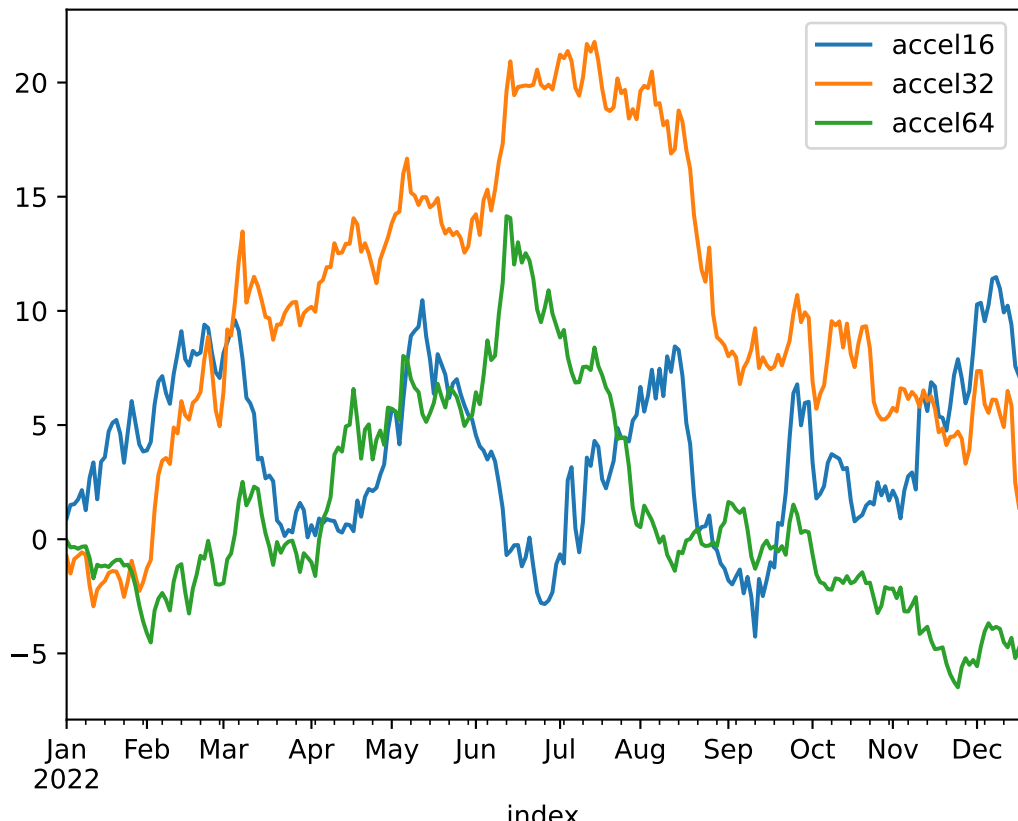
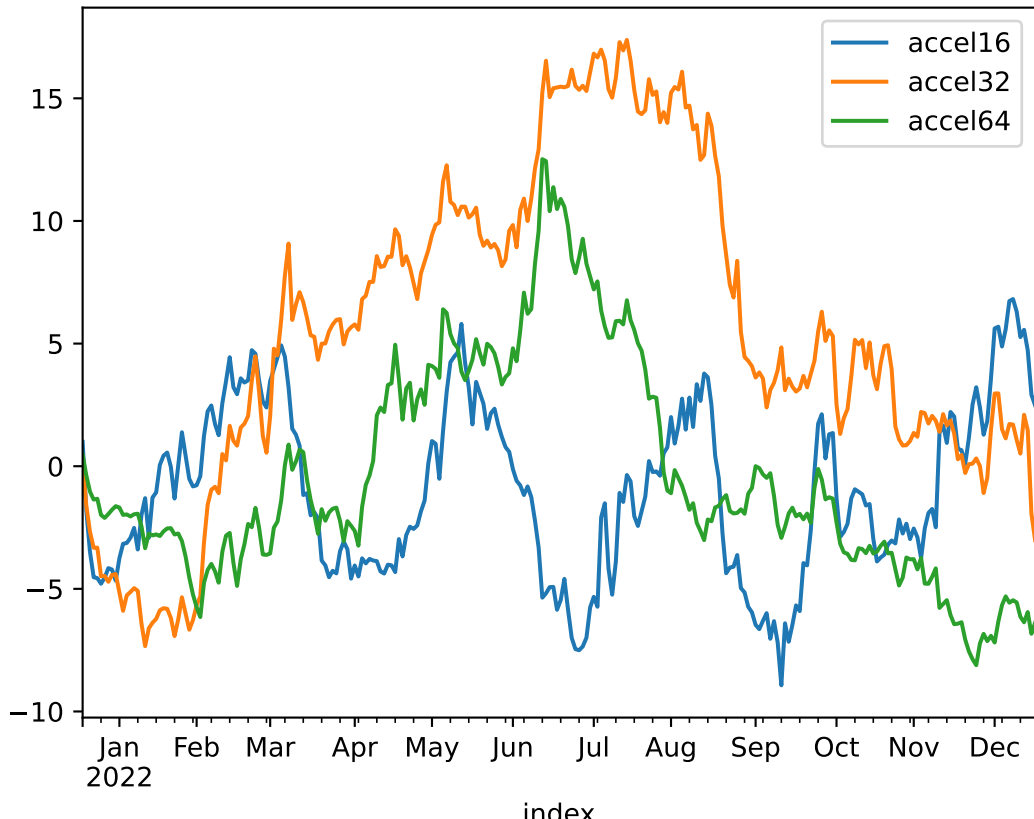


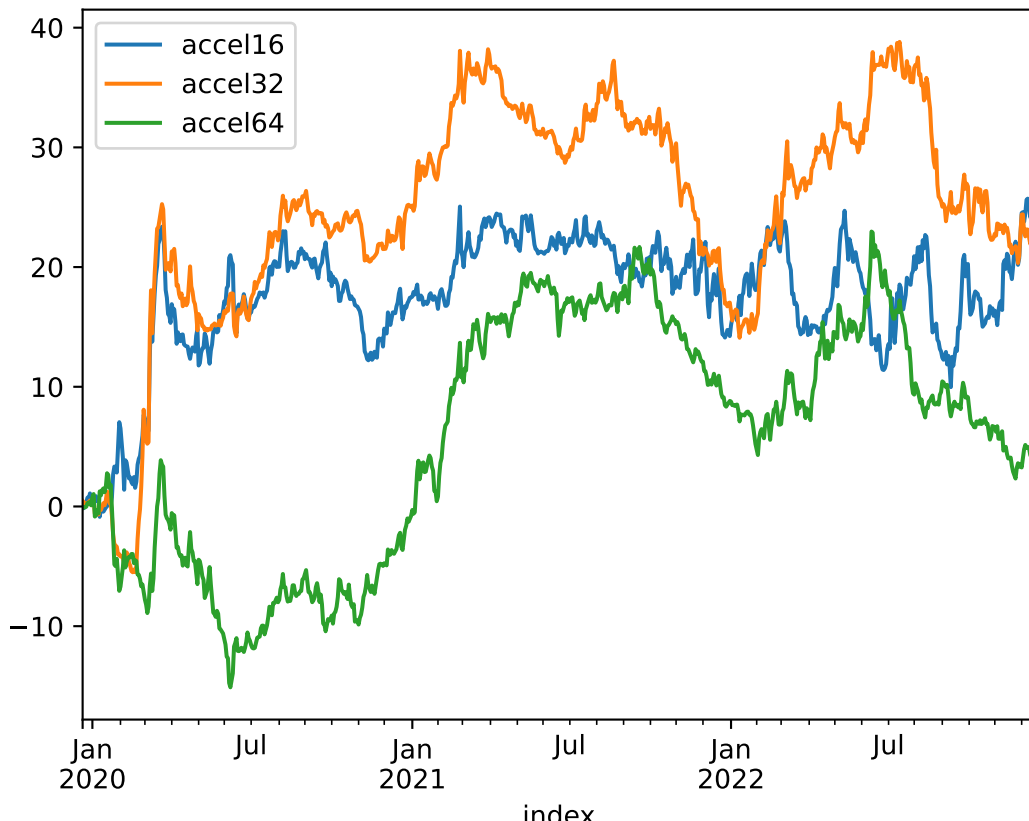
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': 7.321, 'accel32': 1.419, 'accel64': -4.871}
ann. std {'accel16': 16.315, 'accel32': 14.795, 'accel64': 11.804}
ann. SR {'accel16': 0.45, 'accel32': 0.1, 'accel64': -0.41}



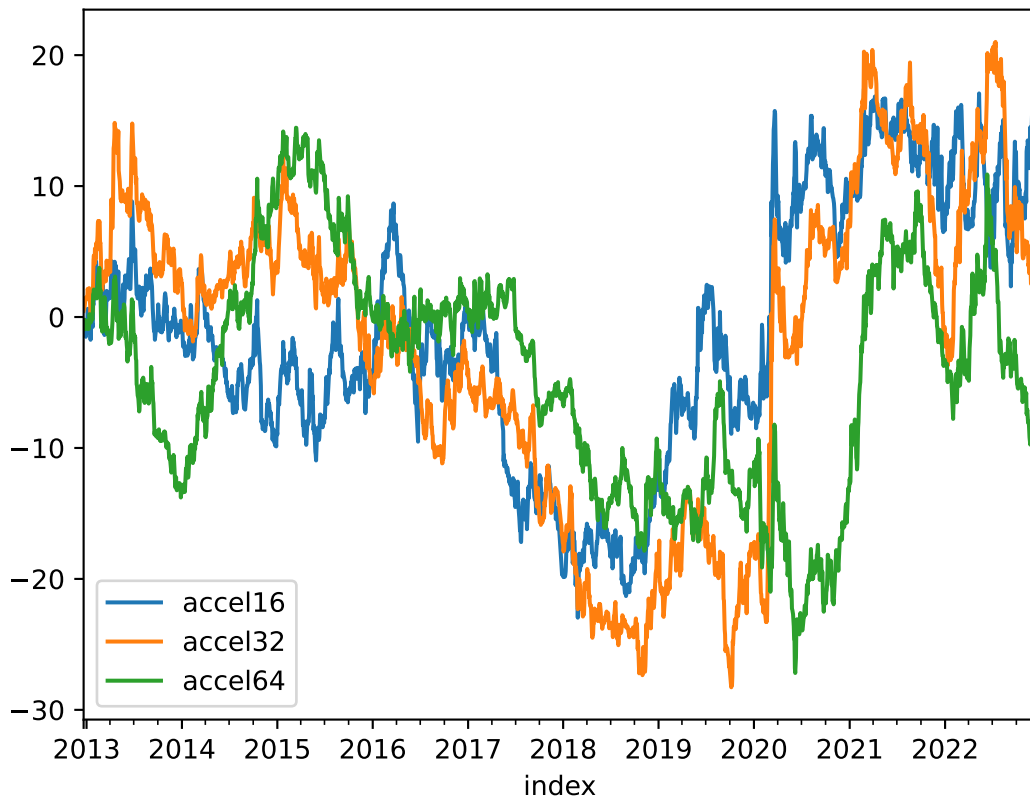
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': 2.445, 'accel32': -2.966, 'accel64': -6.287}
ann. std {'accel16': 16.404, 'accel32': 14.715, 'accel64': 11.658}
ann. SR {'accel16': 0.15, 'accel32': -0.2, 'accel64': -0.54}



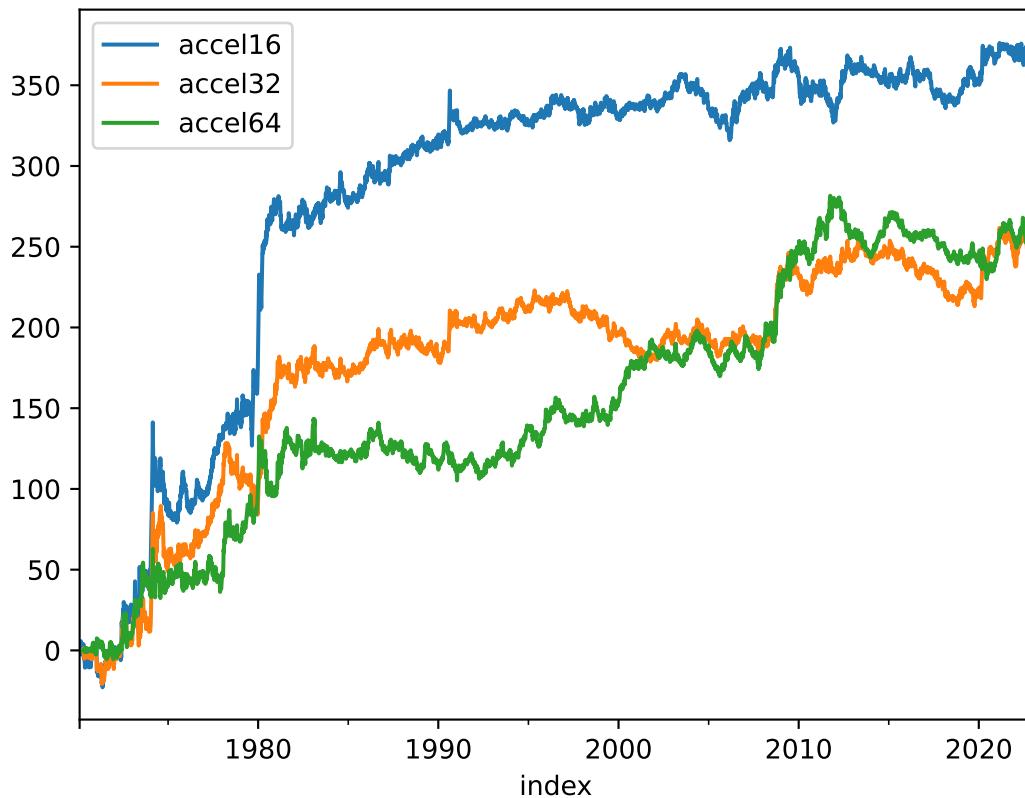
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 7.01, 'accel32': 6.037, 'accel64': 1.331}
ann. std {'accel16': 14.907, 'accel32': 14.257, 'accel64': 11.75}
ann. SR {'accel16': 0.47, 'accel32': 0.42, 'accel64': 0.11}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.351, 'accel32': 0.061, 'accel64': -0.787}
ann. std {'accel16': 11.918, 'accel32': 11.195, 'accel64': 9.576}
ann. SR {'accel16': 0.11, 'accel32': 0.01, 'accel64': -0.08}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.913, 'accel32': 4.491, 'accel64': 4.623}
ann. std {'accel16': 15.732, 'accel32': 13.803, 'accel64': 13.332}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}

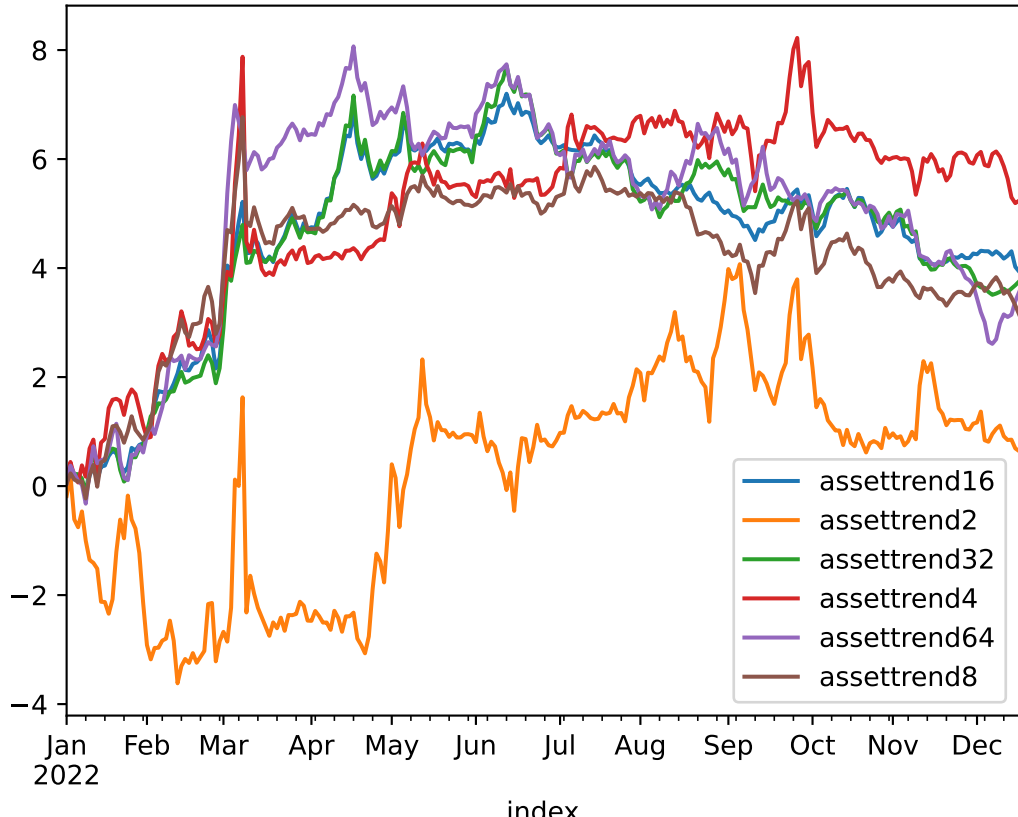


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.031, 'assettrend2': 0.658, 'assettrend32': 3.845, 'assettrend4': 5.363, 'assettrend64': 3.643, 'assettrend8': 3.225}

ann. std {'assettrend16': 3.086, 'assettrend2': 7.798, 'assettrend32': 3.392, 'assettrend4': 5.844, 'assettrend64': 4.054, 'assettrend8': 3.825}

ann. SR {'assettrend16': 1.31, 'assettrend2': 0.08, 'assettrend32': 1.13, 'assettrend4': 0.92, 'assettrend64': 0.9, 'assettrend8': 0.84}

