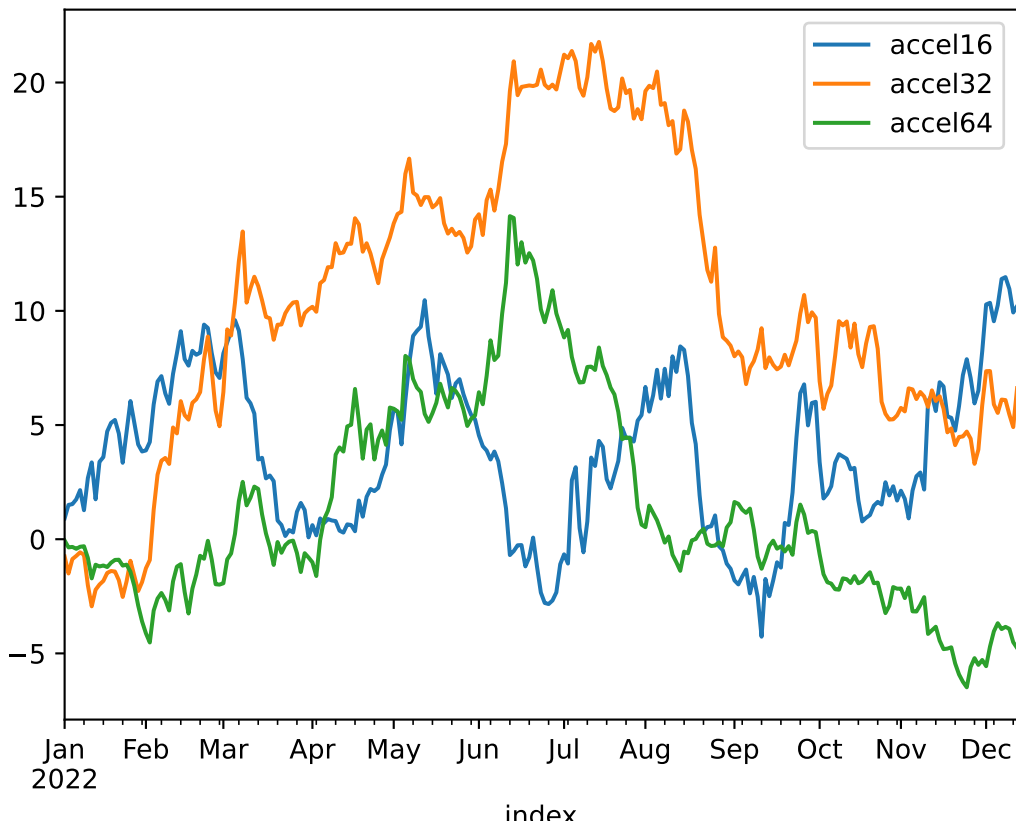
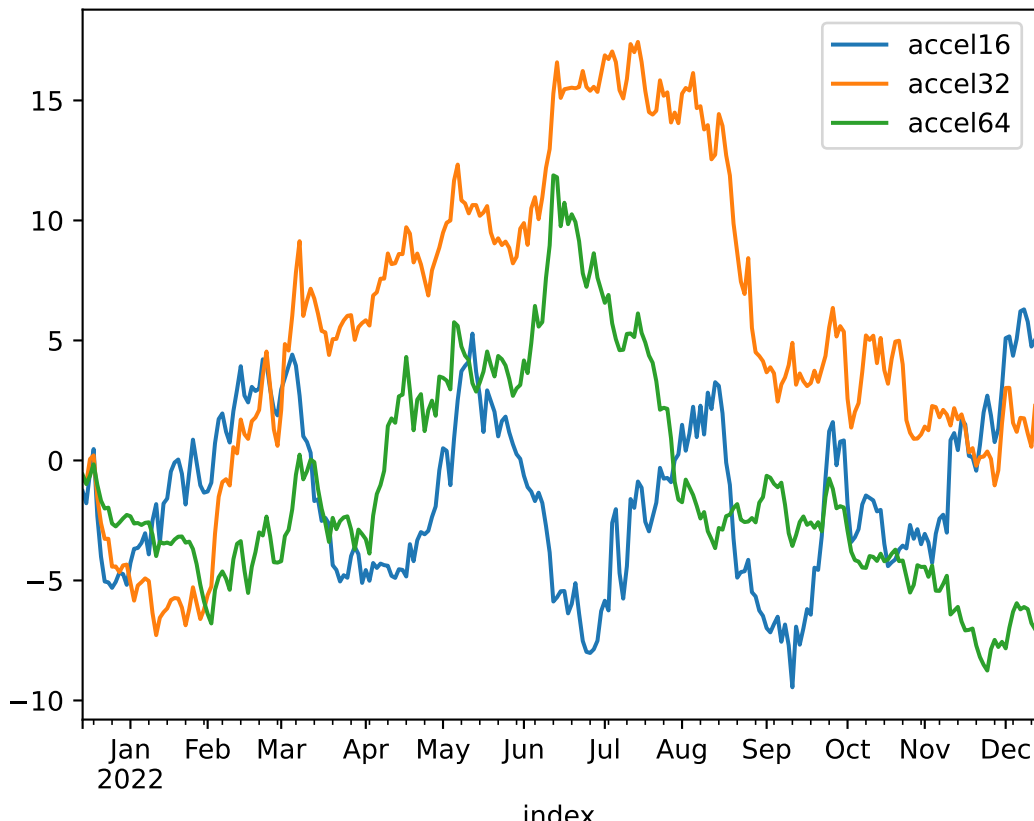


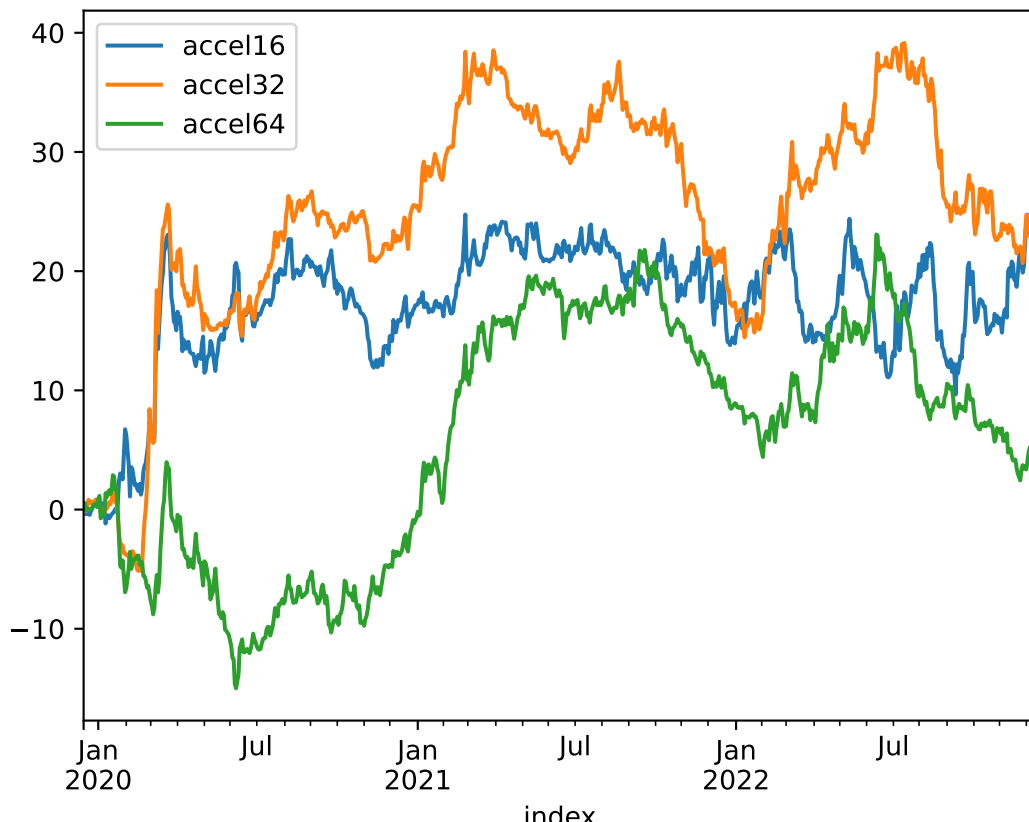
Total Trading Rule P&L for period 'YTD'  
ann. mean {'accel16': 10.58, 'accel32': 6.855, 'accel64': -4.936}  
ann. std {'accel16': 16.274, 'accel32': 14.426, 'accel64': 11.826}  
ann. SR {'accel16': 0.65, 'accel32': 0.48, 'accel64': -0.42}



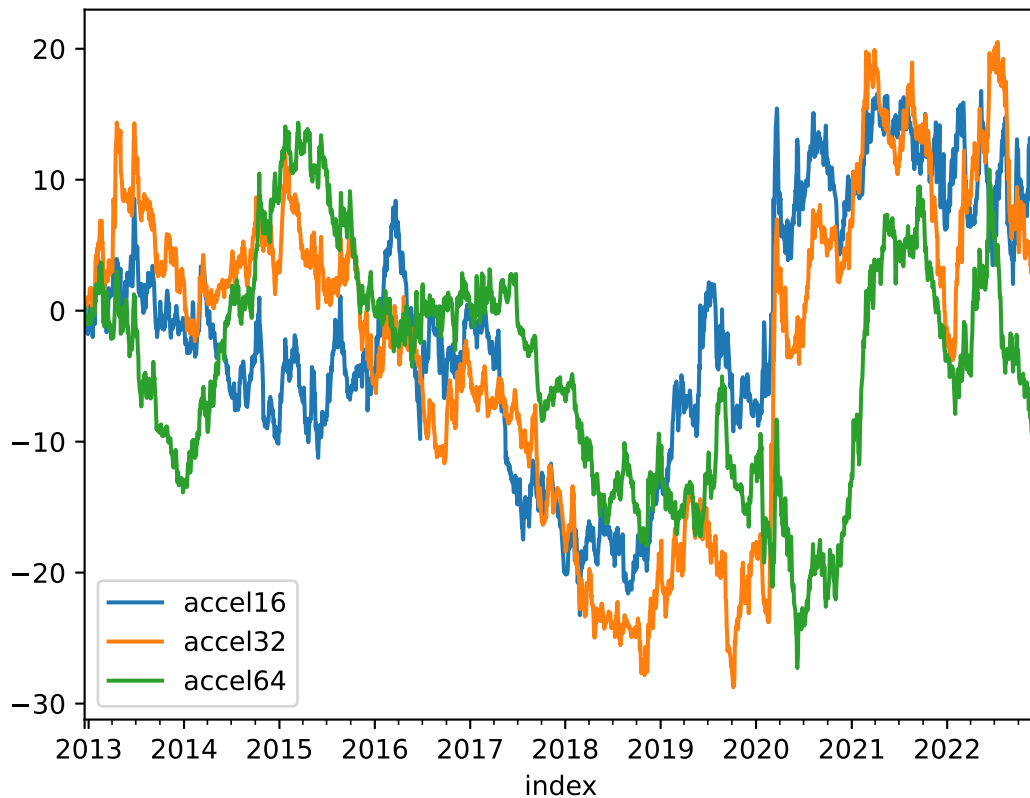
Total Trading Rule P&L for period '1Y'  
ann. mean {'accel16': 4.948, 'accel32': 2.239, 'accel64': -6.923}  
ann. std {'accel16': 16.381, 'accel32': 14.336, 'accel64': 11.634}  
ann. SR {'accel16': 0.3, 'accel32': 0.16, 'accel64': -0.6}



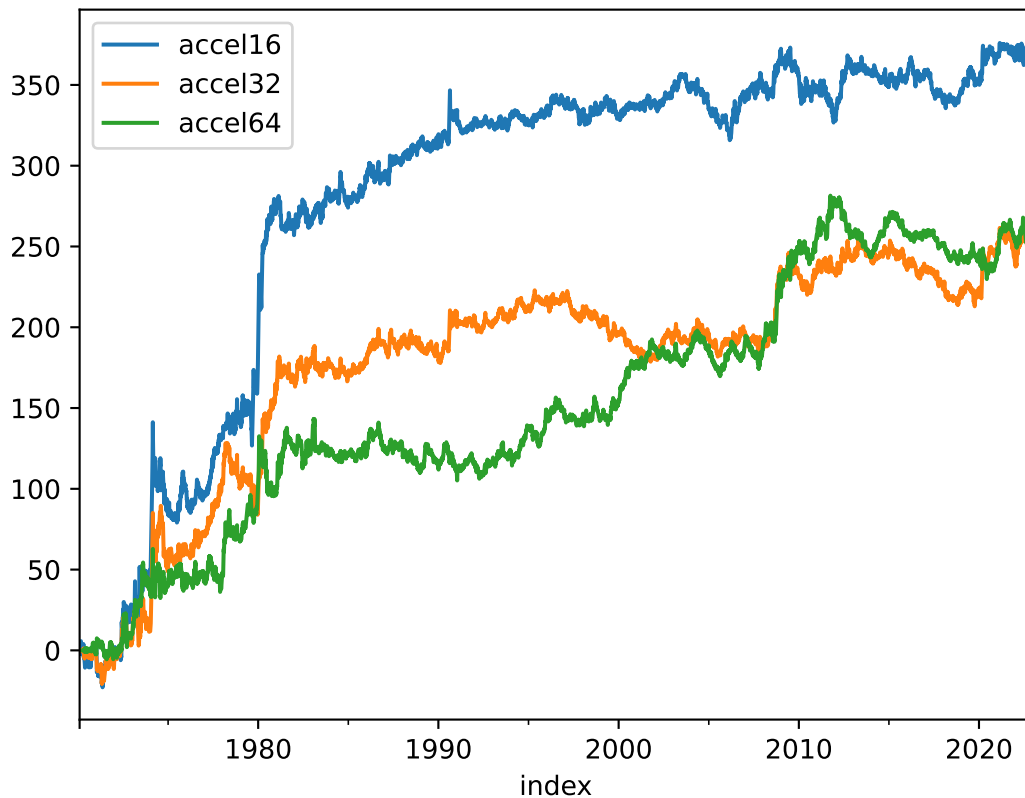
Total Trading Rule P&L for period '3Y'  
ann. mean {'accel16': 7.902, 'accel32': 7.852, 'accel64': 1.364}  
ann. std {'accel16': 14.85, 'accel32': 14.101, 'accel64': 11.735}  
ann. SR {'accel16': 0.53, 'accel32': 0.56, 'accel64': 0.12}



Total Trading Rule P&L for period '10Y'  
ann. mean {'accel16': 1.622, 'accel32': 0.526, 'accel64': -0.798}  
ann. std {'accel16': 11.903, 'accel32': 11.14, 'accel64': 9.571}  
ann. SR {'accel16': 0.14, 'accel32': 0.05, 'accel64': -0.08}

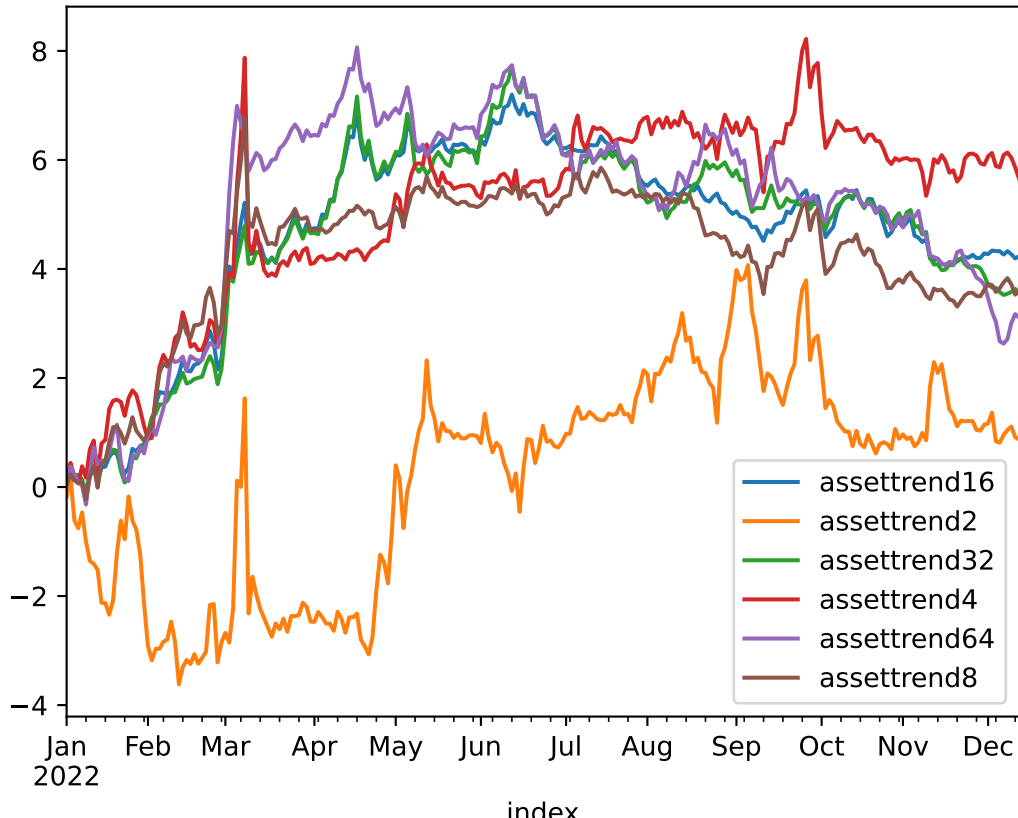


Total Trading Rule P&L for period '99Y'  
ann. mean {'accel16': 6.968, 'accel32': 4.587, 'accel64': 4.622}  
ann. std {'accel16': 15.731, 'accel32': 13.796, 'accel64': 13.332}  
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}



