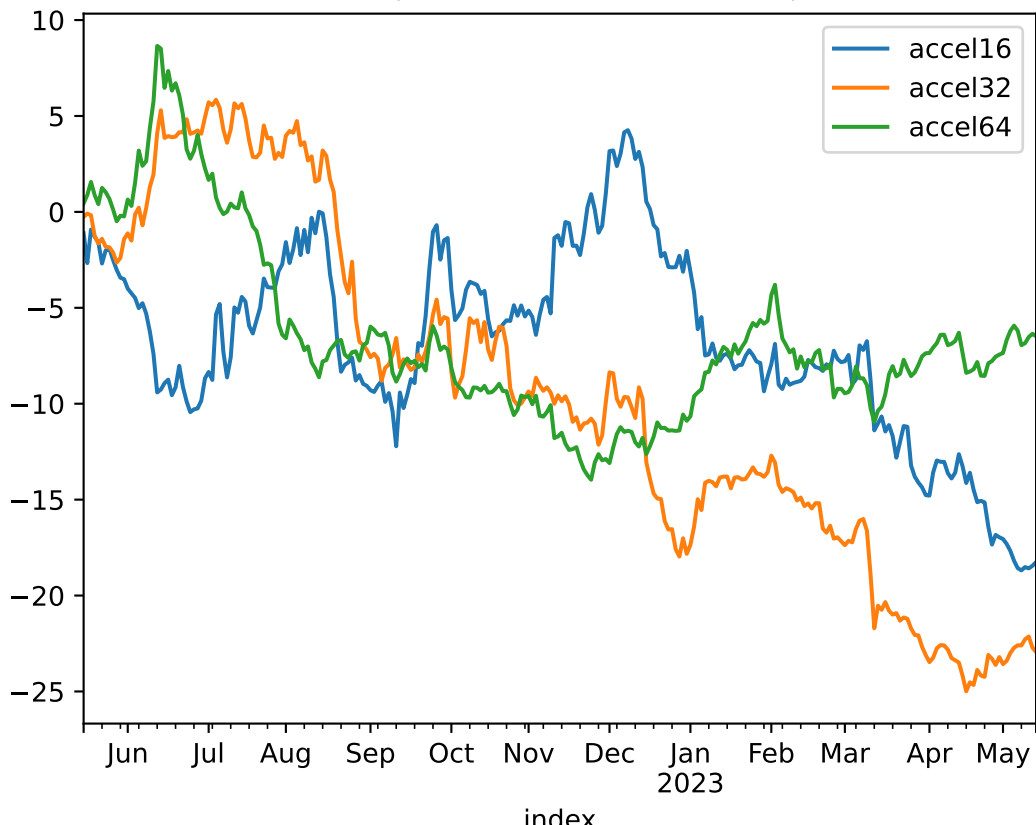


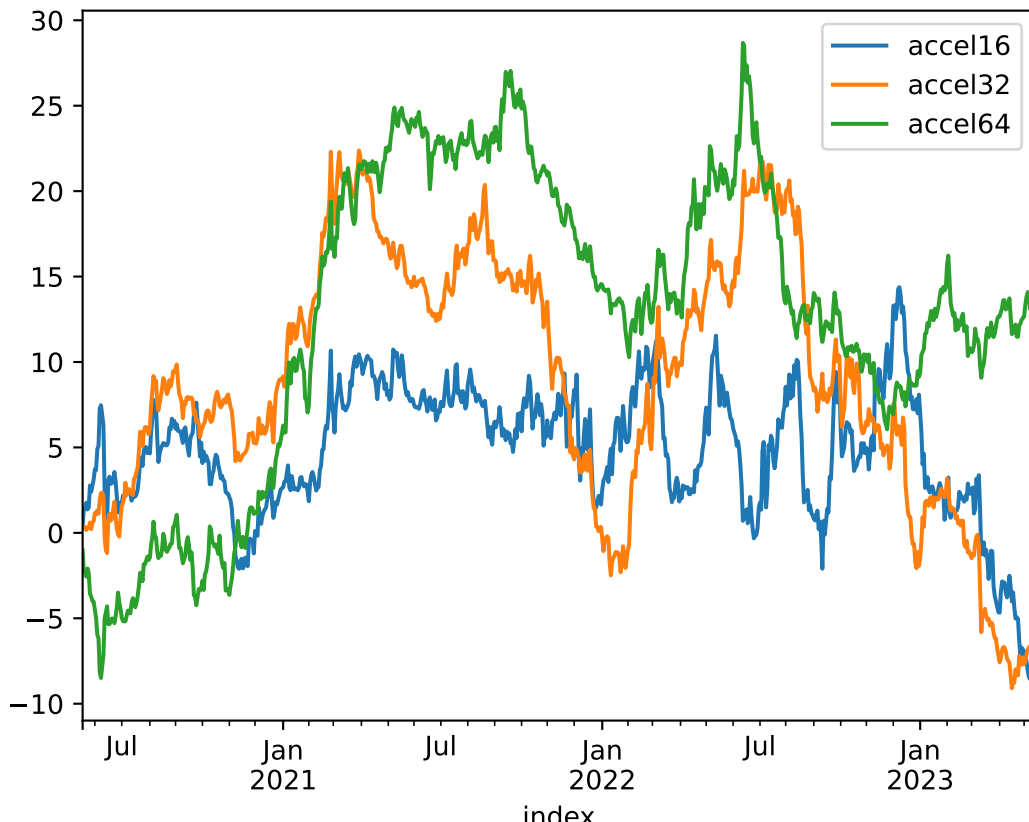
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -43.731, 'accel32': -13.79, 'accel64': 11.878}
ann. std {'accel16': 12.349, 'accel32': 9.698, 'accel64': 9.081}
ann. SR {'accel16': -3.54, 'accel32': -1.42, 'accel64': 1.31}



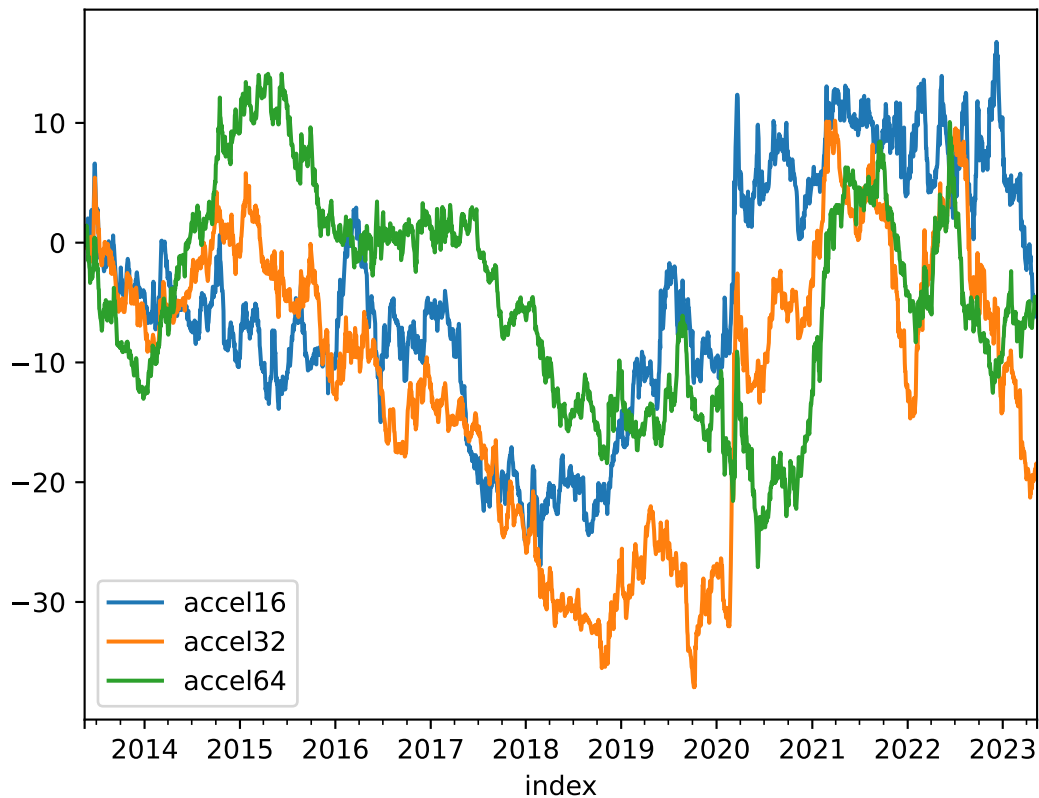
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -17.977, 'accel32': -22.59, 'accel64': -6.382}
ann. std {'accel16': 15.667, 'accel32': 12.808, 'accel64': 10.257}
ann. SR {'accel16': -1.15, 'accel32': -1.76, 'accel64': -0.62}



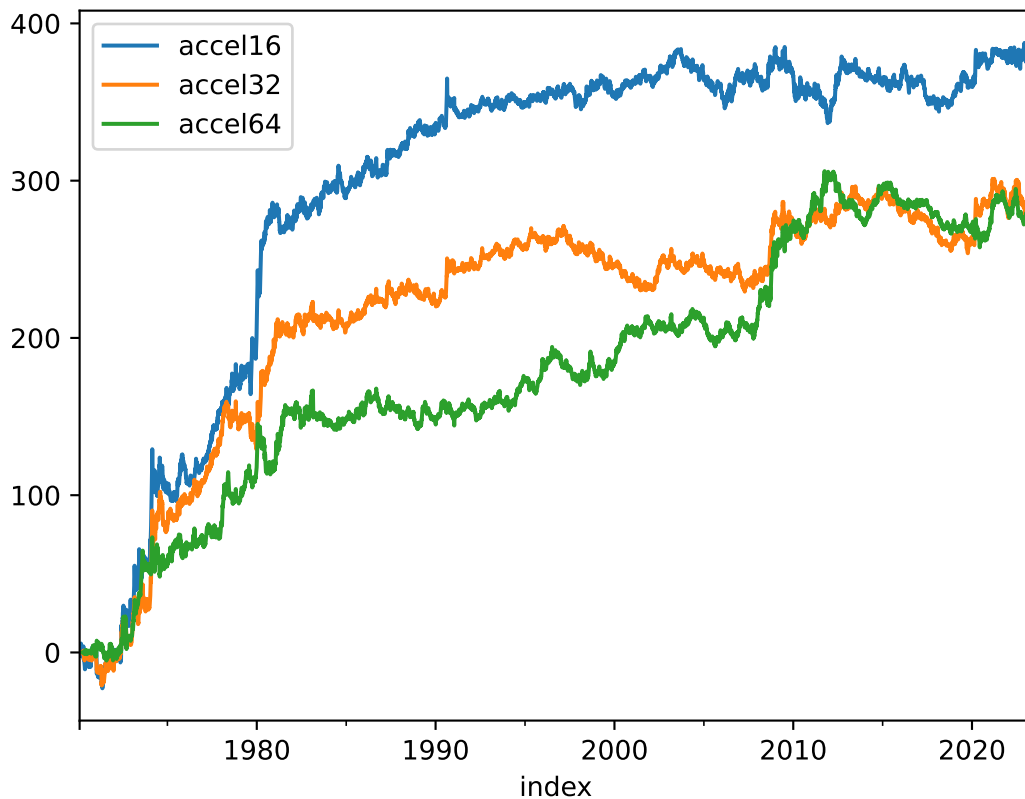
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.672, 'accel32': -2.314, 'accel64': 4.444}
ann. std {'accel16': 13.521, 'accel32': 11.747, 'accel64': 10.459}
ann. SR {'accel16': -0.2, 'accel32': -0.2, 'accel64': 0.42}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.565, 'accel32': -1.889, 'accel64': -0.497}
ann. std {'accel16': 11.692, 'accel32': 10.661, 'accel64': 9.323}
ann. SR {'accel16': -0.05, 'accel32': -0.18, 'accel64': -0.05}

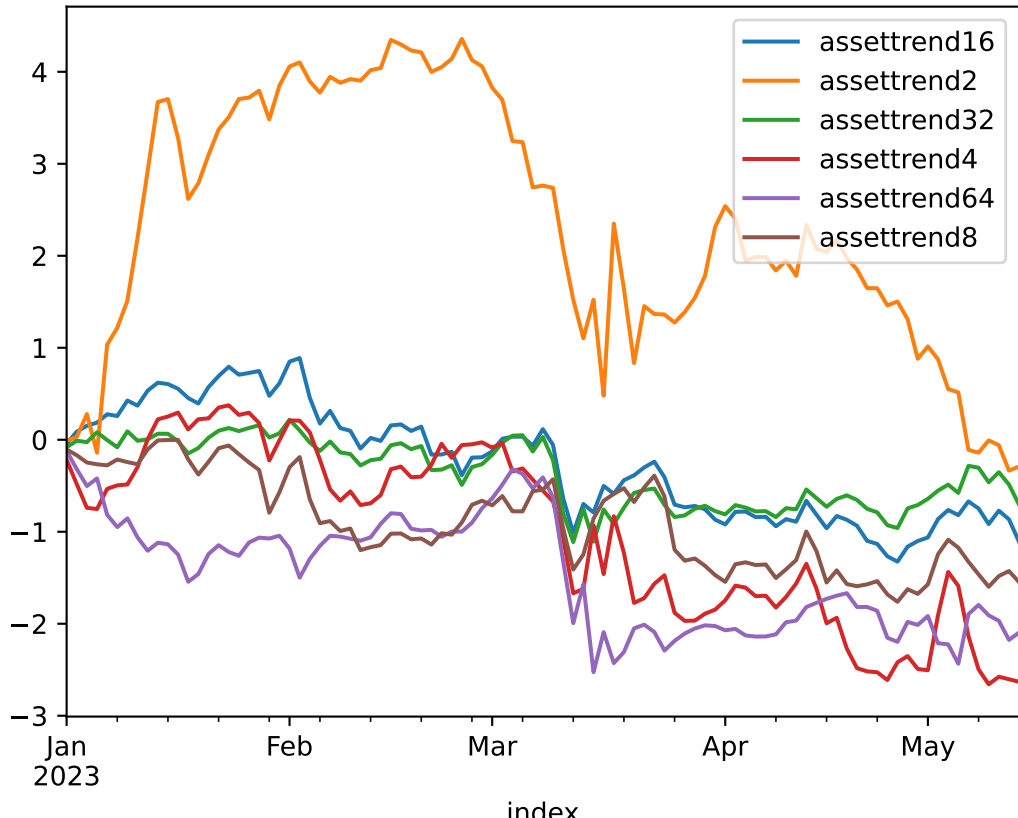


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.724, 'accel32': 5.005, 'accel64': 5.15}
ann. std {'accel16': 14.125, 'accel32': 12.449, 'accel64': 12.099}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}



Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -2.993, 'assetrend2': -0.784, 'assetrend32': -1.904, 'assetrend4': -7.09, 'assetrend64': -5.649, 'assetrend8': -4.171}
 ann. std {'assetrend16': 2.503, 'assetrend2': 6.321, 'assetrend32': 2.295, 'assetrend4': 3.799, 'assetrend64': 3.364, 'assetrend8': 2.83}
 ann. SR {'assetrend16': -1.2, 'assetrend2': -0.12, 'assetrend32': -0.83, 'assetrend4': -1.87, 'assetrend64': -1.68, 'assetrend8': -1.47}

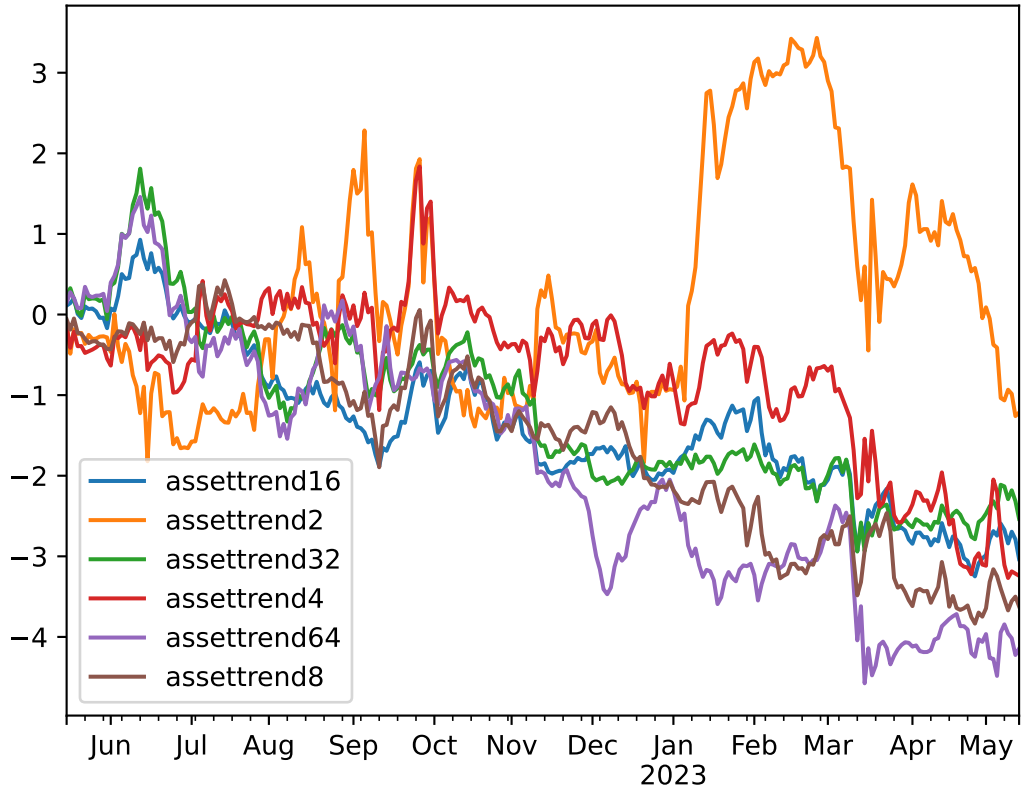


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -2.988, 'assettrend2': -1.198, 'assettrend32': -2.496, 'assettrend4': -3.192, 'assettrend64': -4.081, 'assettrend8': -3.565}

ann. std {'assettrend16': 2.236, 'assettrend2': 6.123, 'assettrend32': 2.486, 'assettrend4': 3.93, 'assettrend64': 3.118, 'assettrend8': 2.639}

ann. SR {'assettrend16': -1.34, 'assettrend2': -0.2, 'assettrend32': -1.0, 'assettrend4': -0.81, 'assettrend64': -1.31, 'assettrend8': -1.35}