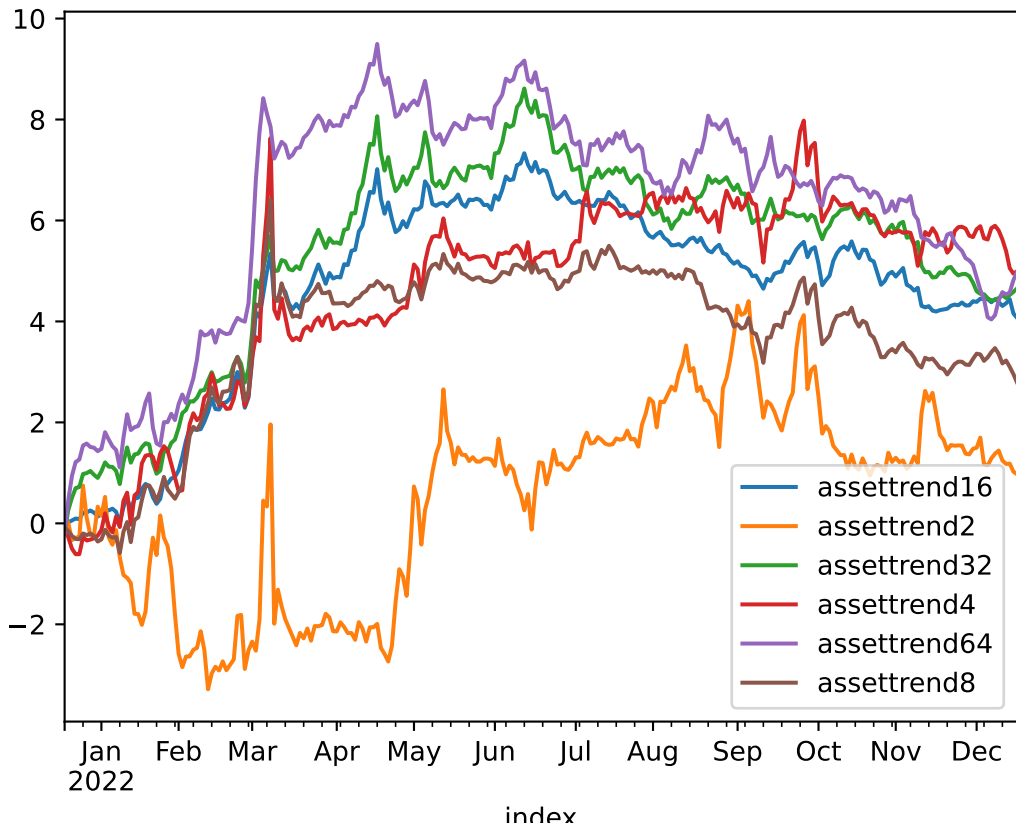


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.007, 'assettrend2': 0.958, 'assettrend32': 4.583, 'assettrend4': 4.916, 'assettrend64': 4.911, 'assettrend8': 2.745}

ann. std {'assettrend16': 3.035, 'assettrend2': 7.779, 'assettrend32': 3.38, 'assettrend4': 5.752, 'assettrend64': 4.078, 'assettrend8': 3.759}

ann. SR {'assettrend16': 1.32, 'assettrend2': 0.12, 'assettrend32': 1.36, 'assettrend4': 0.85, 'assettrend64': 1.2, 'assettrend8': 0.73}

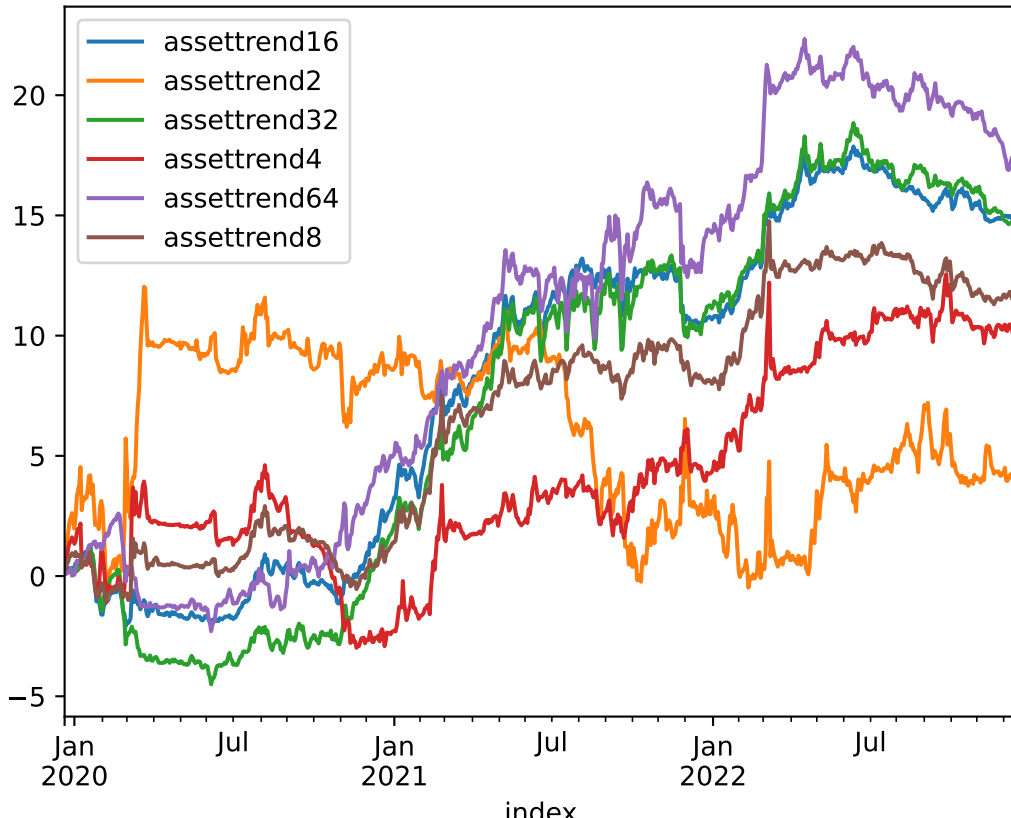


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.788, 'assettrend2': 1.239, 'assettrend32': 4.878, 'assettrend4': 3.136, 'assettrend64': 5.845, 'assettrend8': 3.652}

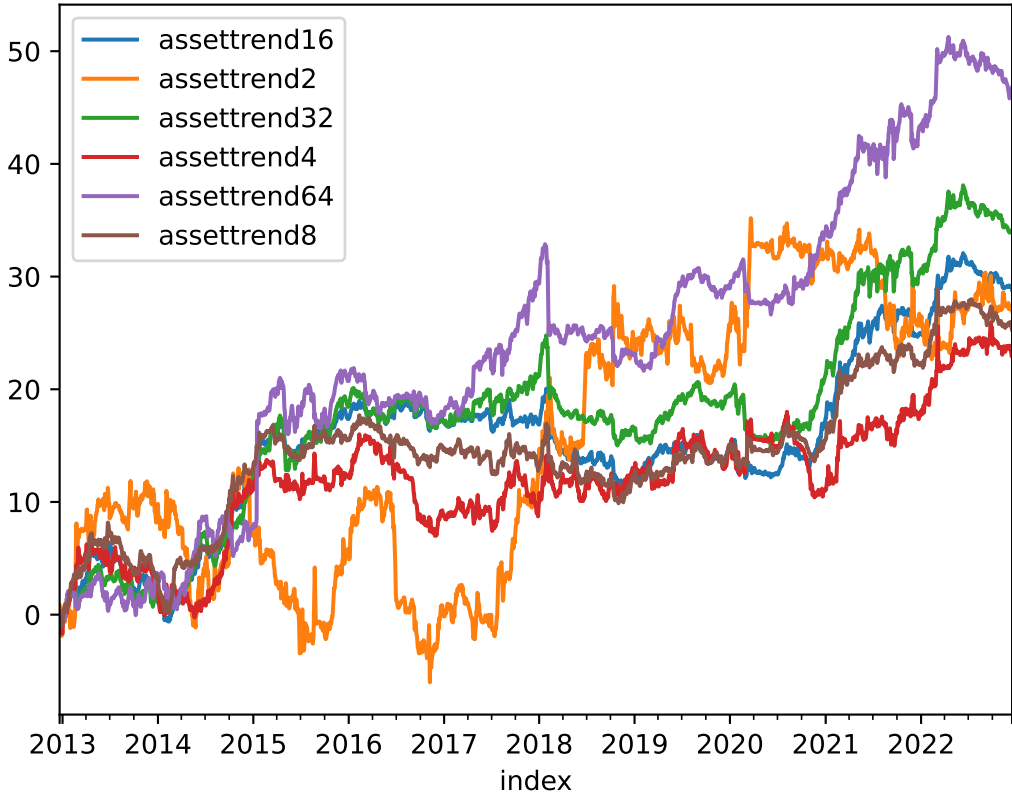
ann. std {'assettrend16': 3.613, 'assettrend2': 7.884, 'assettrend32': 4.427, 'assettrend4': 5.464, 'assettrend64': 5.135, 'assettrend8': 3.764}

ann. SR {'assettrend16': 1.33, 'assettrend2': 0.16, 'assettrend32': 1.1, 'assettrend4': 0.57, 'assettrend64': 1.14, 'assettrend8': 0.97}



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

ann. mean {'assettrend16': 2.83, 'assettrend2': 2.644, 'assettrend32': 3.353, 'assettrend4': 2.254, 'assettrend64': 4.591, 'assettrend8': 2.483}
ann. std {'assettrend16': 3.282, 'assettrend2': 8.448, 'assettrend32': 3.76, 'assettrend4': 5.036, 'assettrend64': 5.314, 'assettrend8': 3.589}
ann. SR {'assettrend16': 0.86, 'assettrend2': 0.31, 'assettrend32': 0.89, 'assettrend4': 0.45, 'assettrend64': 0.86, 'assettrend8': 0.69}

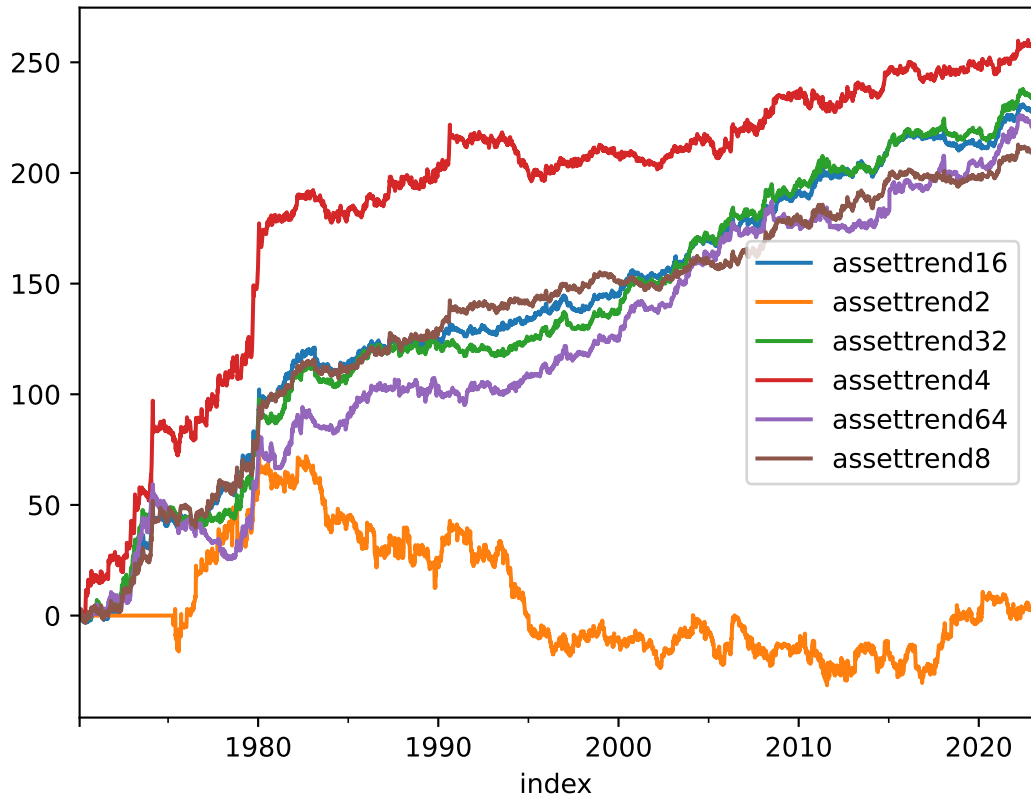


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.227, 'assettrend2': 0.046, 'assettrend32': 4.342, 'assettrend4': 4.772, 'assettrend64': 4.115, 'assettrend8': 3.883}

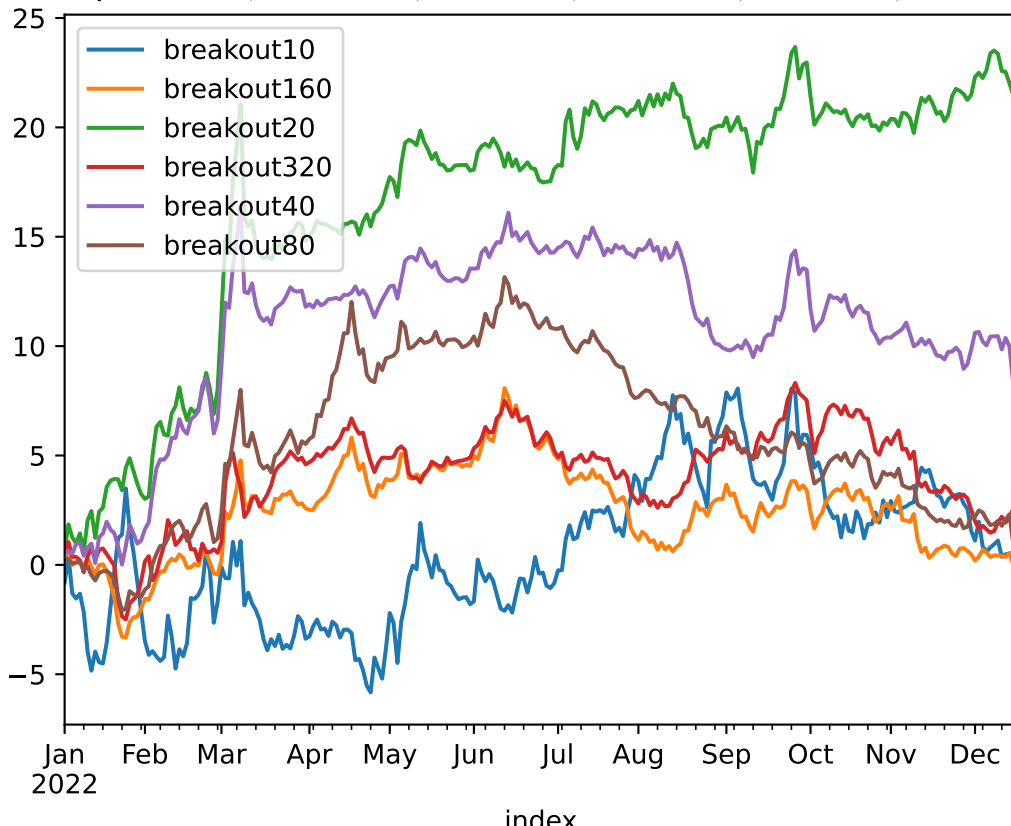
ann. std {'assettrend16': 4.663, 'assettrend2': 10.053, 'assettrend32': 4.898, 'assettrend4': 7.352, 'assettrend64': 5.473, 'assettrend8': 5.038}

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': 0.596, 'breakout160': 0.334, 'breakout20': 22.097, 'breakout320': 2.903, 'breakout40': 8.15, 'breakout80': 1.009}
 ann. std {'breakout10': 13.809, 'breakout160': 7.216, 'breakout20': 12.213, 'breakout320': 7.542, 'breakout40': 9.866, 'breakout80': 8.027}
 ann. SR {'breakout10': 0.04, 'breakout160': 0.05, 'breakout20': 1.81, 'breakout320': 0.38, 'breakout40': 0.83, 'breakout80': 0.13}

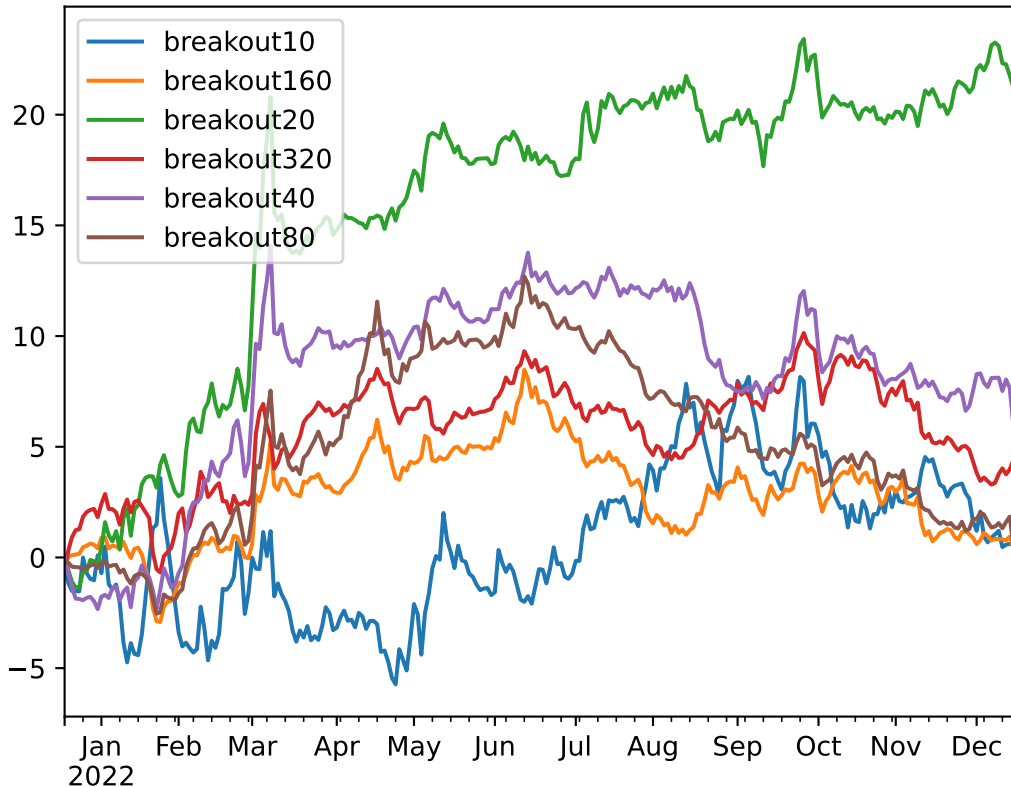


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 0.667, 'breakout160': 0.721, 'breakout20': 20.996, 'breakout320': 4.584, 'breakout40': 5.539, 'breakout80': 0.512}