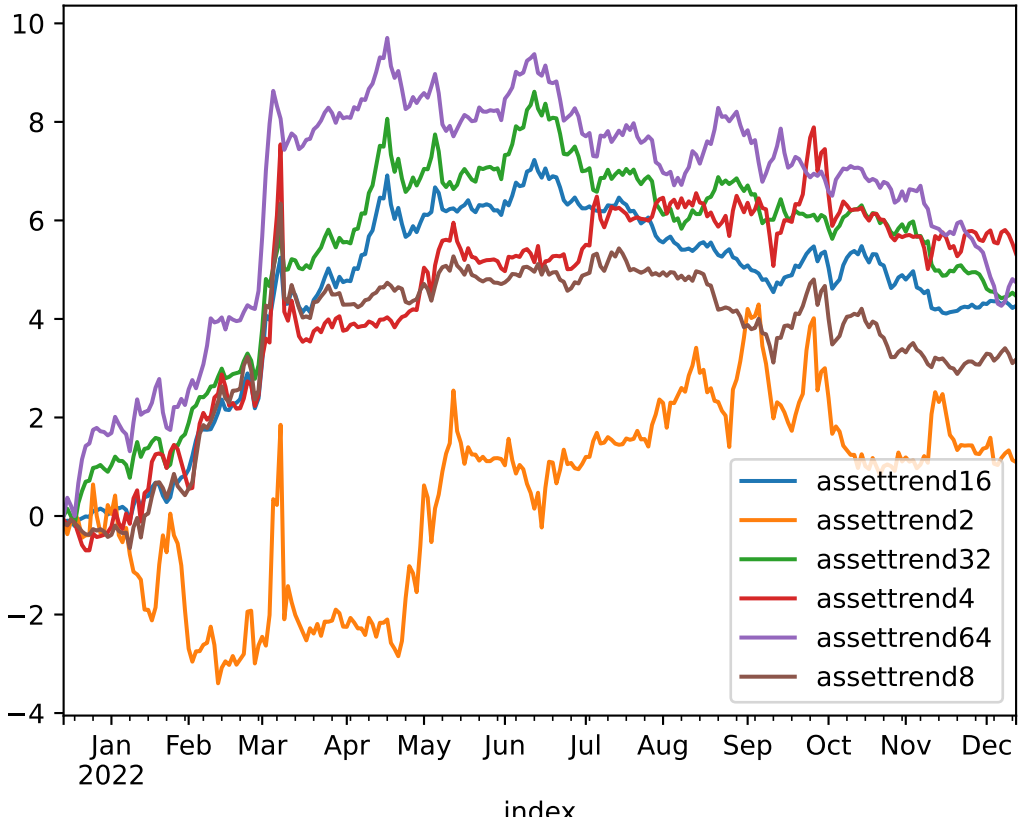
# Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.391, 'assettrend2': 0.904, 'assettrend32': 3.7, 'assettrend4': 5.86, 'assettrend64': 3.22, 'assettrend8': 3.734}  
ann. std {'assettrend16': 3.086, 'assettrend2': 7.844, 'assettrend32': 3.41, 'assettrend4': 5.865, 'assettrend64': 4.068, 'assettrend8': 3.838}  
ann. SR {'assettrend16': 1.42, 'assettrend2': 0.12, 'assettrend32': 1.08, 'assettrend4': 1.0, 'assettrend64': 0.79, 'assettrend8': 0.97}



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

ann. mean {'assettrend16': 4.2, 'assettrend2': 1.078, 'assettrend32': 4.399, 'assettrend4': 5.241, 'assettrend64': 4.671, 'assettrend8': 3.128}  
ann. std {'assettrend16': 3.019, 'assettrend2': 7.786, 'assettrend32': 3.385, 'assettrend4': 5.741, 'assettrend64': 4.088, 'assettrend8': 3.755}  
ann. SR {'assettrend16': 1.39, 'assettrend2': 0.14, 'assettrend32': 1.3, 'assettrend4': 0.91, 'assettrend64': 1.14, 'assettrend8': 0.83}

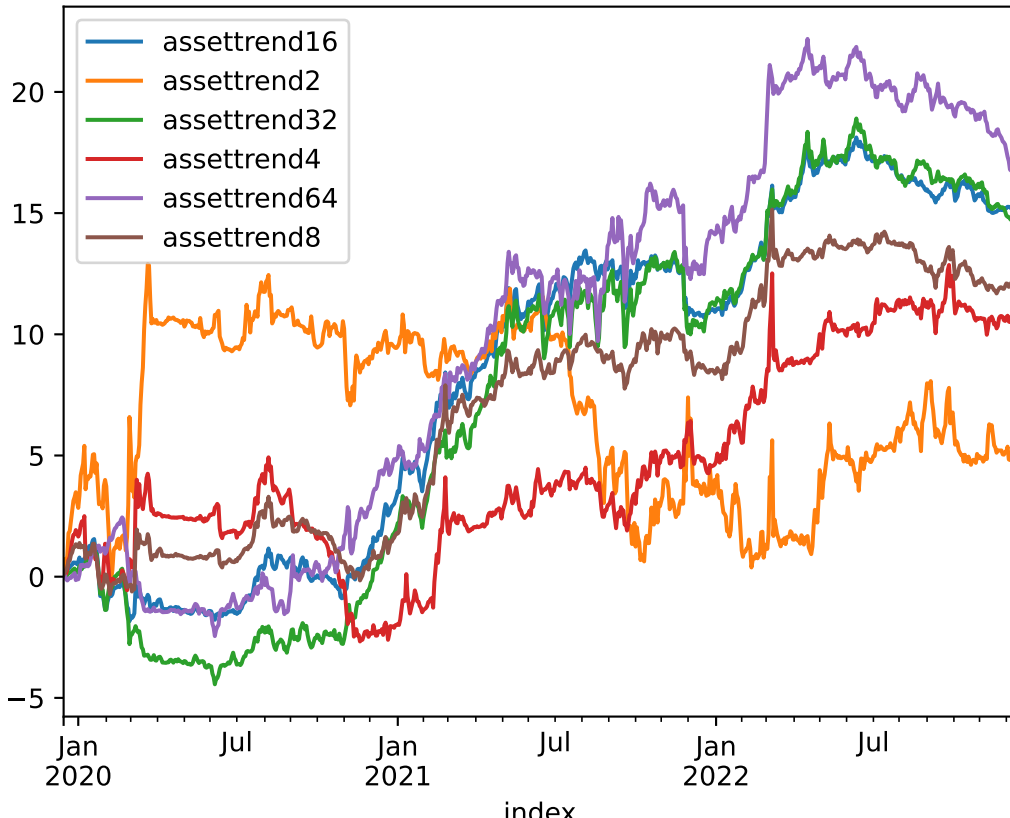


# Total Trading Rule P&L for period '3Y'

ann. mean {'assetrend16': 4.963, 'assetrend2': 1.595, 'assetrend32': 4.831, 'assetrend4': 3.37, 'assetrend64': 5.639, 'assetrend8': 3.922}

ann. std {'assetrend16': 3.606, 'assetrend2': 7.888, 'assetrend32': 4.425, 'assetrend4': 5.458, 'assetrend64': 5.13, 'assetrend8': 3.76}

ann. SR {'assetrend16': 1.38, 'assetrend2': 0.2, 'assetrend32': 1.09, 'assetrend4': 0.62, 'assetrend64': 1.1, 'assetrend8': 1.04}



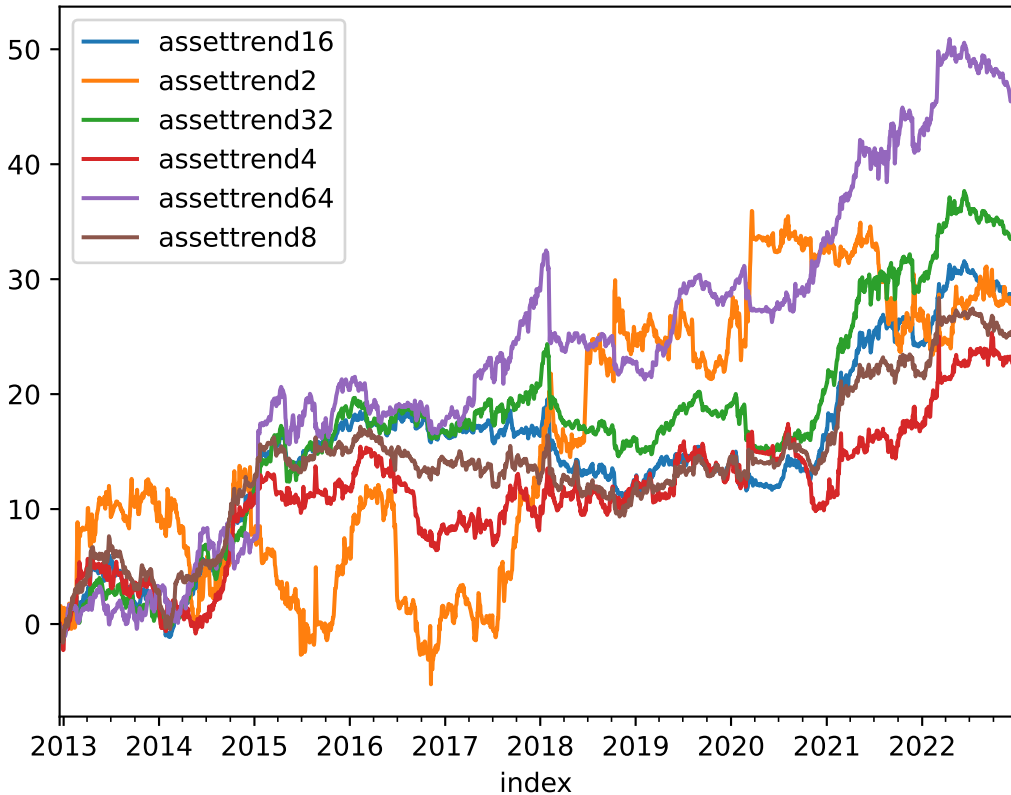


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.809, 'assettrend2': 2.741, 'assettrend32': 3.293, 'assettrend4': 2.237, 'assettrend8': 2.474}

ann. std {'assettrend16': 3.281, 'assettrend2': 8.449, 'assettrend32': 3.761, 'assettrend4': 5.039, 'assettrend64': 5.314, 'assettrend8': 3.59}

ann. SR {'assettrend16': 0.86, 'assettrend2': 0.32, 'assettrend32': 0.88, 'assettrend4': 0.44, 'assettrend64': 0.85, 'assettrend8': 0.69}

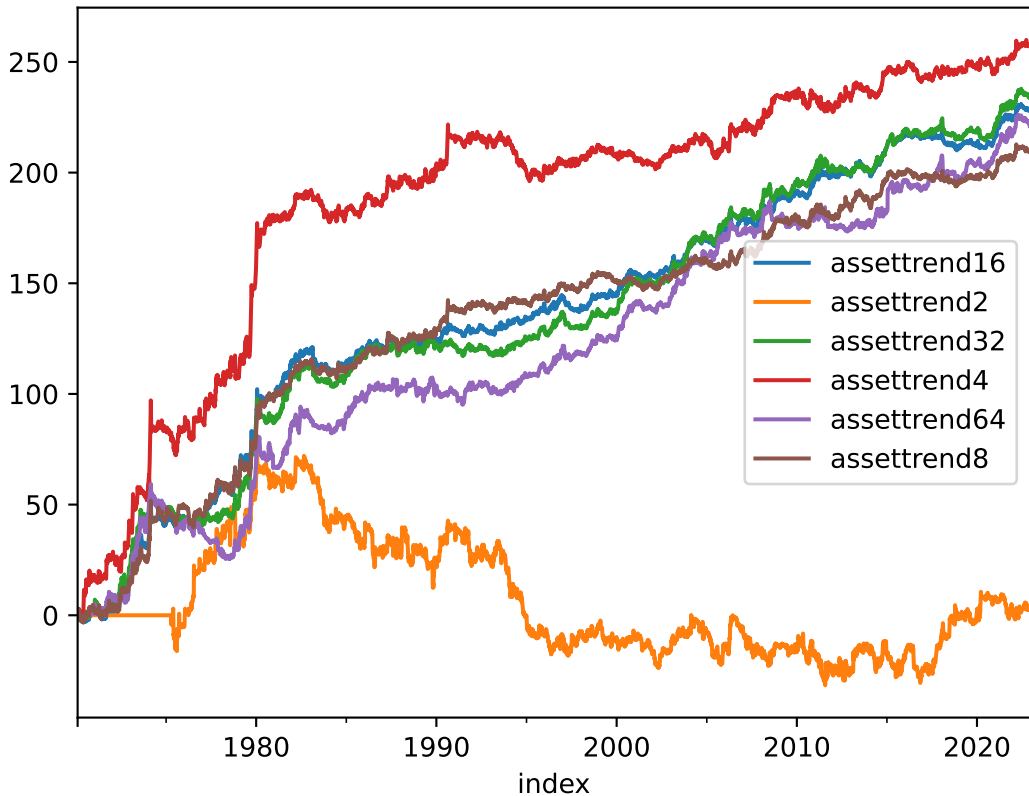


# Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.232, 'assettrend2': 0.048, 'assettrend32': 4.339, 'assettrend4': 4.778, 'assettrend8': 3.891}

ann. std {'assettrend16': 4.663, 'assettrend2': 10.054, 'assettrend32': 4.898, 'assettrend4': 7.353, 'assettrend64': 5.473, 'assettrend8': 5.038}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.0, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}

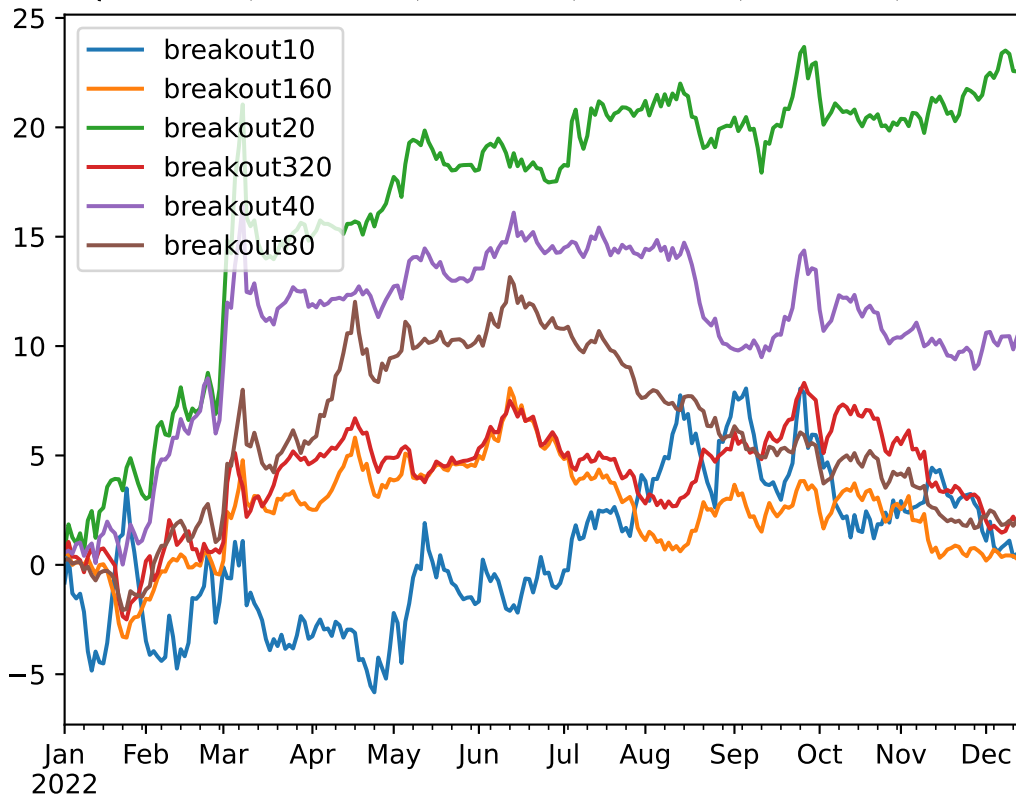


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 0.526, 'breakout160': 0.282, 'breakout20': 23.376, 'breakout320': 1.939, 'breakout40': 10.79, 'breakout80': 2.127}

ann. std {'breakout10': 13.893, 'breakout160': 7.232, 'breakout20': 12.254, 'breakout320': 7.572, 'breakout40': 9.75, 'breakout80': 7.954}

ann. SR {'breakout10': 0.04, 'breakout160': 0.04, 'breakout20': 1.91, 'breakout320': 0.26, 'breakout40': 1.11, 'breakout80': 0.27}



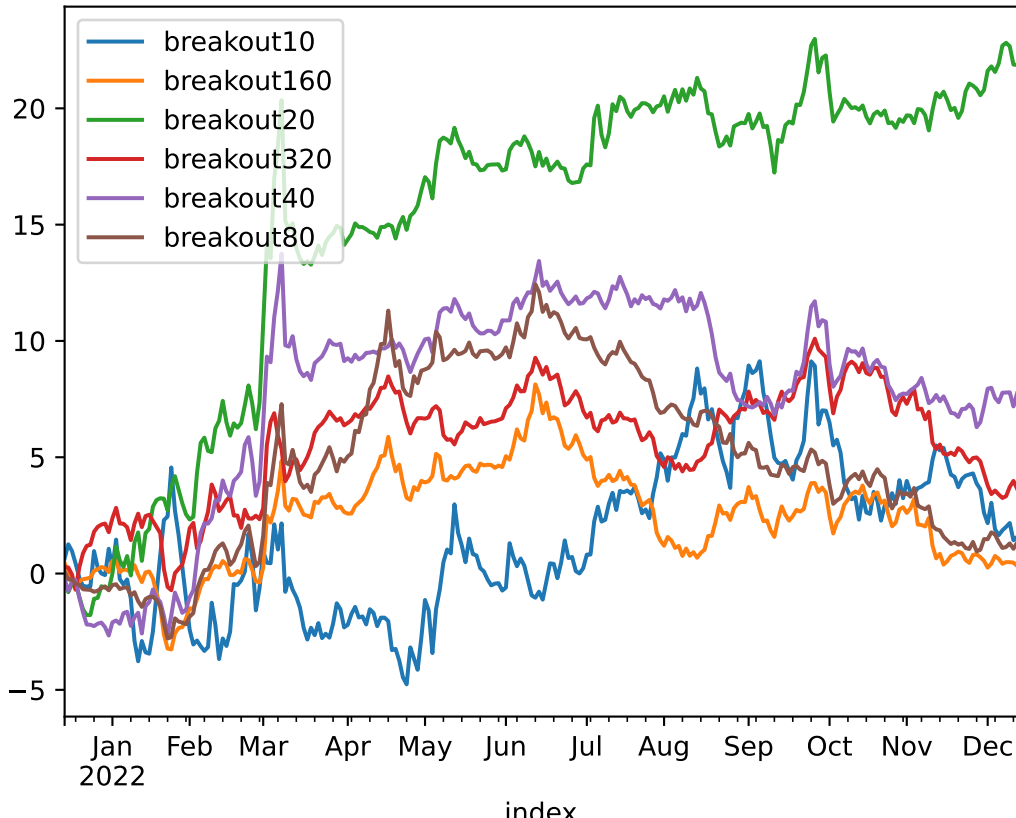
index

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

ann. mean {'breakout10': 1.548, 'breakout160': 0.327, 'breakout20': 21.526, 'breakout320': 3.592, 'breakout40': 7.628, 'breakout80': 1.311}

