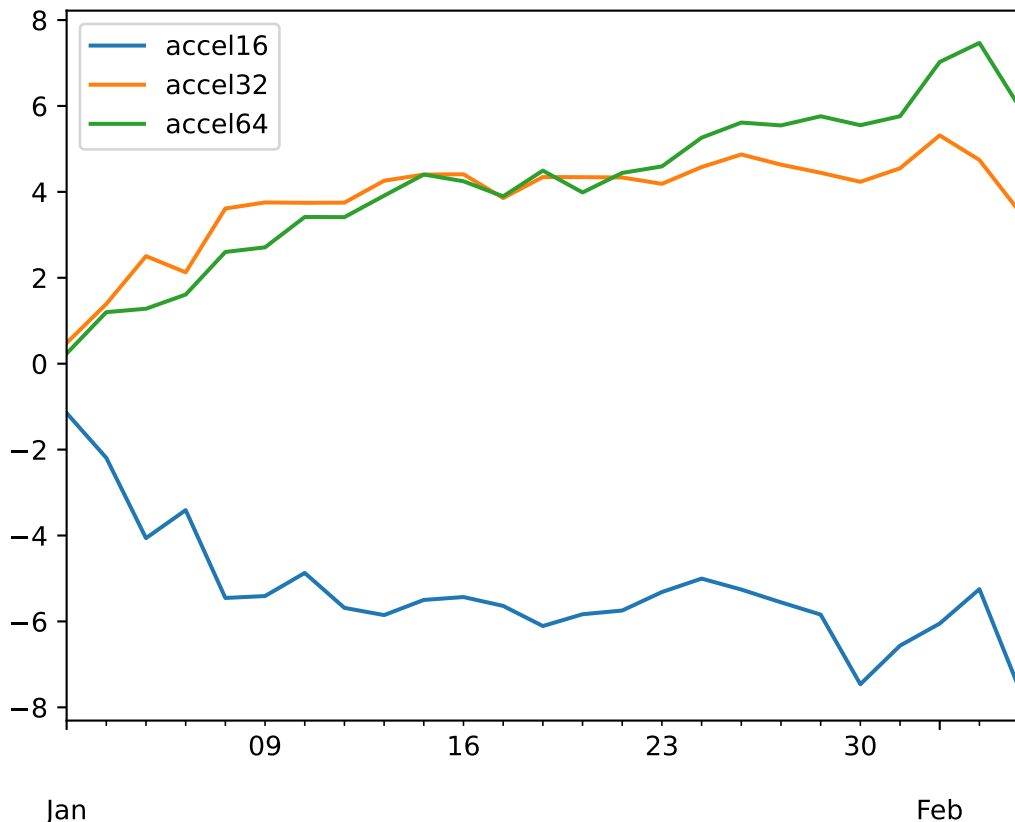
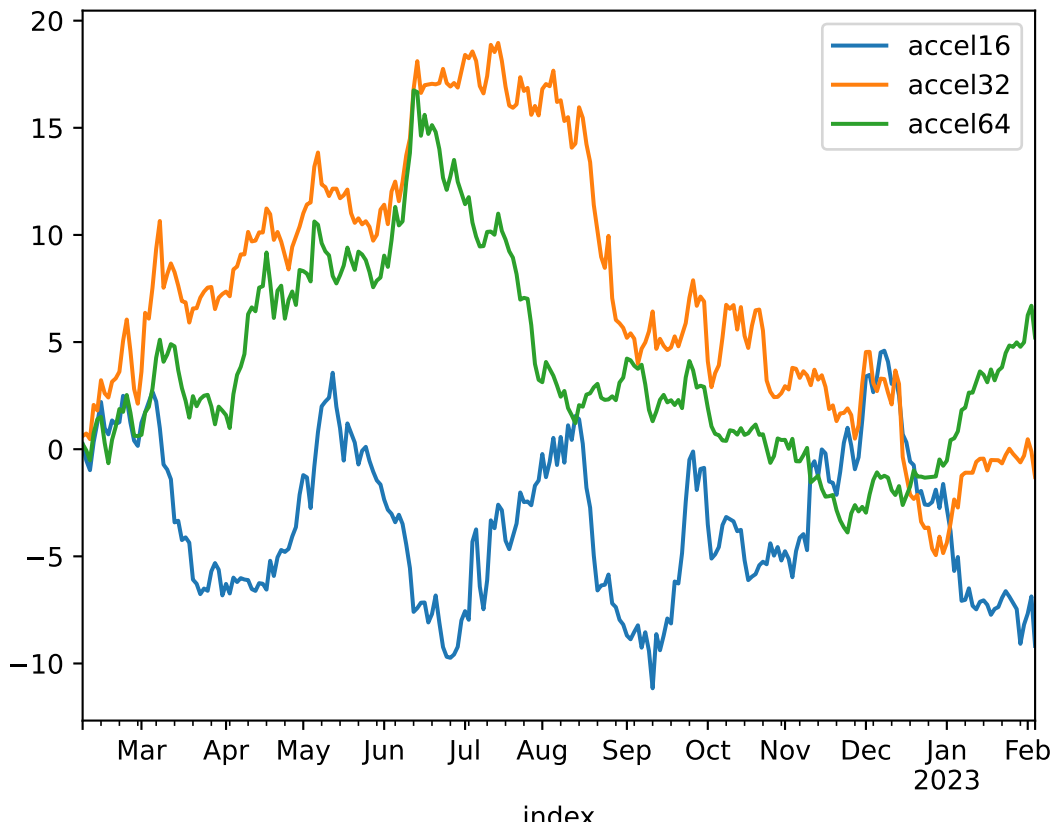


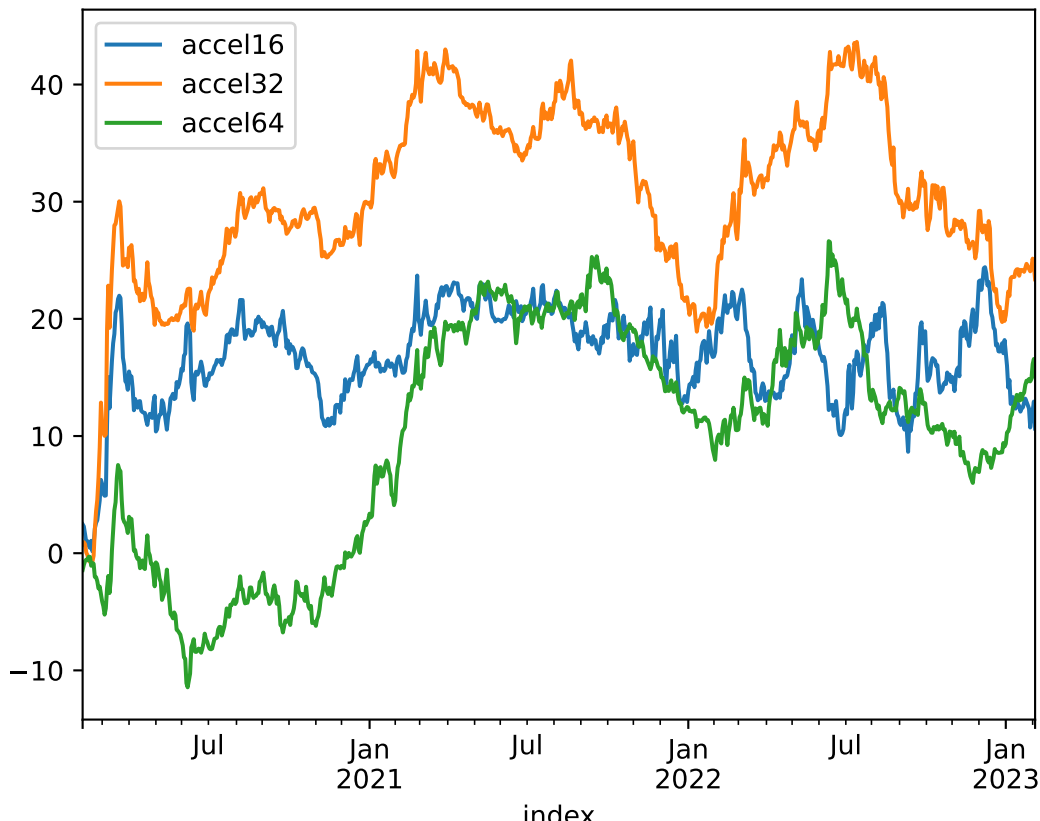
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -77.385, 'accel32': 36.362, 'accel64': 61.331}
ann. std {'accel16': 14.558, 'accel32': 9.133, 'accel64': 8.848}
ann. SR {'accel16': -5.32, 'accel32': 3.98, 'accel64': 6.93}



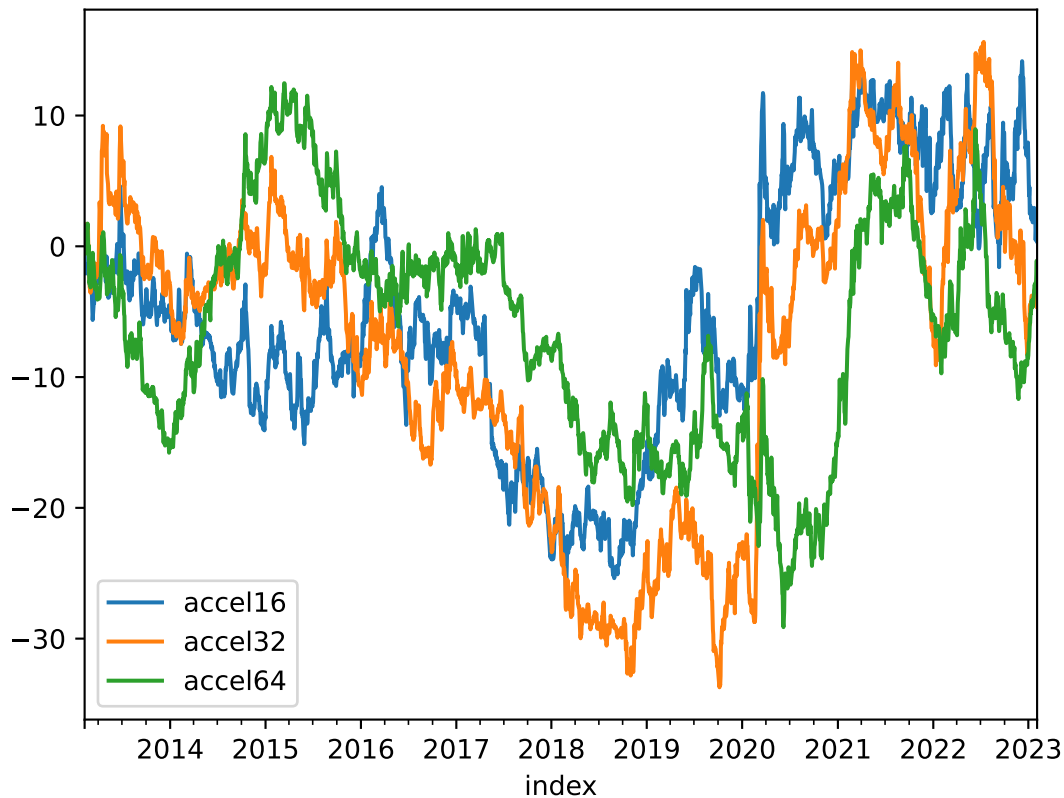
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -9.037, 'accel32': -1.279, 'accel64': 5.136}
ann. std {'accel16': 16.138, 'accel32': 14.409, 'accel64': 11.755}
ann. SR {'accel16': -0.56, 'accel32': -0.09, 'accel64': 0.44}



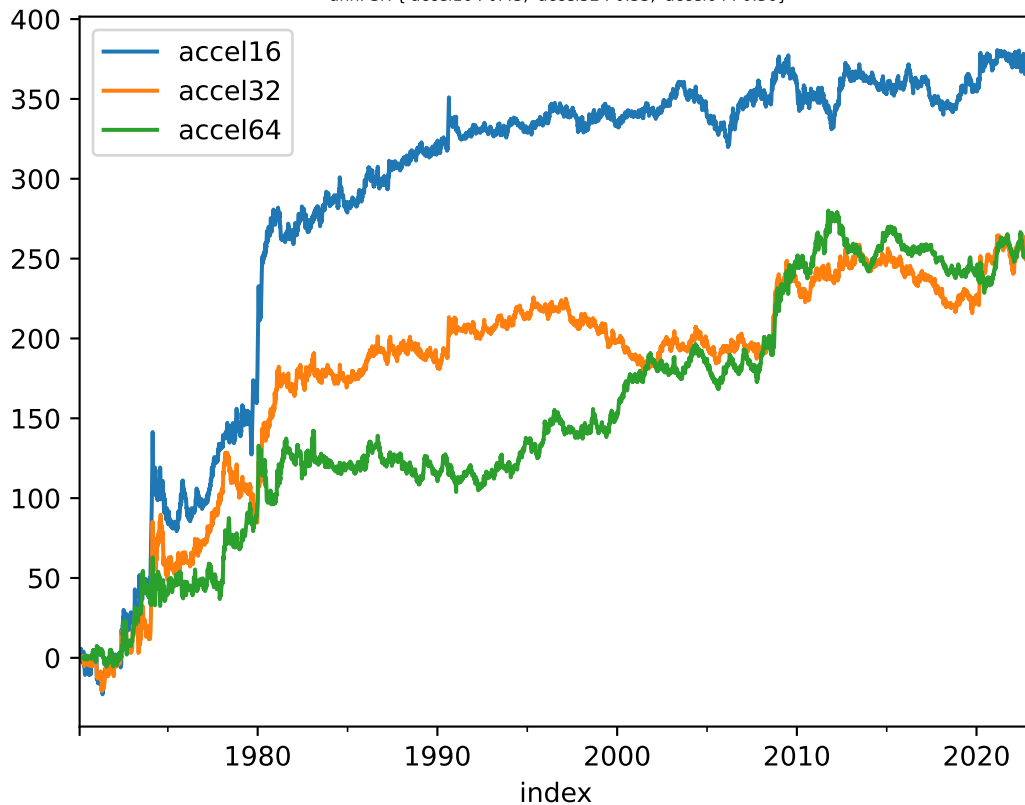
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 3.486, 'accel32': 7.662, 'accel64': 4.95}
ann. std {'accel16': 14.903, 'accel32': 14.294, 'accel64': 11.416}
ann. SR {'accel16': 0.23, 'accel32': 0.54, 'accel64': 0.43}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.038, 'accel32': -0.455, 'accel64': -0.253}
ann. std {'accel16': 11.97, 'accel32': 11.187, 'accel64': 9.598}
ann. SR {'accel16': 0.0, 'accel32': -0.04, 'accel64': -0.03}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.804, 'accel32': 4.534, 'accel64': 4.722}
ann. std {'accel16': 15.697, 'accel32': 13.782, 'accel64': 13.302}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.36}