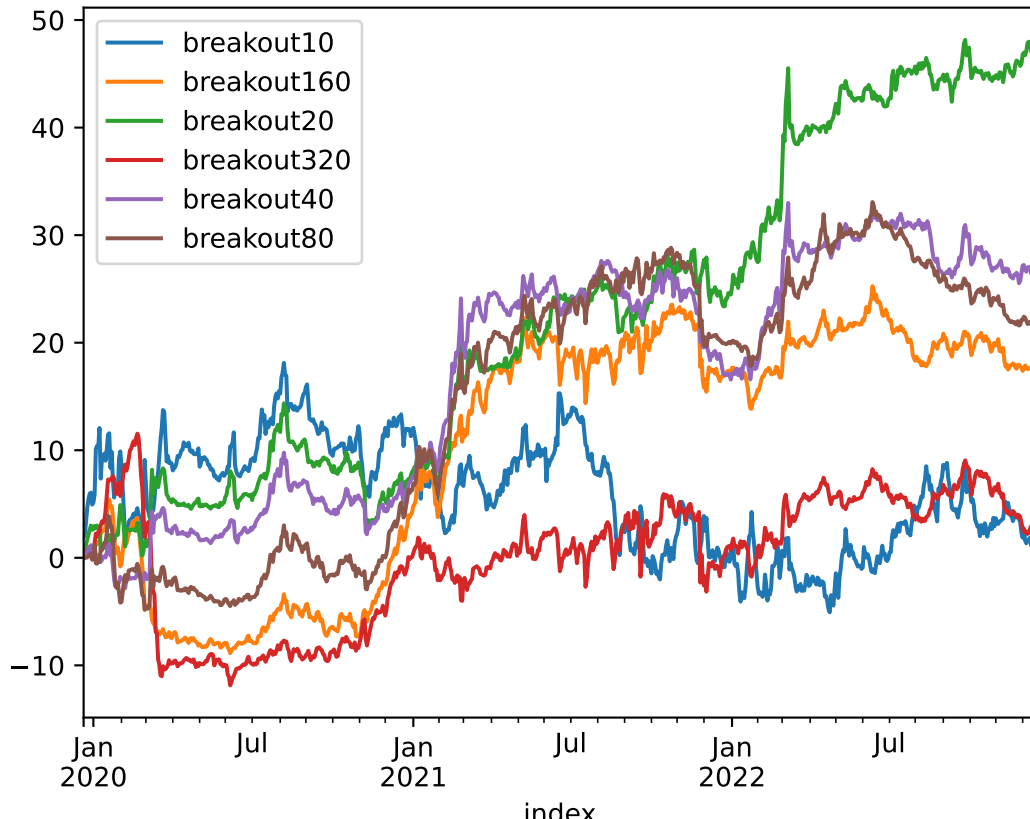
ann. std {'breakout10': 13.721, 'breakout160': 7.105, 'breakout20': 12.04, 'breakout320': 7.544, 'breakout40': 9.753, 'breakout80': 7.878}

ann. SR {'breakout10': 0.05, 'breakout160': 0.1, 'breakout20': 1.74, 'breakout320': 0.61, 'breakout40': 0.57, 'breakout80': 0.06}



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

ann. mean {'breakout10': 0.44, 'breakout160': 5.739, 'breakout20': 15.095, 'breakout320': 1.173, 'breakout40': 8.04, 'breakout80': 6.853}
ann. std {'breakout10': 15.085, 'breakout160': 9.756, 'breakout20': 11.534, 'breakout320': 10.758, 'breakout40': 9.998, 'breakout80': 9.613}
ann. SR {'breakout10': 0.03, 'breakout160': 0.59, 'breakout20': 1.31, 'breakout320': 0.11, 'breakout40': 0.8, 'breakout80': 0.71}

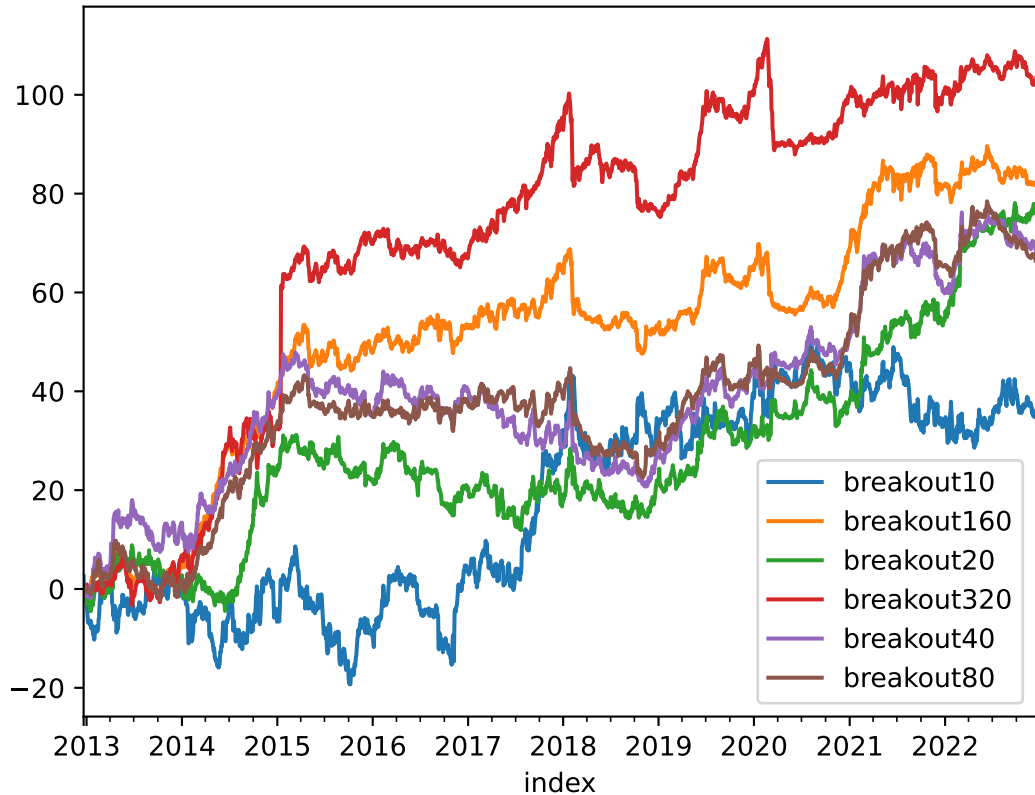


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.435, 'breakout160': 8.041, 'breakout20': 7.462, 'breakout320': 10.148, 'breakout40': 6.653, 'breakout80': 6.509}

ann. std {'breakout10': 15.76, 'breakout160': 9.142, 'breakout20': 11.21, 'breakout320': 13.347, 'breakout40': 9.856, 'breakout80': 9.026}

ann. SR {'breakout10': 0.22, 'breakout160': 0.88, 'breakout20': 0.67, 'breakout320': 0.76, 'breakout40': 0.68, 'breakout80': 0.72}

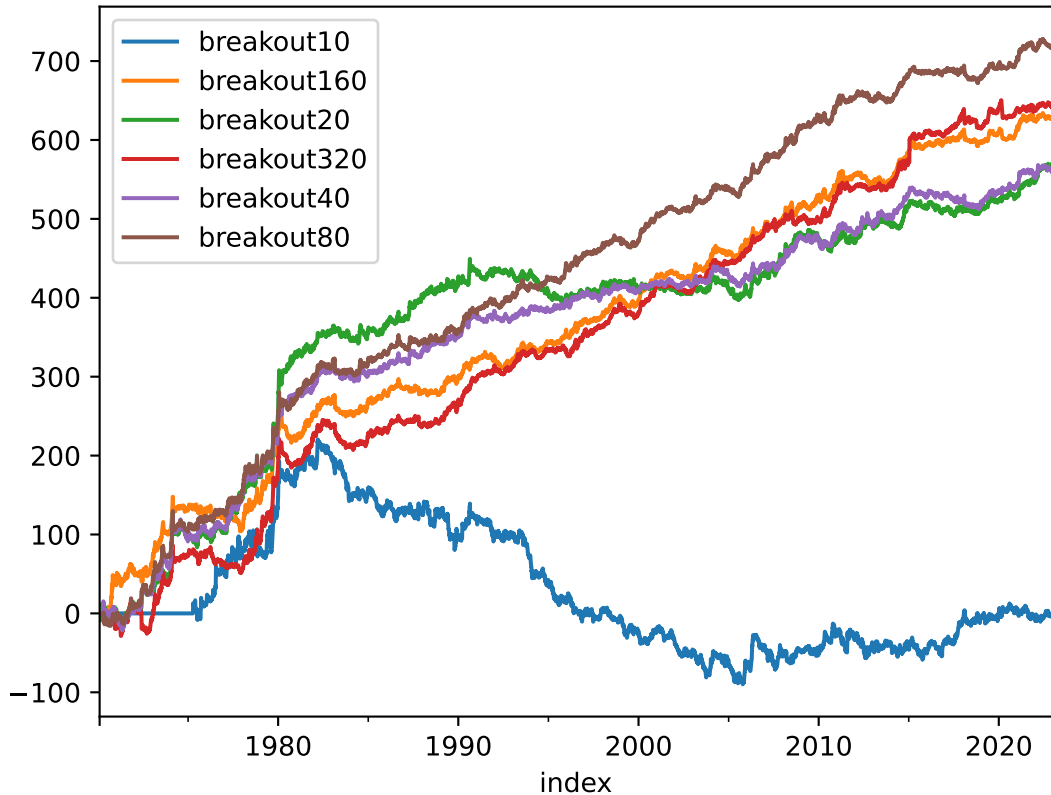


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.077, 'breakout160': 11.627, 'breakout20': 10.538, 'breakout320': 11.922, 'breakout40': 10.388, 'breakout80': 13.286}

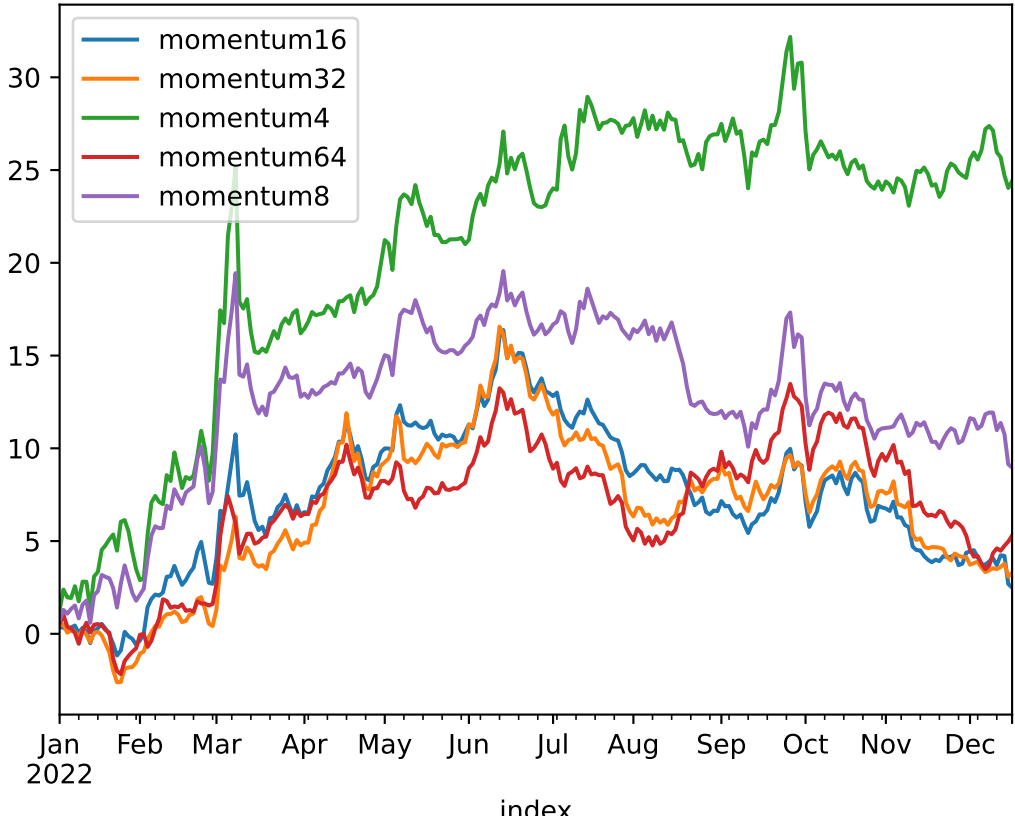
ann. std {'breakout10': 20.843, 'breakout160': 12.502, 'breakout20': 16.109, 'breakout320': 13.056, 'breakout40': 13.241, 'breakout80': 12.762}

ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}



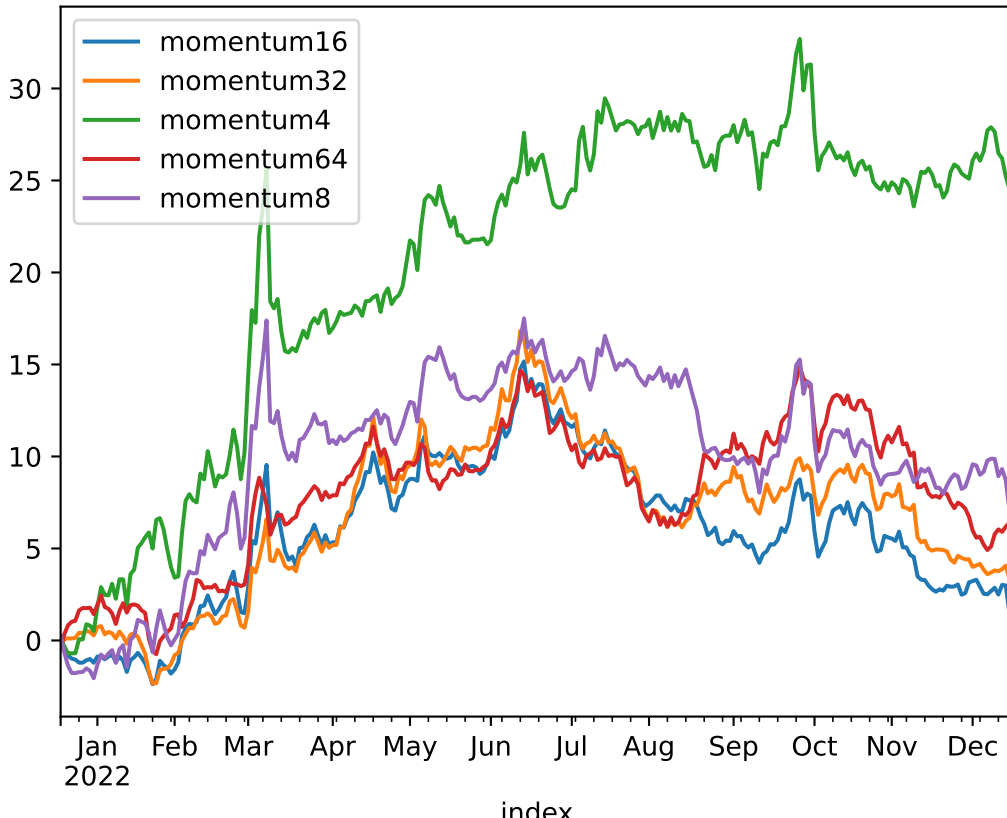
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 2.555, 'momentum32': 3.37, 'momentum4': 24.984, 'momentum64': 5.421, 'momentum8': 9.182}
ann. std {'momentum16': 10.262, 'momentum32': 9.807, 'momentum4': 17.494, 'momentum64': 9.485, 'momentum8': 13.434}
ann. SR {'momentum16': 0.25, 'momentum32': 0.34, 'momentum4': 1.43, 'momentum64': 0.57, 'momentum8': 0.68}



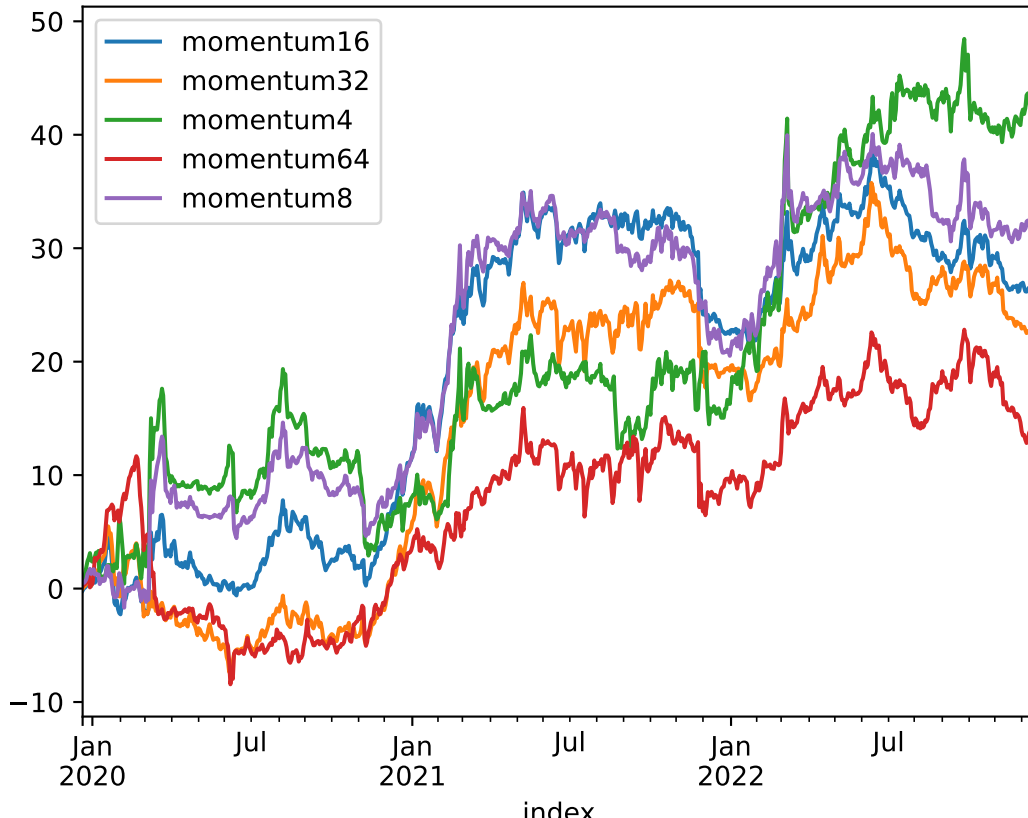
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 1.264, 'momentum32': 3.51, 'momentum4': 24.532, 'momentum64': 6.622, 'momentum8': 6.81}
ann. std {'momentum16': 10.086, 'momentum32': 9.633, 'momentum4': 17.202, 'momentum64': 9.381, 'momentum8': 13.243}
ann. SR {'momentum16': 0.13, 'momentum32': 0.36, 'momentum4': 1.43, 'momentum64': 0.71, 'momentum8': 0.51}