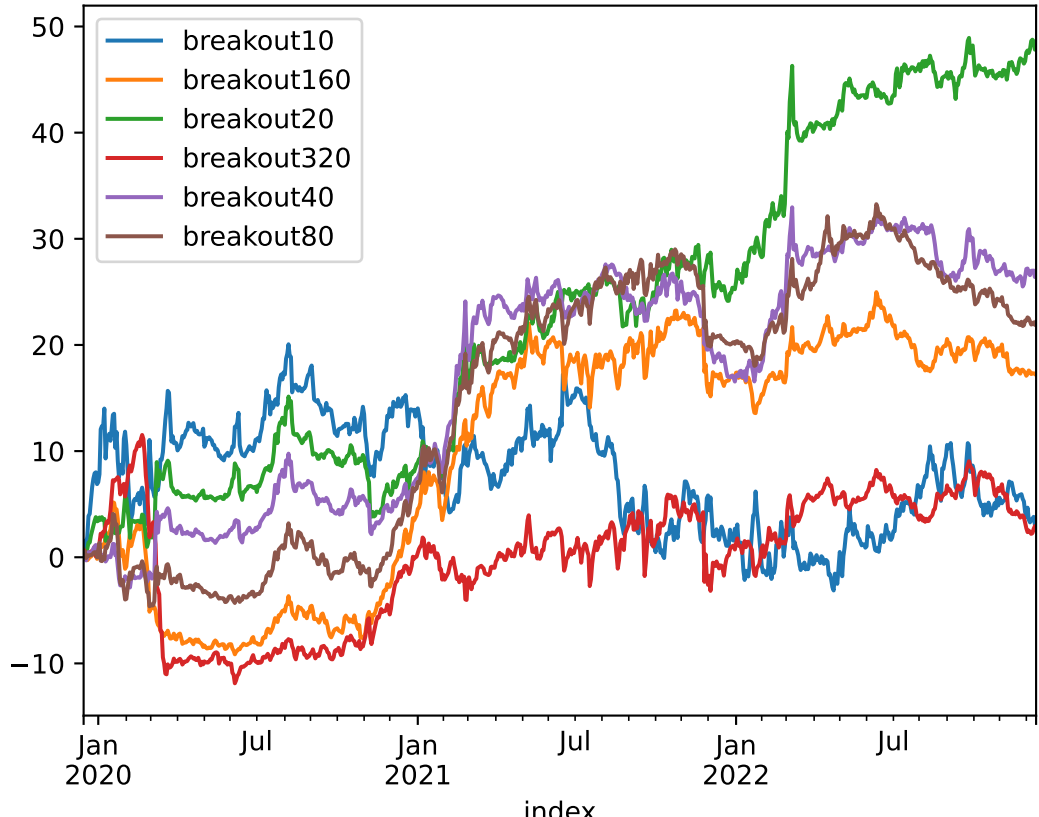
ann. std {'breakout10': 13.752, 'breakout160': 7.115, 'breakout20': 12.033, 'breakout320': 7.54, 'breakout40': 9.611, 'breakout80': 7.768}

ann. SR {'breakout10': 0.11, 'breakout160': 0.05, 'breakout20': 1.79, 'breakout320': 0.48, 'breakout40': 0.79, 'breakout80': 0.17}



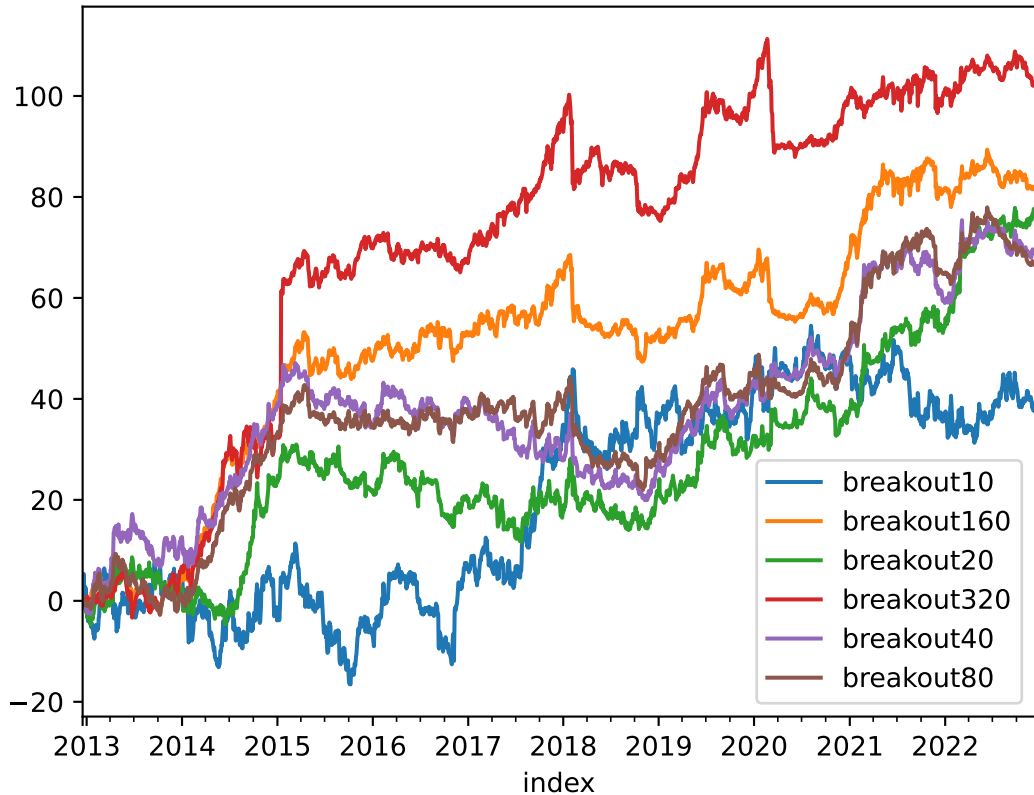
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 1.049, 'breakout160': 5.622, 'breakout20': 15.649, 'breakout320': 0.85, 'breakout40': 8.826, 'breakout80': 7.253}  
ann. std {'breakout10': 15.098, 'breakout160': 9.754, 'breakout20': 11.52, 'breakout320': 10.758, 'breakout40': 9.942, 'breakout80': 9.584}  
ann. SR {'breakout10': 0.07, 'breakout160': 0.58, 'breakout20': 1.36, 'breakout320': 0.08, 'breakout40': 0.89, 'breakout80': 0.76}



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

ann. mean {'breakout10': 3.696, 'breakout160': 8.011, 'breakout20': 7.534, 'breakout320': 10.054, 'breakout40': 6.814, 'breakout80': 6.564}  
ann. std {'breakout10': 15.768, 'breakout160': 9.141, 'breakout20': 11.21, 'breakout320': 13.348, 'breakout40': 9.841, 'breakout80': 9.016}  
ann. SR {'breakout10': 0.23, 'breakout160': 0.88, 'breakout20': 0.67, 'breakout320': 0.75, 'breakout40': 0.69, 'breakout80': 0.73}

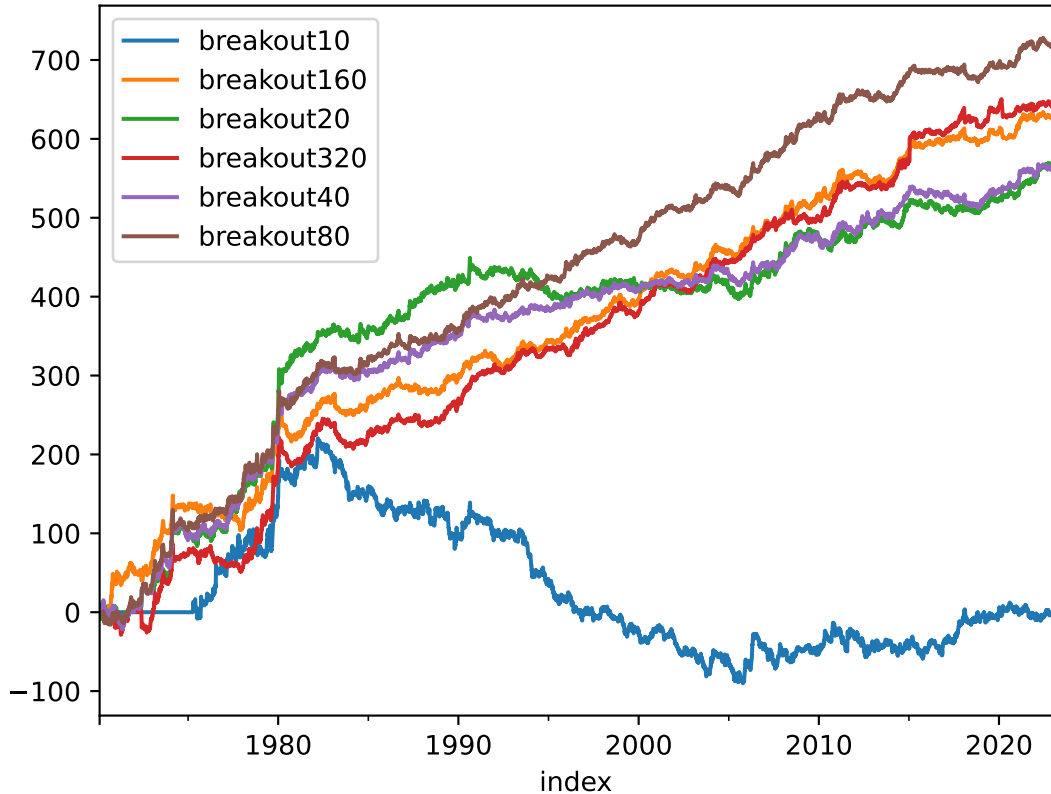


# Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.084, 'breakout160': 11.628, 'breakout20': 10.554, 'breakout320': 11.906, 'breakout40': 10.433, 'breakout80': 13.307}

ann. std {'breakout10': 20.846, 'breakout160': 12.504, 'breakout20': 16.11, 'breakout320': 13.057, 'breakout40': 13.24, 'breakout80': 12.762}

ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.66, 'breakout320': 0.91, 'breakout40': 0.79, 'breakout80': 1.04}

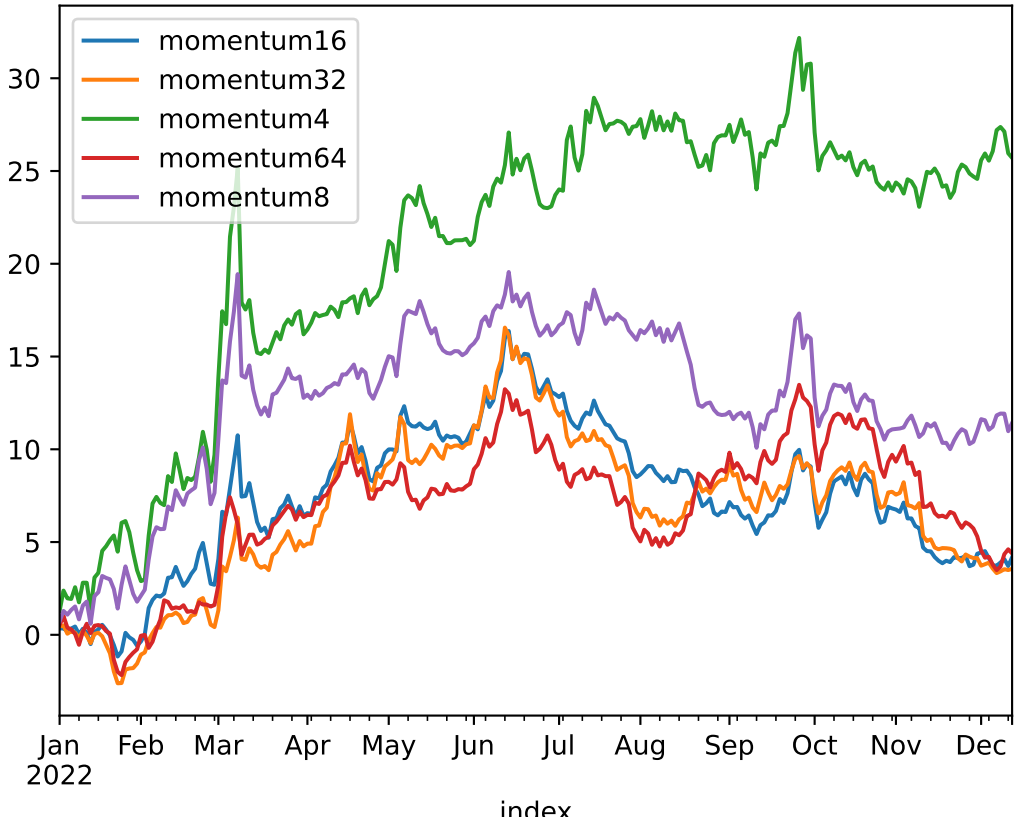


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.333, 'momentum32': 3.688, 'momentum4': 26.646, 'momentum64': 4.544, 'momentum8': 11.836}

ann. std {'momentum16': 10.201, 'momentum32': 9.835, 'momentum4': 17.545, 'momentum64': 9.534, 'momentum8': 13.391}

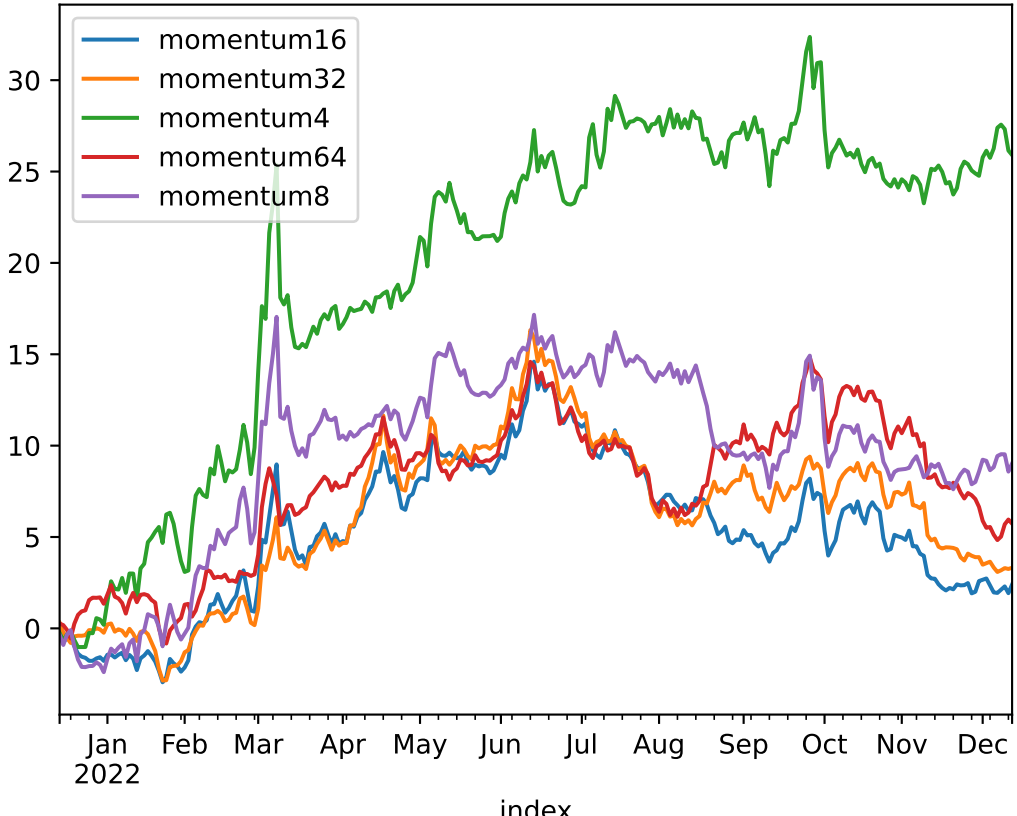
ann. SR {'momentum16': 0.42, 'momentum32': 0.37, 'momentum4': 1.52, 'momentum64': 0.48, 'momentum8': 0.88}





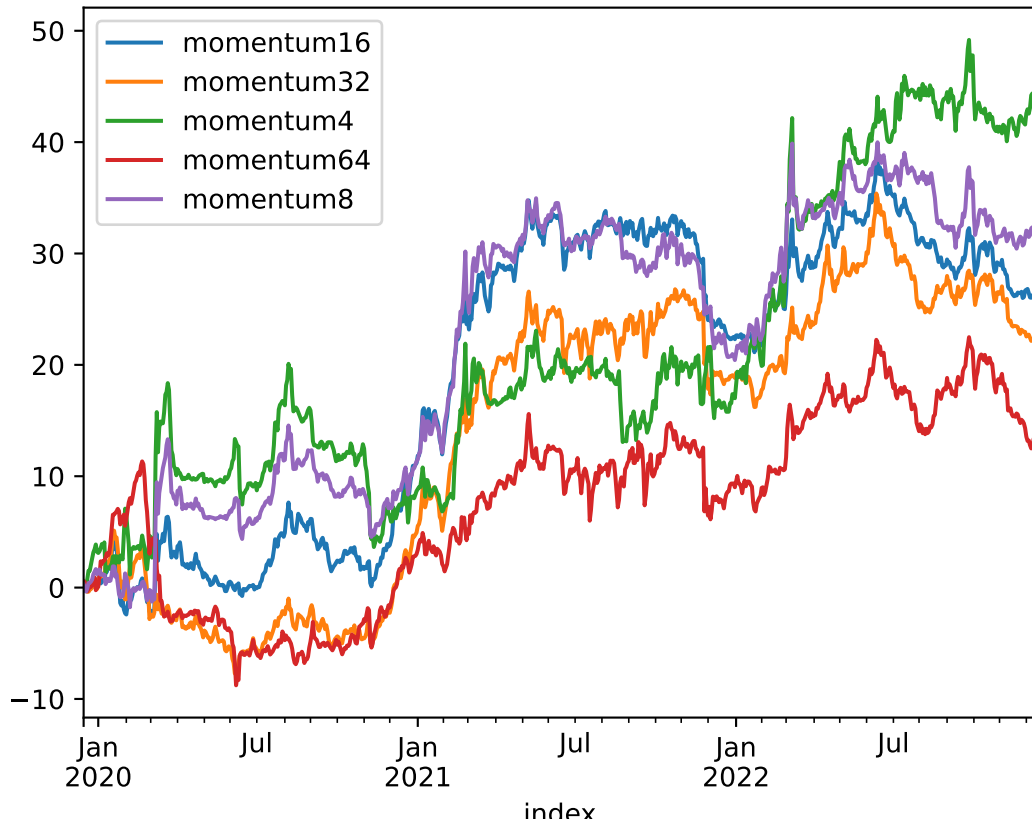
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.362, 'momentum32': 3.268, 'momentum4': 25.504, 'momentum64': 5.642, 'momentum8': 8.885}  
ann. std {'momentum16': 9.984, 'momentum32': 9.628, 'momentum4': 17.162, 'momentum64': 9.381, 'momentum8': 13.153}  
ann. SR {'momentum16': 0.24, 'momentum32': 0.34, 'momentum4': 1.49, 'momentum64': 0.6, 'momentum8': 0.68}



