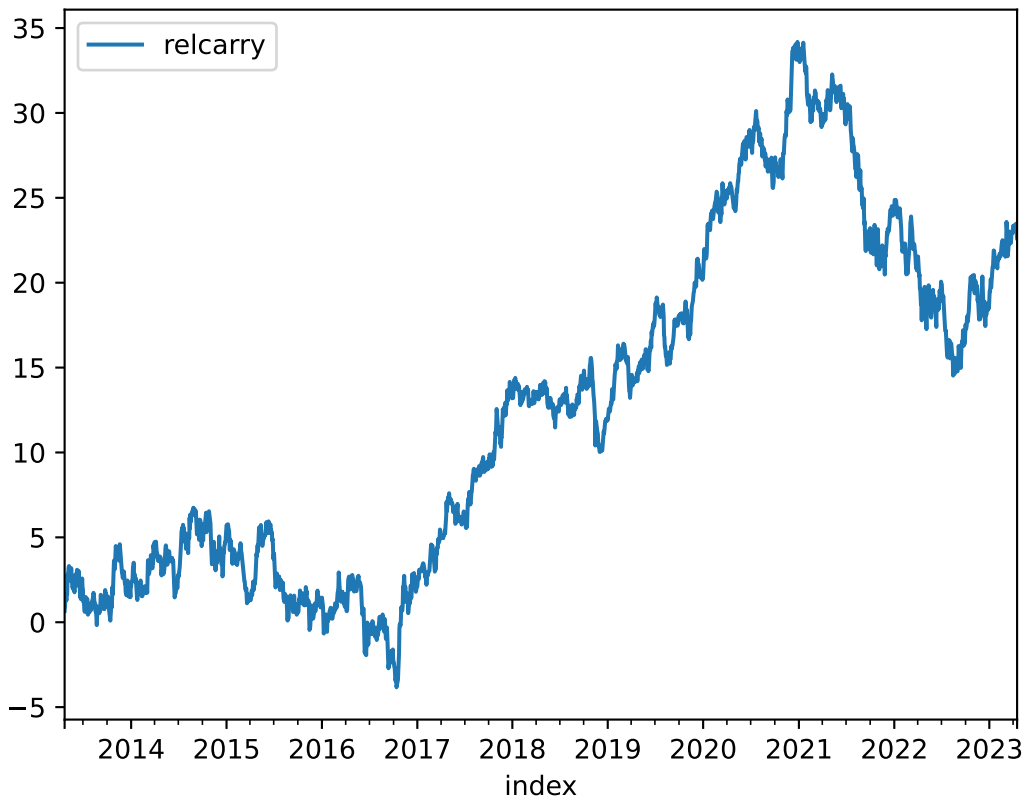
Total Trading Rule P&L for period '1Y'  
ann. mean {'relcarry': 3.631}  
ann. std {'relcarry': 6.963}  
ann. SR {'relcarry': 0.52}



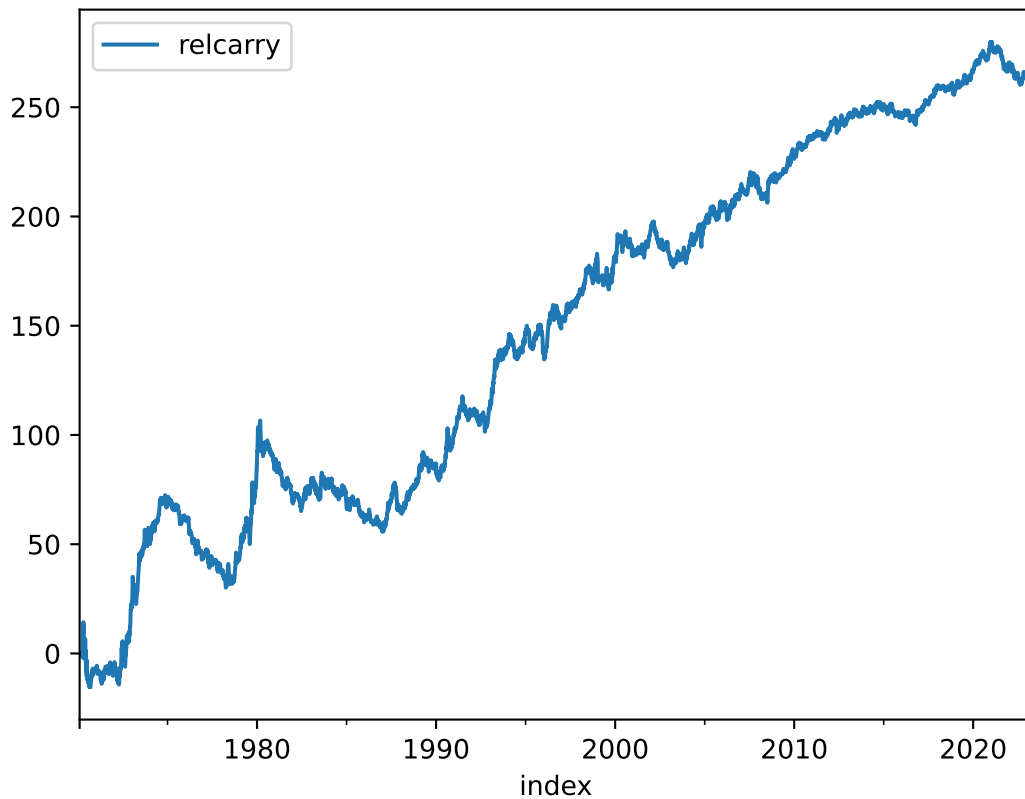
Total Trading Rule P&L for period '3Y'  
ann. mean {'relcarry': -0.995}  
ann. std {'relcarry': 6.649}  
ann. SR {'relcarry': -0.15}



