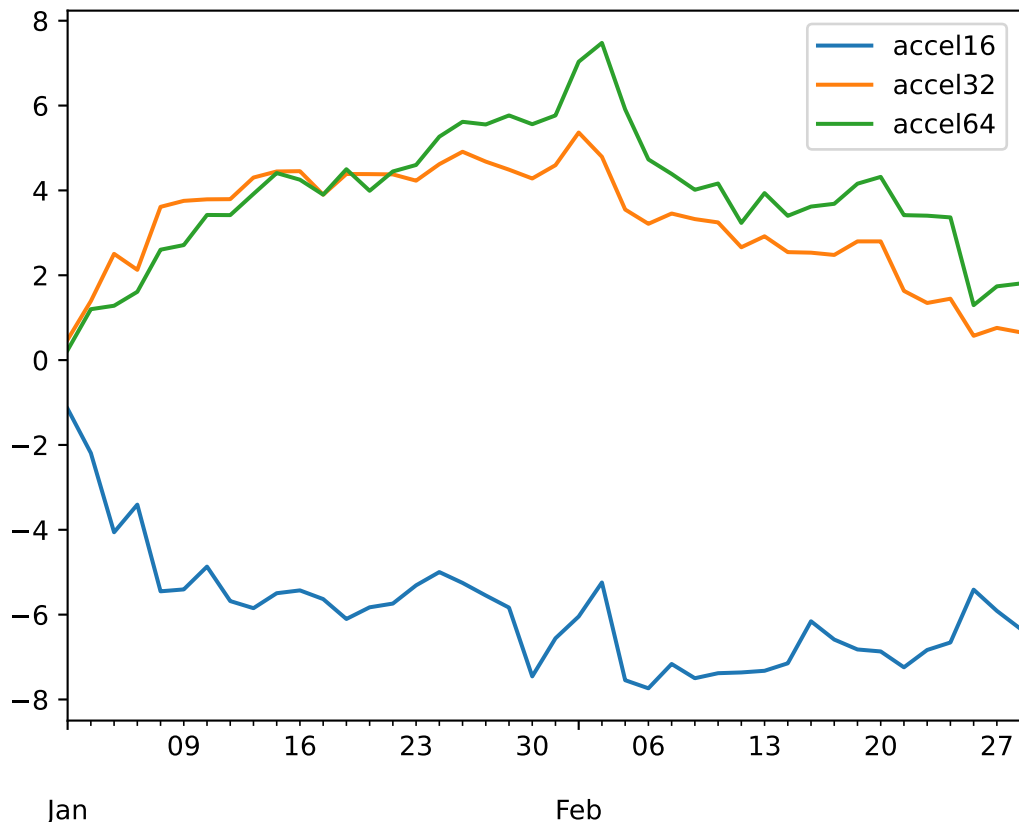
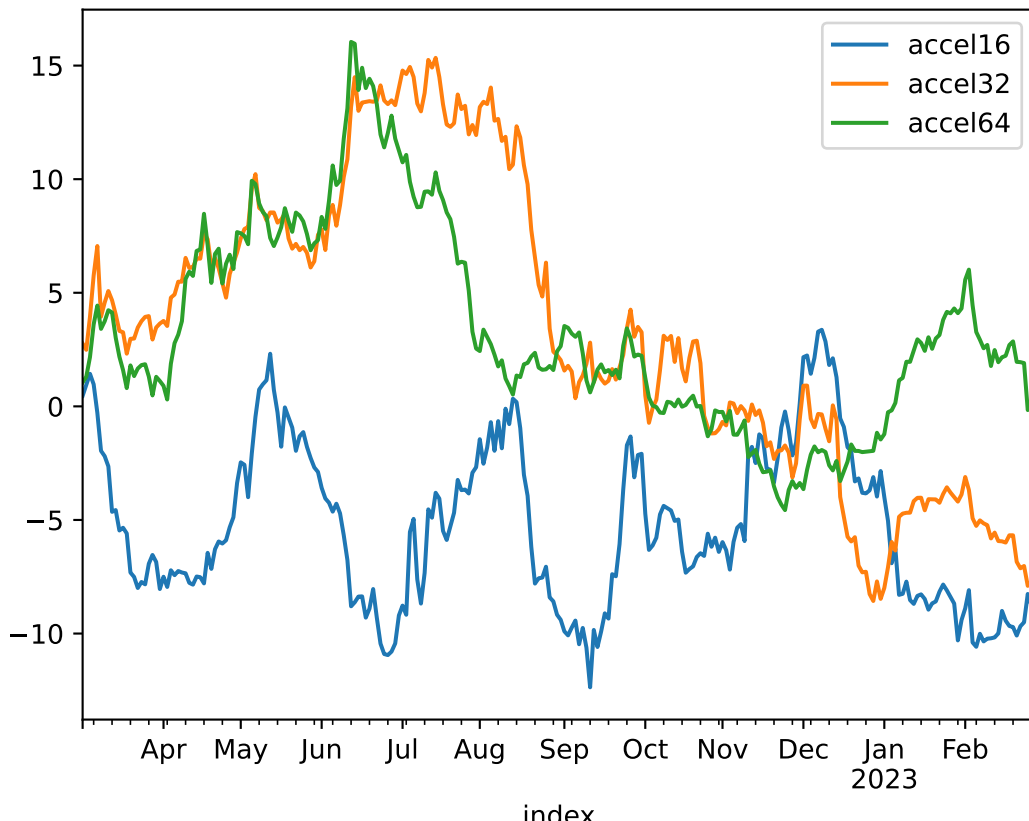


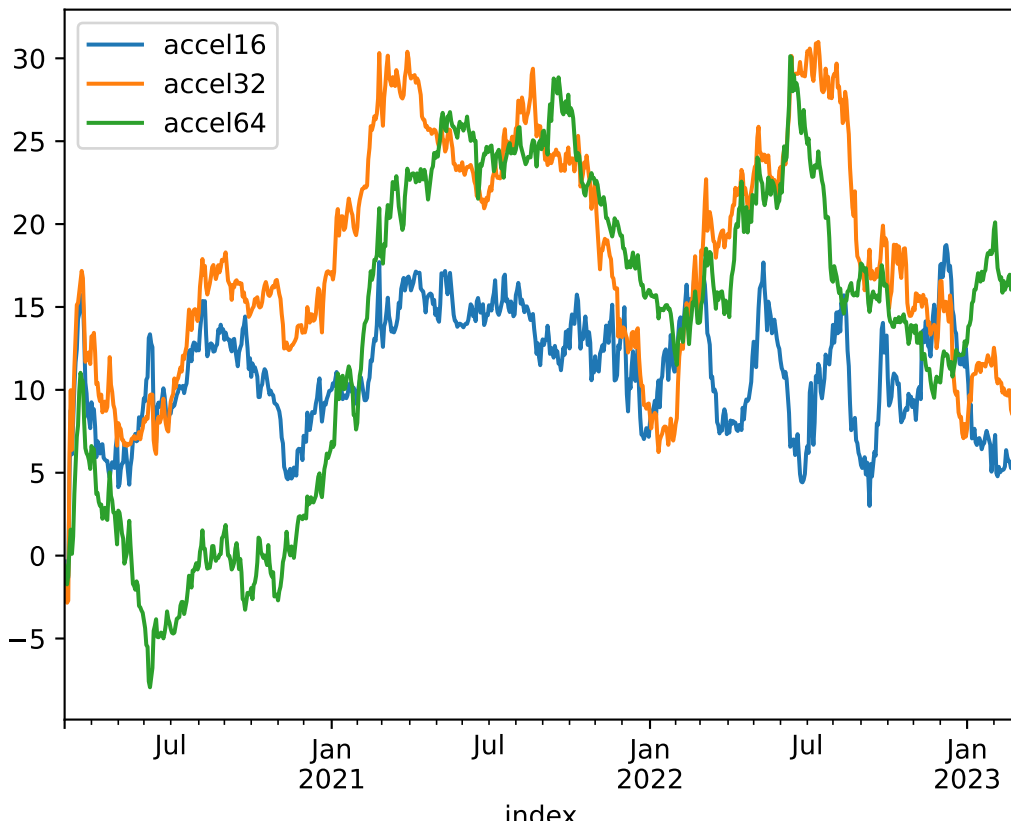
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -38.571, 'accel32': 4.005, 'accel64': 11.002}
ann. std {'accel16': 12.549, 'accel32': 8.492, 'accel64': 10.568}
ann. SR {'accel16': -3.07, 'accel32': 0.47, 'accel64': 1.04}



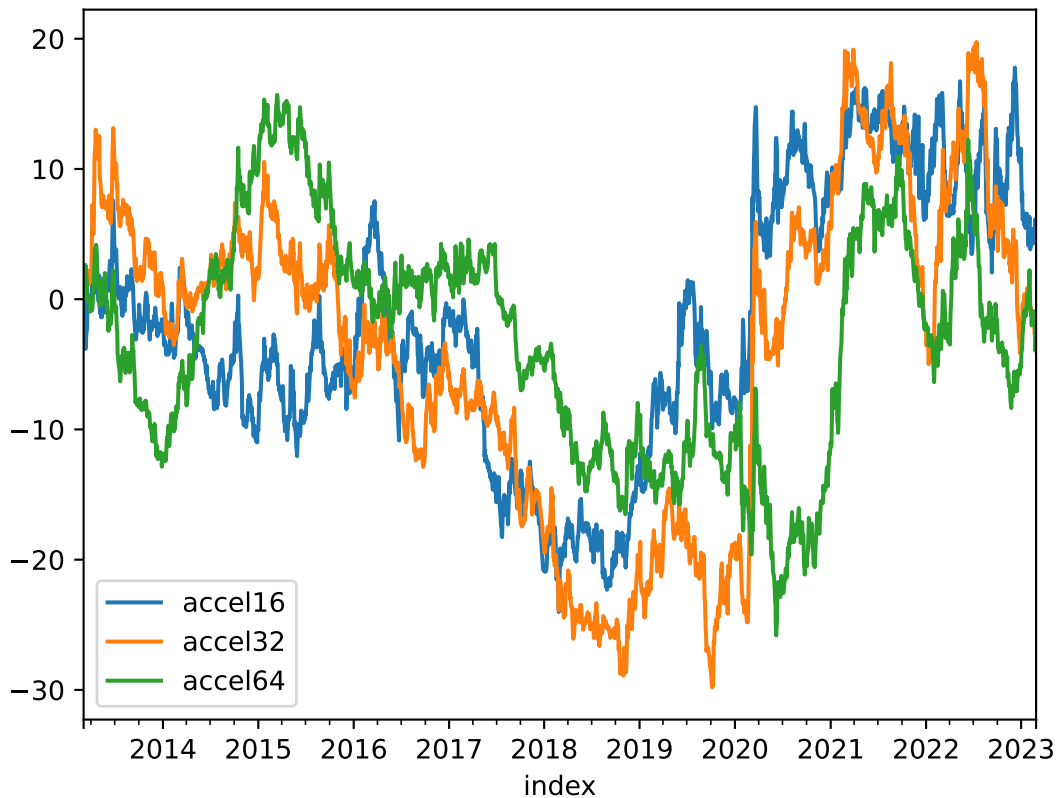
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -9.033, 'accel32': -7.696, 'accel64': 0.342}
ann. std {'accel16': 15.903, 'accel32': 13.906, 'accel64': 11.73}
ann. SR {'accel16': -0.57, 'accel32': -0.55, 'accel64': 0.03}



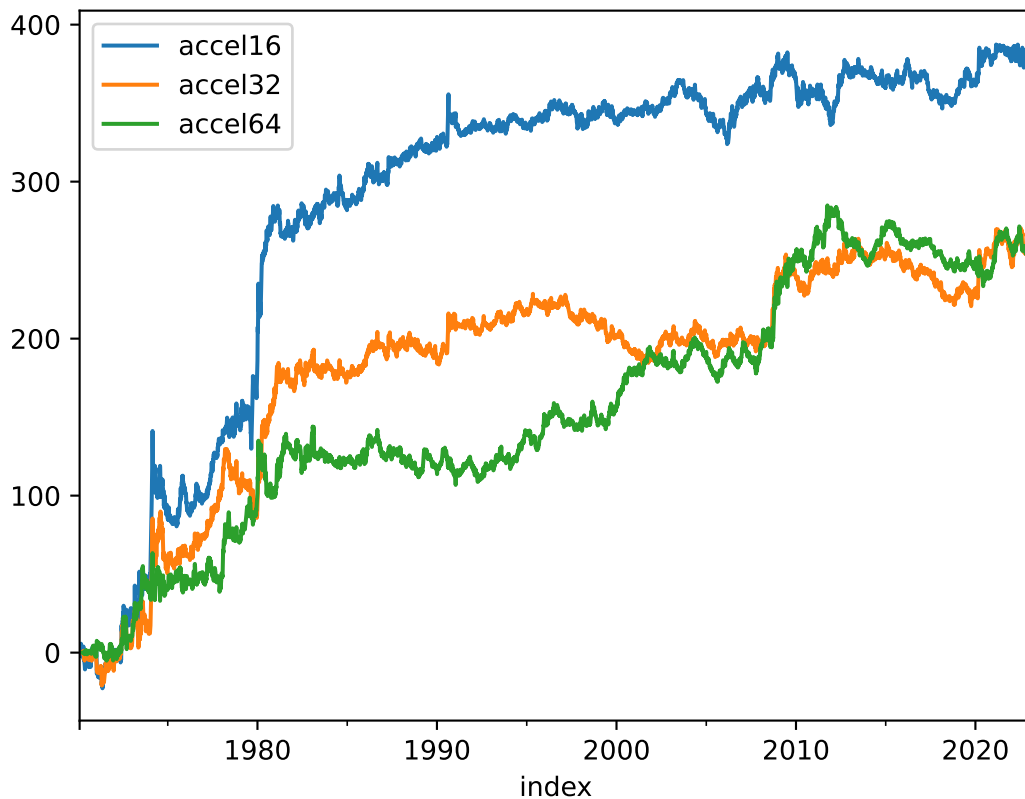
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 2.027, 'accel32': 2.565, 'accel64': 4.725}
ann. std {'accel16': 14.763, 'accel32': 13.912, 'accel64': 11.451}
ann. SR {'accel16': 0.14, 'accel32': 0.18, 'accel64': 0.41}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.515, 'accel32': -0.334, 'accel64': -0.338}
ann. std {'accel16': 11.987, 'accel32': 11.167, 'accel64': 9.585}
ann. SR {'accel16': 0.04, 'accel32': -0.03, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.949, 'accel32': 4.568, 'accel64': 4.729}
ann. std {'accel16': 15.661, 'accel32': 13.739, 'accel64': 13.254}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.36}

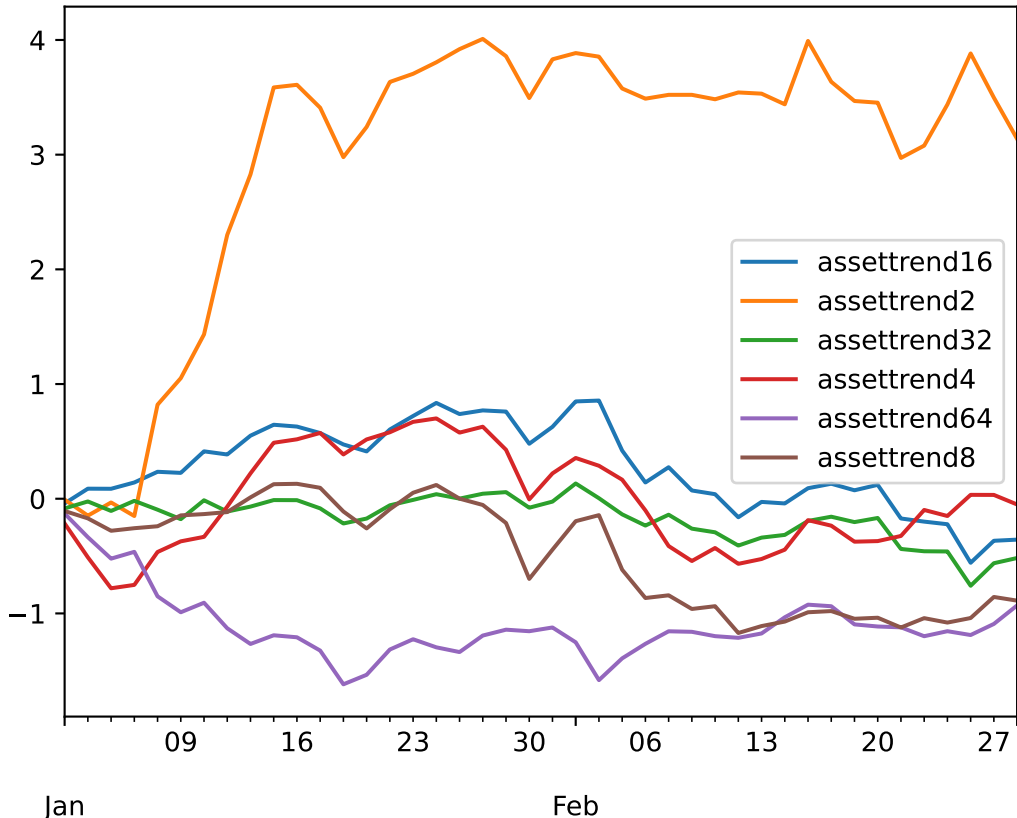


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -2.174, 'assettrend2': 19.125, 'assettrend32': -3.15, 'assettrend4': -0.306, 'assettrend64': -5.671, 'assettrend8': -5.415}

ann. std {'assettrend16': 2.483, 'assettrend2': 5.433, 'assettrend32': 1.729, 'assettrend4': 2.892, 'assettrend64': 2.259, 'assettrend8': 2.501}

ann. SR {'assettrend16': -0.88, 'assettrend2': 3.52, 'assettrend32': -1.82, 'assettrend4': -0.11, 'assettrend64': -2.51, 'assettrend8': -2.17}