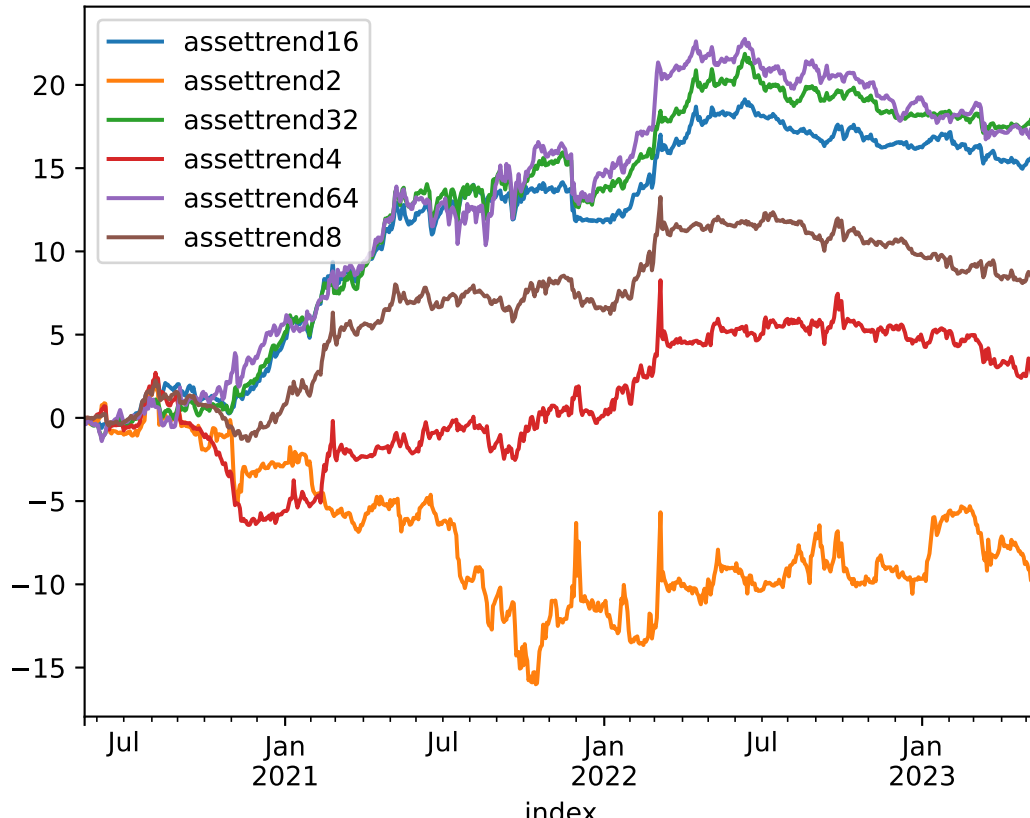
index

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

ann. mean {'assettrend16': 4.98, 'assettrend2': -3.267, 'assettrend32': 5.752, 'assettrend4': 0.78, 'assettrend64': 5.632, 'assettrend8': 2.727}

ann. std {'assettrend16': 3.418, 'assettrend2': 7.821, 'assettrend32': 4.131, 'assettrend4': 4.986, 'assettrend64': 5.019, 'assettrend8': 3.533}

ann. SR {'assettrend16': 1.46, 'assettrend2': -0.42, 'assettrend32': 1.39, 'assettrend4': 0.16, 'assettrend64': 1.12, 'assettrend8': 0.77}

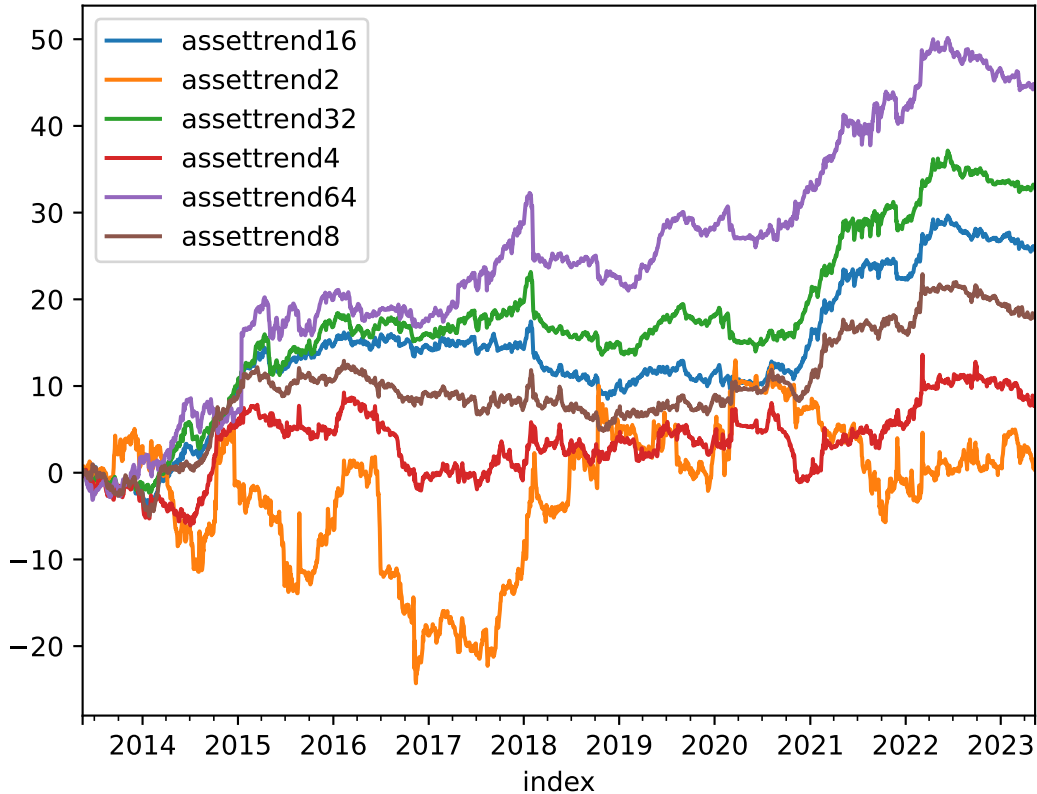


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.524, 'assettrend2': 0.034, 'assettrend32': 3.222, 'assettrend4': 0.758, 'assettrend64': 4.374, 'assettrend8': 1.763}

ann. std {'assettrend16': 3.149, 'assettrend2': 9.769, 'assettrend32': 3.587, 'assettrend4': 4.978, 'assettrend64': 5.192, 'assettrend8': 3.449}

ann. SR {'assettrend16': 0.8, 'assettrend2': 0.0, 'assettrend32': 0.9, 'assettrend4': 0.15, 'assettrend64': 0.84, 'assettrend8': 0.51}

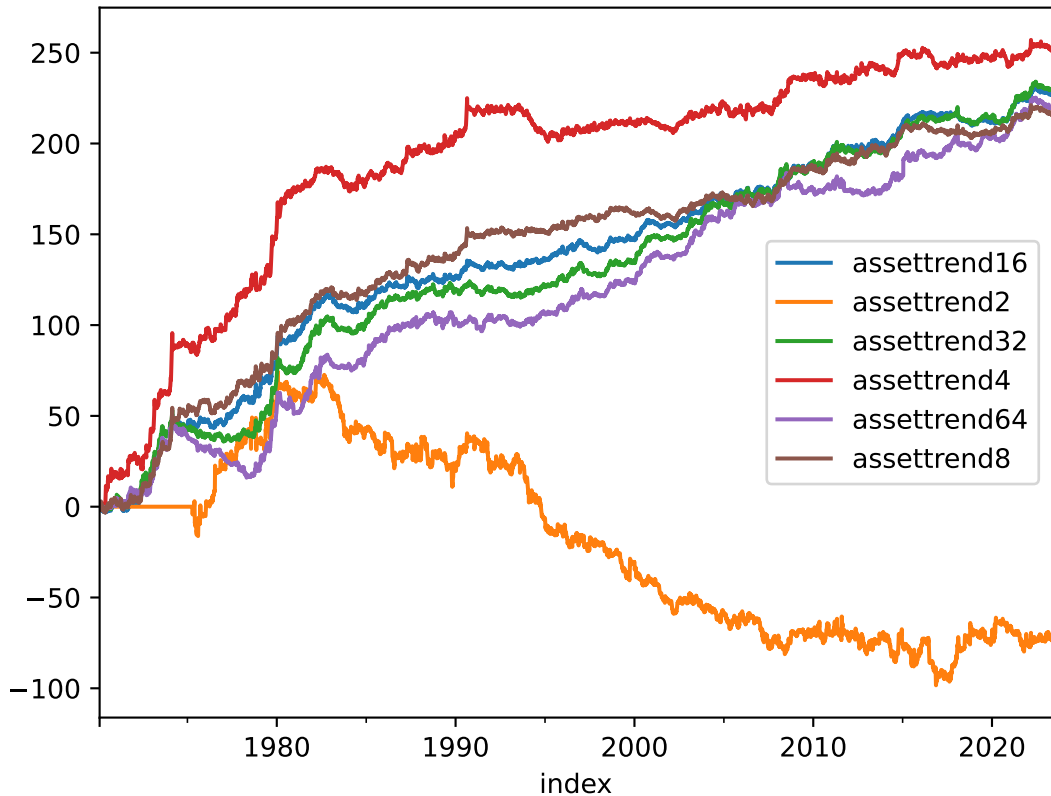


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.179, 'assettrend2': -1.358, 'assettrend32': 4.231, 'assettrend4': 4.626, 'assettrend8': 3.981}

ann. std {'assettrend16': 4.302, 'assettrend2': 10.255, 'assettrend32': 4.493, 'assettrend4': 6.545, 'assettrend64': 4.994, 'assettrend8': 4.631}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

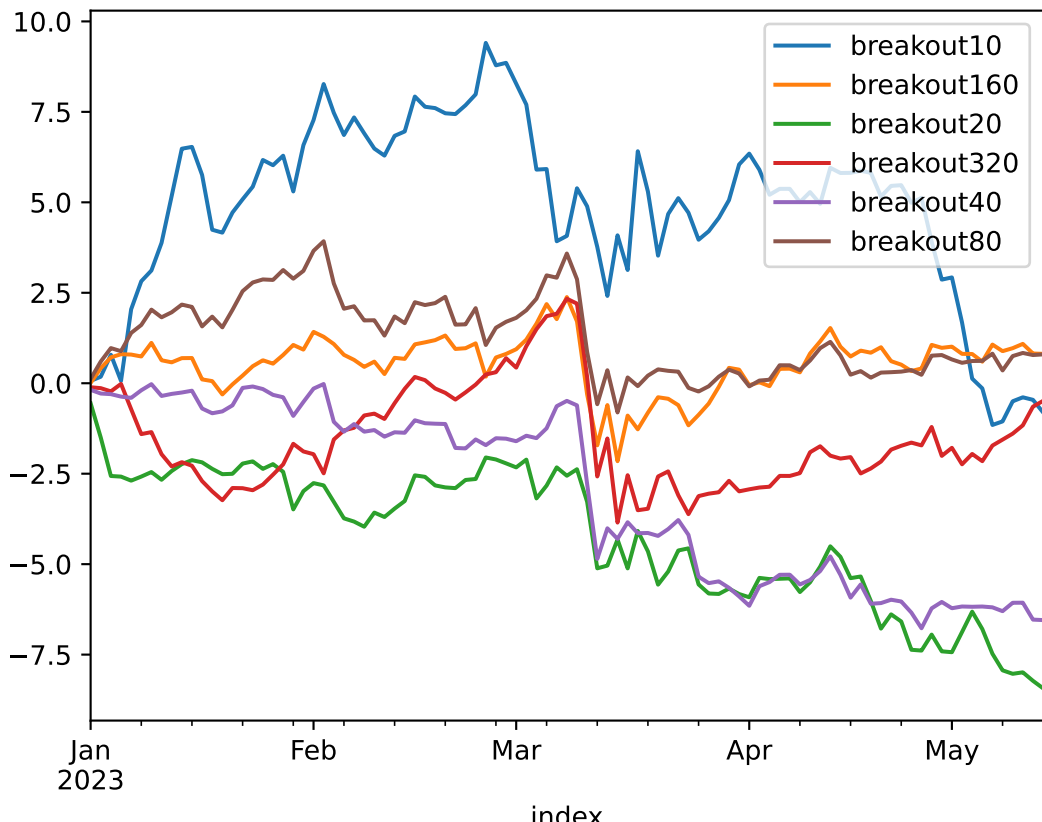


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -2.171, 'breakout160': 2.189, 'breakout20': -22.72, 'breakout320': -1.314, 'breakout40': -17.639, 'breakout80': 2.15}

ann. std {'breakout10': 13.776, 'breakout160': 7.491, 'breakout20': 7.615, 'breakout320': 9.236, 'breakout40': 7.005, 'breakout80': 7.5}

ann. SR {'breakout10': -0.16, 'breakout160': 0.29, 'breakout20': -2.98, 'breakout320': -0.14, 'breakout40': -2.52, 'breakout80': 0.29}

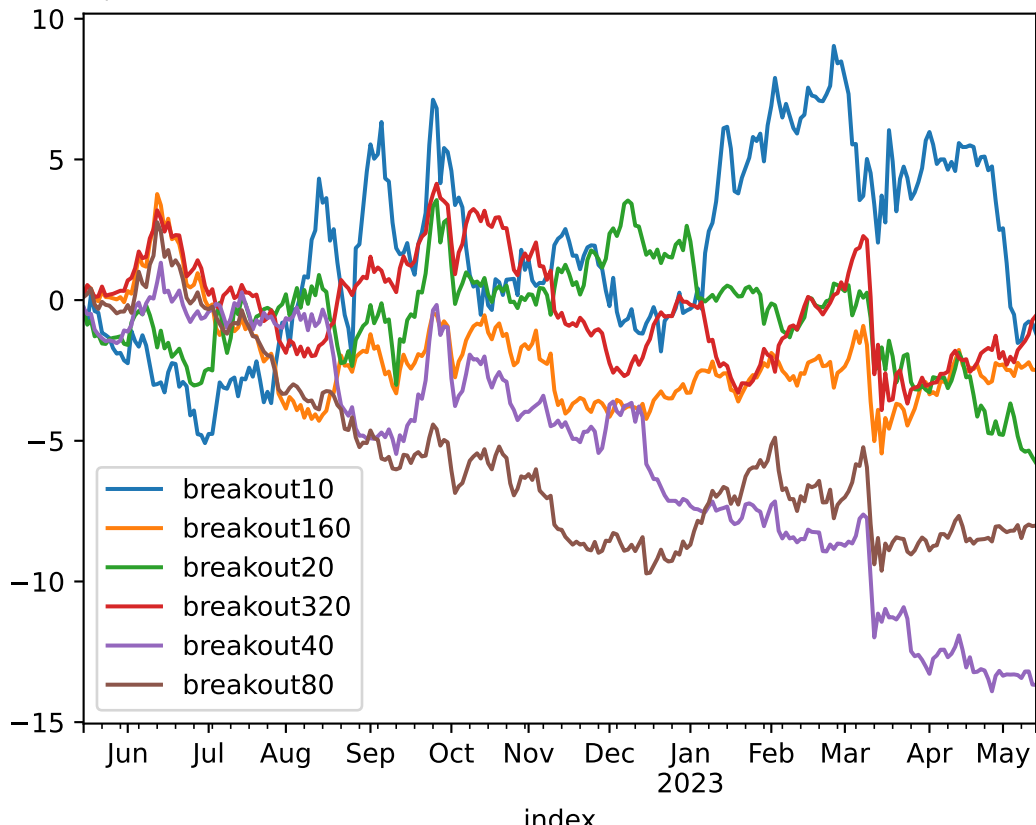


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': -1.158, 'breakout160': -2.446, 'breakout20': -5.7, 'breakout320': -0.538, 'breakout40': -13.467, 'breakout80': -7.891}

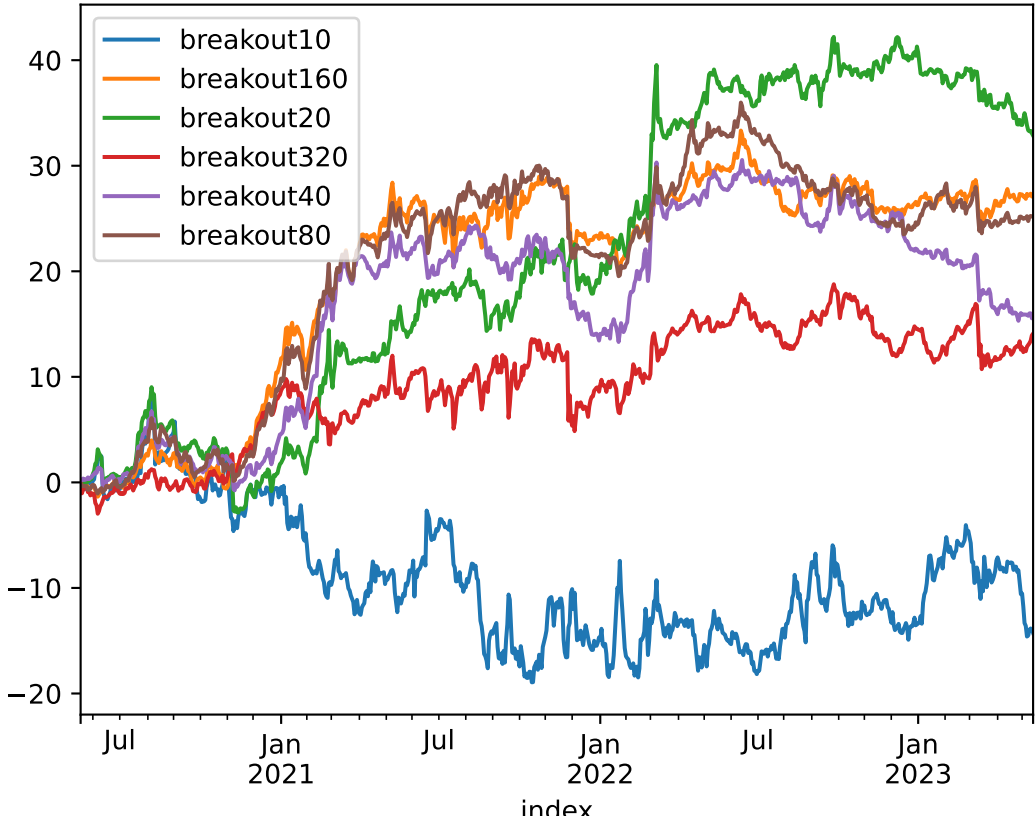
ann. std {'breakout10': 13.188, 'breakout160': 6.882, 'breakout20': 8.387, 'breakout320': 7.541, 'breakout40': 7.081, 'breakout80': 6.489}

ann. SR {'breakout10': -0.09, 'breakout160': -0.36, 'breakout20': -0.68, 'breakout320': -0.07, 'breakout40': -1.9, 'breakout80': -1.22}