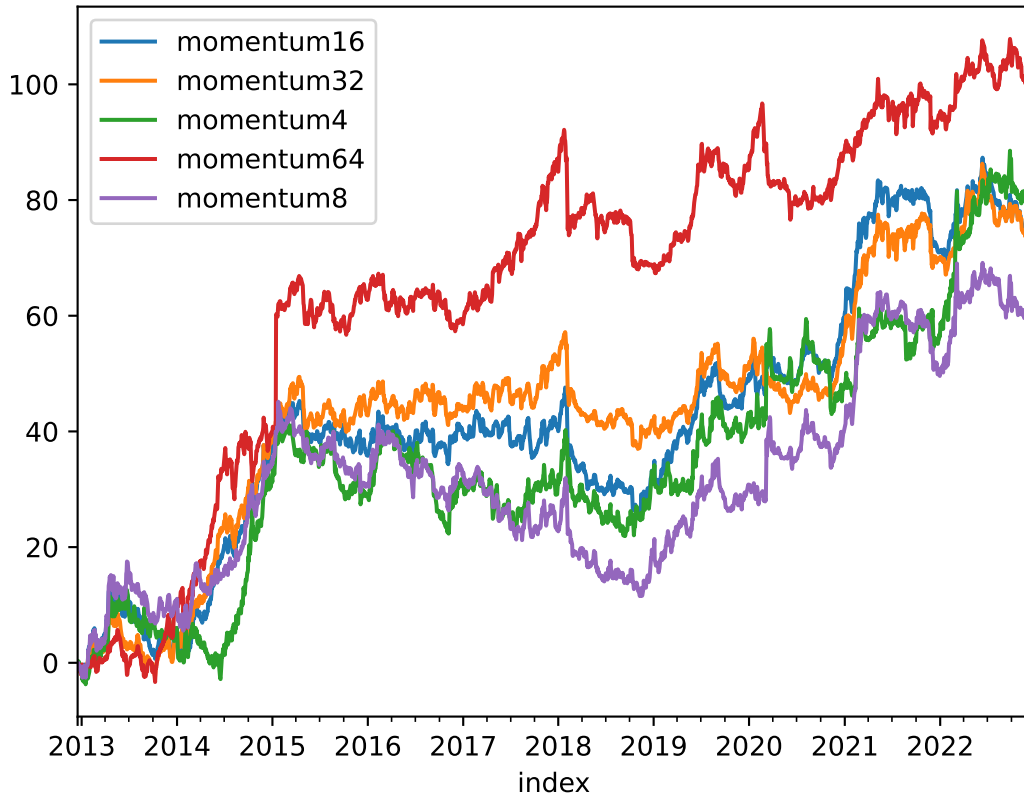
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.67, 'momentum32': 7.327, 'momentum4': 13.983, 'momentum64': 4.385, 'momentum8': 10.426}  
ann. std {'momentum16': 10.993, 'momentum32': 10.864, 'momentum4': 16.076, 'momentum64': 10.969, 'momentum8': 12.741}  
ann. SR {'momentum16': 0.79, 'momentum32': 0.67, 'momentum4': 0.87, 'momentum64': 0.4, 'momentum8': 0.82}



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

ann. mean {'momentum16': 7.377, 'momentum32': 7.196, 'momentum4': 8.059, 'momentum64': 9.698, 'momentum8': 5.99}  
ann. std {'momentum16': 9.954, 'momentum32': 9.507, 'momentum4': 13.687, 'momentum64': 12.015, 'momentum8': 11.323}  
ann. SR {'momentum16': 0.74, 'momentum32': 0.76, 'momentum4': 0.59, 'momentum64': 0.81, 'momentum8': 0.53}

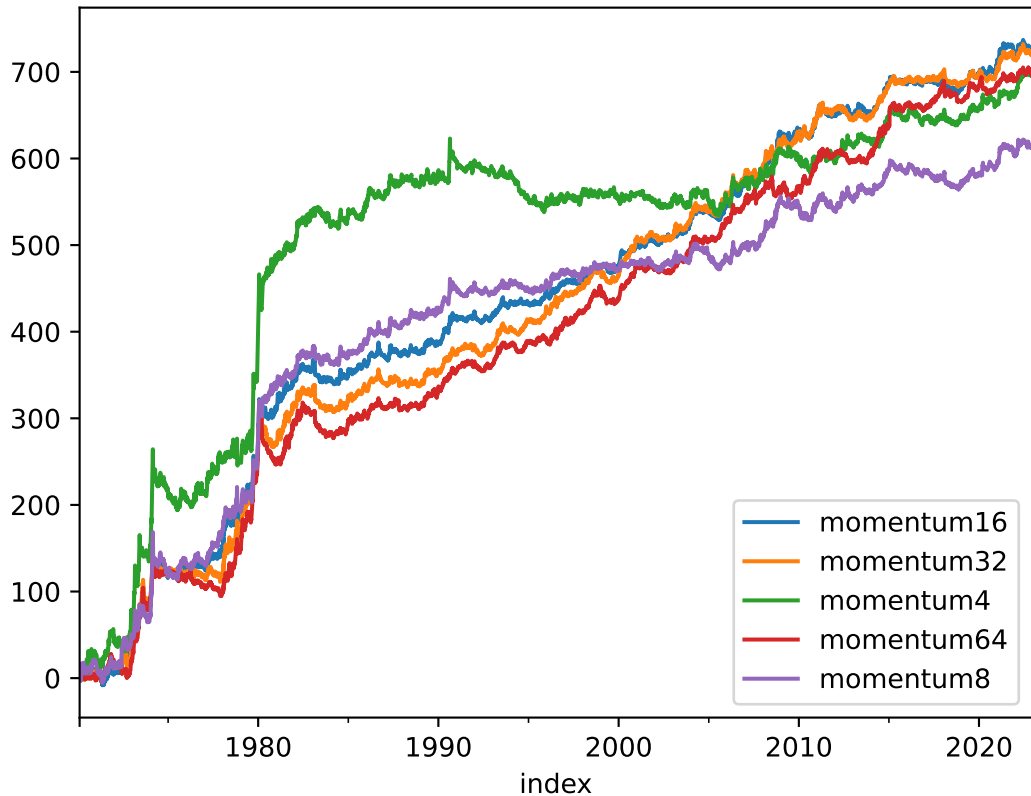


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.453, 'momentum32': 13.349, 'momentum4': 12.963, 'momentum64': 12.925, 'momentum8': 11.393}

ann. std {'momentum16': 14.23, 'momentum32': 13.861, 'momentum4': 20.087, 'momentum64': 13.497, 'momentum8': 15.88}

ann. SR {'momentum16': 0.95, 'momentum32': 0.96, 'momentum4': 0.65, 'momentum64': 0.96, 'momentum8': 0.72}

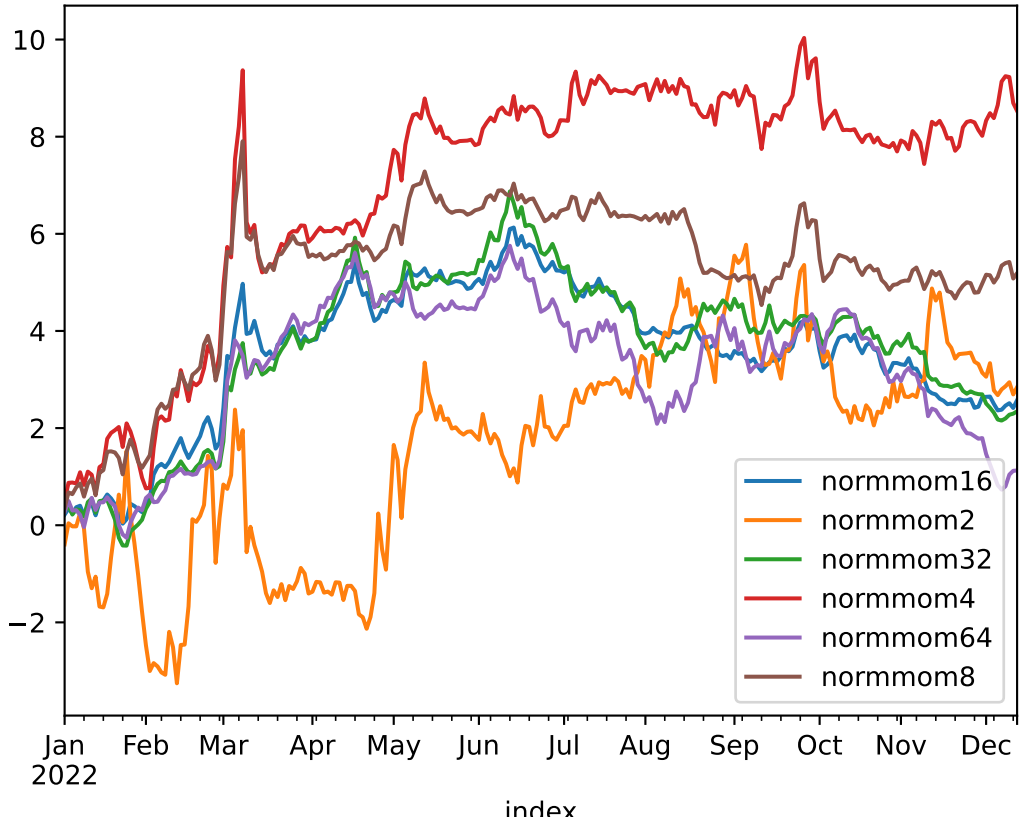


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.668, 'normmom2': 2.946, 'normmom32': 2.431, 'normmom4': 8.841, 'normmom64': 1.169, 'normmom8': 5.379}

ann. std {'normmom16': 3.167, 'normmom2': 8.184, 'normmom32': 3.233, 'normmom4': 6.081, 'normmom64': 3.496, 'normmom8': 4.328}

ann. SR {'normmom16': 0.84, 'normmom2': 0.36, 'normmom32': 0.75, 'normmom4': 1.45, 'normmom64': 0.33, 'normmom8': 1.24}

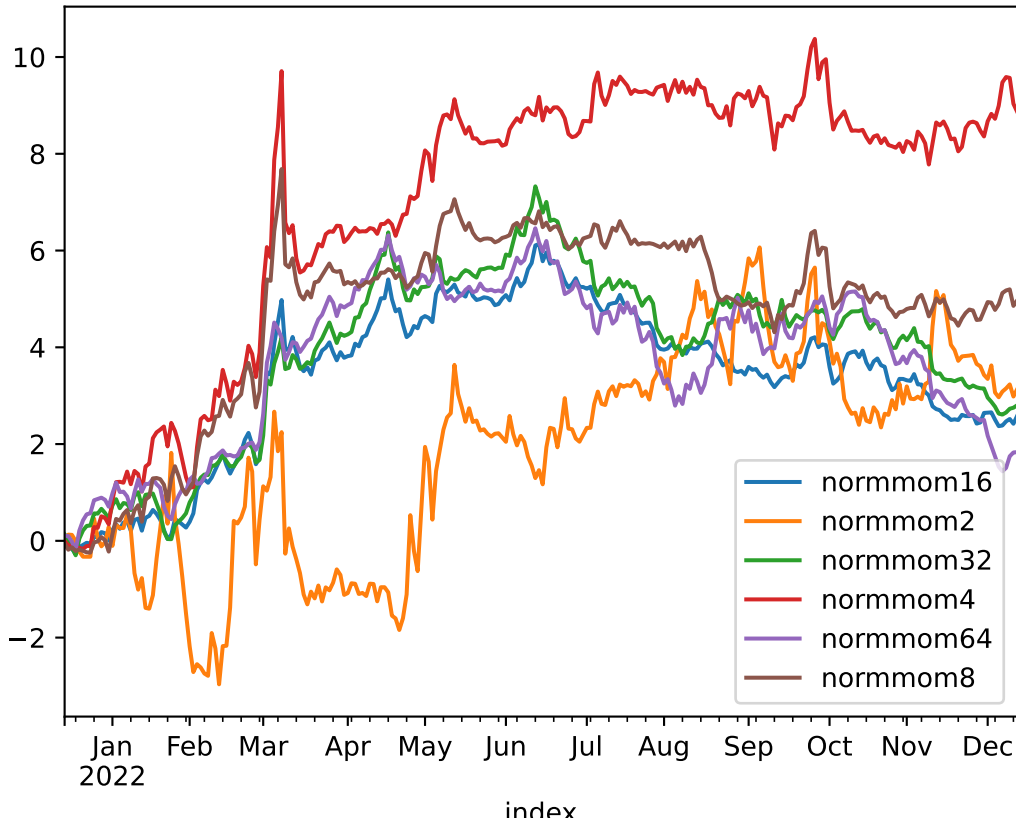


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.541, 'normmom2': 3.083, 'normmom32': 2.757, 'normmom4': 8.735, 'normmom64': 1.805, 'normmom8': 4.89}

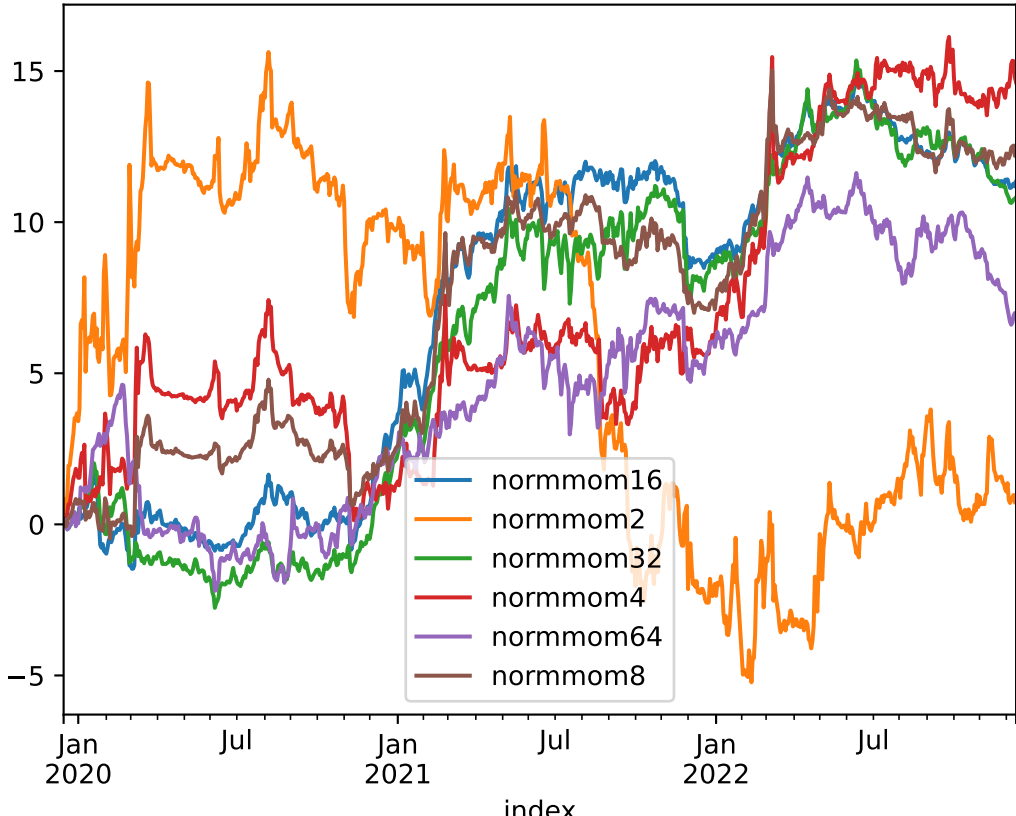
ann. std {'normmom16': 3.103, 'normmom2': 8.039, 'normmom32': 3.201, 'normmom4': 5.946, 'normmom64': 3.46, 'normmom8': 4.236}

ann. SR {'normmom16': 0.82, 'normmom2': 0.38, 'normmom32': 0.86, 'normmom4': 1.47, 'normmom64': 0.52, 'normmom8': 1.15}



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

ann. mean {'normmom16': 3.712, 'normmom2': 0.285, 'normmom32': 3.544, 'normmom4': 4.788, 'normmom64': 2.292, 'normmom8': 4.028}  
ann. std {'normmom16': 3.704, 'normmom2': 8.89, 'normmom32': 4.05, 'normmom4': 5.944, 'normmom64': 4.346, 'normmom8': 4.247}  
ann. SR {'normmom16': 1.0, 'normmom2': 0.03, 'normmom32': 0.87, 'normmom4': 0.81, 'normmom64': 0.53, 'normmom8': 0.95}

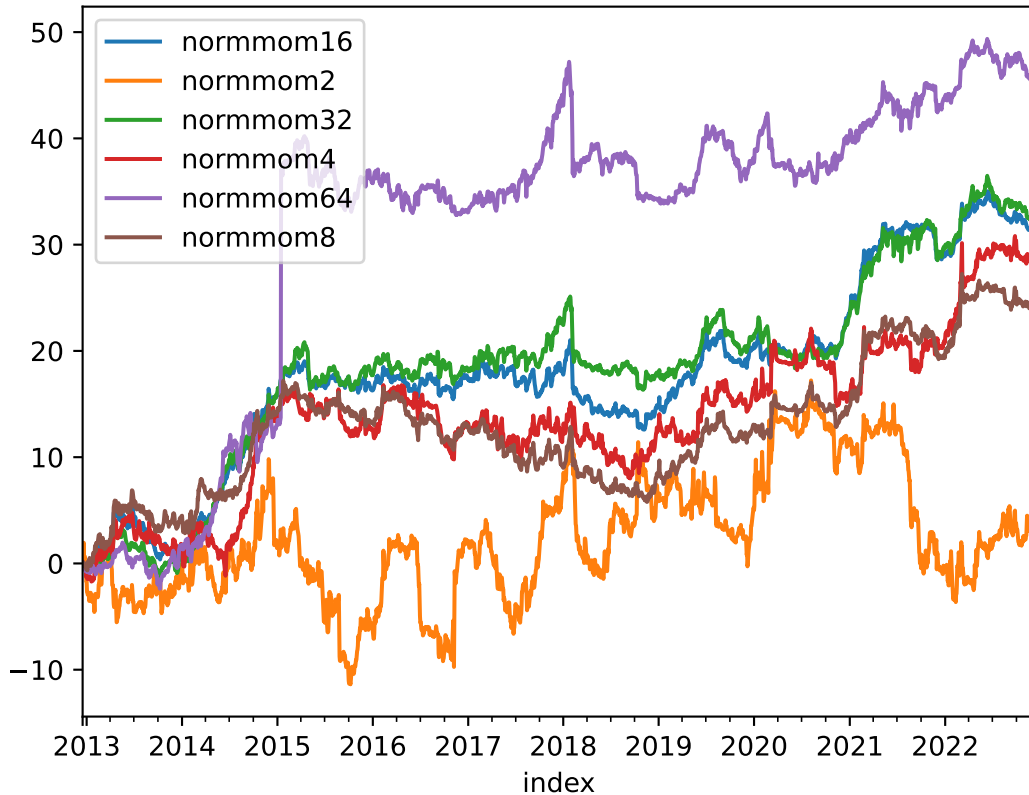


# Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.09, 'normmom2': 0.242, 'normmom32': 3.137, 'normmom4': 2.878, 'normmom64': 4.393, 'normmom8': 2.409}

ann. std {'normmom16': 3.58, 'normmom2': 9.1, 'normmom32': 3.733, 'normmom4': 5.498, 'normmom64': 8.564, 'normmom8': 4.055}