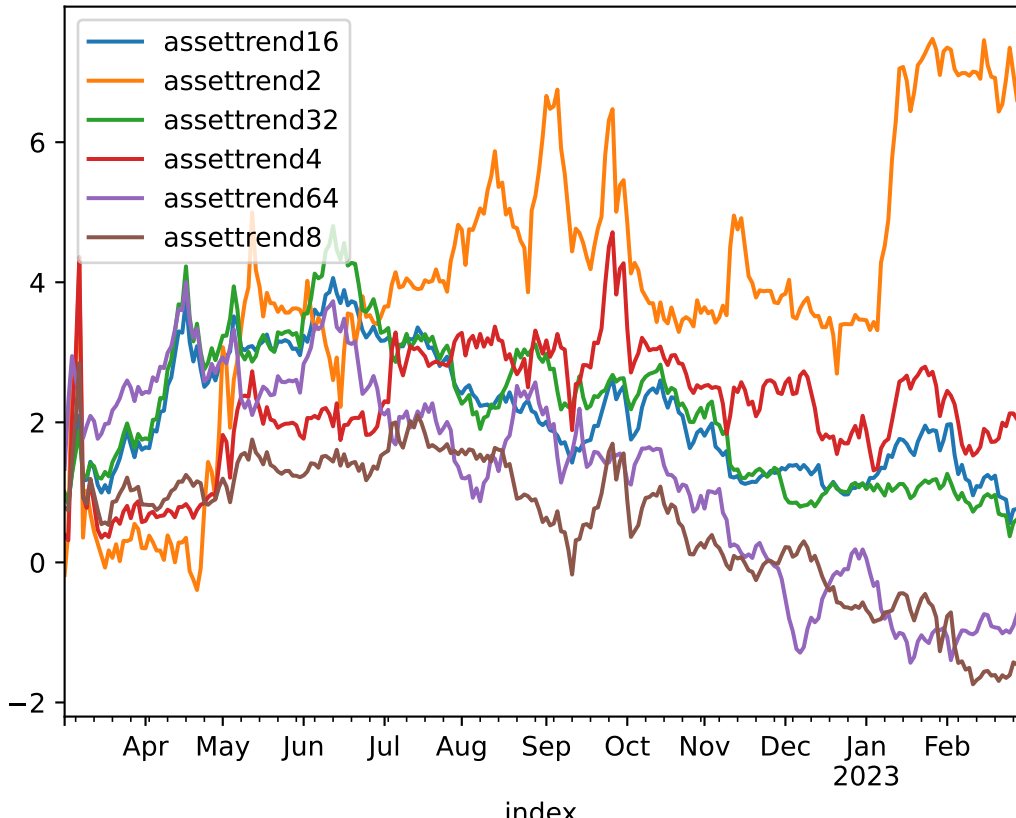


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 0.75, 'assettrend2': 6.502, 'assettrend32': 0.606, 'assettrend4': 2.013, 'assettrend64': -0.734, 'assettrend8': -1.436}

ann. std {'assettrend16': 2.864, 'assettrend2': 7.442, 'assettrend32': 3.077, 'assettrend4': 5.485, 'assettrend64': 3.507, 'assettrend8': 3.428}

ann. SR {'assettrend16': 0.26, 'assettrend2': 0.87, 'assettrend32': 0.2, 'assettrend4': 0.37, 'assettrend64': -0.21, 'assettrend8': -0.42}

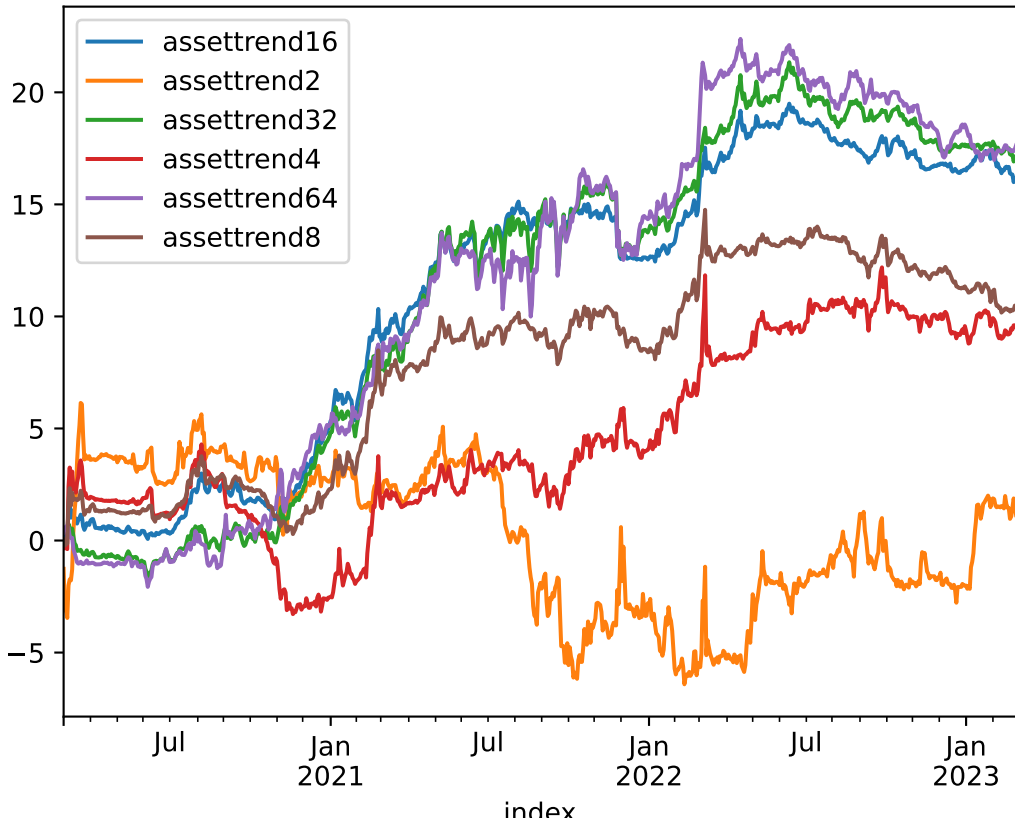


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.302, 'assettrend2': 0.371, 'assettrend32': 5.616, 'assettrend4': 3.116, 'assettrend64': 5.773, 'assettrend8': 3.422}

ann. std {'assettrend16': 3.514, 'assettrend2': 7.335, 'assettrend32': 4.243, 'assettrend4': 5.25, 'assettrend64': 5.041, 'assettrend8': 3.735}

ann. SR {'assettrend16': 1.51, 'assettrend2': 0.05, 'assettrend32': 1.32, 'assettrend4': 0.59, 'assettrend64': 1.15, 'assettrend8': 0.92}

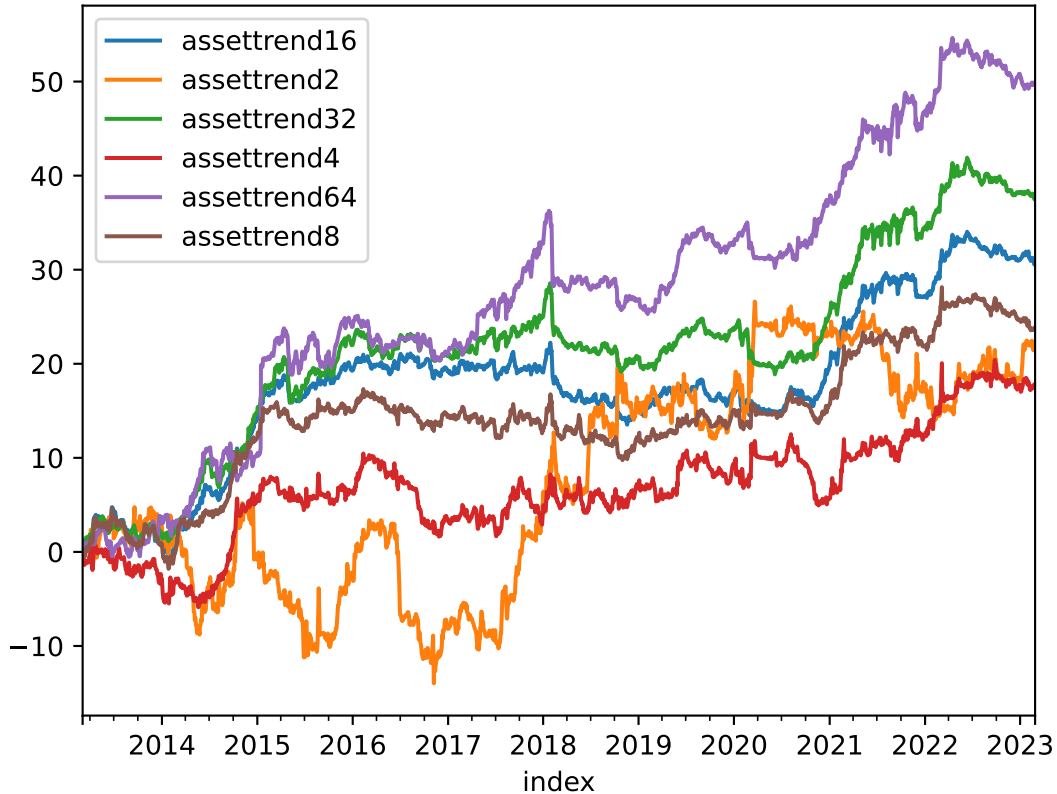


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 3.018, 'assettrend2': 2.122, 'assettrend32': 3.705, 'assettrend4': 1.742, 'assettrend64': 4.899, 'assettrend8': 2.341}

ann. std {'assettrend16': 3.244, 'assettrend2': 8.214, 'assettrend32': 3.702, 'assettrend4': 4.982, 'assettrend64': 5.284, 'assettrend8': 3.566}

ann. SR {'assettrend16': 0.93, 'assettrend2': 0.26, 'assettrend32': 1.0, 'assettrend4': 0.35, 'assettrend64': 0.93, 'assettrend8': 0.66}

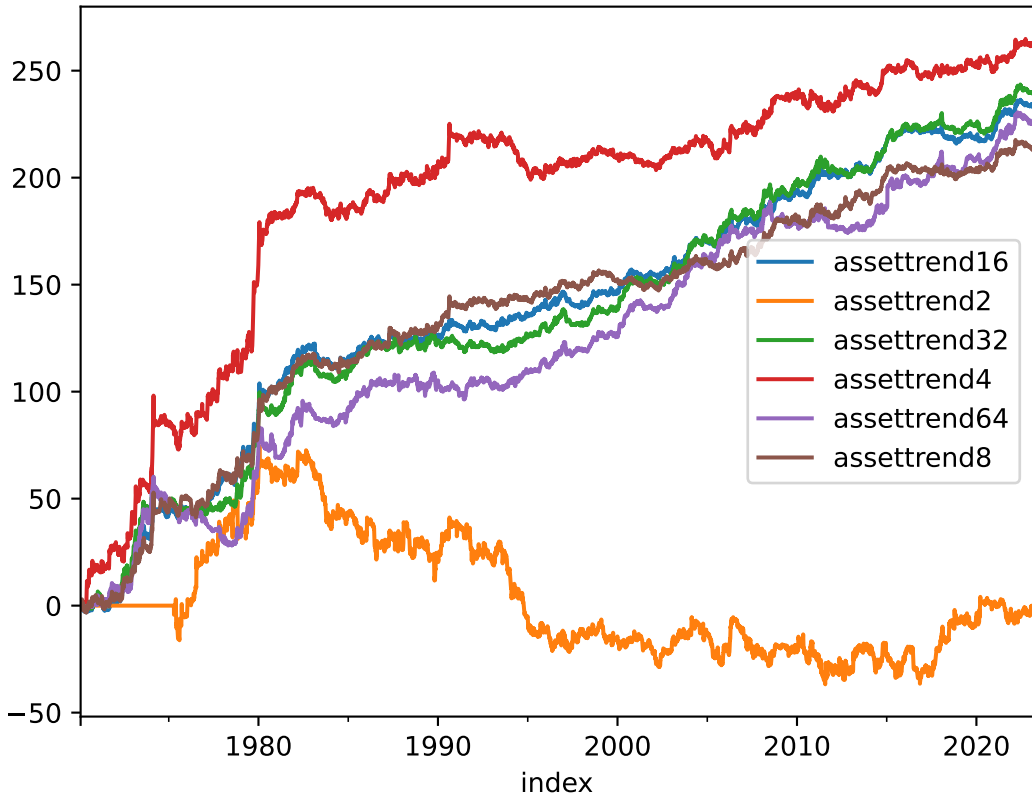


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.31, 'assettrend2': -0.017, 'assettrend32': 4.425, 'assettrend4': 4.847, 'assettrend64': 4.175, 'assettrend8': 3.944}

ann. std {'assettrend16': 4.633, 'assettrend2': 10.017, 'assettrend32': 4.847, 'assettrend4': 7.337, 'assettrend64': 5.407, 'assettrend8': 5.016}

ann. SR {'assettrend16': 0.93, 'assettrend2': -0.0, 'assettrend32': 0.91, 'assettrend4': 0.66, 'assettrend64': 0.77, 'assettrend8': 0.79}

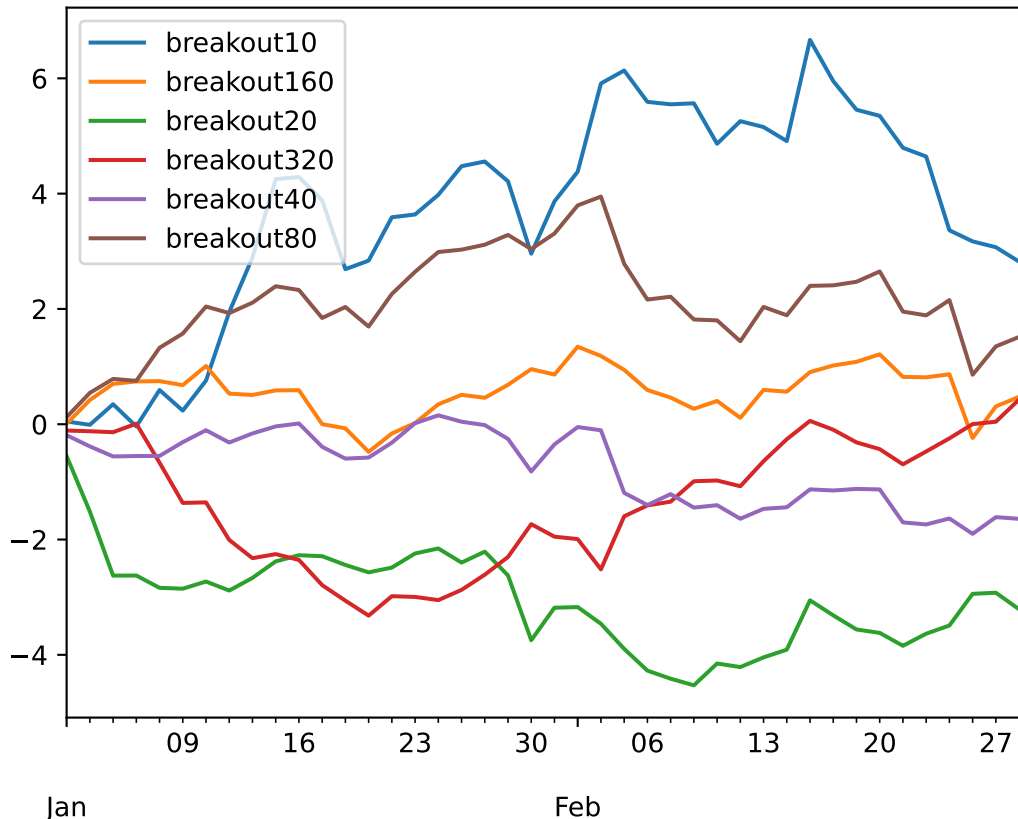


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 17.189, 'breakout160': 2.903, 'breakout20': -19.563, 'breakout320': 2.618, 'breakout40': -9.999, 'breakout80': 9.227}

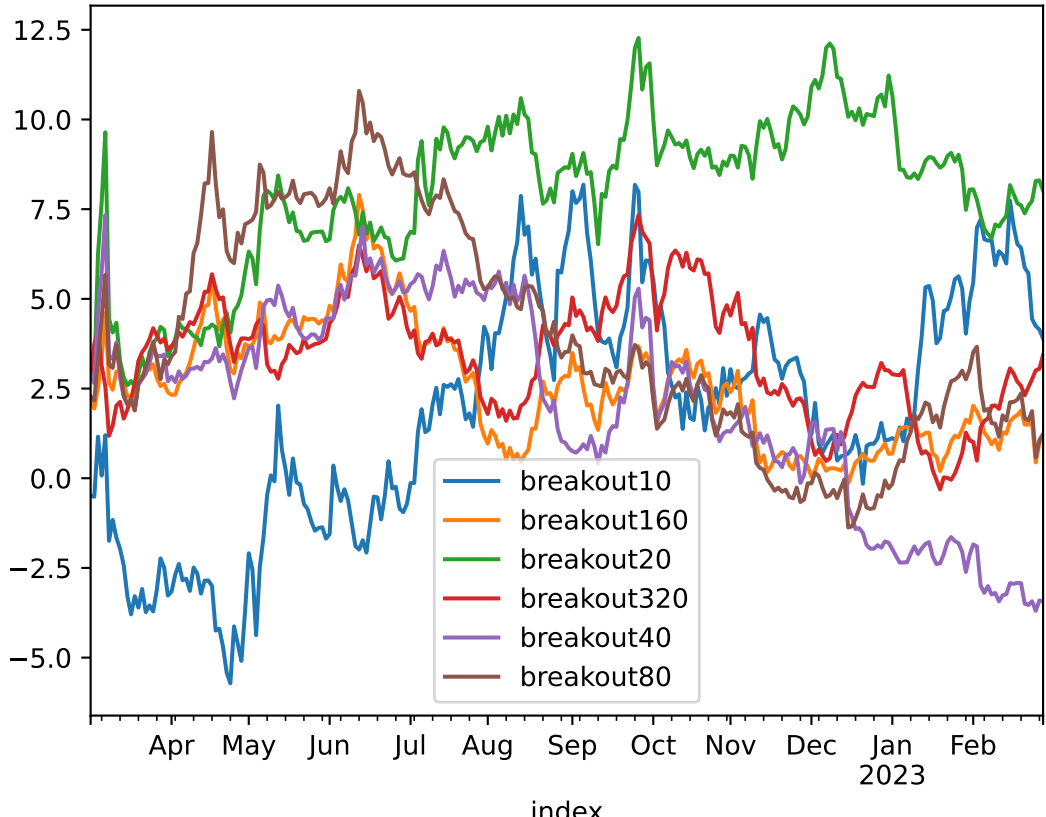
ann. std {'breakout10': 11.096, 'breakout160': 5.126, 'breakout20': 6.328, 'breakout320': 5.437, 'breakout40': 4.562, 'breakout80': 6.868}

ann. SR {'breakout10': 1.55, 'breakout160': 0.57, 'breakout20': -3.09, 'breakout320': 0.48, 'breakout40': -2.19, 'breakout80': 1.34}