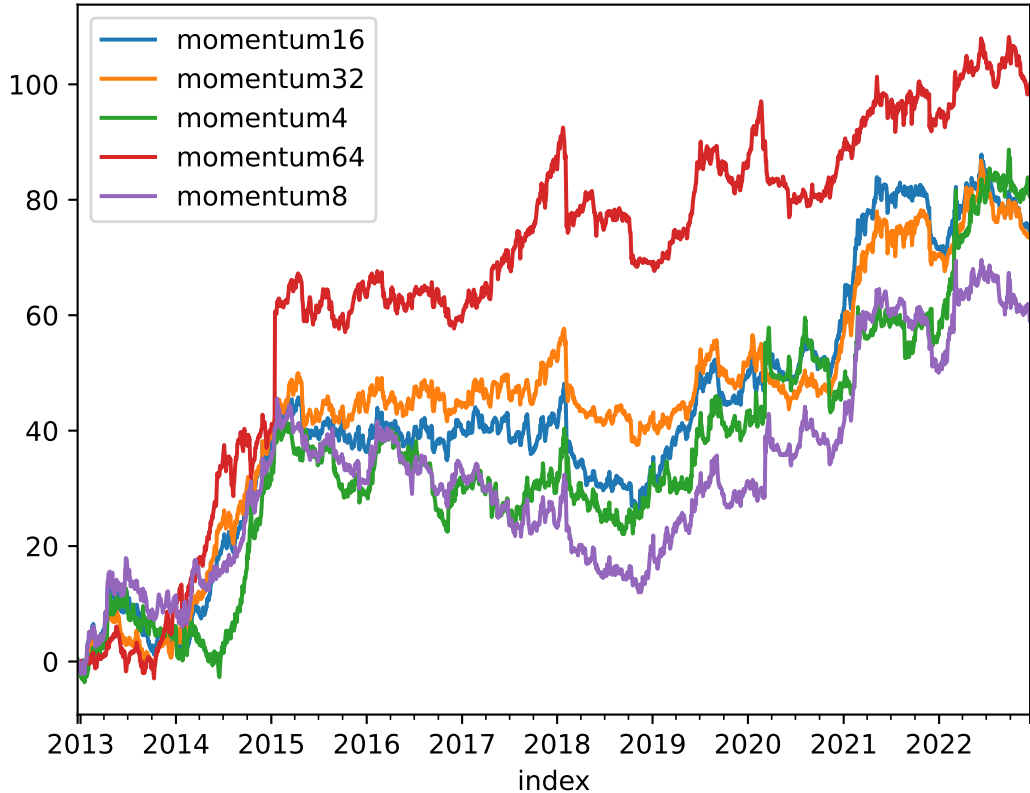
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.176, 'momentum32': 7.37, 'momentum4': 13.331, 'momentum64': 4.799, 'momentum8': 9.664}
ann. std {'momentum16': 11.026, 'momentum32': 10.869, 'momentum4': 16.101, 'momentum64': 10.967, 'momentum8': 12.785}
ann. SR {'momentum16': 0.74, 'momentum32': 0.68, 'momentum4': 0.83, 'momentum64': 0.44, 'momentum8': 0.76}



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

ann. mean {'momentum16': 7.263, 'momentum32': 7.221, 'momentum4': 7.945, 'momentum64': 9.823, 'momentum8': 5.793}
ann. std {'momentum16': 9.965, 'momentum32': 9.509, 'momentum4': 13.692, 'momentum64': 12.015, 'momentum8': 11.335}
ann. SR {'momentum16': 0.73, 'momentum32': 0.76, 'momentum4': 0.58, 'momentum64': 0.82, 'momentum8': 0.51}

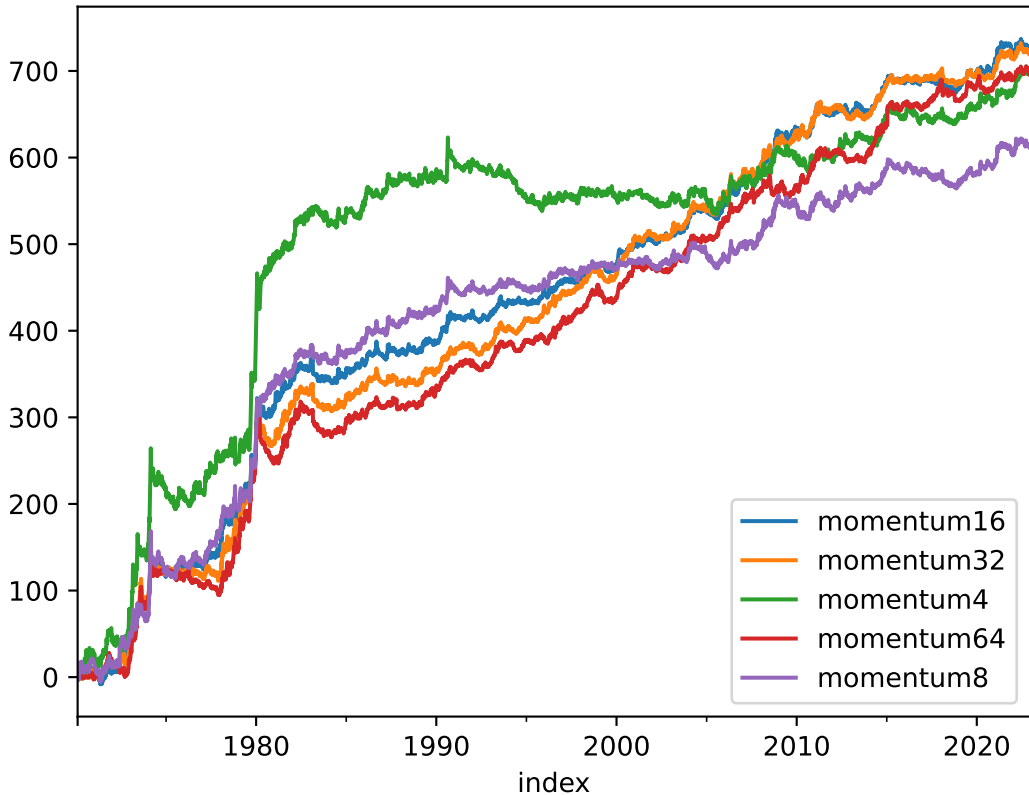


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.42, 'momentum32': 13.343, 'momentum4': 12.942, 'momentum64': 12.94, 'momentum8': 11.348}

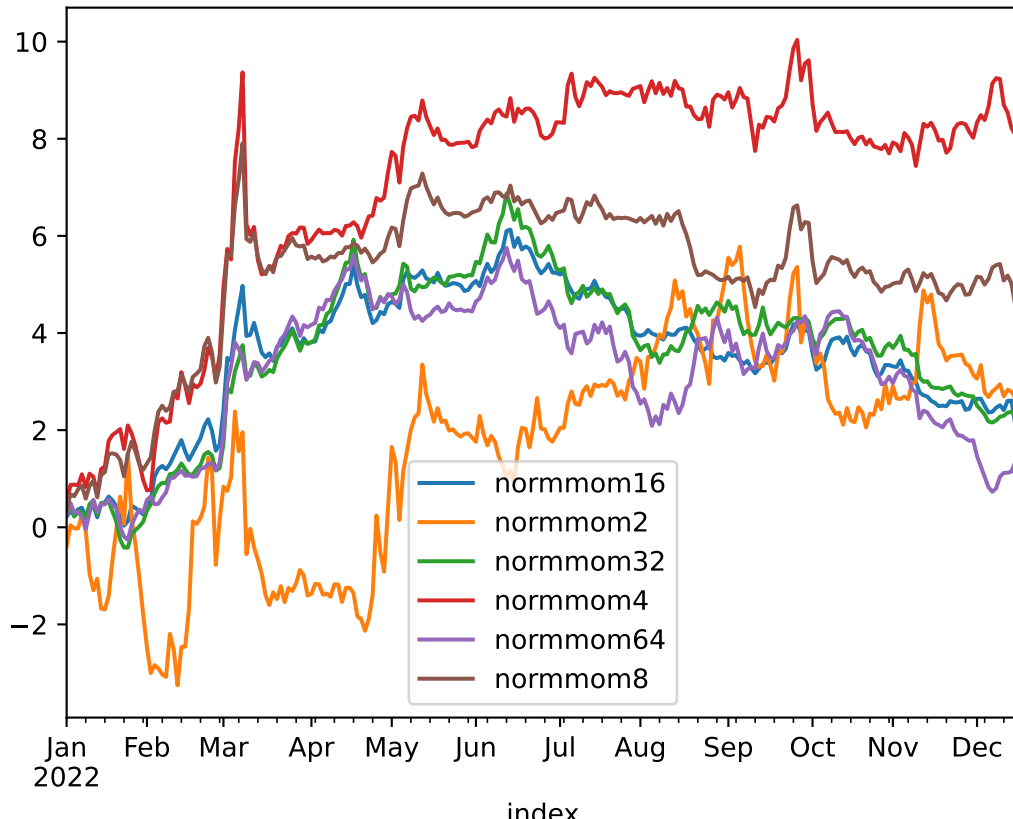
ann. std {'momentum16': 14.23, 'momentum32': 13.86, 'momentum4': 20.086, 'momentum64': 13.496, 'momentum8': 15.88}

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



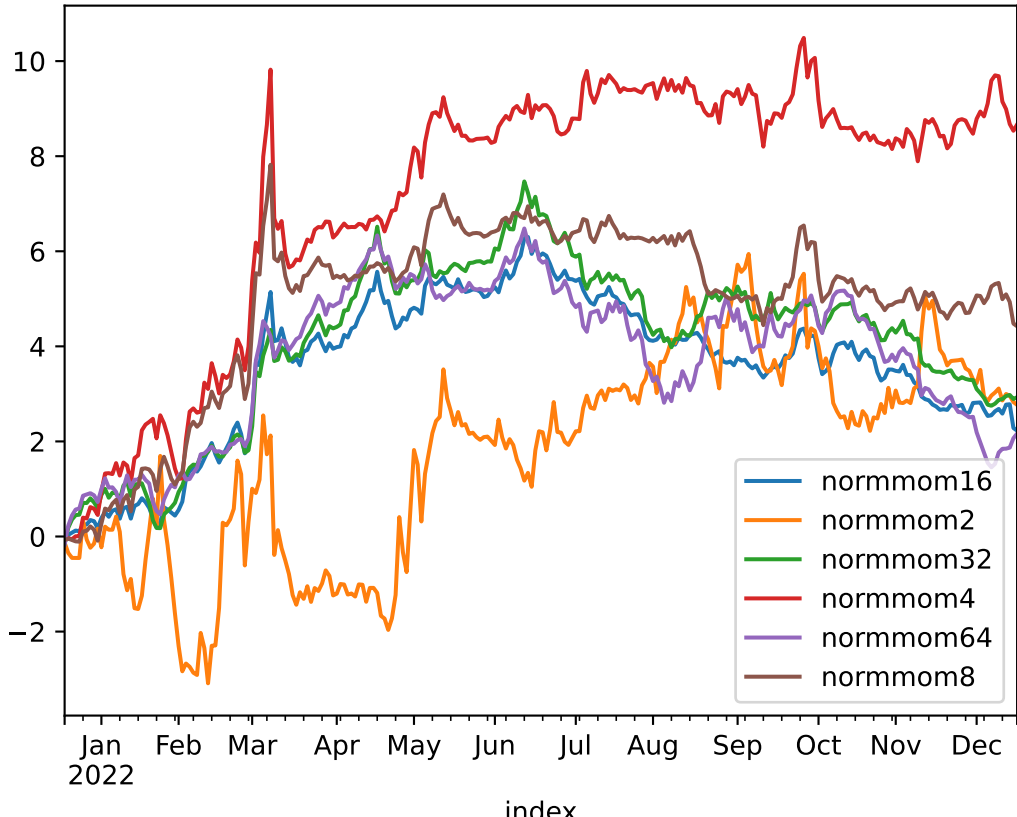
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.104, 'normmom2': 2.665, 'normmom32': 2.39, 'normmom4': 8.41, 'normmom64': 1.474, 'normmom8': 4.62}
ann. std {'normmom16': 3.192, 'normmom2': 8.137, 'normmom32': 3.215, 'normmom4': 6.058, 'normmom64': 3.482, 'normmom8': 4.333}
ann. SR {'normmom16': 0.66, 'normmom2': 0.33, 'normmom32': 0.74, 'normmom4': 1.39, 'normmom64': 0.42, 'normmom8': 1.07}



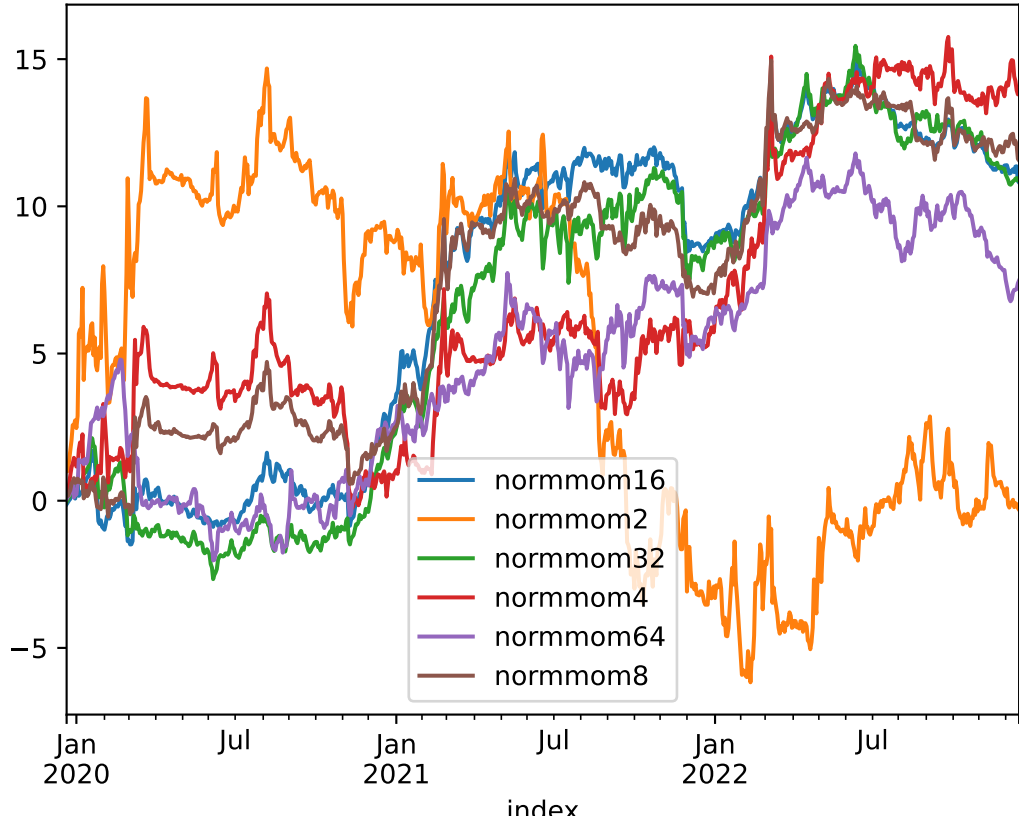
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.192, 'normmom2': 2.726, 'normmom32': 2.885, 'normmom4': 8.533, 'normmom64': 2.131, 'normmom8': 4.355}
ann. std {'normmom16': 3.143, 'normmom2': 8.039, 'normmom32': 3.193, 'normmom4': 5.958, 'normmom64': 3.463, 'normmom8': 4.263}
ann. SR {'normmom16': 0.7, 'normmom2': 0.34, 'normmom32': 0.9, 'normmom4': 1.43, 'normmom64': 0.62, 'normmom8': 1.02}



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

ann. mean {'normmom16': 3.541, 'normmom2': -0.102, 'normmom32': 3.577, 'normmom4': 4.567, 'normmom64': 2.453, 'normmom8': 3.788}
ann. std {'normmom16': 3.714, 'normmom2': 8.885, 'normmom32': 4.049, 'normmom4': 5.95, 'normmom64': 4.347, 'normmom8': 4.258}
ann. SR {'normmom16': 0.95, 'normmom2': -0.01, 'normmom32': 0.88, 'normmom4': 0.77, 'normmom64': 0.56, 'normmom8': 0.89}

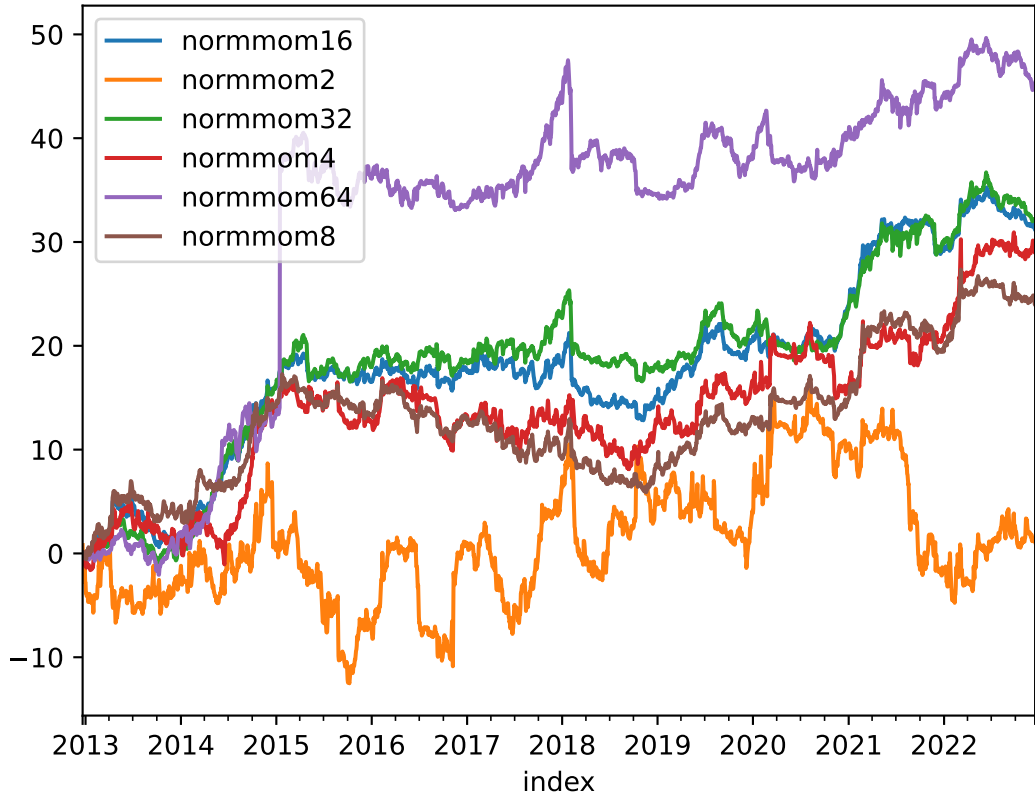


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.061, 'normmom2': 0.108, 'normmom32': 3.159, 'normmom4': 2.858, 'normmom64': 4.453, 'normmom8': 2.352}