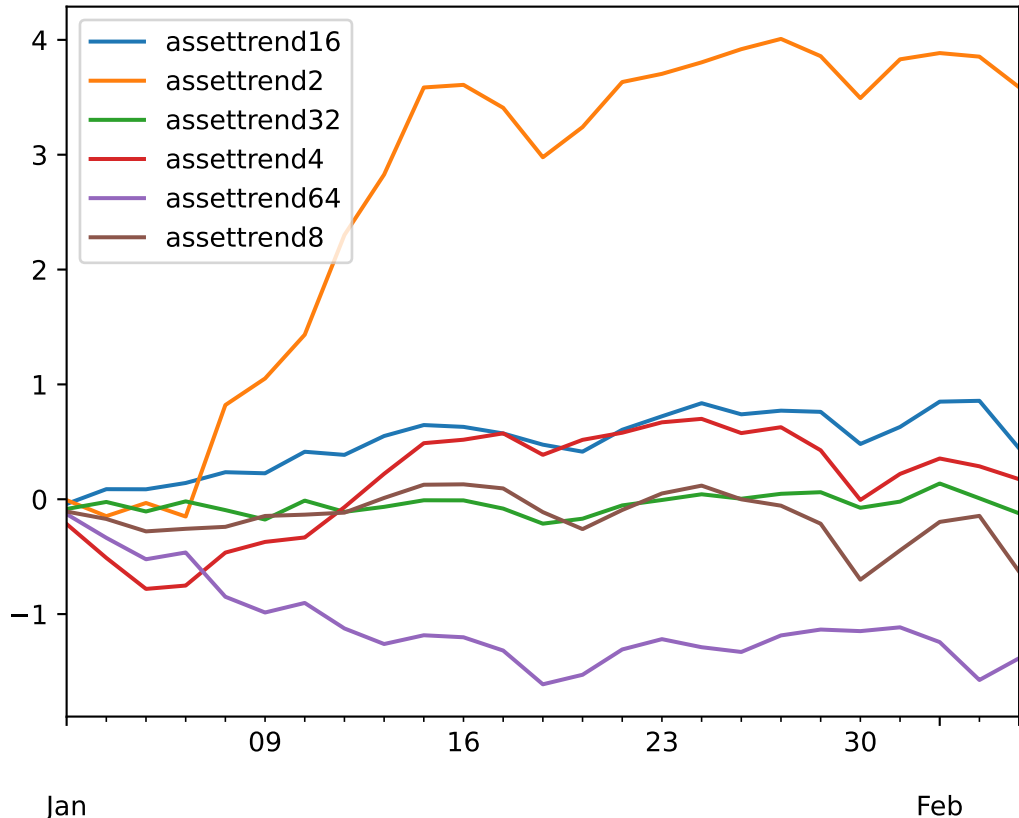


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.542, 'assettrend2': 36.738, 'assettrend32': -1.256, 'assettrend4': 1.786, 'assettrend64': -14.175, 'assettrend8': -6.448}

ann. std {'assettrend16': 2.32, 'assettrend2': 5.758, 'assettrend32': 1.48, 'assettrend4': 3.141, 'assettrend64': 2.583, 'assettrend8': 2.947}

ann. SR {'assettrend16': 1.96, 'assettrend2': 6.38, 'assettrend32': -0.85, 'assettrend4': 0.57, 'assettrend64': -5.49, 'assettrend8': -2.19}

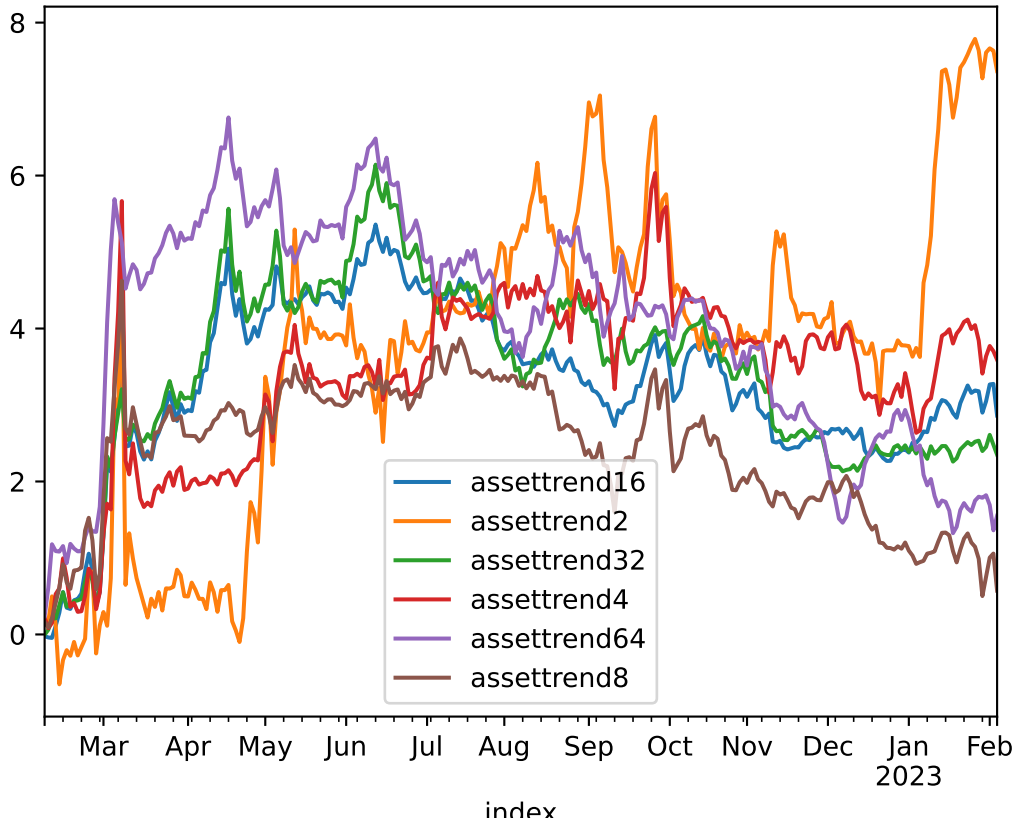


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 2.818, 'assettrend2': 7.253, 'assettrend32': 2.314, 'assettrend4': 3.536, 'assettrend64': 1.527, 'assettrend8': 0.564}

ann. std {'assettrend16': 2.98, 'assettrend2': 7.559, 'assettrend32': 3.177, 'assettrend4': 5.582, 'assettrend64': 3.758, 'assettrend8': 3.694}

ann. SR {'assettrend16': 0.95, 'assettrend2': 0.96, 'assettrend32': 0.73, 'assettrend4': 0.63, 'assettrend64': 0.41, 'assettrend8': 0.15}

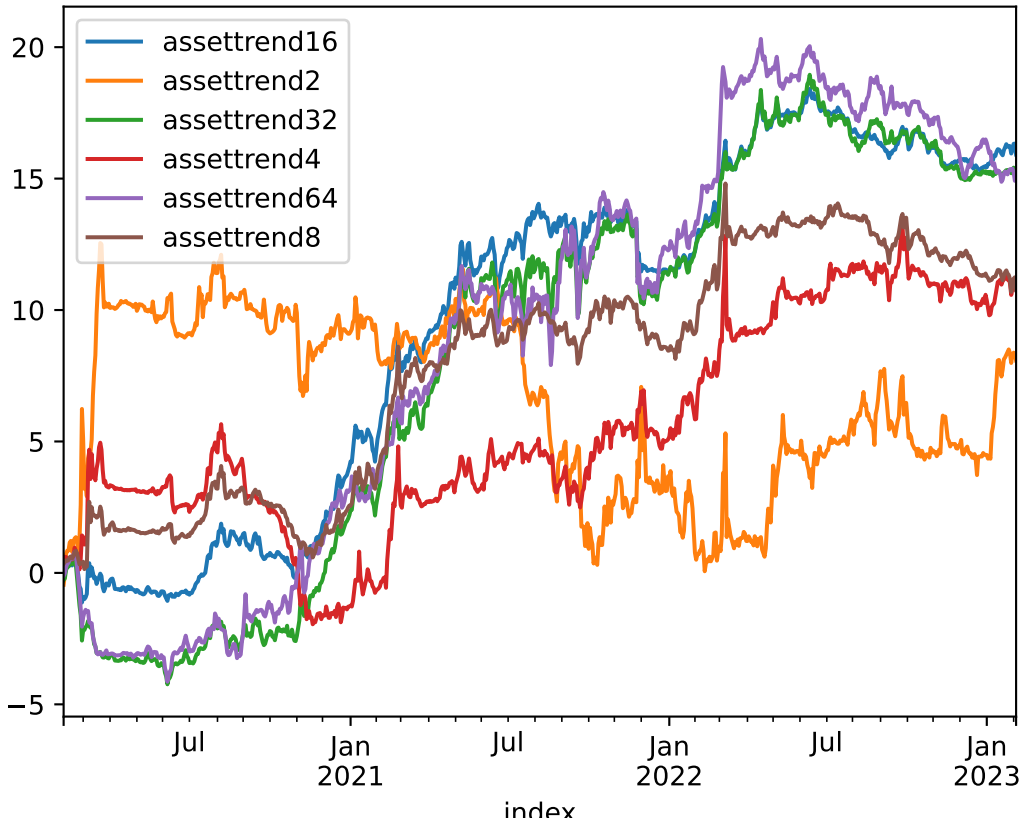


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.217, 'assettrend2': 2.649, 'assettrend32': 4.968, 'assettrend4': 3.525, 'assettrend64': 4.951, 'assettrend8': 3.527}

ann. std {'assettrend16': 3.526, 'assettrend2': 7.675, 'assettrend32': 4.333, 'assettrend4': 5.287, 'assettrend64': 5.121, 'assettrend8': 3.733}

ann. SR {'assettrend16': 1.48, 'assettrend2': 0.35, 'assettrend32': 1.15, 'assettrend4': 0.67, 'assettrend64': 0.97, 'assettrend8': 0.94}

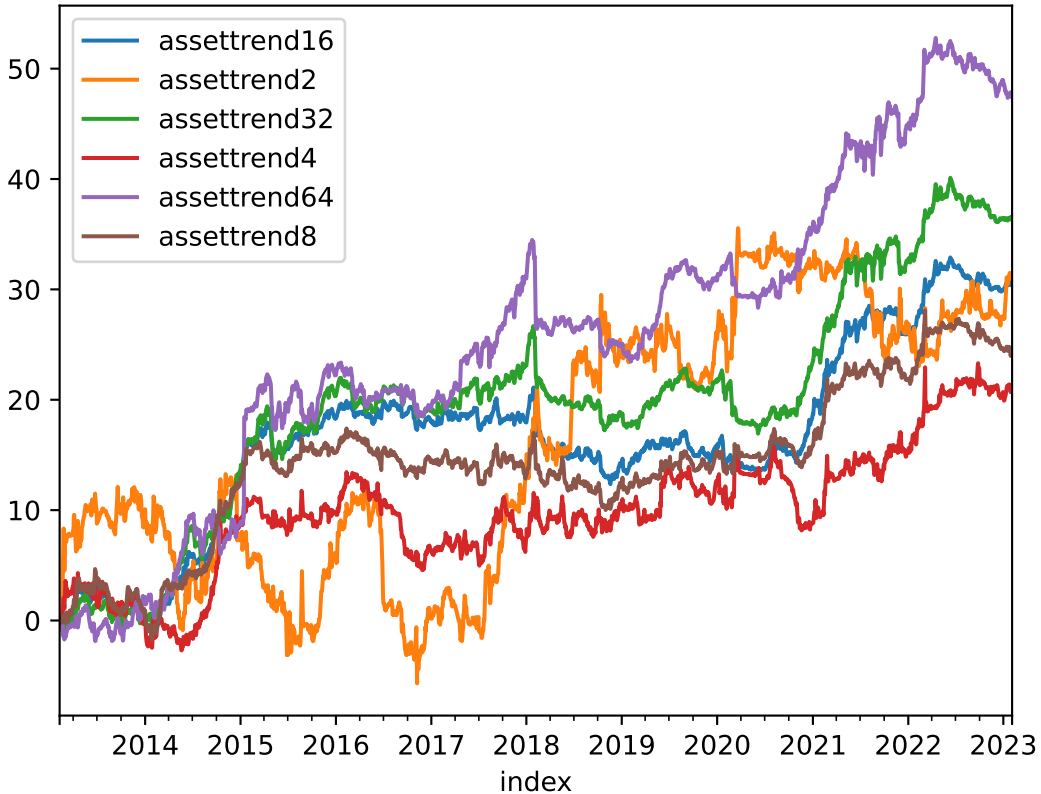


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.985, 'assettrend2': 3.052, 'assettrend32': 3.567, 'assettrend4': 2.049, 'assettrend64': 4.672, 'assettrend8': 2.362}

ann. std {'assettrend16': 3.261, 'assettrend2': 8.394, 'assettrend32': 3.728, 'assettrend4': 5.003, 'assettrend64': 5.32, 'assettrend8': 3.566}

ann. SR {'assettrend16': 0.92, 'assettrend2': 0.36, 'assettrend32': 0.96, 'assettrend4': 0.41, 'assettrend64': 0.88, 'assettrend8': 0.66}

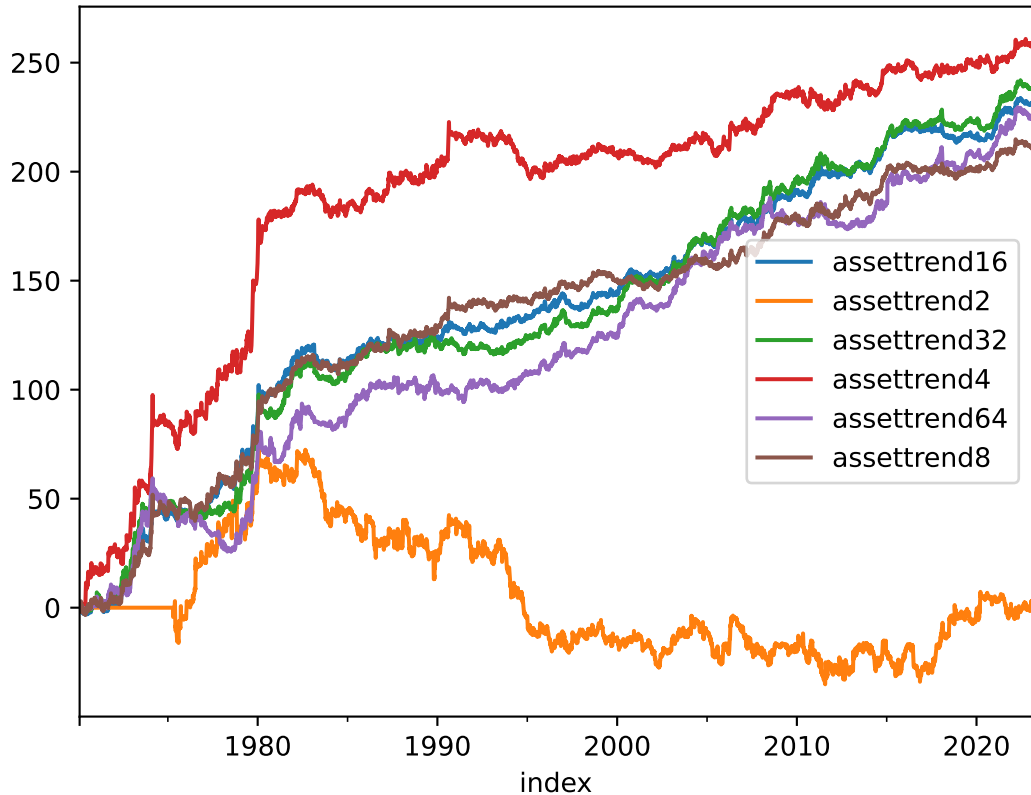


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.281, 'assettrend2': 0.052, 'assettrend32': 4.408, 'assettrend4': 4.784, 'assettrend64': 4.153, 'assettrend8': 3.902}

ann. std {'assettrend16': 4.646, 'assettrend2': 10.023, 'assettrend32': 4.872, 'assettrend4': 7.342, 'assettrend64': 5.453, 'assettrend8': 5.023}

ann. SR {'assettrend16': 0.92, 'assettrend2': 0.01, 'assettrend32': 0.9, 'assettrend4': 0.65, 'assettrend64': 0.76, 'assettrend8': 0.78}