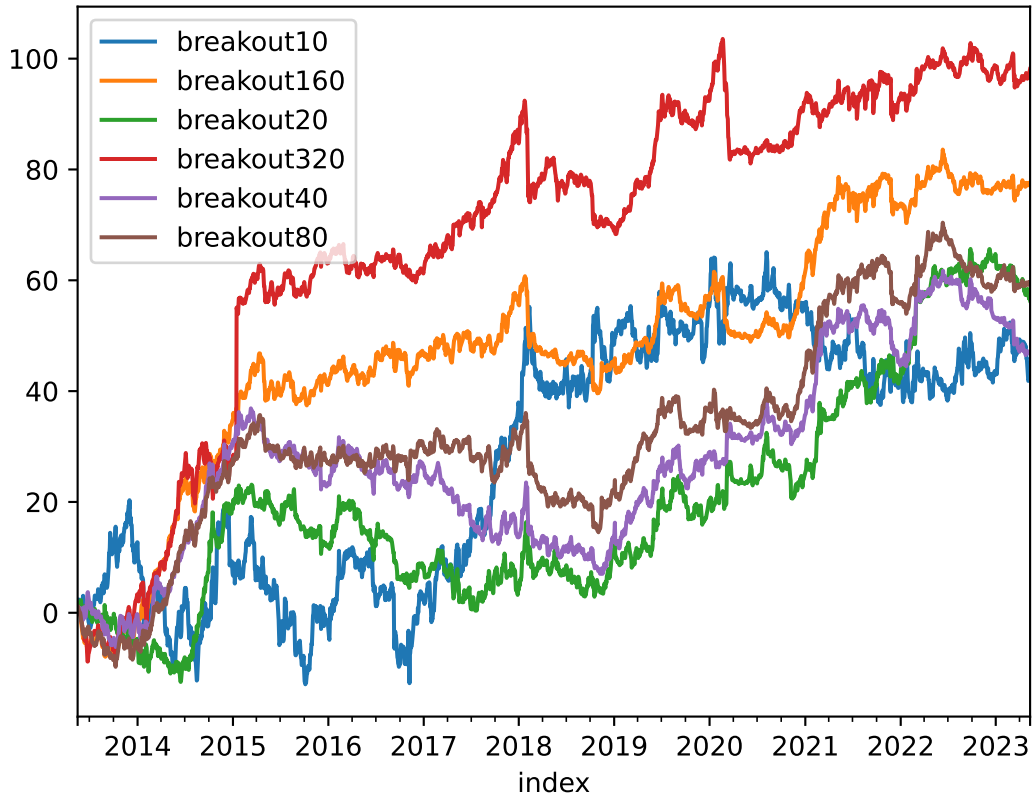
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.68, 'breakout160': 8.887, 'breakout20': 10.785, 'breakout320': 4.625, 'breakout40': 5.099, 'breakout80': 8.271}
ann. std {'breakout10': 15.102, 'breakout160': 9.193, 'breakout20': 11.084, 'breakout320': 9.927, 'breakout40': 9.492, 'breakout80': 8.918}
ann. SR {'breakout10': -0.31, 'breakout160': 0.97, 'breakout20': 0.97, 'breakout320': 0.47, 'breakout40': 0.54, 'breakout80': 0.93}



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

ann. mean {'breakout10': 4.143, 'breakout160': 7.595, 'breakout20': 5.53, 'breakout320': 9.636, 'breakout40': 4.587, 'breakout80': 5.855}
ann. std {'breakout10': 17.803, 'breakout160': 8.858, 'breakout20': 11.072, 'breakout320': 13.085, 'breakout40': 9.359, 'breakout80': 8.711}
ann. SR {'breakout10': 0.23, 'breakout160': 0.86, 'breakout20': 0.5, 'breakout320': 0.74, 'breakout40': 0.49, 'breakout80': 0.67}

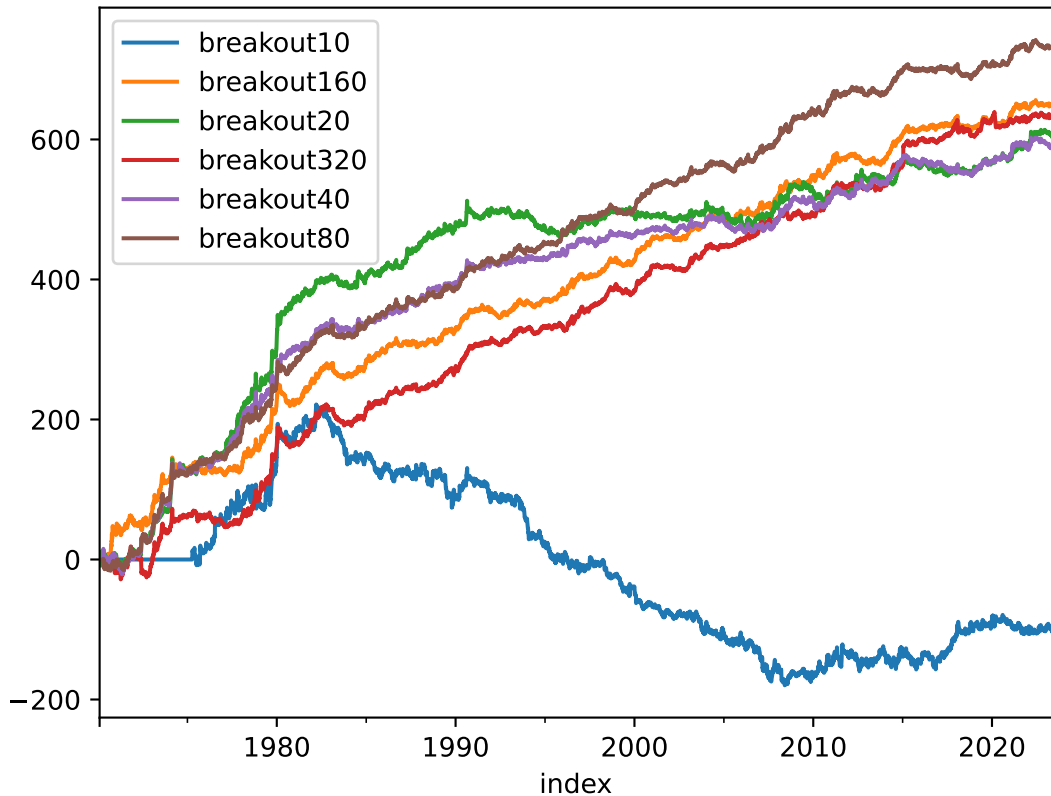


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.879, 'breakout160': 11.972, 'breakout20': 11.132, 'breakout320': 11.671, 'breakout40': 10.824, 'breakout80': 13.472}

ann. std {'breakout10': 21.312, 'breakout160': 11.524, 'breakout20': 14.885, 'breakout320': 12.11, 'breakout40': 12.107, 'breakout80': 11.712}

ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.89, 'breakout80': 1.15}

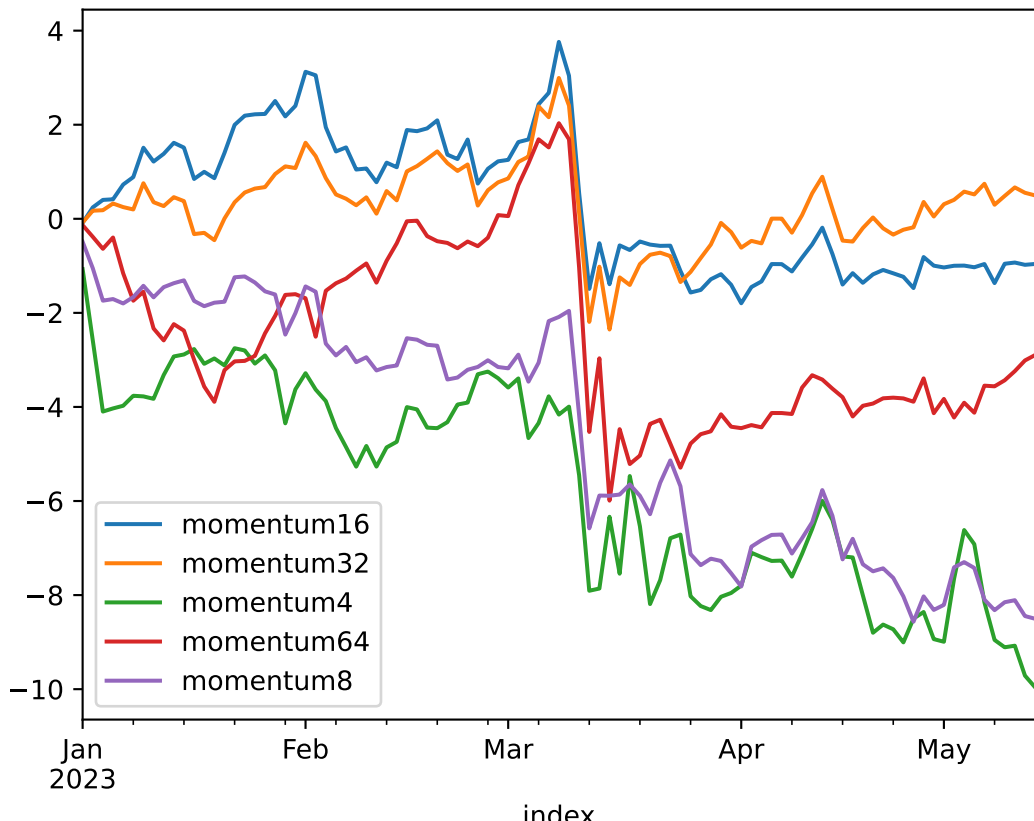


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.587, 'momentum32': 1.339, 'momentum4': -26.841, 'momentum64': -7.807, 'momentum8': -22.913}

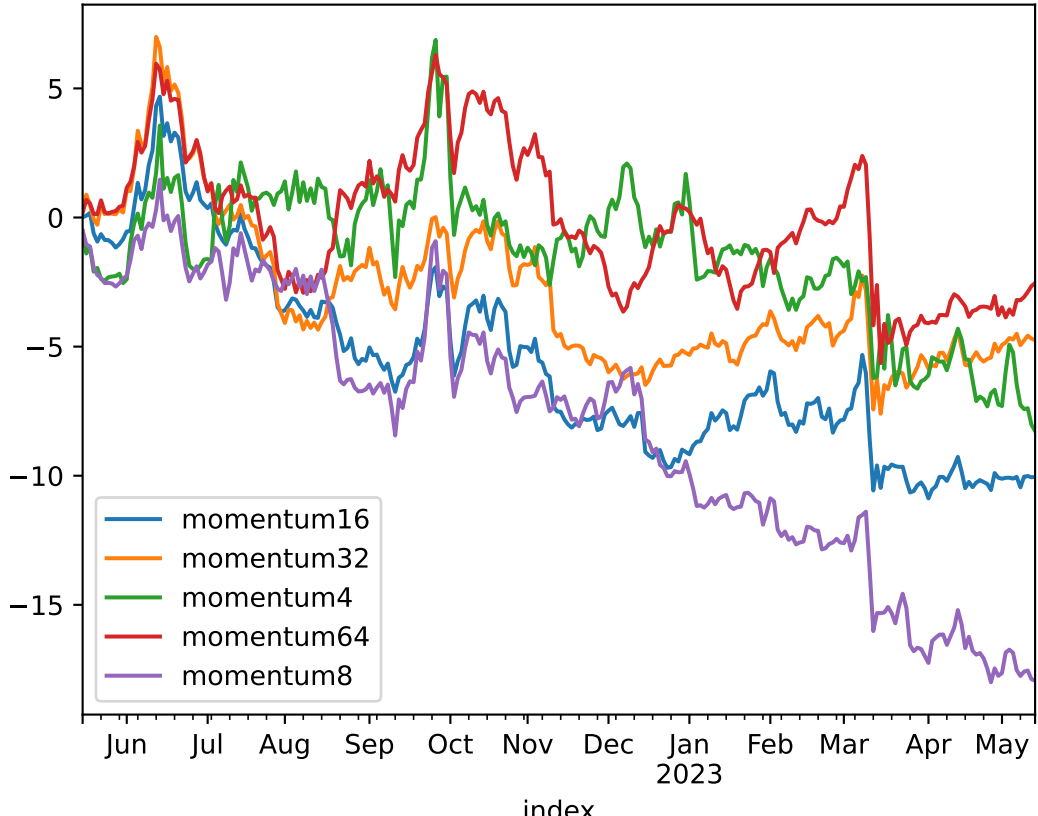
ann. std {'momentum16': 8.333, 'momentum32': 8.344, 'momentum4': 11.127, 'momentum64': 11.197, 'momentum8': 8.464}

ann. SR {'momentum16': -0.31, 'momentum32': 0.16, 'momentum4': -2.41, 'momentum64': -0.7, 'momentum8': -2.71}



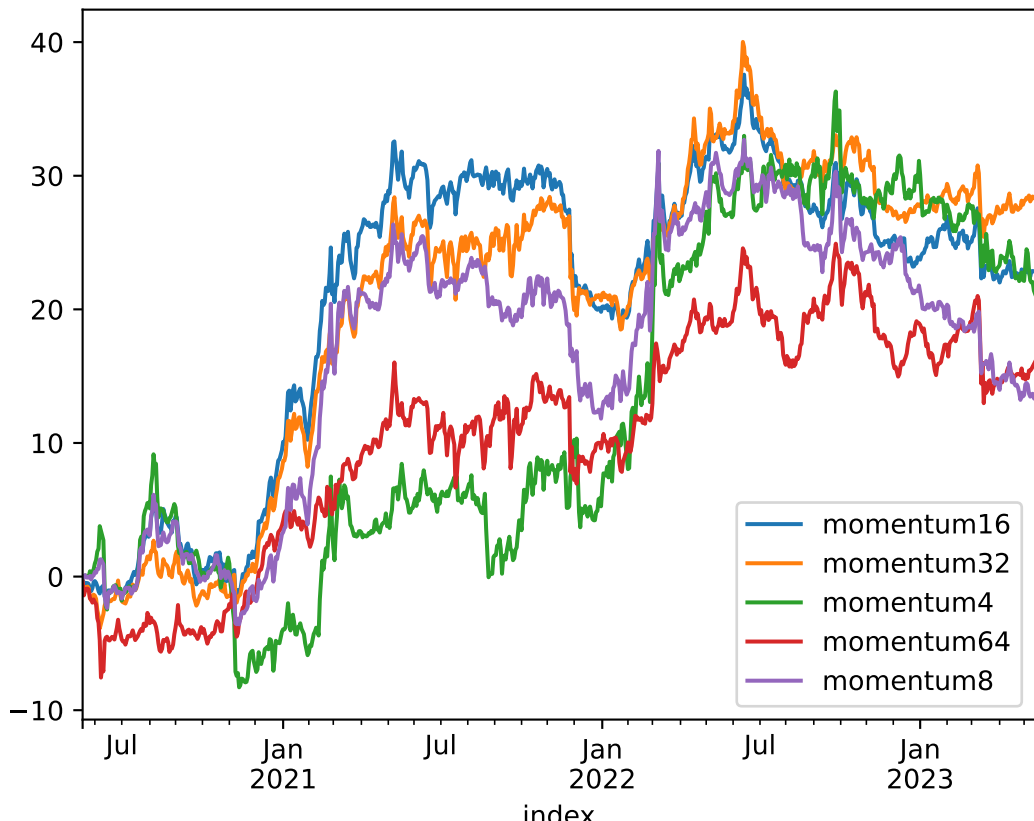
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -9.888, 'momentum32': -4.674, 'momentum4': -8.142, 'momentum64': -2.504, 'momentum8': -17.662}
ann. std {'momentum16': 8.482, 'momentum32': 8.809, 'momentum4': 13.203, 'momentum64': 10.14, 'momentum8': 9.713}
ann. SR {'momentum16': -1.17, 'momentum32': -0.53, 'momentum4': -0.62, 'momentum64': -0.25, 'momentum8': -1.82}



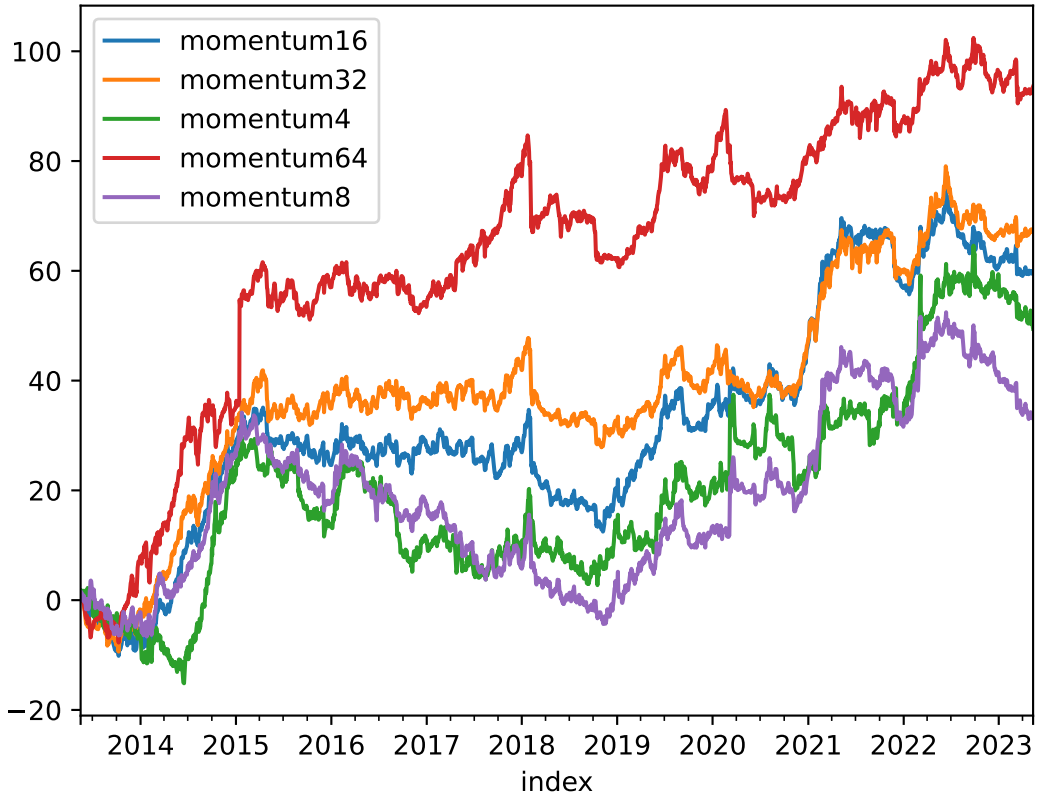
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.498, 'momentum32': 9.28, 'momentum4': 6.944, 'momentum64': 5.275, 'momentum8': 4.361}
ann. std {'momentum16': 10.128, 'momentum32': 10.381, 'momentum4': 14.705, 'momentum64': 10.837, 'momentum8': 11.447}
ann. SR {'momentum16': 0.74, 'momentum32': 0.89, 'momentum4': 0.47, 'momentum64': 0.49, 'momentum8': 0.38}