Total Trading Rule P&L for period '10Y'  
ann. mean {'relcarry': 2.221}  
ann. std {'relcarry': 5.826}  
ann. SR {'relcarry': 0.38}



Total Trading Rule P&L for period '99Y'  
ann. mean {'relcarry': 4.949}  
ann. std {'relcarry': 8.961}  
ann. SR {'relcarry': 0.55}



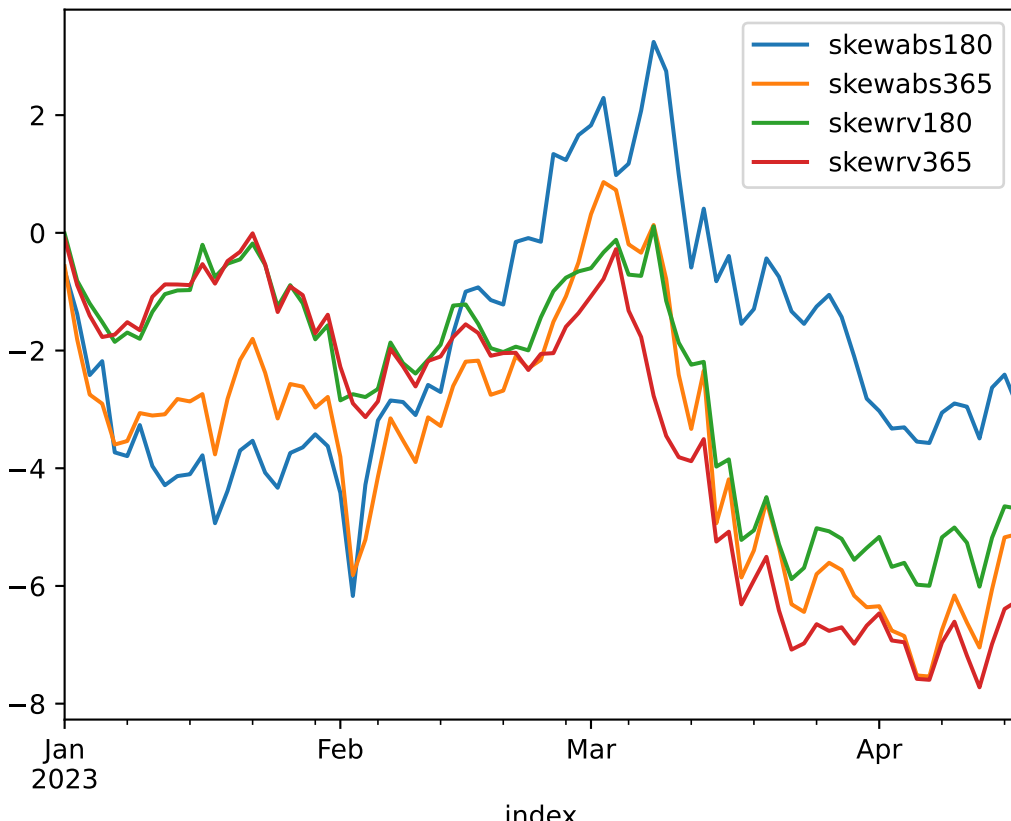


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': -9.749, 'skewabs365': -17.022, 'skewrv180': -15.576, 'skewrv365': -20.806}

