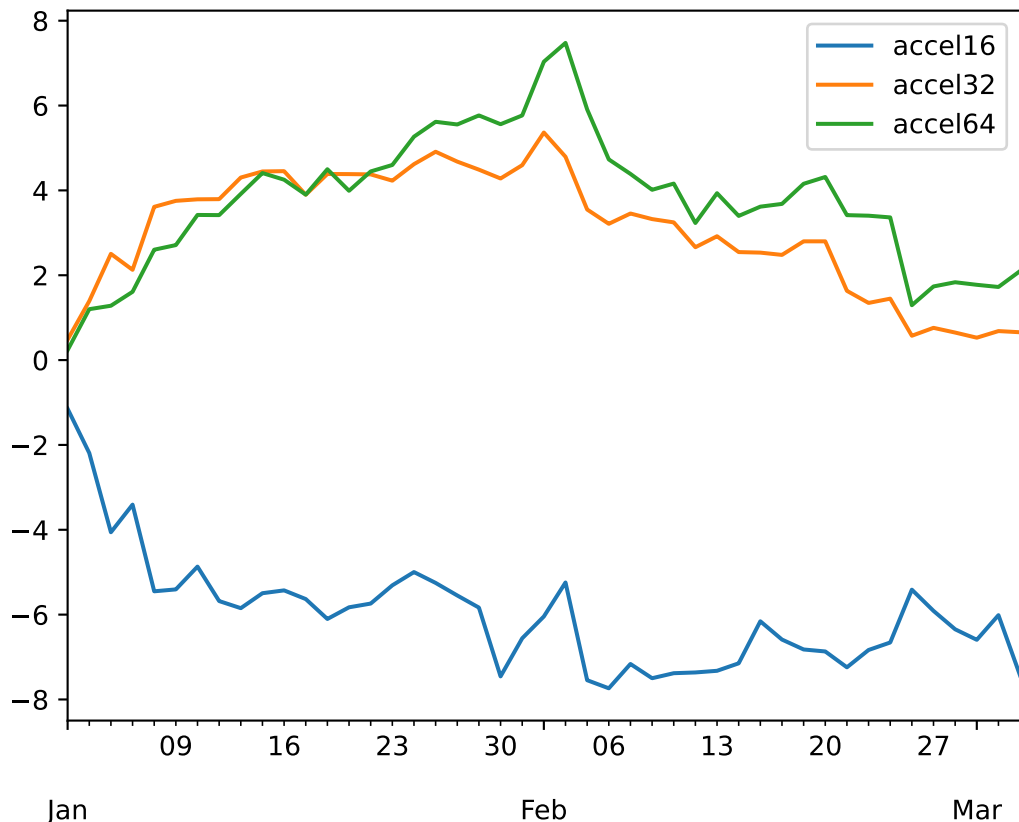
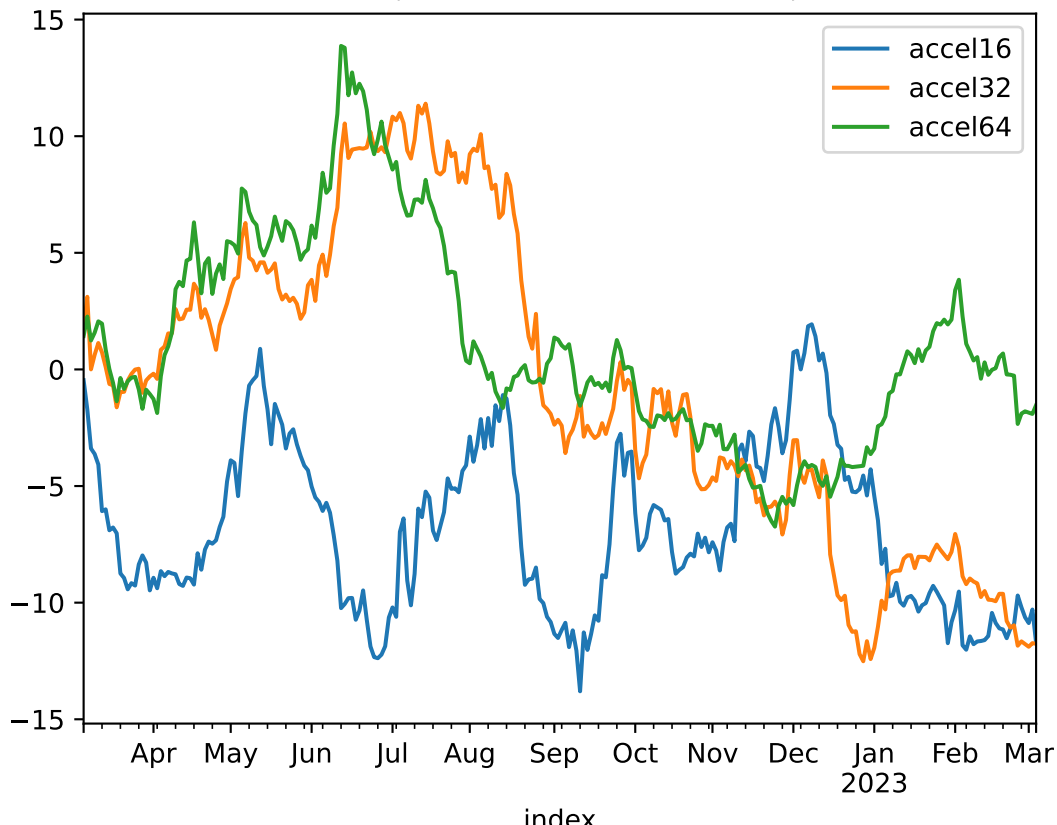


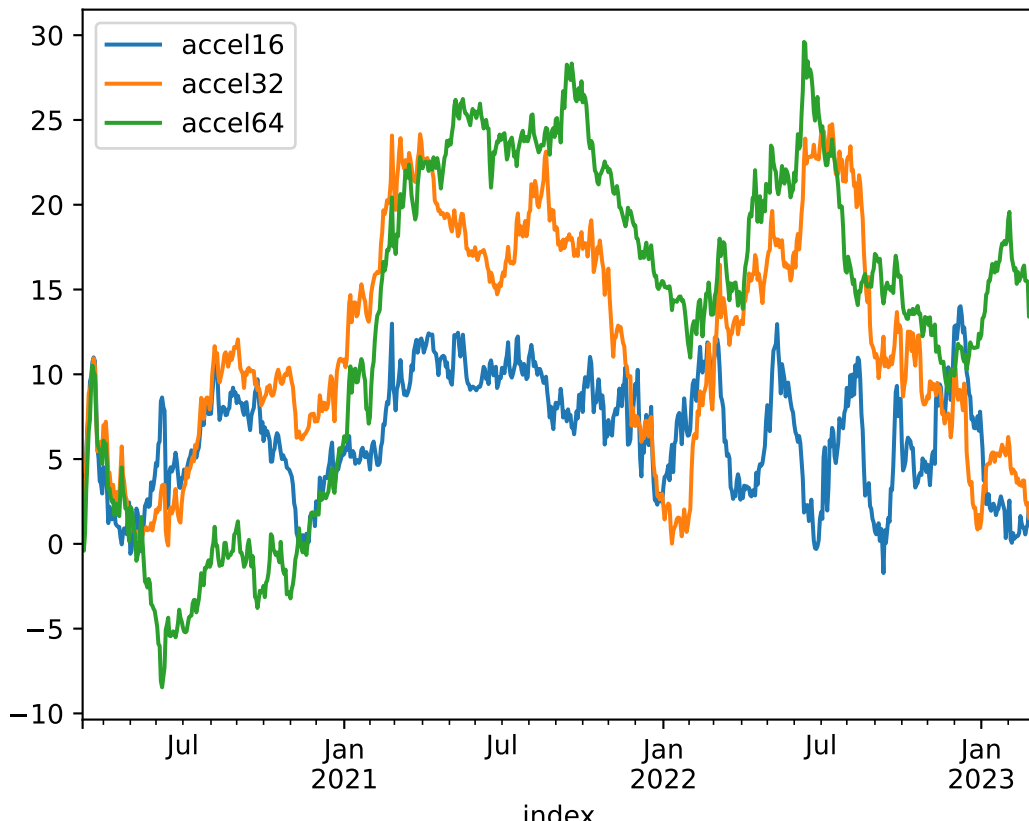
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -42.309, 'accel32': 3.731, 'accel64': 11.944}
ann. std {'accel16': 12.623, 'accel32': 8.213, 'accel64': 10.239}
ann. SR {'accel16': -3.35, 'accel32': 0.45, 'accel64': 1.17}



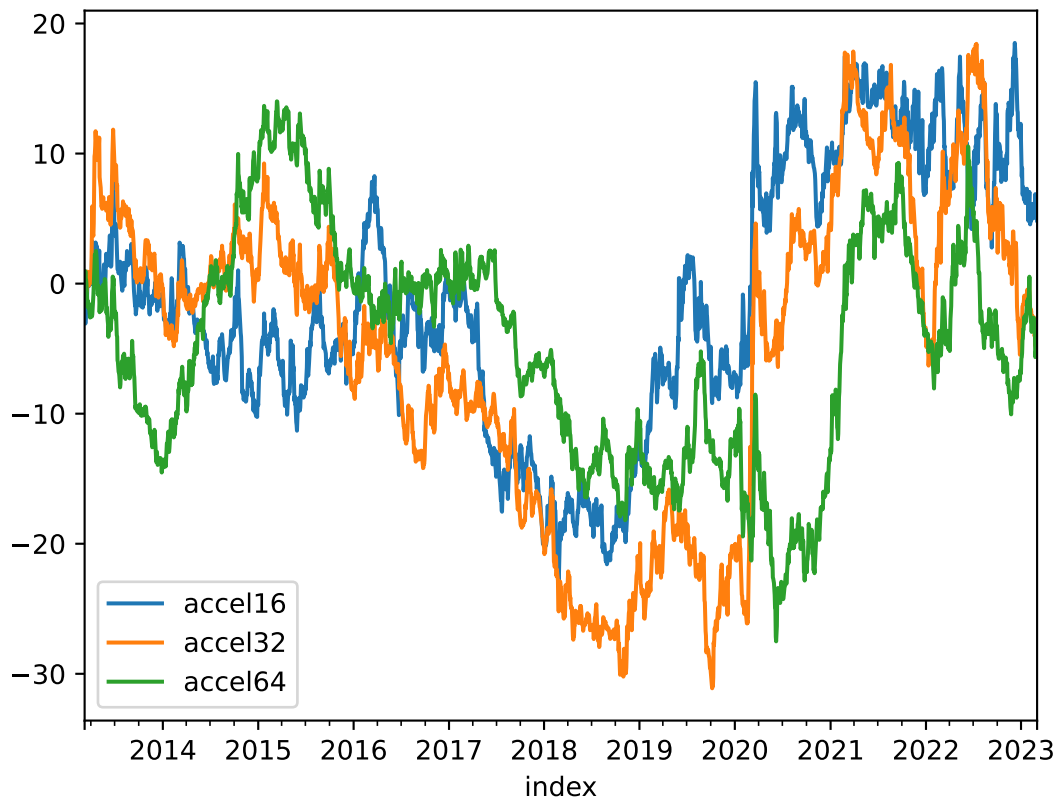
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -11.538, 'accel32': -11.582, 'accel64': -1.509}
ann. std {'accel16': 15.951, 'accel32': 13.543, 'accel64': 11.656}
ann. SR {'accel16': -0.72, 'accel32': -0.86, 'accel64': -0.13}



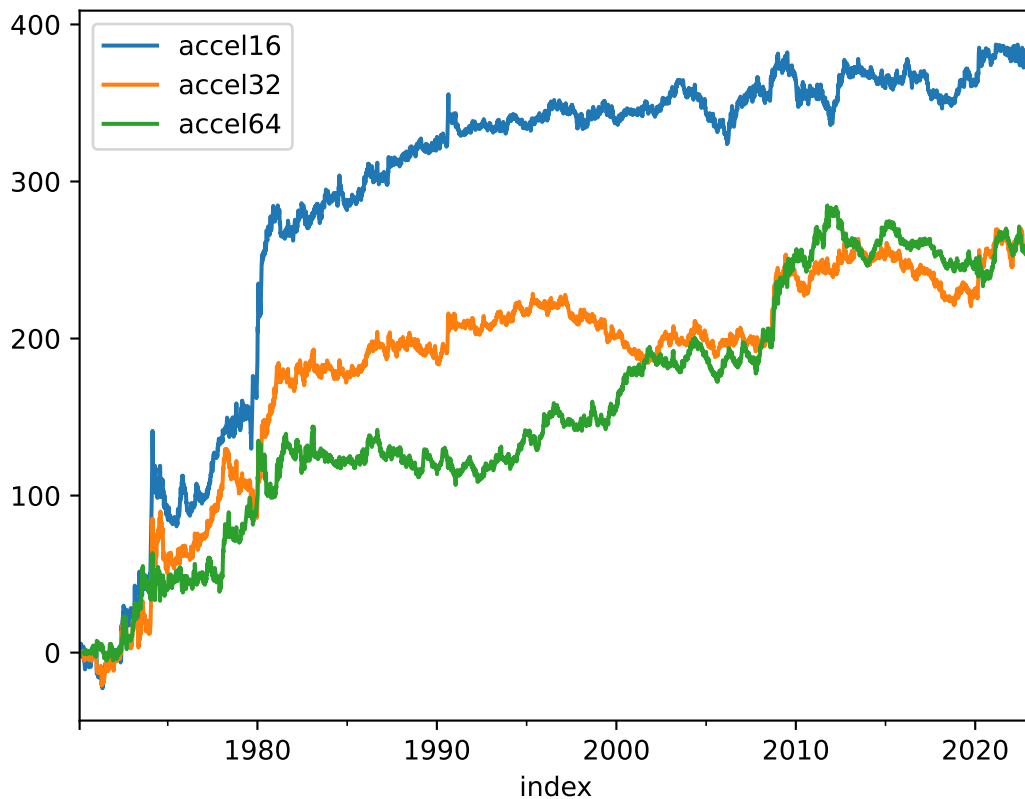
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 0.118, 'accel32': 0.524, 'accel64': 4.661}
ann. std {'accel16': 14.388, 'accel32': 12.905, 'accel64': 11.407}
ann. SR {'accel16': 0.01, 'accel32': 0.04, 'accel64': 0.41}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.477, 'accel32': -0.464, 'accel64': -0.476}
ann. std {'accel16': 11.992, 'accel32': 11.164, 'accel64': 9.579}
ann. SR {'accel16': 0.04, 'accel32': -0.04, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.924, 'accel32': 4.565, 'accel64': 4.731}
ann. std {'accel16': 15.661, 'accel32': 13.737, 'accel64': 13.252}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.36}

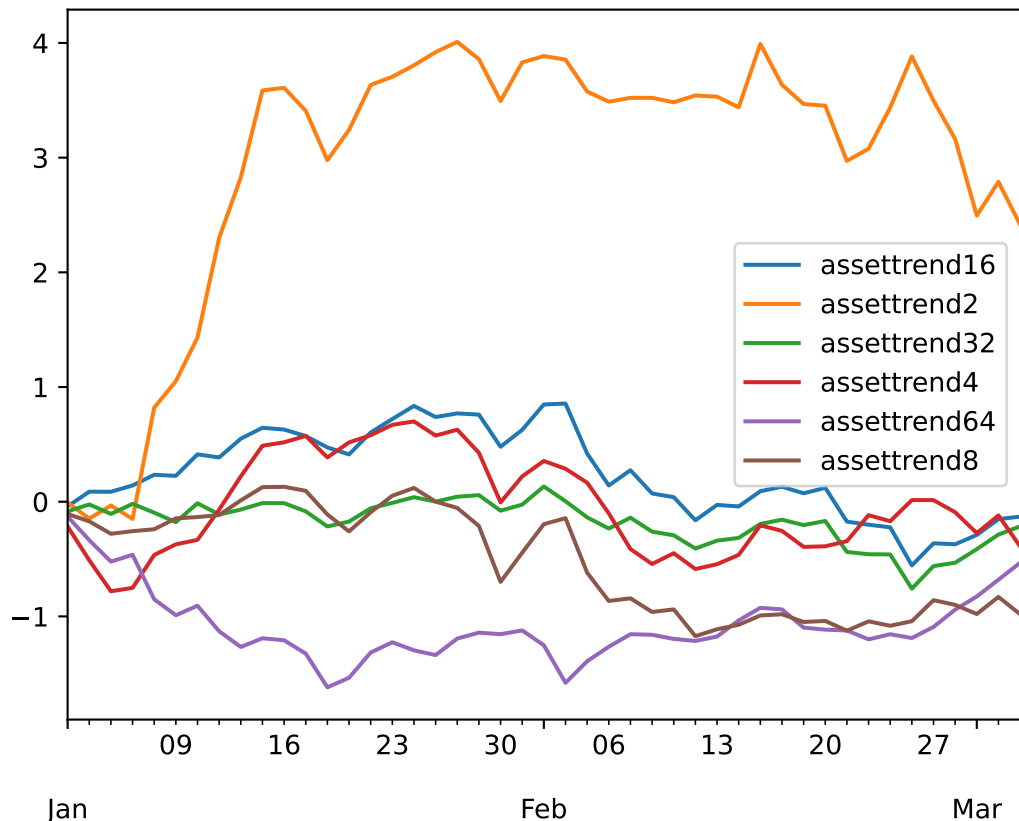


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -0.739, 'assettrend2': 13.745, 'assettrend32': -1.223, 'assettrend4': -2.213, 'assettrend64': -3.029, 'assettrend8': -5.58}

ann. std {'assettrend16': 2.43, 'assettrend2': 5.649, 'assettrend32': 1.735, 'assettrend4': 2.92, 'assettrend64': 2.267, 'assettrend8': 2.473}

ann. SR {'assettrend16': -0.3, 'assettrend2': 2.43, 'assettrend32': -0.7, 'assettrend4': -0.76, 'assettrend64': -1.34, 'assettrend8': -2.26}