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

ann. mean {'momentum16': 5.881, 'momentum32': 6.61, 'momentum4': 4.854, 'momentum64': 9.19, 'momentum8': 3.245}
ann. std {'momentum16': 9.634, 'momentum32': 9.26, 'momentum4': 13.685, 'momentum64': 11.872, 'momentum8': 10.843}
ann. SR {'momentum16': 0.61, 'momentum32': 0.71, 'momentum4': 0.35, 'momentum64': 0.77, 'momentum8': 0.3}

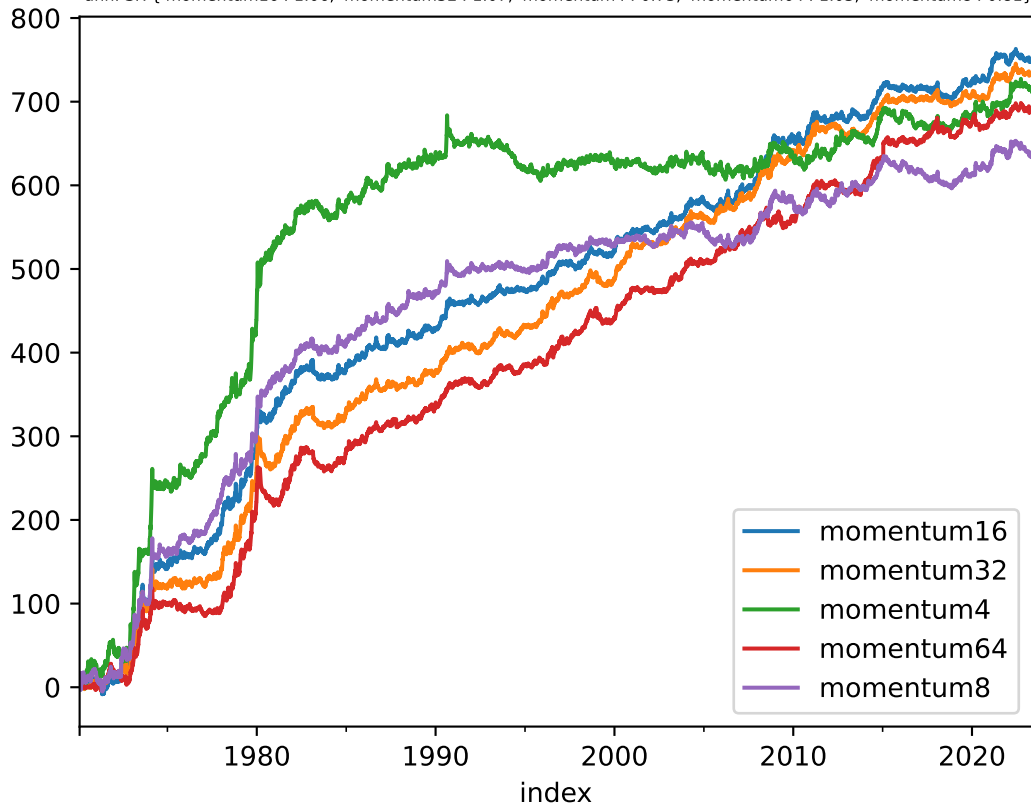


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.784, 'momentum32': 13.516, 'momentum4': 13.117, 'momentum64': 12.703, 'momentum8': 11.675}

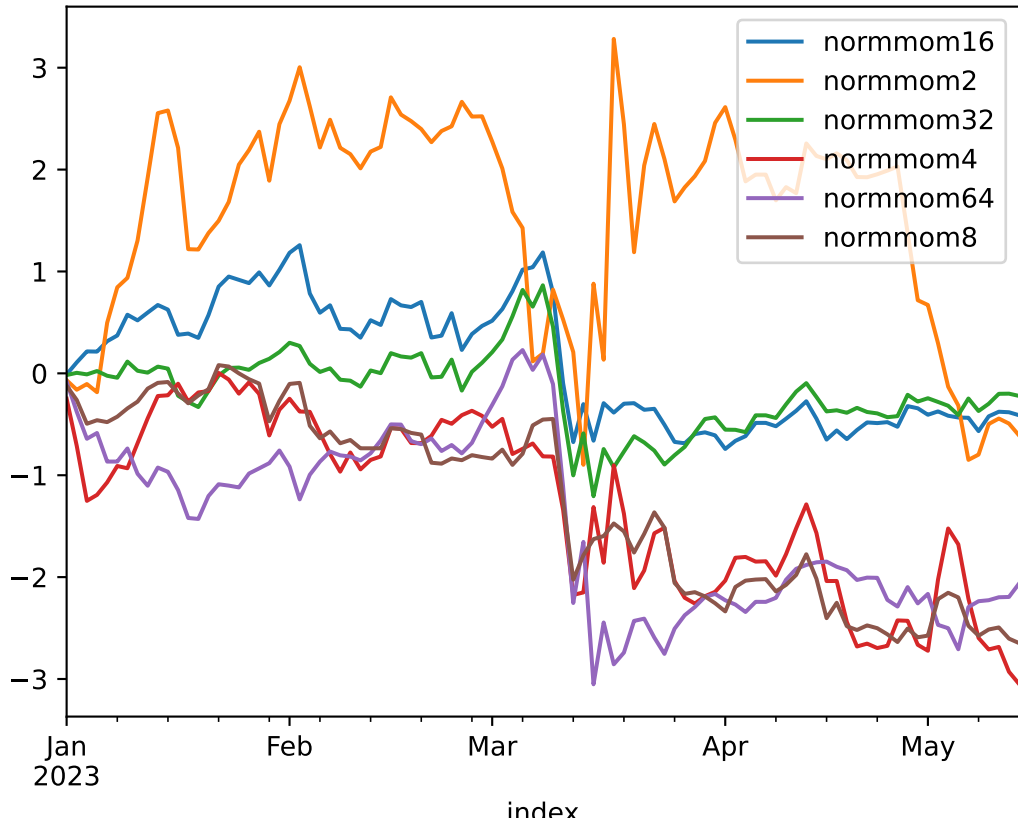
ann. std {'momentum16': 13.041, 'momentum32': 12.605, 'momentum4': 17.887, 'momentum64': 12.326, 'momentum8': 14.326}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.73, 'momentum64': 1.03, 'momentum8': 0.81}



Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.108, 'normmom2': -1.643, 'normmom32': -0.597, 'normmom4': -8.216, 'normmom64': -5.559, 'normmom8': -7.135}
 ann. std {'normmom16': 2.989, 'normmom2': 8.726, 'normmom32': 2.938, 'normmom4': 4.627, 'normmom64': 4.415, 'normmom8': 3.008}
 ann. SR {'normmom16': -0.37, 'normmom2': -0.19, 'normmom32': -0.2, 'normmom4': -1.78, 'normmom64': -1.26, 'normmom8': -2.37}

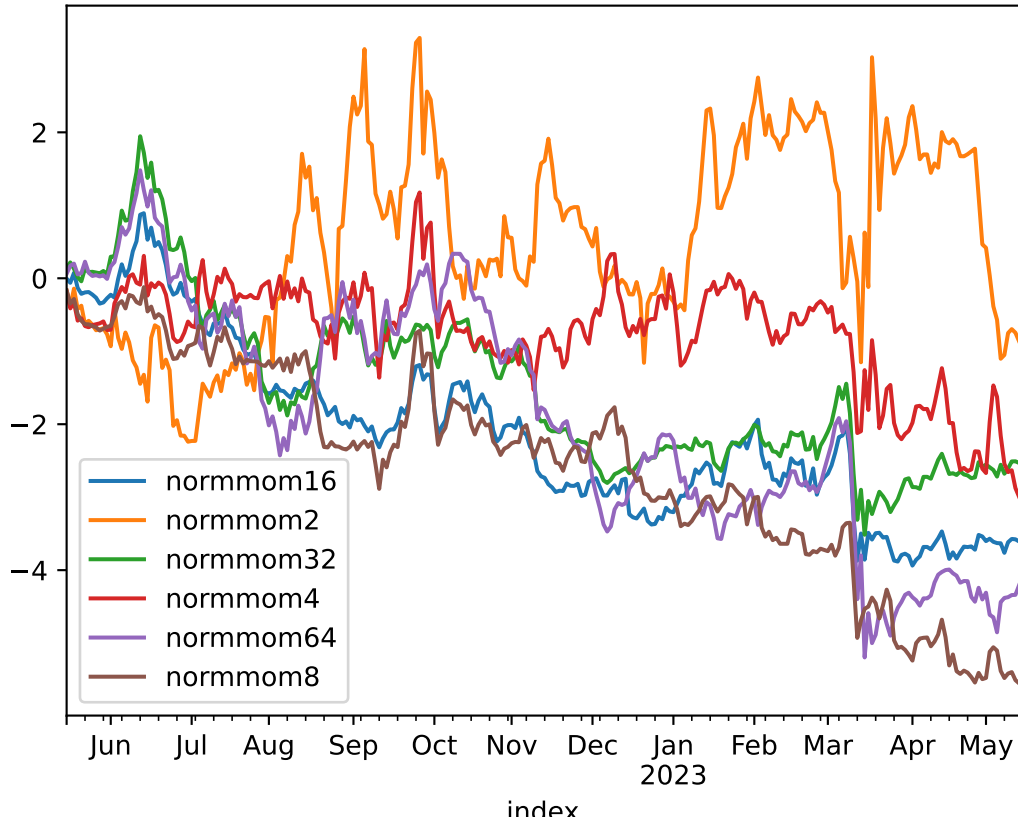


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.551, 'normmom2': -0.85, 'normmom32': -2.492, 'normmom4': -2.949, 'normmom64': -4.142, 'normmom8': -5.465}

ann. std {'normmom16': 2.523, 'normmom2': 7.432, 'normmom32': 2.824, 'normmom4': 4.337, 'normmom64': 3.818, 'normmom8': 2.883}

ann. SR {'normmom16': -1.41, 'normmom2': -0.11, 'normmom32': -0.88, 'normmom4': -0.68, 'normmom64': -1.08, 'normmom8': -1.9}

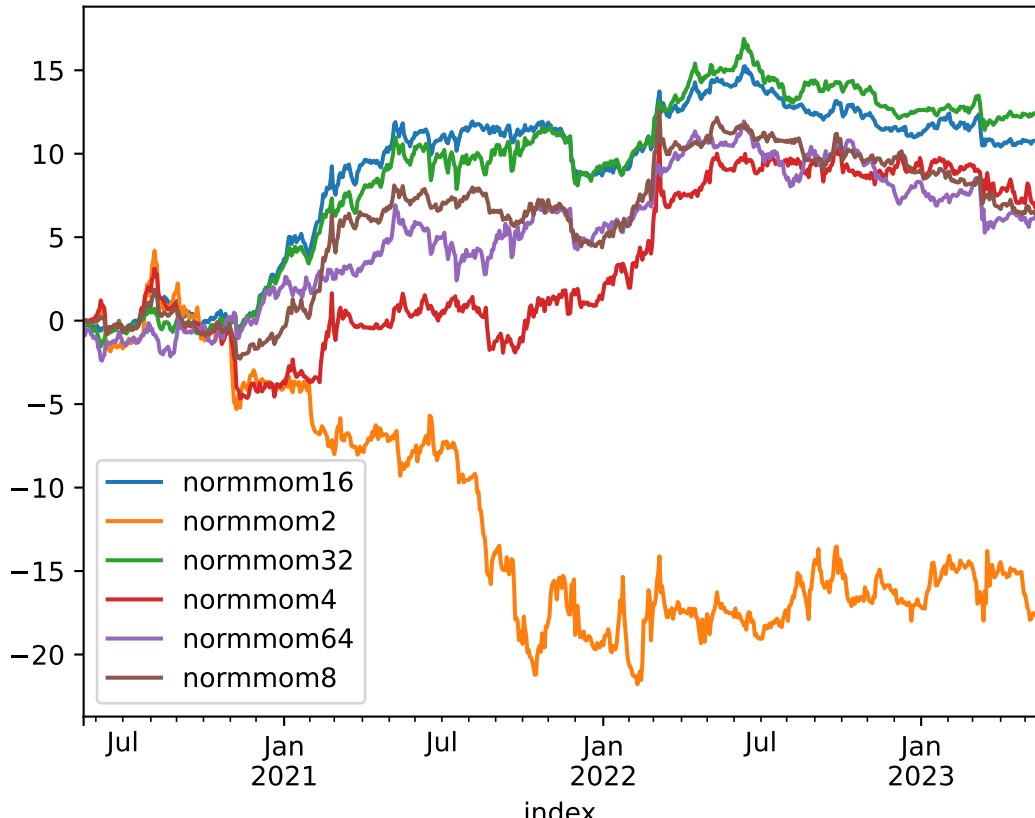


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.528, 'normmom2': -5.804, 'normmom32': 4.07, 'normmom4': 2.198, 'normmom64': 2.054, 'normmom8': 2.091}

ann. std {'normmom16': 3.509, 'normmom2': 8.648, 'normmom32': 3.88, 'normmom4': 5.417, 'normmom64': 4.284, 'normmom8': 3.942}

ann. SR {'normmom16': 1.01, 'normmom2': -0.67, 'normmom32': 1.05, 'normmom4': 0.41, 'normmom64': 0.48, 'normmom8': 0.53}

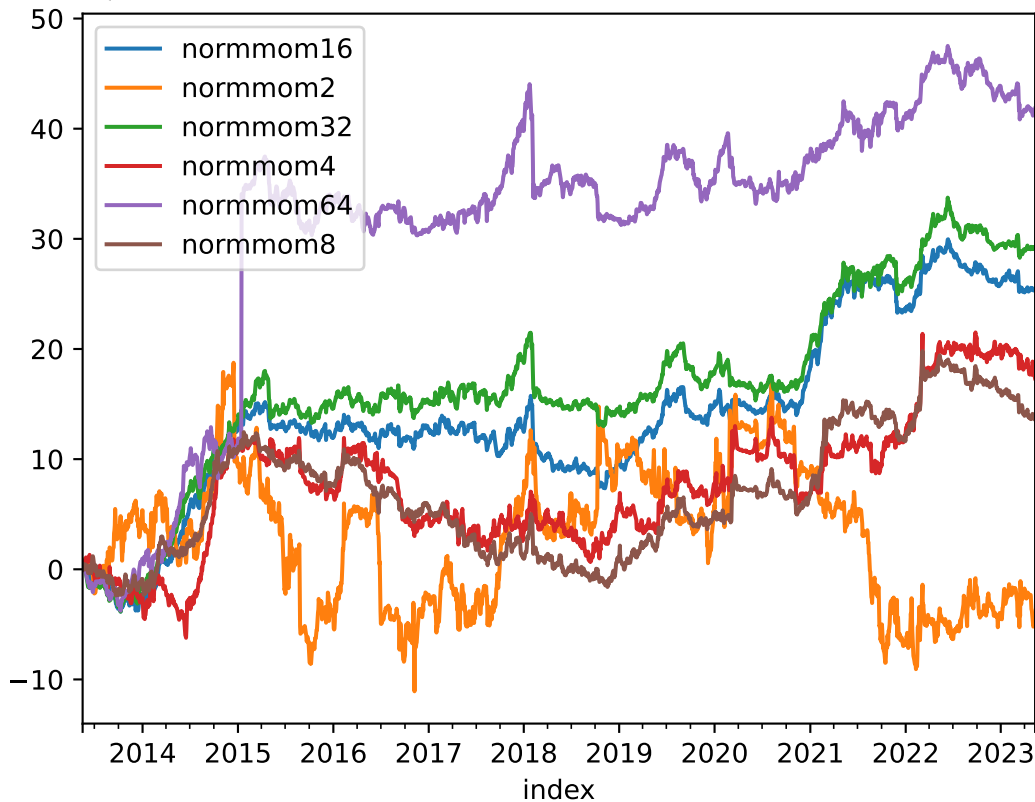


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.501, 'normmom2': -0.488, 'normmom32': 2.874, 'normmom4': 1.702, 'normmom64': 4.108, 'normmom8': 1.337}