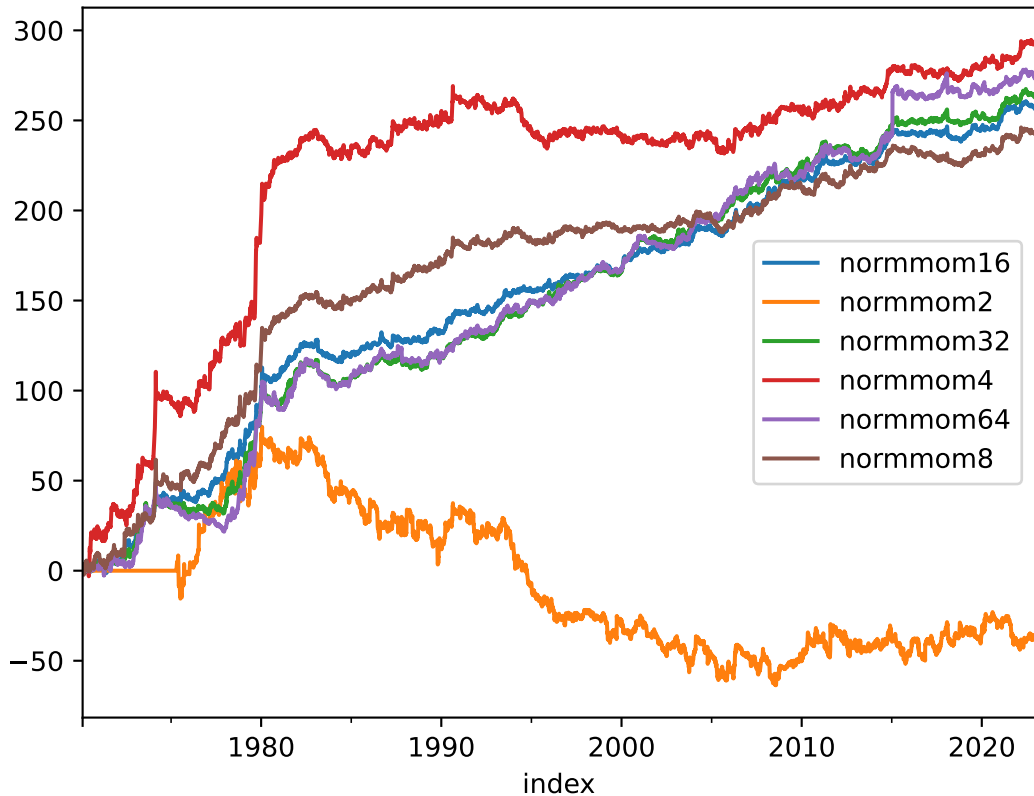
ann. std {'normmom16': 3.582, 'normmom2': 9.097, 'normmom32': 3.732, 'normmom4': 5.499, 'normmom64': 8.564, 'normmom8': 4.057}

ann. SR {'normmom16': 0.85, 'normmom2': 0.01, 'normmom32': 0.85, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.58}



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

ann. mean {'normmom16': 4.763, 'normmom2': -0.705, 'normmom32': 4.88, 'normmom4': 5.436, 'normmom64': 5.085, 'normmom8': 4.505}
ann. std {'normmom16': 4.926, 'normmom2': 11.204, 'normmom32': 4.994, 'normmom4': 8.326, 'normmom64': 6.313, 'normmom8': 5.935}
ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.81, 'normmom8': 0.76}

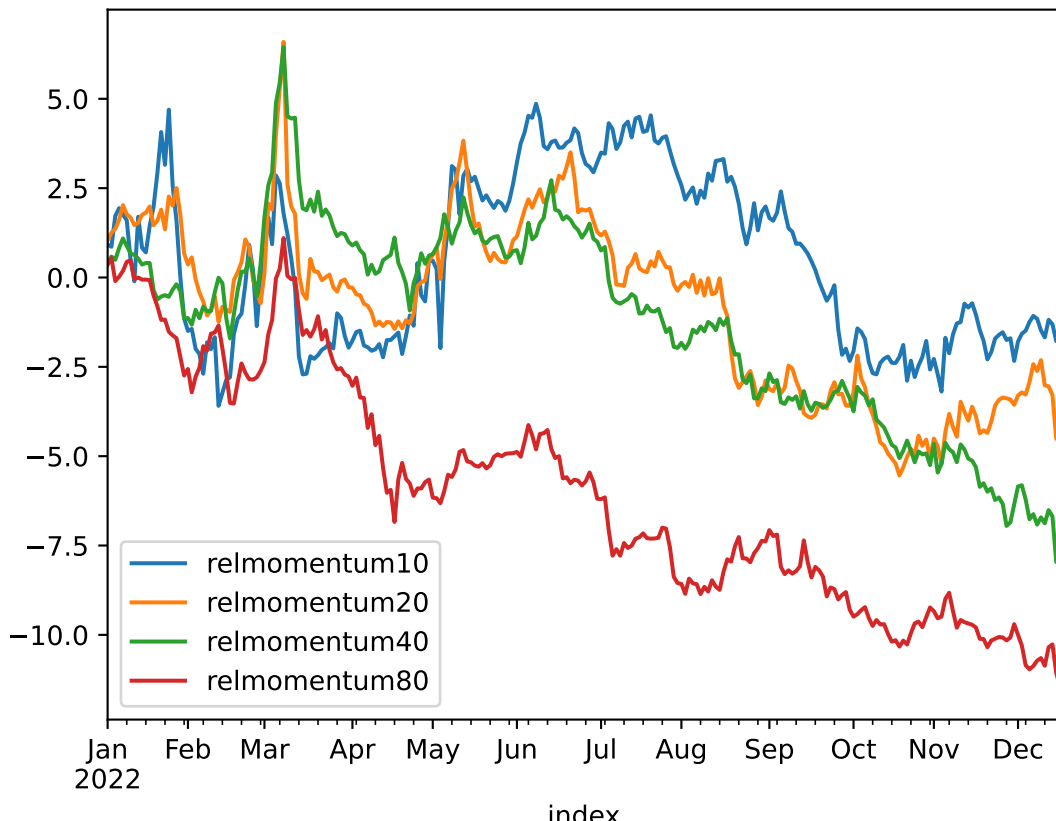


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.488, 'relmomentum20': -4.633, 'relmomentum40': -8.059, 'relmomentum80': -11.742}

ann. std {'relmomentum10': 10.126, 'relmomentum20': 8.586, 'relmomentum40': 6.777, 'relmomentum80': 5.762}

ann. SR {'relmomentum10': -0.15, 'relmomentum20': -0.54, 'relmomentum40': -1.19, 'relmomentum80': -2.04}

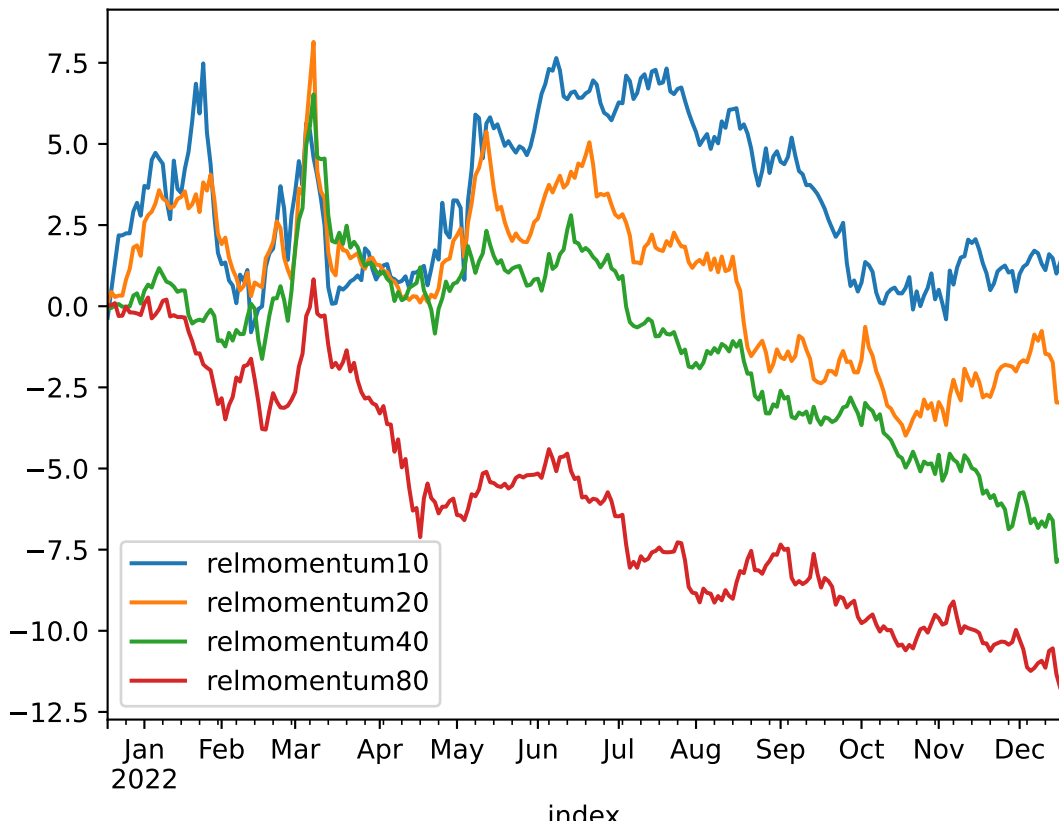


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.313, 'relmomentum20': -2.927, 'relmomentum40': -7.67, 'relmomentum80': -11.561}

ann. std {'relmomentum10': 10.076, 'relmomentum20': 8.482, 'relmomentum40': 6.664, 'relmomentum80': 5.674}

ann. SR {'relmomentum10': 0.13, 'relmomentum20': -0.35, 'relmomentum40': -1.15, 'relmomentum80': -2.04}

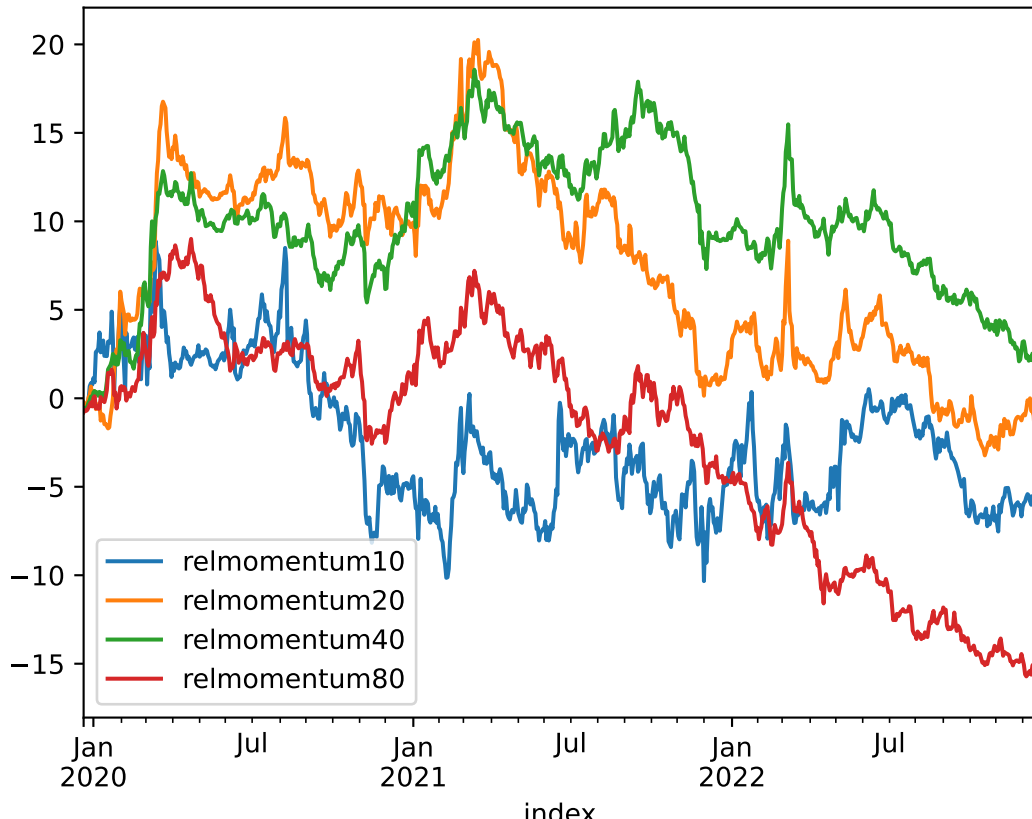


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.899, 'relmomentum20': -0.725, 'relmomentum40': 0.382, 'relmomentum80': -5.317}

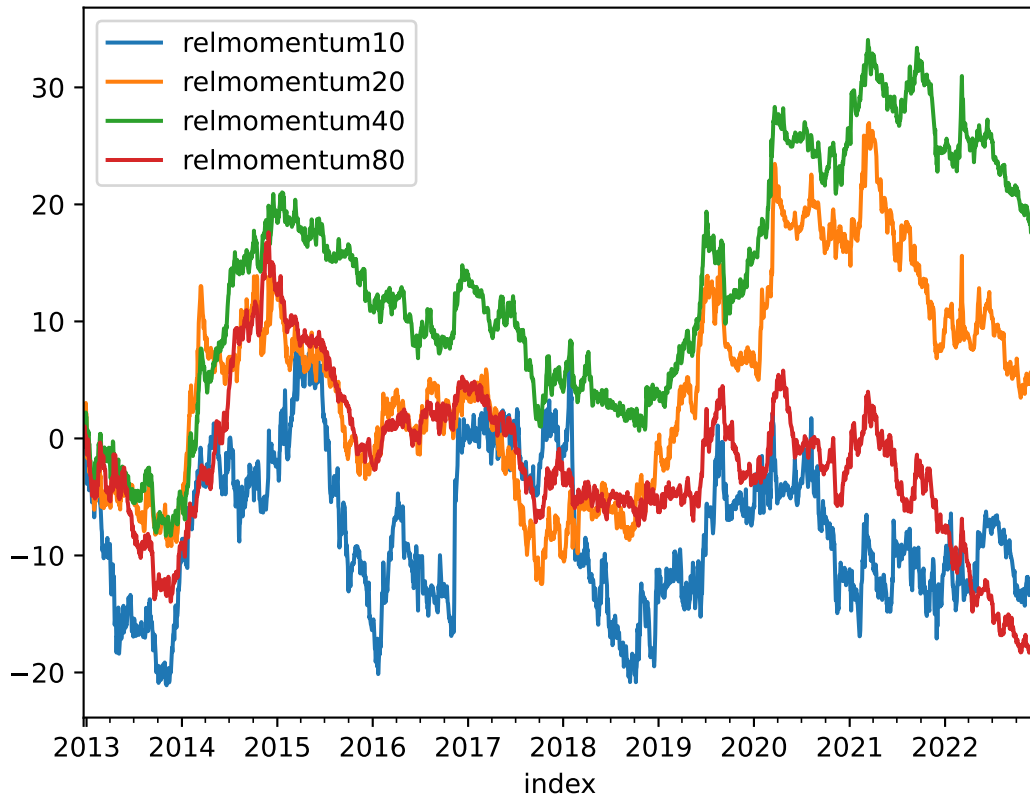
ann. std {'relmomentum10': 12.74, 'relmomentum20': 9.072, 'relmomentum40': 7.479, 'relmomentum80': 6.968}

ann. SR {'relmomentum10': -0.15, 'relmomentum20': -0.08, 'relmomentum40': 0.05, 'relmomentum80': -0.76}



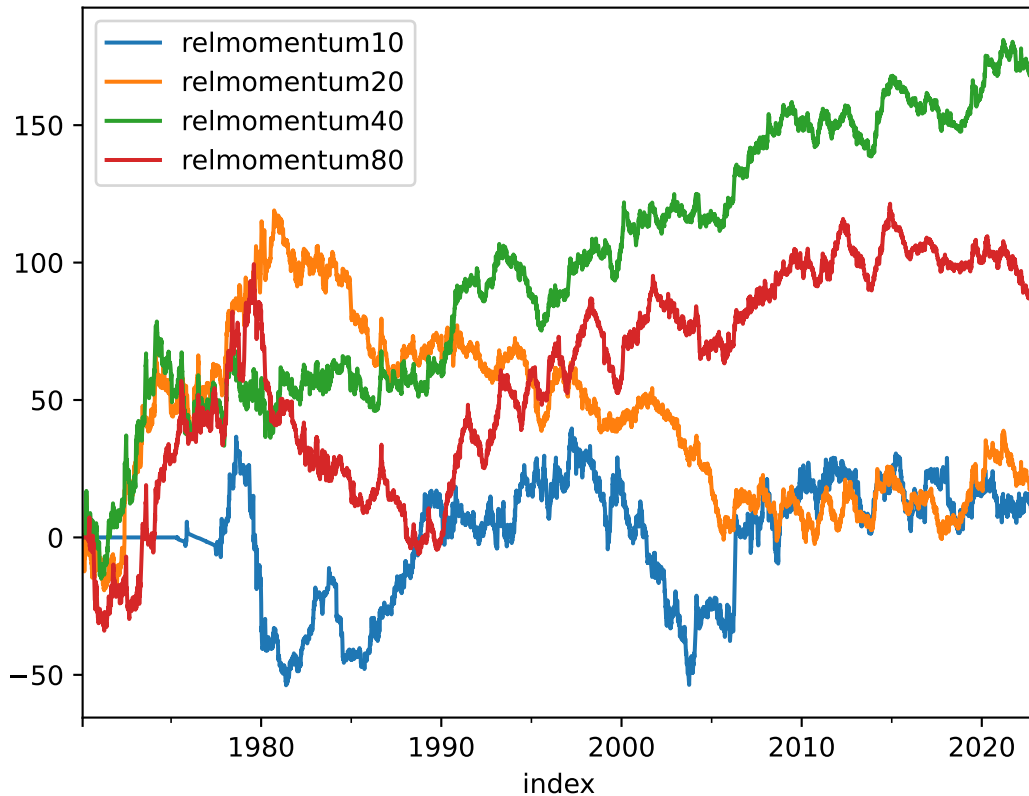
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.233, 'relmomentum20': 0.441, 'relmomentum40': 1.636, 'relmomentum80': -1.908}
ann. std {'relmomentum10': 12.984, 'relmomentum20': 9.047, 'relmomentum40': 7.382, 'relmomentum80': 6.836}
ann. SR {'relmomentum10': -0.09, 'relmomentum20': 0.05, 'relmomentum40': 0.22, 'relmomentum80': -0.28}