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

ann. mean {'breakout10': 3.832, 'breakout160': 1.136, 'breakout20': 7.892, 'breakout320': 3.383, 'breakout40': -3.382, 'breakout80': 1.213}
ann. std {'breakout10': 12.13, 'breakout160': 6.911, 'breakout20': 10.817, 'breakout320': 6.799, 'breakout40': 8.586, 'breakout80': 7.88}
ann. SR {'breakout10': 0.32, 'breakout160': 0.16, 'breakout20': 0.73, 'breakout320': 0.5, 'breakout40': -0.39, 'breakout80': 0.15}

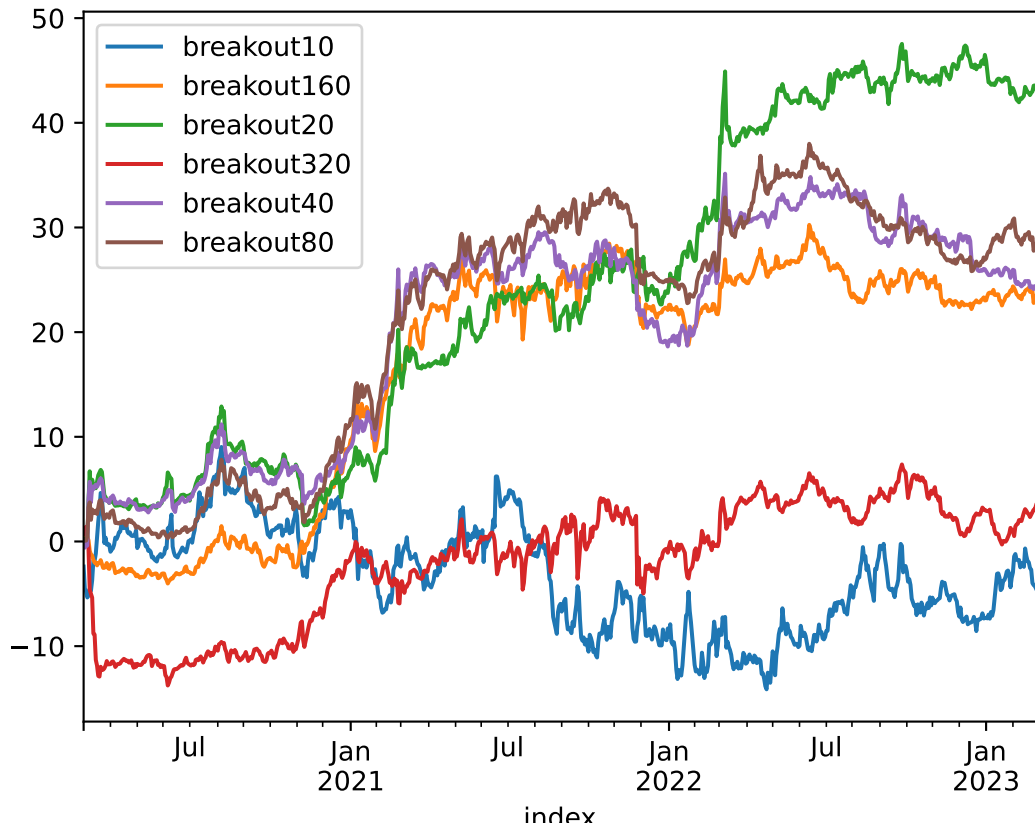


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -1.478, 'breakout160': 7.695, 'breakout20': 14.168, 'breakout320': 1.133, 'breakout40': 7.977, 'breakout80': 9.307}

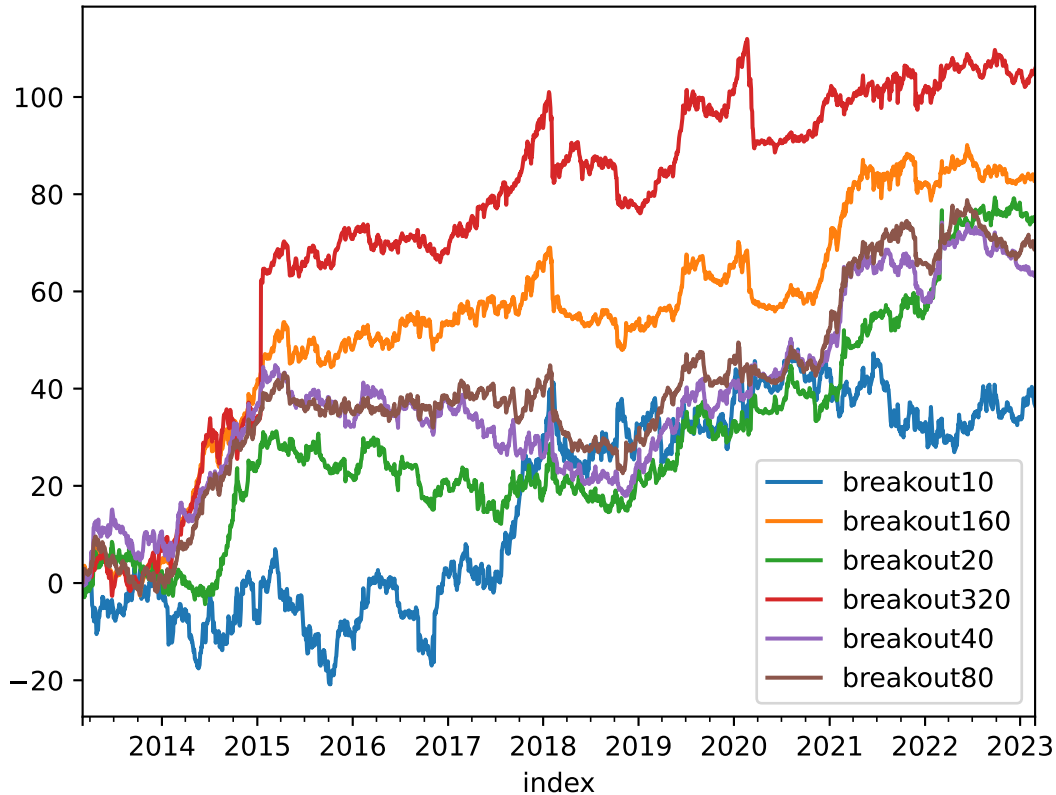
ann. std {'breakout10': 13.63, 'breakout160': 9.202, 'breakout20': 11.332, 'breakout320': 10.281, 'breakout40': 9.902, 'breakout80': 9.226}

ann. SR {'breakout10': -0.11, 'breakout160': 0.84, 'breakout20': 1.25, 'breakout320': 0.11, 'breakout40': 0.81, 'breakout80': 1.01}



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

ann. mean {'breakout10': 3.587, 'breakout160': 8.188, 'breakout20': 7.372, 'breakout320': 10.389, 'breakout40': 6.228, 'breakout80': 6.799}
ann. std {'breakout10': 15.598, 'breakout160': 9.045, 'breakout20': 11.152, 'breakout320': 13.315, 'breakout40': 9.703, 'breakout80': 8.949}
ann. SR {'breakout10': 0.23, 'breakout160': 0.91, 'breakout20': 0.66, 'breakout320': 0.78, 'breakout40': 0.64, 'breakout80': 0.76}

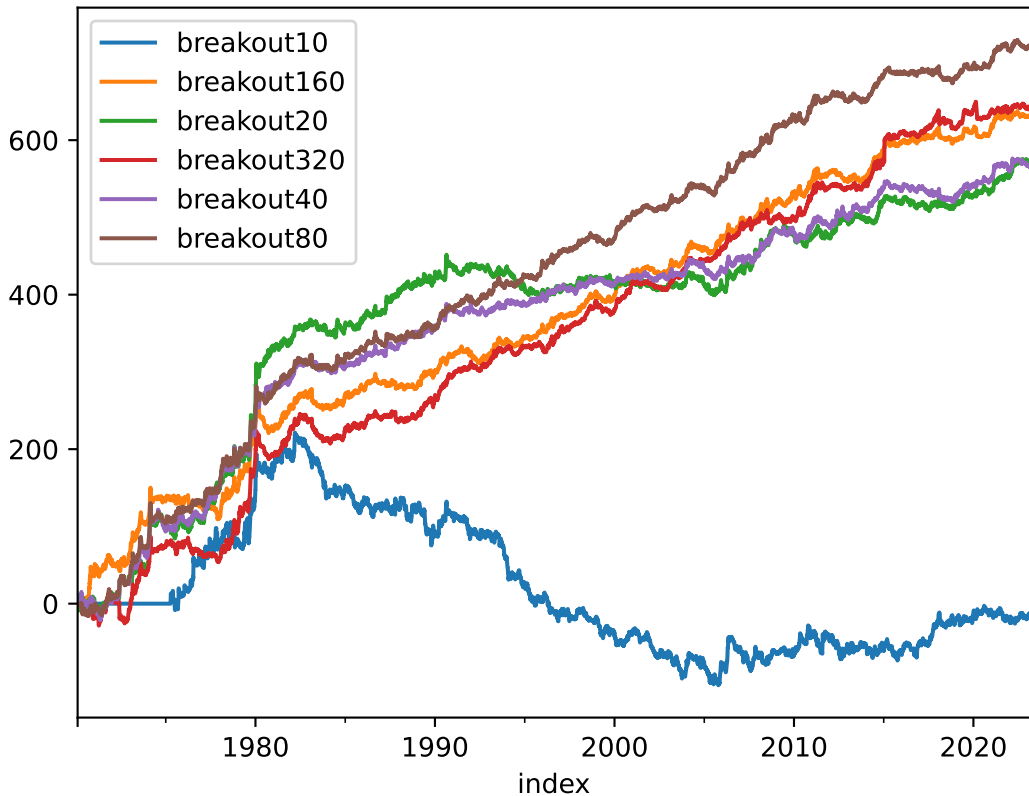


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.301, 'breakout160': 11.667, 'breakout20': 10.566, 'breakout320': 11.9, 'breakout40': 10.456, 'breakout80': 13.316}

ann. std {'breakout10': 20.755, 'breakout160': 12.437, 'breakout20': 15.983, 'breakout320': 13.0, 'breakout40': 13.182, 'breakout80': 12.685}

ann. SR {'breakout10': -0.01, 'breakout160': 0.94, 'breakout20': 0.66, 'breakout320': 0.92, 'breakout40': 0.79, 'breakout80': 1.05}

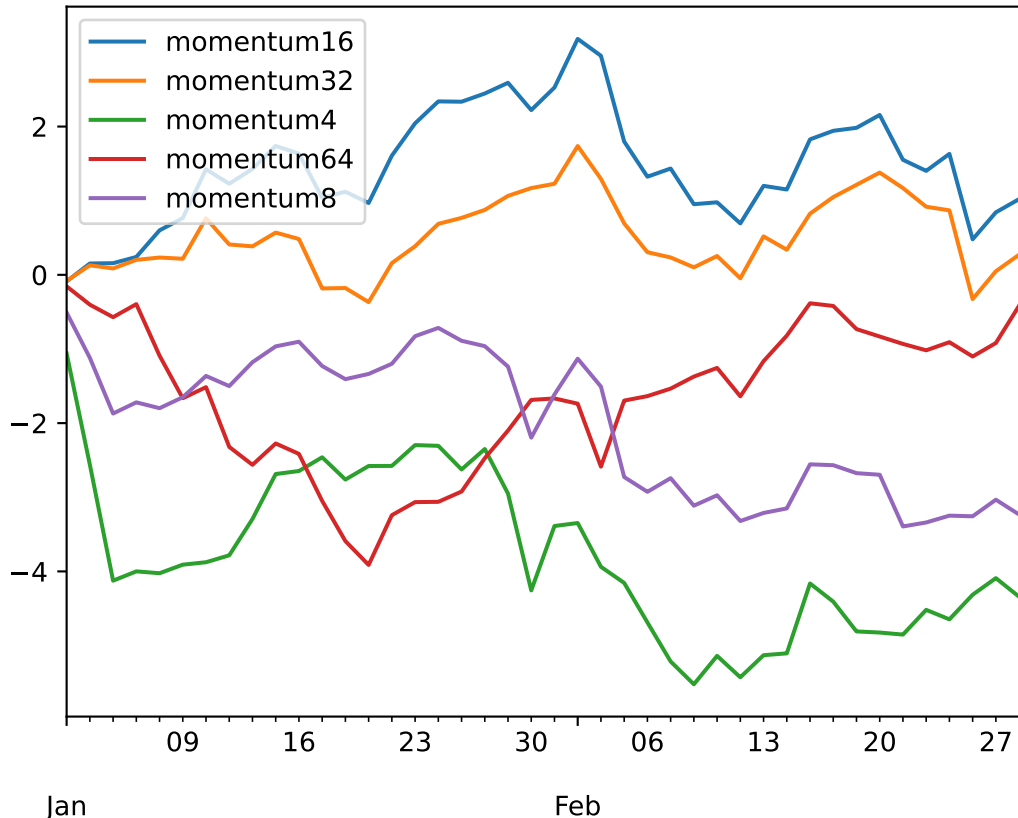


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 6.226, 'momentum32': 1.656, 'momentum4': -26.464, 'momentum64': -2.537, 'momentum8': -19.703}

ann. std {'momentum16': 6.715, 'momentum32': 5.604, 'momentum4': 8.69, 'momentum64': 6.28, 'momentum8': 6.18}

ann. SR {'momentum16': 0.93, 'momentum32': 0.3, 'momentum4': -3.05, 'momentum64': -0.4, 'momentum8': -3.19}

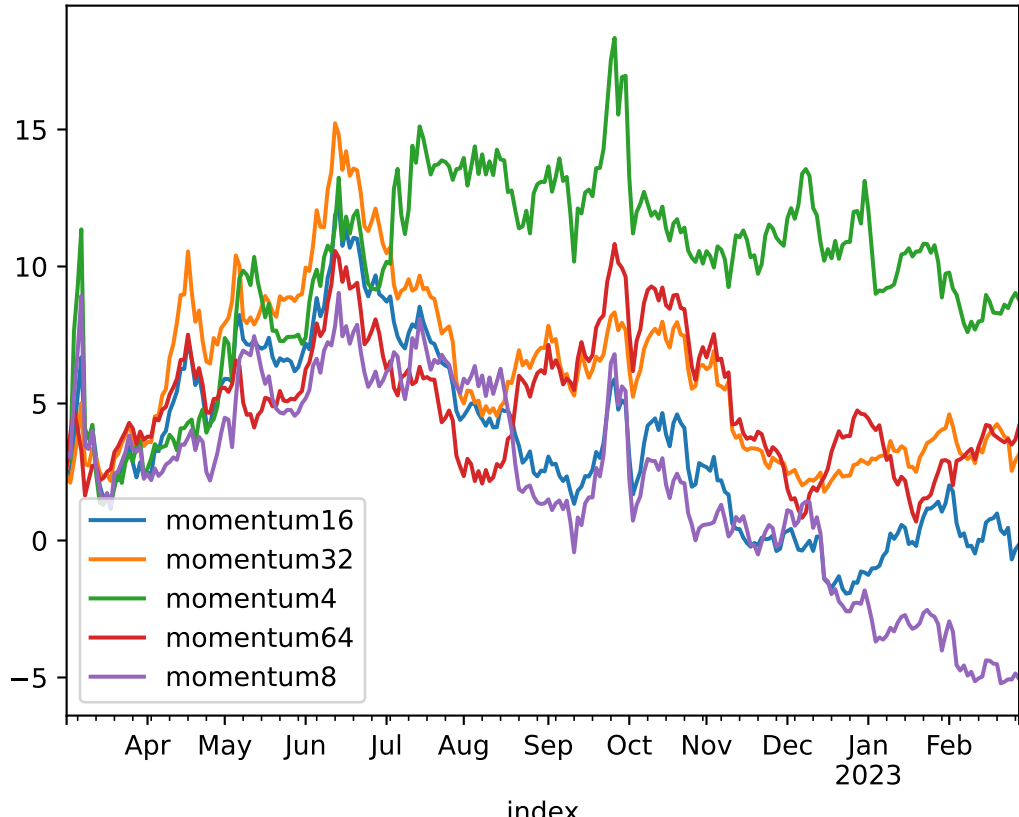


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -0.146, 'momentum32': 3.092, 'momentum4': 8.649, 'momentum64': 4.122, 'momentum8': -4.974}