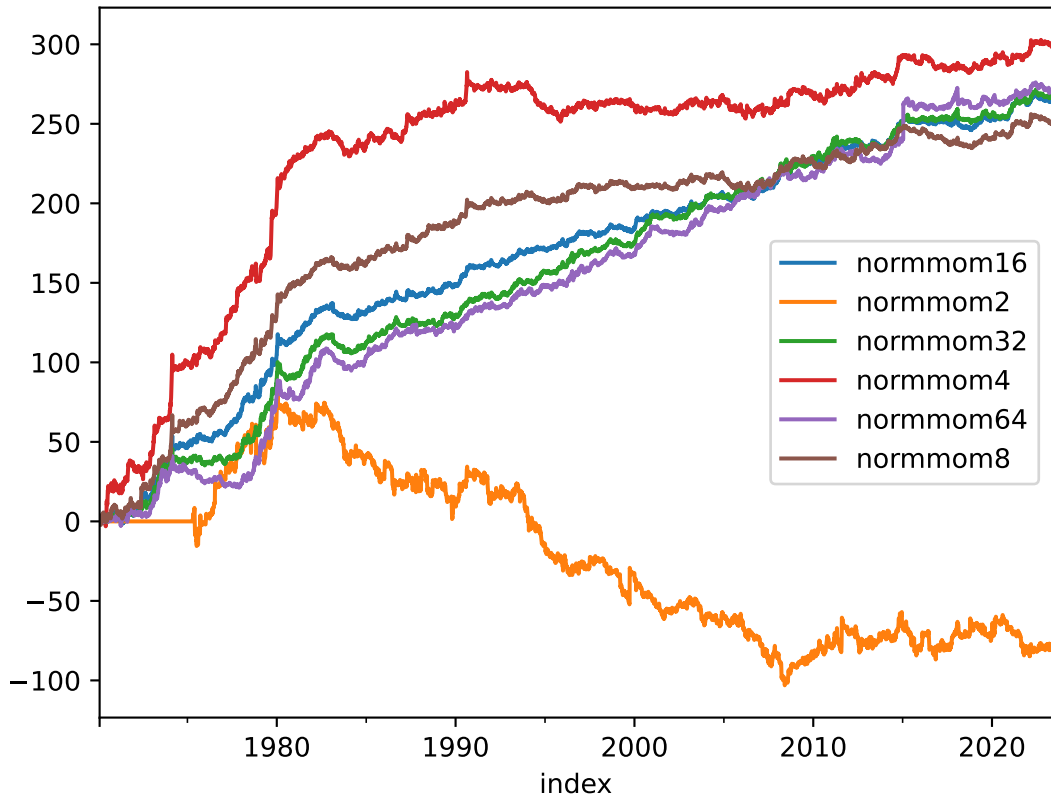
ann. std {'normmom16': 3.457, 'normmom2': 10.314, 'normmom32': 3.617, 'normmom4': 5.451, 'normmom64': 8.274, 'normmom8': 3.877}

ann. SR {'normmom16': 0.72, 'normmom2': -0.05, 'normmom32': 0.79, 'normmom4': 0.31, 'normmom64': 0.5, 'normmom8': 0.35}



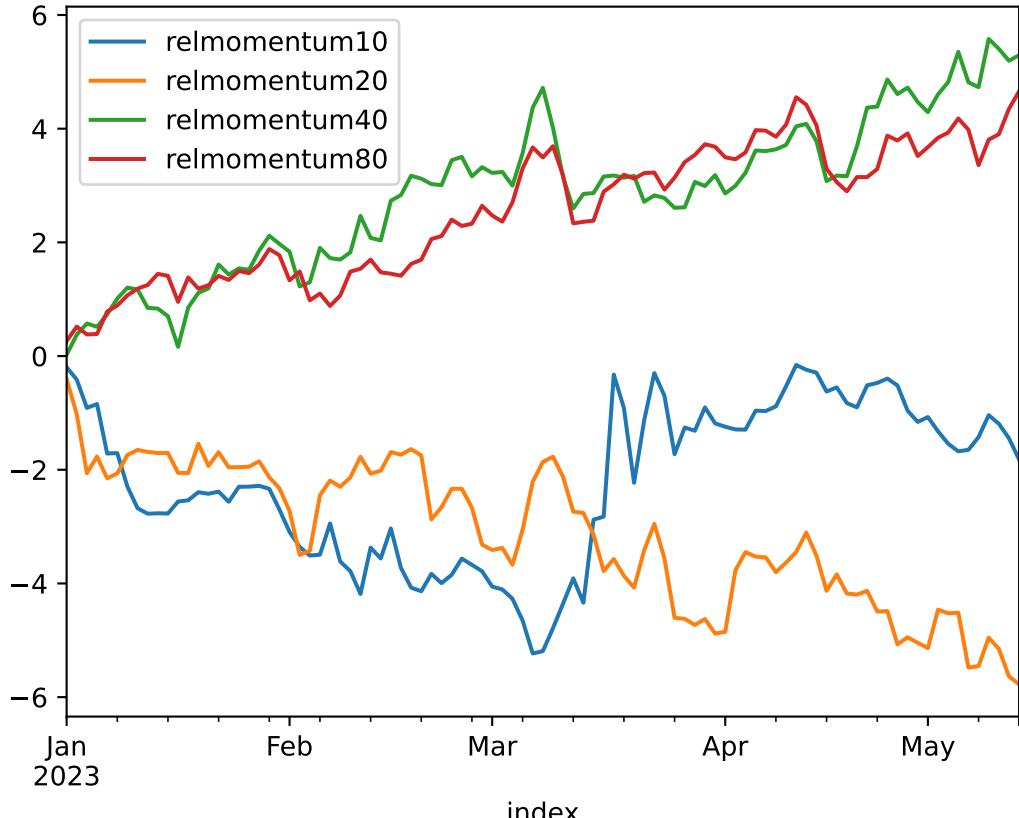
Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.865, 'normmom2': -1.487, 'normmom32': 4.919, 'normmom4': 5.5, 'normmom64': 4.98, 'normmom8': 4.604}
ann. std {'normmom16': 4.53, 'normmom2': 11.606, 'normmom32': 4.607, 'normmom4': 7.382, 'normmom64': 5.868, 'normmom8': 5.363}
ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.74, 'normmom64': 0.85, 'normmom8': 0.86}



Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -4.905, 'relmomentum20': -15.56, 'relmomentum40': 14.263, 'relmomentum80': 12.547}
ann. std {'relmomentum10': 7.71, 'relmomentum20': 6.603, 'relmomentum40': 5.432, 'relmomentum80': 4.443}
ann. SR {'relmomentum10': -0.64, 'relmomentum20': -2.36, 'relmomentum40': 2.63, 'relmomentum80': 2.82}

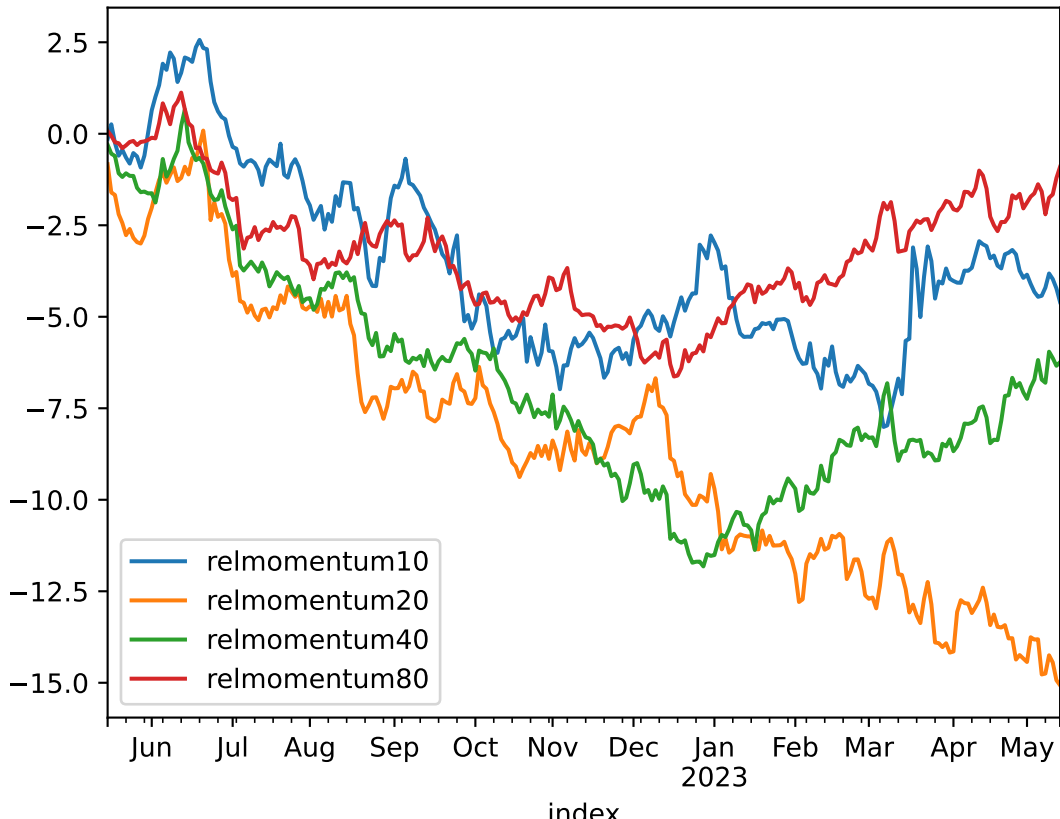


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -4.527, 'relmomentum20': -14.837, 'relmomentum40': -6.145, 'relmomentum80': -0.889}

ann. std {'relmomentum10': 7.148, 'relmomentum20': 6.401, 'relmomentum40': 5.27, 'relmomentum80': 4.544}

ann. SR {'relmomentum10': -0.63, 'relmomentum20': -2.32, 'relmomentum40': -1.17, 'relmomentum80': -0.2}

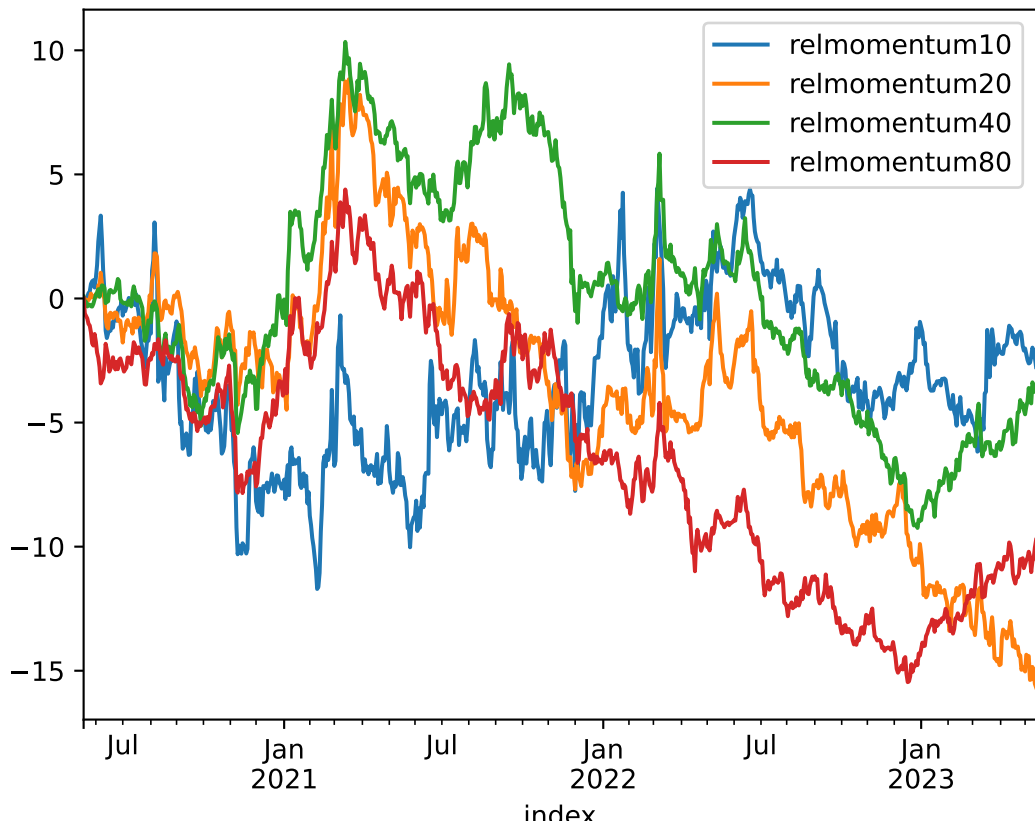


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.906, 'relmomentum20': -5.142, 'relmomentum40': -1.203, 'relmomentum80': -3.193}

ann. std {'relmomentum10': 11.923, 'relmomentum20': 8.376, 'relmomentum40': 6.975, 'relmomentum80': 6.33}

ann. SR {'relmomentum10': -0.08, 'relmomentum20': -0.61, 'relmomentum40': -0.17, 'relmomentum80': -0.5}

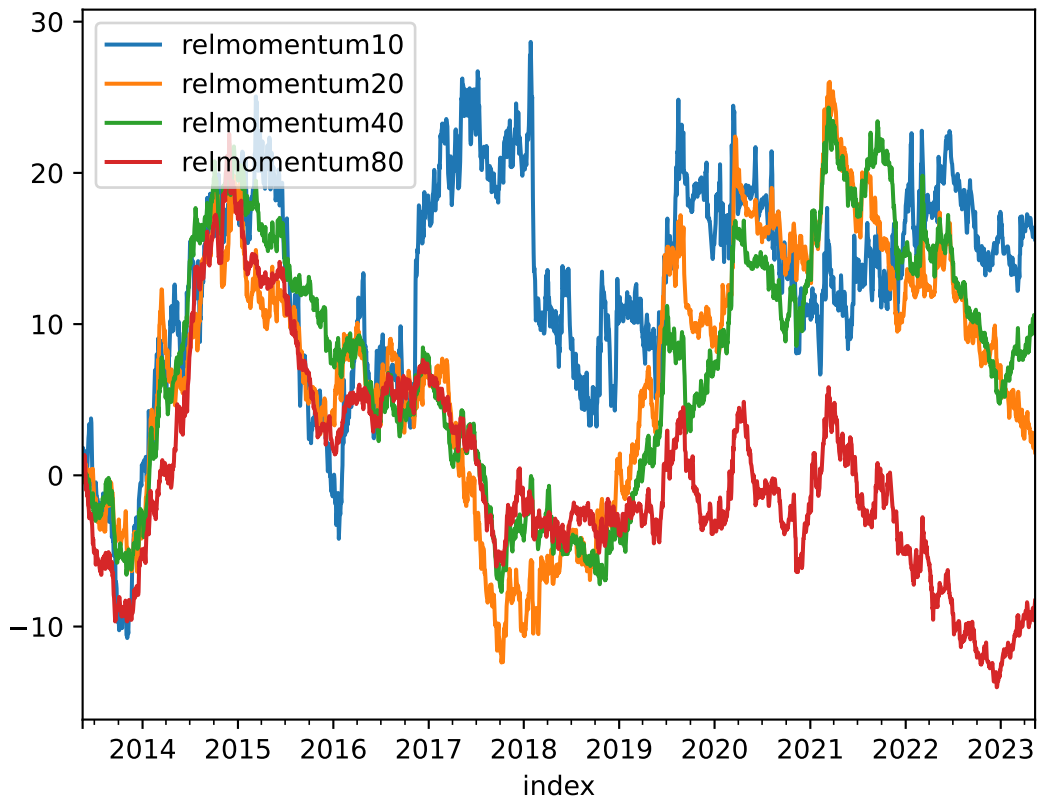


Total Trading Rule P&L for period '10Y'

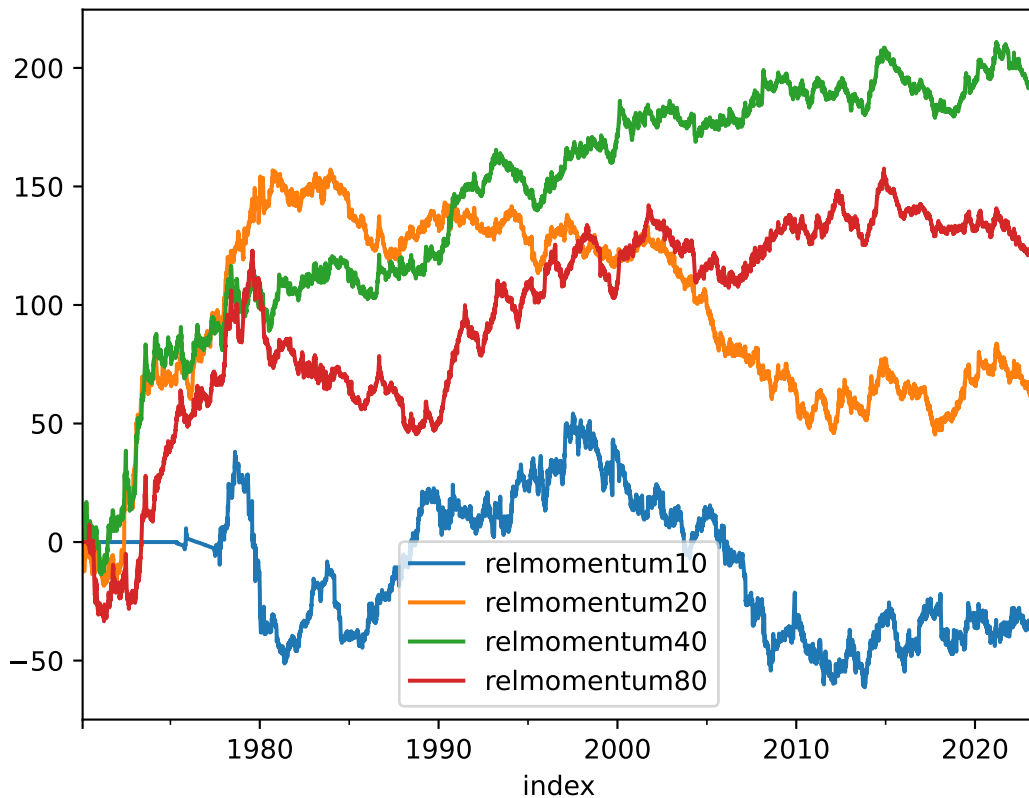
ann. mean {'relmomentum10': 1.532, 'relmomentum20': 0.149, 'relmomentum40': 1.013, 'relmomentum80': -0.814}

ann. std {'relmomentum10': 13.39, 'relmomentum20': 8.54, 'relmomentum40': 6.995, 'relmomentum80': 6.359}