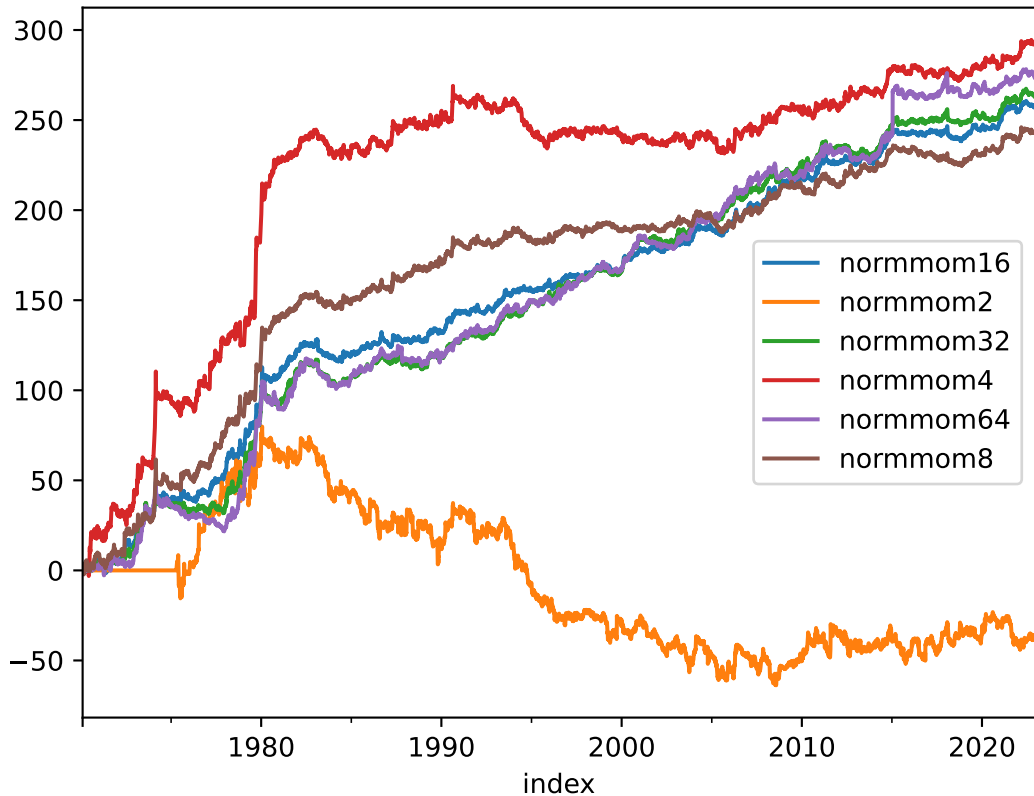
ann. SR {'normmom16': 0.86, 'normmom2': 0.03, 'normmom32': 0.84, 'normmom4': 0.52, 'normmom64': 0.51, 'normmom8': 0.59}





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

ann. mean {'normmom16': 4.773, 'normmom2': -0.704, 'normmom32': 4.88, 'normmom4': 5.439, 'normmom64': 5.08, 'normmom8': 4.516}  
ann. std {'normmom16': 4.926, 'normmom2': 11.205, 'normmom32': 4.995, 'normmom4': 8.327, 'normmom64': 6.314, 'normmom8': 5.935}  
ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.8, 'normmom8': 0.76}

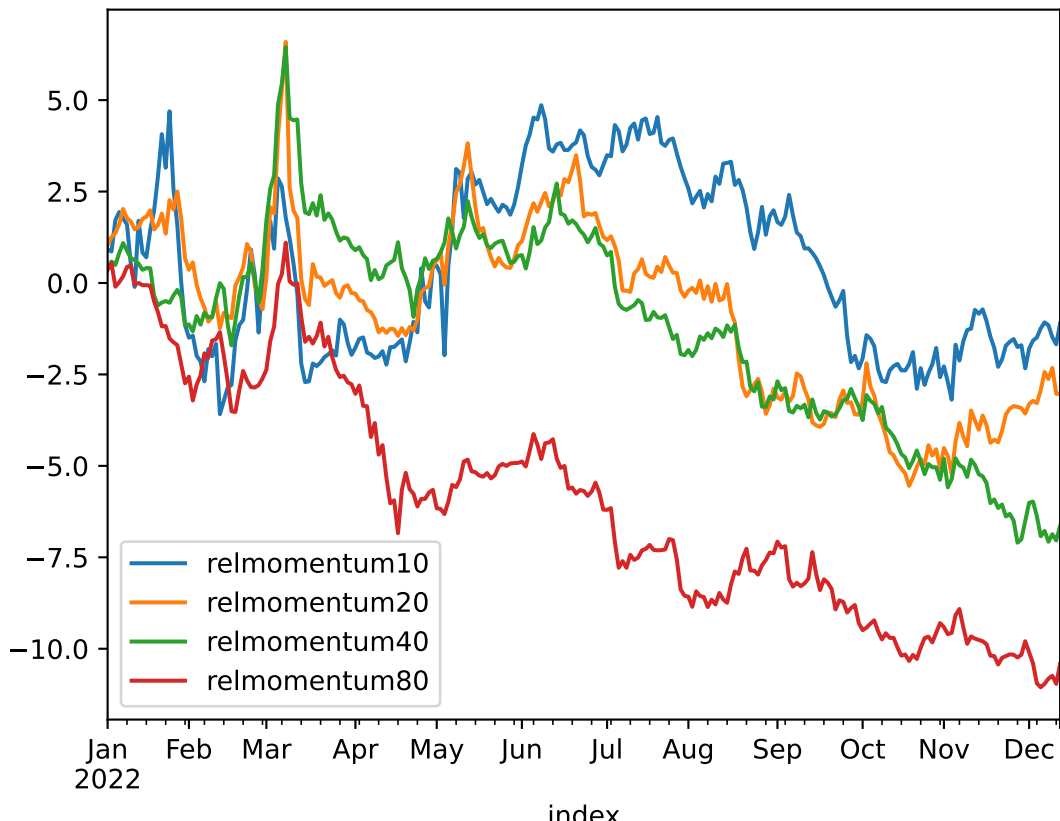


# Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.146, 'relmomentum20': -3.143, 'relmomentum40': -6.89, 'relmomentum80': -10.793}

ann. std {'relmomentum10': 10.175, 'relmomentum20': 8.546, 'relmomentum40': 6.685, 'relmomentum80': 5.727}

ann. SR {'relmomentum10': -0.11, 'relmomentum20': -0.37, 'relmomentum40': -1.03, 'relmomentum80': -1.88}

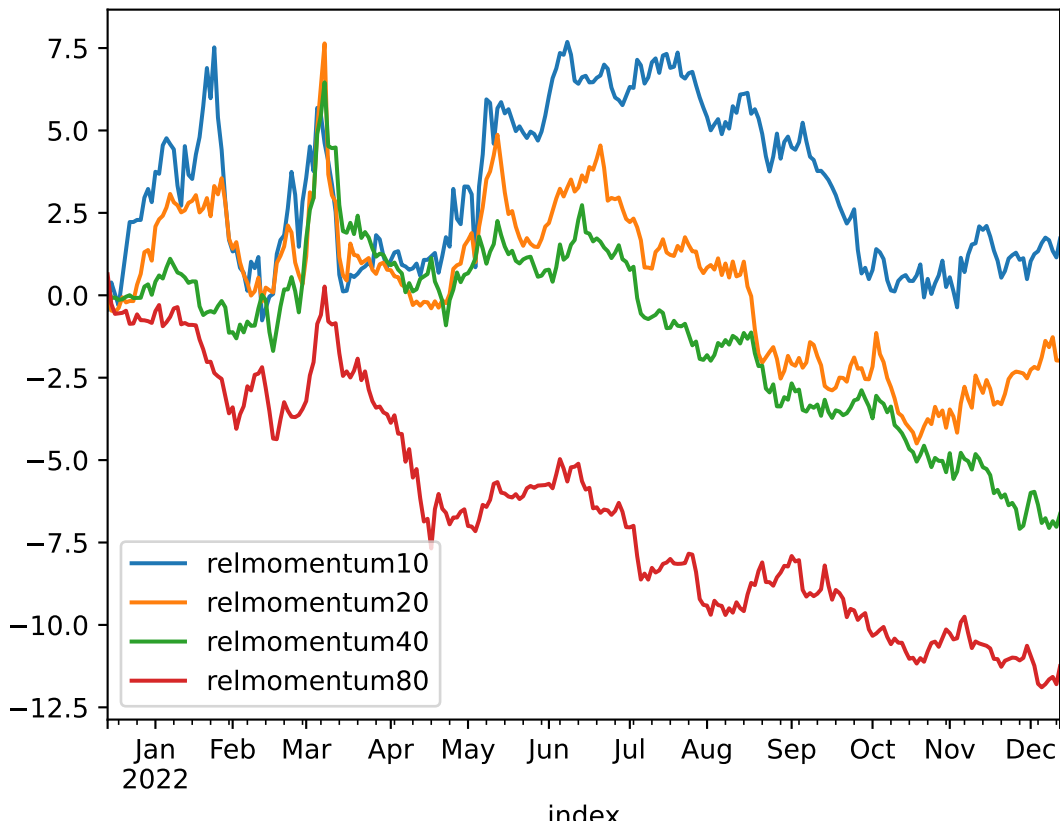


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.694, 'relmomentum20': -1.951, 'relmomentum40': -6.531, 'relmomentum80': -11.079}

ann. std {'relmomentum10': 10.112, 'relmomentum20': 8.41, 'relmomentum40': 6.558, 'relmomentum80': 5.715}

ann. SR {'relmomentum10': 0.17, 'relmomentum20': -0.23, 'relmomentum40': -1.0, 'relmomentum80': -1.94}

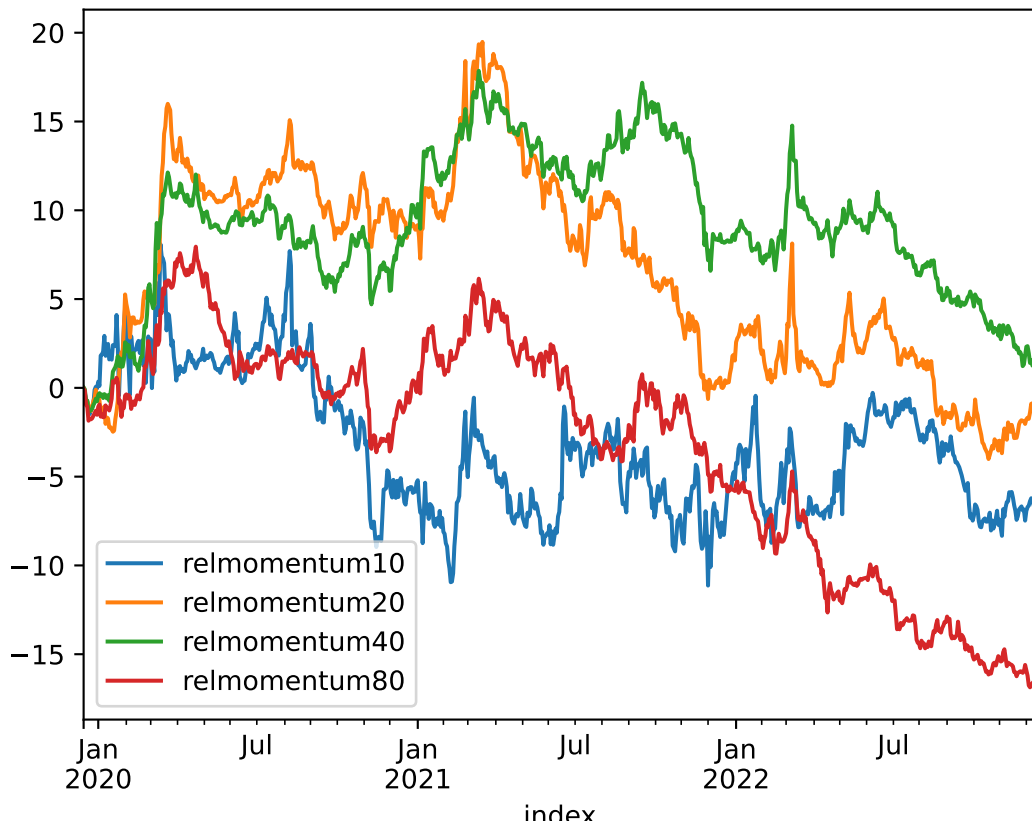


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.045, 'relmomentum20': -0.489, 'relmomentum40': 0.549, 'relmomentum80': -5.311}

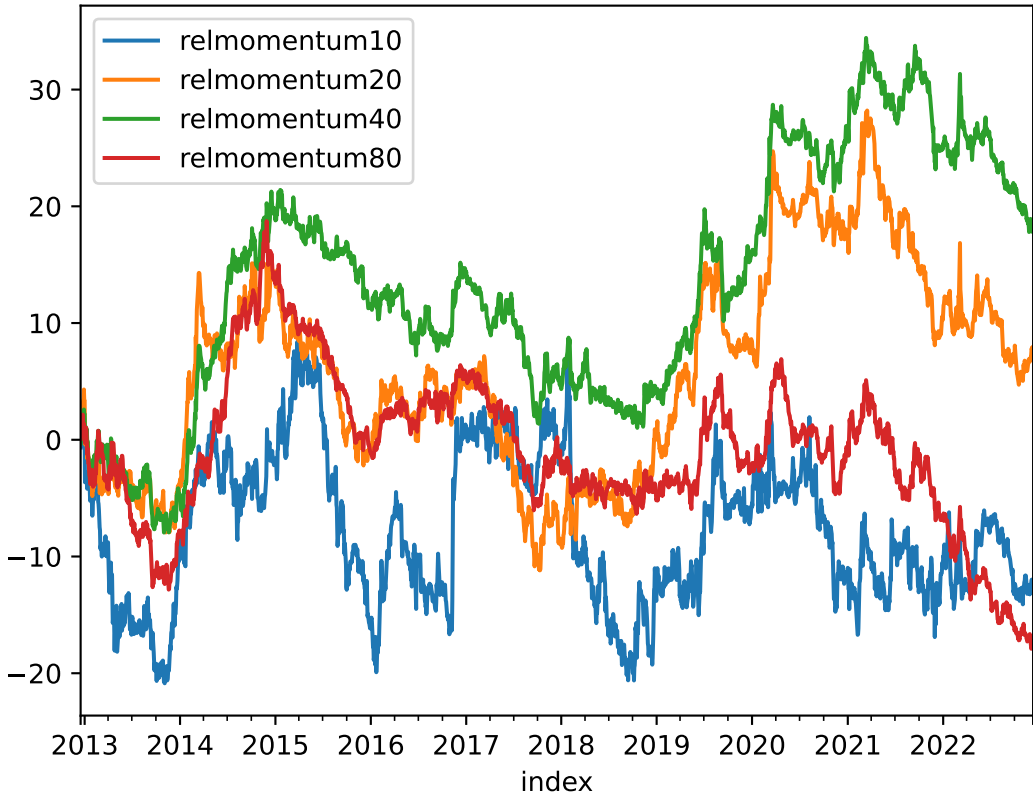
ann. std {'relmomentum10': 12.731, 'relmomentum20': 9.044, 'relmomentum40': 7.445, 'relmomentum80': 6.958}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -0.05, 'relmomentum40': 0.07, 'relmomentum80': -0.76}



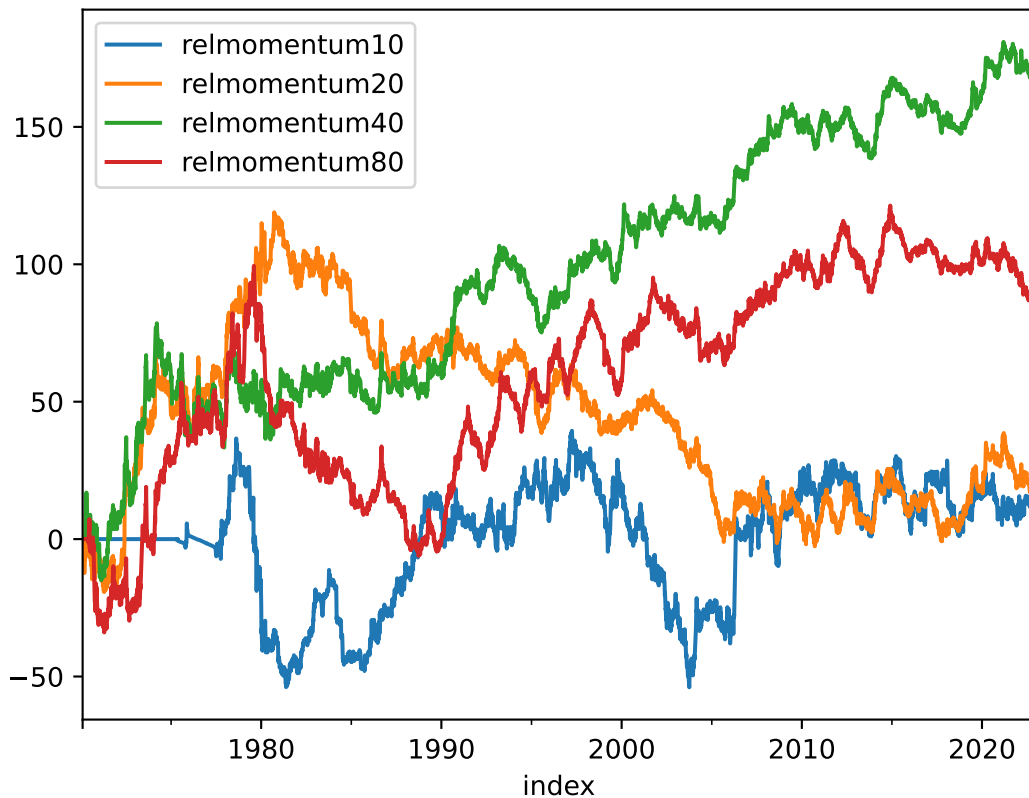
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.18, 'relmomentum20': 0.71, 'relmomentum40': 1.792, 'relmomentum80': -1.695}  
ann. std {'relmomentum10': 12.987, 'relmomentum20': 9.041, 'relmomentum40': 7.373, 'relmomentum80': 6.838}  
ann. SR {'relmomentum10': -0.09, 'relmomentum20': 0.08, 'relmomentum40': 0.24, 'relmomentum80': -0.25}