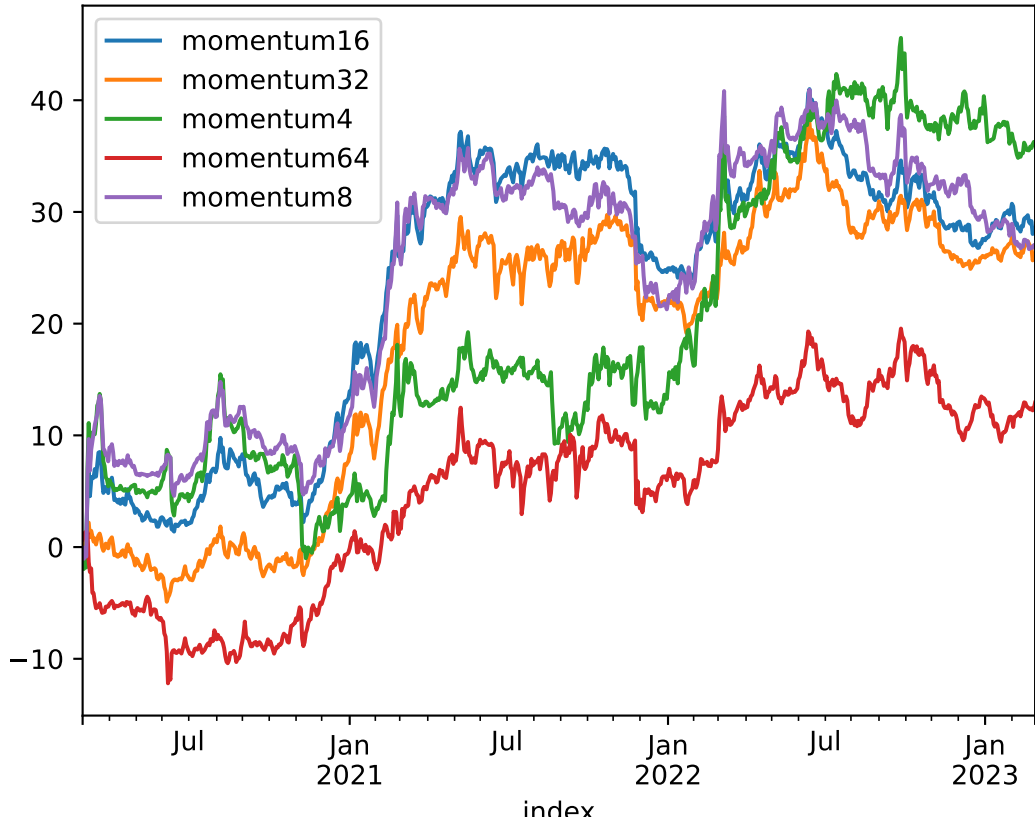
ann. std {'momentum16': 9.799, 'momentum32': 9.495, 'momentum4': 15.955, 'momentum64': 9.158, 'momentum8': 12.043}

ann. SR {'momentum16': -0.01, 'momentum32': 0.33, 'momentum4': 0.54, 'momentum64': 0.45, 'momentum8': -0.41}



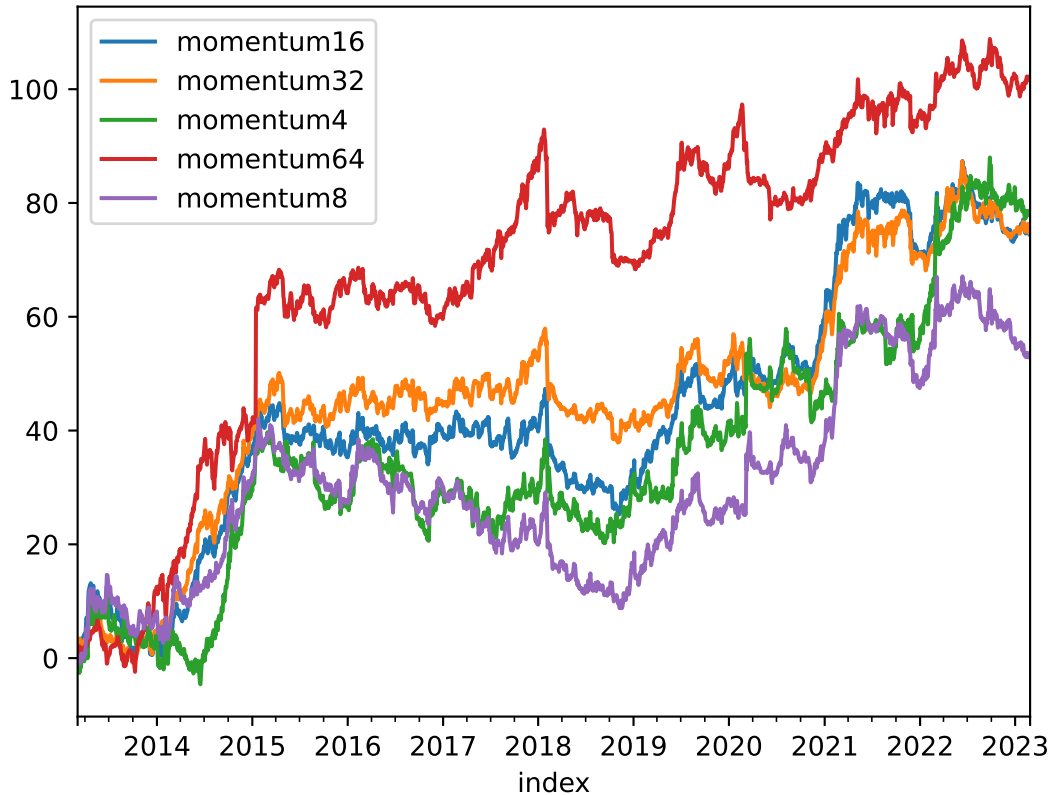
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 9.353, 'momentum32': 8.598, 'momentum4': 11.792, 'momentum64': 4.23, 'momentum8': 8.785}
ann. std {'momentum16': 10.817, 'momentum32': 10.474, 'momentum4': 15.805, 'momentum64': 10.645, 'momentum8': 12.699}
ann. SR {'momentum16': 0.86, 'momentum32': 0.82, 'momentum4': 0.75, 'momentum64': 0.4, 'momentum8': 0.69}



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

ann. mean {'momentum16': 7.36, 'momentum32': 7.388, 'momentum4': 7.703, 'momentum64': 10.036, 'momentum8': 5.206}
ann. std {'momentum16': 9.87, 'momentum32': 9.412, 'momentum4': 13.683, 'momentum64': 11.963, 'momentum8': 11.256}
ann. SR {'momentum16': 0.75, 'momentum32': 0.79, 'momentum4': 0.56, 'momentum64': 0.84, 'momentum8': 0.46}

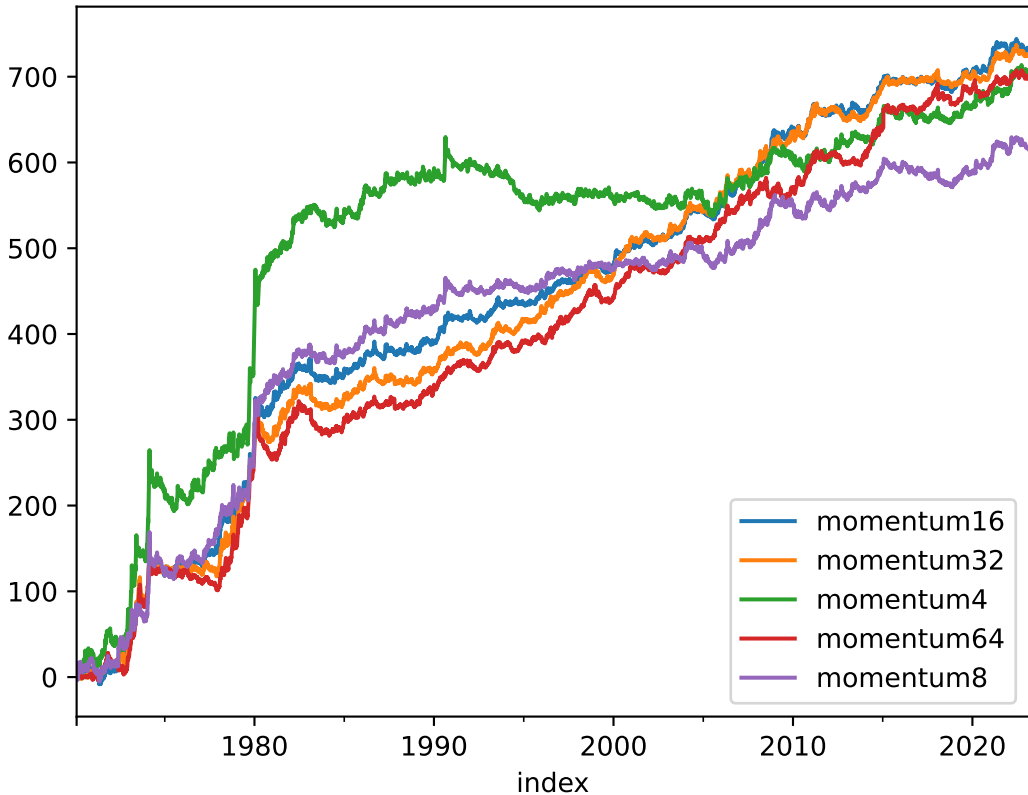


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.527, 'momentum32': 13.406, 'momentum4': 13.017, 'momentum64': 12.96, 'momentum8': 11.379}

ann. std {'momentum16': 14.133, 'momentum32': 13.743, 'momentum4': 20.0, 'momentum64': 13.356, 'momentum8': 15.791}

ann. SR {'momentum16': 0.96, 'momentum32': 0.98, 'momentum4': 0.65, 'momentum64': 0.97, 'momentum8': 0.72}

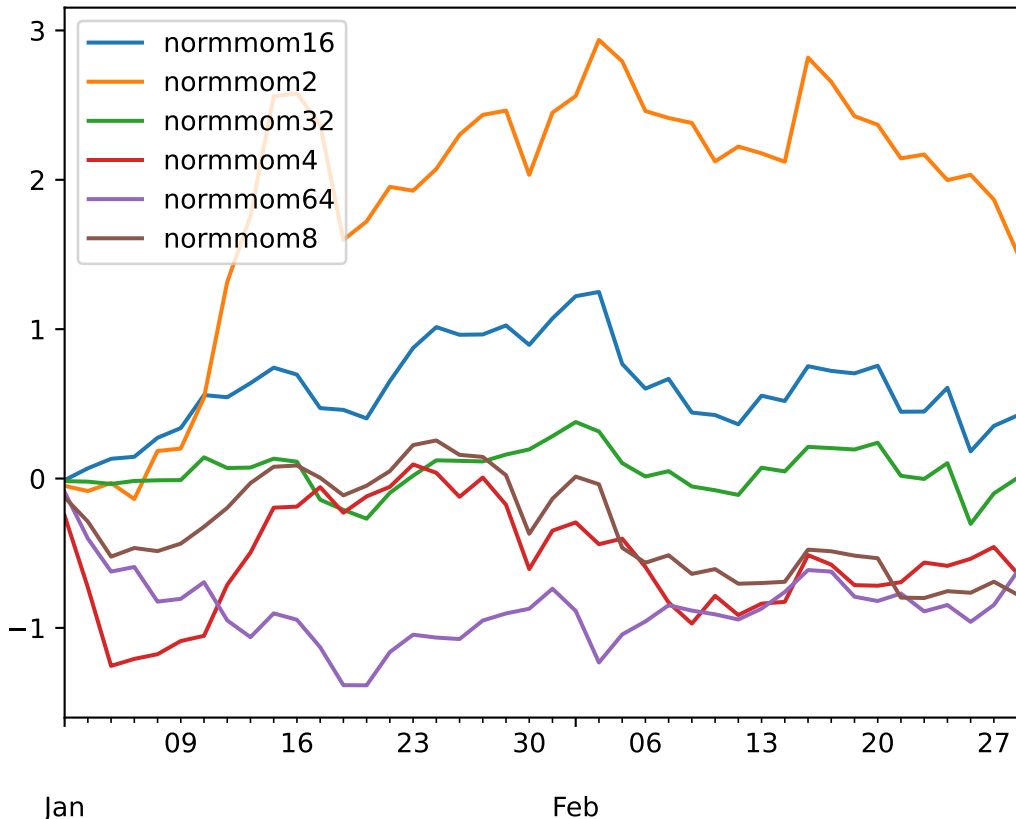


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.567, 'normmom2': 9.237, 'normmom32': 0.013, 'normmom4': -3.86, 'normmom64': -3.82, 'normmom8': -4.726}

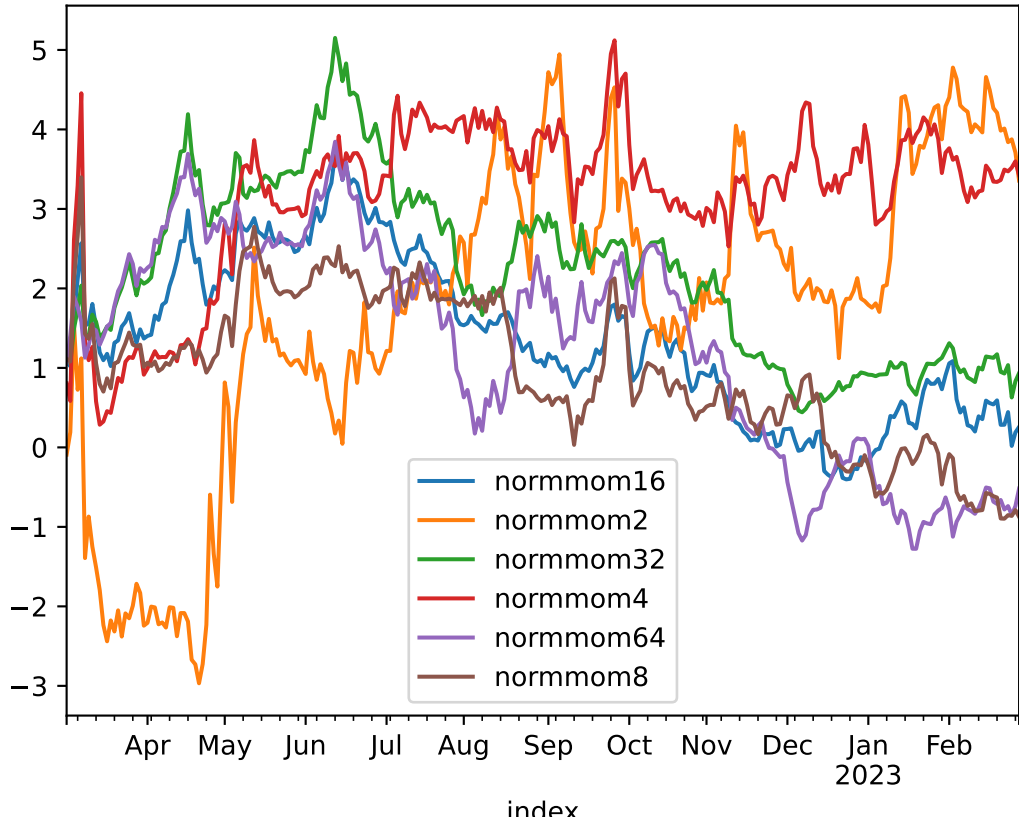
ann. std {'normmom16': 2.633, 'normmom2': 4.967, 'normmom32': 1.922, 'normmom4': 3.175, 'normmom64': 2.339, 'normmom8': 2.28}

ann. SR {'normmom16': 0.98, 'normmom2': 1.86, 'normmom32': 0.01, 'normmom4': -1.22, 'normmom64': -1.63, 'normmom8': -2.07}



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

ann. mean {'normmom16': 0.254, 'normmom2': 3.305, 'normmom32': 0.92, 'normmom4': 3.371, 'normmom64': -0.51, 'normmom8': -0.86}
ann. std {'normmom16': 3.016, 'normmom2': 6.859, 'normmom32': 3.032, 'normmom4': 5.558, 'normmom64': 3.342, 'normmom8': 3.807}
ann. SR {'normmom16': 0.08, 'normmom2': 0.48, 'normmom32': 0.3, 'normmom4': 0.61, 'normmom64': -0.15, 'normmom8': -0.23}

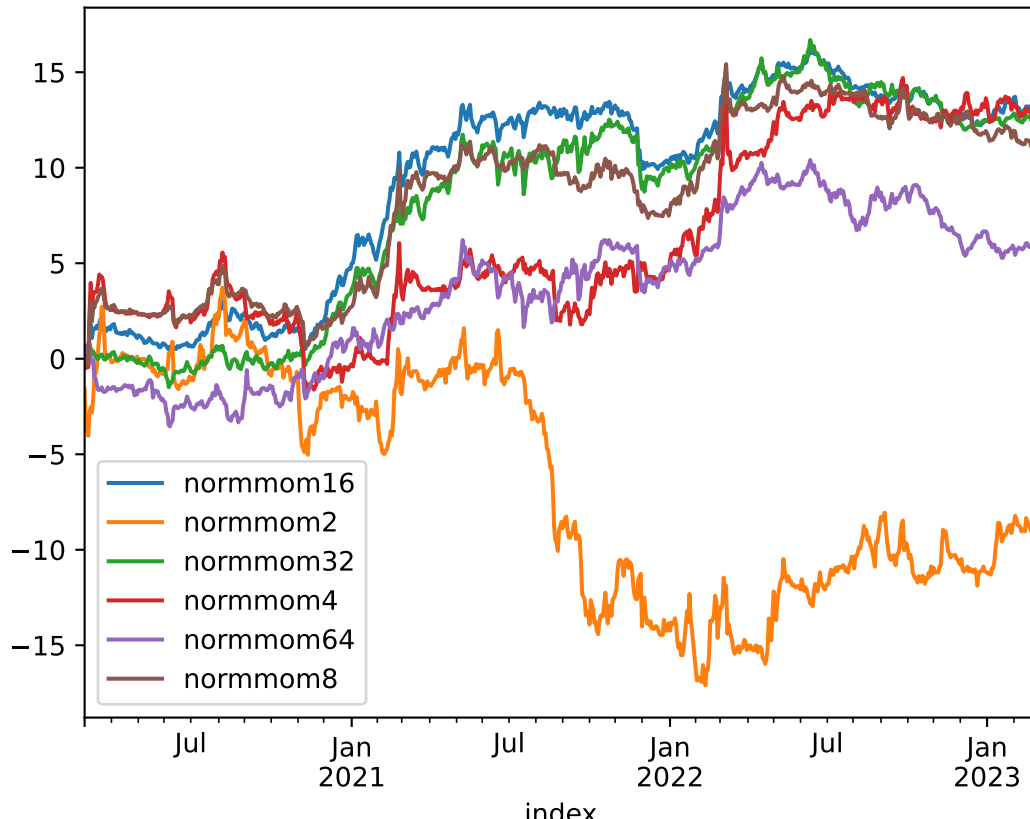


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 4.218, 'normmom2': -3.157, 'normmom32': 4.084, 'normmom4': 4.258, 'normmom64': 1.978, 'normmom8': 3.652}