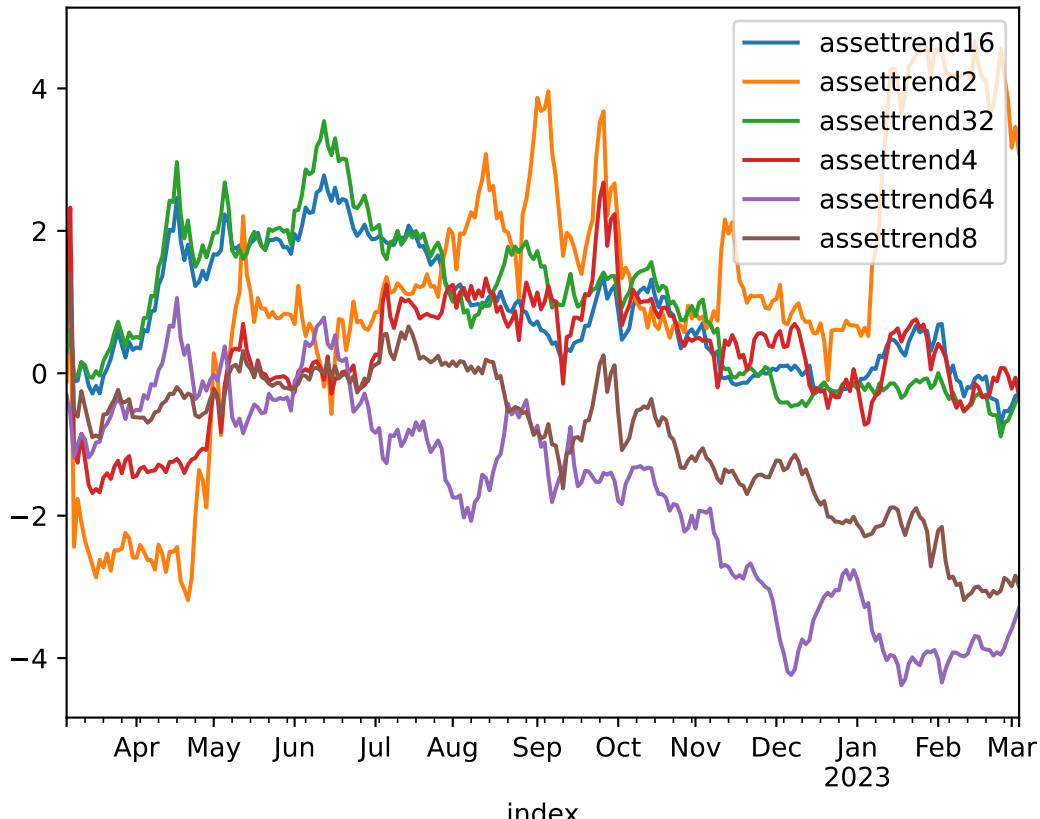


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -0.29, 'assettrend2': 3.041, 'assettrend32': -0.34, 'assettrend4': -0.326, 'assettrend64': -3.246, 'assettrend8': -2.948}

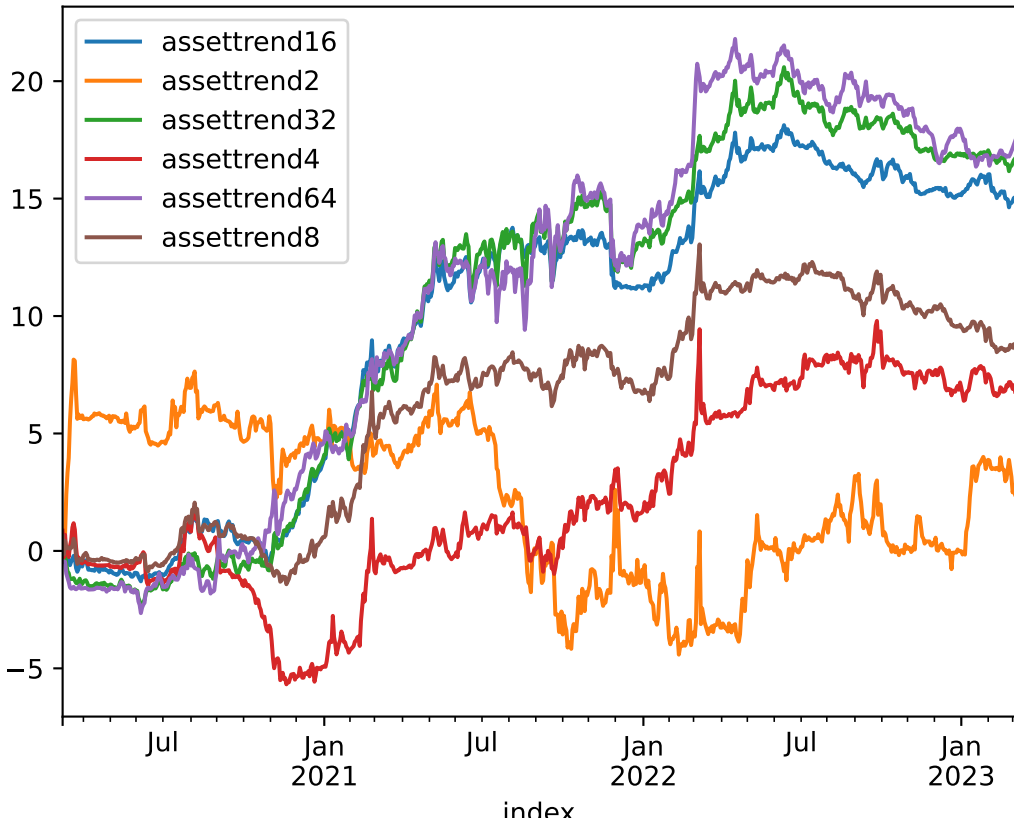
ann. std {'assettrend16': 2.677, 'assettrend2': 7.091, 'assettrend32': 2.887, 'assettrend4': 5.21, 'assettrend64': 3.037, 'assettrend8': 3.266}

ann. SR {'assettrend16': -0.11, 'assettrend2': 0.43, 'assettrend32': -0.12, 'assettrend4': -0.06, 'assettrend64': -1.07, 'assettrend8': -0.9}



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

ann. mean {'assettrend16': 4.941, 'assettrend2': 0.791, 'assettrend32': 5.484, 'assettrend4': 2.226, 'assettrend64': 5.726, 'assettrend8': 2.84}
 ann. std {'assettrend16': 3.468, 'assettrend2': 7.195, 'assettrend32': 4.243, 'assettrend4': 5.013, 'assettrend64': 5.043, 'assettrend8': 3.589}
 ann. SR {'assettrend16': 1.42, 'assettrend2': 0.11, 'assettrend32': 1.29, 'assettrend4': 0.44, 'assettrend64': 1.14, 'assettrend8': 0.79}

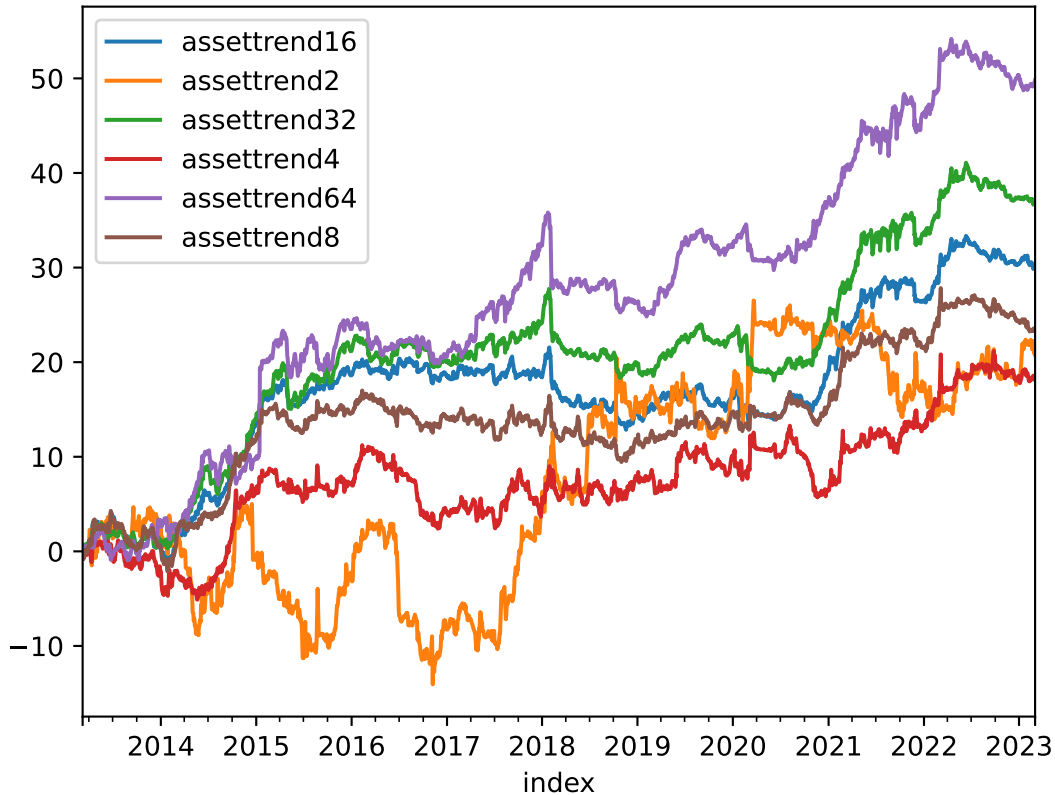


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.973, 'assettrend2': 2.041, 'assettrend32': 3.653, 'assettrend4': 1.784, 'assettrend64': 4.892, 'assettrend8': 2.301}

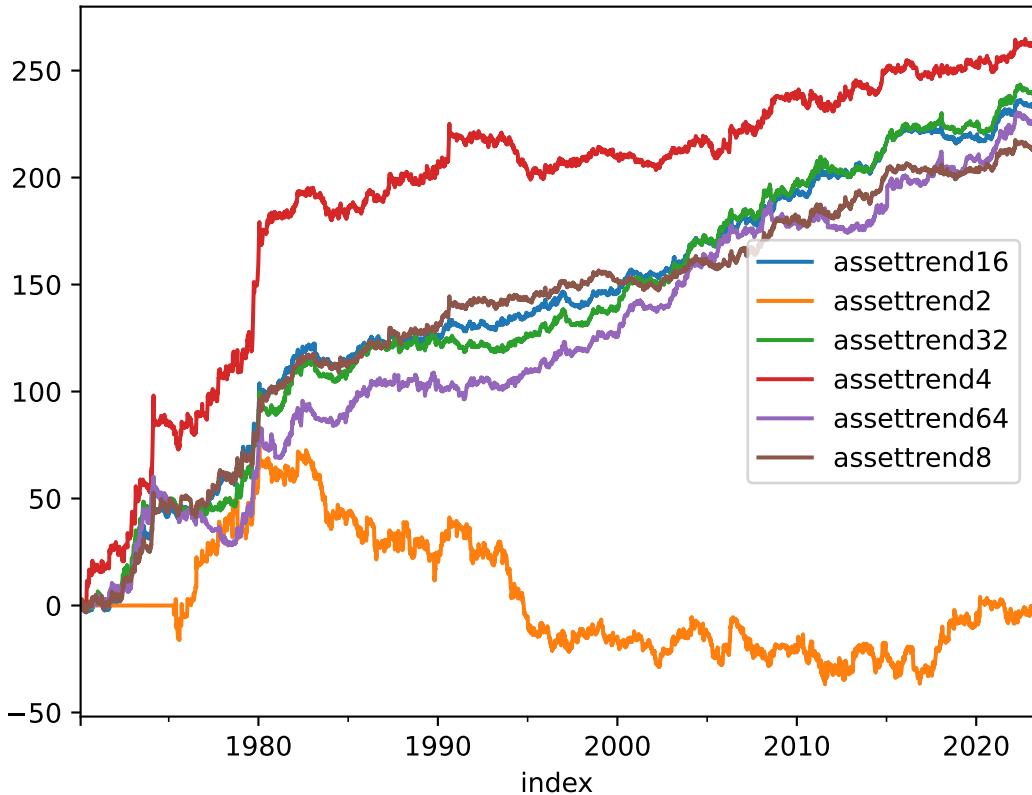
ann. std {'assettrend16': 3.242, 'assettrend2': 8.215, 'assettrend32': 3.7, 'assettrend4': 4.981, 'assettrend64': 5.284, 'assettrend8': 3.566}

ann. SR {'assettrend16': 0.92, 'assettrend2': 0.25, 'assettrend32': 0.99, 'assettrend4': 0.36, 'assettrend64': 0.93, 'assettrend8': 0.65}



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

ann. mean {'assetrend16': 4.312, 'assetrend2': -0.032, 'assetrend32': 4.429, 'assetrend4': 4.839, 'assetrend8': 3.94}
ann. std {'assetrend16': 4.633, 'assetrend2': 10.017, 'assetrend32': 4.847, 'assetrend4': 7.337, 'assetrend64': 5.406, 'assetrend8': 5.015}
ann. SR {'assetrend16': 0.93, 'assetrend2': -0.0, 'assetrend32': 0.91, 'assetrend4': 0.66, 'assetrend64': 0.77, 'assetrend8': 0.79}

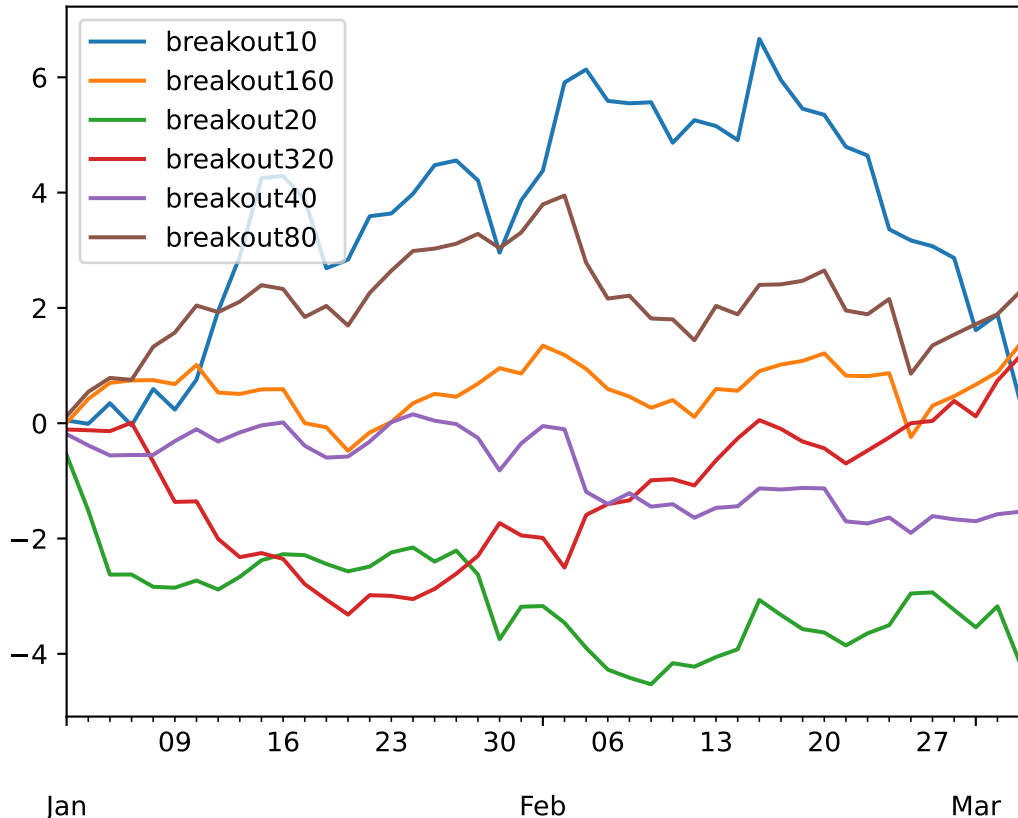


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 2.541, 'breakout160': 7.67, 'breakout20': -23.434, 'breakout320': 6.512, 'breakout40': -8.746, 'breakout80': 12.883}

ann. std {'breakout10': 11.717, 'breakout160': 5.104, 'breakout20': 6.562, 'breakout320': 5.54, 'breakout40': 4.425, 'breakout80': 6.695}

ann. SR {'breakout10': 0.22, 'breakout160': 1.5, 'breakout20': -3.57, 'breakout320': 1.18, 'breakout40': -1.98, 'breakout80': 1.92}

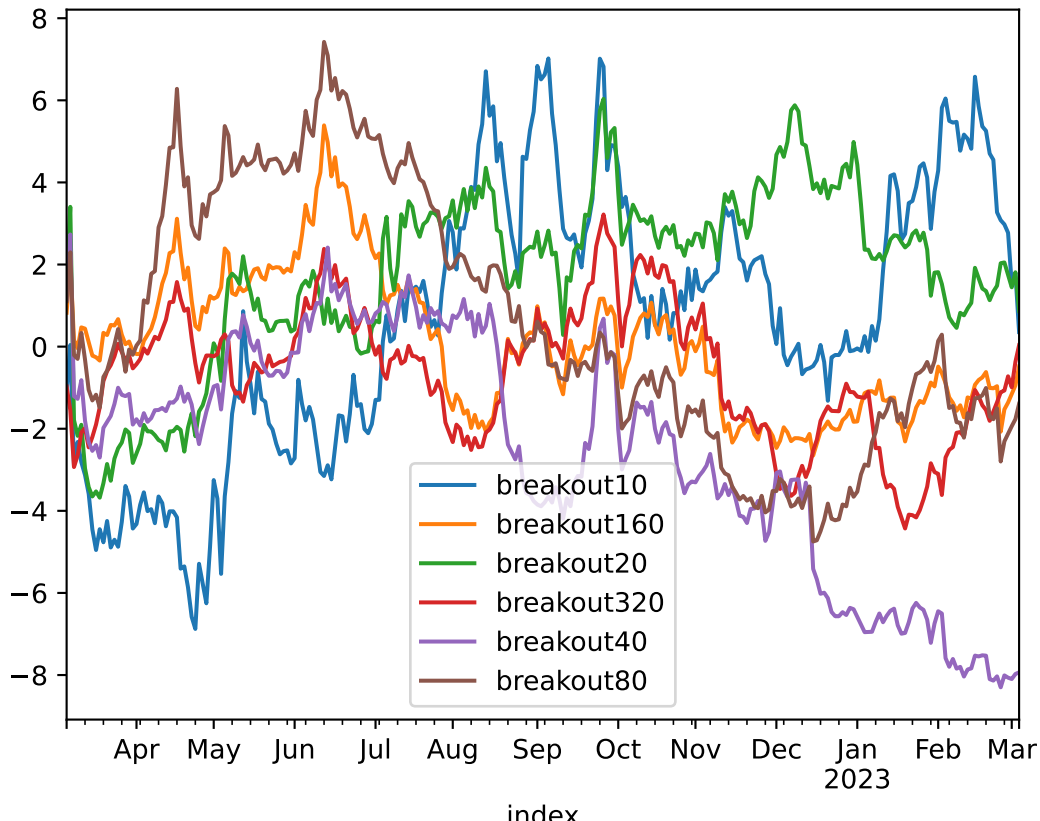


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 0.35, 'breakout160': -0.475, 'breakout20': 0.853, 'breakout320': 0.034, 'breakout40': -7.812, 'breakout80': -1.371}