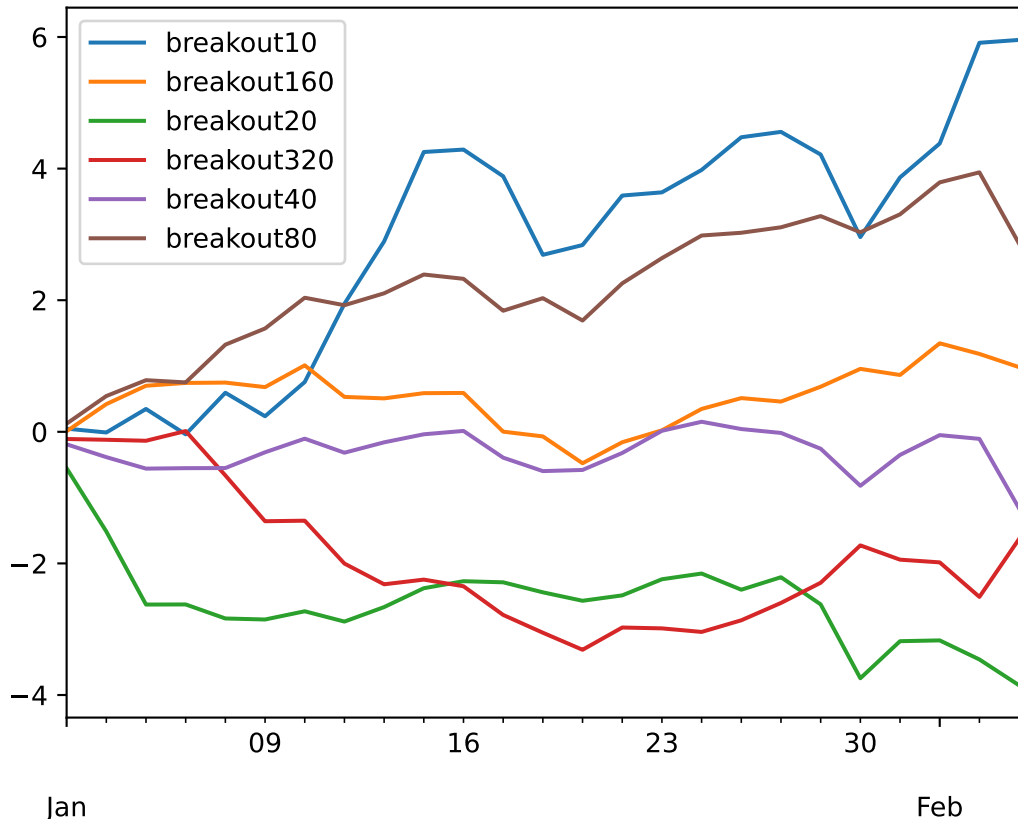


Total Trading Rule P&L for period 'YTD'

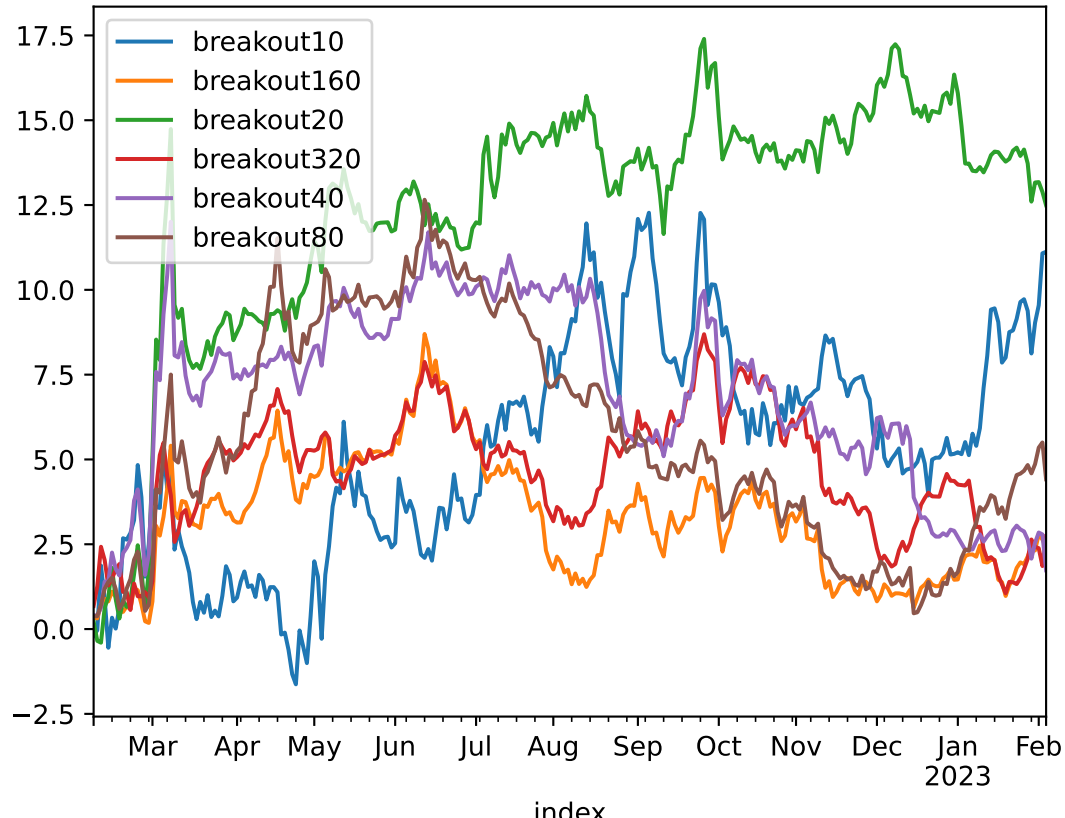
ann. mean {'breakout10': 60.988, 'breakout160': 10.061, 'breakout20': -39.45, 'breakout320': -16.673, 'breakout40': -11.916, 'breakout80': 29.276}

ann. std {'breakout10': 11.075, 'breakout160': 4.36, 'breakout20': 6.769, 'breakout320': 6.085, 'breakout40': 5.128, 'breakout80': 5.881}

ann. SR {'breakout10': 5.51, 'breakout160': 2.31, 'breakout20': -5.83, 'breakout320': -2.74, 'breakout40': -2.32, 'breakout80': 4.98}