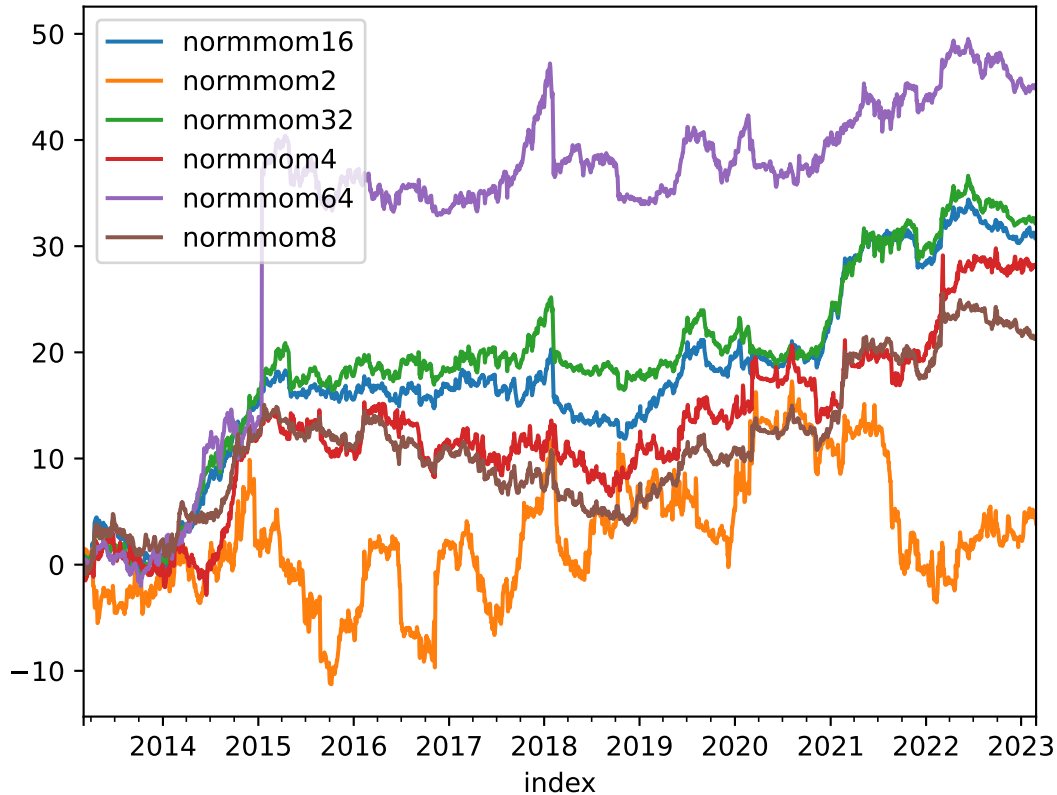
ann. std {'normmom16': 3.621, 'normmom2': 7.832, 'normmom32': 3.897, 'normmom4': 5.677, 'normmom64': 4.169, 'normmom8': 4.205}

ann. SR {'normmom16': 1.17, 'normmom2': -0.4, 'normmom32': 1.05, 'normmom4': 0.75, 'normmom64': 0.47, 'normmom8': 0.87}



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

ann. mean {'normmom16': 3.038, 'normmom2': 0.382, 'normmom32': 3.184, 'normmom4': 2.76, 'normmom64': 4.435, 'normmom8': 2.09}
ann. std {'normmom16': 3.552, 'normmom2': 8.976, 'normmom32': 3.699, 'normmom4': 5.464, 'normmom64': 8.482, 'normmom8': 4.022}
ann. SR {'normmom16': 0.86, 'normmom2': 0.04, 'normmom32': 0.86, 'normmom4': 0.51, 'normmom64': 0.52, 'normmom8': 0.52}

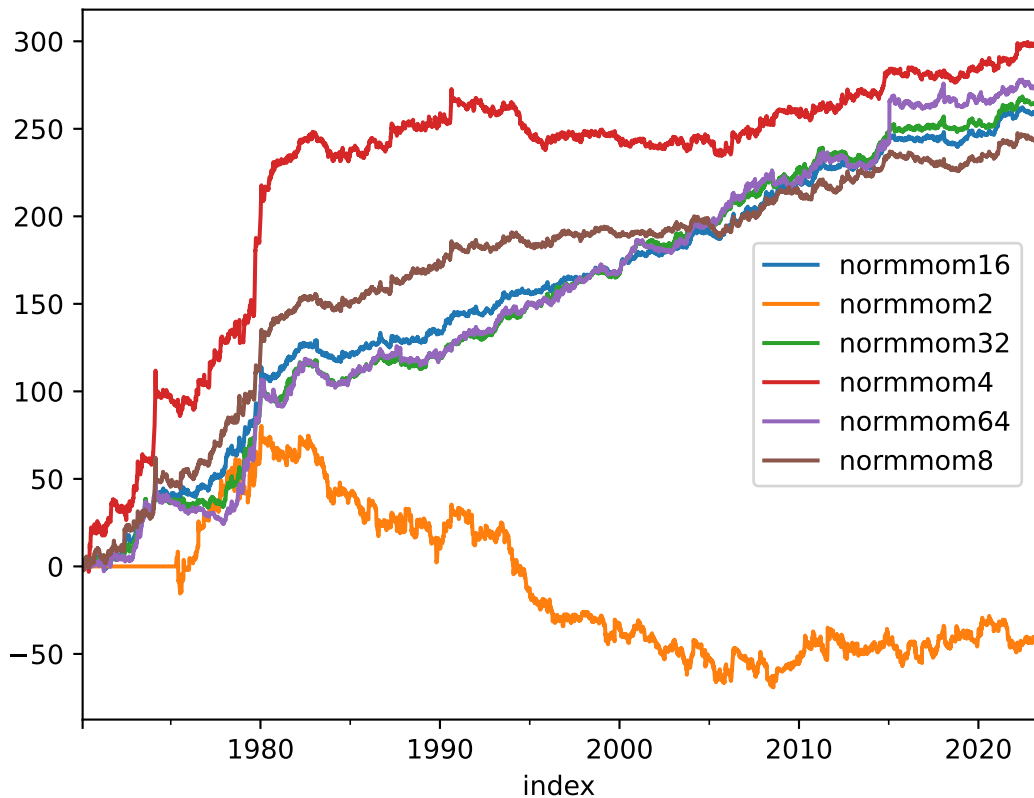


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.786, 'normmom2': -0.77, 'normmom32': 4.887, 'normmom4': 5.509, 'normmom8': 4.498}

ann. std {'normmom16': 4.889, 'normmom2': 11.169, 'normmom32': 4.948, 'normmom4': 8.29, 'normmom64': 6.235, 'normmom8': 5.903}

ann. SR {'normmom16': 0.98, 'normmom2': -0.07, 'normmom32': 0.99, 'normmom4': 0.66, 'normmom64': 0.81, 'normmom8': 0.76}

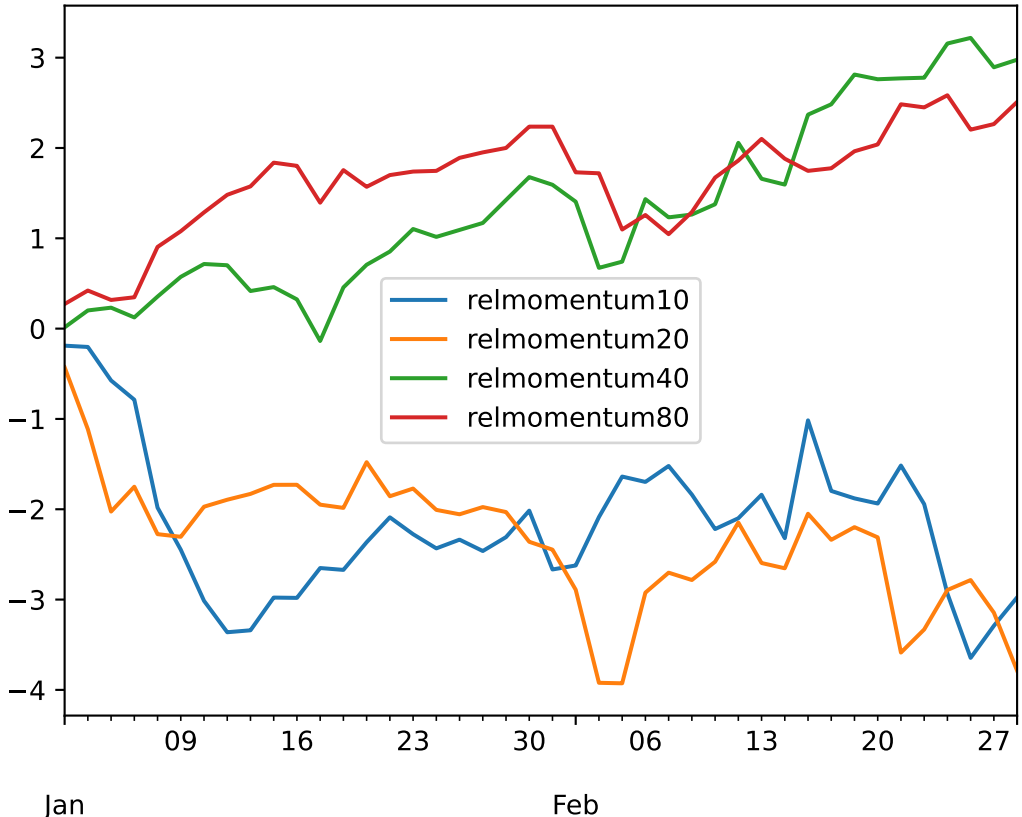


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -18.139, 'relmomentum20': -23.079, 'relmomentum40': 18.147, 'relmomentum80': 15.296}

ann. std {'relmomentum10': 7.329, 'relmomentum20': 7.041, 'relmomentum40': 4.773, 'relmomentum80': 3.901}

ann. SR {'relmomentum10': -2.48, 'relmomentum20': -3.28, 'relmomentum40': 3.8, 'relmomentum80': 3.92}

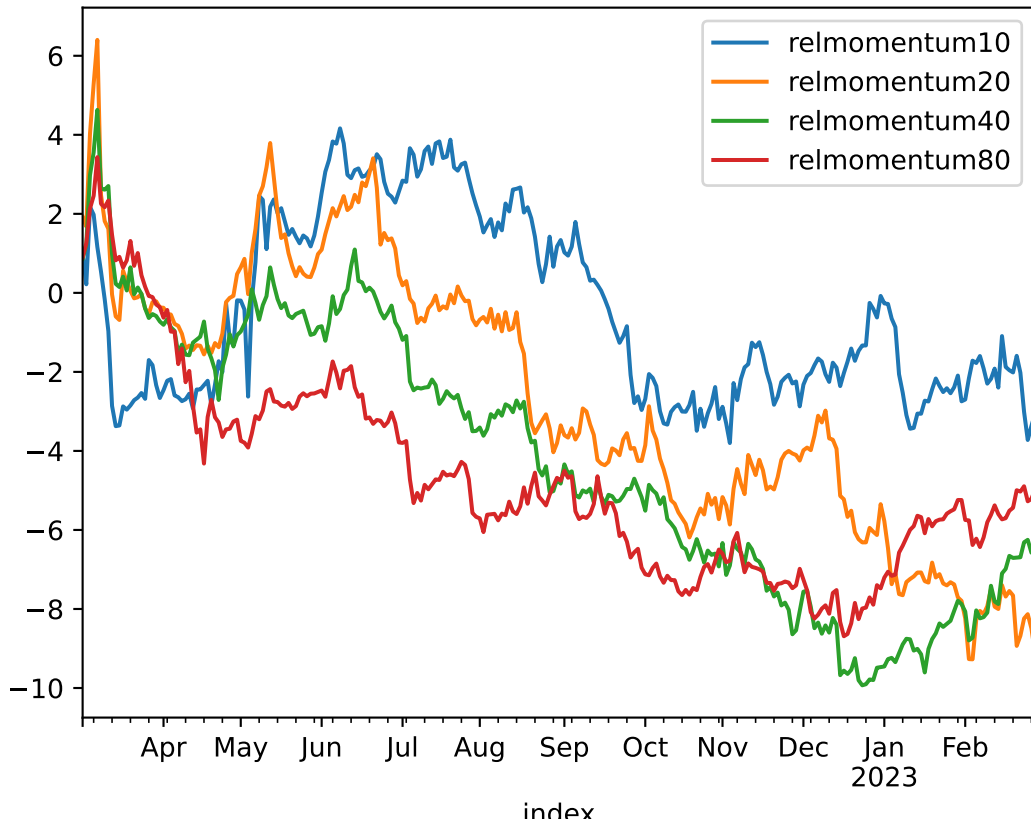


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.007, 'relmomentum20': -8.993, 'relmomentum40': -6.392, 'relmomentum80': -4.892}

ann. std {'relmomentum10': 8.499, 'relmomentum20': 8.452, 'relmomentum40': 6.307, 'relmomentum80': 5.486}

ann. SR {'relmomentum10': -0.35, 'relmomentum20': -1.06, 'relmomentum40': -1.01, 'relmomentum80': -0.89}

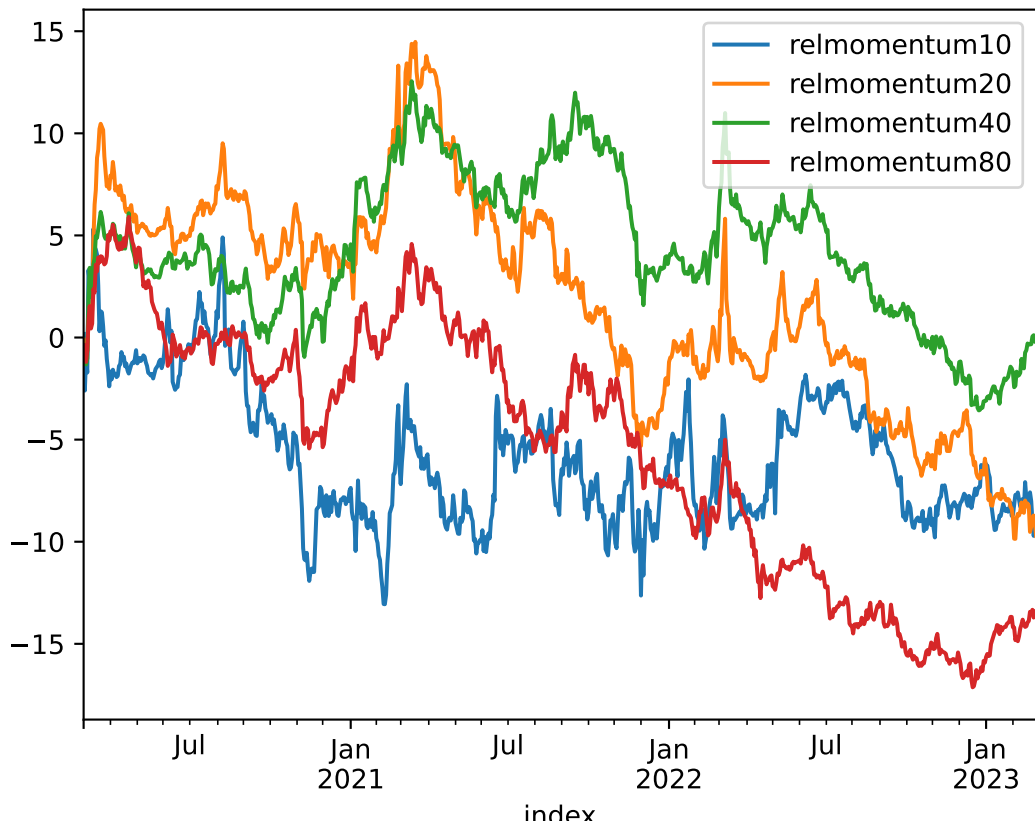


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.96, 'relmomentum20': -3.181, 'relmomentum40': -0.042, 'relmomentum80': -4.389}

ann. std {'relmomentum10': 12.106, 'relmomentum20': 8.91, 'relmomentum40': 7.337, 'relmomentum80': 6.774}

ann. SR {'relmomentum10': -0.24, 'relmomentum20': -0.36, 'relmomentum40': -0.01, 'relmomentum80': -0.65}

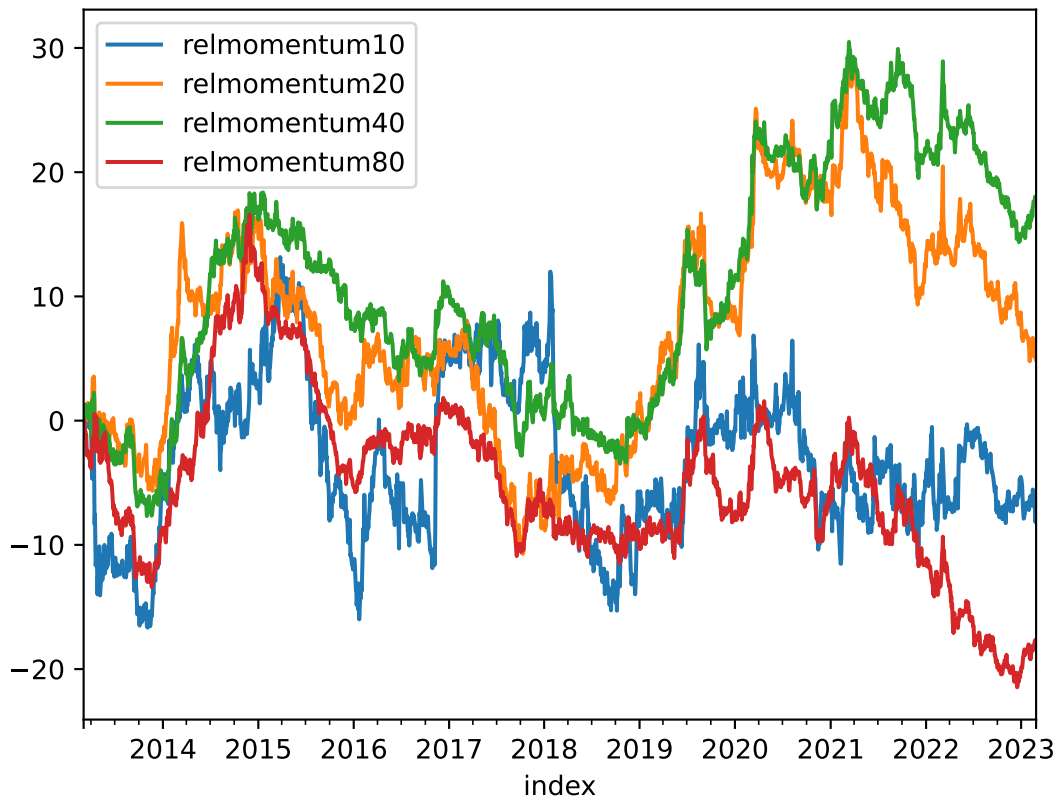


Total Trading Rule P&L for period '10Y'