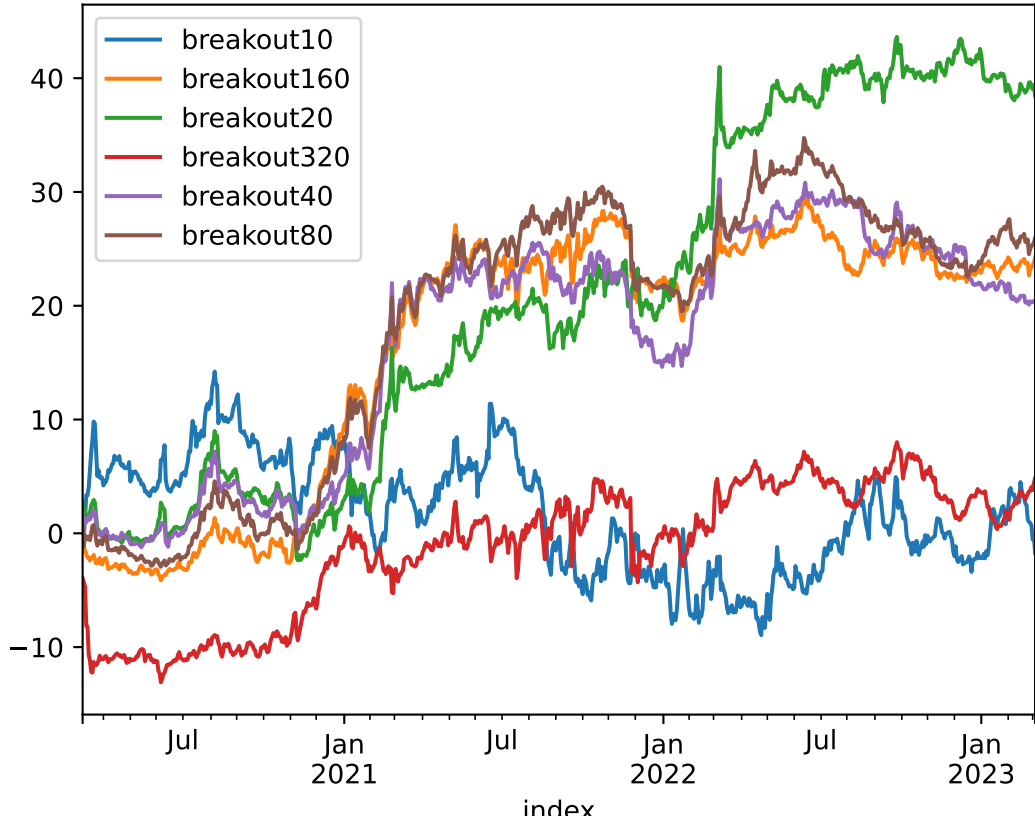
ann. std {'breakout10': 12.158, 'breakout160': 6.538, 'breakout20': 9.735, 'breakout320': 6.187, 'breakout40': 7.836, 'breakout80': 7.465}

ann. SR {'breakout10': 0.03, 'breakout160': -0.07, 'breakout20': 0.09, 'breakout320': 0.01, 'breakout40': -1.0, 'breakout80': -0.18}



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

ann. mean {'breakout10': -0.563, 'breakout160': 7.961, 'breakout20': 12.623, 'breakout320': 1.585, 'breakout40': 6.717, 'breakout80': 8.512}
ann. std {'breakout10': 13.564, 'breakout160': 9.212, 'breakout20': 11.118, 'breakout320': 10.256, 'breakout40': 9.589, 'breakout80': 9.105}
ann. SR {'breakout10': -0.04, 'breakout160': 0.86, 'breakout20': 1.14, 'breakout320': 0.15, 'breakout40': 0.7, 'breakout80': 0.93}

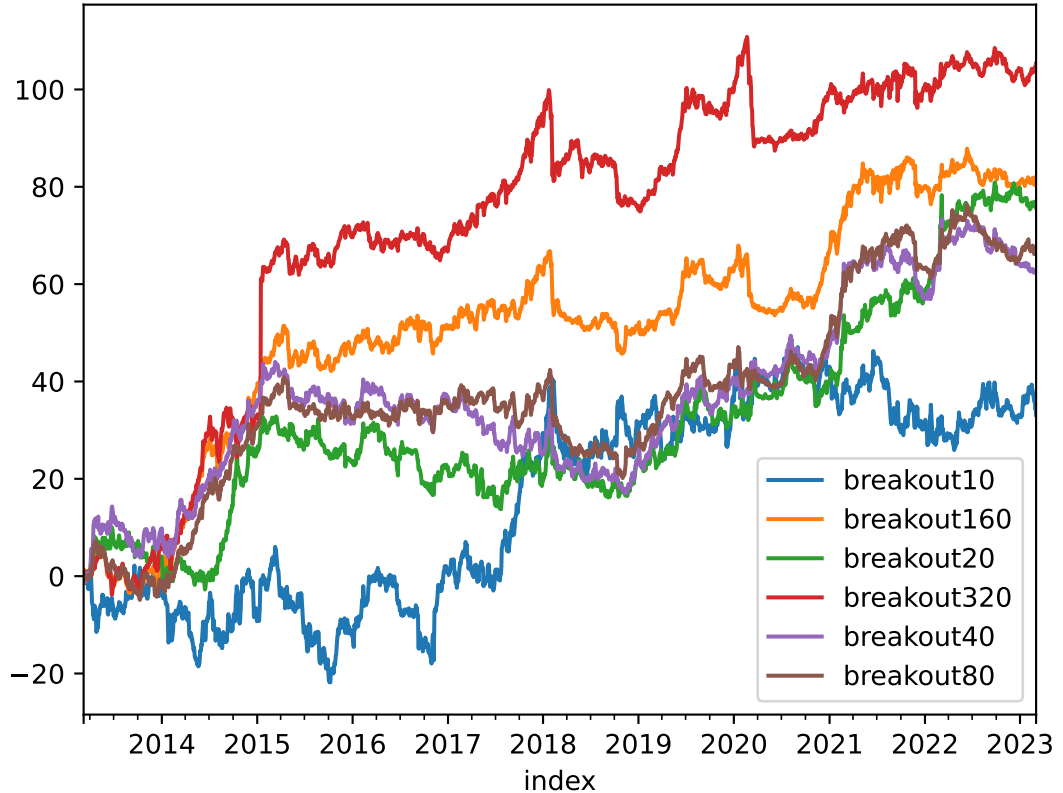


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.255, 'breakout160': 8.049, 'breakout20': 7.438, 'breakout320': 10.344, 'breakout40': 6.156, 'breakout80': 6.633}

ann. std {'breakout10': 15.6, 'breakout160': 9.033, 'breakout20': 11.149, 'breakout320': 13.313, 'breakout40': 9.701, 'breakout80': 8.937}

ann. SR {'breakout10': 0.21, 'breakout160': 0.89, 'breakout20': 0.67, 'breakout320': 0.78, 'breakout40': 0.63, 'breakout80': 0.74}

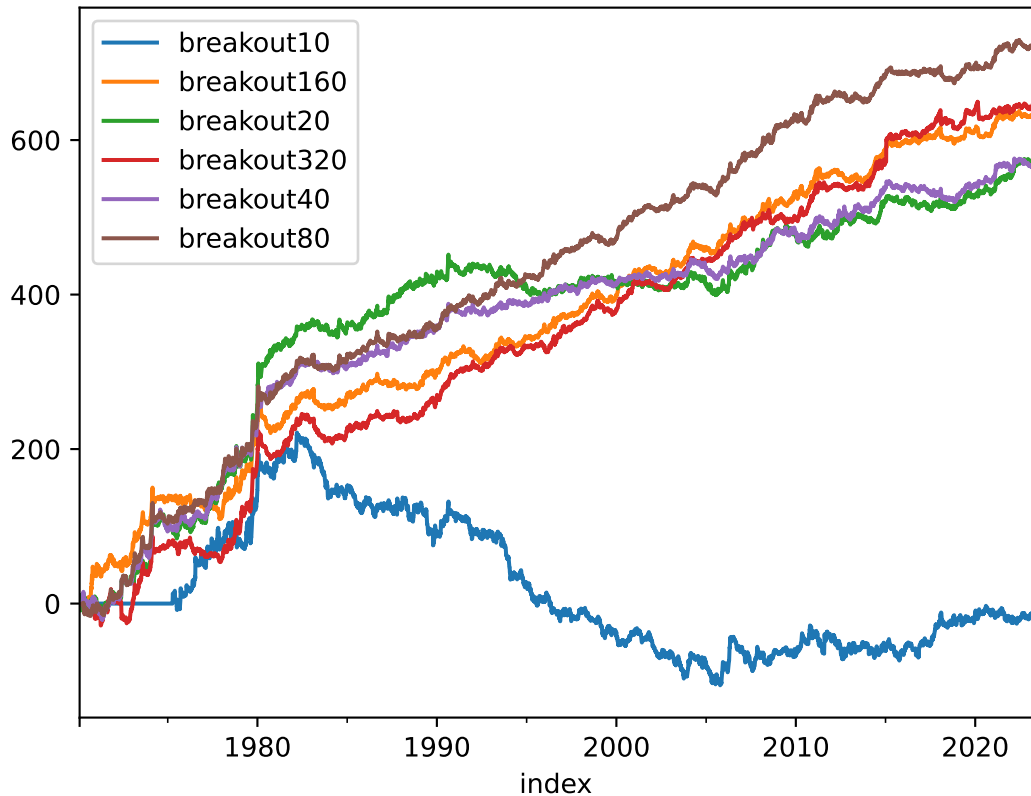


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.348, 'breakout160': 11.679, 'breakout20': 10.544, 'breakout320': 11.909, 'breakout40': 10.454, 'breakout80': 13.325}

ann. std {'breakout10': 20.754, 'breakout160': 12.436, 'breakout20': 15.982, 'breakout320': 12.999, 'breakout40': 13.181, 'breakout80': 12.683}

ann. SR {'breakout10': -0.02, 'breakout160': 0.94, 'breakout20': 0.66, 'breakout320': 0.92, 'breakout40': 0.79, 'breakout80': 1.05}

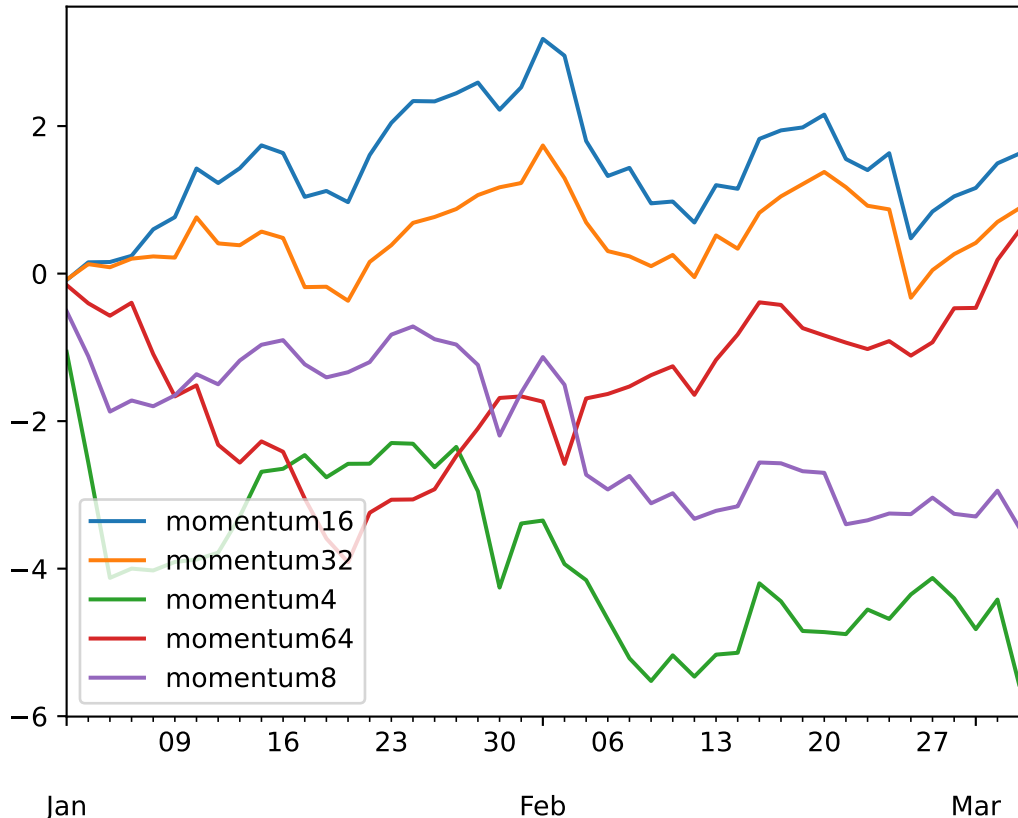


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 9.247, 'momentum32': 5.025, 'momentum4': -31.675, 'momentum64': 3.304, 'momentum8': -19.564}

ann. std {'momentum16': 6.534, 'momentum32': 5.474, 'momentum4': 8.862, 'momentum64': 6.309, 'momentum8': 6.14}

ann. SR {'momentum16': 1.42, 'momentum32': 0.92, 'momentum4': -3.57, 'momentum64': 0.52, 'momentum8': -3.19}

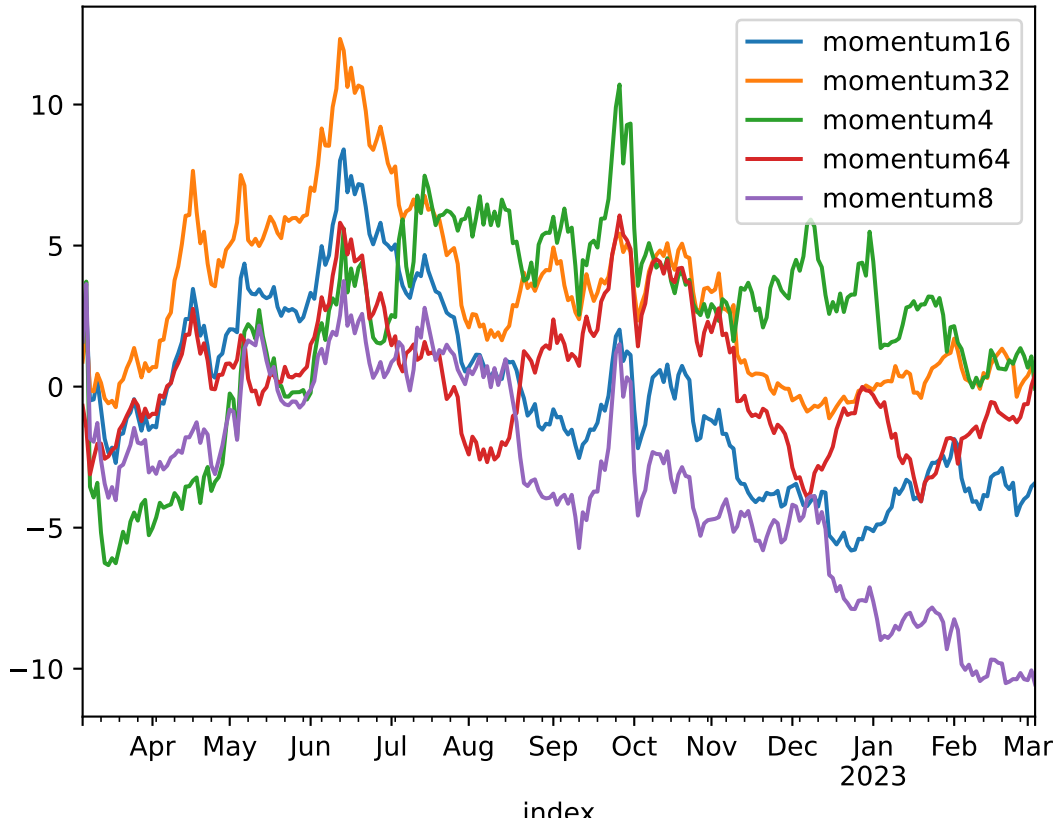


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -3.361, 'momentum32': 0.837, 'momentum4': -0.075, 'momentum64': 0.42, 'momentum8': -10.391}

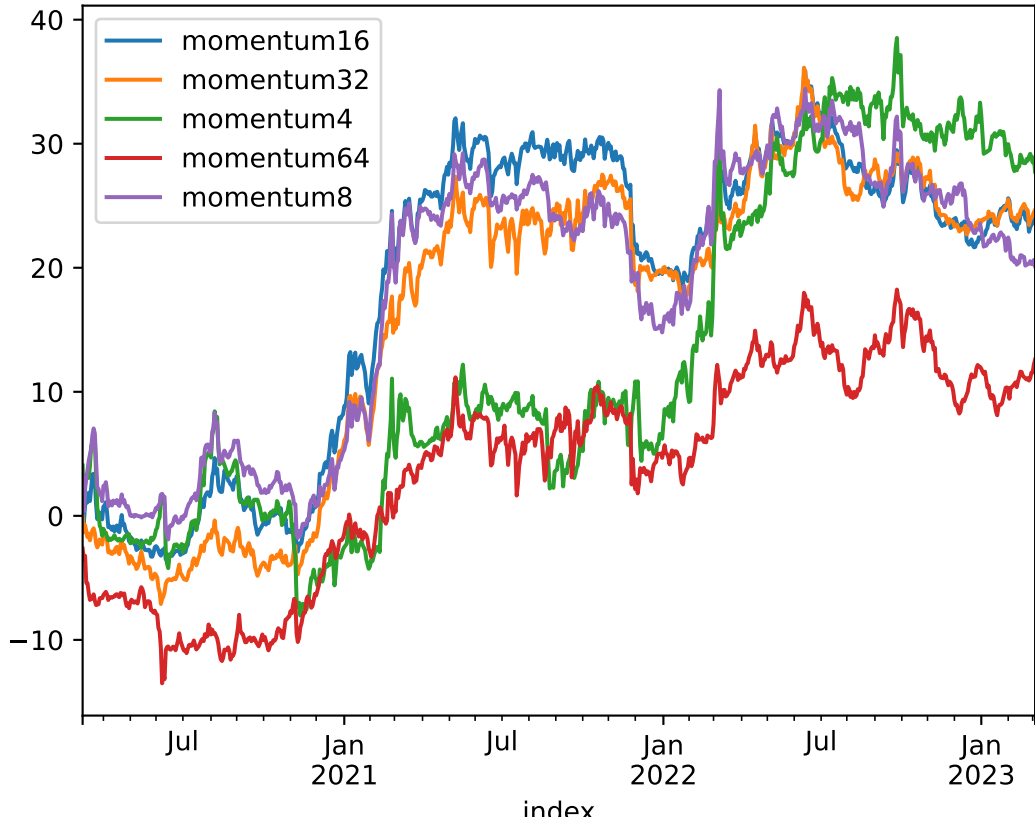
ann. std {'momentum16': 9.354, 'momentum32': 9.169, 'momentum4': 14.864, 'momentum64': 8.681, 'momentum8': 11.4}

ann. SR {'momentum16': -0.36, 'momentum32': 0.09, 'momentum4': -0.01, 'momentum64': 0.05, 'momentum8': -0.91}