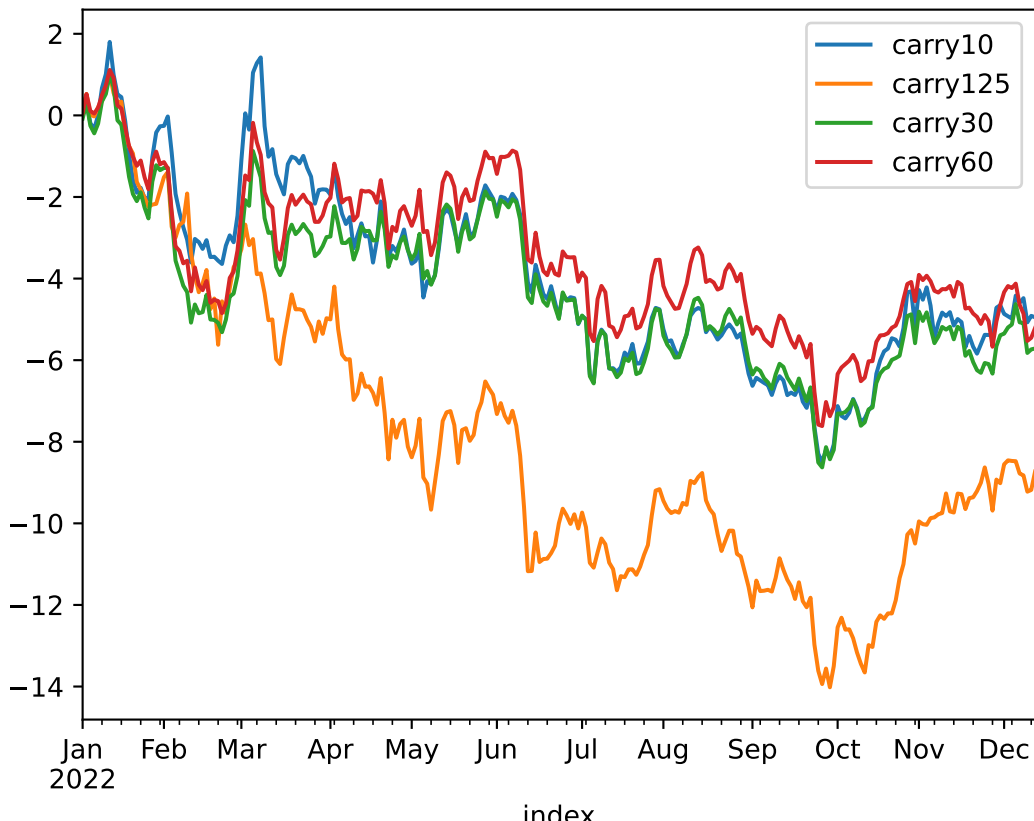
Total Trading Rule P&L for period '99Y'

ann. mean {'relmomentum10': 0.182, 'relmomentum20': 0.327, 'relmomentum40': 3.058, 'relmomentum80': 1.585}  
ann. std {'relmomentum10': 13.329, 'relmomentum20': 11.529, 'relmomentum40': 10.798, 'relmomentum80': 11.067}  
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}

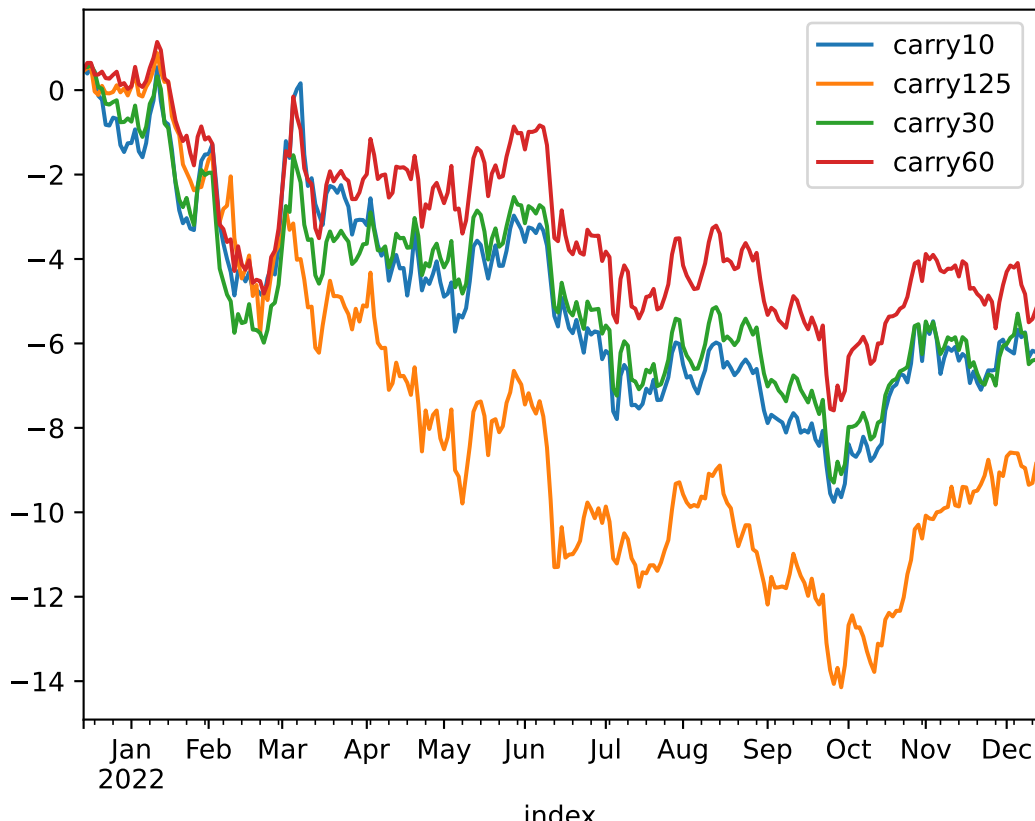


Total Trading Rule P&L for period 'YTD'

ann. mean	{'carry10': -5.13, 'carry125': -9.049, 'carry30': -5.922, 'carry60': -5.401}
ann. std	{'carry10': 7.207, 'carry125': 7.574, 'carry30': 6.794, 'carry60': 6.81}
ann. SR	{'carry10': -0.71, 'carry125': -1.19, 'carry30': -0.87, 'carry60': -0.79}

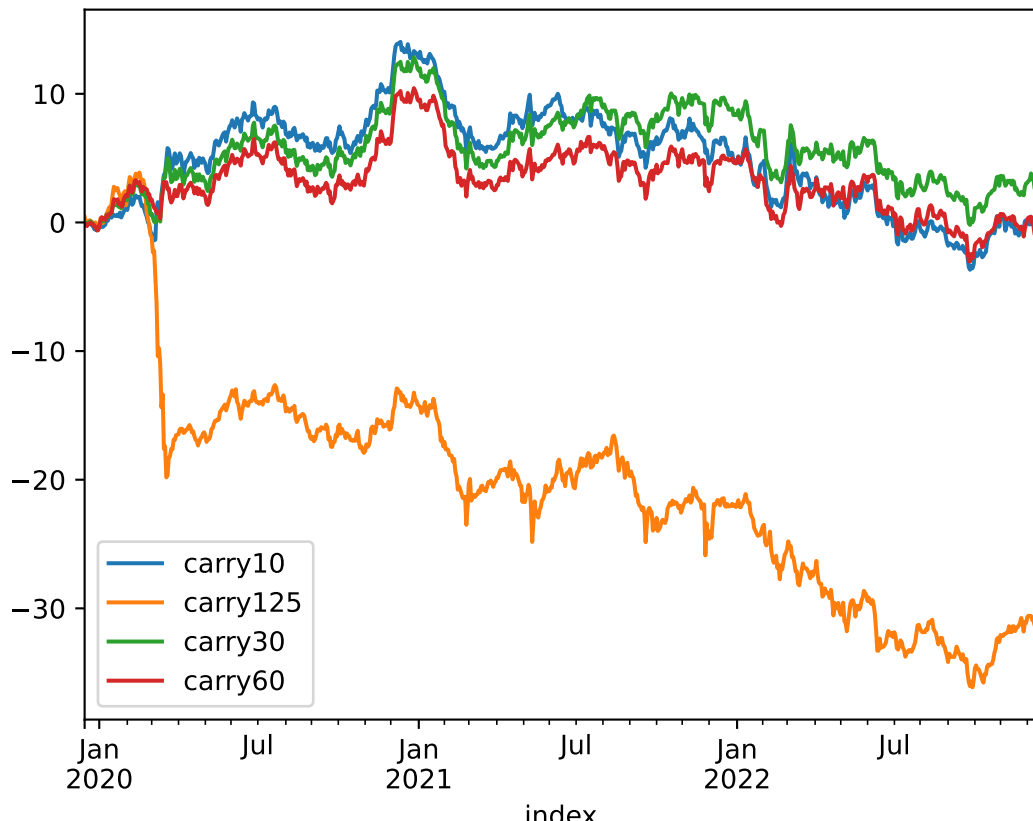


Total Trading Rule P&L for period '1Y'  
ann. mean {'carry10': -6.112, 'carry125': -8.721, 'carry30': -6.284, 'carry60': -5.103}  
ann. std {'carry10': 7.124, 'carry125': 7.43, 'carry30': 6.685, 'carry60': 6.675}  
ann. SR {'carry10': -0.86, 'carry125': -1.17, 'carry30': -0.94, 'carry60': -0.76}

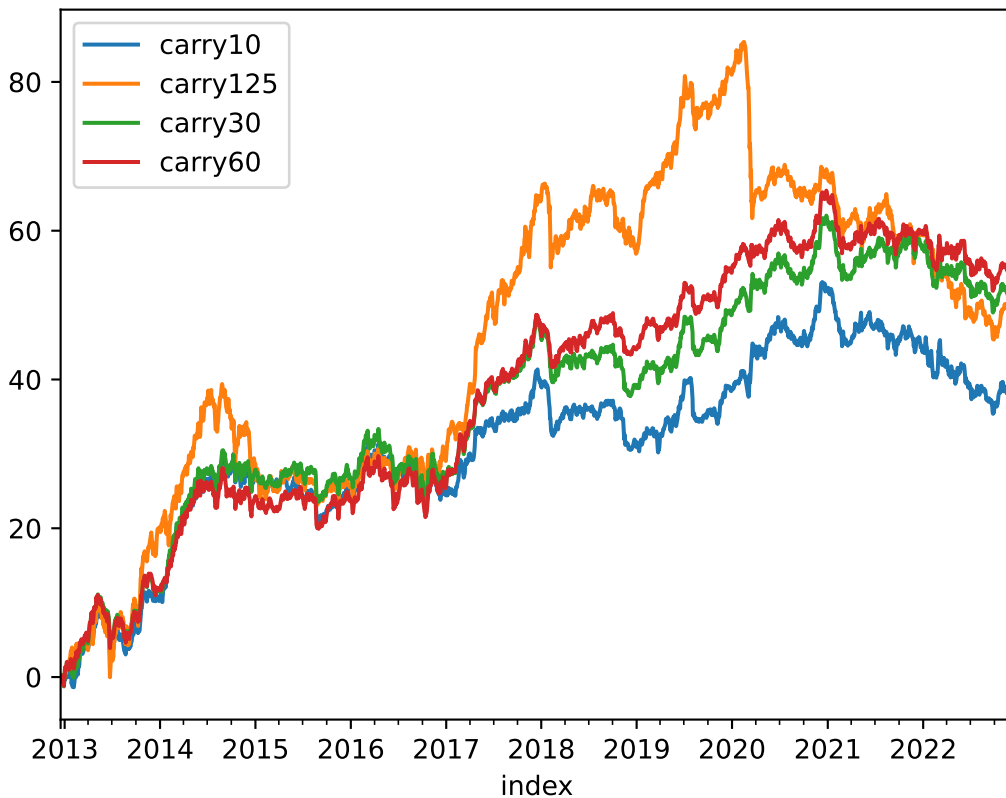




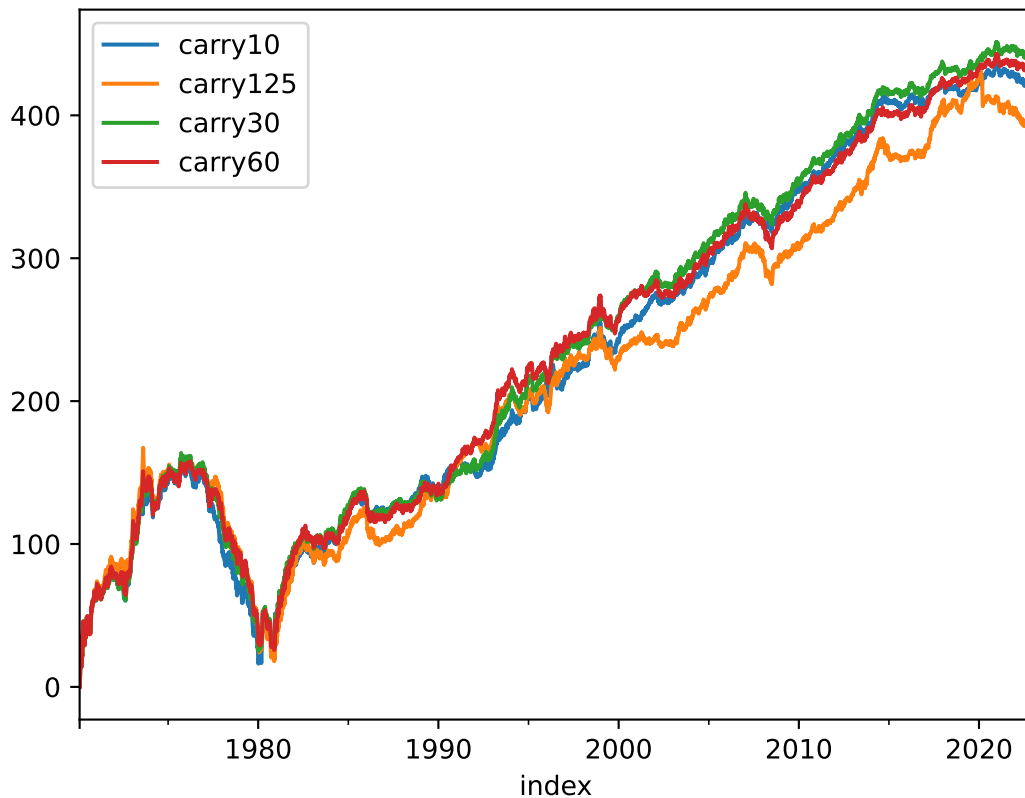
Total Trading Rule P&L for period '3Y'  
ann. mean {'carry10': -0.043, 'carry125': -10.099, 'carry30': 0.891, 'carry60': -0.207}  
ann. std {'carry10': 6.805, 'carry125': 9.387, 'carry30': 6.585, 'carry60': 6.524}  
ann. SR {'carry10': -0.01, 'carry125': -1.08, 'carry30': 0.14, 'carry60': -0.03}



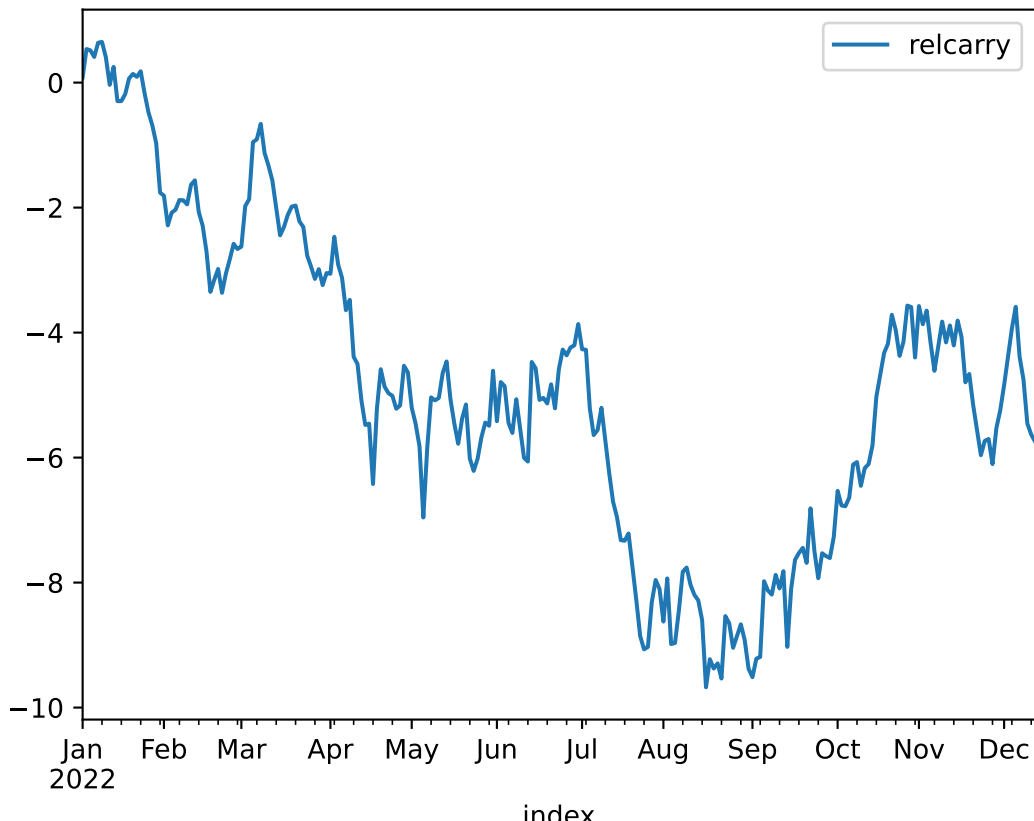
Total Trading Rule P&L for period '10Y'  
ann. mean {'carry10': 3.823, 'carry125': 4.974, 'carry30': 5.098, 'carry60': 5.334}  
ann. std {'carry10': 6.461, 'carry125': 9.13, 'carry30': 6.572, 'carry60': 6.538}  
ann. SR {'carry10': 0.59, 'carry125': 0.54, 'carry30': 0.78, 'carry60': 0.82}



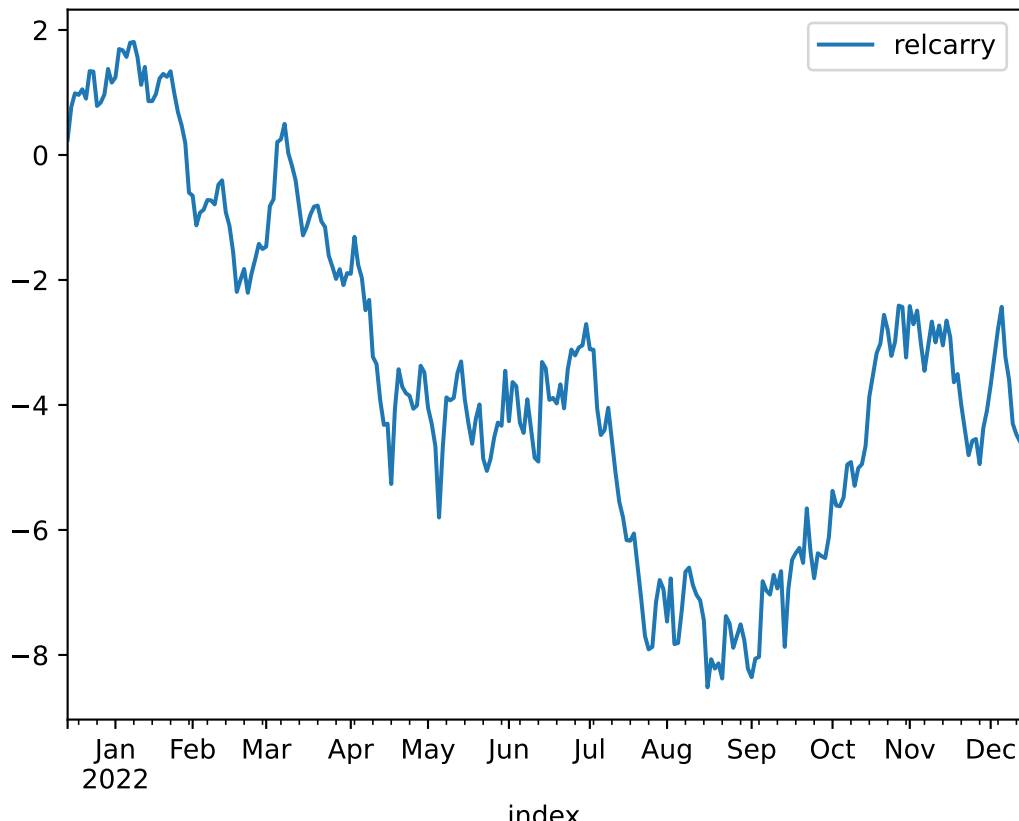
Total Trading Rule P&L for period '99Y'  
ann. mean {'carry10': 7.839, 'carry125': 7.339, 'carry30': 8.191, 'carry60': 8.016}  
ann. std {'carry10': 11.864, 'carry125': 12.103, 'carry30': 11.875, 'carry60': 11.826}  
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