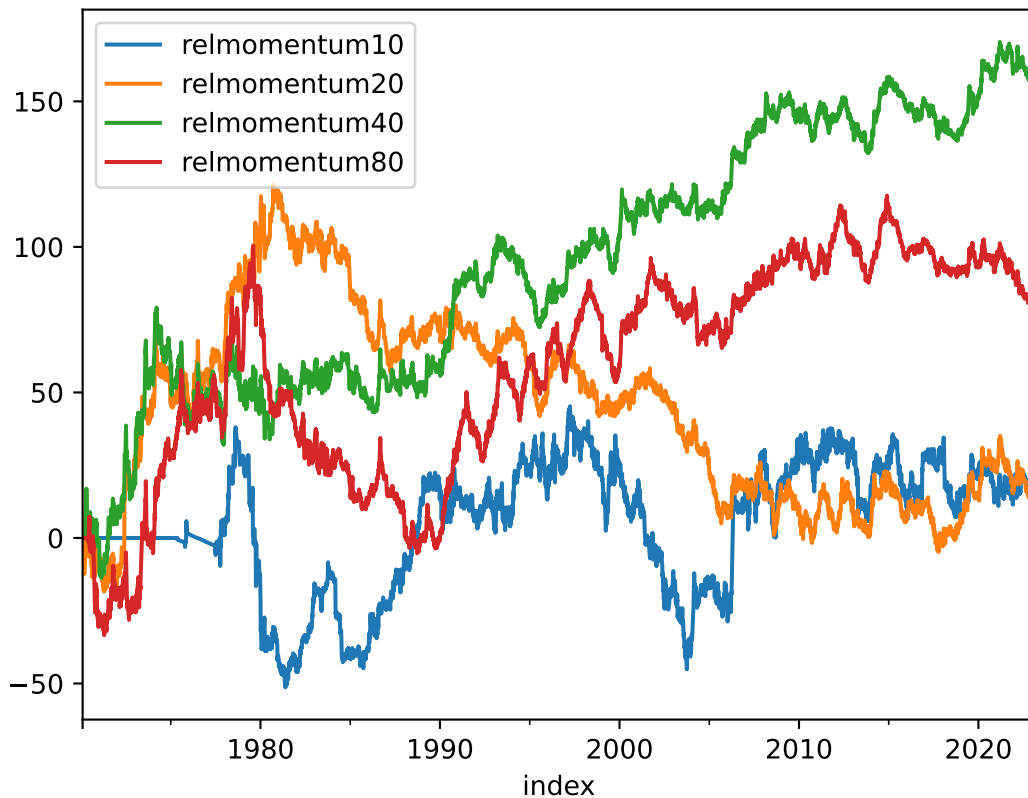
ann. mean {'relmomentum10': -0.737, 'relmomentum20': 0.484, 'relmomentum40': 1.749, 'relmomentum80': -1.742}

ann. std {'relmomentum10': 12.913, 'relmomentum20': 8.913, 'relmomentum40': 7.254, 'relmomentum80': 6.683}

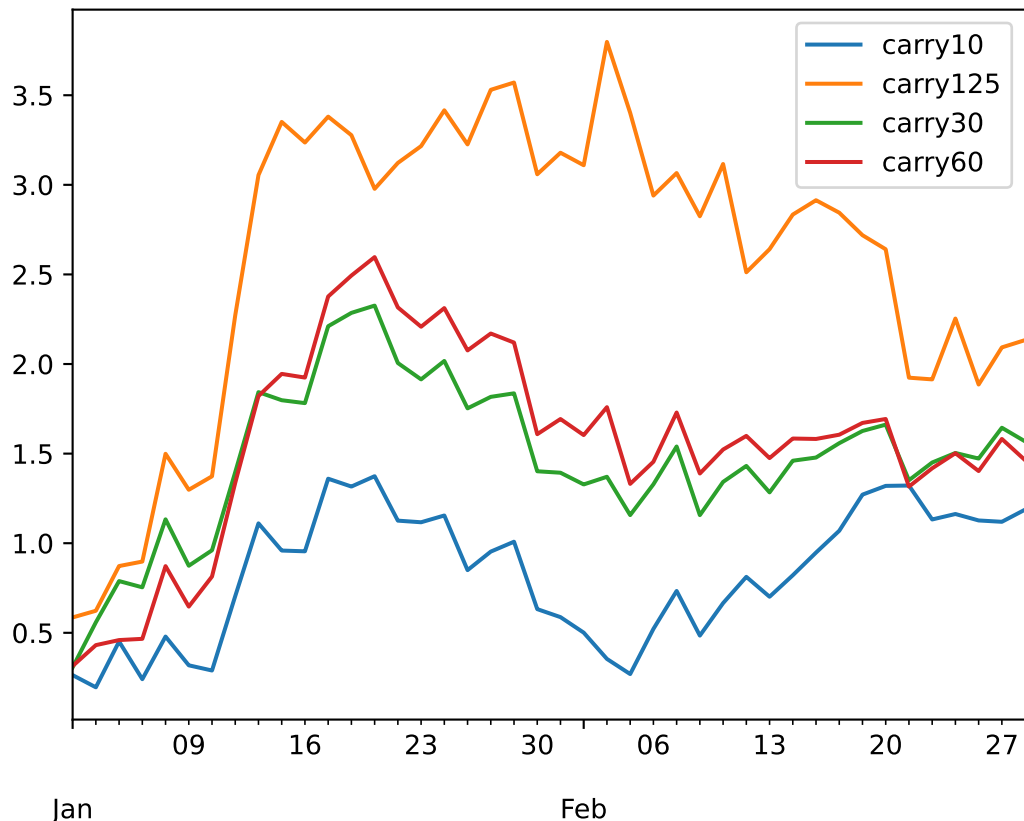
ann. SR {'relmomentum10': -0.06, 'relmomentum20': 0.05, 'relmomentum40': 0.24, 'relmomentum80': -0.26}



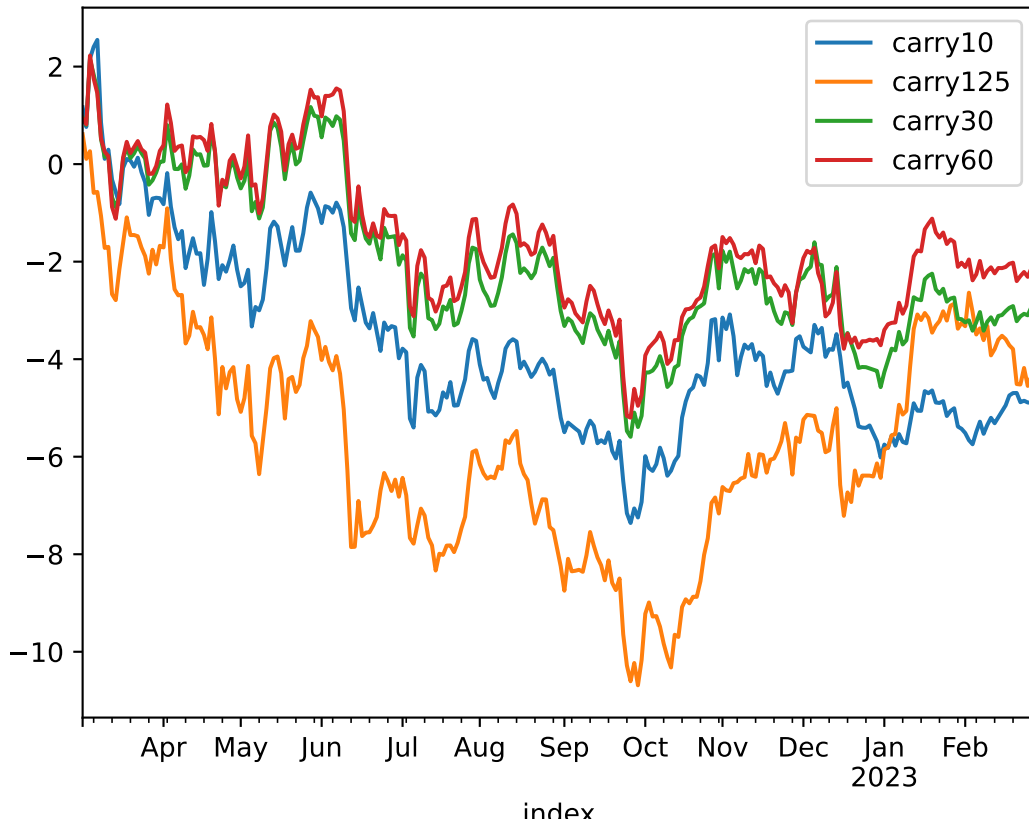
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': 0.277, 'relmomentum20': 0.201, 'relmomentum40': 2.917, 'relmomentum80': 1.54}
ann. std {'relmomentum10': 13.403, 'relmomentum20': 11.502, 'relmomentum40': 10.78, 'relmomentum80': 11.048}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 7.238, 'carry125': 13.005, 'carry30': 9.559, 'carry60': 8.92}
ann. std {'carry10': 3.041, 'carry125': 5.641, 'carry30': 3.414, 'carry60': 3.698}
ann. SR {'carry10': 2.38, 'carry125': 2.31, 'carry30': 2.8, 'carry60': 2.41}

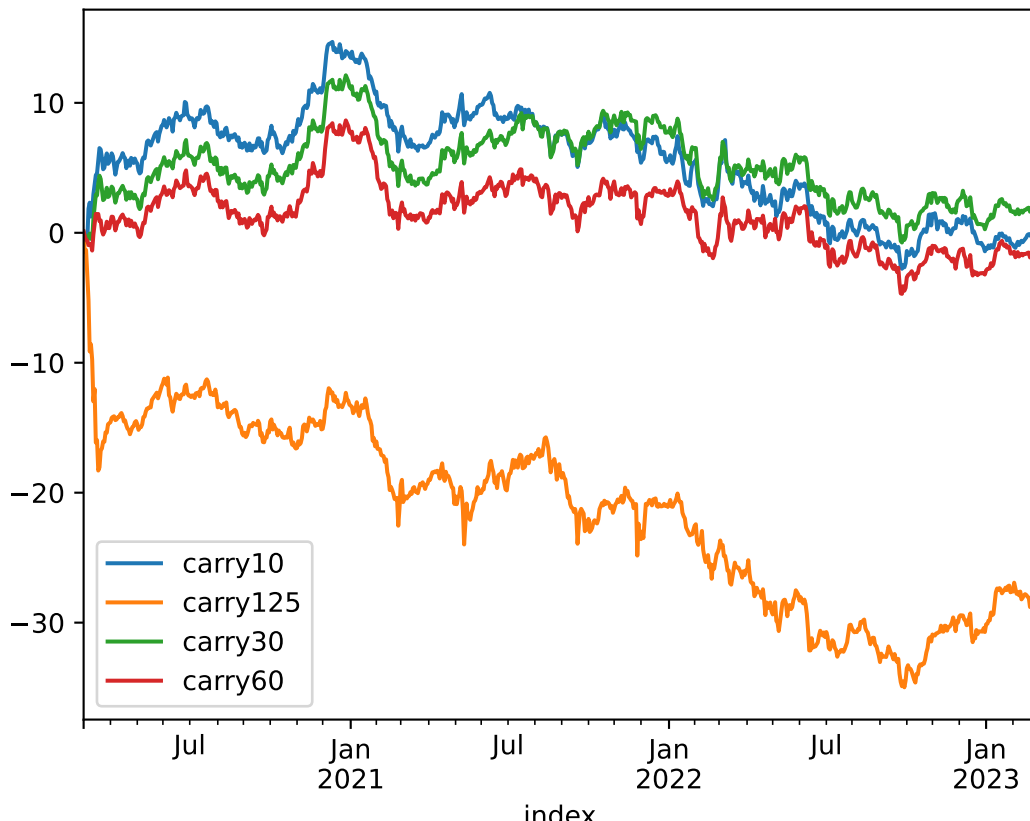


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -4.753, 'carry125': -4.234, 'carry30': -2.959, 'carry60': -2.217}
ann. std {'carry10': 6.383, 'carry125': 7.191, 'carry30': 6.165, 'carry60': 6.377}
ann. SR {'carry10': -0.74, 'carry125': -0.59, 'carry30': -0.48, 'carry60': -0.35}

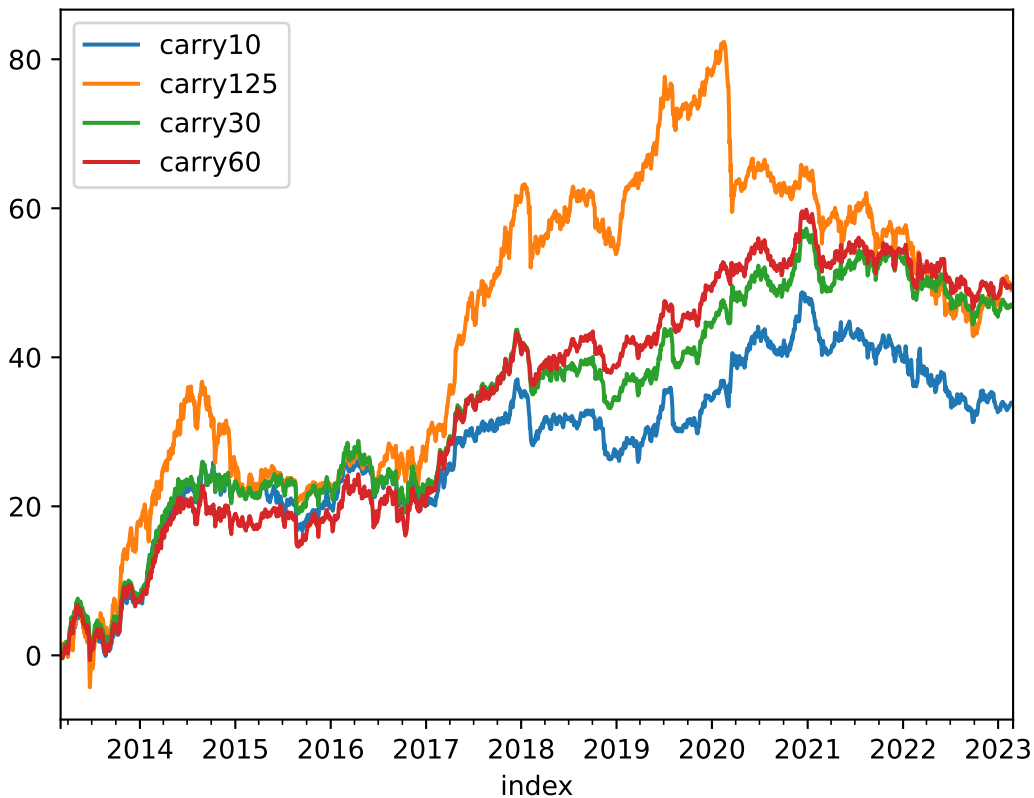


Total Trading Rule P&L for period '3Y'

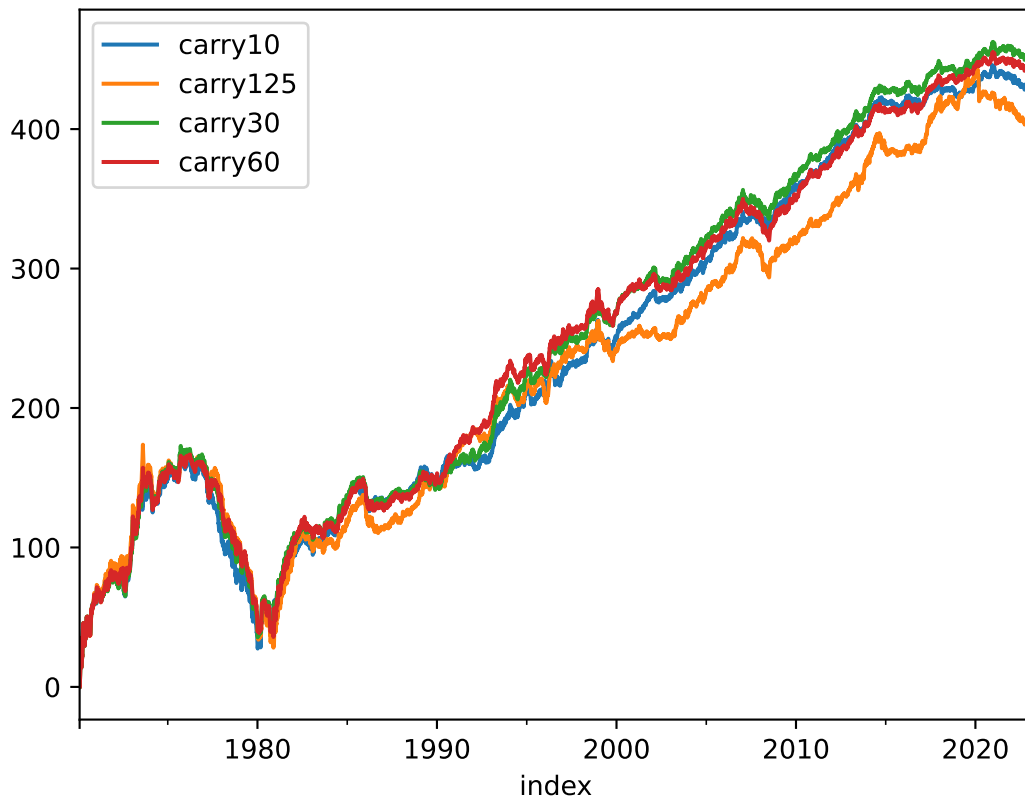
ann. mean	{'carry10': -0.078, 'carry125': -9.359, 'carry30': 0.602, 'carry60': -0.573}
ann. std	{'carry10': 6.765, 'carry125': 9.236, 'carry30': 6.558, 'carry60': 6.511}
ann. SR	{'carry10': -0.01, 'carry125': -1.01, 'carry30': 0.09, 'carry60': -0.09}