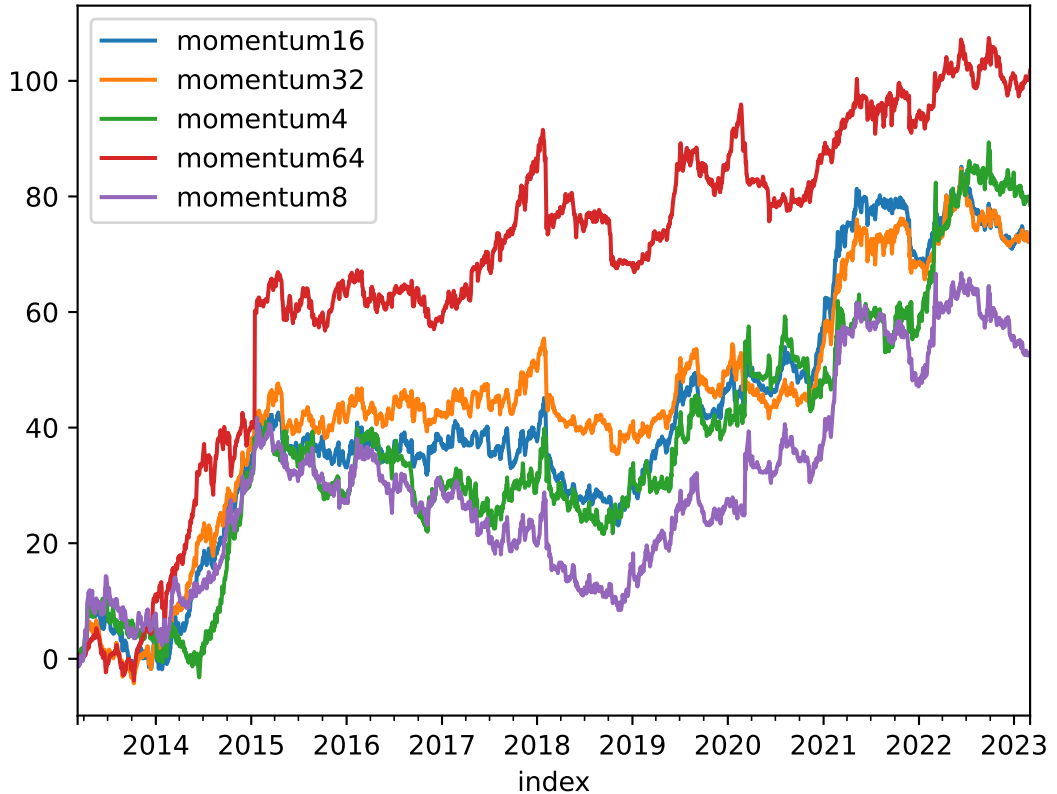
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.892, 'momentum32': 8.093, 'momentum4': 9.106, 'momentum64': 4.135, 'momentum8': 6.607}
ann. std {'momentum16': 10.461, 'momentum32': 10.445, 'momentum4': 14.97, 'momentum64': 10.646, 'momentum8': 11.995}
ann. SR {'momentum16': 0.75, 'momentum32': 0.77, 'momentum4': 0.61, 'momentum64': 0.39, 'momentum8': 0.55}



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

ann. mean {'momentum16': 7.2, 'momentum32': 7.202, 'momentum4': 7.717, 'momentum64': 9.995, 'momentum8': 5.151}
ann. std {'momentum16': 9.861, 'momentum32': 9.4, 'momentum4': 13.683, 'momentum64': 11.961, 'momentum8': 11.256}
ann. SR {'momentum16': 0.73, 'momentum32': 0.77, 'momentum4': 0.56, 'momentum64': 0.84, 'momentum8': 0.46}

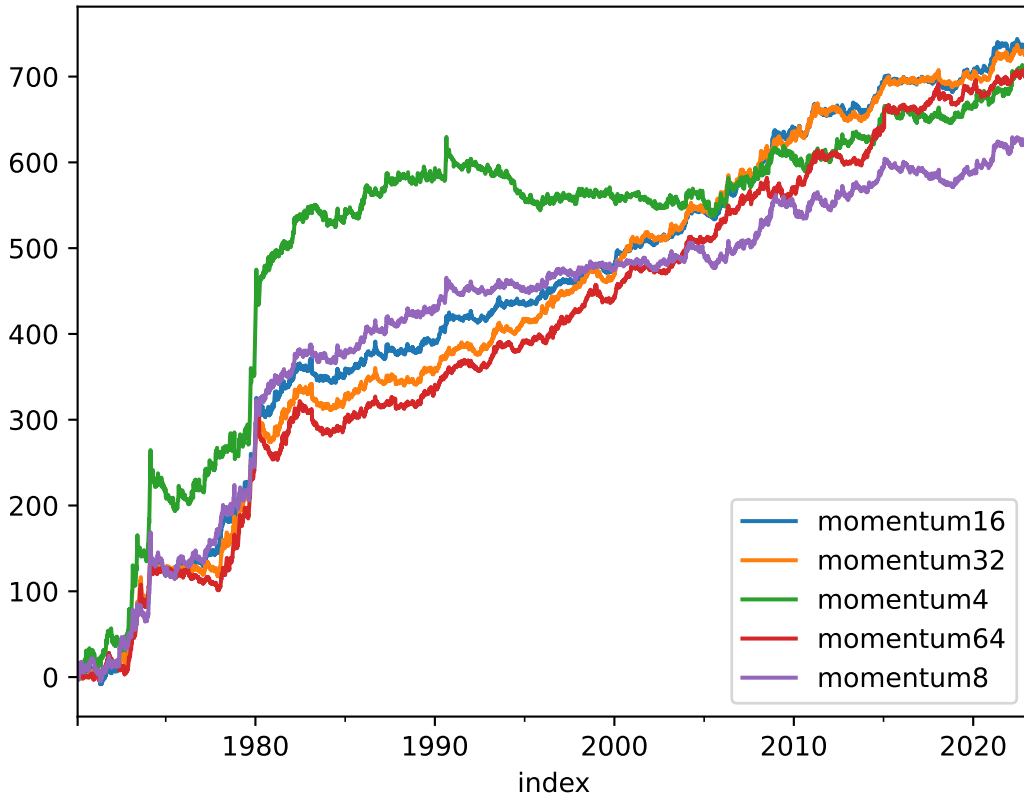


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.533, 'momentum32': 13.413, 'momentum4': 12.99, 'momentum64': 12.974, 'momentum8': 11.371}

ann. std {'momentum16': 14.132, 'momentum32': 13.741, 'momentum4': 19.999, 'momentum64': 13.355, 'momentum8': 15.79}

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

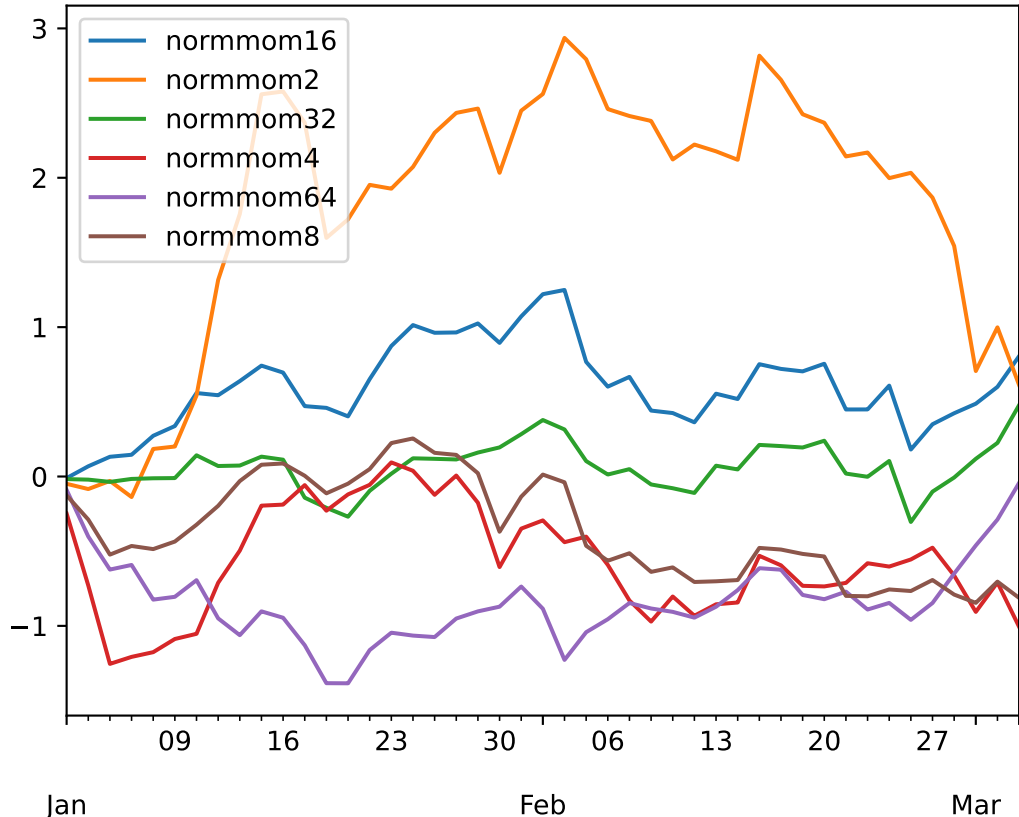


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 4.583, 'normmom2': 3.485, 'normmom32': 2.717, 'normmom4': -5.723, 'normmom64': -0.245, 'normmom8': -4.623}

ann. std {'normmom16': 2.598, 'normmom2': 5.347, 'normmom32': 1.984, 'normmom4': 3.223, 'normmom64': 2.412, 'normmom8': 2.249}

ann. SR {'normmom16': 1.76, 'normmom2': 0.65, 'normmom32': 1.37, 'normmom4': -1.78, 'normmom64': -0.1, 'normmom8': -2.06}

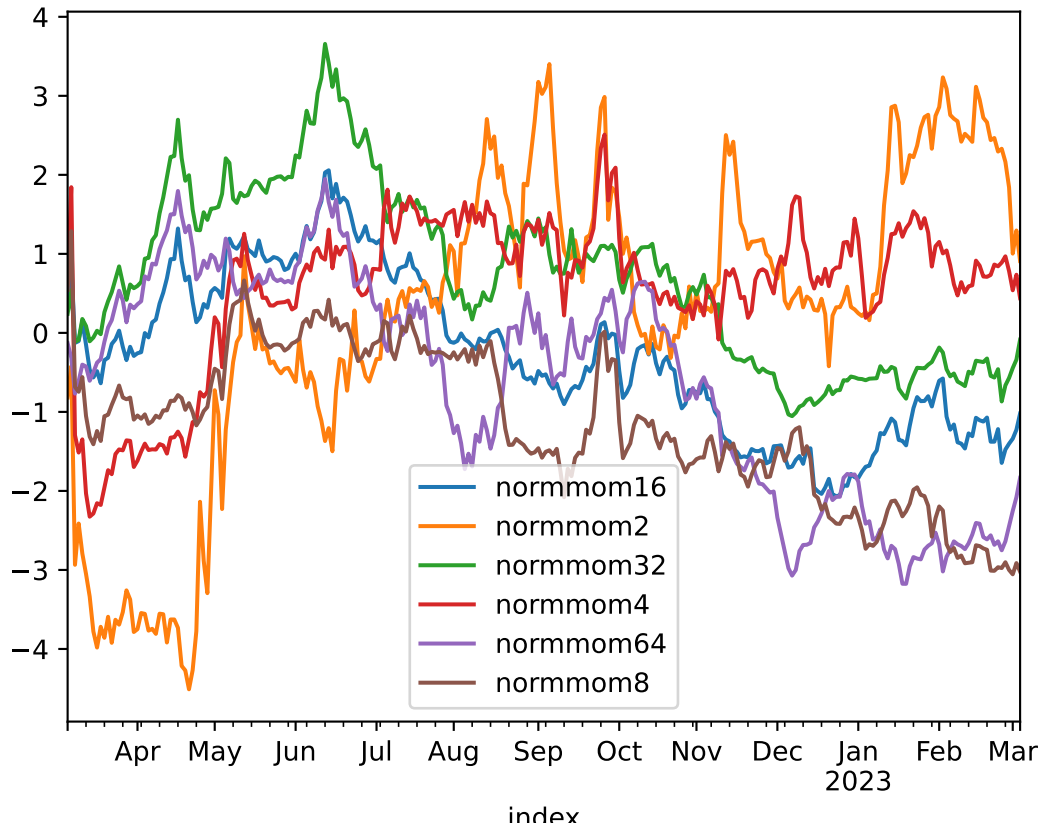


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -1.005, 'normmom2': 0.896, 'normmom32': -0.085, 'normmom4': 0.433, 'normmom64': -1.806, 'normmom8': -2.976}

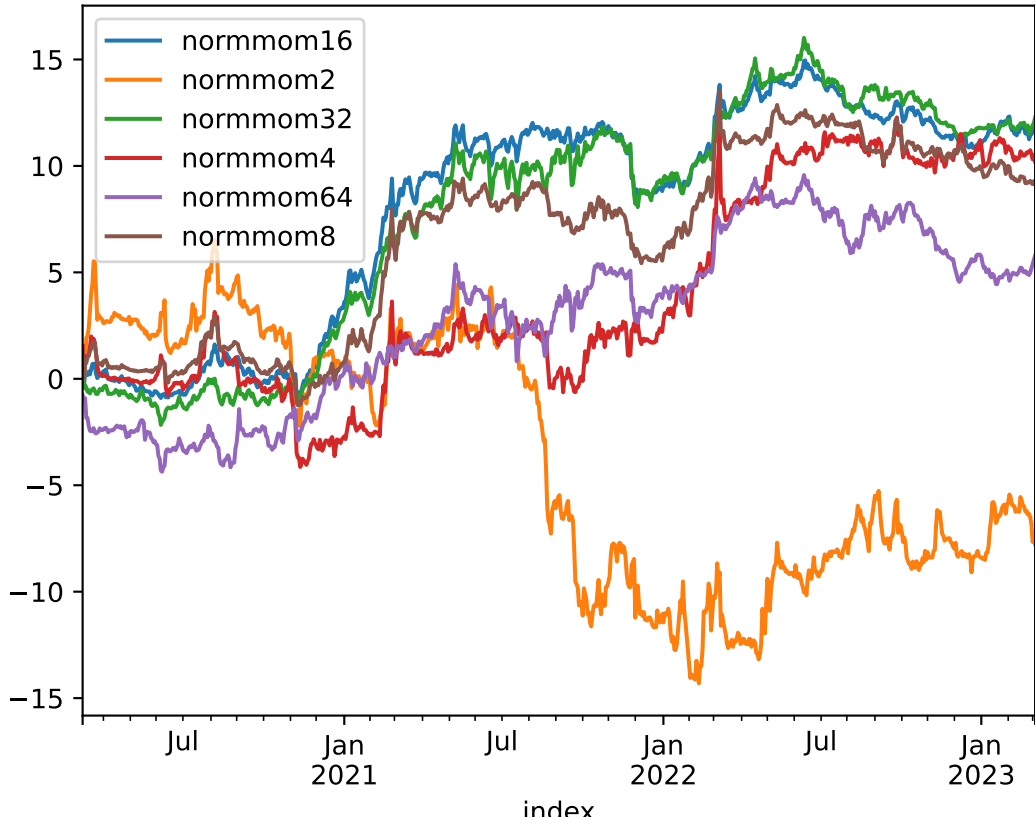
ann. std {'normmom16': 2.756, 'normmom2': 6.789, 'normmom32': 2.789, 'normmom4': 5.135, 'normmom64': 3.13, 'normmom8': 3.496}

ann. SR {'normmom16': -0.36, 'normmom2': 0.13, 'normmom32': -0.03, 'normmom4': 0.08, 'normmom64': -0.58, 'normmom8': -0.85}



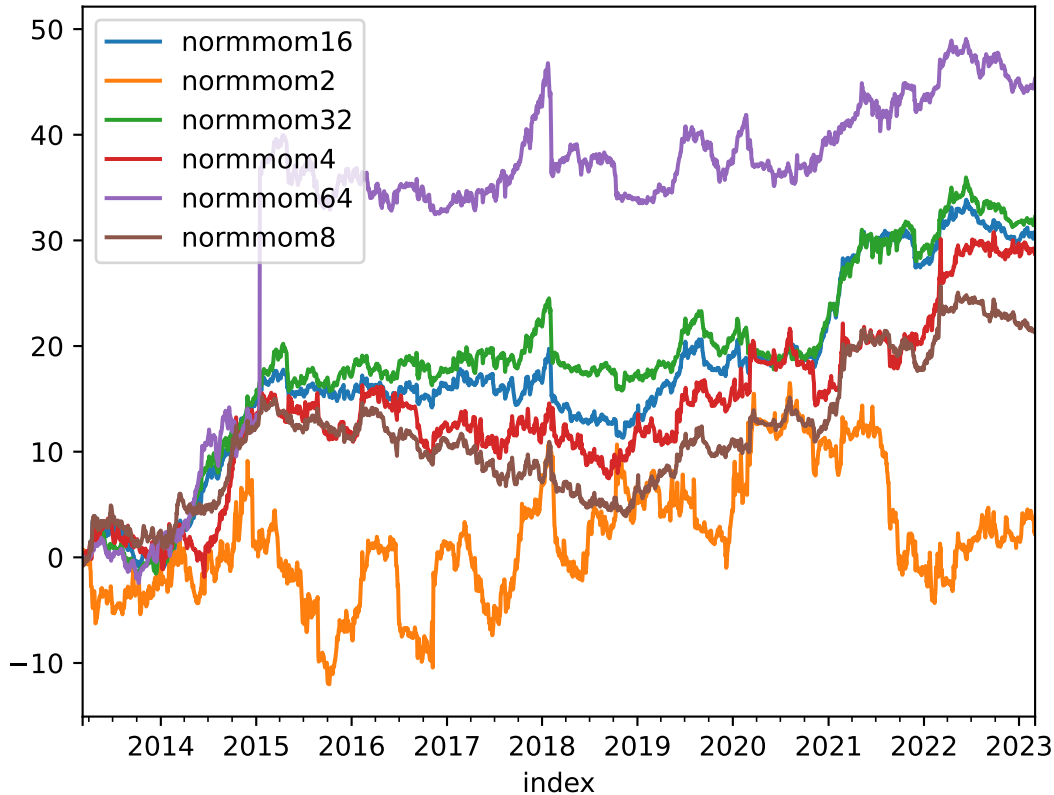
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.899, 'normmom2': -2.546, 'normmom32': 4.027, 'normmom4': 3.351, 'normmom64': 1.9, 'normmom8': 3.012}
ann. std {'normmom16': 3.541, 'normmom2': 7.671, 'normmom32': 3.896, 'normmom4': 5.441, 'normmom64': 4.168, 'normmom8': 4.026}
ann. SR {'normmom16': 1.1, 'normmom2': -0.33, 'normmom32': 1.03, 'normmom4': 0.62, 'normmom64': 0.46, 'normmom8': 0.75}