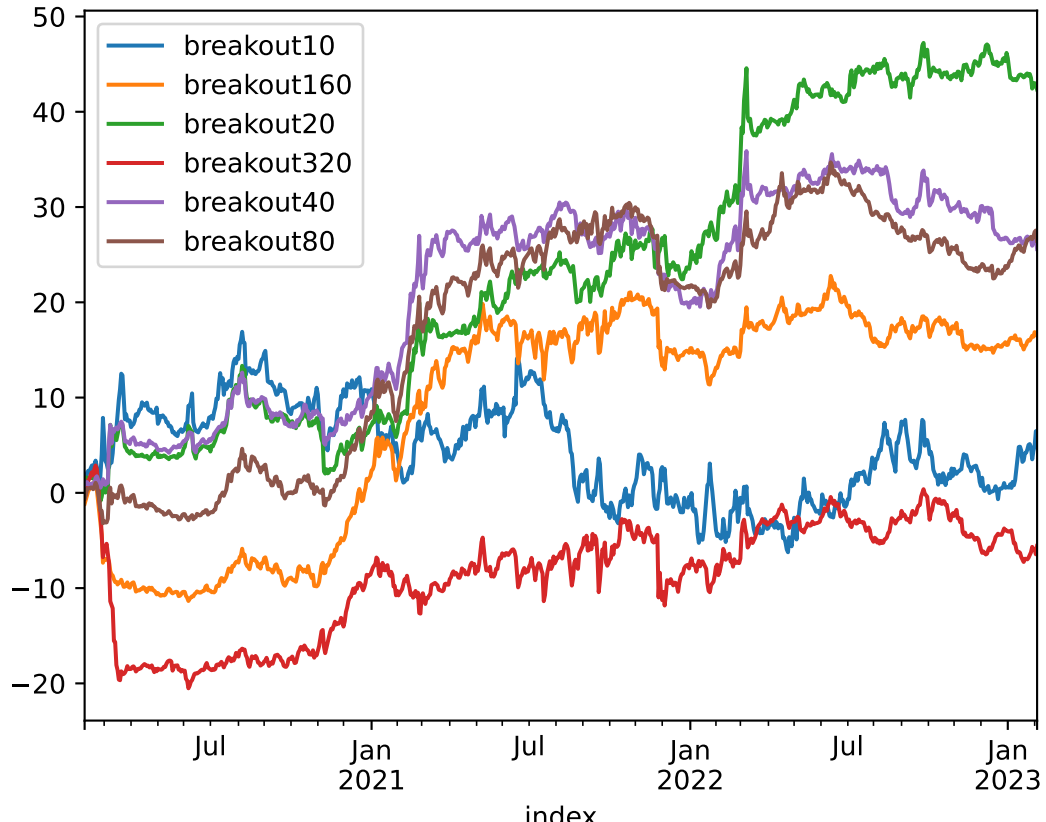


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ann. mean {'breakout10': 10.95, 'breakout160': 2.398, 'breakout20': 12.302, 'breakout320': 2.697, 'breakout40': 1.706, 'breakout80': 4.348}
ann. std {'breakout10': 12.821, 'breakout160': 6.868, 'breakout20': 11.585, 'breakout320': 7.059, 'breakout40': 9.292, 'breakout80': 7.908}
ann. SR {'breakout10': 0.85, 'breakout160': 0.35, 'breakout20': 1.06, 'breakout320': 0.38, 'breakout40': 0.18, 'breakout80': 0.55}
```



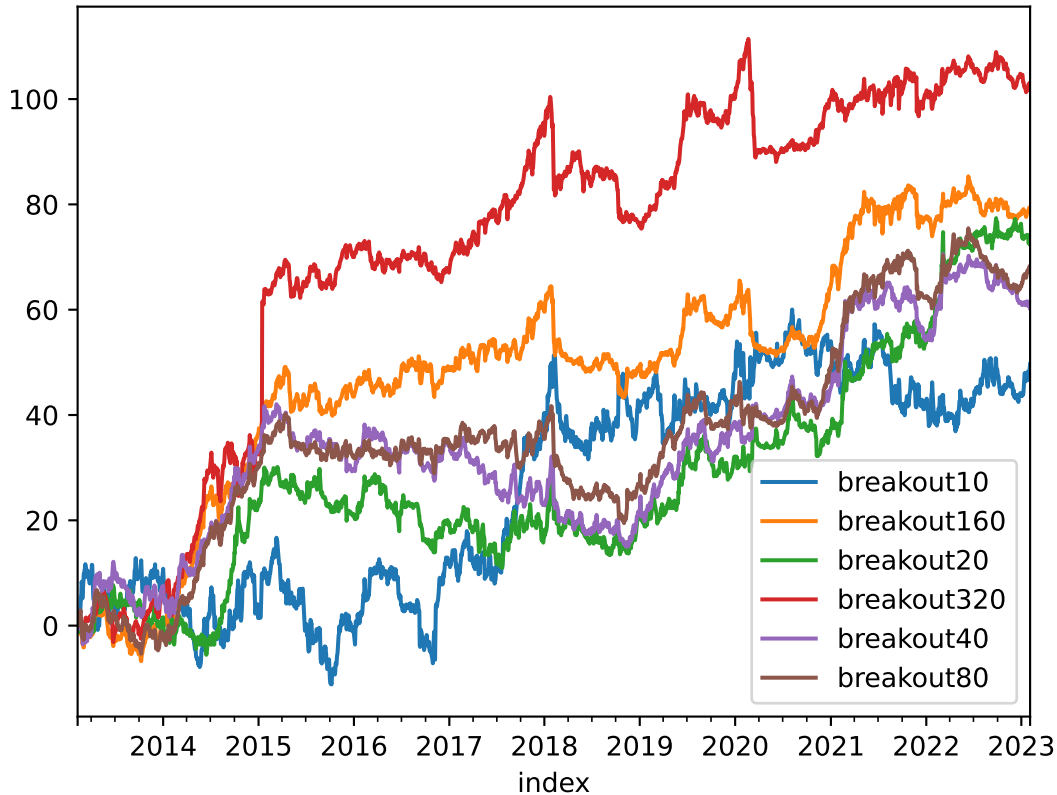
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 2.136, 'breakout160': 5.411, 'breakout20': 13.874, 'breakout320': -1.826, 'breakout40': 8.39, 'breakout80': 8.671}
ann. std {'breakout10': 13.951, 'breakout160': 9.489, 'breakout20': 11.391, 'breakout320': 10.591, 'breakout40': 9.903, 'breakout80': 9.253}
ann. SR {'breakout10': 0.15, 'breakout160': 0.57, 'breakout20': 1.22, 'breakout320': -0.17, 'breakout40': 0.85, 'breakout80': 0.94}



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

ann. mean {'breakout10': 4.876, 'breakout160': 7.765, 'breakout20': 7.118, 'breakout320': 10.113, 'breakout40': 5.919, 'breakout80': 6.602}
ann. std {'breakout10': 15.687, 'breakout160': 9.096, 'breakout20': 11.155, 'breakout320': 13.333, 'breakout40': 9.734, 'breakout80': 8.991}
ann. SR {'breakout10': 0.31, 'breakout160': 0.85, 'breakout20': 0.64, 'breakout320': 0.76, 'breakout40': 0.61, 'breakout80': 0.73}

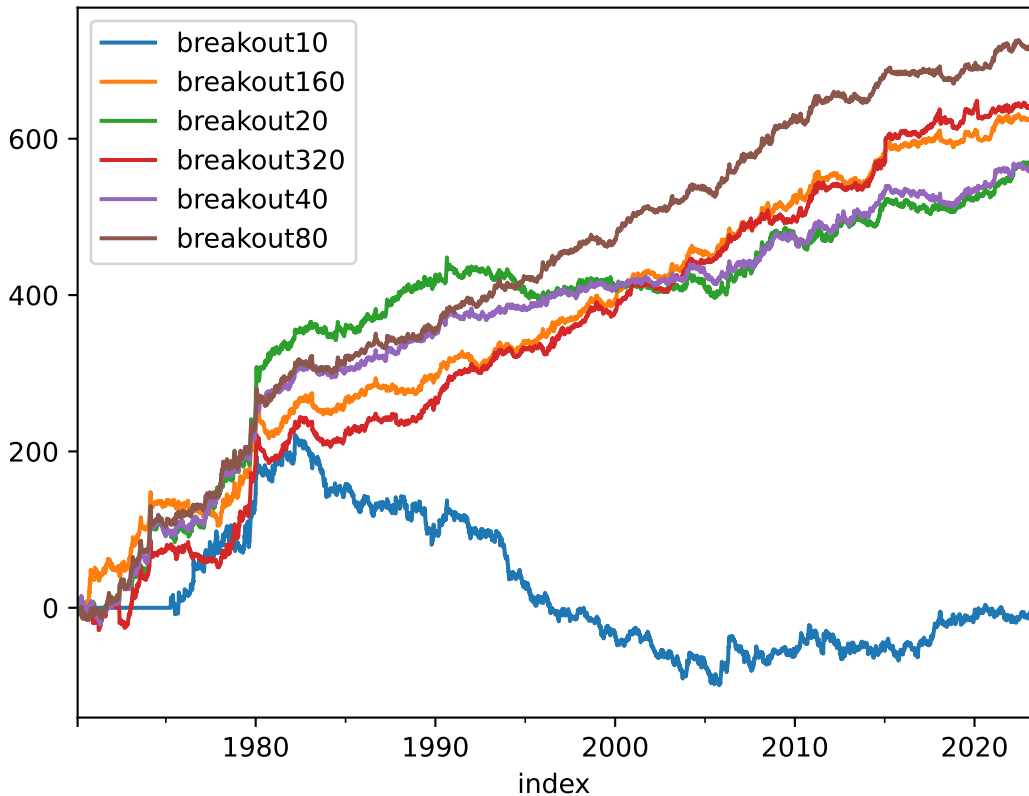


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.12, 'breakout160': 11.573, 'breakout20': 10.463, 'breakout320': 11.851, 'breakout40': 10.33, 'breakout80': 13.294}

ann. std {'breakout10': 20.775, 'breakout160': 12.463, 'breakout20': 16.042, 'breakout320': 13.019, 'breakout40': 13.2, 'breakout80': 12.719}

ann. SR {'breakout10': -0.01, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.05}

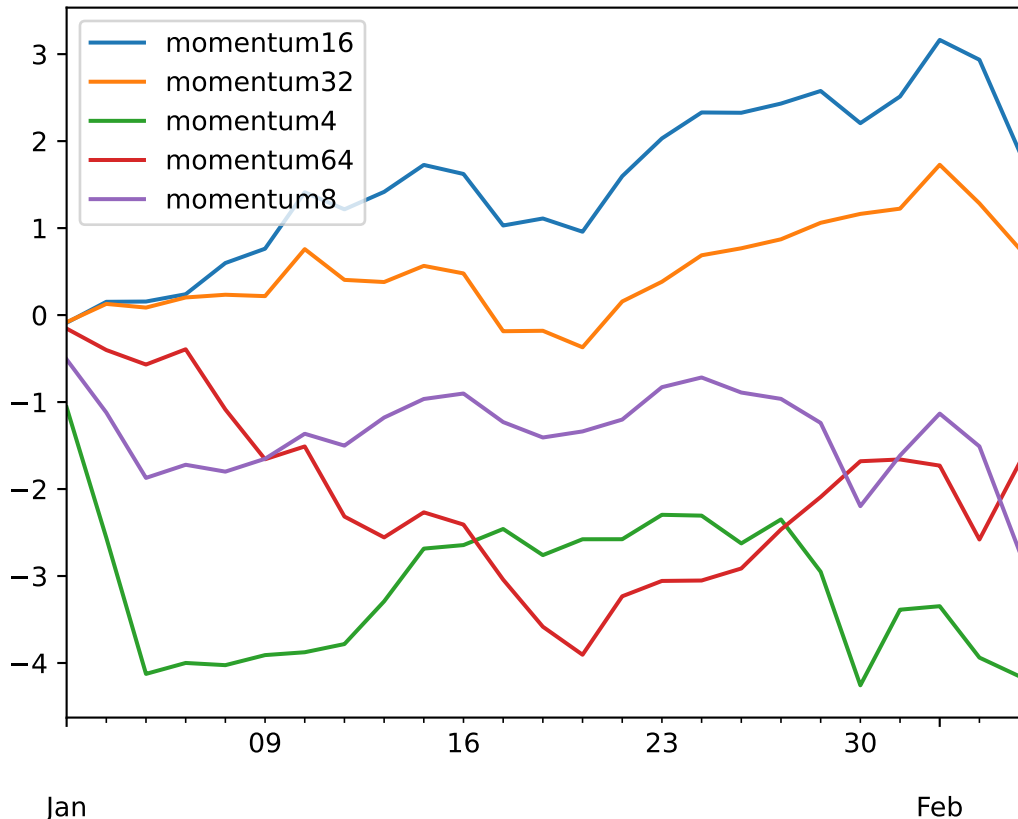