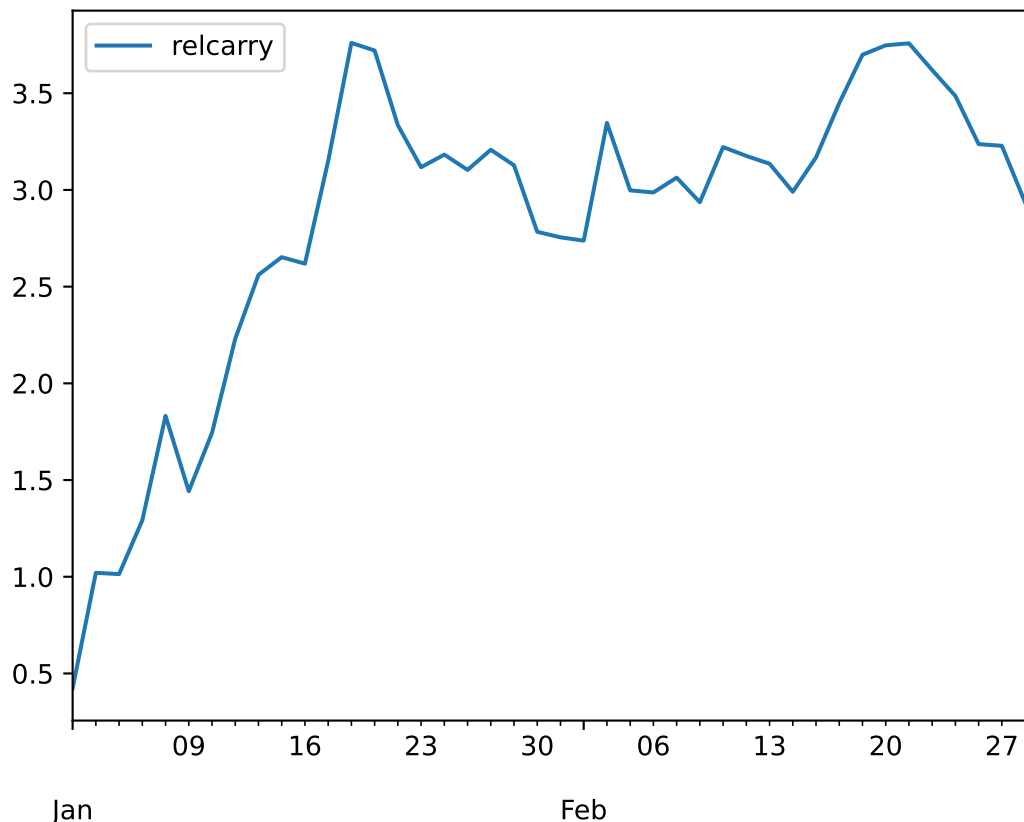
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.32, 'carry125': 4.833, 'carry30': 4.616, 'carry60': 4.854}
ann. std {'carry10': 6.376, 'carry125': 9.237, 'carry30': 6.489, 'carry60': 6.456}
ann. SR {'carry10': 0.52, 'carry125': 0.52, 'carry30': 0.71, 'carry60': 0.75}



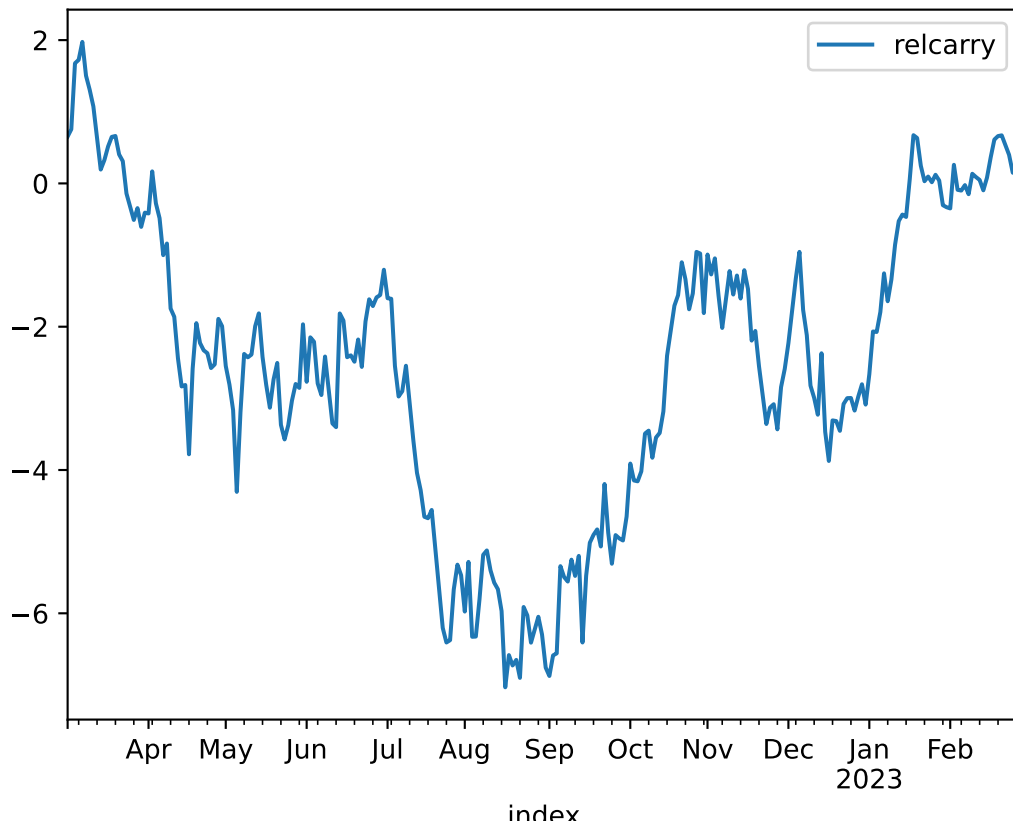
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.965, 'carry125': 7.574, 'carry30': 8.362, 'carry60': 8.223}
ann. std {'carry10': 11.895, 'carry125': 12.174, 'carry30': 11.915, 'carry60': 11.869}
ann. SR {'carry10': 0.67, 'carry125': 0.62, 'carry30': 0.7, 'carry60': 0.69}



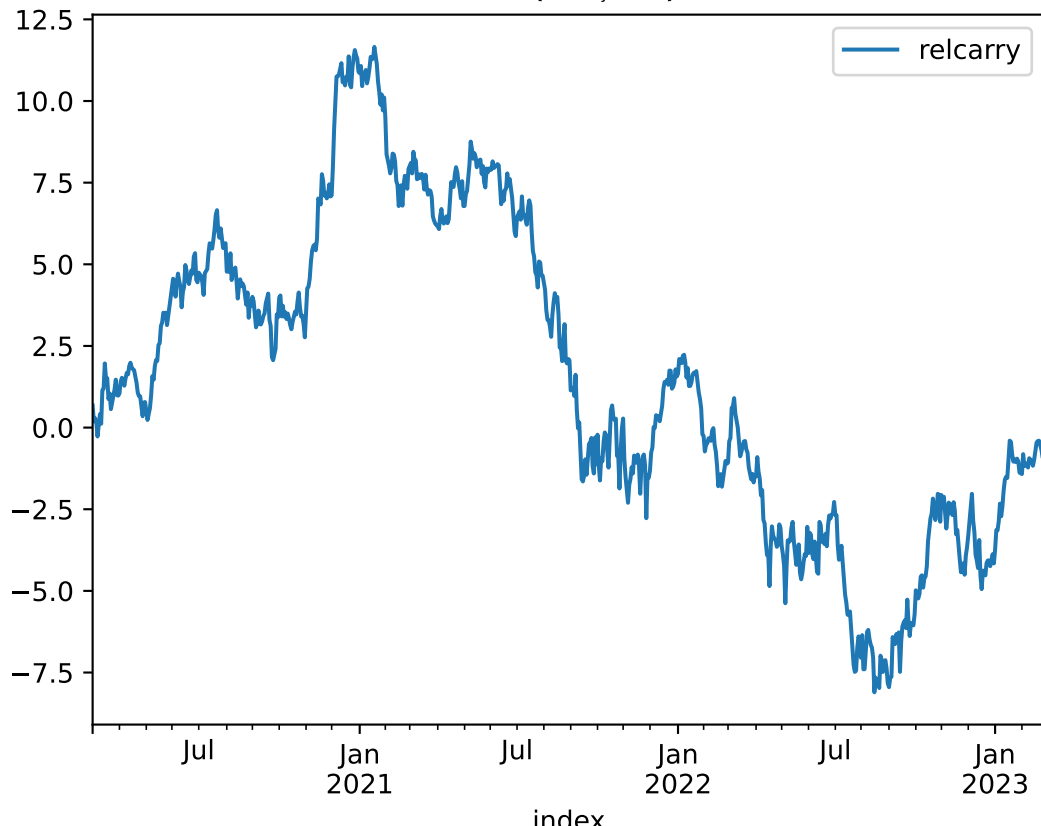
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 17.893}
ann. std {'relcarry': 4.525}
ann. SR {'relcarry': 3.95}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -0.149}
ann. std {'relcarry': 7.153}
ann. SR {'relcarry': -0.02}



Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.401}
ann. std {'relcarry': 6.791}
ann. SR {'relcarry': -0.06}

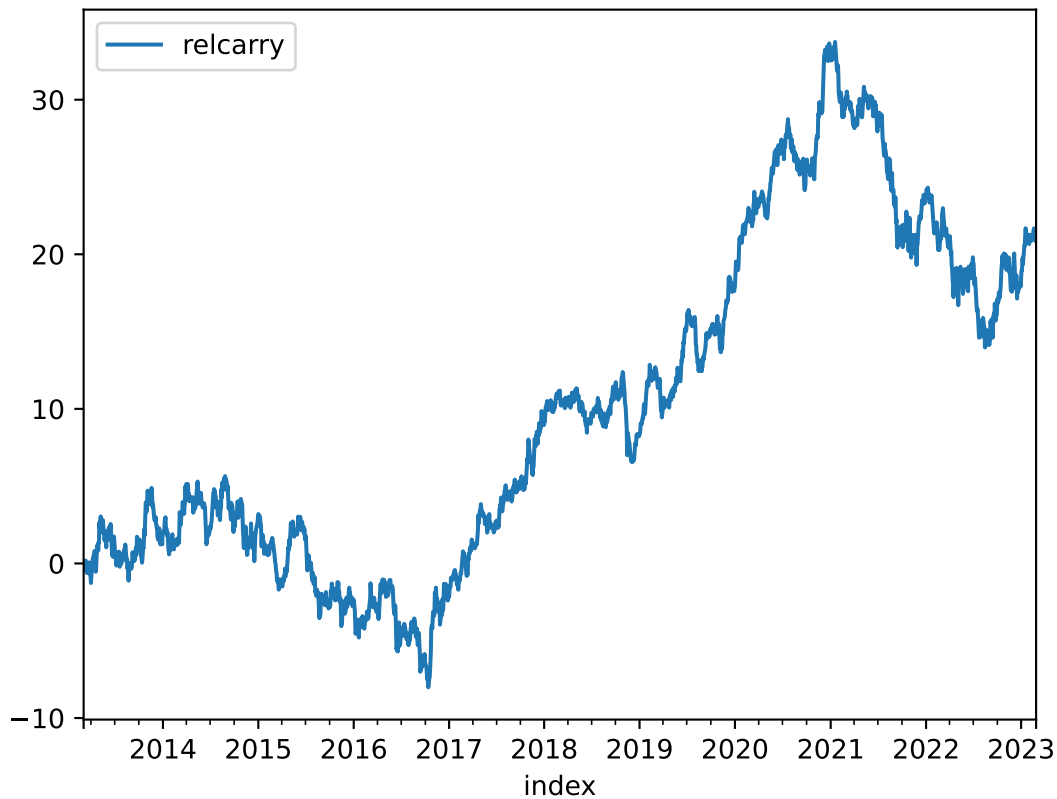


Total Trading Rule P&L for period '10Y'

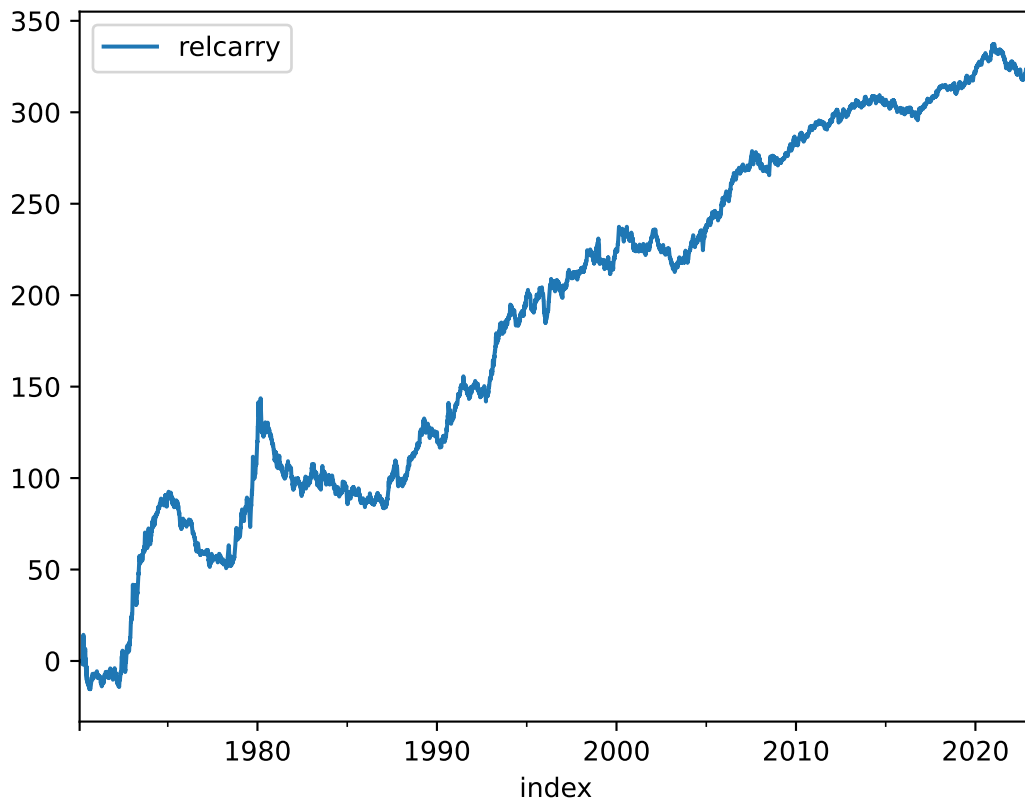
ann. mean {'relcarry': 2.048}

ann. std {'relcarry': 5.99}

ann. SR {'relcarry': 0.34}



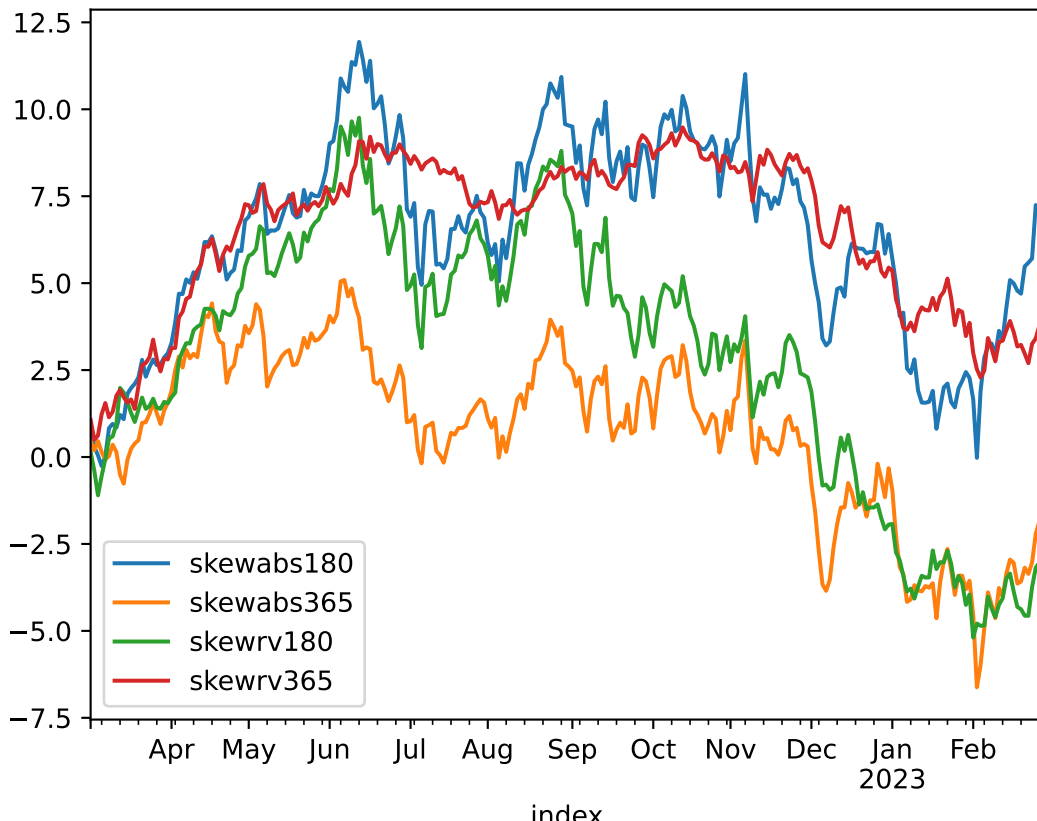
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.0}
ann. std {'relcarry': 9.976}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 5.298, 'skewabs365': -6.597, 'skewrv180': -7.684, 'skewrv365': -10.209}
ann. std {'skewabs180': 11.593, 'skewabs365': 10.905, 'skewrv180': 7.19, 'skewrv365': 6.711}
ann. SR {'skewabs180': 0.46, 'skewabs365': -0.6, 'skewrv180': -1.07, 'skewrv365': -1.52}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 7.17, 'skewabs365': -1.383, 'skewrv180': -3.154, 'skewrv365': 3.714}
ann. std {'skewabs180': 10.513, 'skewabs365': 8.932, 'skewrv180': 9.046, 'skewrv365': 5.362}
ann. SR {'skewabs180': 0.68, 'skewabs365': -0.15, 'skewrv180': -0.35, 'skewrv365': 0.69}