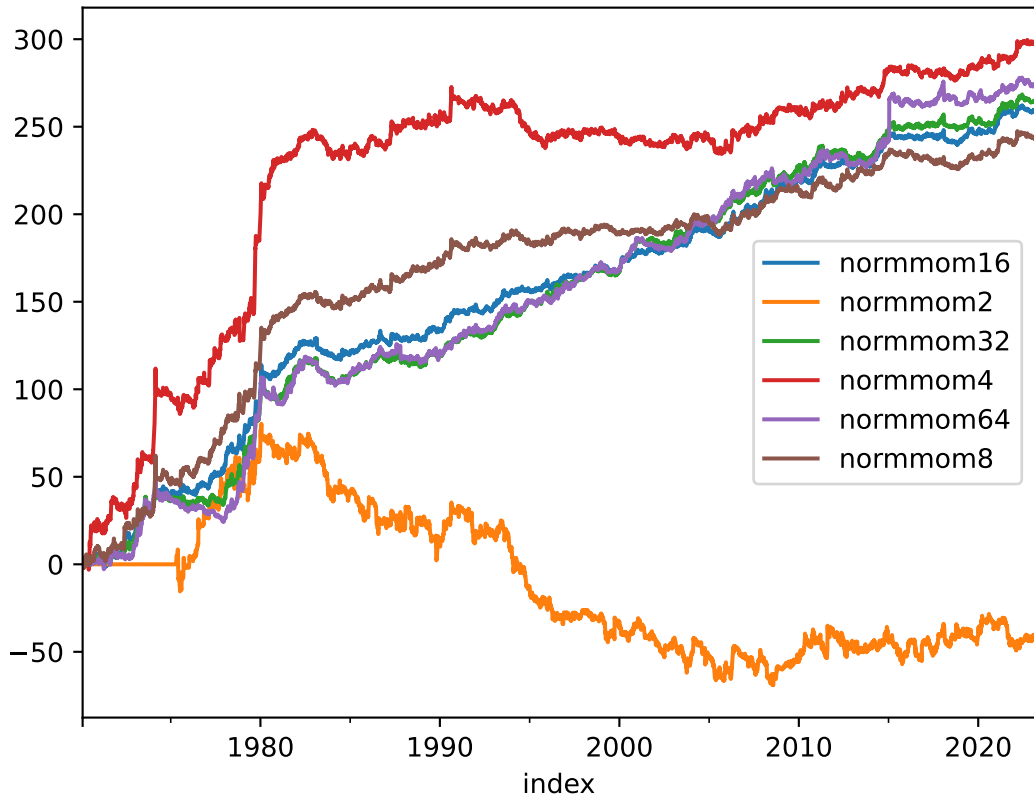
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.022, 'normmom2': 0.218, 'normmom32': 3.164, 'normmom4': 2.82, 'normmom64': 4.447, 'normmom8': 2.1}
ann. std {'normmom16': 3.551, 'normmom2': 8.974, 'normmom32': 3.698, 'normmom4': 5.46, 'normmom64': 8.482, 'normmom8': 4.021}
ann. SR {'normmom16': 0.85, 'normmom2': 0.02, 'normmom32': 0.86, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.52}

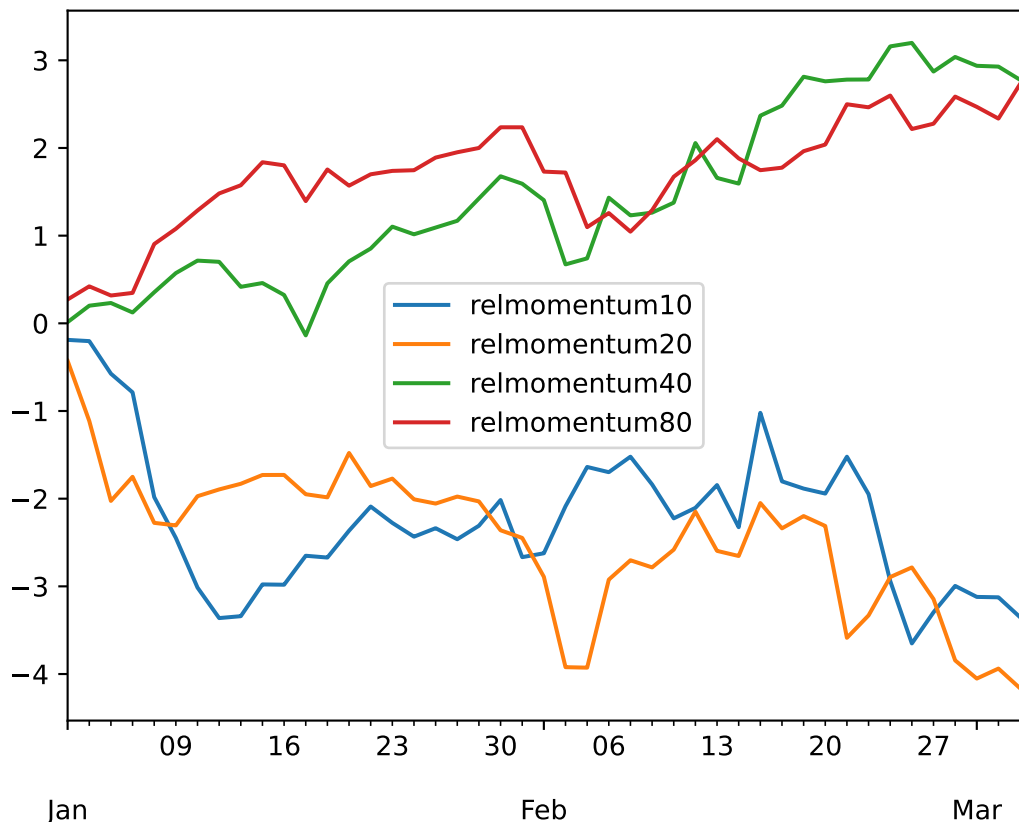


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.791, 'normmom2': -0.788, 'normmom32': 4.894, 'normmom4': 5.5, 'normmom64': 5.071, 'normmom8': 4.495}
ann. std {'normmom16': 4.889, 'normmom2': 11.169, 'normmom32': 4.947, 'normmom4': 8.289, 'normmom64': 6.234, 'normmom8': 5.902}
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': -19.07, 'relmomentum20': -23.682, 'relmomentum40': 15.801, 'relmomentum80': 15.529}
ann. std {'relmomentum10': 7.085, 'relmomentum20': 6.856, 'relmomentum40': 4.664, 'relmomentum80': 3.934}
ann. SR {'relmomentum10': -2.69, 'relmomentum20': -3.45, 'relmomentum40': 3.39, 'relmomentum80': 3.95}

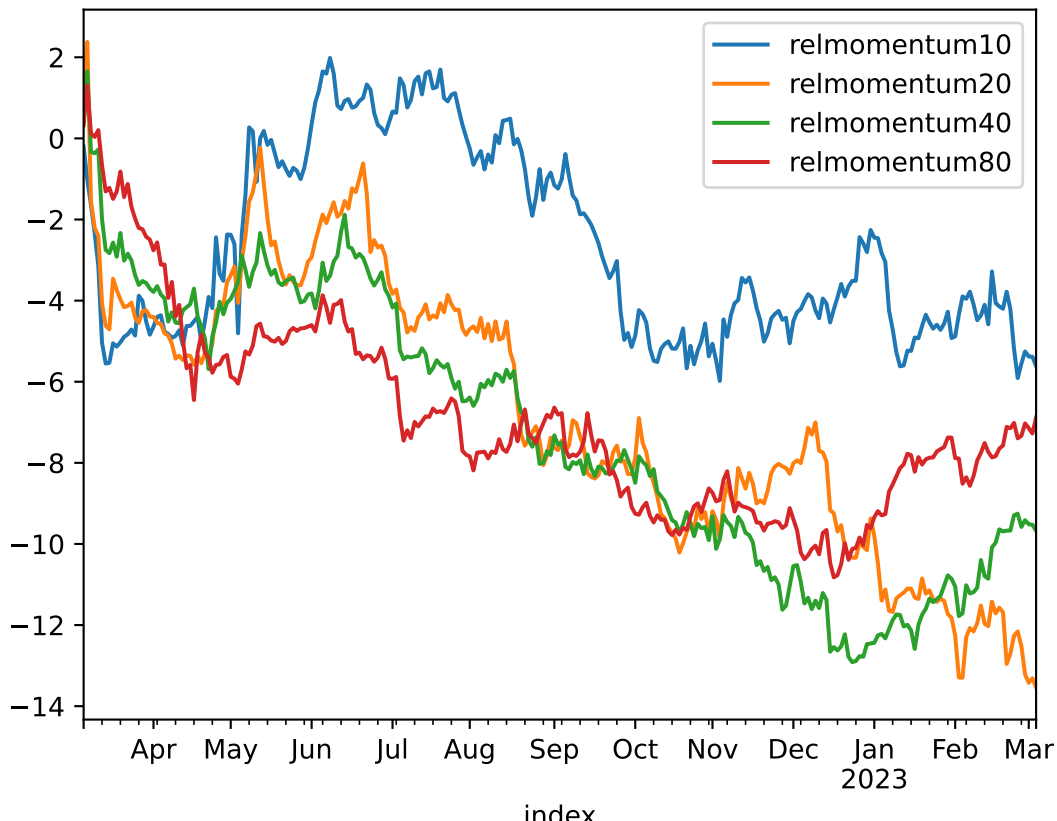


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -5.524, 'relmomentum20': -13.326, 'relmomentum40': -9.526, 'relmomentum80': -6.777}

ann. std {'relmomentum10': 8.177, 'relmomentum20': 7.88, 'relmomentum40': 5.977, 'relmomentum80': 5.344}

ann. SR {'relmomentum10': -0.68, 'relmomentum20': -1.69, 'relmomentum40': -1.59, 'relmomentum80': -1.27}

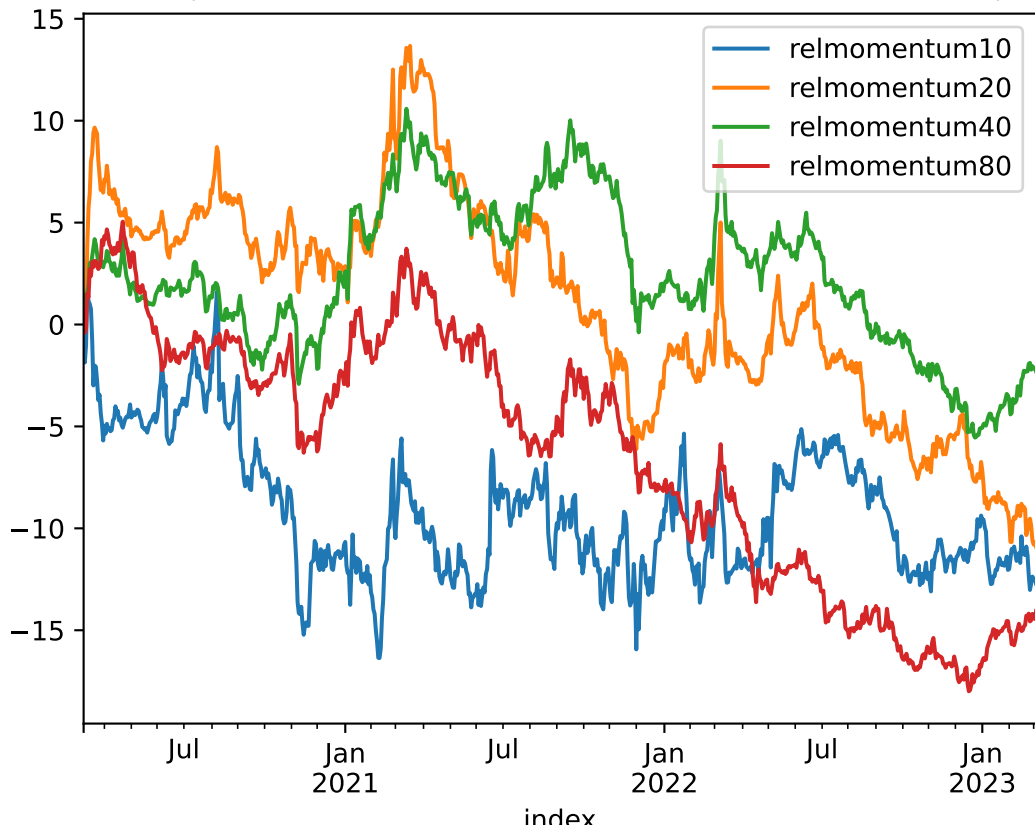


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -4.176, 'relmomentum20': -3.58, 'relmomentum40': -0.757, 'relmomentum80': -4.613}

ann. std {'relmomentum10': 11.621, 'relmomentum20': 8.879, 'relmomentum40': 7.125, 'relmomentum80': 6.713}

ann. SR {'relmomentum10': -0.36, 'relmomentum20': -0.4, 'relmomentum40': -0.11, 'relmomentum80': -0.69}

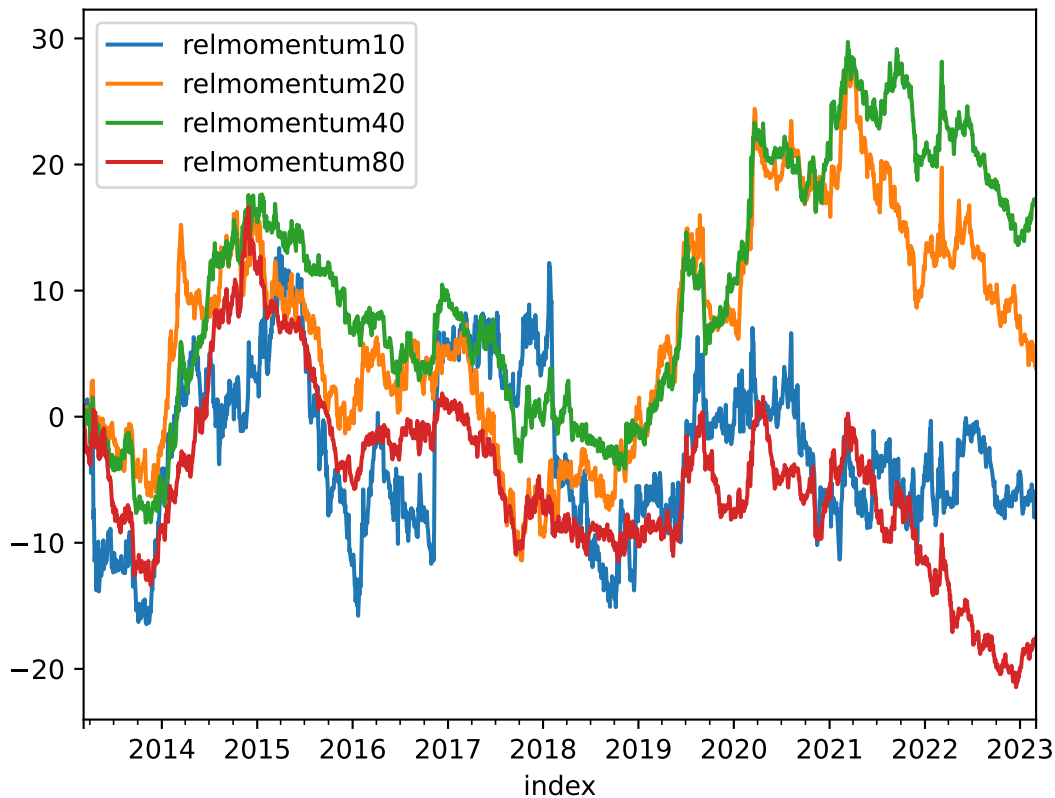


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.756, 'relmomentum20': 0.378, 'relmomentum40': 1.653, 'relmomentum80': -1.721}

ann. std {'relmomentum10': 12.912, 'relmomentum20': 8.912, 'relmomentum40': 7.251, 'relmomentum80': 6.681}

ann. SR {'relmomentum10': -0.06, 'relmomentum20': 0.04, 'relmomentum40': 0.23, 'relmomentum80': -0.26}

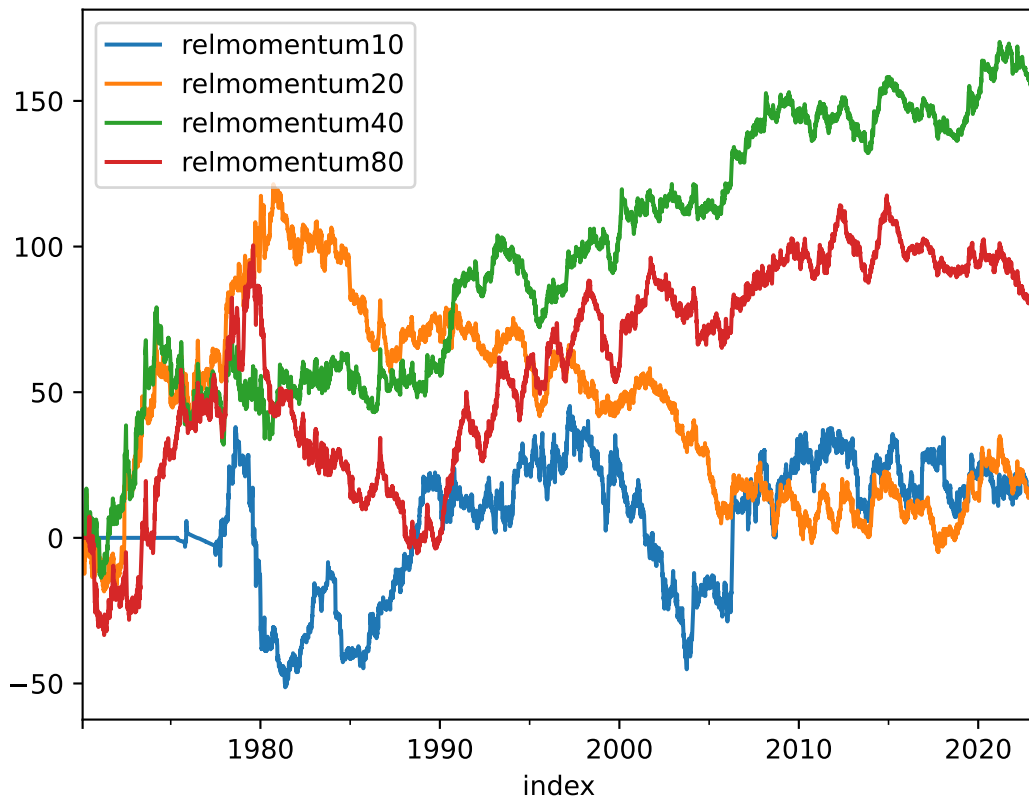


Total Trading Rule P&L for period '99Y'