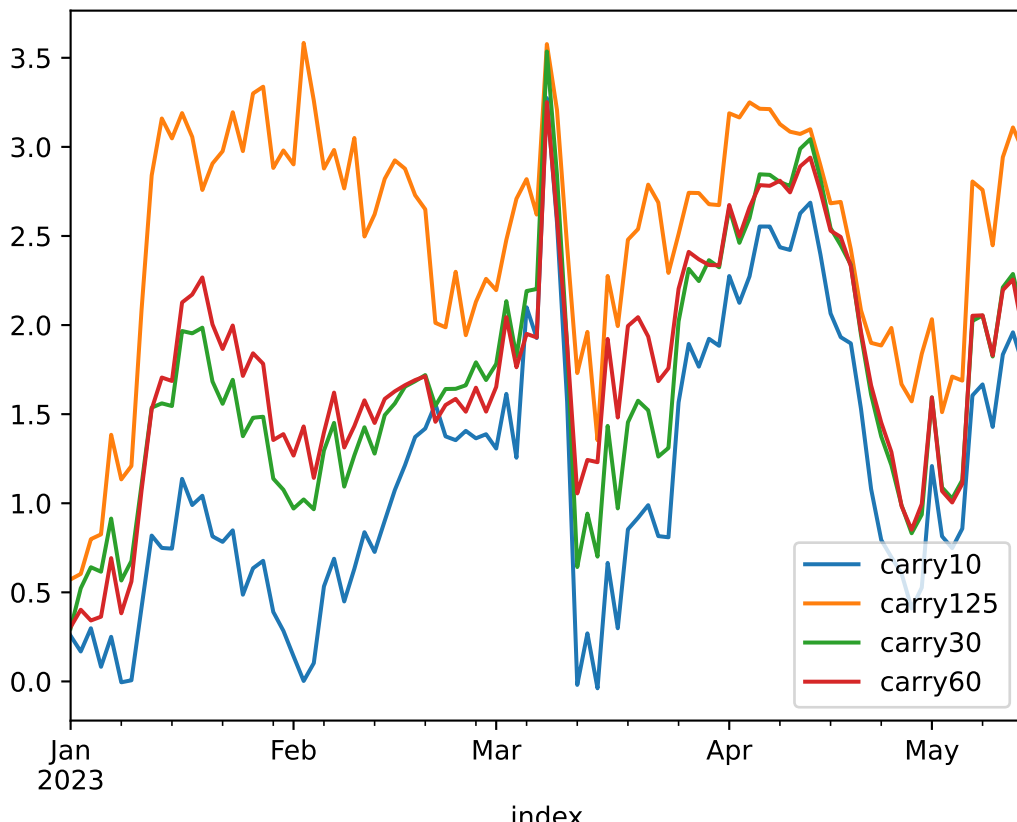
ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.02, 'relmomentum40': 0.14, 'relmomentum80': -0.13}



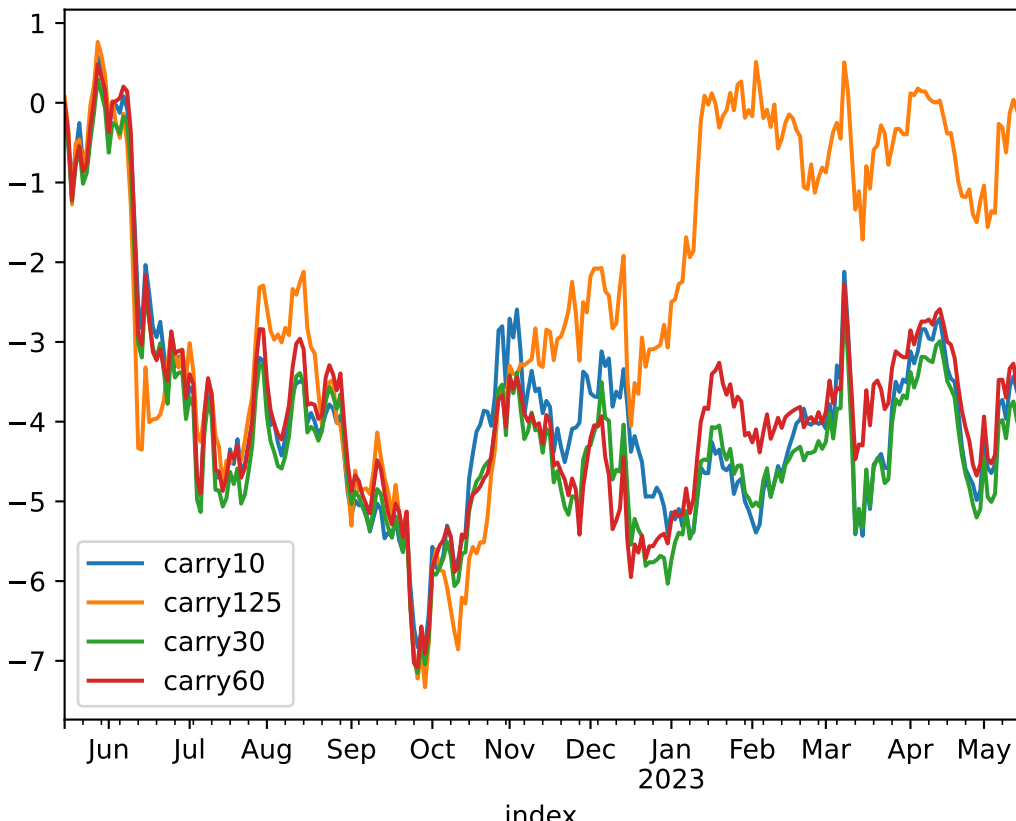
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.643, 'relmomentum20': 1.091, 'relmomentum40': 3.628, 'relmomentum80': 2.333}
ann. std {'relmomentum10': 13.384, 'relmomentum20': 10.466, 'relmomentum40': 9.636, 'relmomentum80': 9.78}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 4.778, 'carry125': 8.019, 'carry30': 5.503, 'carry60': 5.272}
ann. std {'carry10': 5.901, 'carry125': 5.633, 'carry30': 5.541, 'carry60': 5.074}
ann. SR {'carry10': 0.81, 'carry125': 1.42, 'carry30': 0.99, 'carry60': 1.04}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.565, 'carry125': -0.093, 'carry30': -3.93, 'carry60': -3.517}
ann. std {'carry10': 5.929, 'carry125': 6.465, 'carry30': 5.922, 'carry60': 5.87}
ann. SR {'carry10': -0.6, 'carry125': -0.01, 'carry30': -0.66, 'carry60': -0.6}

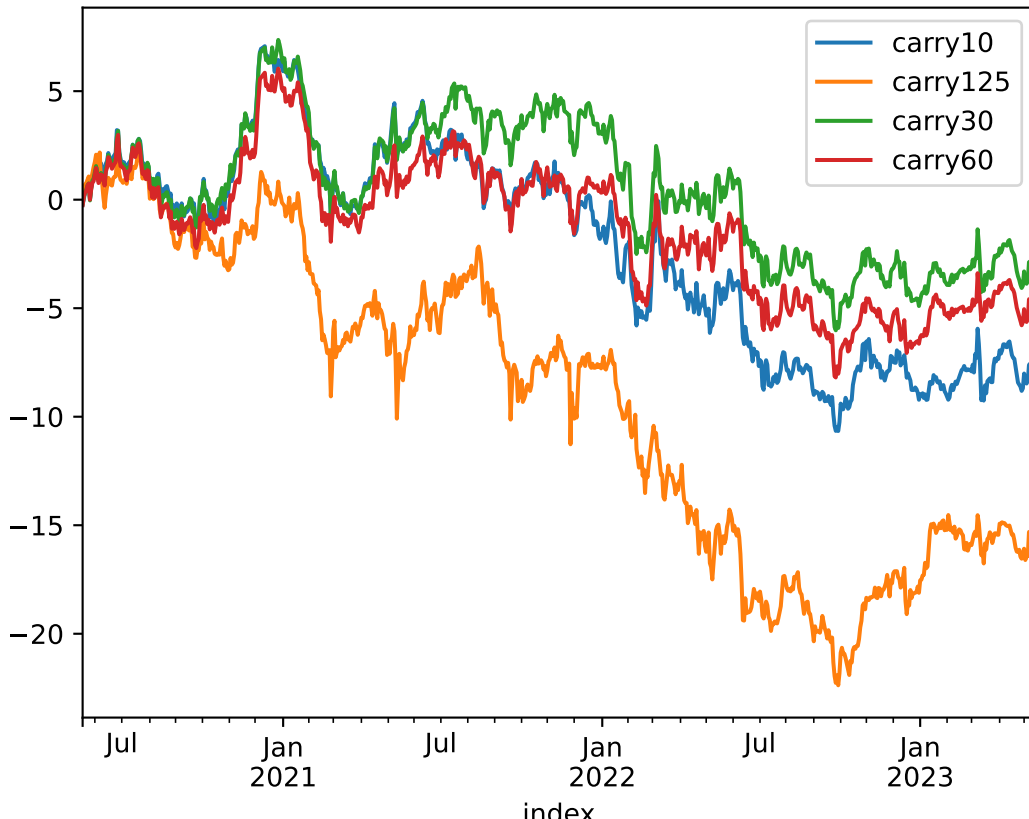


Total Trading Rule P&L for period '3Y'

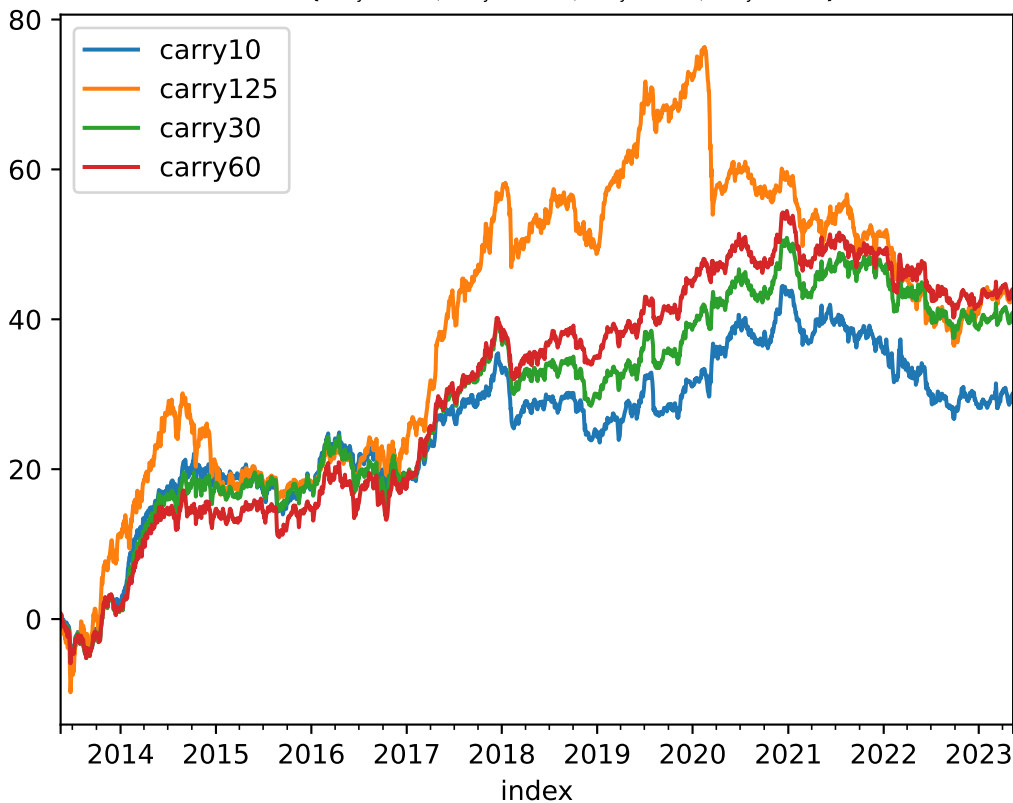
ann. mean {'carry10': -2.444, 'carry125': -4.968, 'carry30': -0.938, 'carry60': -1.537}

ann. std {'carry10': 6.541, 'carry125': 8.025, 'carry30': 6.481, 'carry60': 6.478}

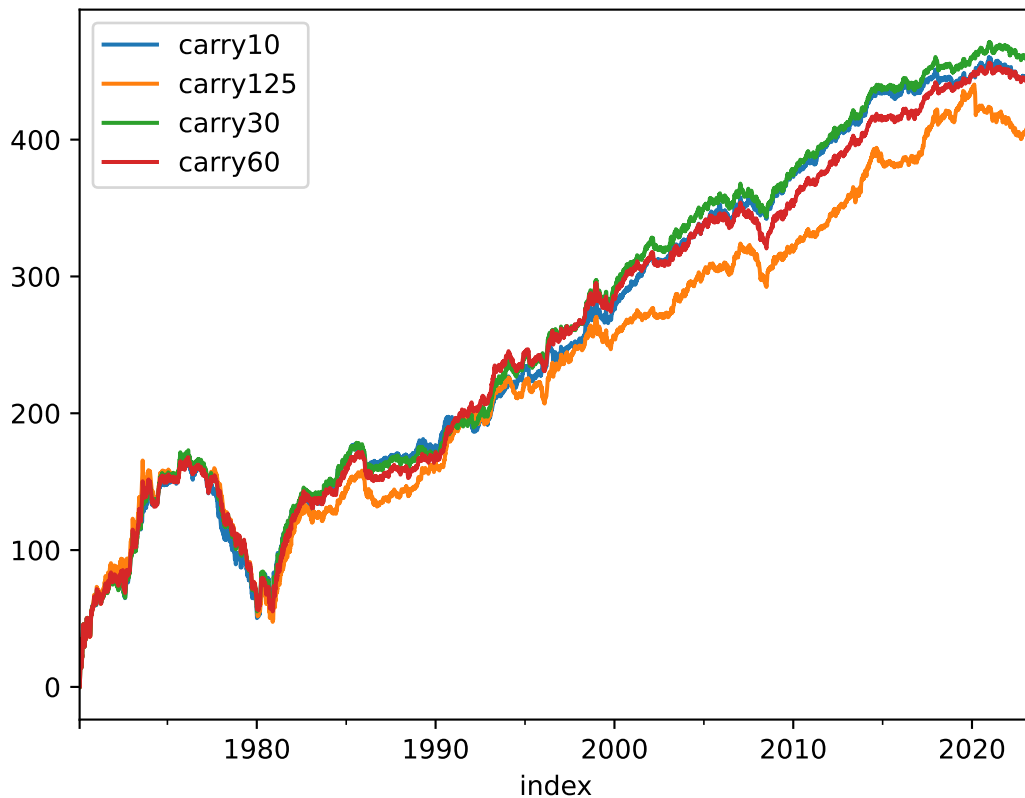
ann. SR {'carry10': -0.37, 'carry125': -0.62, 'carry30': -0.14, 'carry60': -0.24}



Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.941, 'carry125': 4.291, 'carry30': 3.993, 'carry60': 4.295}
ann. std {'carry10': 6.369, 'carry125': 8.951, 'carry30': 6.456, 'carry60': 6.401}
ann. SR {'carry10': 0.46, 'carry125': 0.48, 'carry30': 0.62, 'carry60': 0.67}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.209, 'carry125': 7.508, 'carry30': 8.495, 'carry60': 8.205}
ann. std {'carry10': 11.197, 'carry125': 11.554, 'carry30': 11.254, 'carry60': 11.257}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}

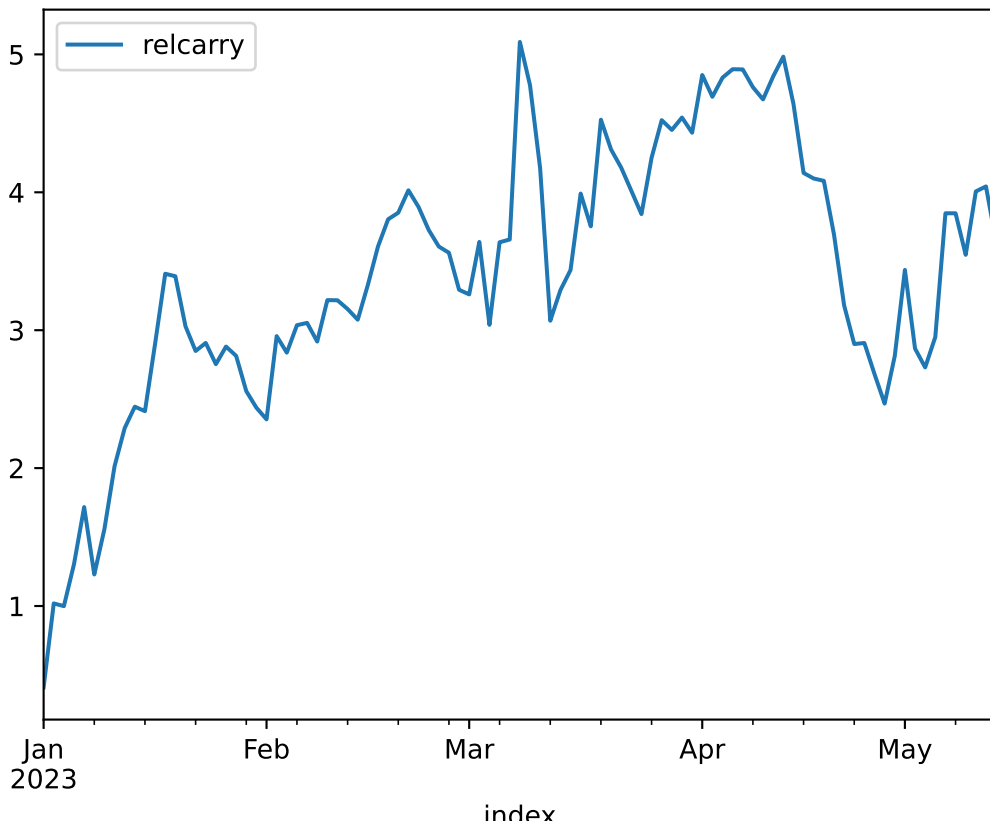


Total Trading Rule P&L for period 'YTD'