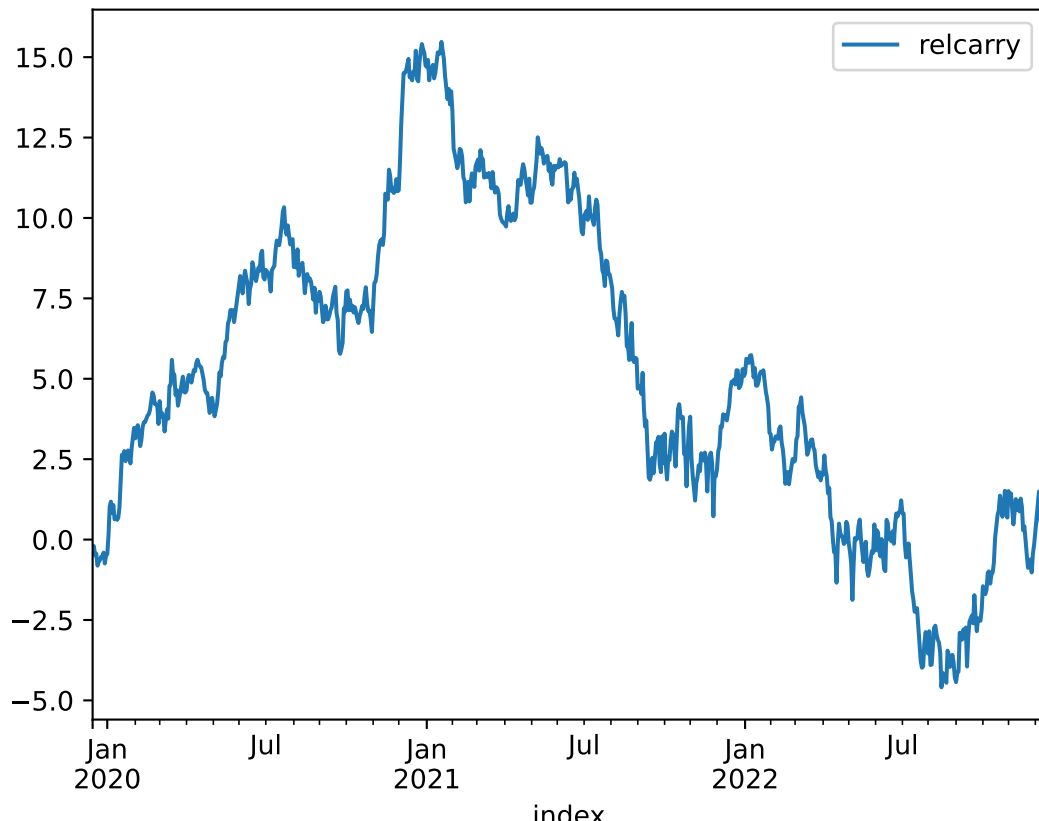
Total Trading Rule P&L for period 'YTD'  
ann. mean {'relcarry': -5.955}  
ann. std {'relcarry': 7.159}  
ann. SR {'relcarry': -0.83}



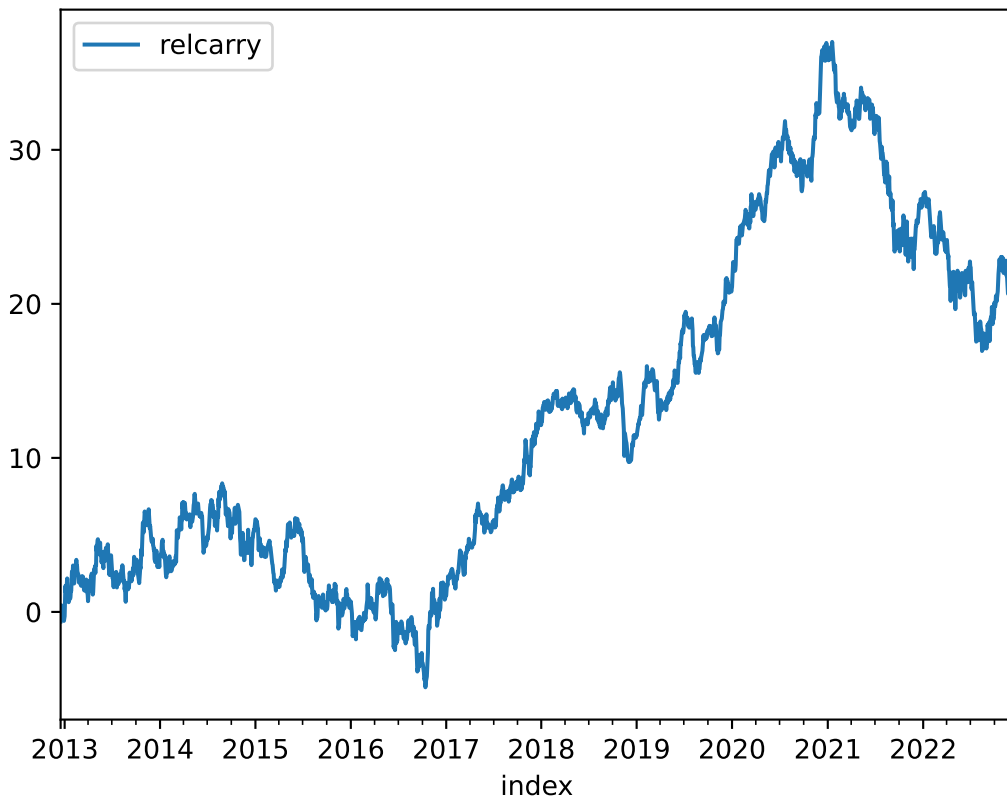
Total Trading Rule P&L for period '1Y'  
ann. mean {'relcarry': -4.517}  
ann. std {'relcarry': 7.062}  
ann. SR {'relcarry': -0.64}



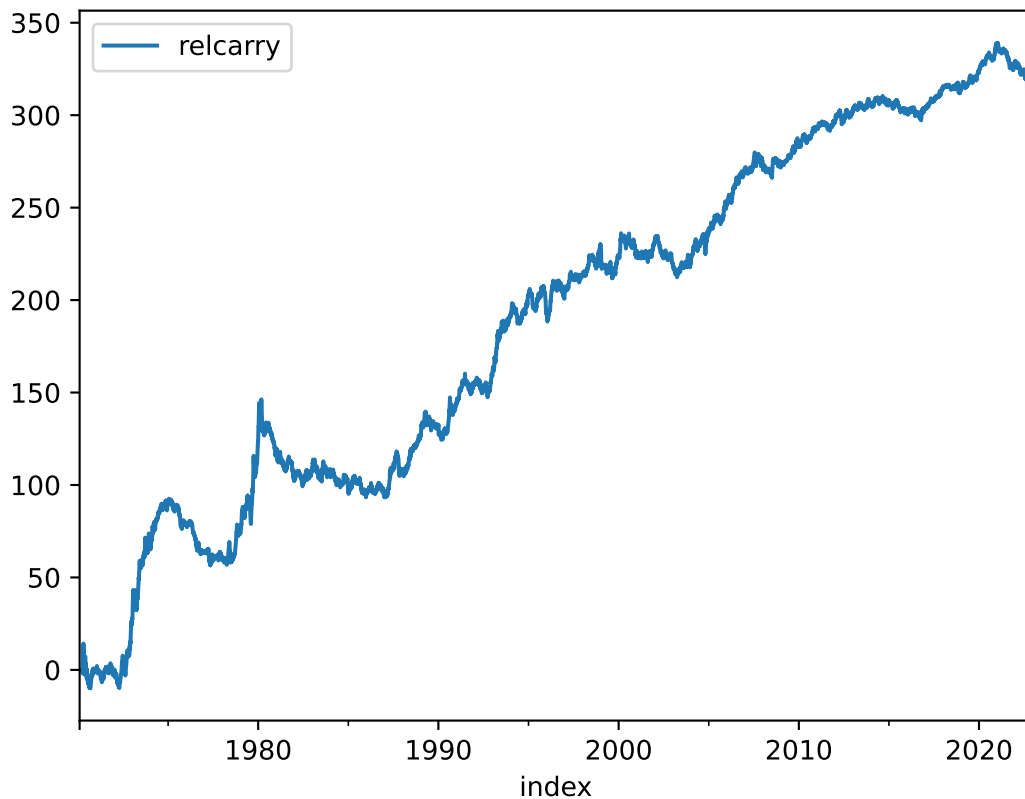
Total Trading Rule P&L for period '3Y'  
ann. mean {'relcarry': -0.217}  
ann. std {'relcarry': 6.817}  
ann. SR {'relcarry': -0.03}



Total Trading Rule P&L for period '10Y'  
ann. mean {'relcarry': 2.049}  
ann. std {'relcarry': 6.047}  
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'  
ann. mean {'relcarry': 5.995}  
ann. std {'relcarry': 9.56}  
ann. SR {'relcarry': 0.63}



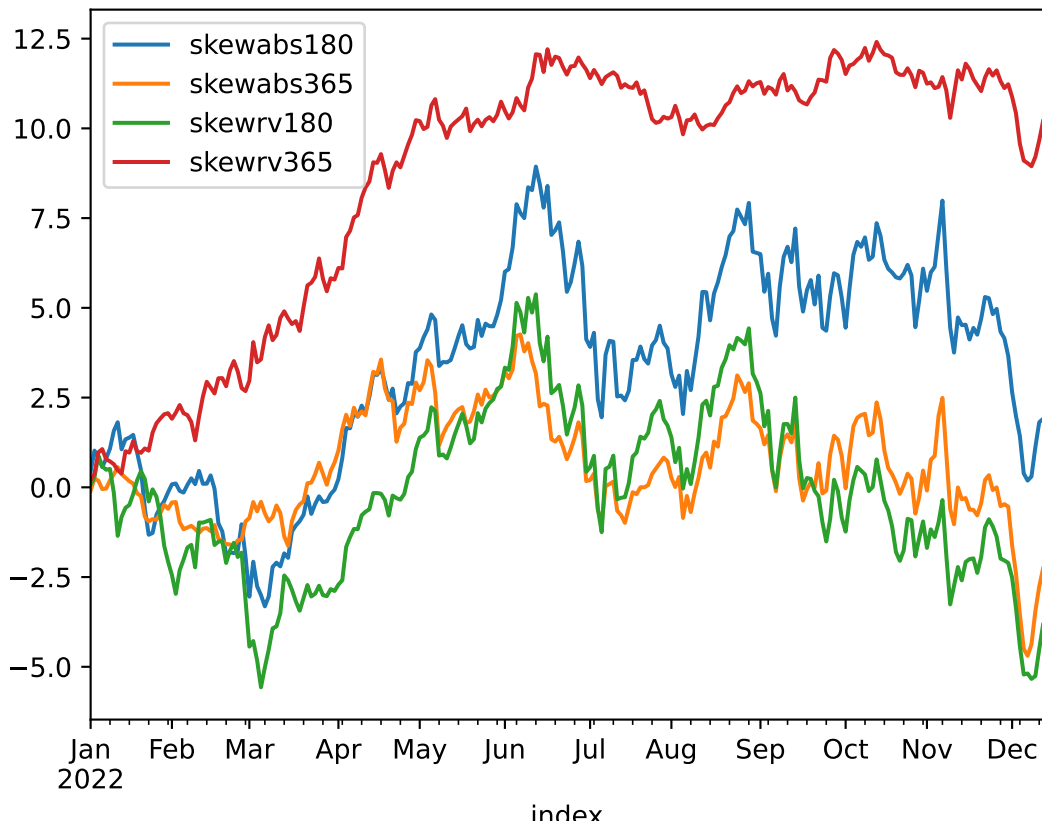


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': 1.977, 'skewabs365': -2.343, 'skewrv180': -3.968, 'skewrv365': 10.572}

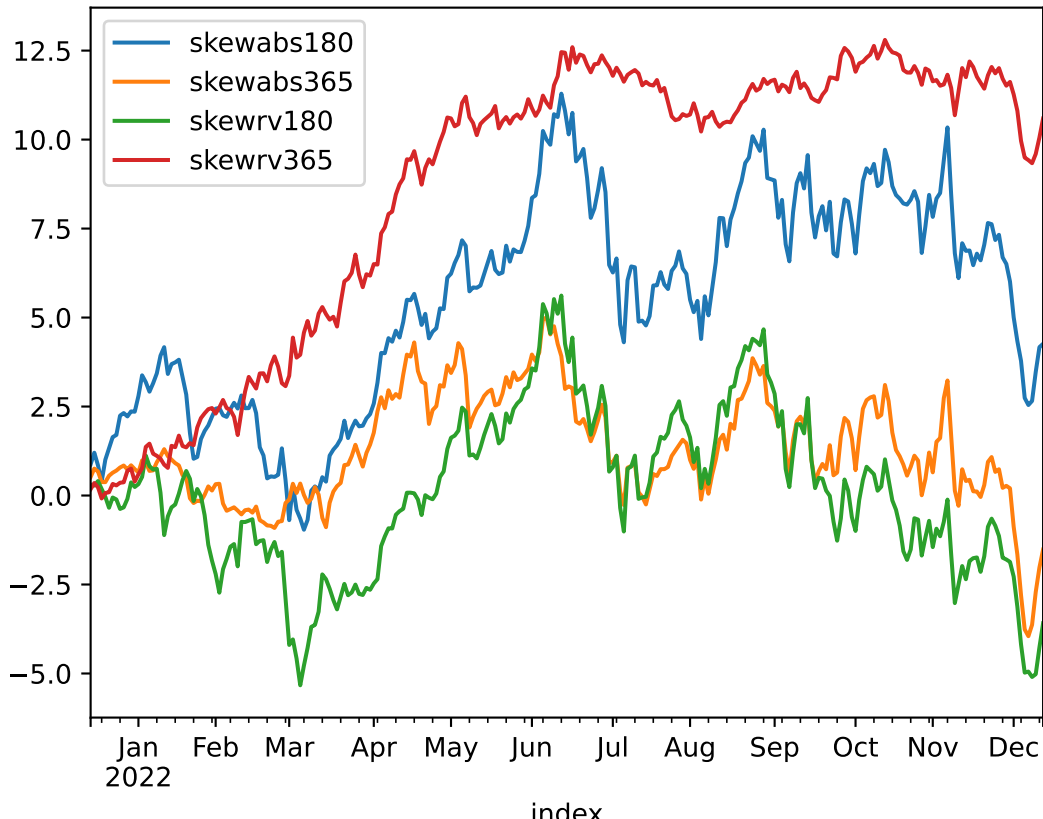
ann. std {'skewabs180': 10.021, 'skewabs365': 7.91, 'skewrv180': 9.399, 'skewrv365': 4.977}

ann. SR {'skewabs180': 0.2, 'skewabs365': -0.3, 'skewrv180': -0.42, 'skewrv365': 2.12}



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

ann. mean {'skewabs180': 4.197, 'skewabs365': -1.496, 'skewrv180': -3.534, 'skewrv365': 10.428}  
ann. std {'skewabs180': 9.87, 'skewabs365': 7.743, 'skewrv180': 9.201, 'skewrv365': 4.9}  
ann. SR {'skewabs180': 0.43, 'skewabs365': -0.19, 'skewrv180': -0.38, 'skewrv365': 2.13}

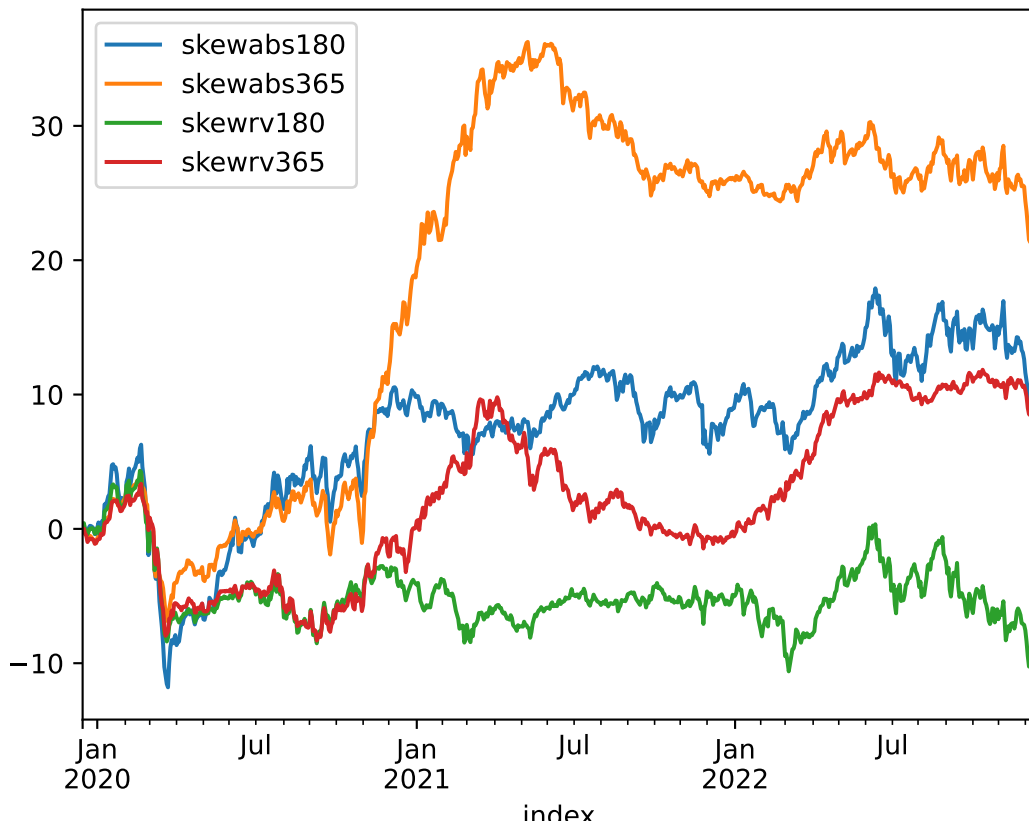


Total Trading Rule P&L for period '3Y'