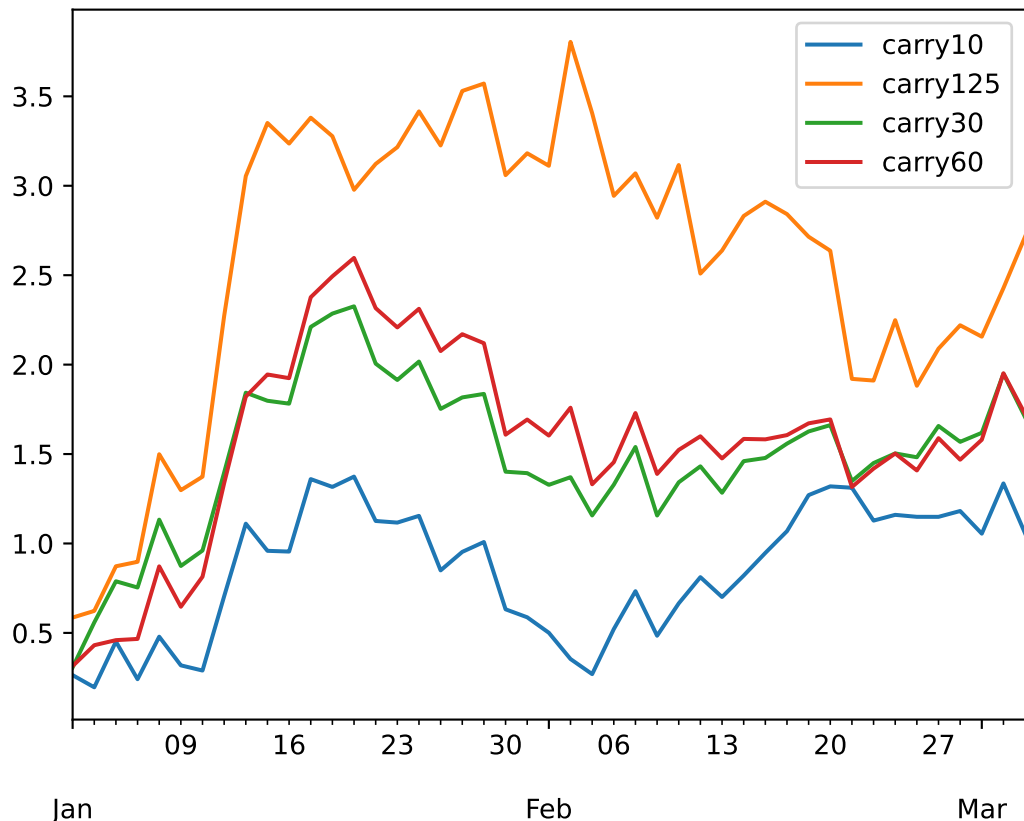
ann. mean {'relmomentum10': 0.27, 'relmomentum20': 0.192, 'relmomentum40': 2.909, 'relmomentum80': 1.542}

ann. std {'relmomentum10': 13.402, 'relmomentum20': 11.501, 'relmomentum40': 10.779, 'relmomentum80': 11.047}

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': 6.009, 'carry125': 15.45, 'carry30': 9.704, 'carry60': 9.801}
ann. std {'carry10': 3.104, 'carry125': 5.517, 'carry30': 3.442, 'carry60': 3.721}
ann. SR {'carry10': 1.94, 'carry125': 2.8, 'carry30': 2.82, 'carry60': 2.63}

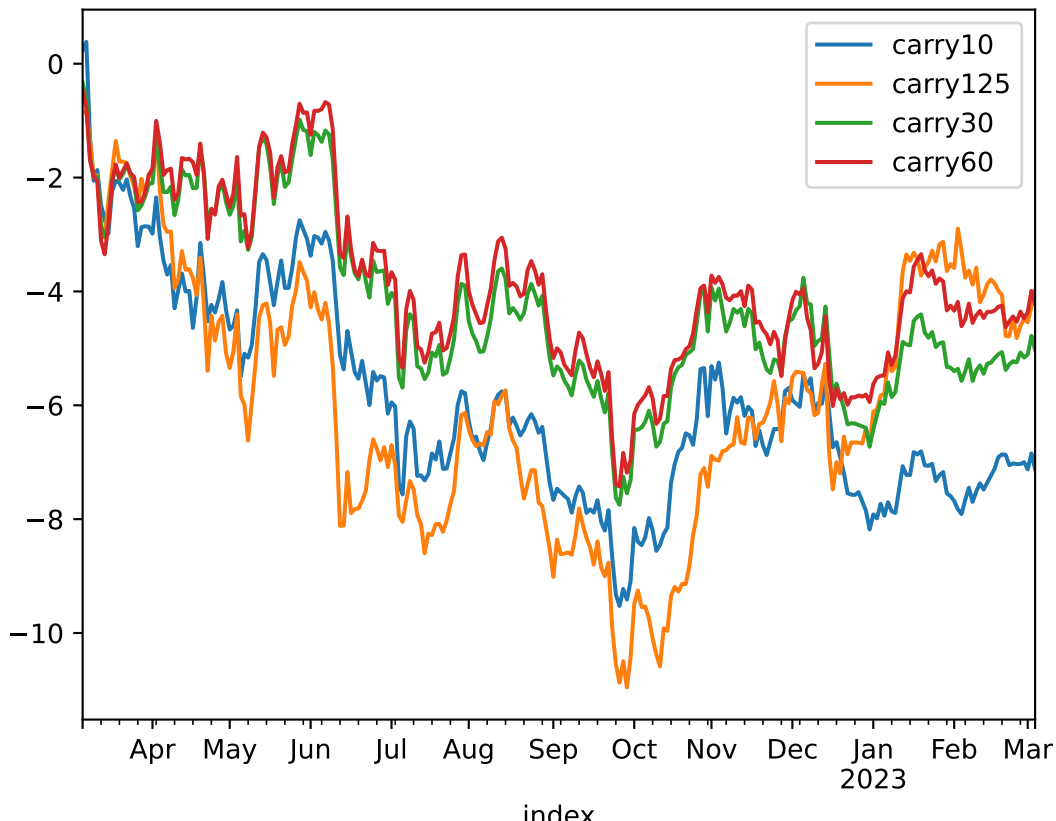


Total Trading Rule P&L for period '1Y'

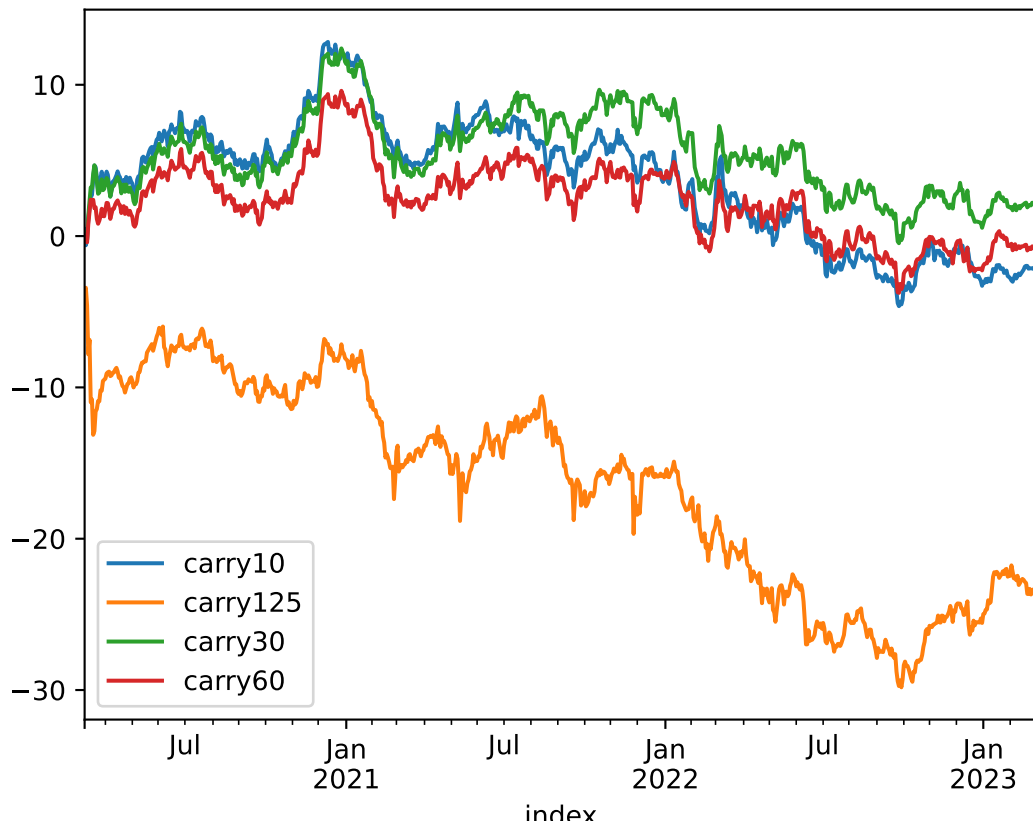
ann. mean {'carry10': -7.015, 'carry125': -3.923, 'carry30': -4.946, 'carry60': -4.154}

ann. std {'carry10': 6.112, 'carry125': 7.159, 'carry30': 5.95, 'carry60': 6.163}

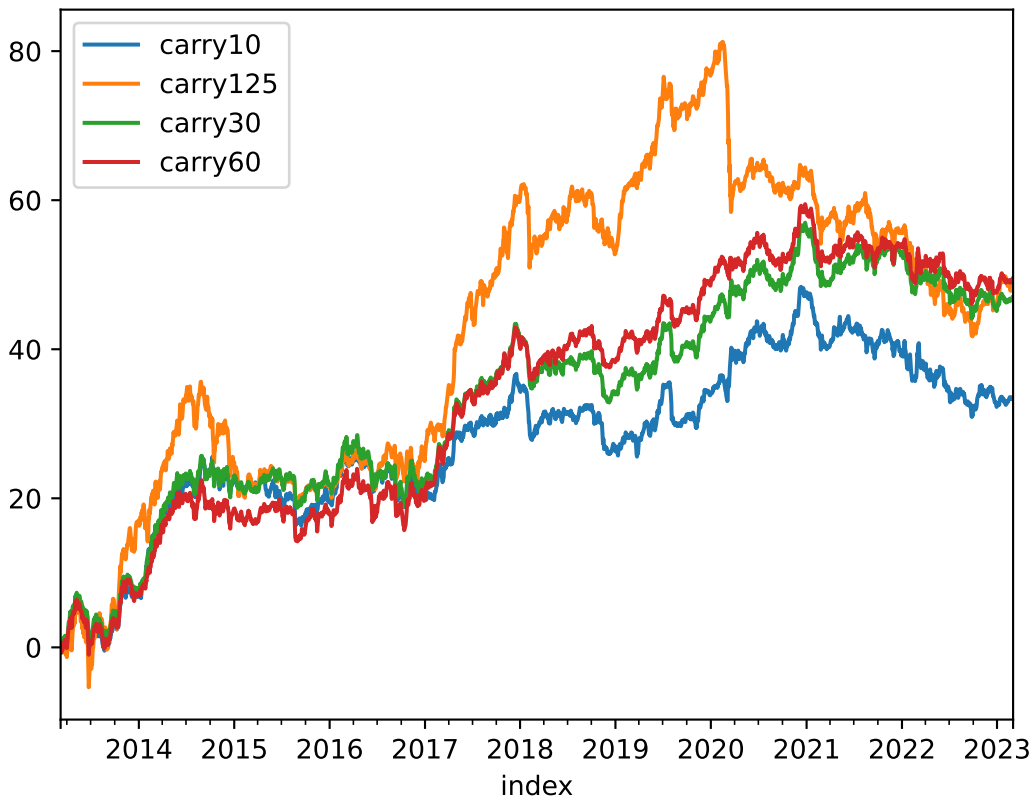
ann. SR {'carry10': -1.15, 'carry125': -0.55, 'carry30': -0.83, 'carry60': -0.67}



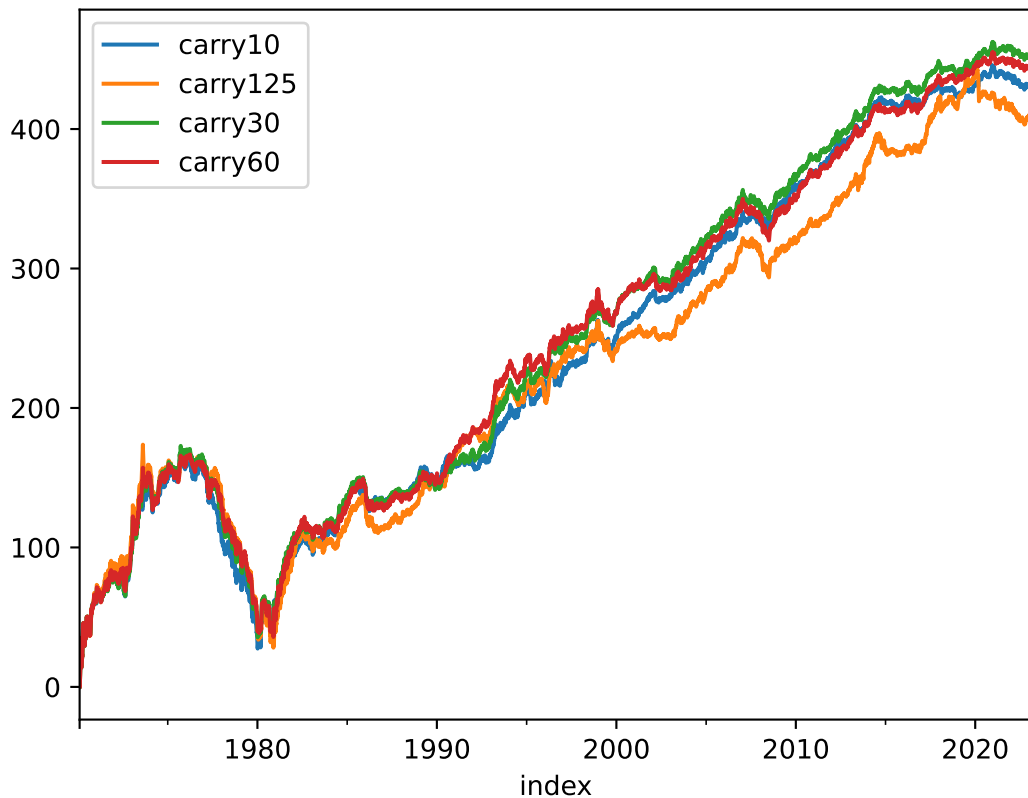
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': -0.732, 'carry125': -7.5, 'carry30': 0.74, 'carry60': -0.179}
ann. std {'carry10': 6.626, 'carry125': 9.099, 'carry30': 6.562, 'carry60': 6.516}
ann. SR {'carry10': -0.11, 'carry125': -0.82, 'carry30': 0.11, 'carry60': -0.03}



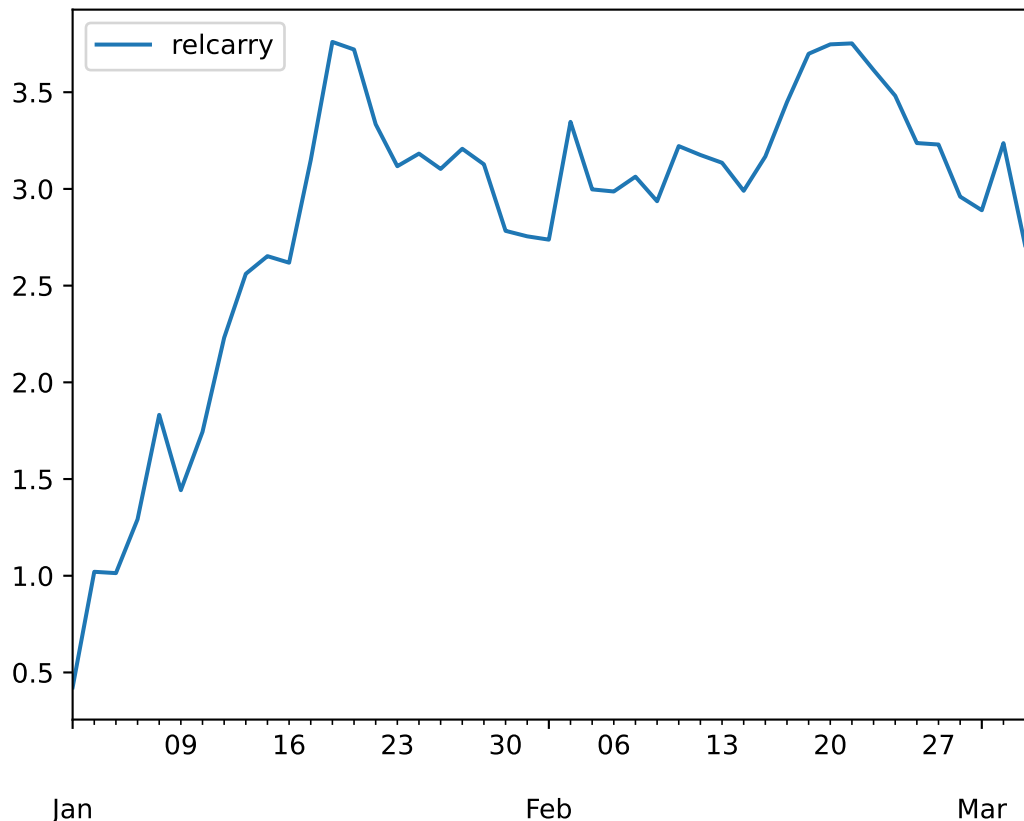
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.271, 'carry125': 4.782, 'carry30': 4.599, 'carry60': 4.844}
ann. std {'carry10': 6.377, 'carry125': 9.235, 'carry30': 6.49, 'carry60': 6.457}
ann. SR {'carry10': 0.51, 'carry125': 0.52, 'carry30': 0.71, 'carry60': 0.75}