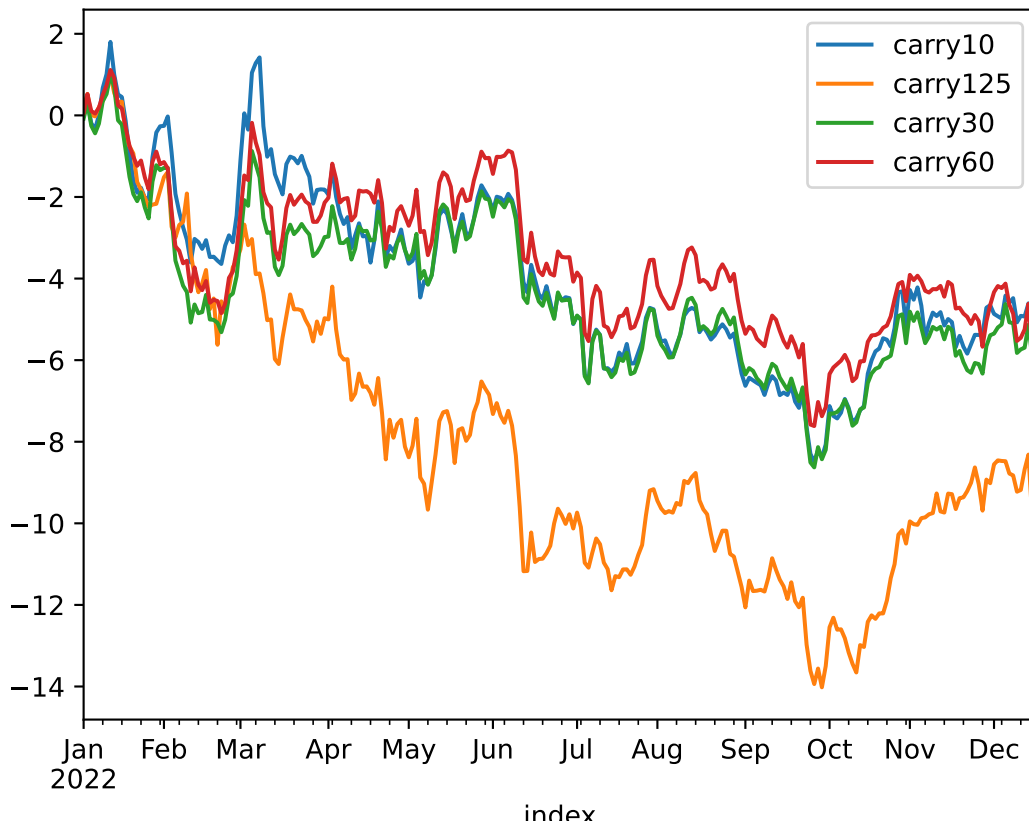


Total Trading Rule P&L for period '99Y'

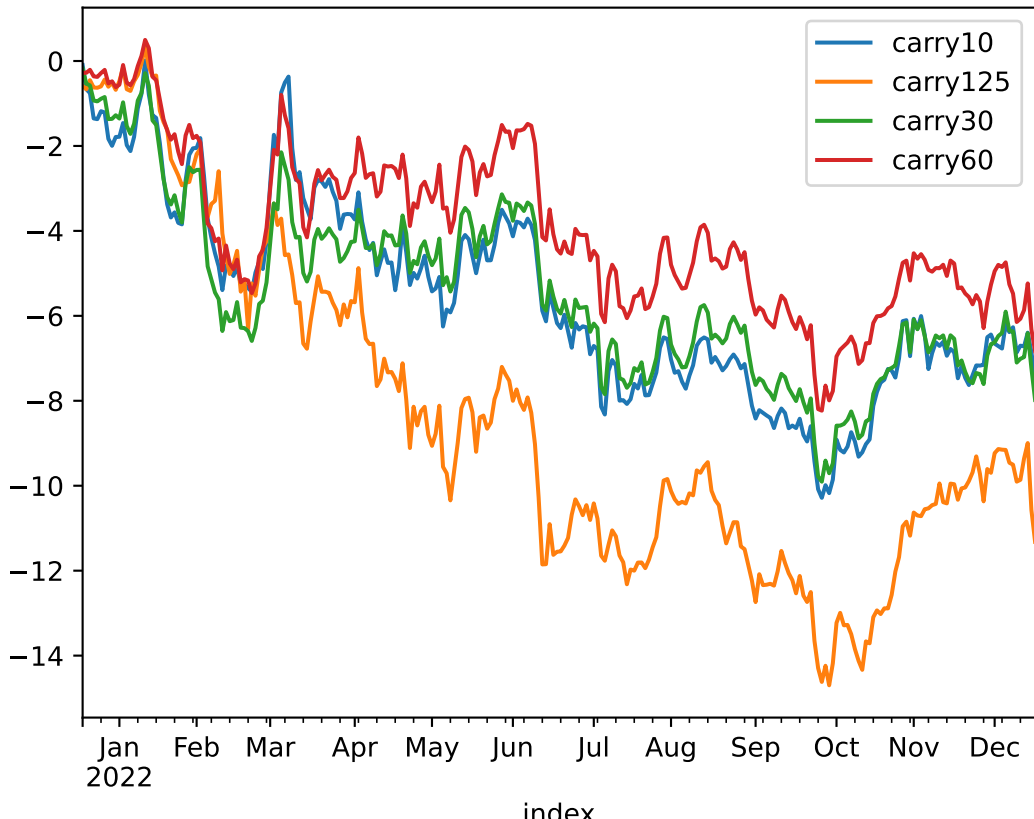
ann. mean {'relmomentum10': 0.182, 'relmomentum20': 0.304, 'relmomentum40': 3.037, 'relmomentum80': 1.566}
ann. std {'relmomentum10': 13.327, 'relmomentum20': 11.529, 'relmomentum40': 10.799, 'relmomentum80': 11.067}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': -5.801, 'carry125': -10.897, 'carry30': -6.865, 'carry60': -6.365}
ann. std {'carry10': 7.209, 'carry125': 7.736, 'carry30': 6.867, 'carry60': 6.902}
ann. SR {'carry10': -0.8, 'carry125': -1.41, 'carry30': -1.0, 'carry60': -0.92}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -7.339, 'carry125': -11.147, 'carry30': -7.858, 'carry60': -6.728}
ann. std {'carry10': 7.146, 'carry125': 7.616, 'carry30': 6.77, 'carry60': 6.783}
ann. SR {'carry10': -1.03, 'carry125': -1.46, 'carry30': -1.16, 'carry60': -0.99}

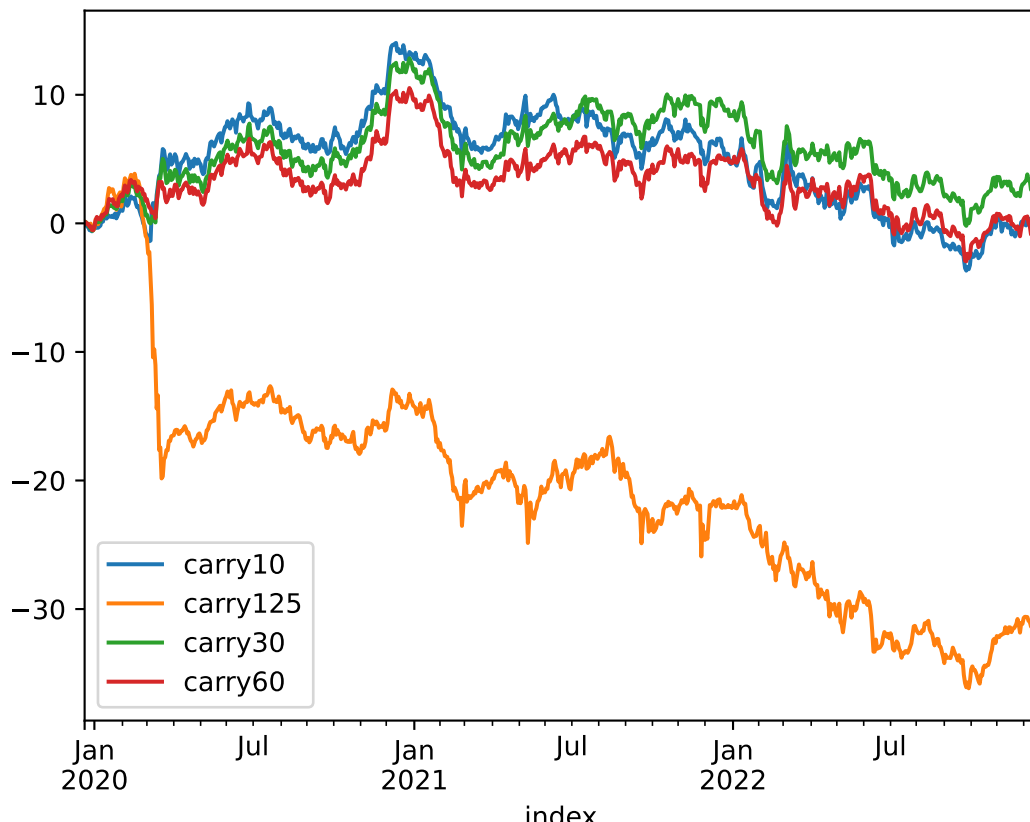


Total Trading Rule P&L for period '3Y'

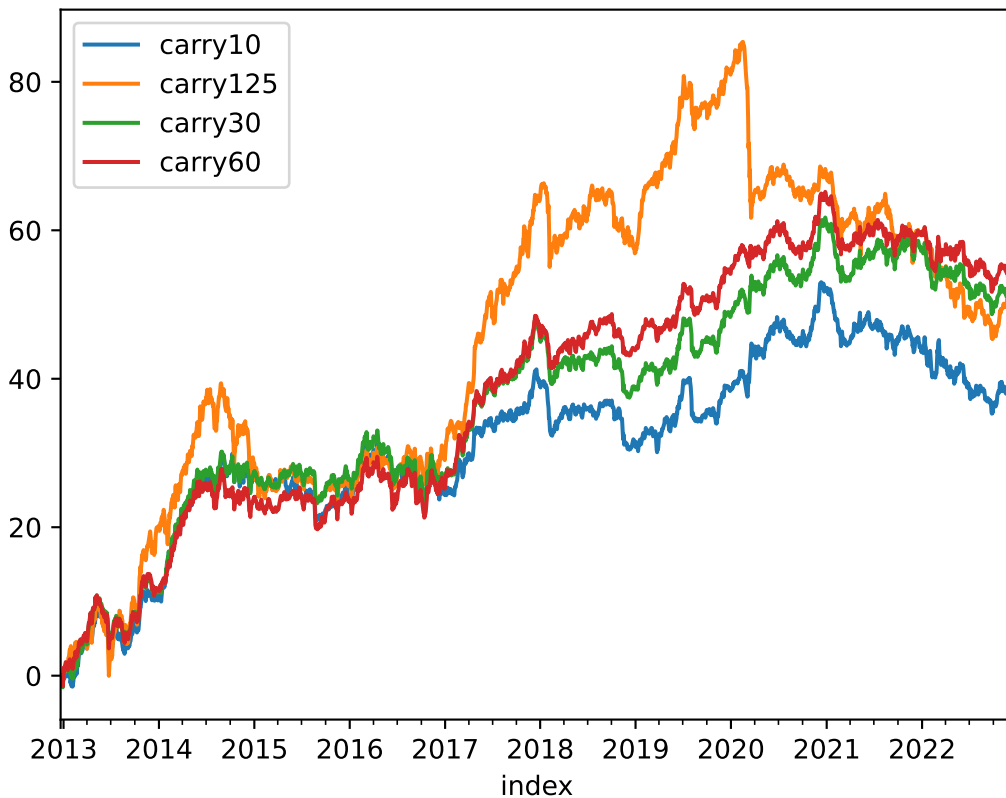
ann. mean {'carry10': -0.278, 'carry125': -10.747, 'carry30': 0.567, 'carry60': -0.508}

ann. std {'carry10': 6.825, 'carry125': 9.44, 'carry30': 6.627, 'carry60': 6.572}

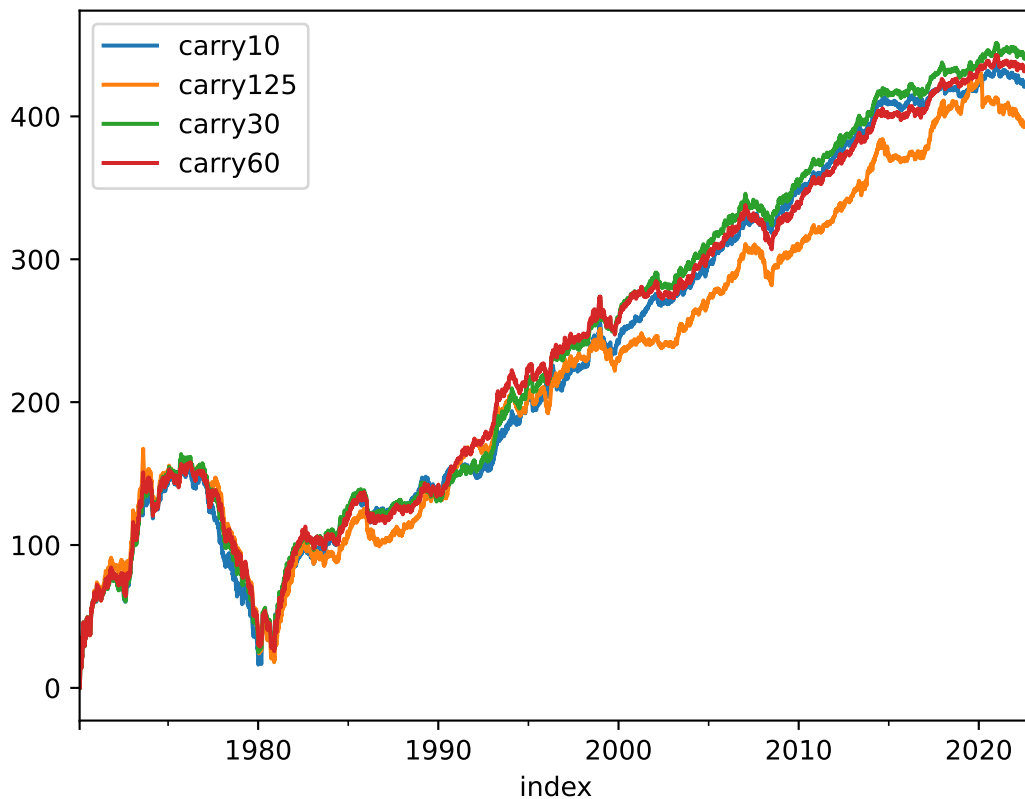
ann. SR {'carry10': -0.04, 'carry125': -1.14, 'carry30': 0.09, 'carry60': -0.08}



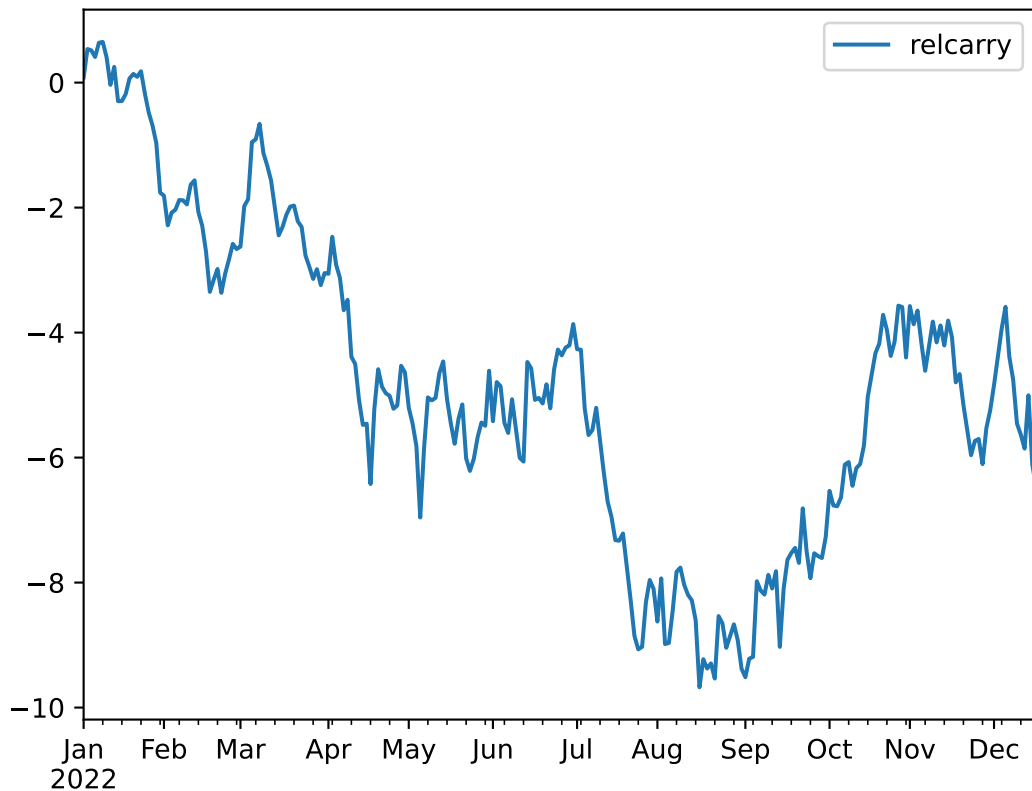
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.744, 'carry125': 4.786, 'carry30': 4.97, 'carry60': 5.215}
ann. std {'carry10': 6.464, 'carry125': 9.144, 'carry30': 6.579, 'carry60': 6.547}
ann. SR {'carry10': 0.58, 'carry125': 0.52, 'carry30': 0.76, 'carry60': 0.8}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.825, 'carry125': 7.302, 'carry30': 8.172, 'carry60': 7.996}
ann. std {'carry10': 11.863, 'carry125': 12.105, 'carry30': 11.875, 'carry60': 11.826}
ann. SR {'carry10': 0.66, 'carry125': 0.6, 'carry30': 0.69, 'carry60': 0.68}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': -6.632}
ann. std {'relcarry': 7.265}
ann. SR {'relcarry': -0.91}