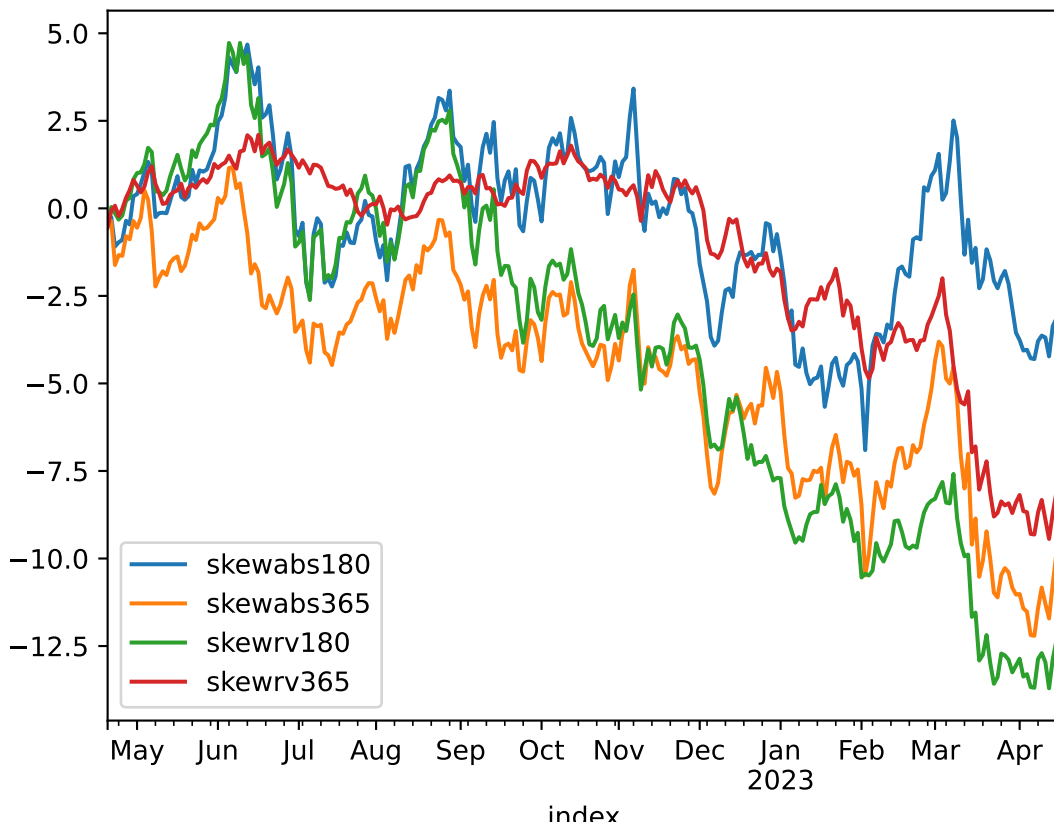
ann. std {'skewabs180': 11.717, 'skewabs365': 11.941, 'skewrv180': 8.309, 'skewrv365': 8.005}

ann. SR {'skewabs180': -0.83, 'skewabs365': -1.43, 'skewrv180': -1.87, 'skewrv365': -2.6}



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

ann. mean {'skewabs180': -3.61, 'skewabs365': -9.637, 'skewrv180': -12.19, 'skewrv365': -7.855}
ann. std {'skewabs180': 11.056, 'skewabs365': 9.944, 'skewrv180': 9.279, 'skewrv365': 5.68}
ann. SR {'skewabs180': -0.33, 'skewabs365': -0.97, 'skewrv180': -1.31, 'skewrv365': -1.38}