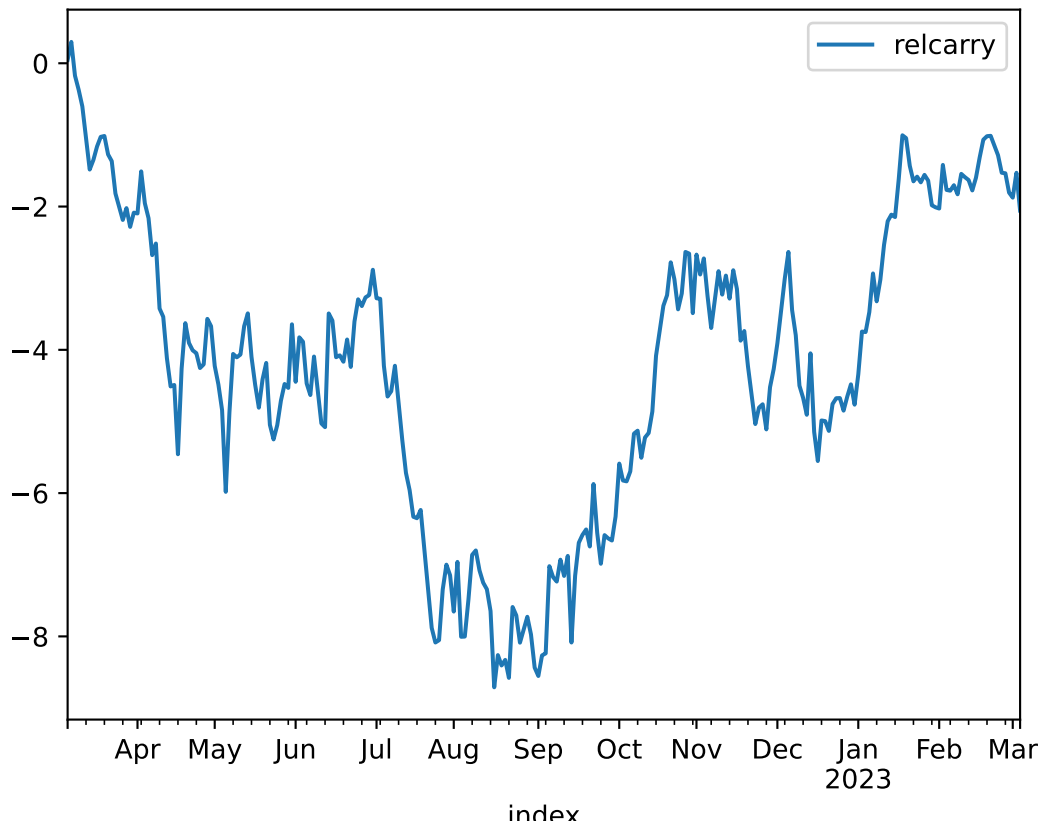
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.96, 'carry125': 7.582, 'carry30': 8.361, 'carry60': 8.225}
ann. std {'carry10': 11.894, 'carry125': 12.172, 'carry30': 11.913, 'carry60': 11.868}
ann. SR {'carry10': 0.67, 'carry125': 0.62, 'carry30': 0.7, 'carry60': 0.69}



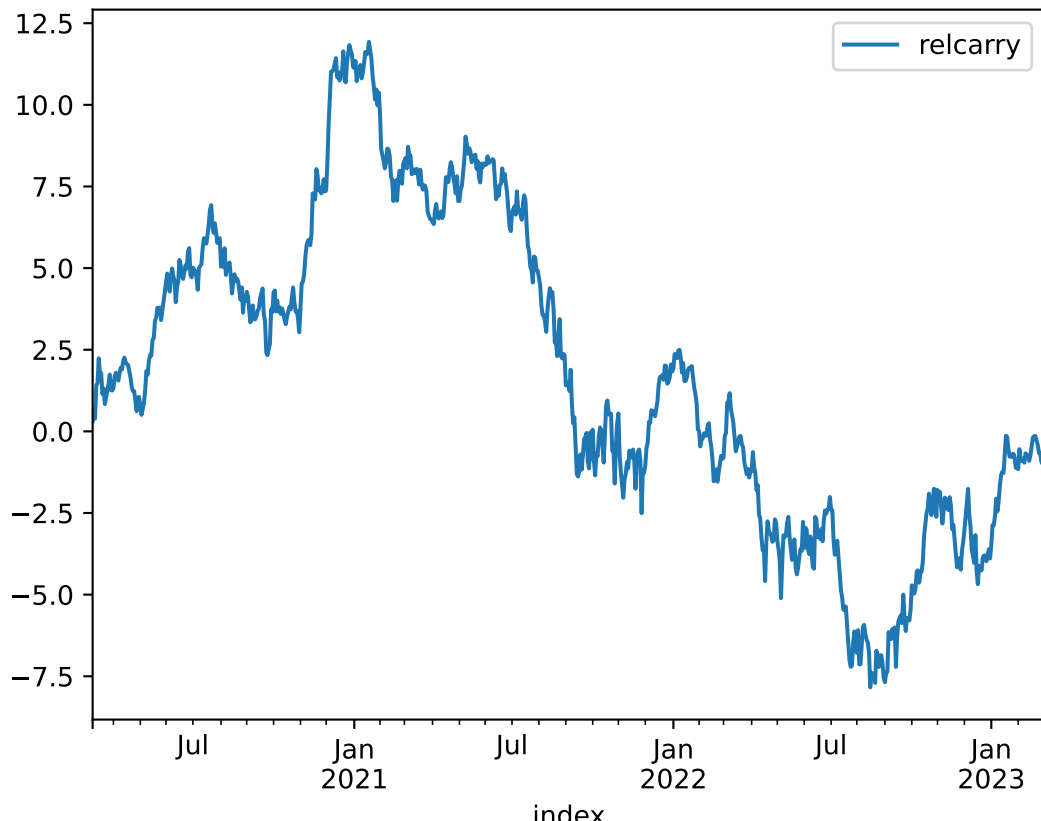
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 15.413}
ann. std {'relcarry': 4.645}
ann. SR {'relcarry': 3.32}



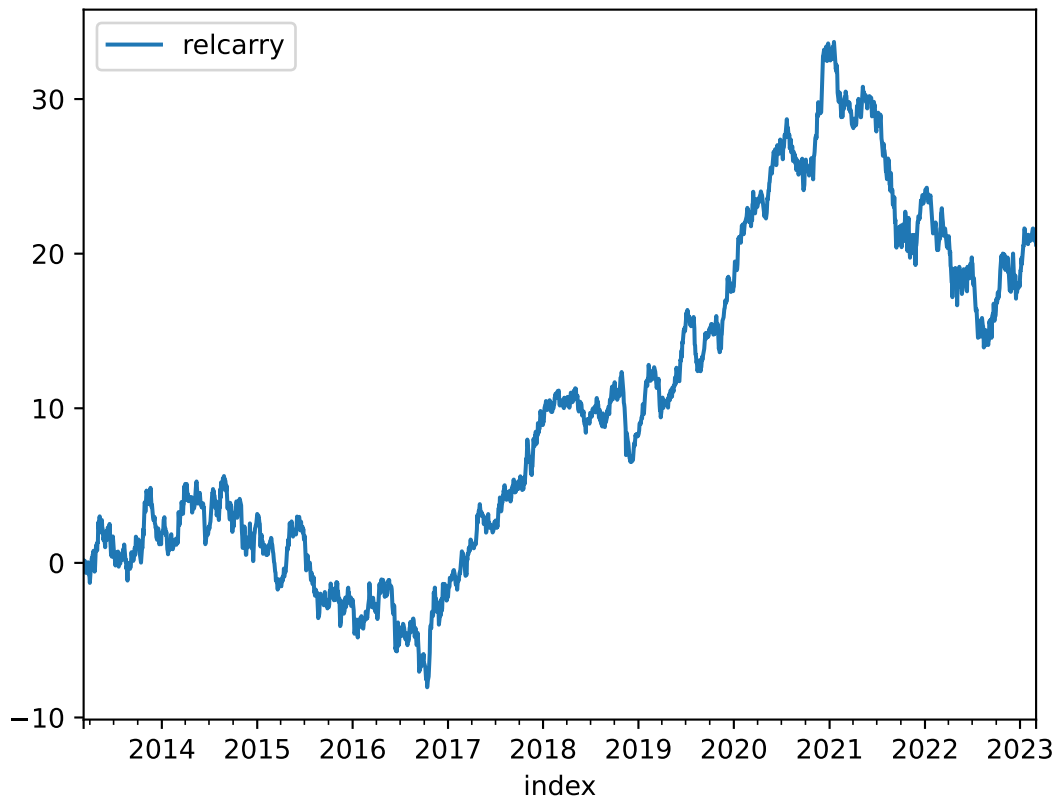
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -2.024}
ann. std {'relcarry': 7.089}
ann. SR {'relcarry': -0.29}



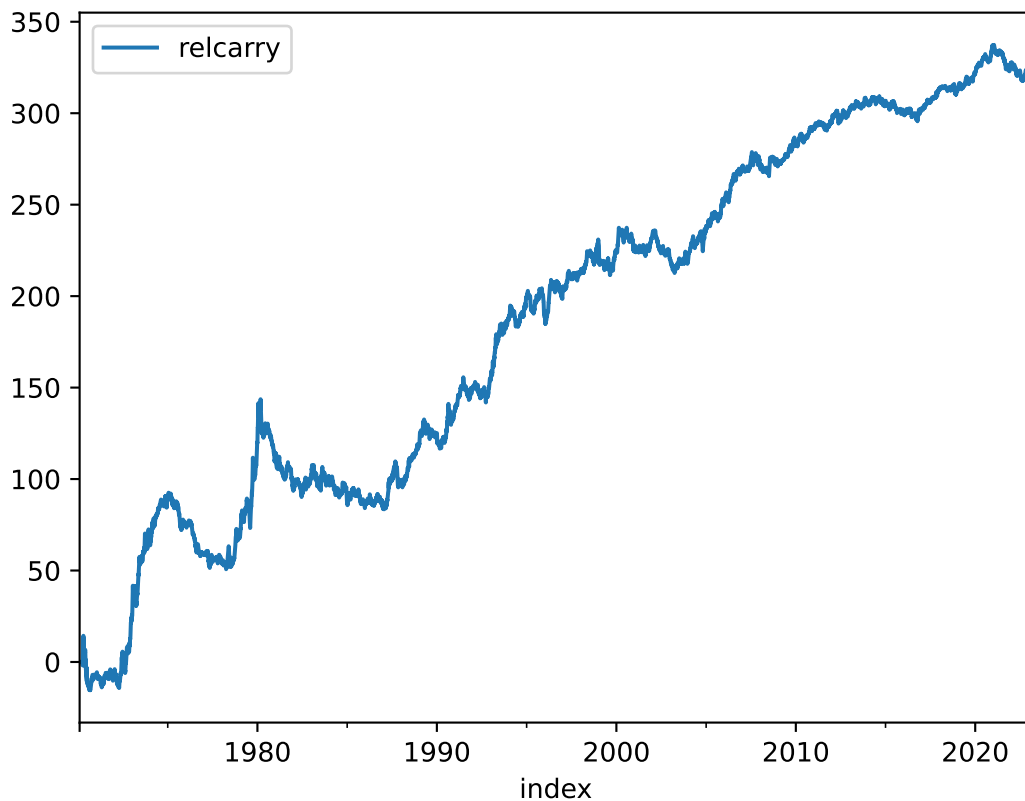
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.388}
ann. std {'relcarry': 6.787}
ann. SR {'relcarry': -0.06}



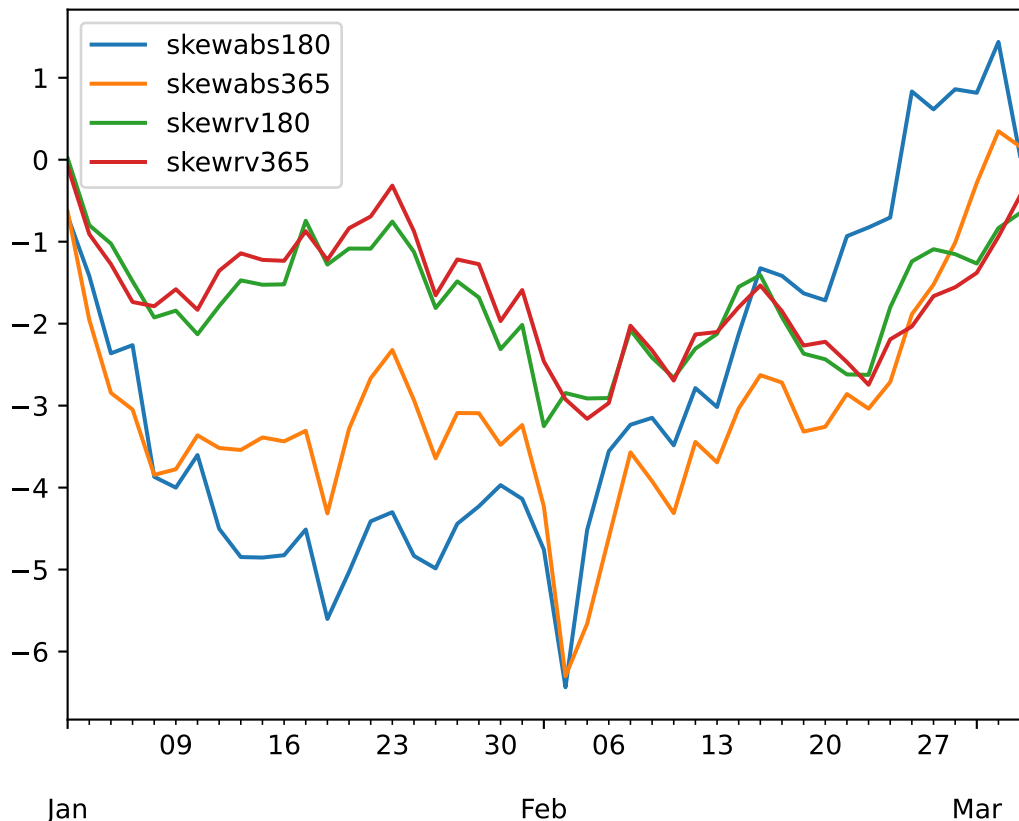
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.022}
ann. std {'relcarry': 5.99}
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.993}
ann. std {'relcarry': 9.975}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 0.273, 'skewabs365': 0.914, 'skewrv180': -3.695, 'skewrv365': -2.503}
ann. std {'skewabs180': 11.781, 'skewabs365': 10.815, 'skewrv180': 7.039, 'skewrv365': 6.719}
ann. SR {'skewabs180': 0.02, 'skewabs365': 0.08, 'skewrv180': -0.52, 'skewrv365': -0.37}

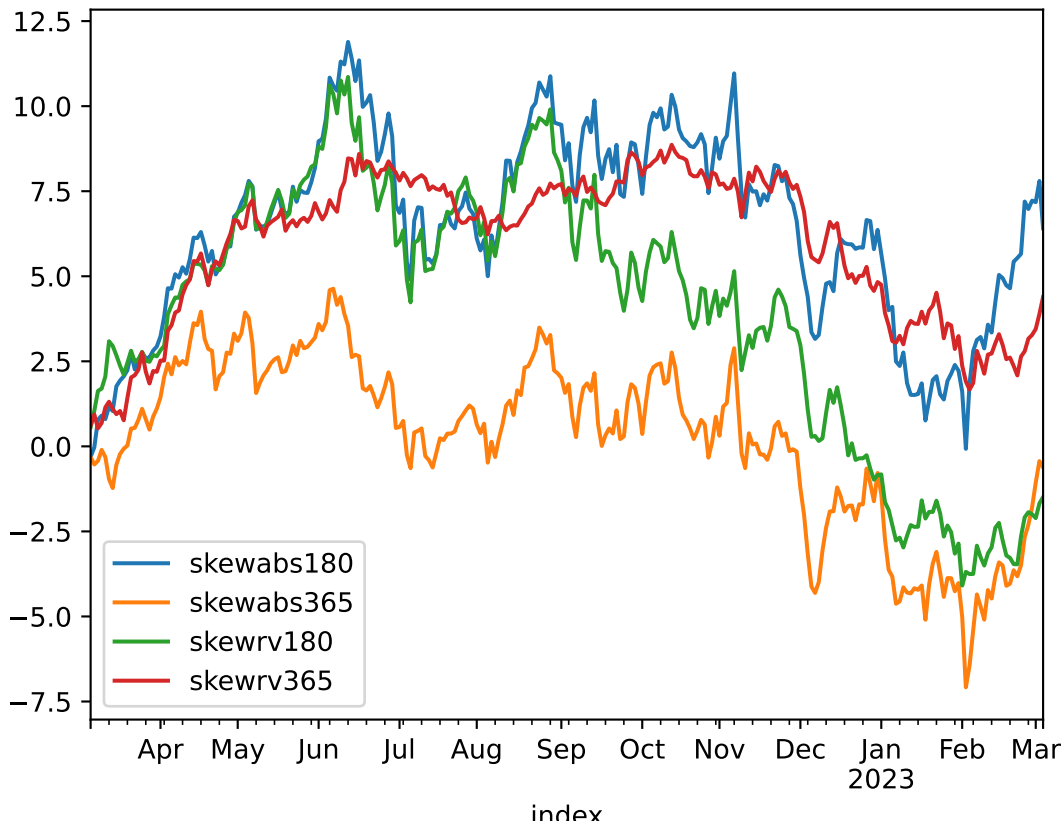


Total Trading Rule P&L for period '1Y'

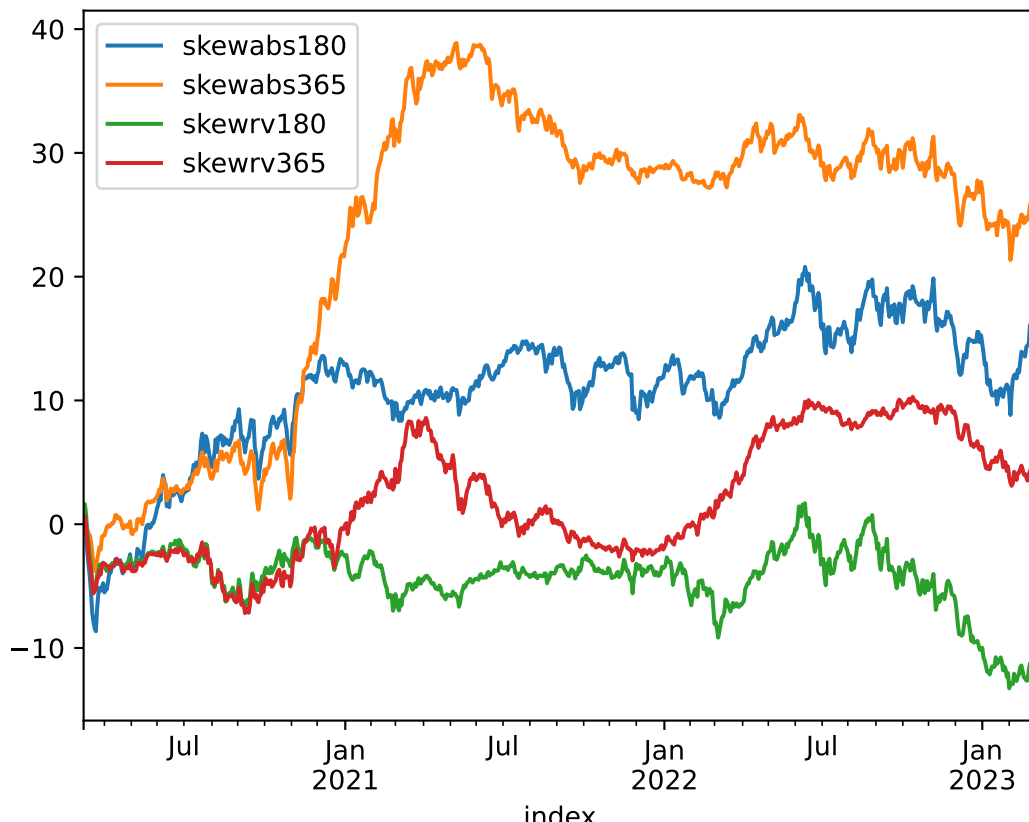
ann. mean {'skewabs180': 6.312, 'skewabs365': -0.611, 'skewrv180': -1.469, 'skewrv365': 4.323}

ann. std {'skewabs180': 10.555, 'skewabs365': 8.97, 'skewrv180': 9.015, 'skewrv365': 5.268}

ann. SR {'skewabs180': 0.6, 'skewabs365': -0.07, 'skewrv180': -0.16, 'skewrv365': 0.82}