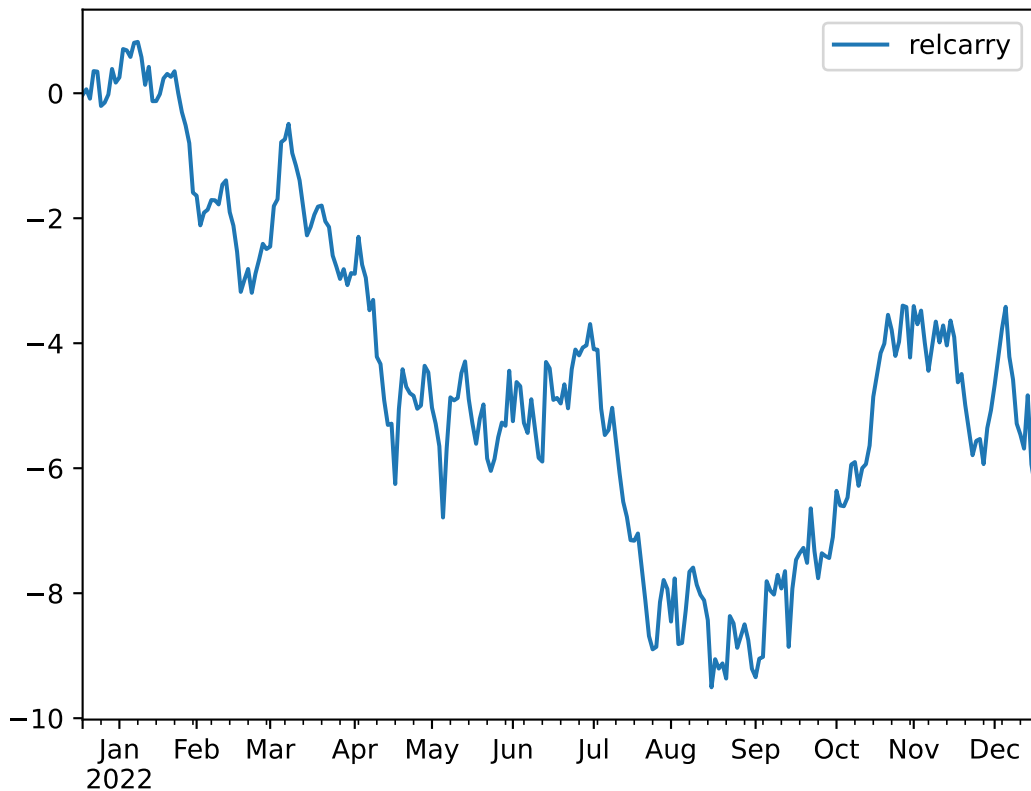


Total Trading Rule P&L for period '1Y'

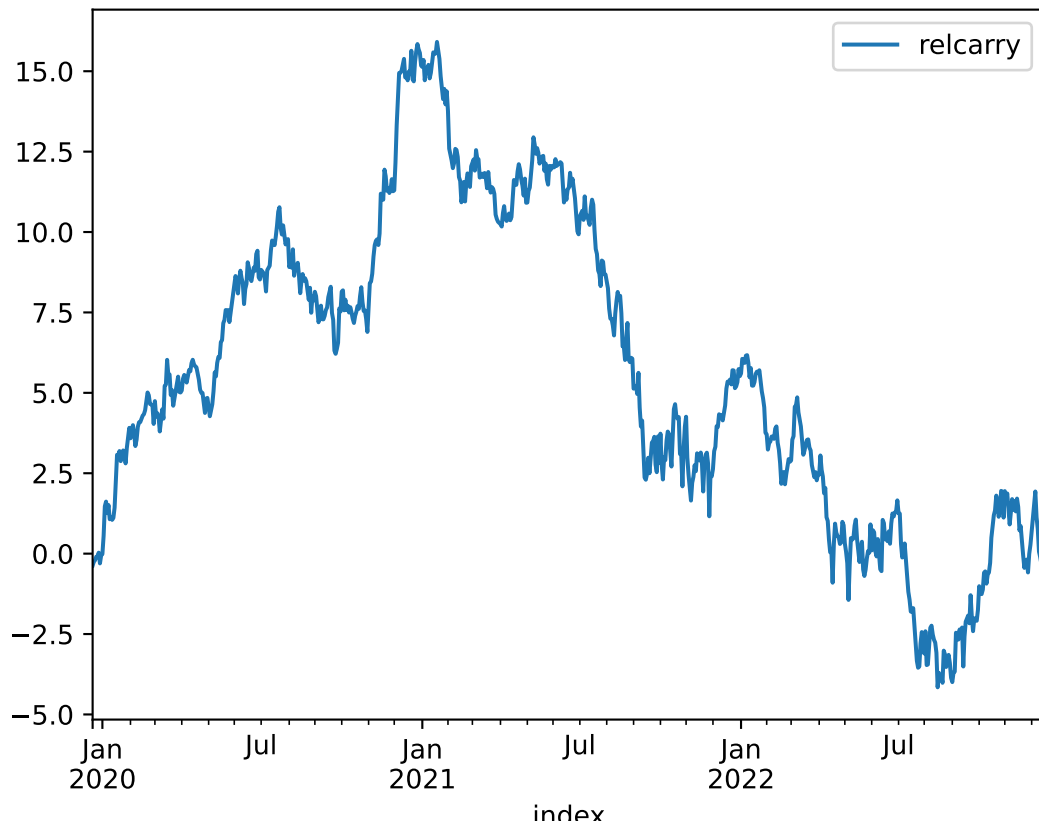
ann. mean {'relcarry': -6.209}

ann. std {'relcarry': 7.177}

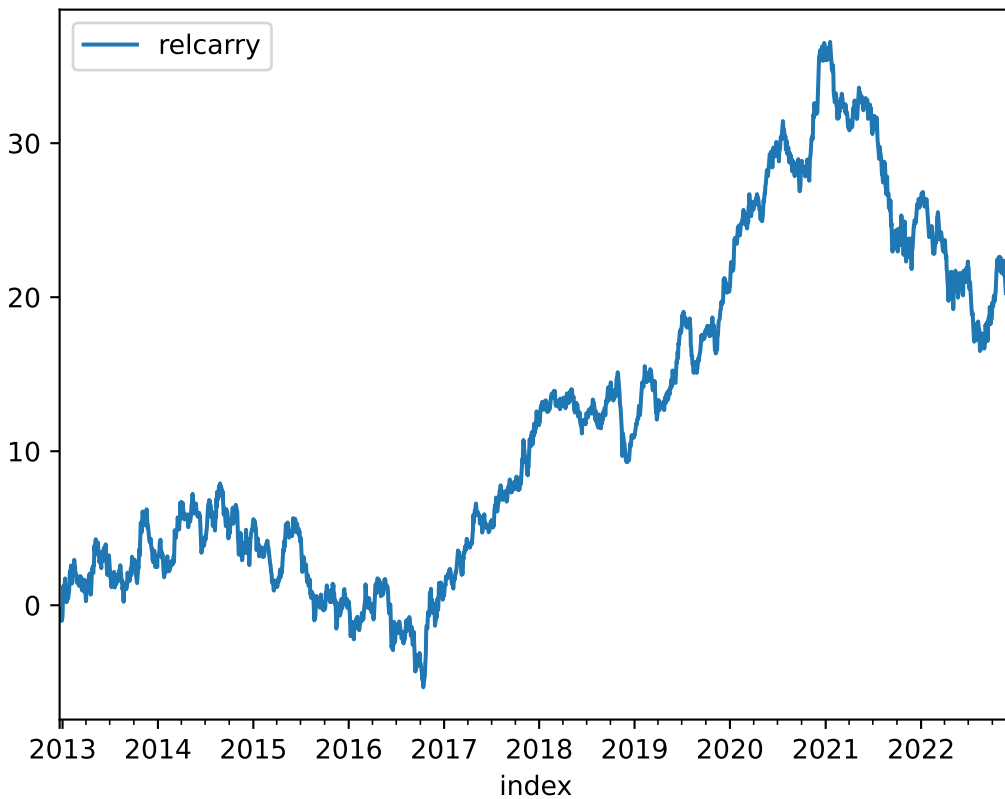
ann. SR {'relcarry': -0.87}



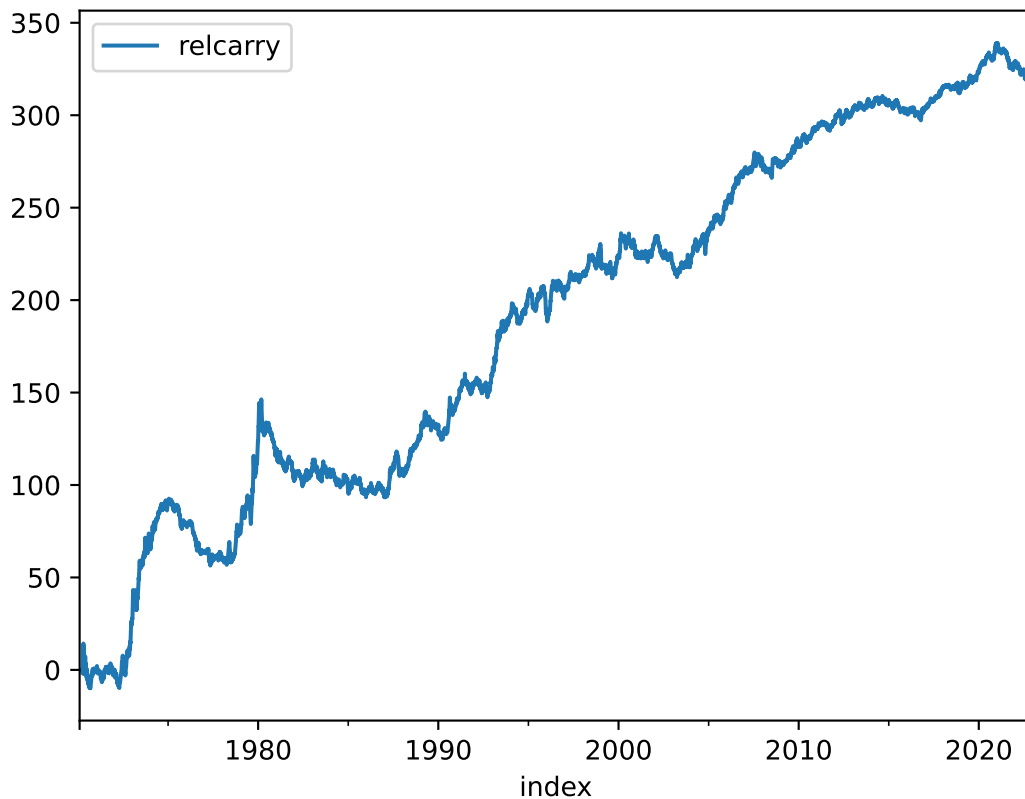
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.314}
ann. std {'relcarry': 6.868}
ann. SR {'relcarry': -0.05}



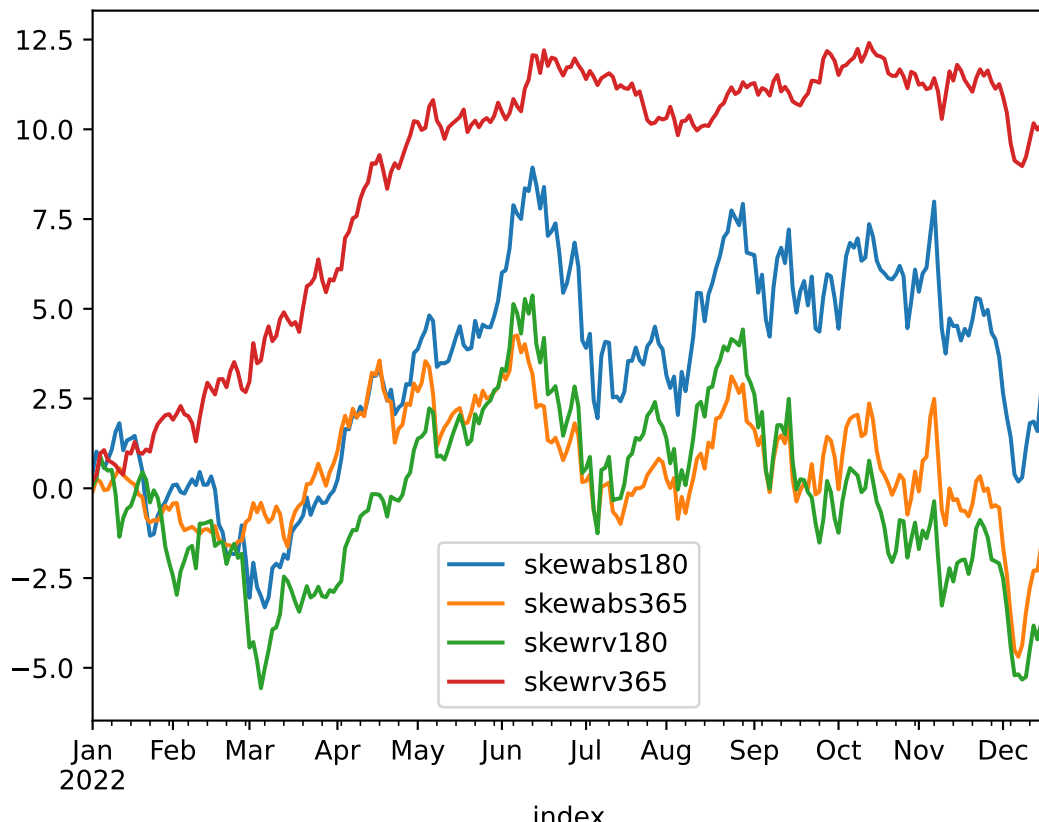
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.935}
ann. std {'relcarry': 6.054}
ann. SR {'relcarry': 0.32}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.981}
ann. std {'relcarry': 9.561}
ann. SR {'relcarry': 0.63}

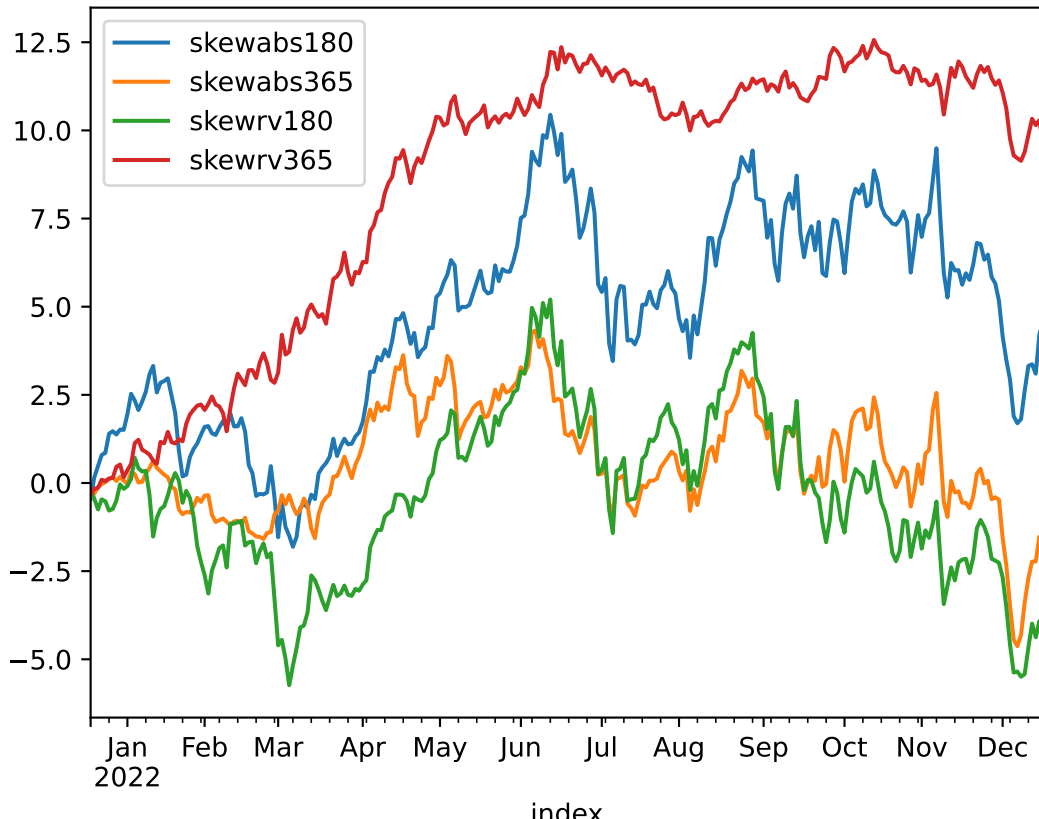


Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 3.136, 'skewabs365': -1.946, 'skewrv180': 9.667, 'skewrv365': 9.667}
ann. std {'skewabs180': 10.034, 'skewabs365': 7.899, 'skewrv180': 9.381, 'skewrv365': 5.004}
ann. SR {'skewabs180': 0.31, 'skewabs365': -0.25, 'skewrv180': -0.48, 'skewrv365': 1.93}



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

ann. mean {'skewabs180': 4.499, 'skewabs365': -1.809, 'skewrv180': -4.457, 'skewrv365': 9.453}
ann. std {'skewabs180': 9.892, 'skewabs365': 7.757, 'skewrv180': 9.232, 'skewrv365': 4.949}
ann. SR {'skewabs180': 0.45, 'skewabs365': -0.23, 'skewrv180': -0.48, 'skewrv365': 1.91}

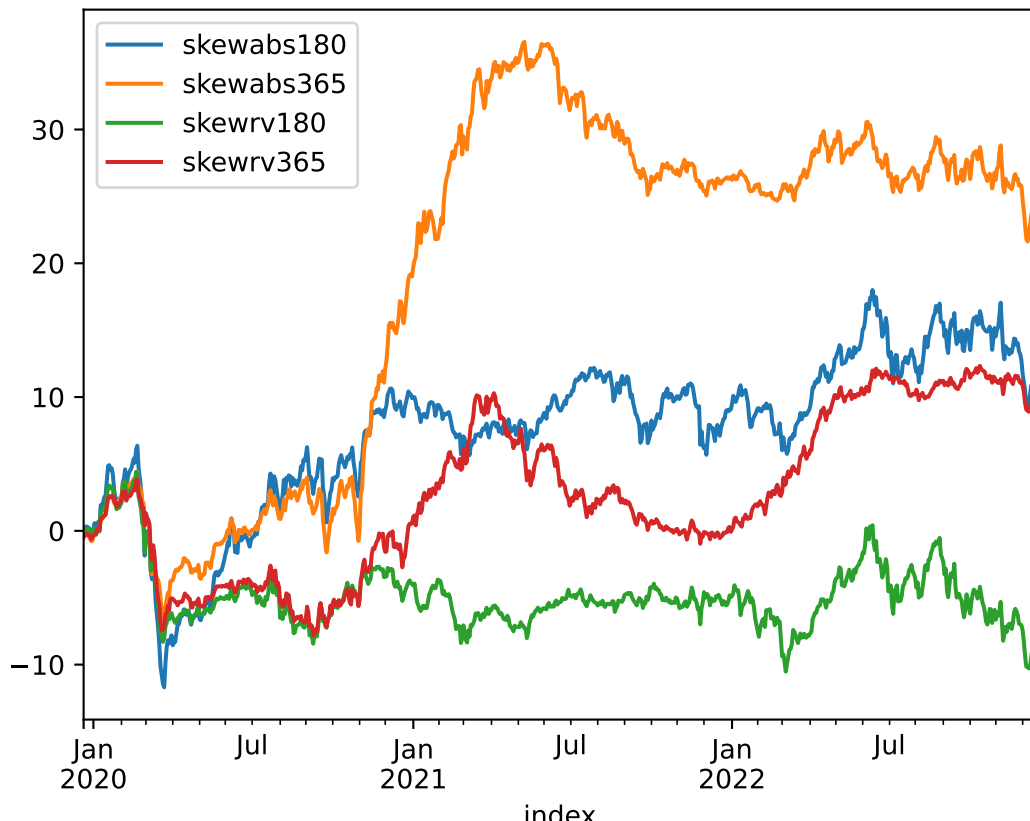


Total Trading Rule P&L for period '3Y'