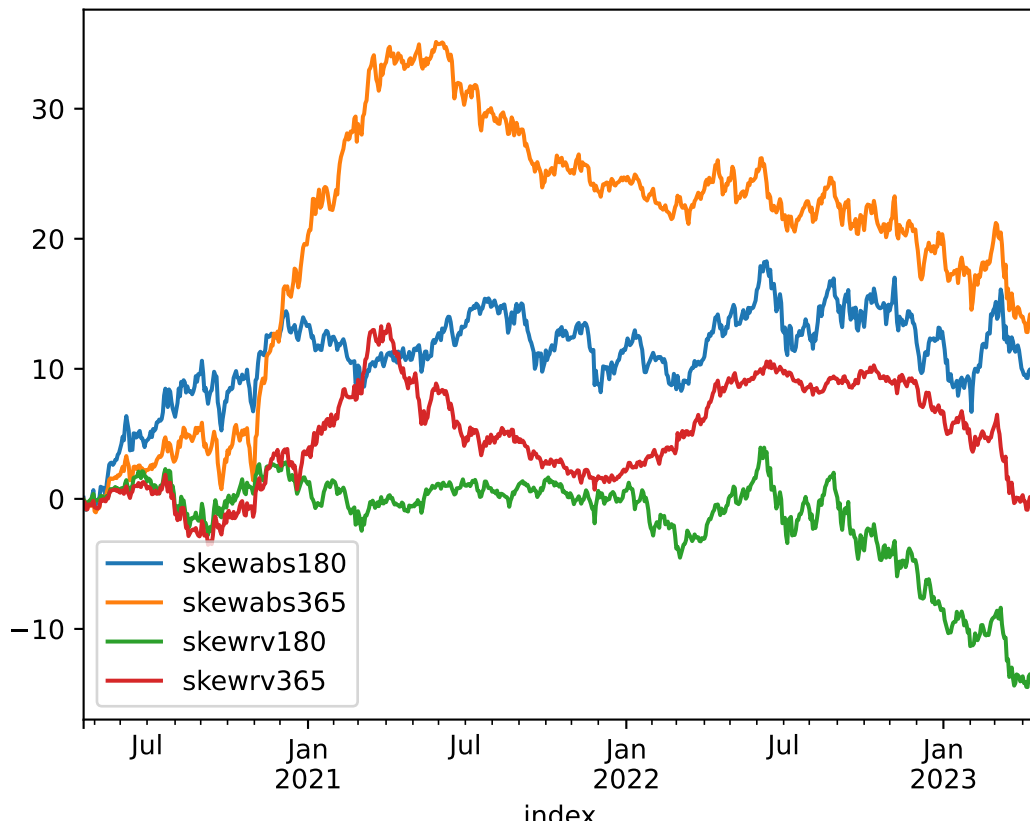


Total Trading Rule P&L for period '3Y'

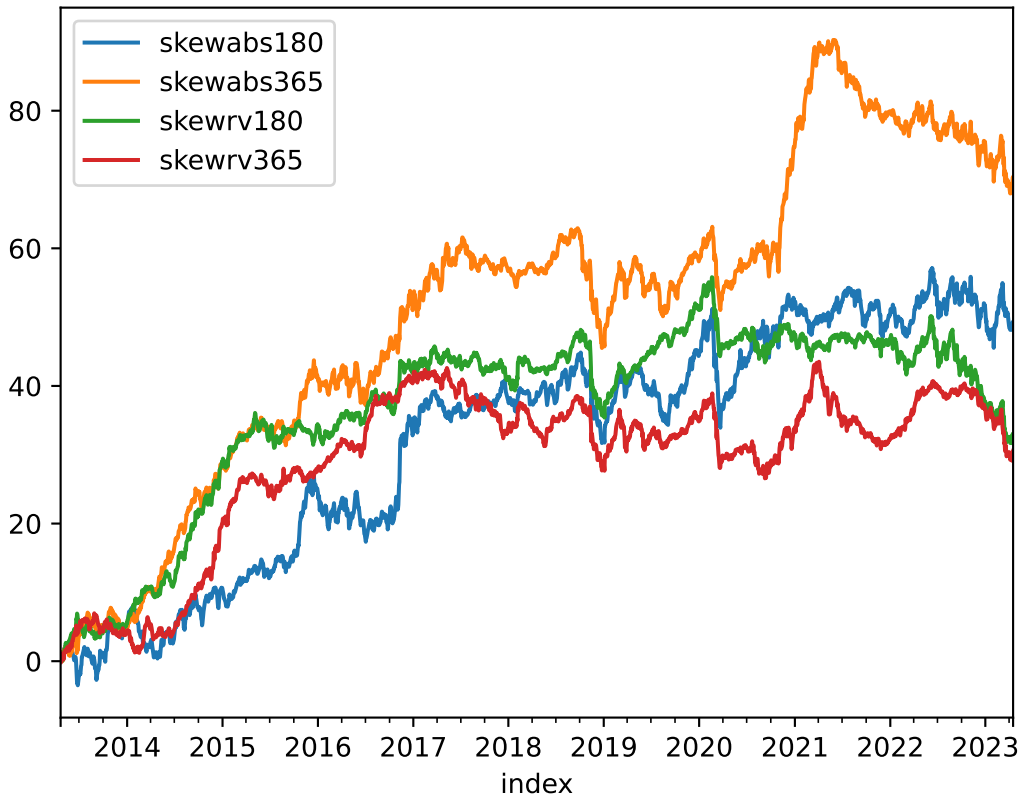
ann. mean {'skewabs180': 3.249, 'skewabs365': 4.988, 'skewrv180': -4.309, 'skewrv365': 0.162}