Total Trading Rule P&L for period '3Y'
ann. mean {'skewabs180': 5.025, 'skewabs365': 9.127, 'skewrv180': -3.498, 'skewrv365': 1.912}
ann. std {'skewabs180': 9.387, 'skewabs365': 8.803, 'skewrv180': 7.458, 'skewrv365': 6.448}
ann. SR {'skewabs180': 0.54, 'skewabs365': 1.04, 'skewrv180': -0.47, 'skewrv365': 0.3}

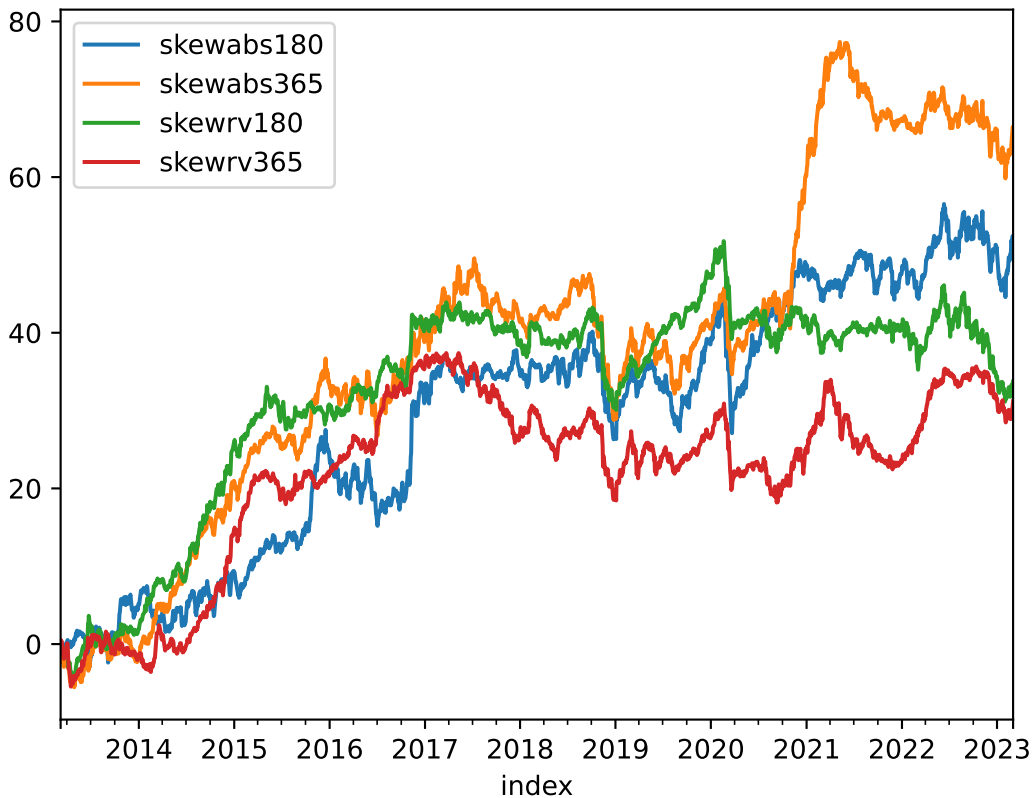


Total Trading Rule P&L for period '10Y'

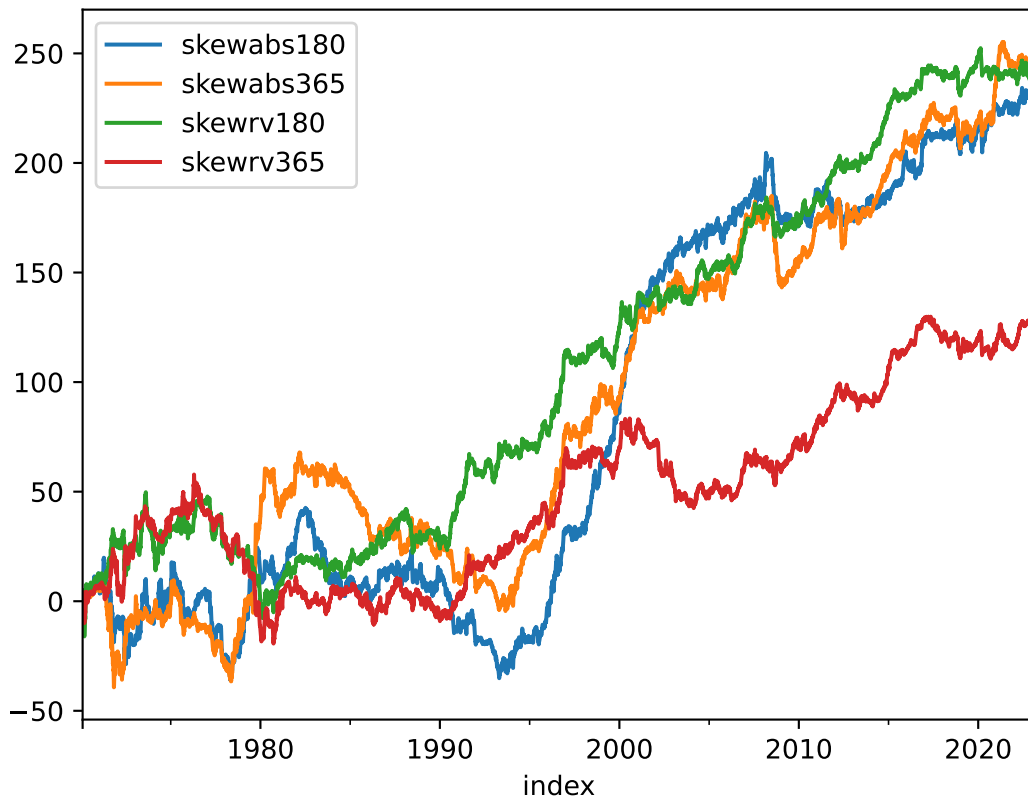
ann. mean {'skewabs180': 5.014, 'skewabs365': 6.51, 'skewrv180': 3.315, 'skewrv365': 3.064}

ann. std {'skewabs180': 8.095, 'skewabs365': 8.023, 'skewrv180': 6.559, 'skewrv365': 6.145}

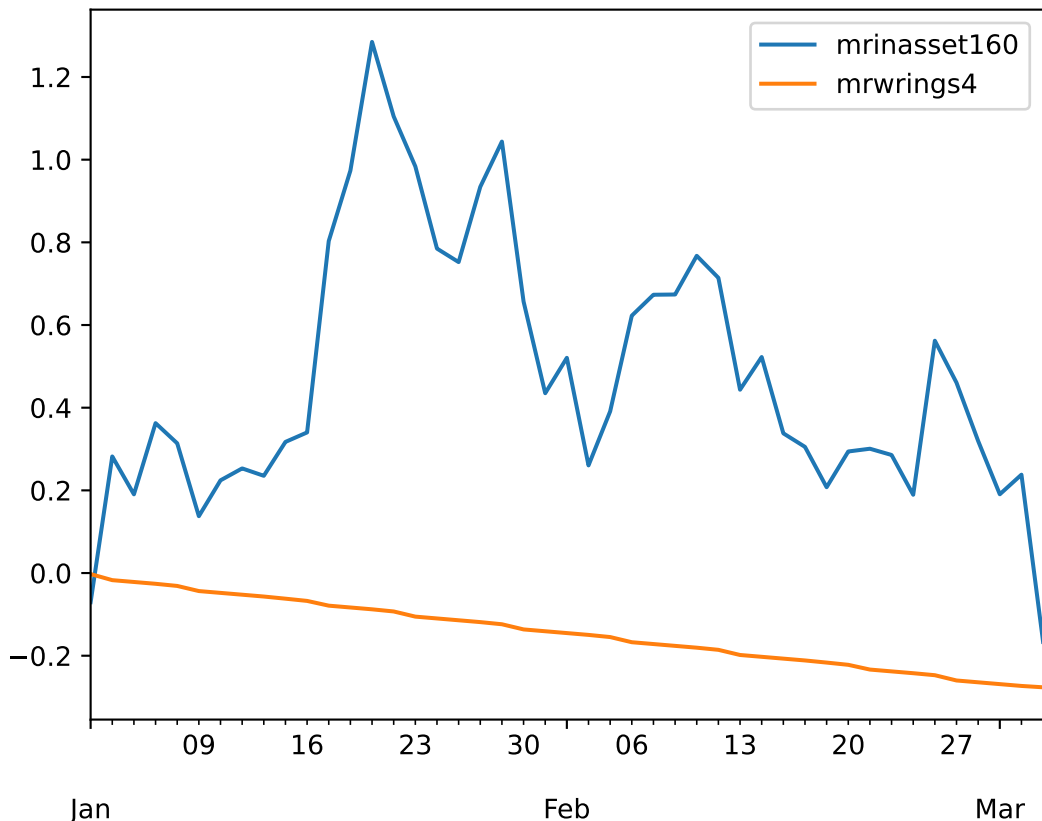
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.81, 'skewrv180': 0.51, 'skewrv365': 0.5}



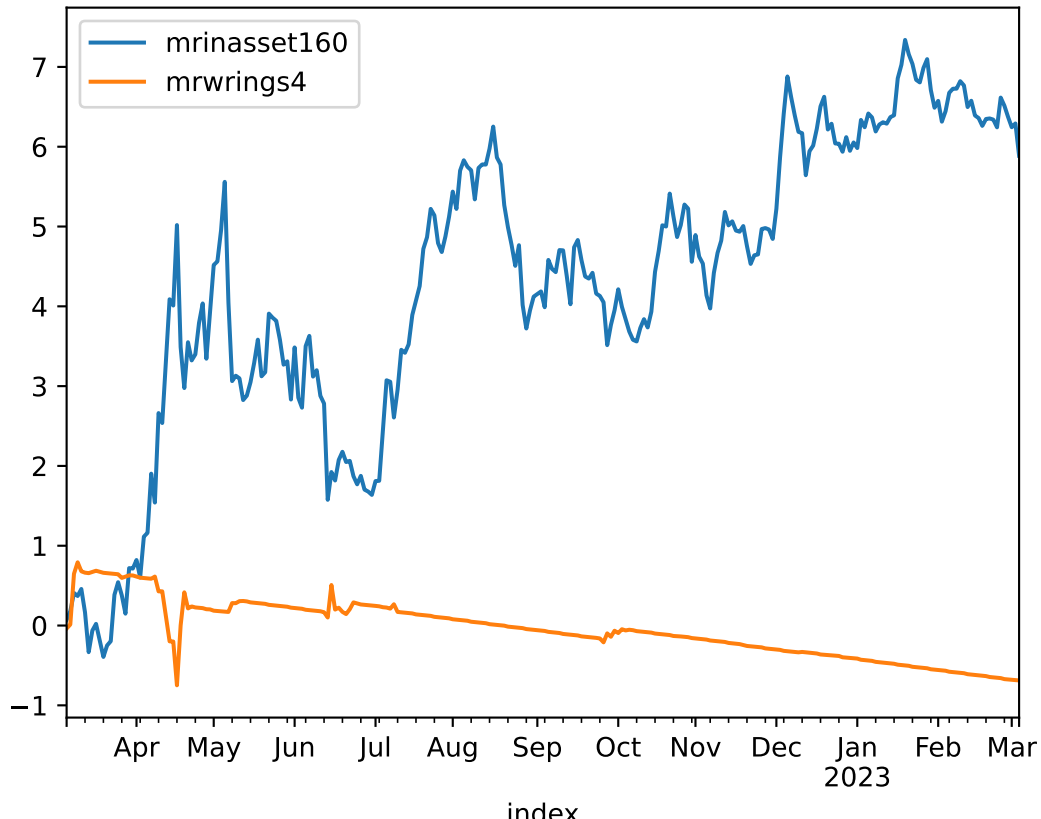
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.229, 'skewabs365': 4.513, 'skewrv180': 4.333, 'skewrv365': 2.286}
ann. std {'skewabs180': 10.78, 'skewabs365': 10.239, 'skewrv180': 9.45, 'skewrv365': 8.741}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



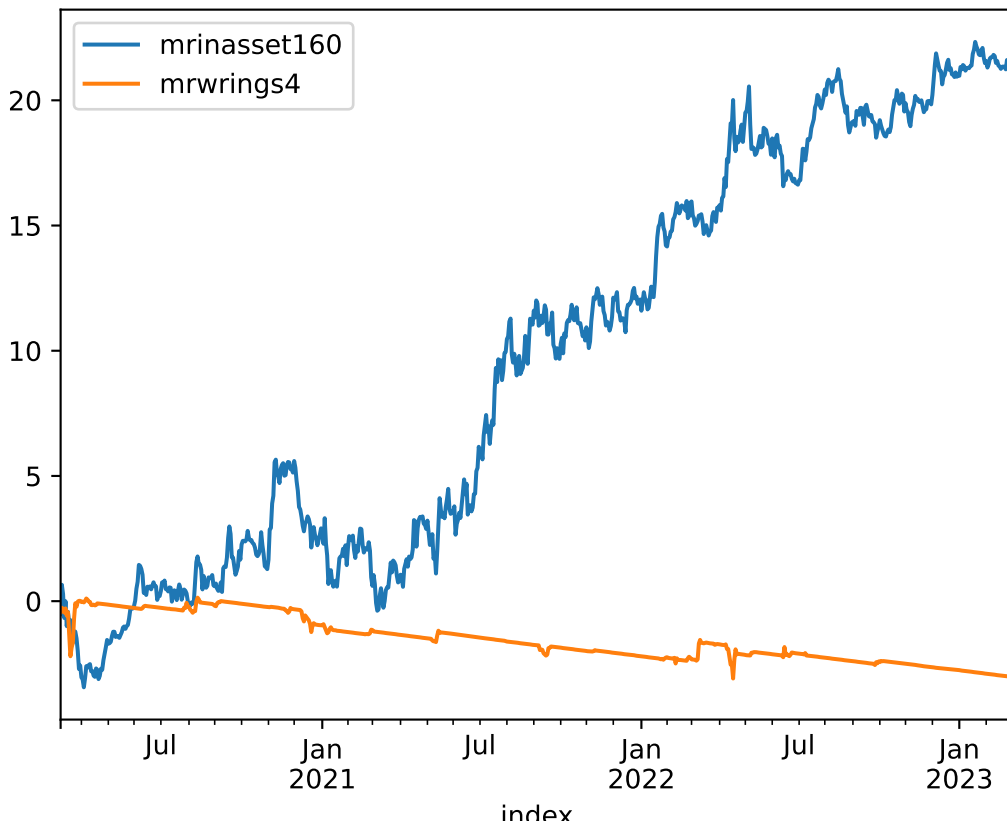
Total Trading Rule P&L for period 'YTD'
ann. mean {'mriasset160': -0.947, 'mrwrings4': -1.572}
ann. std {'mriasset160': 2.994, 'mrwrings4': 0.053}
ann. SR {'mriasset160': -0.32, 'mrwrings4': -29.84}



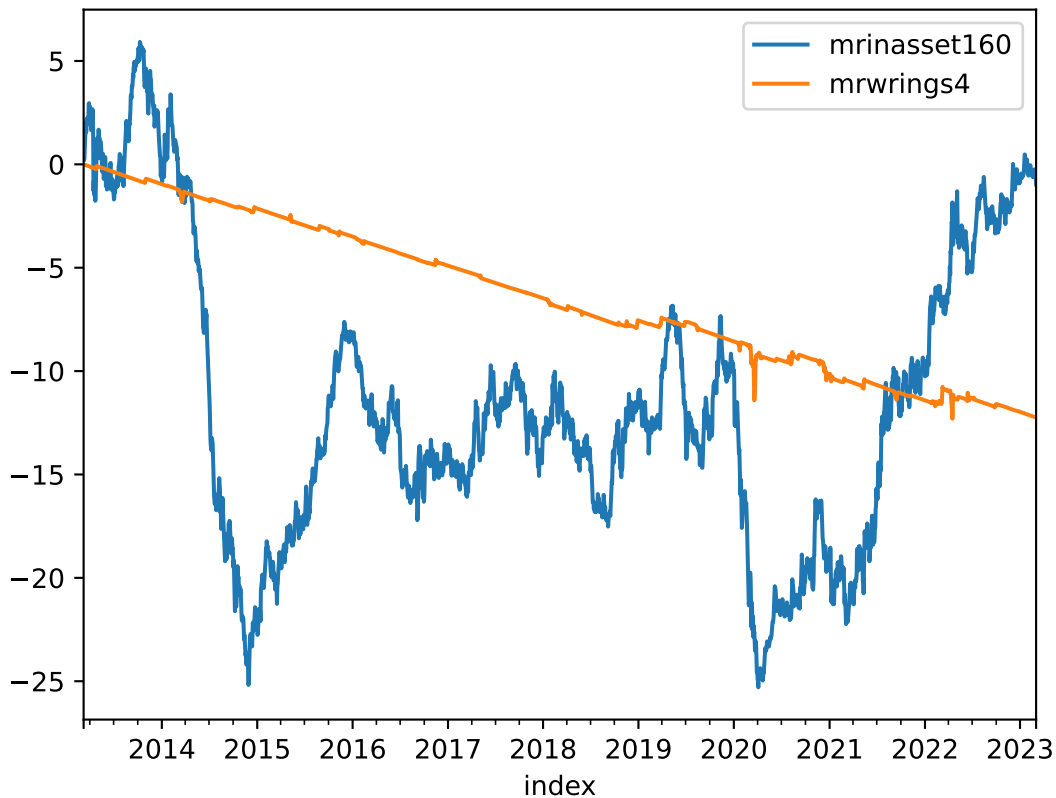
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 5.797, 'mrwrings4': -0.677}
ann. std {'mrinasset160': 5.567, 'mrwrings4': 1.439}
ann. SR {'mrinasset160': 1.04, 'mrwrings4': -0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.853, 'mrwrings4': -0.994}
ann. std {'mrinasset160': 6.481, 'mrwrings4': 1.497}
ann. SR {'mrinasset160': 1.06, 'mrwrings4': -0.66}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.096, 'mrwrings4': -1.202}
ann. std {'mrinasset160': 6.491, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': -0.01, 'mrwrings4': -1.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.141, 'mrwrings4': -2.318}
ann. std {'mrinasset160': 11.15, 'mrwrings4': 2.616}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.89}