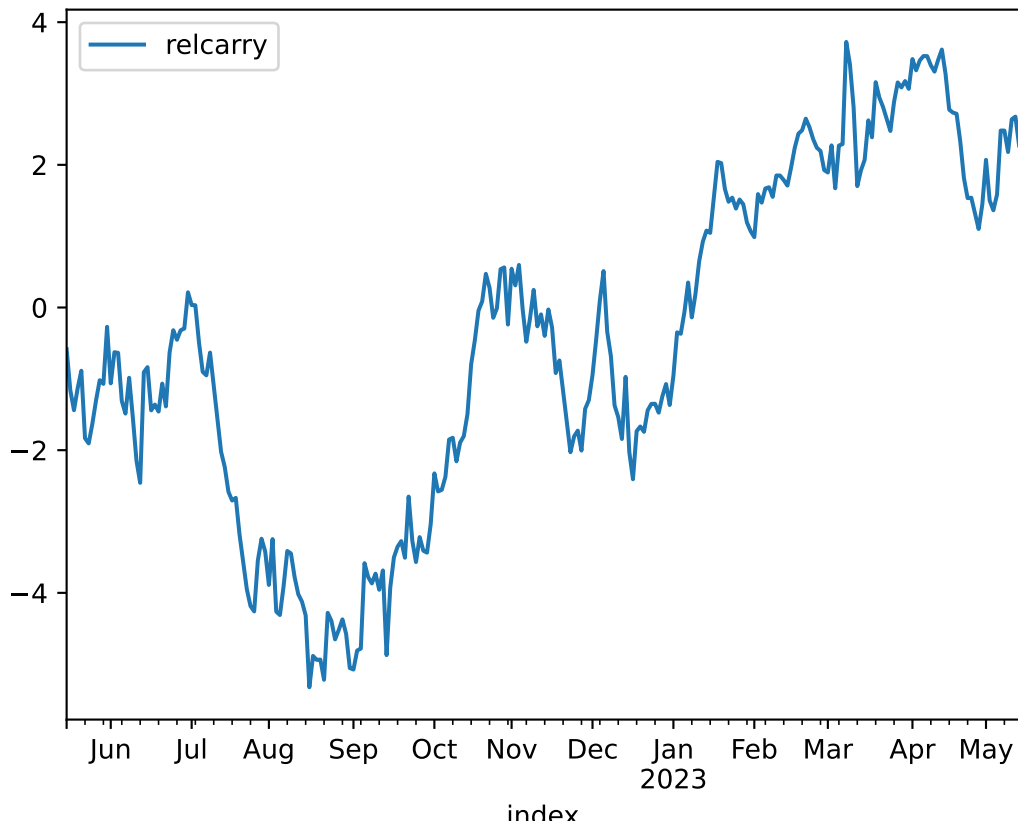
ann. mean {'relcarry': 9.81}

ann. std {'relcarry': 5.822}

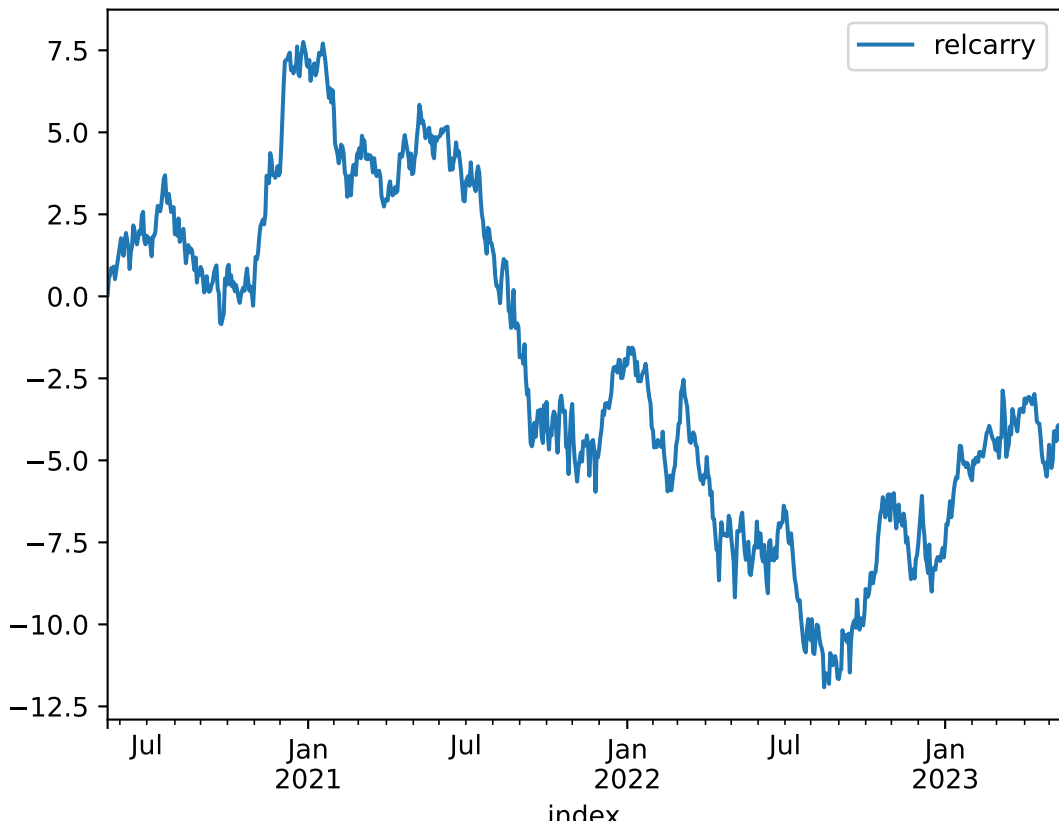
ann. SR {'relcarry': 1.68}



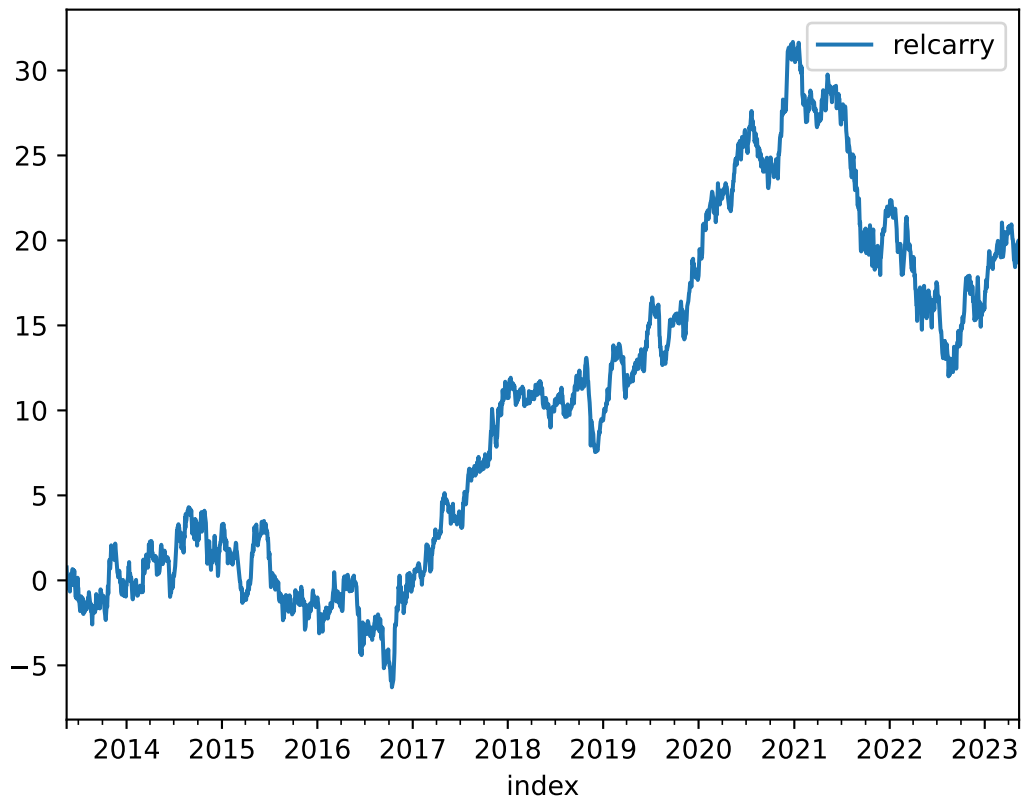
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 2.238}
ann. std {'relcarry': 6.811}
ann. SR {'relcarry': 0.33}



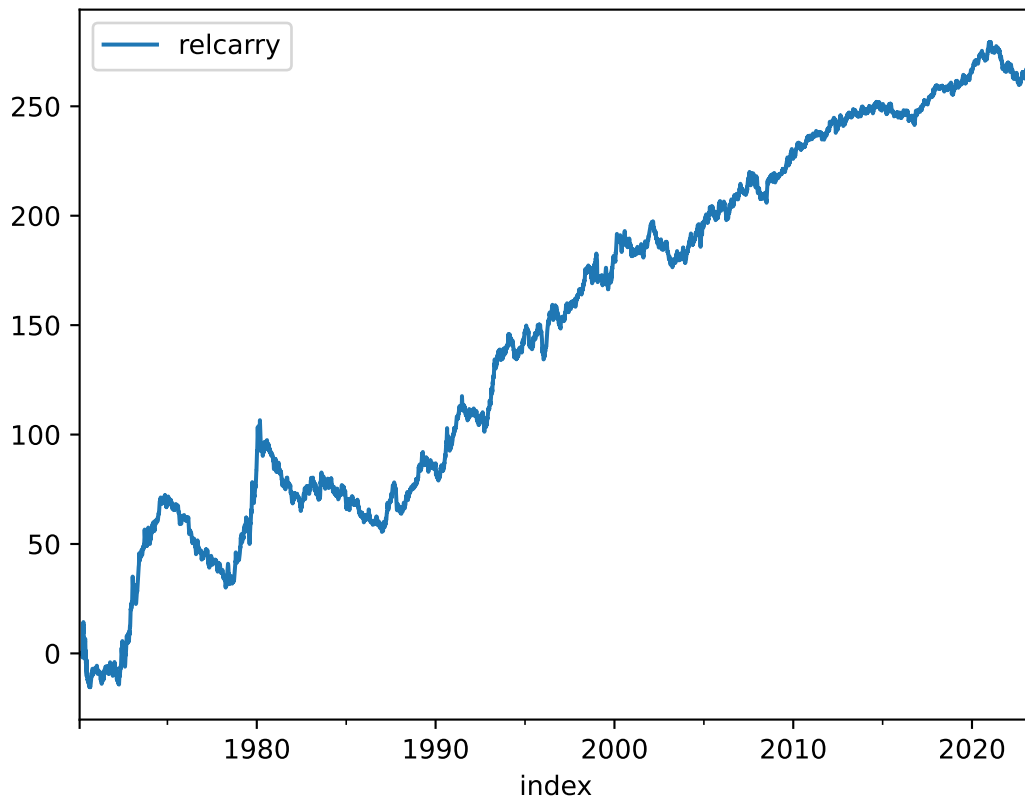
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.418}
ann. std {'relcarry': 6.689}
ann. SR {'relcarry': -0.21}



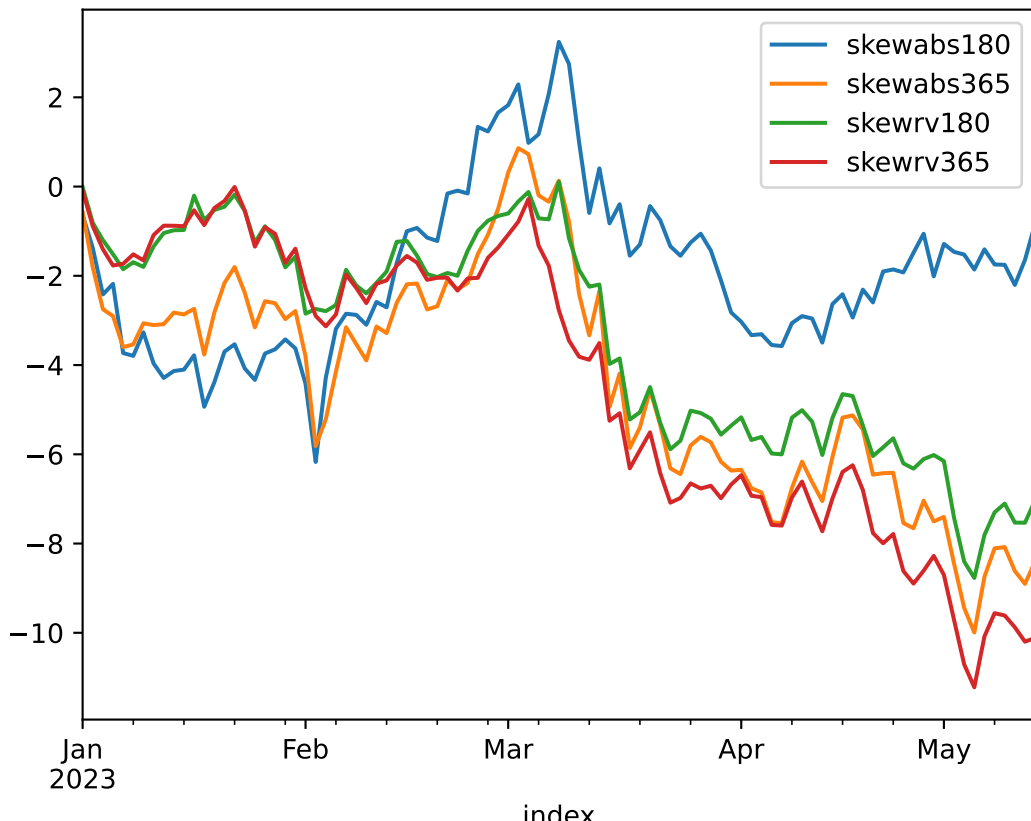
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.925}
ann. std {'relcarry': 5.826}
ann. SR {'relcarry': 0.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.924}
ann. std {'relcarry': 8.958}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -2.244, 'skewabs365': -22.639, 'skewrv180': -18.943, 'skewrv365': -27.255}
ann. std {'skewabs180': 11.105, 'skewabs365': 11.659, 'skewrv180': 8.417, 'skewrv365': 8.246}
ann. SR {'skewabs180': -0.2, 'skewabs365': -1.94, 'skewrv180': -2.25, 'skewrv365': -3.31}

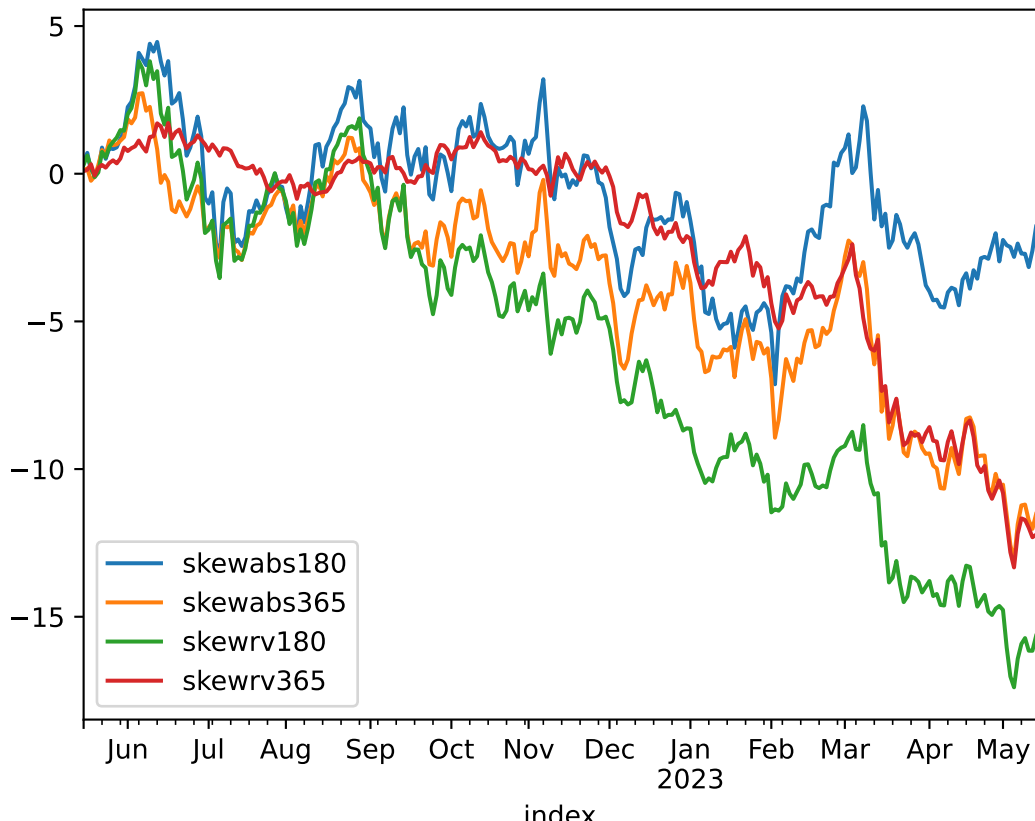


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -1.762, 'skewabs365': -11.346, 'skewrv180': -15.407, 'skewrv365': -12.035}

ann. std {'skewabs180': 11.067, 'skewabs365': 10.0, 'skewrv180': 9.418, 'skewrv365': 6.061}

ann. SR {'skewabs180': -0.16, 'skewabs365': -1.13, 'skewrv180': -1.64, 'skewrv365': -1.99}

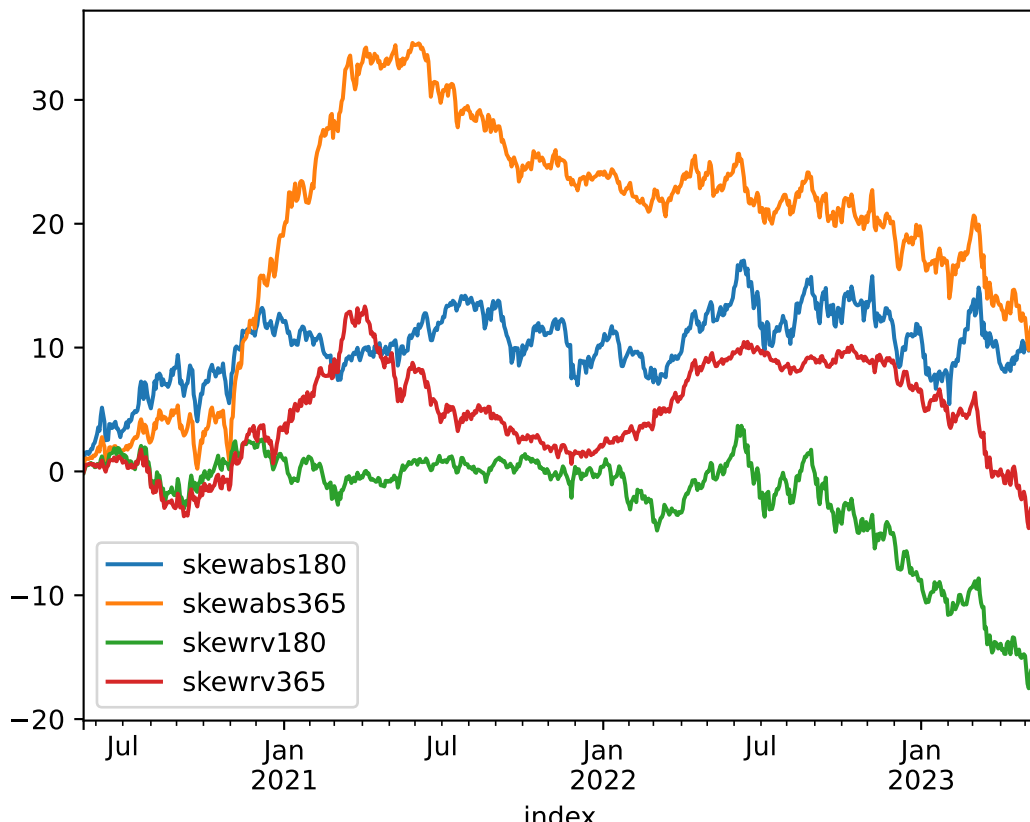


Total Trading Rule P&L for period '3Y'