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 19.352, 'momentum32': 7.87, 'momentum4': -42.51, 'momentum64': -17.505, 'momentum8': -27.706}

ann. std {'momentum16': 6.19, 'momentum32': 4.831, 'momentum4': 10.022, 'momentum64': 7.273, 'momentum8': 7.078}

ann. SR {'momentum16': 3.13, 'momentum32': 1.63, 'momentum4': -4.24, 'momentum64': -2.41, 'momentum8': -3.91}

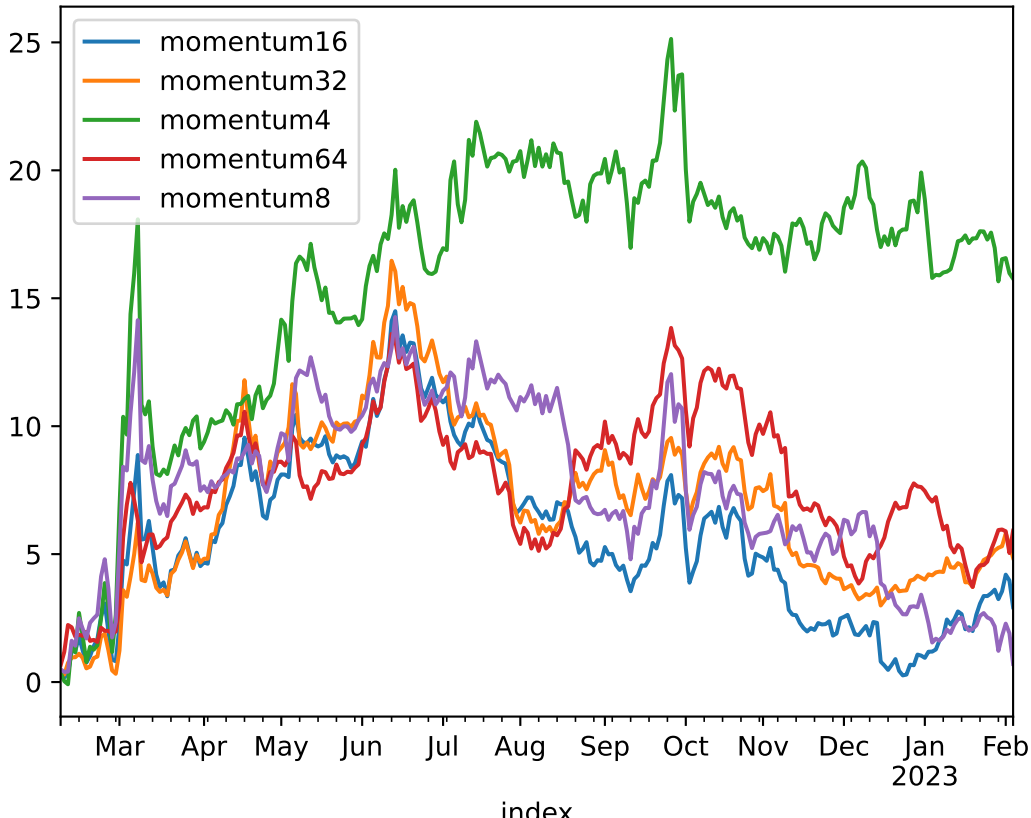


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.879, 'momentum32': 4.777, 'momentum4': 15.522, 'momentum64': 5.822, 'momentum8': 0.699}

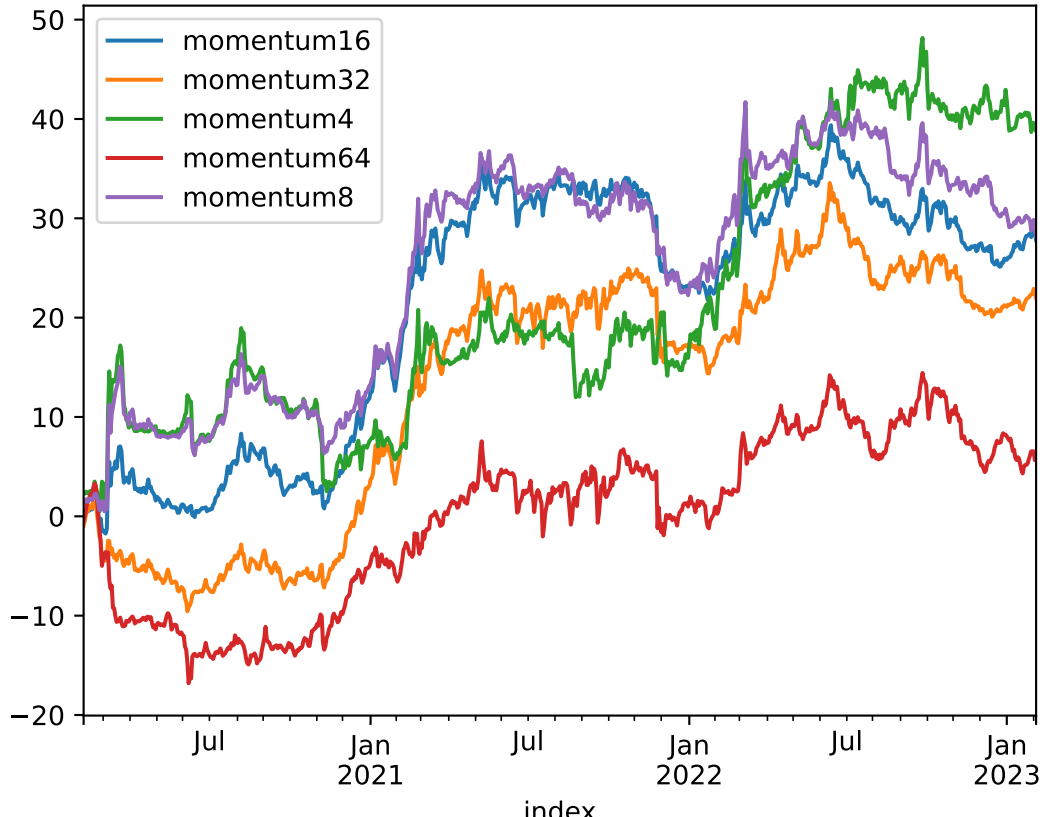
ann. std {'momentum16': 9.992, 'momentum32': 9.519, 'momentum4': 16.86, 'momentum64': 9.273, 'momentum8': 12.787}

ann. SR {'momentum16': 0.29, 'momentum32': 0.5, 'momentum4': 0.92, 'momentum64': 0.63, 'momentum8': 0.05}



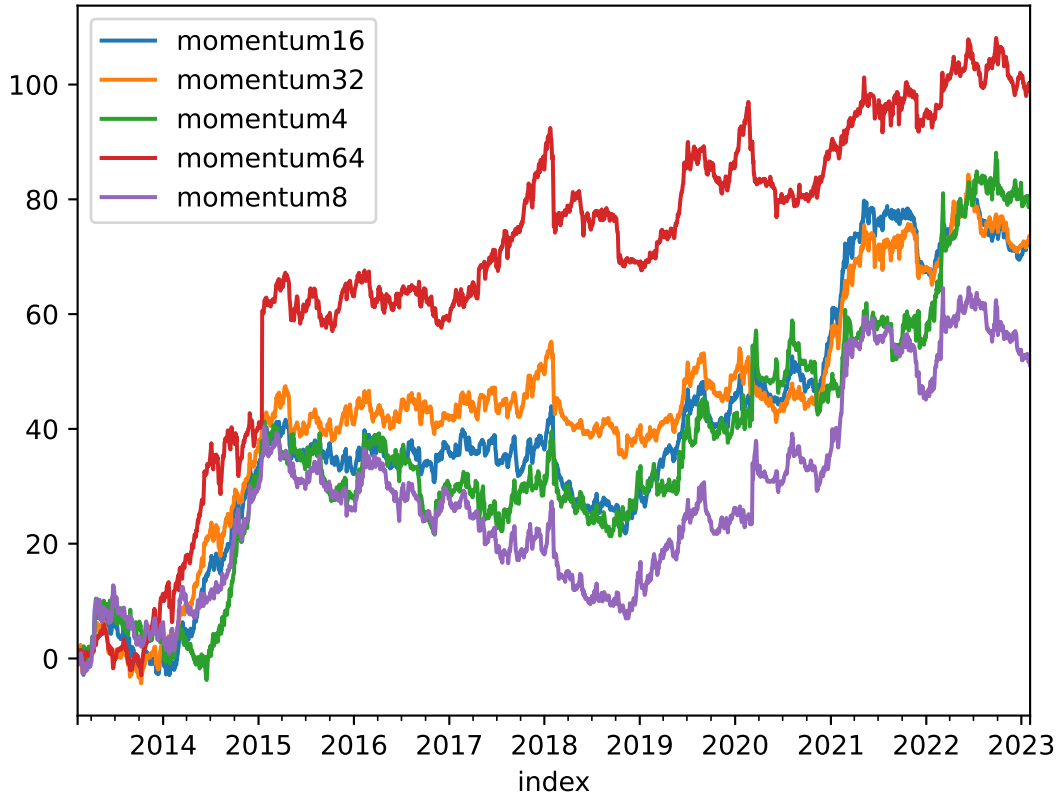
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 9.111, 'momentum32': 7.192, 'momentum4': 12.715, 'momentum64': 2.134, 'momentum8': 9.264}
ann. std {'momentum16': 10.846, 'momentum32': 10.654, 'momentum4': 15.912, 'momentum64': 10.861, 'momentum8': 12.72}
ann. SR {'momentum16': 0.84, 'momentum32': 0.68, 'momentum4': 0.8, 'momentum64': 0.2, 'momentum8': 0.73}



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

ann. mean {'momentum16': 7.083, 'momentum32': 7.138, 'momentum4': 7.733, 'momentum64': 9.839, 'momentum8': 5.019}
ann. std {'momentum16': 9.914, 'momentum32': 9.475, 'momentum4': 13.687, 'momentum64': 12.014, 'momentum8': 11.27}
ann. SR {'momentum16': 0.71, 'momentum32': 0.75, 'momentum4': 0.56, 'momentum64': 0.82, 'momentum8': 0.45}

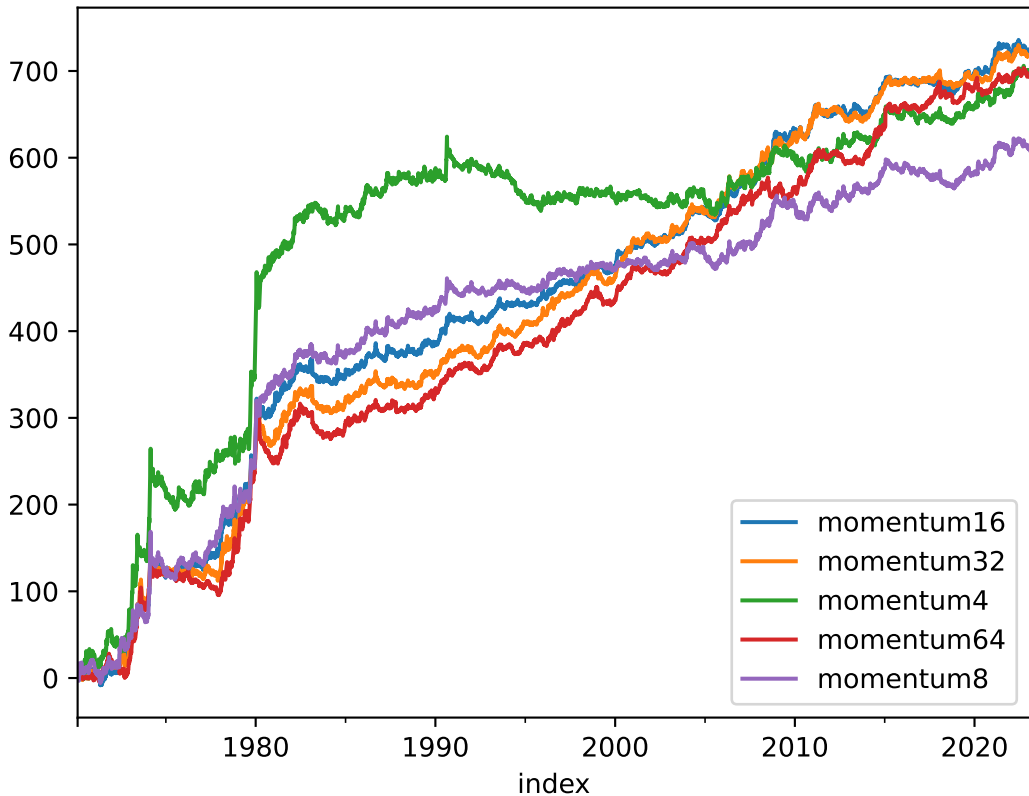


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.408, 'momentum32': 13.298, 'momentum4': 12.896, 'momentum64': 12.873, 'momentum8': 11.271}

ann. std {'momentum16': 14.188, 'momentum32': 13.81, 'momentum4': 20.048, 'momentum64': 13.445, 'momentum8': 15.834}

ann. SR {'momentum16': 0.95, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71}

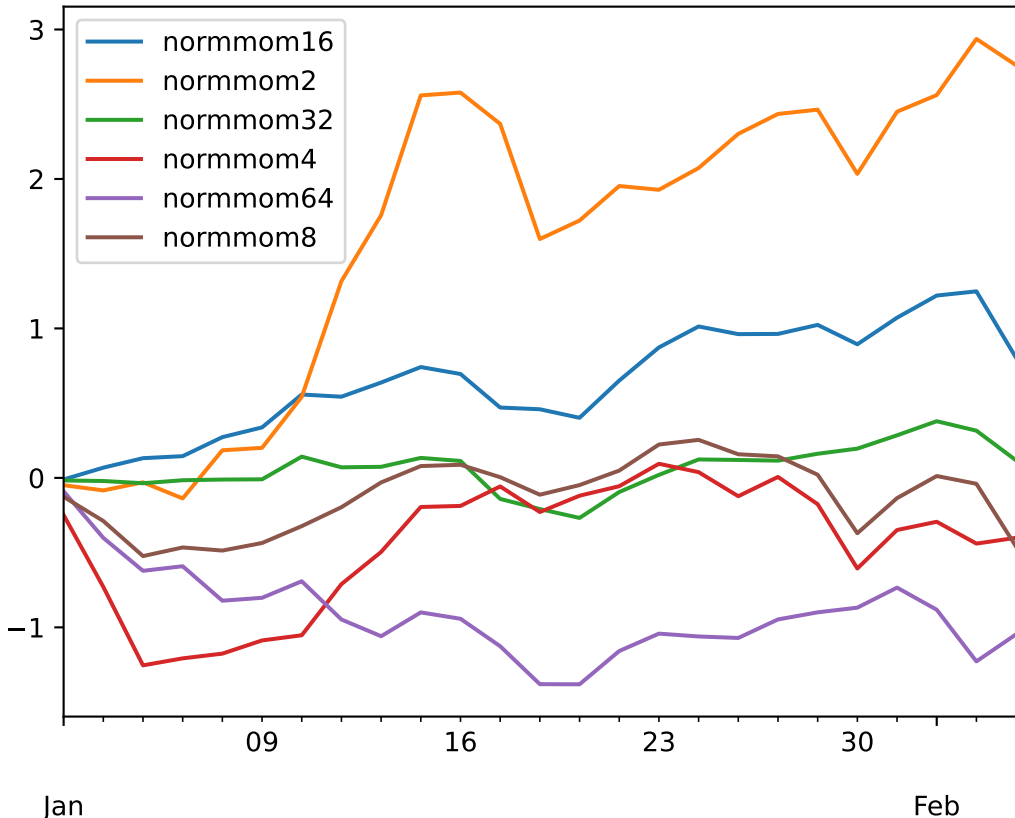