ann. std {'skewabs180': 9.128, 'skewabs365': 8.888, 'skewrv180': 7.227, 'skewrv365': 6.308}

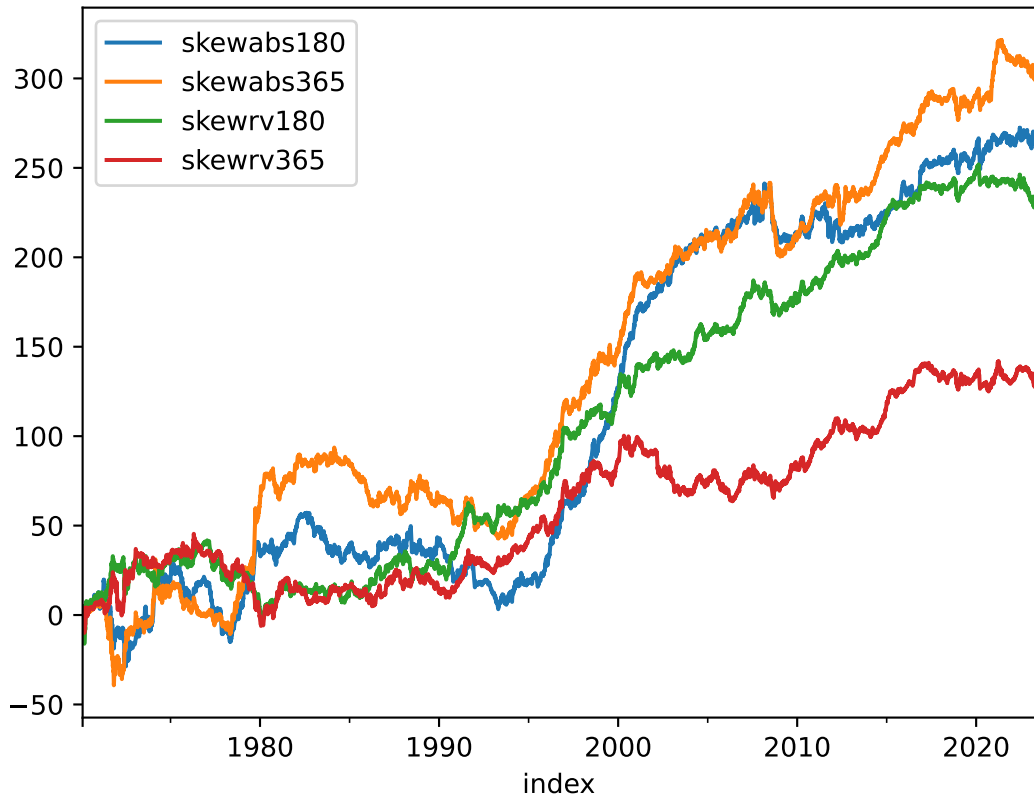
ann. SR {'skewabs180': 0.36, 'skewabs365': 0.56, 'skewrv180': -0.6, 'skewrv365': 0.03}