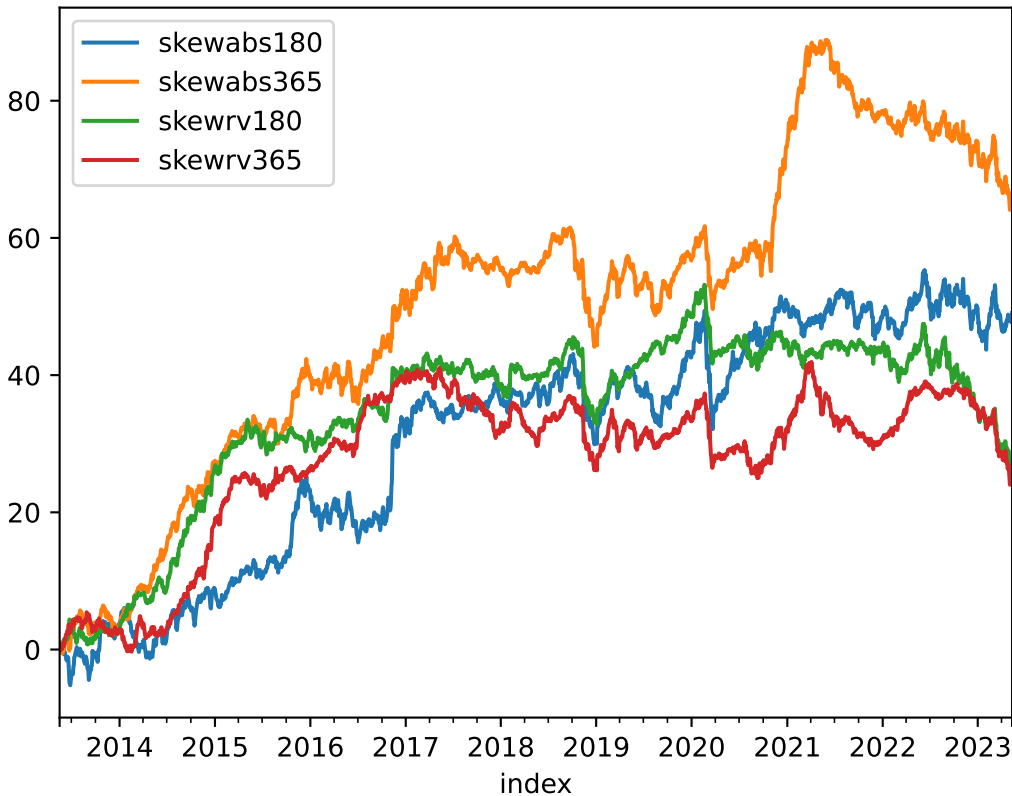
ann. mean {'skewabs180': 3.537, 'skewabs365': 3.743, 'skewrv180': -5.177, 'skewrv365': -1.141}

ann. std {'skewabs180': 9.147, 'skewabs365': 9.001, 'skewrv180': 7.341, 'skewrv365': 6.454}

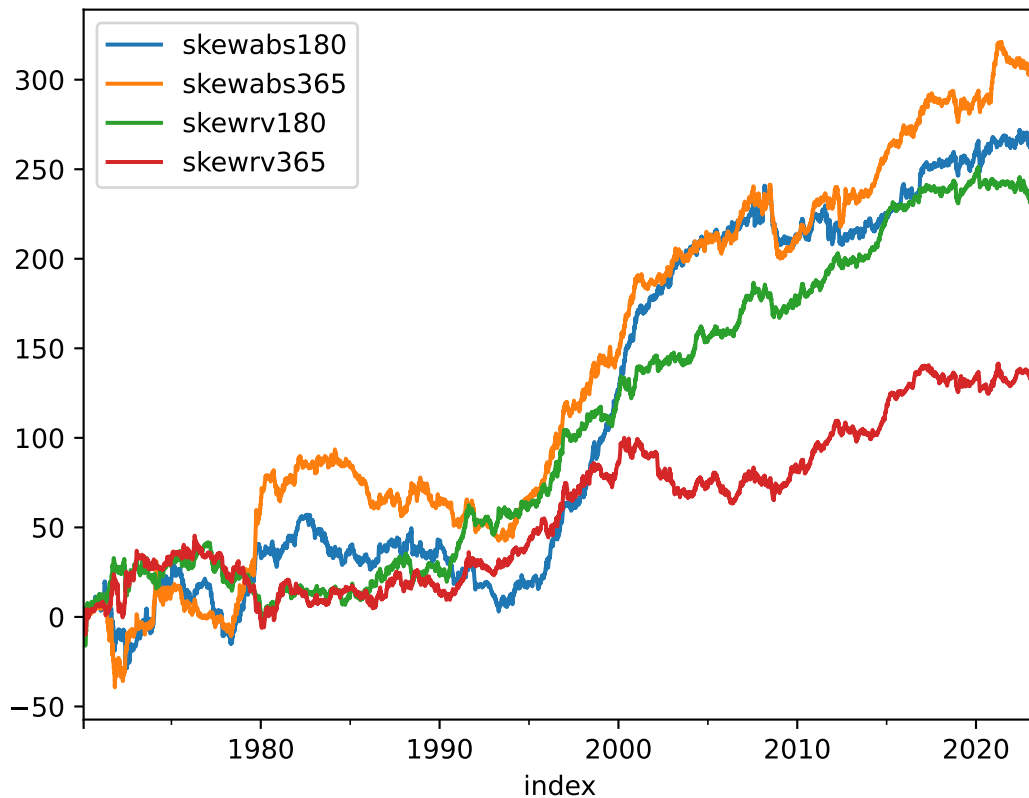
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.42, 'skewrv180': -0.71, 'skewrv365': -0.18}



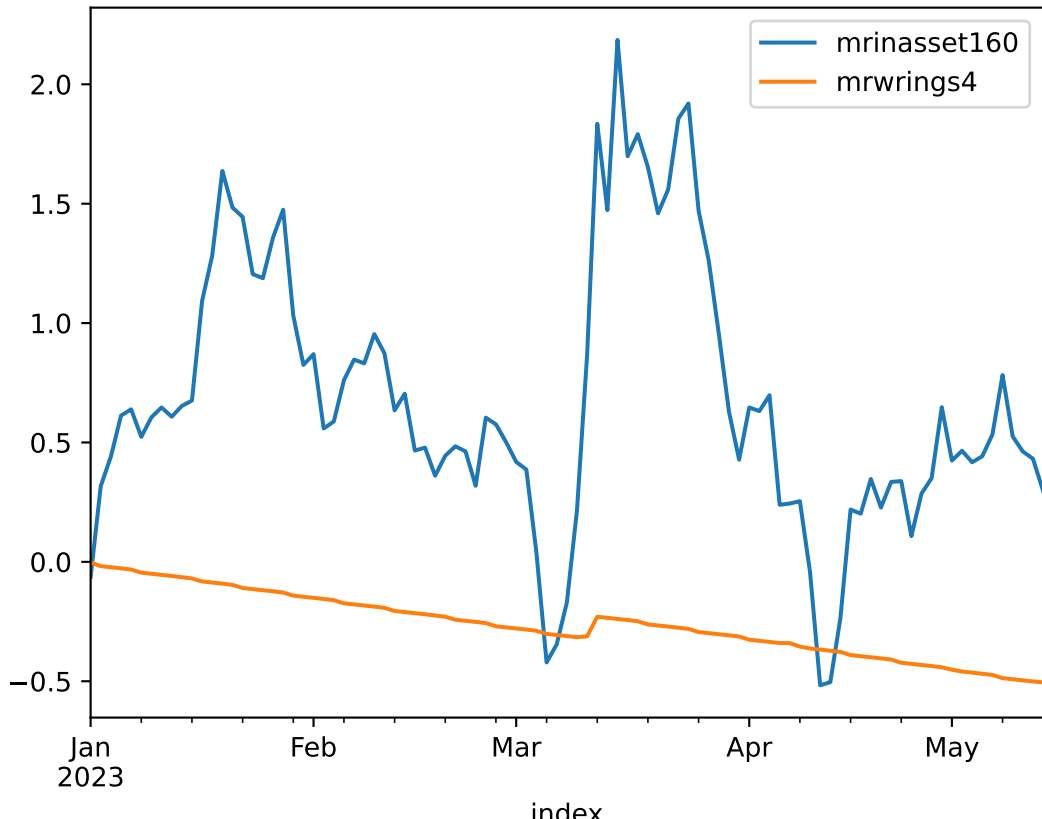
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.816, 'skewabs365': 6.448, 'skewrv180': 2.749, 'skewrv365': 2.467}
ann. std {'skewabs180': 8.025, 'skewabs365': 7.975, 'skewrv180': 6.418, 'skewrv365': 6.079}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.81, 'skewrv180': 0.43, 'skewrv365': 0.41}



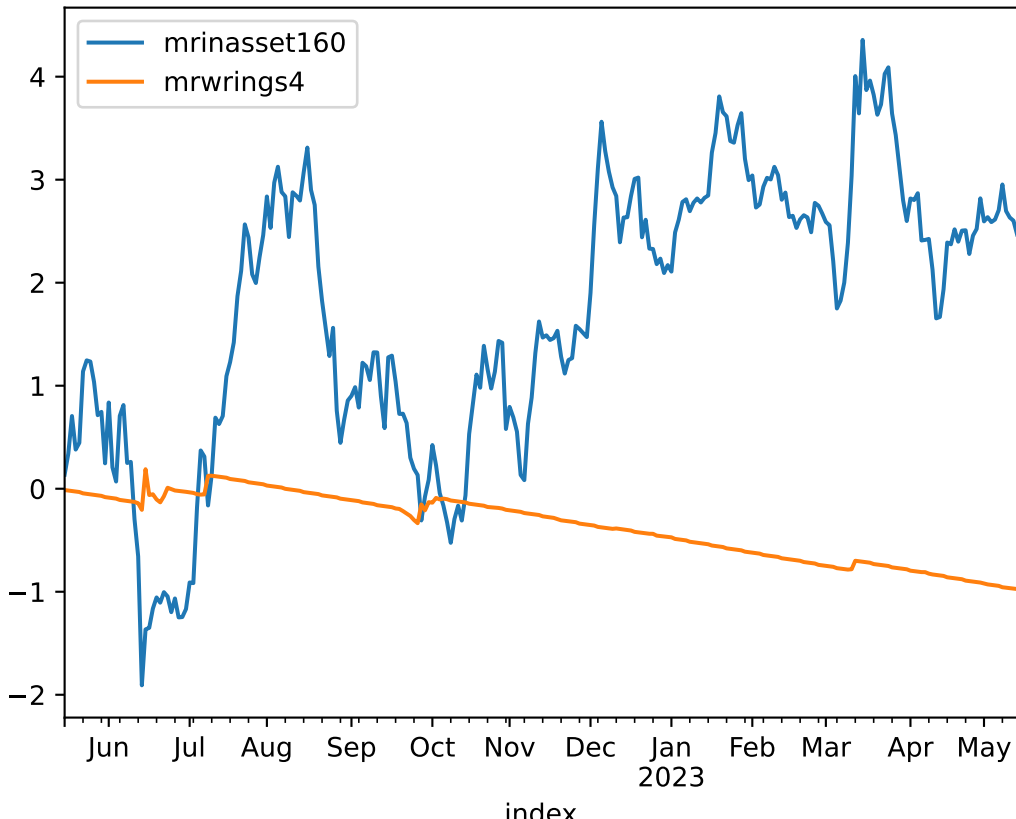
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.892, 'skewabs365': 5.487, 'skewrv180': 4.165, 'skewrv365': 2.297}
ann. std {'skewabs180': 10.099, 'skewabs365': 9.871, 'skewrv180': 8.752, 'skewrv365': 8.126}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.28}



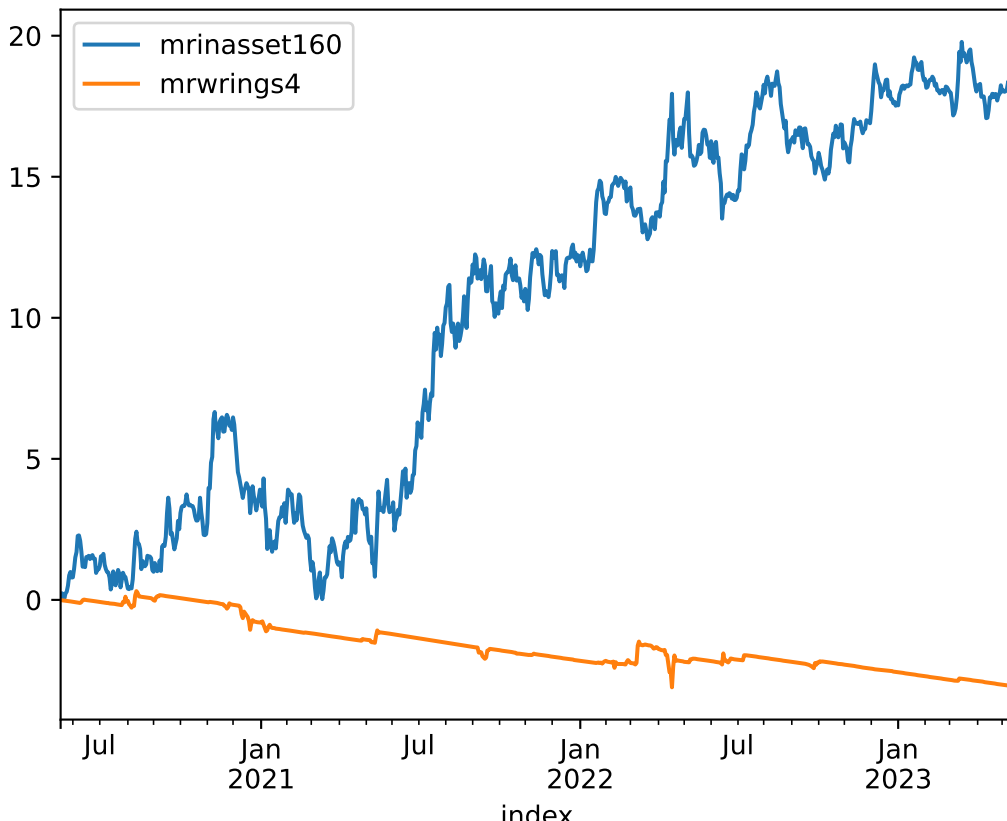
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.801, 'mrwrings4': -1.359}
ann. std {'mrinasset160': 4.055, 'mrwrings4': 0.156}
ann. SR {'mrinasset160': 0.2, 'mrwrings4': -8.7}



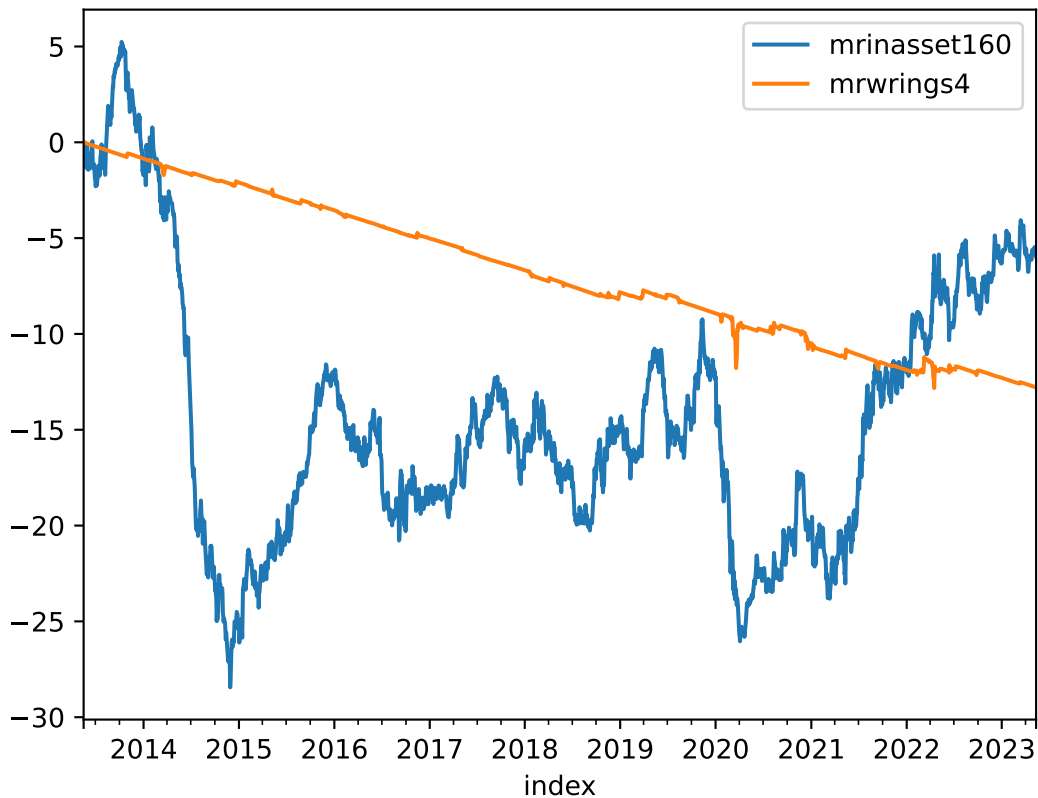
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 2.43, 'mrwrings4': -0.959}
ann. std {'mrinasset160': 4.796, 'mrwrings4': 0.574}
ann. SR {'mrinasset160': 0.51, 'mrwrings4': -1.67}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 5.872, 'mrwrings4': -1.004}
ann. std {'mriasset160': 6.266, 'mrwrings4': 1.018}
ann. SR {'mriasset160': 0.94, 'mrwrings4': -0.99}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.584, 'mrwrings4': -1.256}
ann. std {'mrinasset160': 6.191, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.09, 'mrwrings4': -1.43}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.563, 'mrwrings4': -2.169}
ann. std {'mrinasset160': 9.863, 'mrwrings4': 2.087}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.04}