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

ann. mean {'skewabs180': 4.897, 'skewabs365': 7.663, 'skewrv180': -4.142, 'skewrv365': 0.79}

ann. std {'skewabs180': 9.498, 'skewabs365': 8.945, 'skewrv180': 7.577, 'skewrv365': 6.578}

ann. SR {'skewabs180': 0.52, 'skewabs365': 0.86, 'skewrv180': -0.55, 'skewrv365': 0.12}

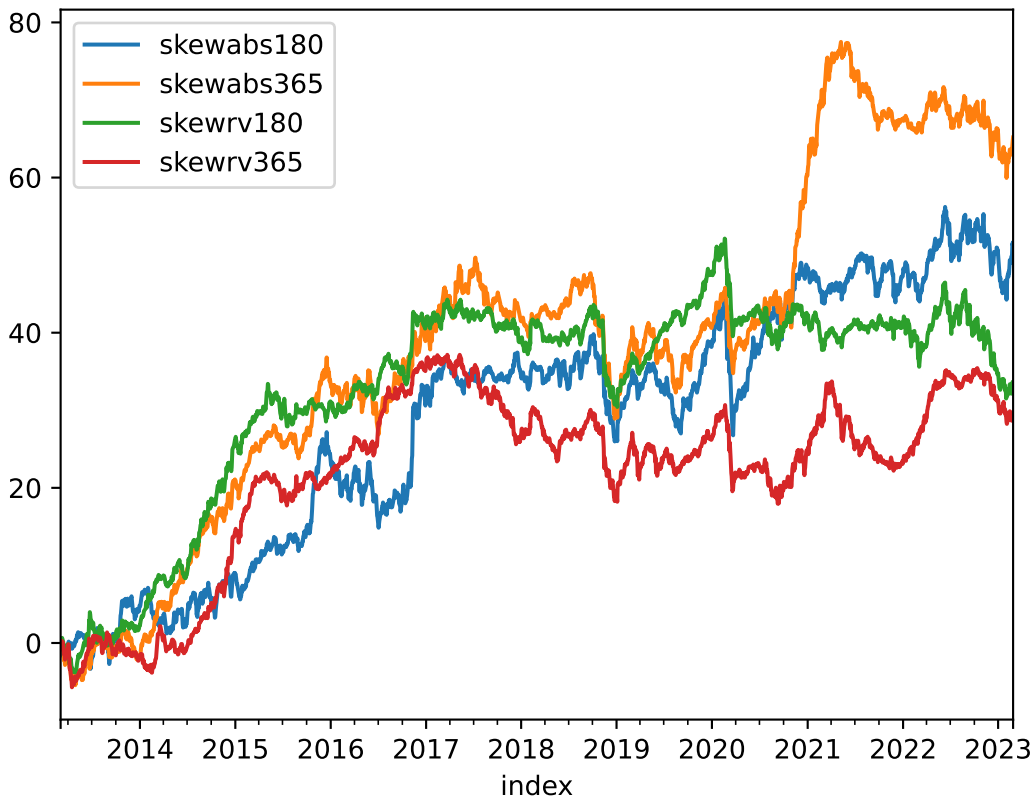


Total Trading Rule P&L for period '10Y'

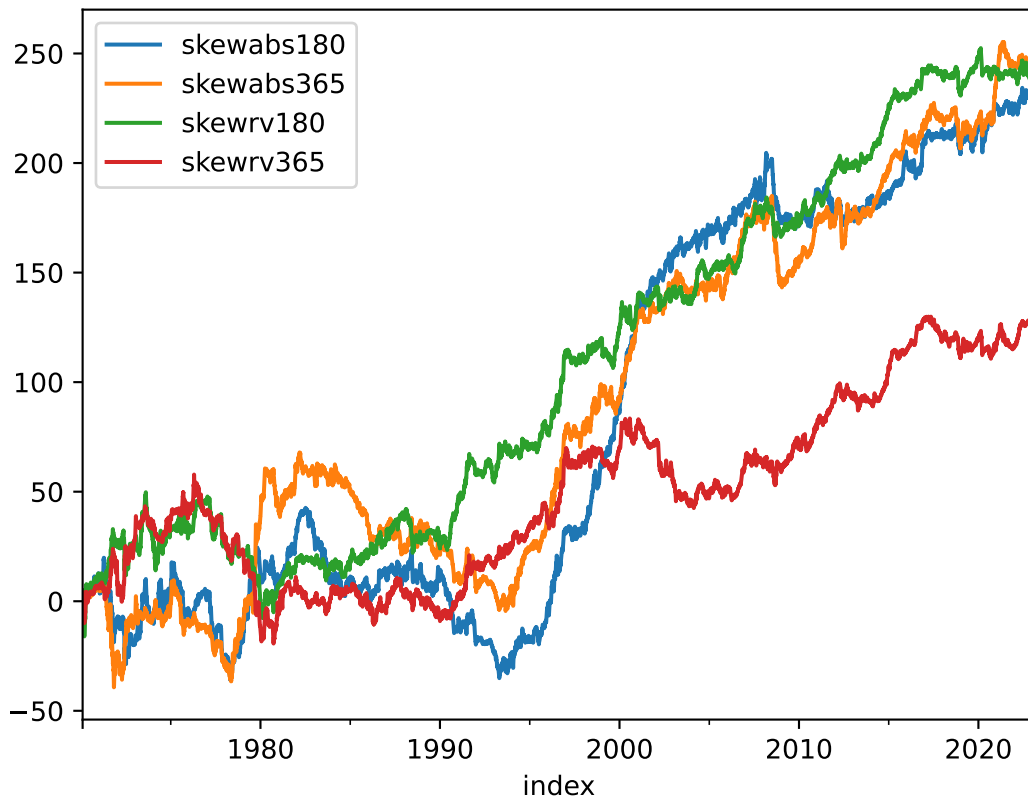
ann. mean {'skewabs180': 5.063, 'skewabs365': 6.4, 'skewrv180': 3.29, 'skewrv365': 2.919}

ann. std {'skewabs180': 8.084, 'skewabs365': 8.022, 'skewrv180': 6.56, 'skewrv365': 6.147}

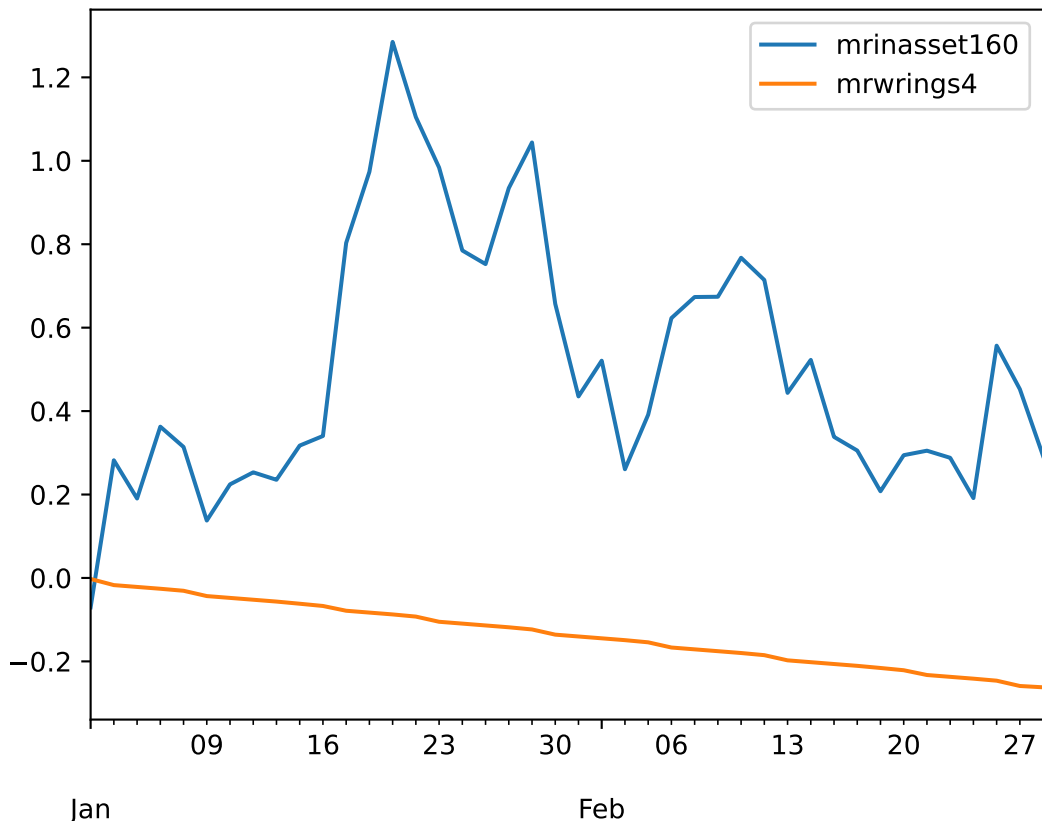
ann. SR {'skewabs180': 0.63, 'skewabs365': 0.8, 'skewrv180': 0.5, 'skewrv365': 0.47}



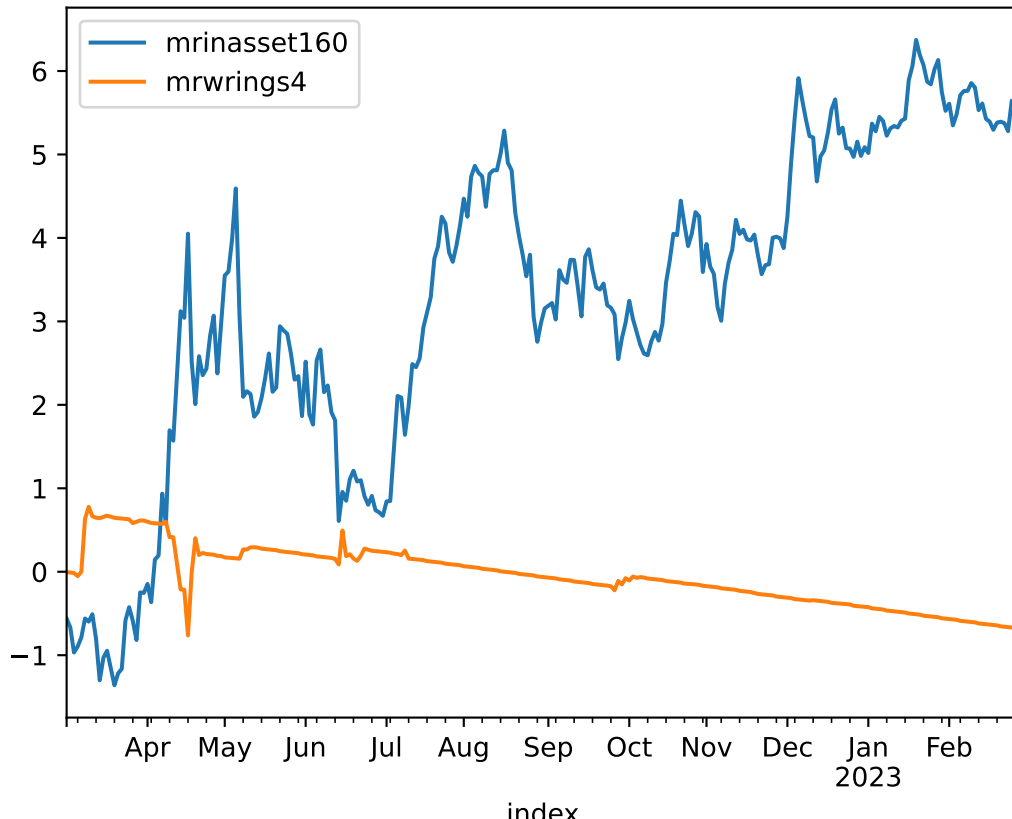
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.246, 'skewabs365': 4.492, 'skewrv180': 4.323, 'skewrv365': 2.264}
ann. std {'skewabs180': 10.779, 'skewabs365': 10.239, 'skewrv180': 9.45, 'skewrv365': 8.742}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



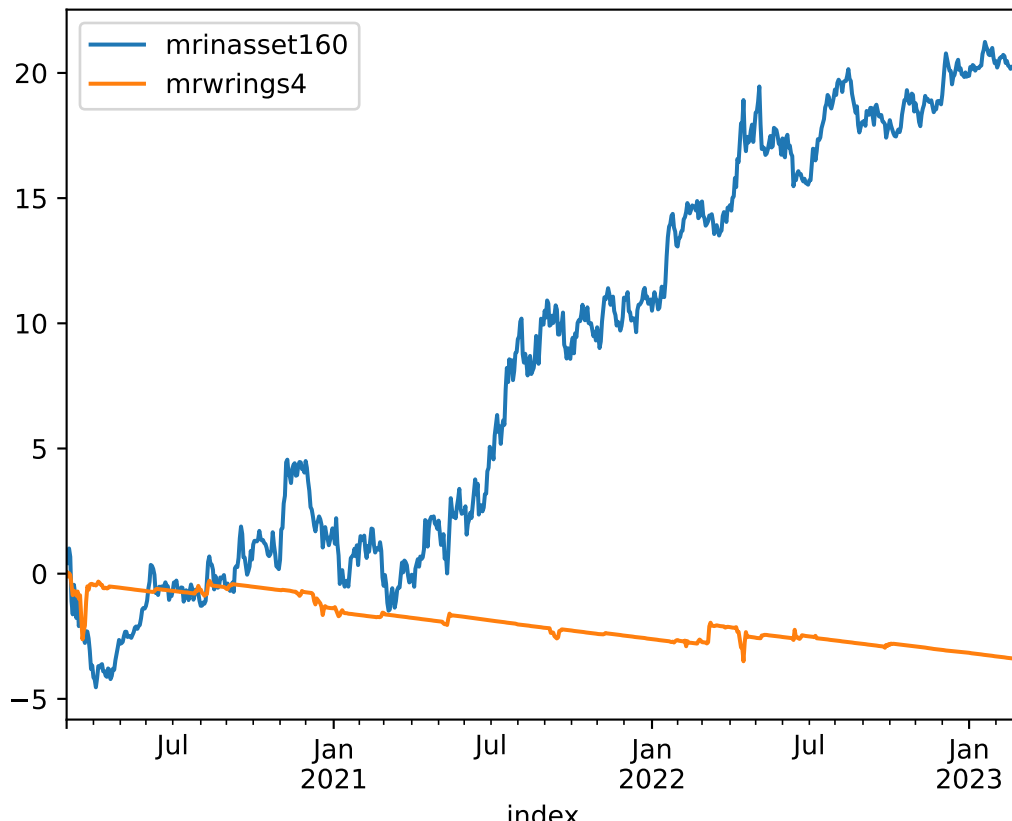
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 1.782, 'mrwrings4': -1.598}
ann. std {'mrinasset160': 2.912, 'mrwrings4': 0.054}
ann. SR {'mrinasset160': 0.61, 'mrwrings4': -29.48}



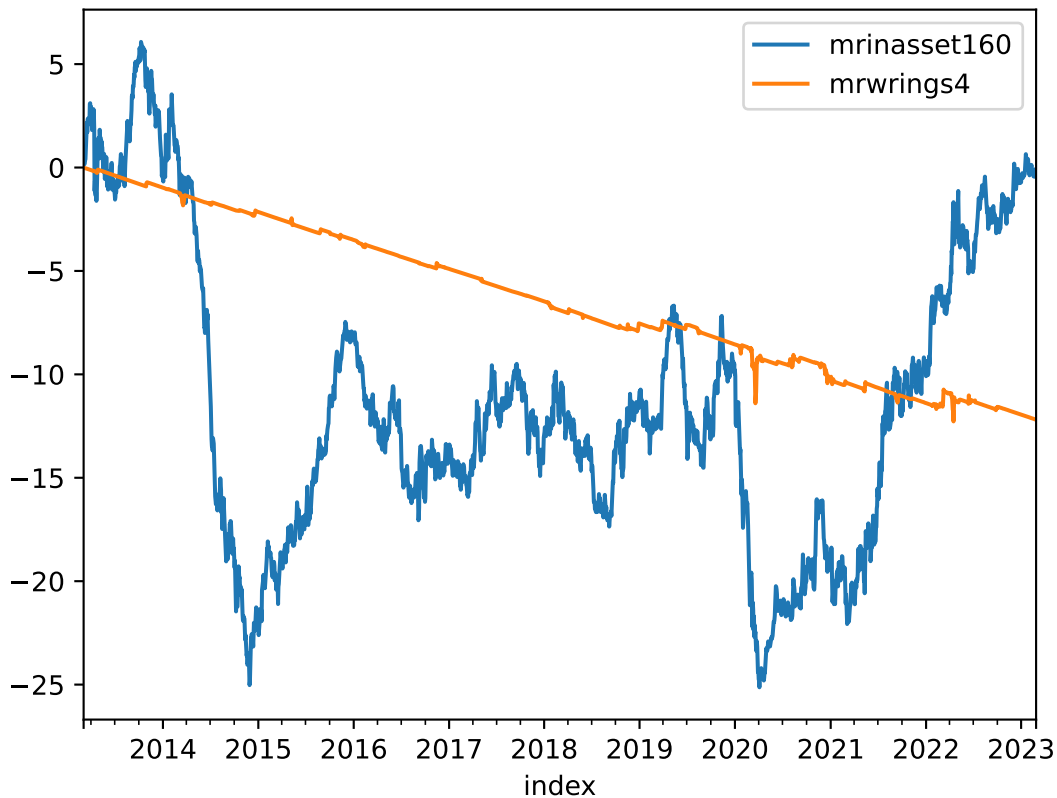
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 5.297, 'mrwrings4': -0.673}
ann. std {'mrinasset160': 5.589, 'mrwrings4': 1.439}
ann. SR {'mrinasset160': 0.95, 'mrwrings4': -0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.628, 'mrwrings4': -1.119}
ann. std {'mrinasset160': 6.562, 'mrwrings4': 1.516}
ann. SR {'mrinasset160': 1.01, 'mrwrings4': -0.74}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.034, 'mrwrings4': -1.198}
ann. std {'mrinasset160': 6.499, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': -0.01, 'mrwrings4': -1.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.132, 'mrwrings4': -2.315}
ann. std {'mrinasset160': 11.151, 'mrwrings4': 2.616}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.88}