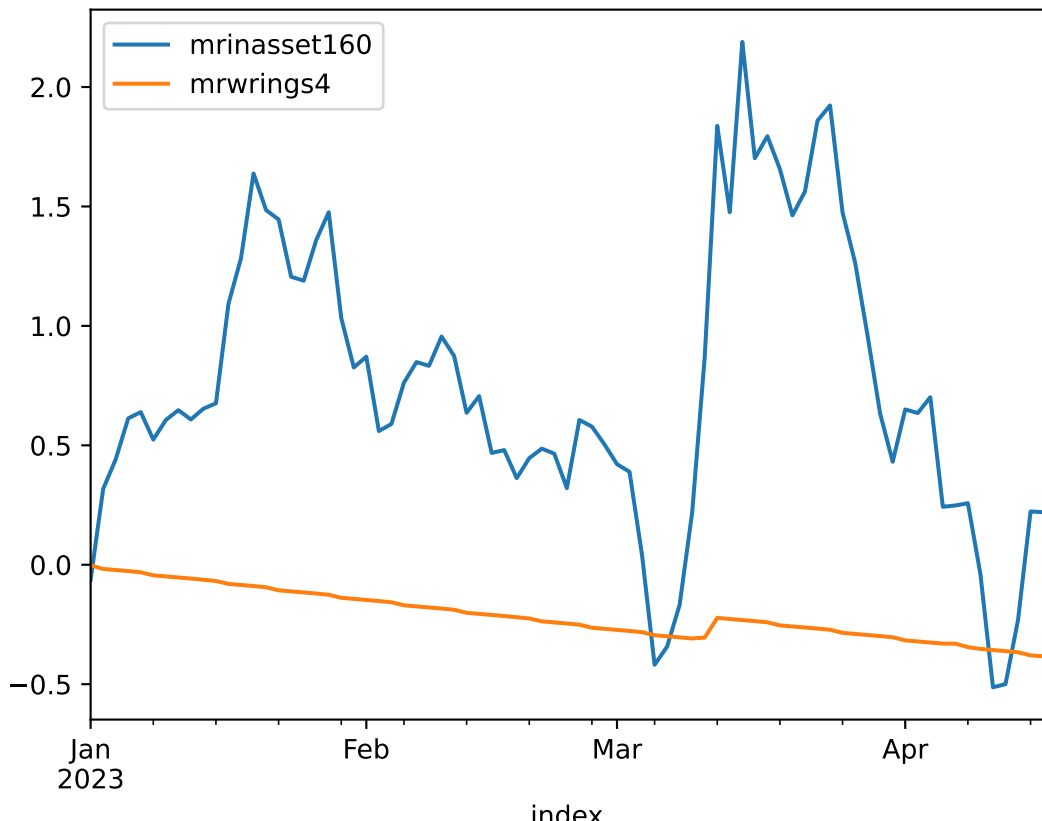
Total Trading Rule P&L for period '10Y'  
ann. mean {'skewabs180': 4.79, 'skewabs365': 6.912, 'skewrv180': 3.242, 'skewrv365': 3.005}  
ann. std {'skewabs180': 8.008, 'skewabs365': 7.949, 'skewrv180': 6.386, 'skewrv365': 6.046}  
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.87, 'skewrv180': 0.51, 'skewrv365': 0.5}