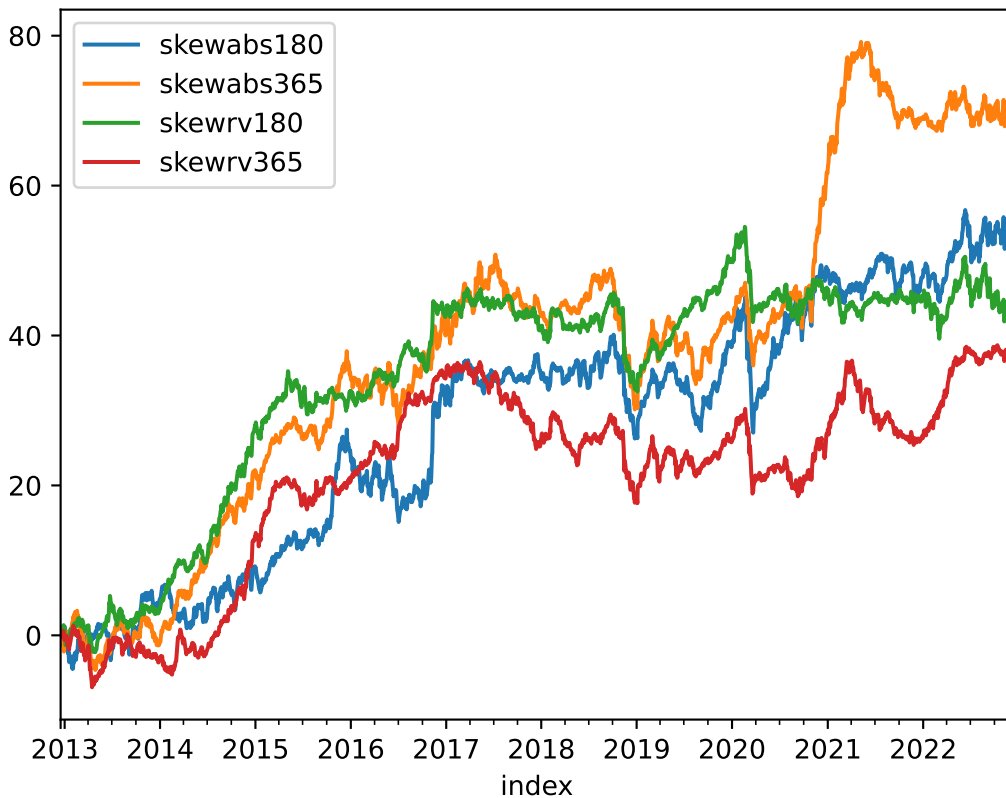
ann. mean {'skewabs180': 3.561, 'skewabs365': 7.78, 'skewrv180': -2.902, 'skewrv365': 3.154}

ann. std {'skewabs180': 9.601, 'skewabs365': 8.754, 'skewrv180': 7.791, 'skewrv365': 6.58}

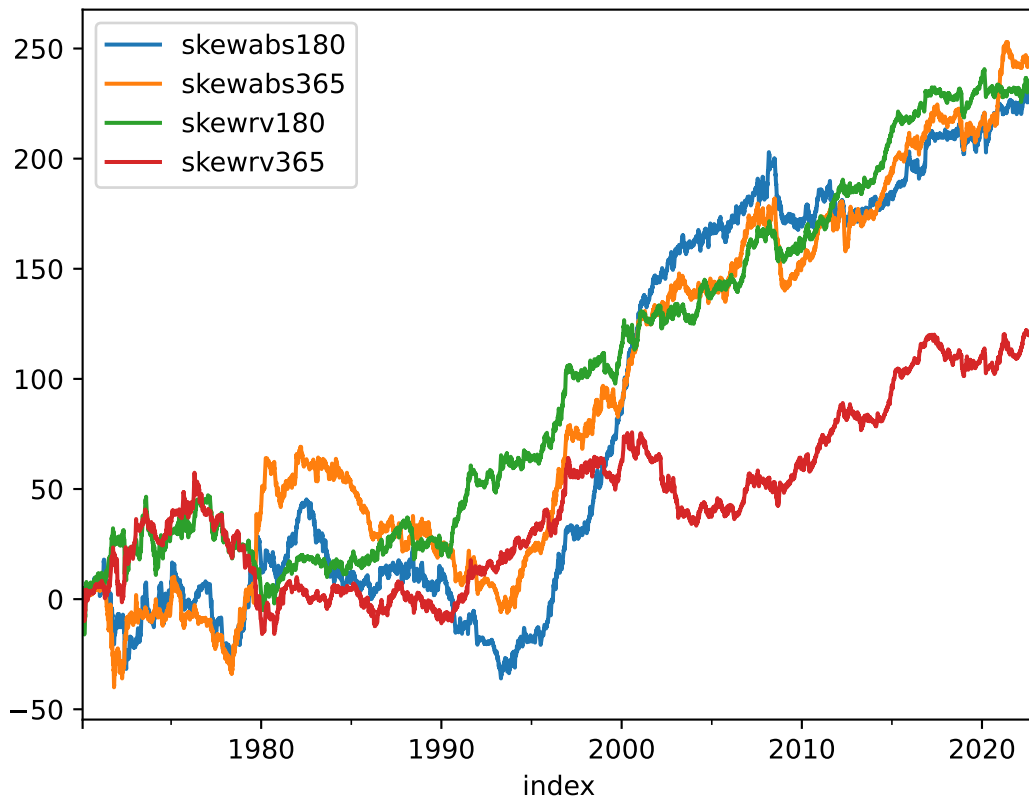
ann. SR {'skewabs180': 0.37, 'skewabs365': 0.89, 'skewrv180': -0.37, 'skewrv365': 0.48}



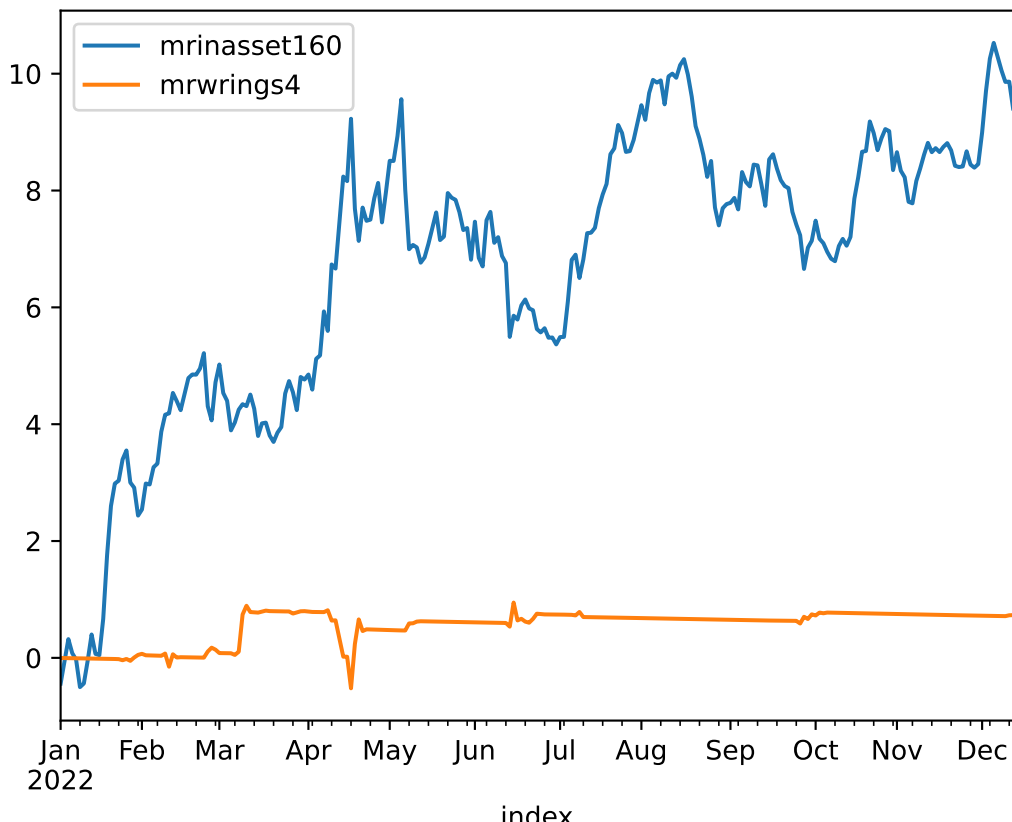
Total Trading Rule P&L for period '10Y'  
ann. mean {'skewabs180': 4.882, 'skewabs365': 6.548, 'skewrv180': 4.056, 'skewrv365': 3.584}  
ann. std {'skewabs180': 8.072, 'skewabs365': 8.002, 'skewrv180': 6.594, 'skewrv365': 6.174}  
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.82, 'skewrv180': 0.62, 'skewrv365': 0.58}



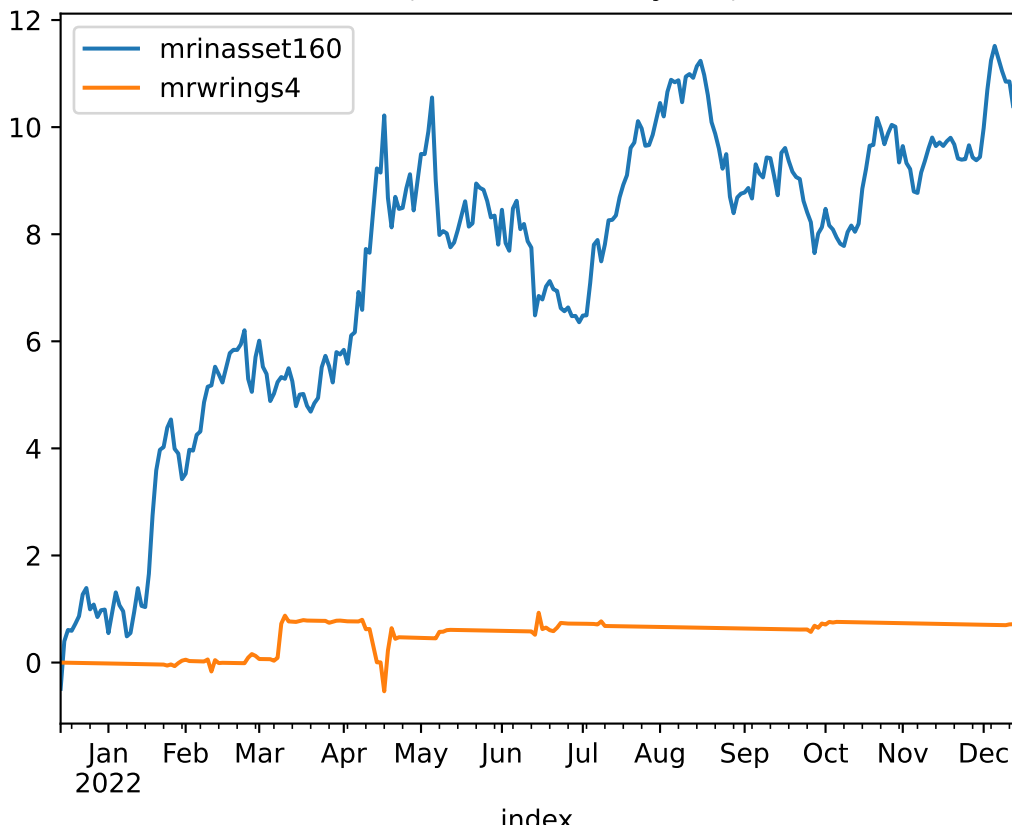
Total Trading Rule P&L for period '99Y'  
ann. mean {'skewabs180': 4.186, 'skewabs365': 4.465, 'skewrv180': 4.223, 'skewrv365': 2.23}  
ann. std {'skewabs180': 10.794, 'skewabs365': 10.3, 'skewrv180': 9.31, 'skewrv365': 8.605}  
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



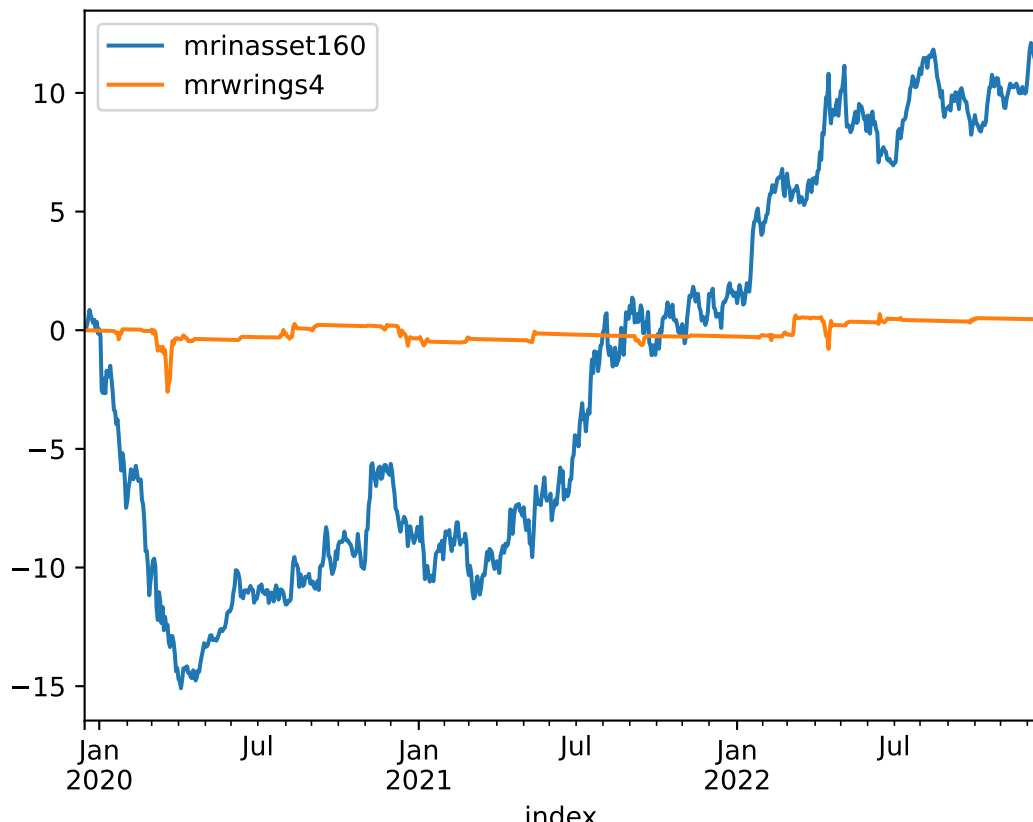
Total Trading Rule P&L for period 'YTD'  
ann. mean {'mrinasset160': 9.747, 'mrwrings4': 0.758}  
ann. std {'mrinasset160': 6.316, 'mrwrings4': 1.52}  
ann. SR {'mrinasset160': 1.54, 'mrwrings4': 0.5}



Total Trading Rule P&L for period '1Y'  
ann. mean {'mrinasset160': 10.235, 'mrwrings4': 0.705}  
ann. std {'mrinasset160': 6.273, 'mrwrings4': 1.481}  
ann. SR {'mrinasset160': 1.63, 'mrwrings4': 0.48}

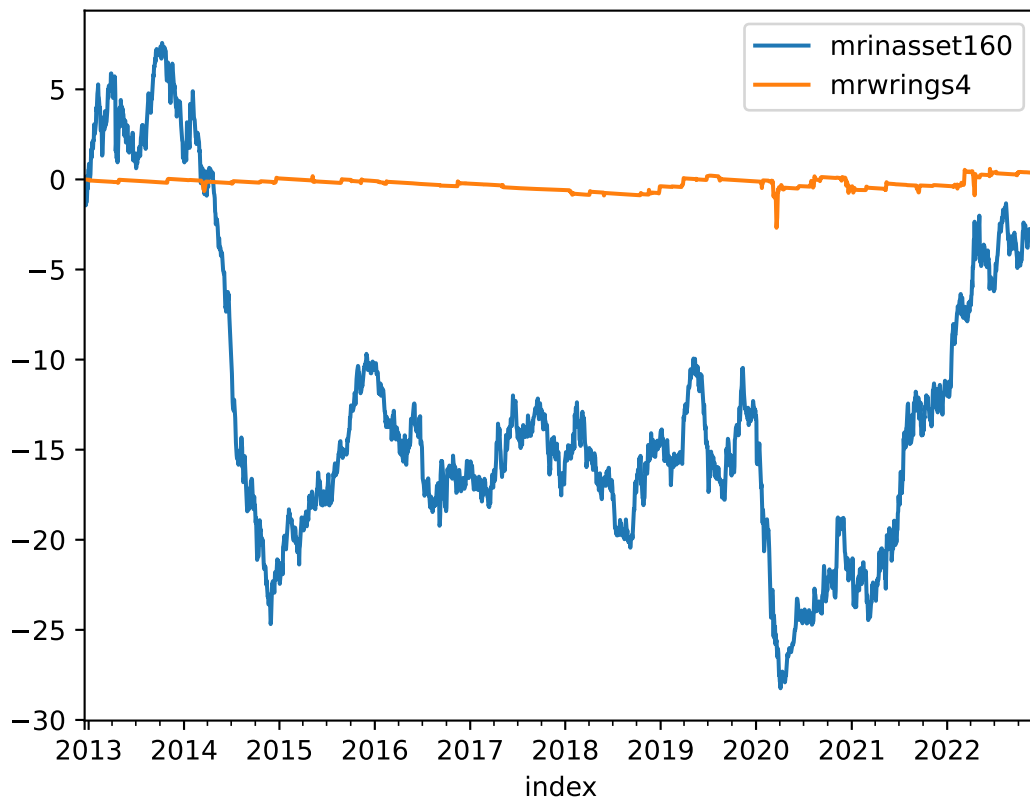


Total Trading Rule P&L for period '3Y'  
ann. mean {'mrinasset160': 3.596, 'mrwrings4': 0.152}  
ann. std {'mrinasset160': 7.085, 'mrwrings4': 1.536}  
ann. SR {'mrinasset160': 0.51, 'mrwrings4': 0.1}





Total Trading Rule P&L for period '10Y'  
ann. mean {'mrinasset160': -0.213, 'mrwrings4': 0.037}  
ann. std {'mrinasset160': 6.641, 'mrwrings4': 0.897}  
ann. SR {'mrinasset160': -0.03, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'  
ann. mean {'mrinasset160': -3.361, 'mrwrings4': -1.173}  
ann. std {'mrinasset160': 10.925, 'mrwrings4': 2.632}  
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