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 8.226, 'normmom2': 28.274, 'normmom32': 1.201, 'normmom4': -4.106, 'normmom64': -10.718, 'normmom8': -4.712}

ann. std {'normmom16': 2.391, 'normmom2': 5.379, 'normmom32': 1.542, 'normmom4': 3.679, 'normmom64': 2.642, 'normmom8': 2.661}

ann. SR {'normmom16': 3.44, 'normmom2': 5.26, 'normmom32': 0.78, 'normmom4': -1.12, 'normmom64': -4.06, 'normmom8': -1.77}

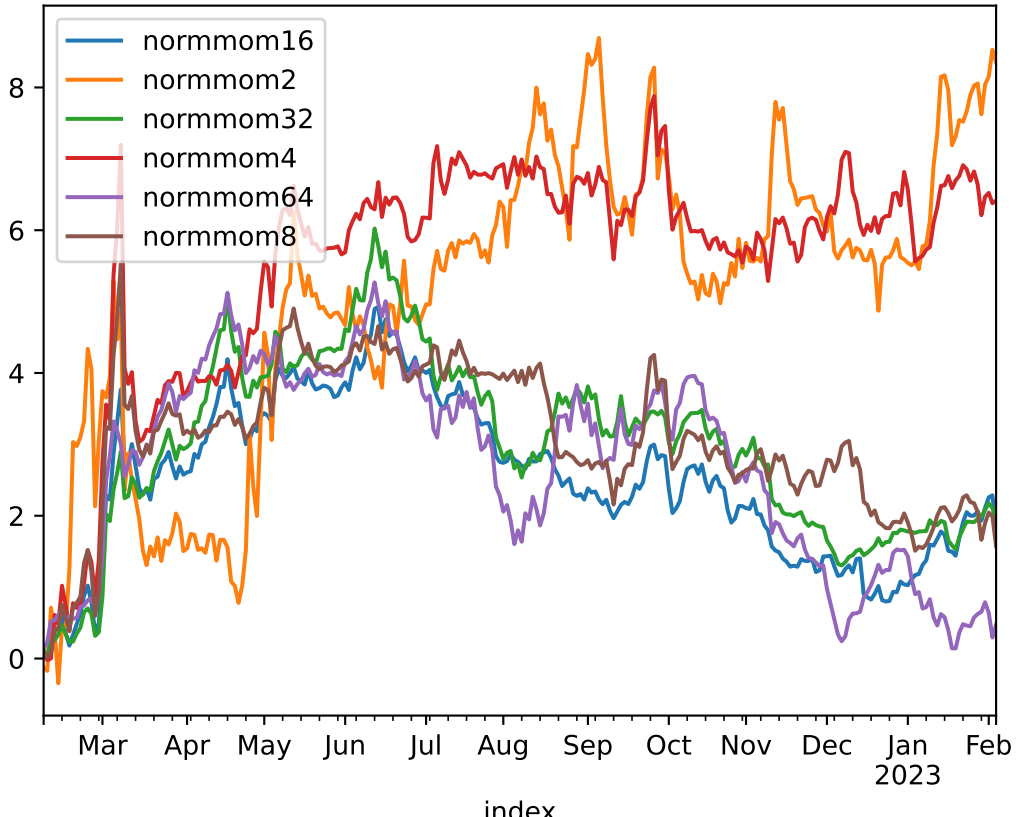


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 1.813, 'normmom2': 8.224, 'normmom32': 1.883, 'normmom4': 6.317, 'normmom64': 0.469, 'normmom8': 1.548}

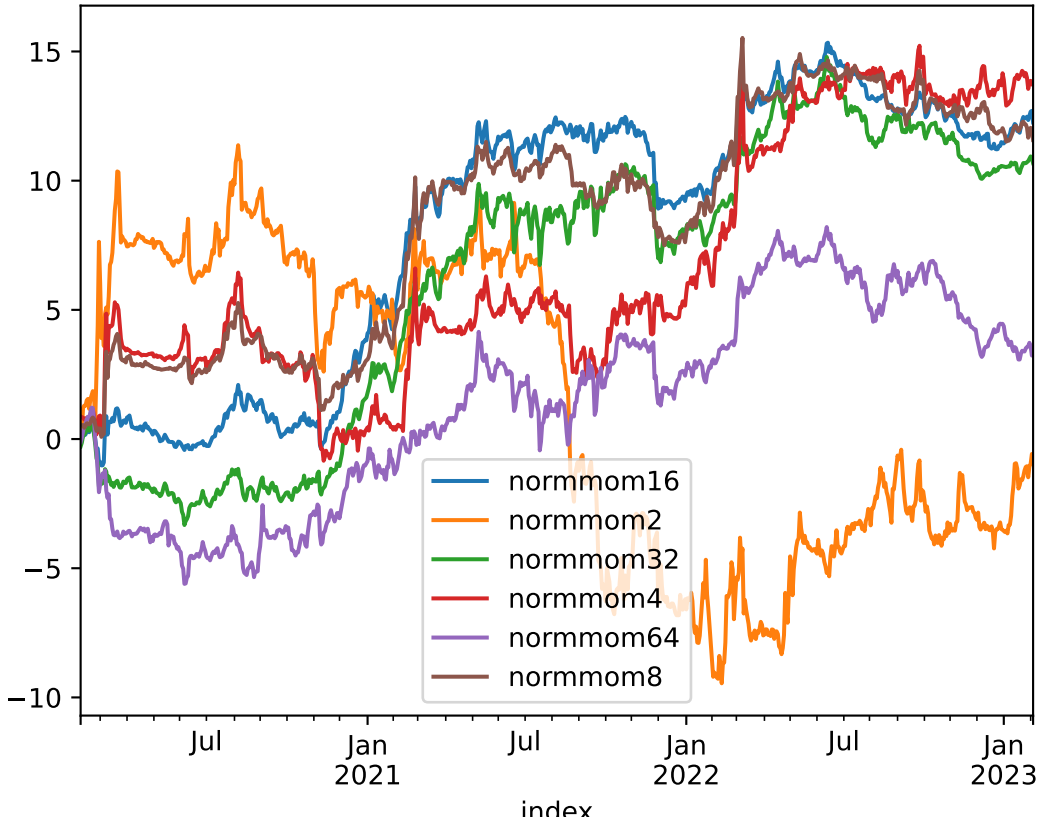
ann. std {'normmom16': 3.099, 'normmom2': 7.603, 'normmom32': 3.055, 'normmom4': 5.837, 'normmom64': 3.393, 'normmom8': 4.121}

ann. SR {'normmom16': 0.58, 'normmom2': 1.08, 'normmom32': 0.62, 'normmom4': 1.08, 'normmom64': 0.14, 'normmom8': 0.38}



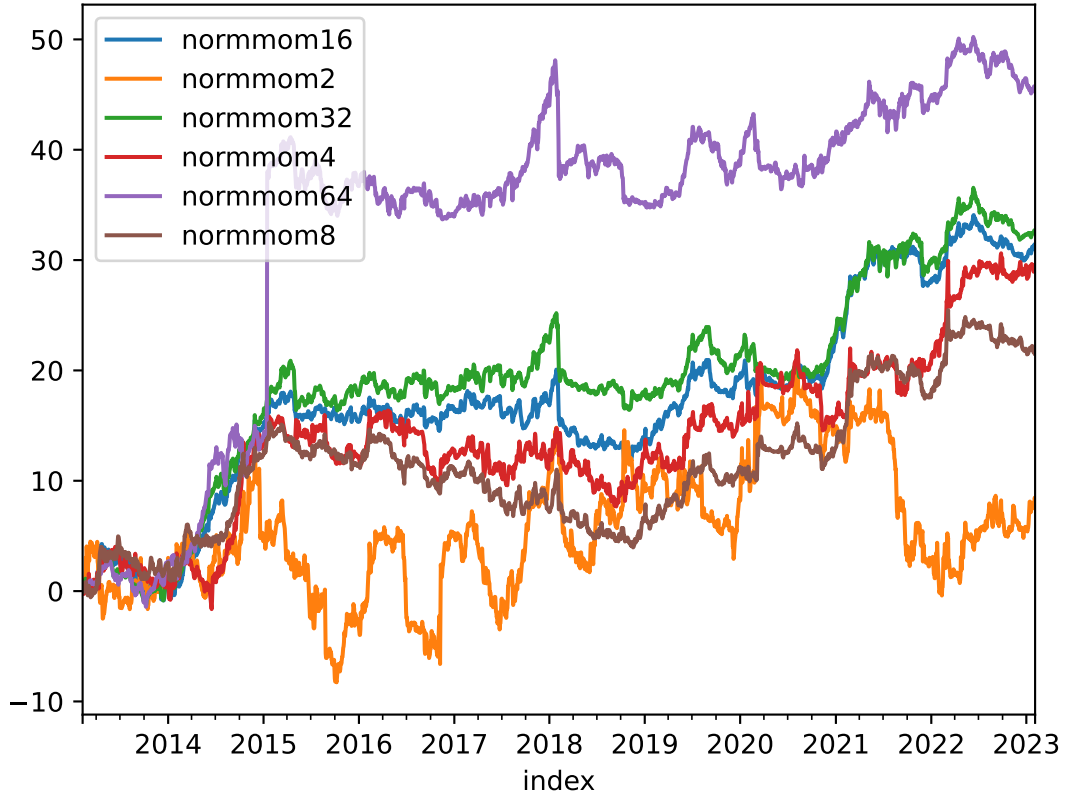
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 4.017, 'normmom2': -0.247, 'normmom32': 3.5, 'normmom4': 4.509, 'normmom64': 1.118, 'normmom8': 3.793}
ann. std {'normmom16': 3.628, 'normmom2': 8.211, 'normmom32': 3.968, 'normmom4': 5.707, 'normmom64': 4.291, 'normmom8': 4.204}
ann. SR {'normmom16': 1.11, 'normmom2': -0.03, 'normmom32': 0.88, 'normmom4': 0.79, 'normmom64': 0.26, 'normmom8': 0.9}



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

ann. mean {'normmom16': 3.044, 'normmom2': 0.815, 'normmom32': 3.186, 'normmom4': 2.862, 'normmom64': 4.461, 'normmom8': 2.113}
ann. std {'normmom16': 3.566, 'normmom2': 9.043, 'normmom32': 3.721, 'normmom4': 5.478, 'normmom64': 8.562, 'normmom8': 4.027}
ann. SR {'normmom16': 0.85, 'normmom2': 0.09, 'normmom32': 0.86, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.52}

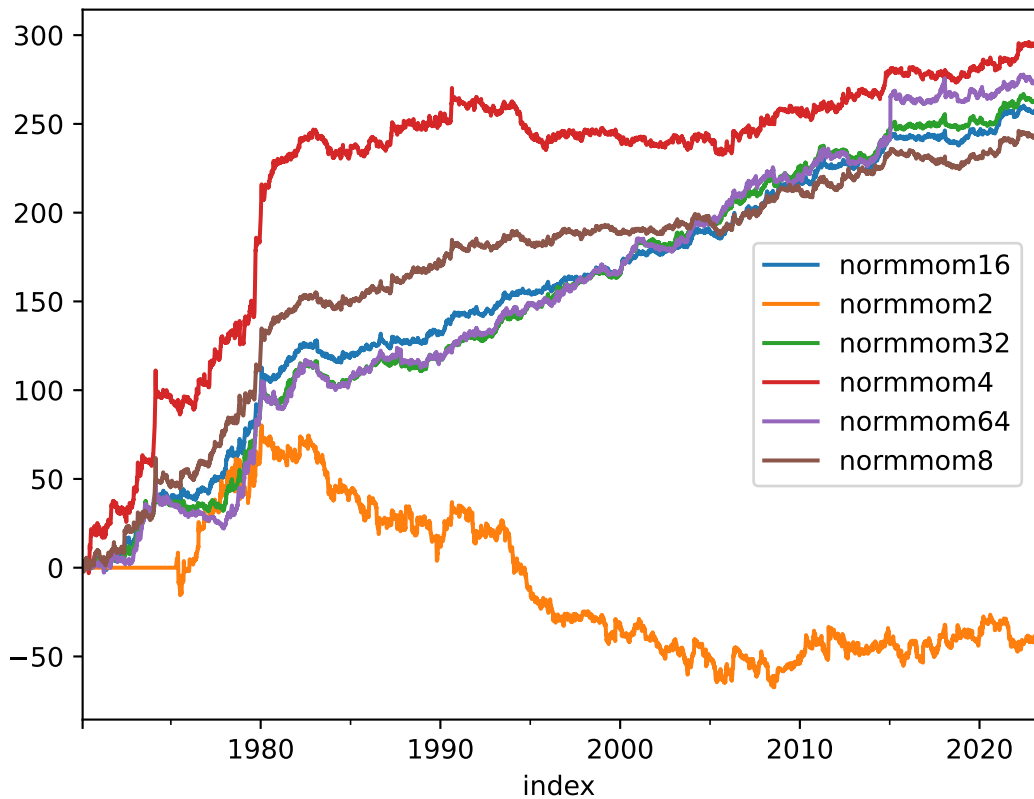


Total Trading Rule P&L for period '99Y'

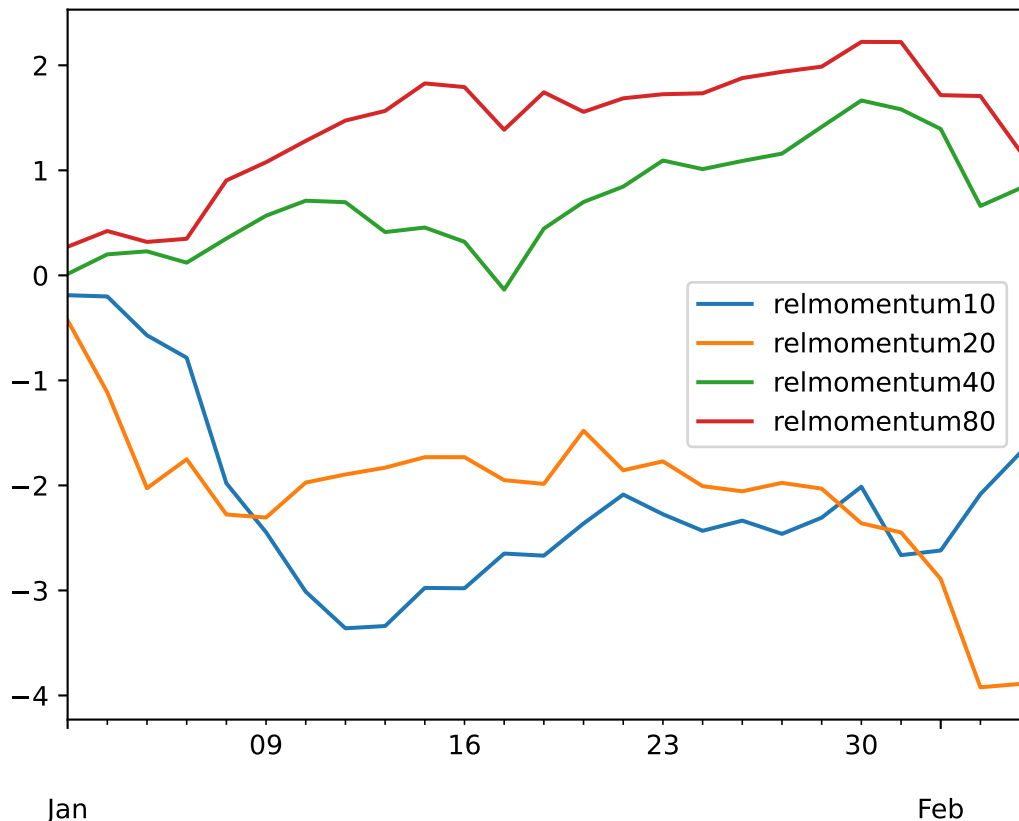
ann. mean {'normmom16': 4.762, 'normmom2': -0.714, 'normmom32': 4.865, 'normmom4': 5.456, 'normmom64': 5.054, 'normmom8': 4.483}