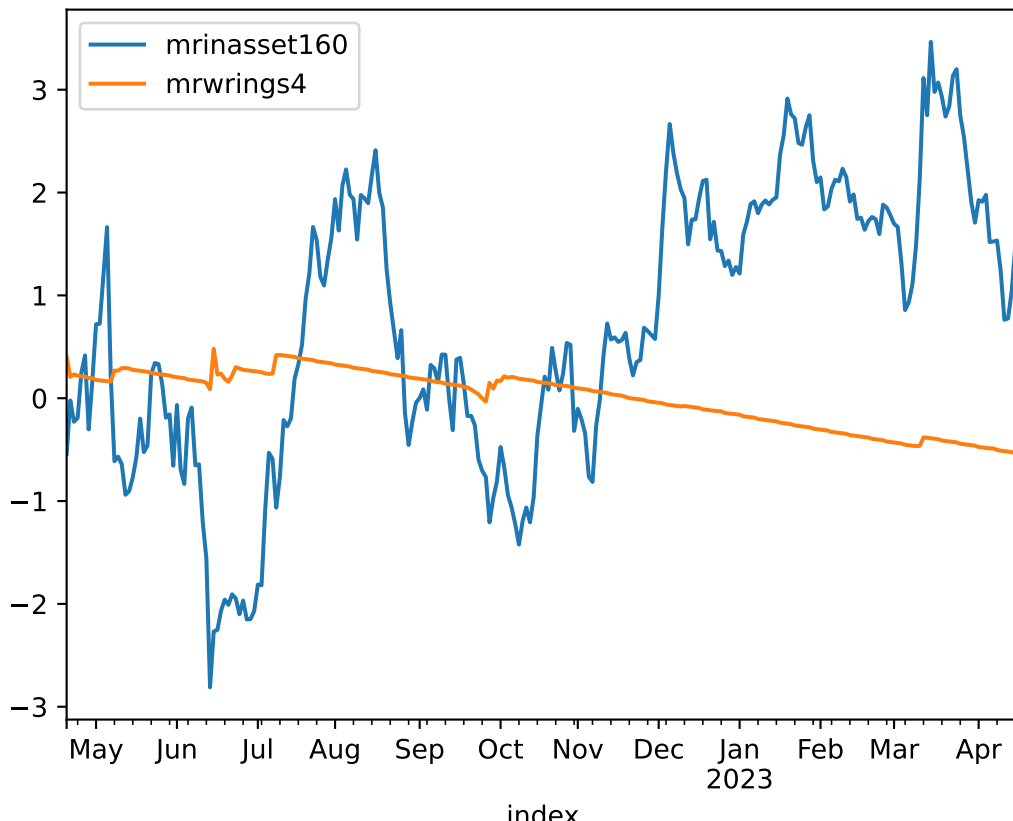
Total Trading Rule P&L for period '99Y'  
ann. mean {'skewabs180': 4.871, 'skewabs365': 5.563, 'skewrv180': 4.226, 'skewrv365': 2.379}  
ann. std {'skewabs180': 10.102, 'skewabs365': 9.869, 'skewrv180': 8.752, 'skewrv365': 8.124}  
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



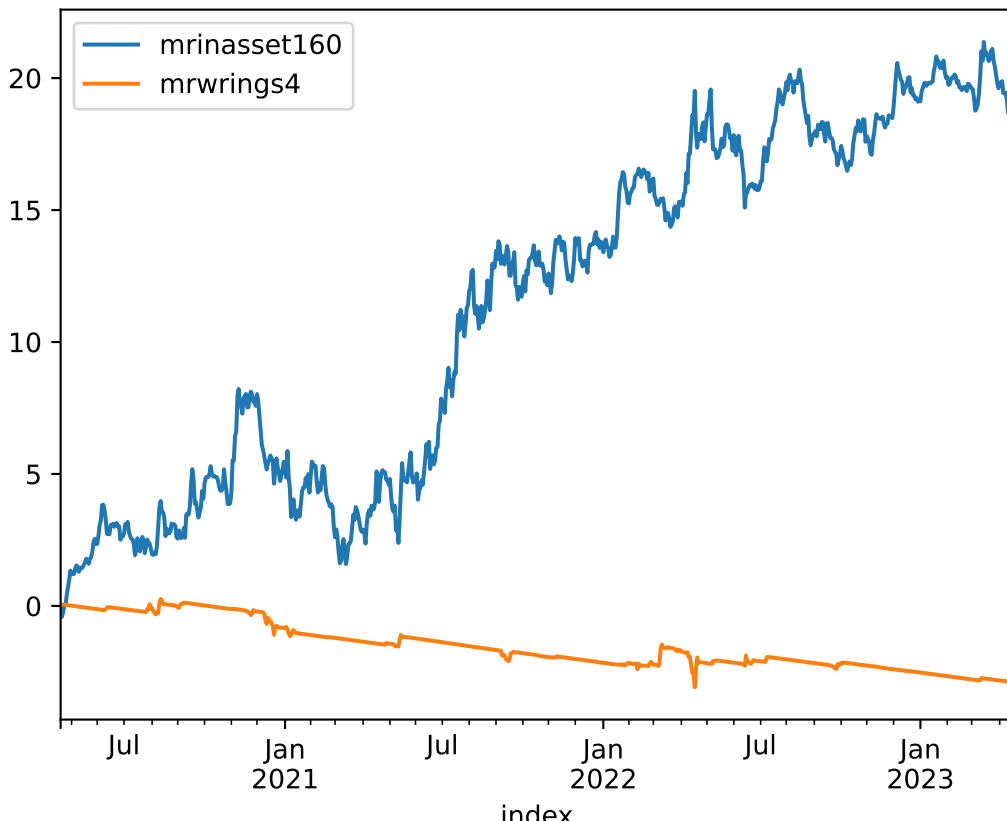
Total Trading Rule P&L for period 'YTD'  
ann. mean {'mrinasset160': 0.732, 'mrwrings4': -1.273}  
ann. std {'mrinasset160': 4.343, 'mrwrings4': 0.172}  
ann. SR {'mrinasset160': 0.17, 'mrwrings4': -7.41}