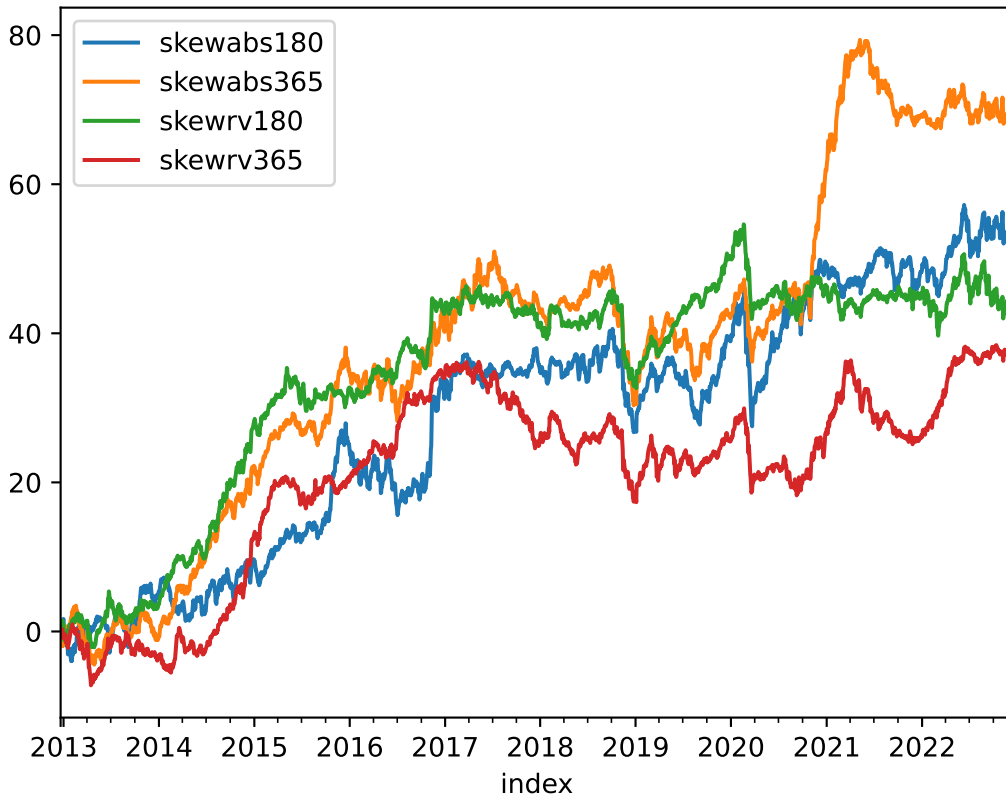
ann. mean {'skewabs180': 3.976, 'skewabs365': 8.006, 'skewrv180': -3.052, 'skewrv365': 3.071}

ann. std {'skewabs180': 9.625, 'skewabs365': 8.767, 'skewrv180': 7.801, 'skewrv365': 6.591}

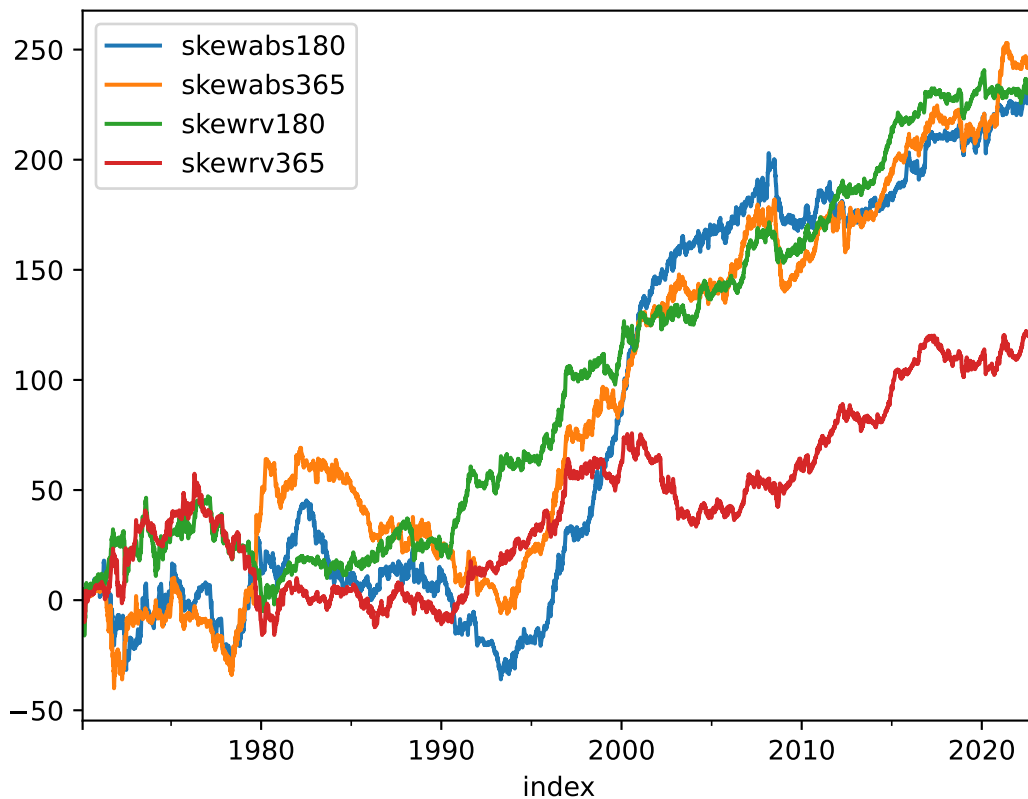
ann. SR {'skewabs180': 0.41, 'skewabs365': 0.91, 'skewrv180': -0.39, 'skewrv365': 0.47}



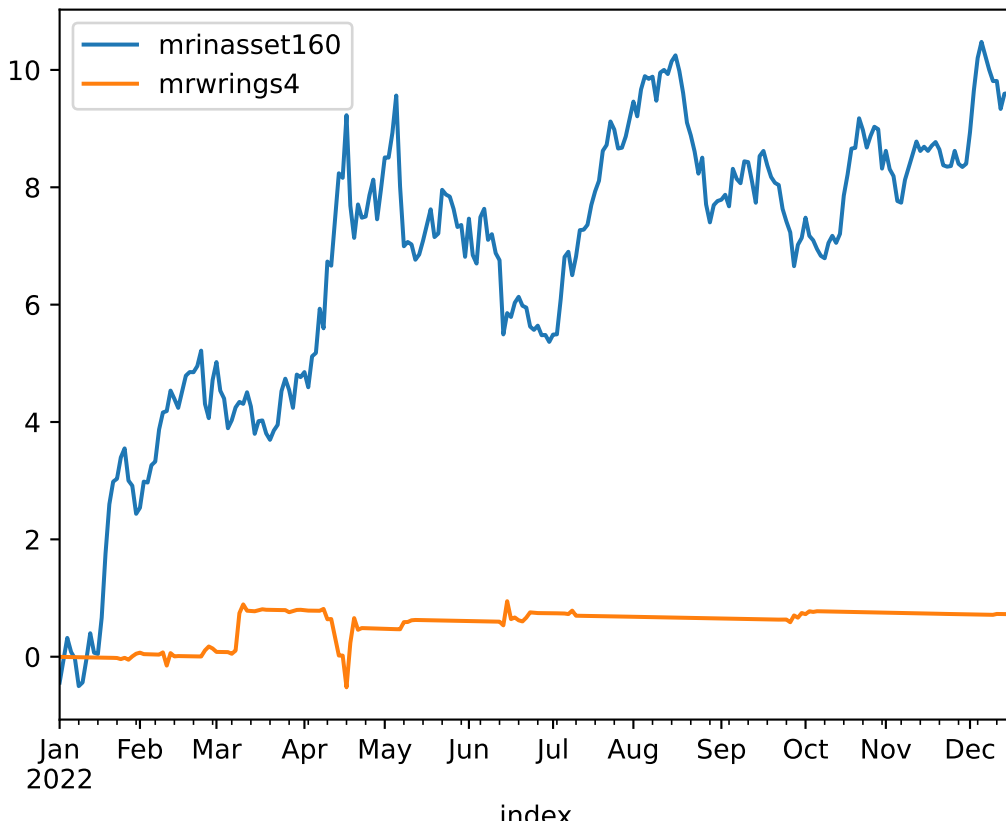
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.042, 'skewabs365': 6.602, 'skewrv180': 4.016, 'skewrv365': 3.481}
ann. std {'skewabs180': 8.08, 'skewabs365': 8.005, 'skewrv180': 6.599, 'skewrv365': 6.176}
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.82, 'skewrv180': 0.61, 'skewrv365': 0.56}



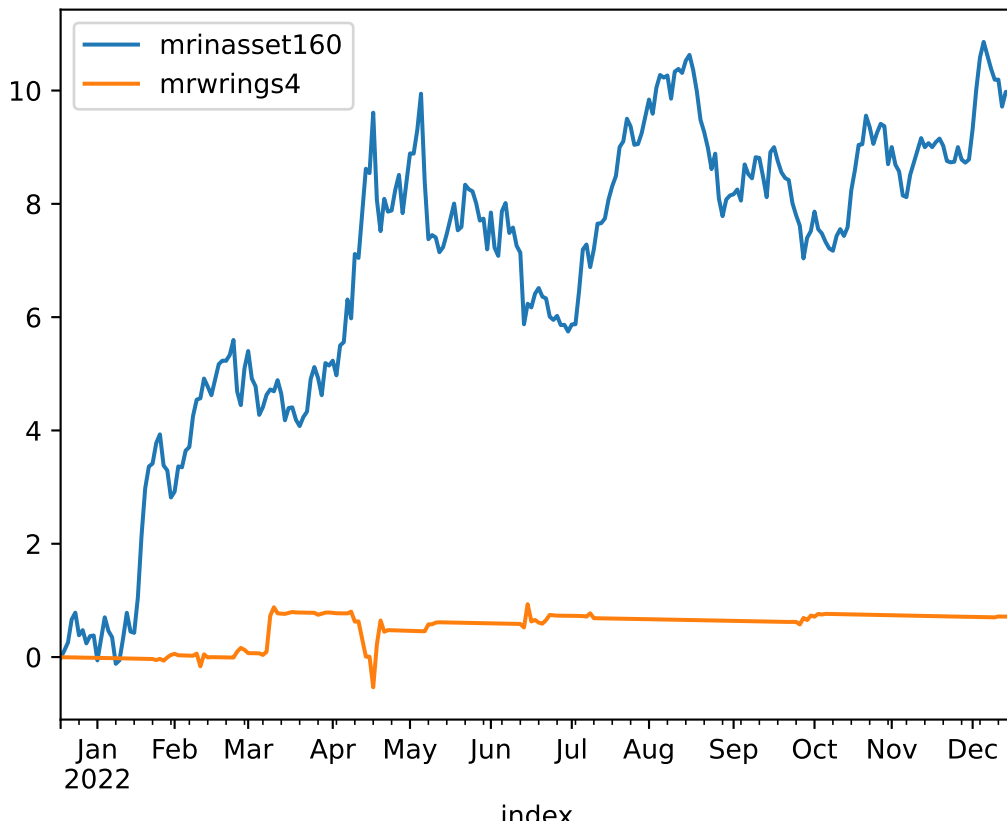
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.207, 'skewabs365': 4.471, 'skewrv180': 4.213, 'skewrv365': 2.216}
ann. std {'skewabs180': 10.794, 'skewabs365': 10.299, 'skewrv180': 9.31, 'skewrv365': 8.604}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



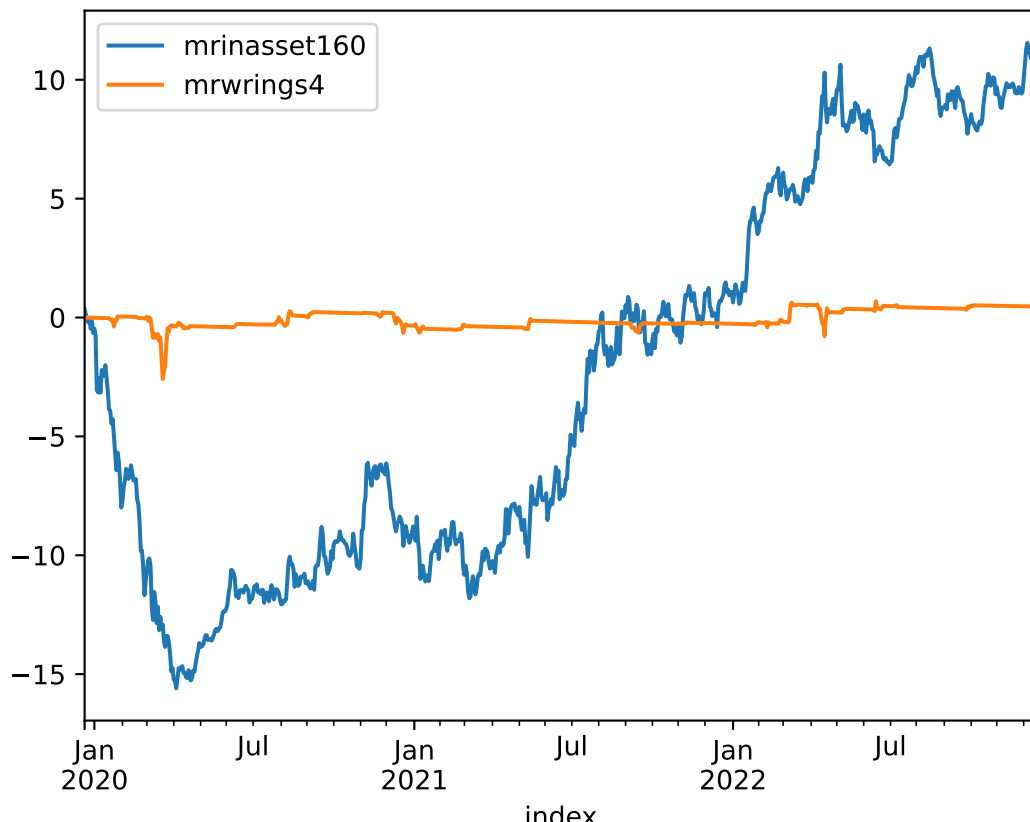
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 10.124, 'mrwrings4': 0.742}
ann. std {'mrinasset160': 6.29, 'mrwrings4': 1.511}
ann. SR {'mrinasset160': 1.61, 'mrwrings4': 0.49}



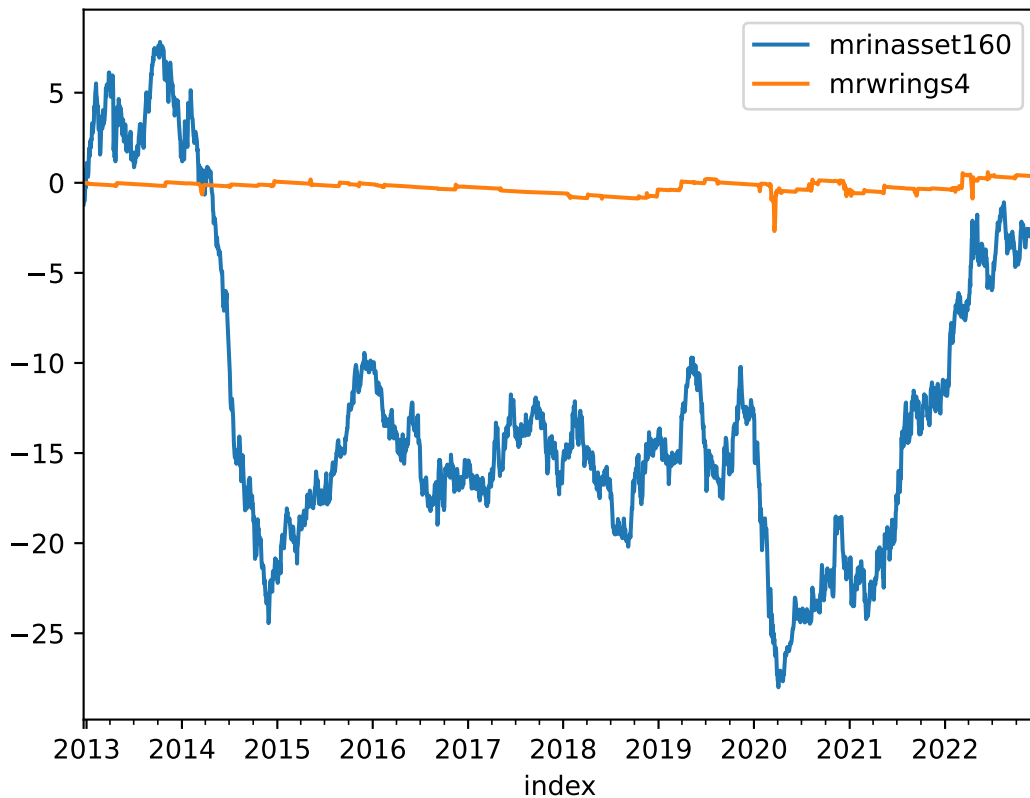
Total Trading Rule P&L for period '1Y'
ann. mean {'mriasset160': 10.11, 'mrwrings4': 0.701}
ann. std {'mriasset160': 6.202, 'mrwrings4': 1.481}
ann. SR {'mriasset160': 1.63, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 3.593, 'mrwrings4': 0.151}
ann. std {'mrinasset160': 7.09, 'mrwrings4': 1.537}
ann. SR {'mrinasset160': 0.51, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.142, 'mrwrings4': 0.036}
ann. std {'mrinasset160': 6.639, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.02, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.35, 'mrwrings4': -1.172}
ann. std {'mrinasset160': 10.924, 'mrwrings4': 2.632}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