ann. std {'normmom16': 4.909, 'normmom2': 11.173, 'normmom32': 4.975, 'normmom4': 8.309, 'normmom64': 6.292, 'normmom8': 5.914}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.66, 'normmom64': 0.8, 'normmom8': 0.76}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relmomentum10': -17.316, 'relmomentum20': -39.832, 'relmomentum40': 8.485, 'relmomentum80': 12.114}
ann. std {'relmomentum10': 6.255, 'relmomentum20': 5.901, 'relmomentum40': 4.244, 'relmomentum80': 4.009}
ann. SR {'relmomentum10': -2.77, 'relmomentum20': -6.75, 'relmomentum40': 2.0, 'relmomentum80': 3.02}

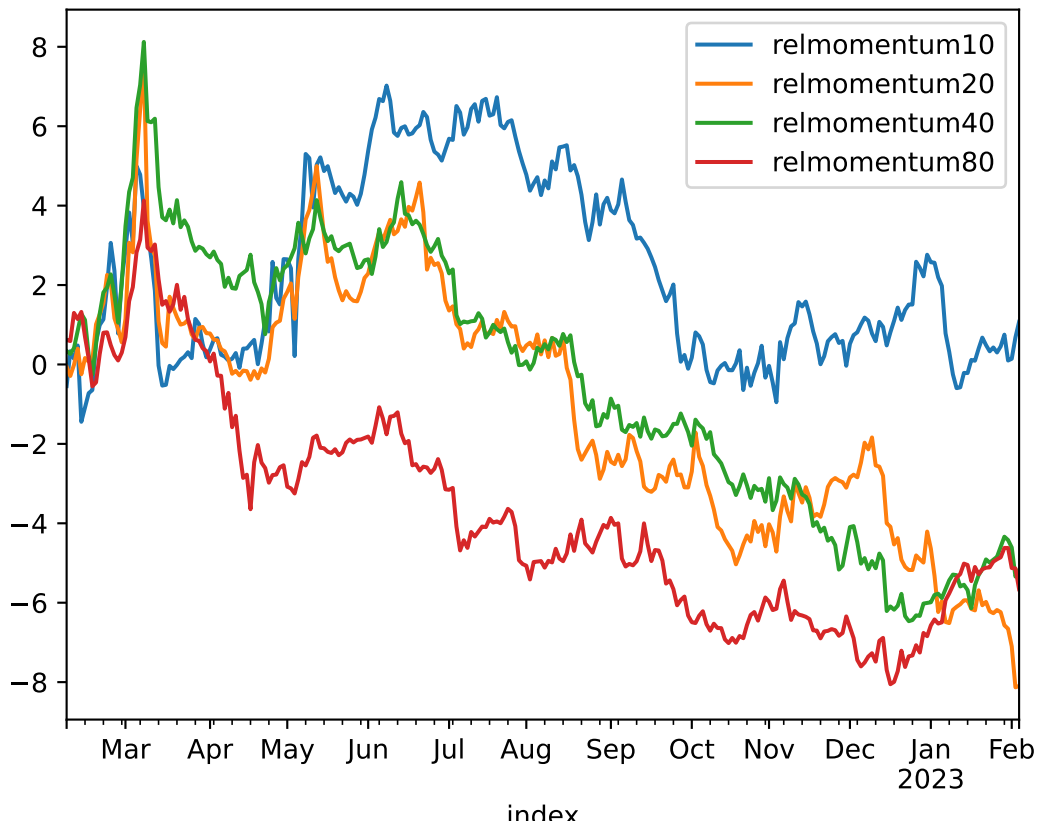


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.056, 'relmomentum20': -7.973, 'relmomentum40': -5.094, 'relmomentum80': -5.573}

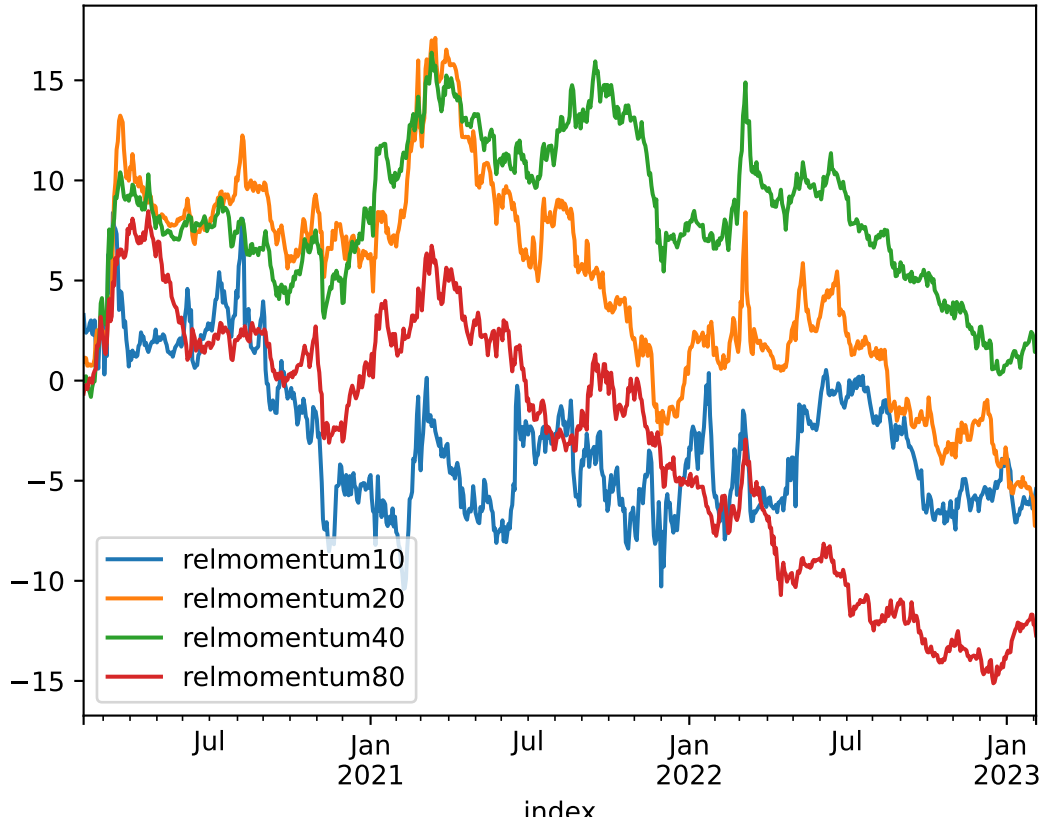
ann. std {'relmomentum10': 9.008, 'relmomentum20': 8.421, 'relmomentum40': 6.69, 'relmomentum80': 5.694}

ann. SR {'relmomentum10': 0.12, 'relmomentum20': -0.95, 'relmomentum40': -0.76, 'relmomentum80': -0.98}



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

ann. mean {'relmomentum10': -1.776, 'relmomentum20': -2.368, 'relmomentum40': 0.524, 'relmomentum80': -4.172}
ann. std {'relmomentum10': 12.35, 'relmomentum20': 8.912, 'relmomentum40': 7.432, 'relmomentum80': 6.873}
ann. SR {'relmomentum10': -0.14, 'relmomentum20': -0.27, 'relmomentum40': 0.07, 'relmomentum80': -0.61}

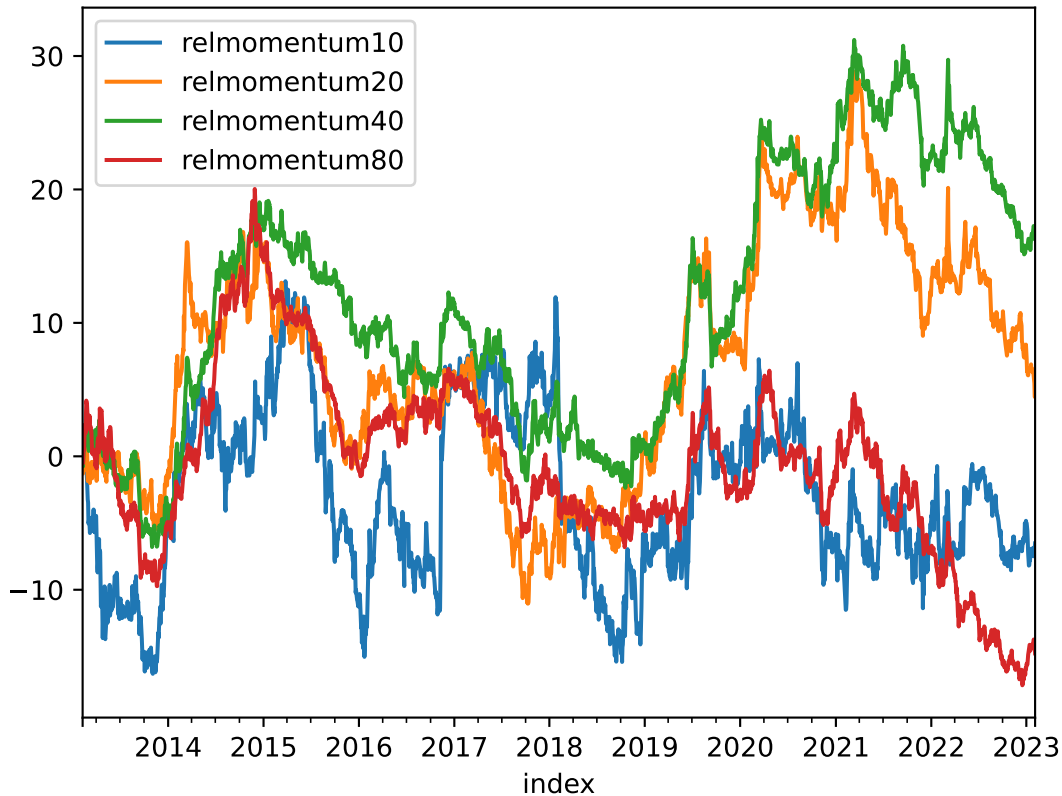


Total Trading Rule P&L for period '10Y'

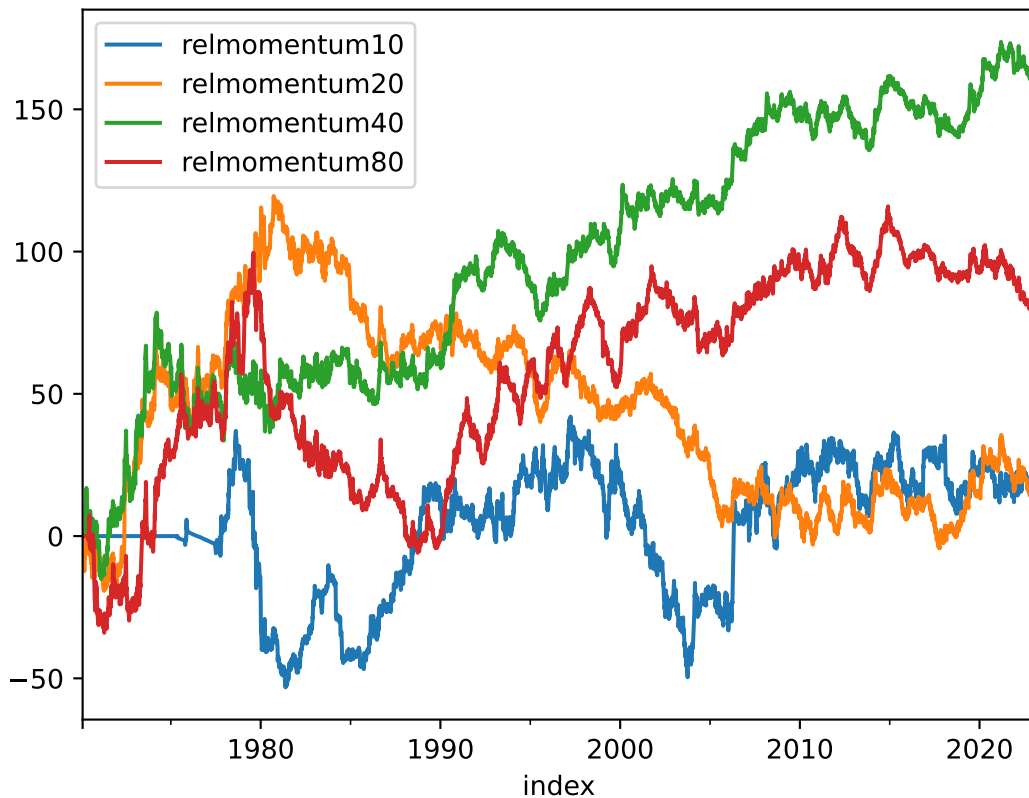
ann. mean {'relmomentum10': -0.641, 'relmomentum20': 0.44, 'relmomentum40': 1.613, 'relmomentum80': -1.45}

ann. std {'relmomentum10': 12.851, 'relmomentum20': 8.904, 'relmomentum40': 7.29, 'relmomentum80': 6.752}

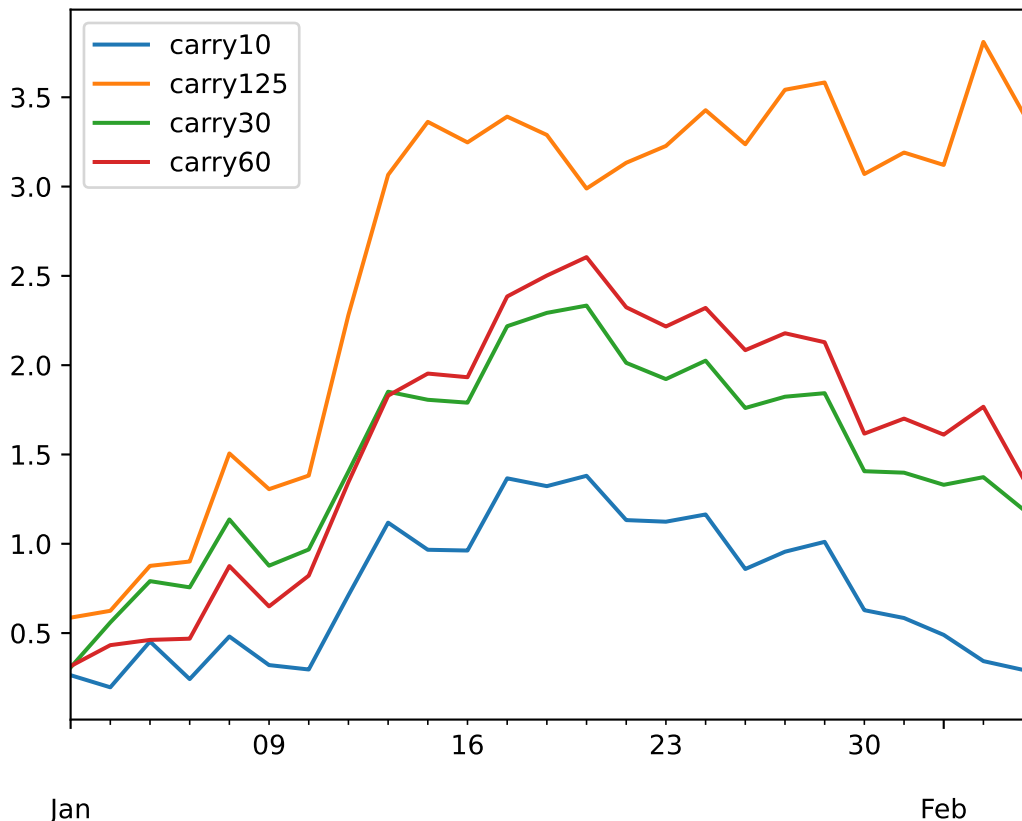
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.05, 'relmomentum40': 0.22, 'relmomentum80': -0.21}



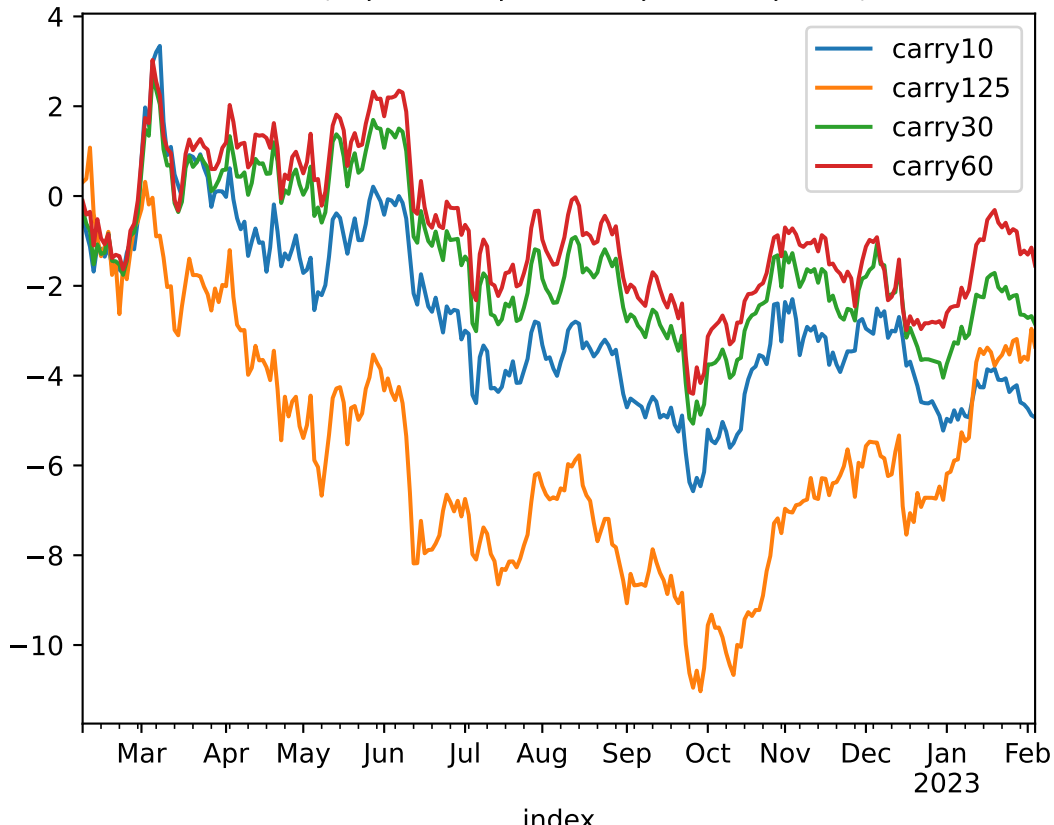
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': 0.31, 'relmomentum20': 0.207, 'relmomentum40': 2.942, 'relmomentum80': 1.501}