Total Trading Rule P&L for period '1Y'  
ann. mean {'mrinasset160': 1.473, 'mrwrings4': -0.532}  
ann. std {'mrinasset160': 5.265, 'mrwrings4': 0.737}  
ann. SR {'mrinasset160': 0.28, 'mrwrings4': -0.72}

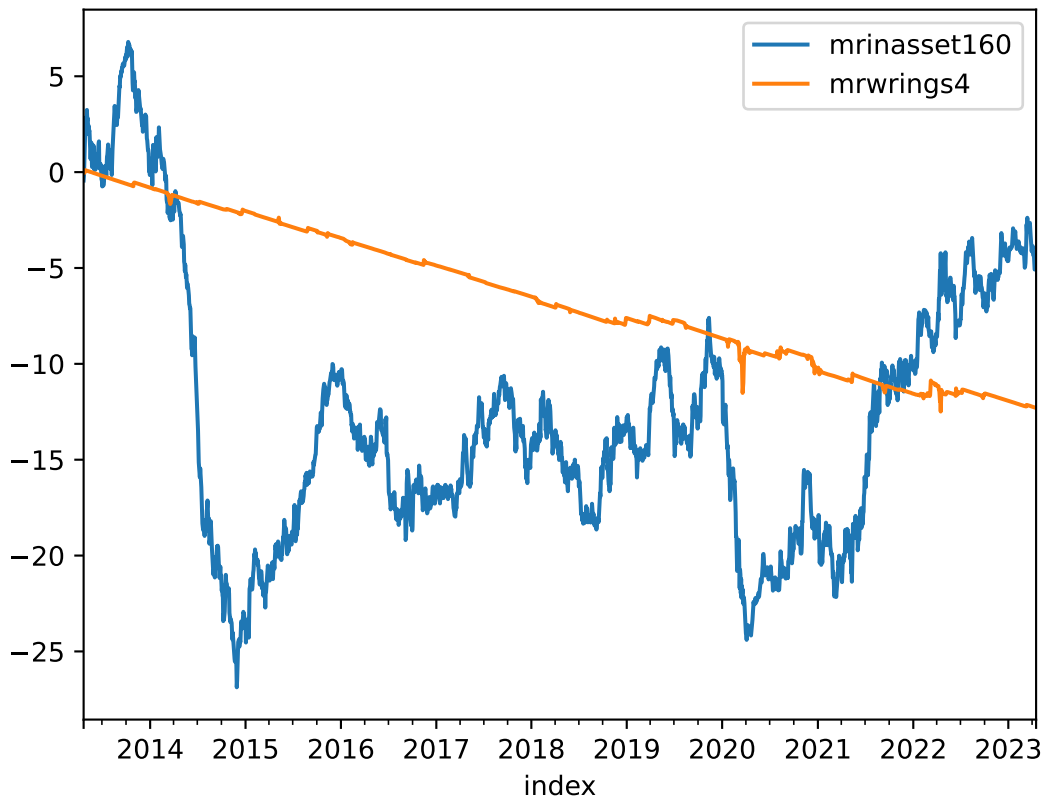


Total Trading Rule P&L for period '3Y'  
ann. mean {'mrinasset160': 6.352, 'mrwrings4': -0.949}  
ann. std {'mrinasset160': 6.266, 'mrwrings4': 1.017}  
ann. SR {'mrinasset160': 1.01, 'mrwrings4': -0.93}





Total Trading Rule P&L for period '10Y'  
ann. mean {'mrinasset160': -0.427, 'mrwrings4': -1.208}  
ann. std {'mrinasset160': 6.231, 'mrwrings4': 0.88}  
ann. SR {'mrinasset160': -0.07, 'mrwrings4': -1.37}



Total Trading Rule P&L for period '99Y'  
ann. mean {'mrinasset160': -3.557, 'mrwrings4': -2.135}  
ann. std {'mrinasset160': 9.869, 'mrwrings4': 2.088}  
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.02}