ann. std {'relmomentum10': 13.326, 'relmomentum20': 11.519, 'relmomentum40': 10.784, 'relmomentum80': 11.063}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



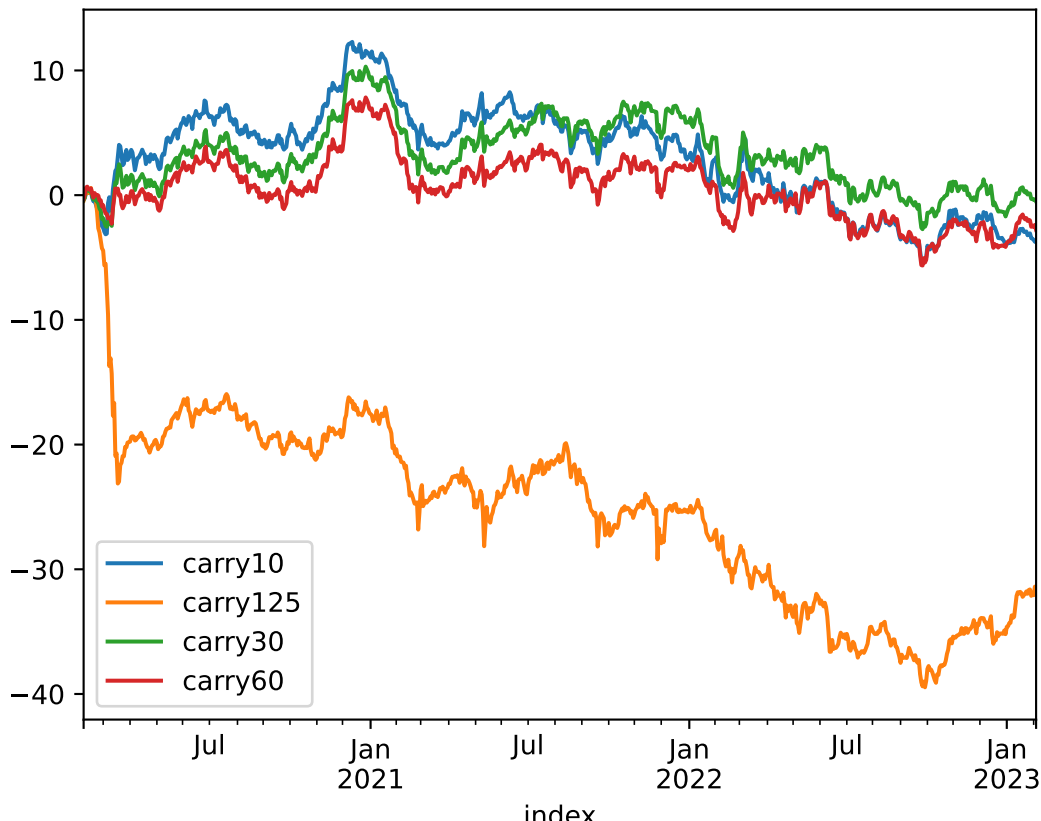
Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 3.011, 'carry125': 34.943, 'carry30': 12.216, 'carry60': 14.006}
ann. std {'carry10': 3.493, 'carry125': 5.767, 'carry30': 3.844, 'carry60': 4.218}
ann. SR {'carry10': 0.86, 'carry125': 6.06, 'carry30': 3.18, 'carry60': 3.32}



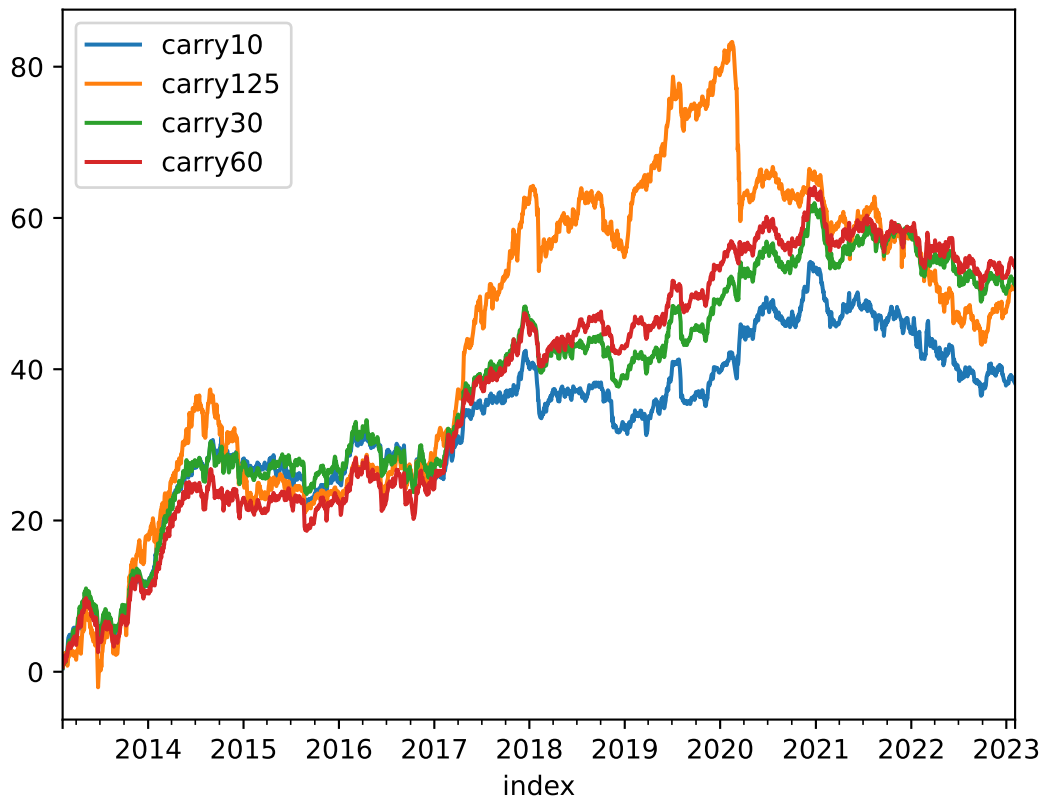
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -4.855, 'carry125': -3.303, 'carry30': -2.81, 'carry60': -1.524}
ann. std {'carry10': 6.65, 'carry125': 7.608, 'carry30': 6.37, 'carry60': 6.588}
ann. SR {'carry10': -0.73, 'carry125': -0.43, 'carry30': -0.44, 'carry60': -0.23}



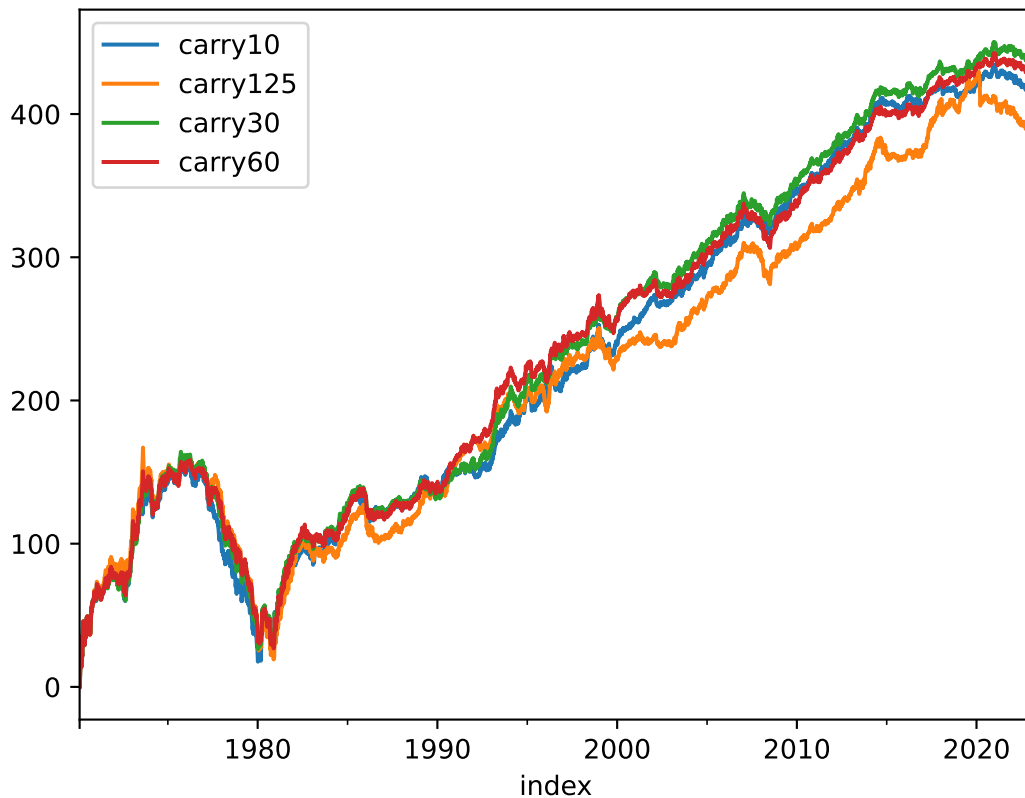
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': -1.24, 'carry125': -10.42, 'carry30': -0.168, 'carry60': -0.913}
ann. std {'carry10': 6.816, 'carry125': 9.391, 'carry30': 6.615, 'carry60': 6.562}
ann. SR {'carry10': -0.18, 'carry125': -1.11, 'carry30': -0.03, 'carry60': -0.14}



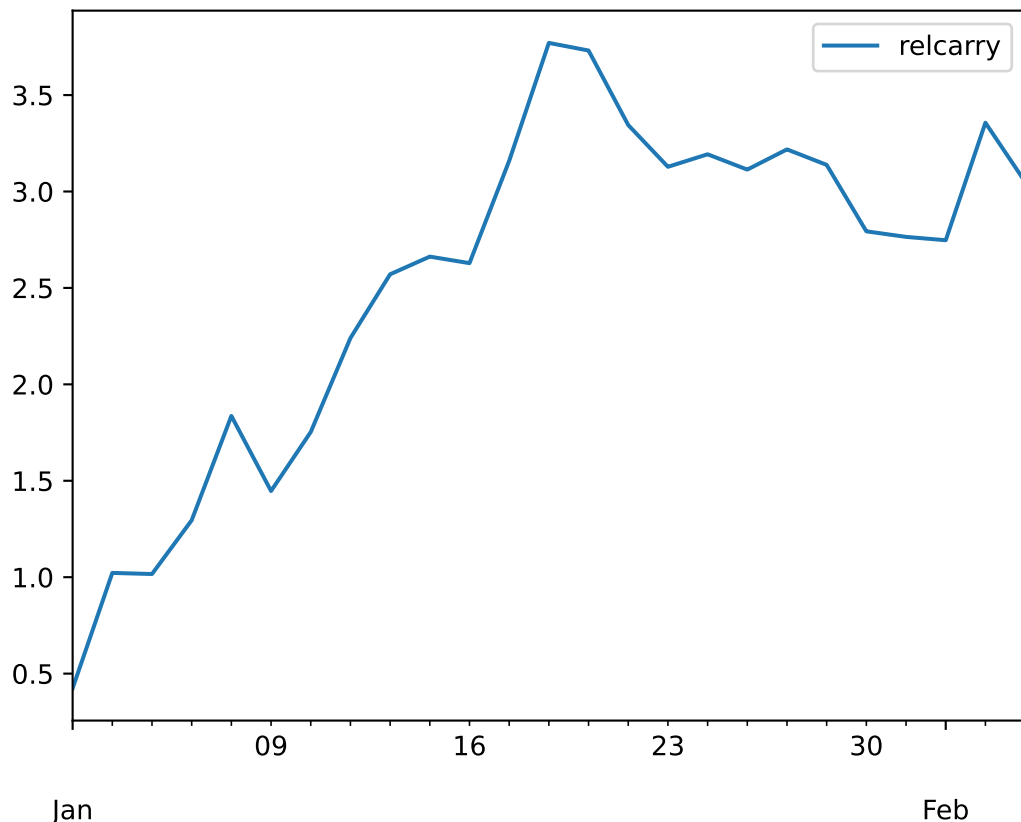
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.744, 'carry125': 4.999, 'carry30': 5.022, 'carry60': 5.251}
ann. std {'carry10': 6.424, 'carry125': 9.124, 'carry30': 6.526, 'carry60': 6.497}
ann. SR {'carry10': 0.58, 'carry125': 0.55, 'carry30': 0.77, 'carry60': 0.81}



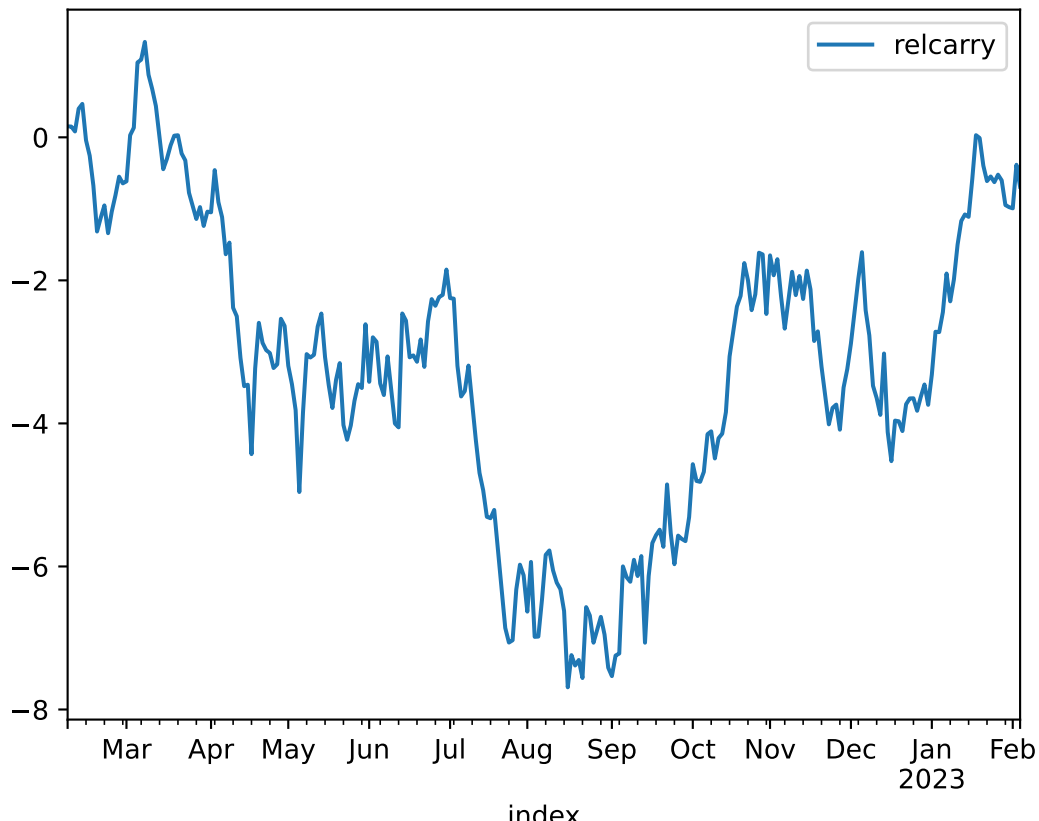
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.745, 'carry125': 7.352, 'carry30': 8.137, 'carry60': 7.995}
ann. std {'carry10': 11.831, 'carry125': 12.066, 'carry30': 11.842, 'carry60': 11.791}
ann. SR {'carry10': 0.65, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



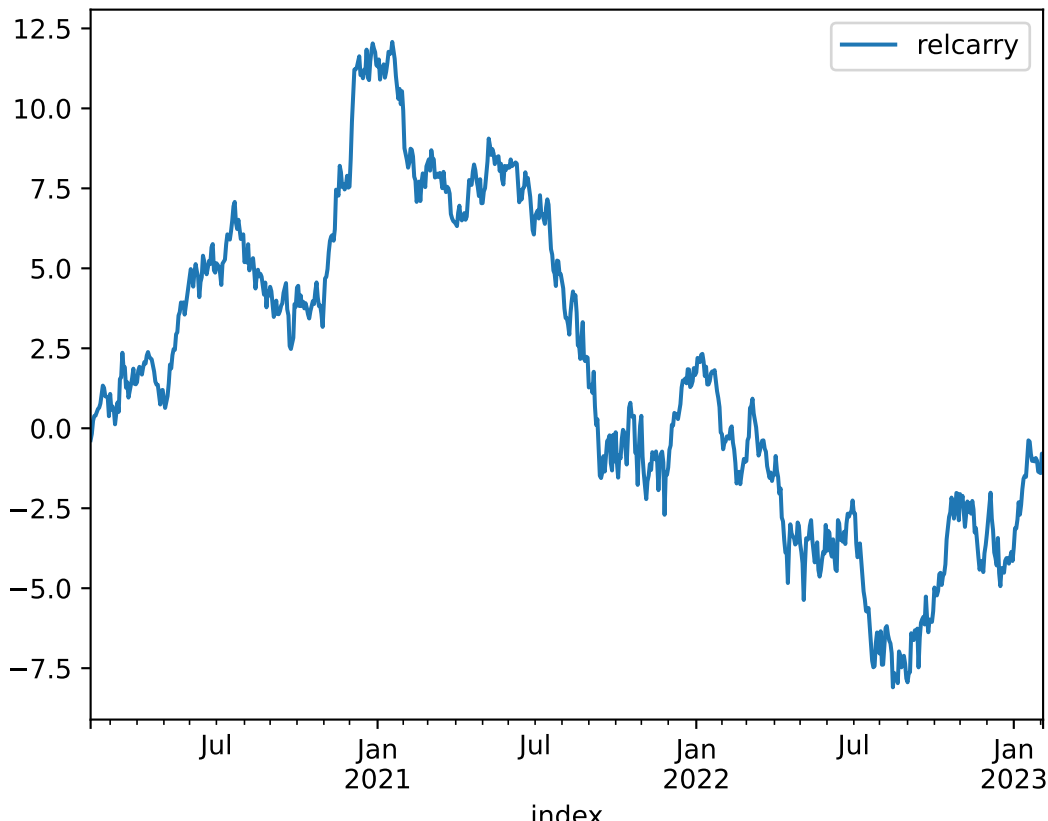
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 31.234}
ann. std {'relcarry': 5.27}
ann. SR {'relcarry': 5.93}



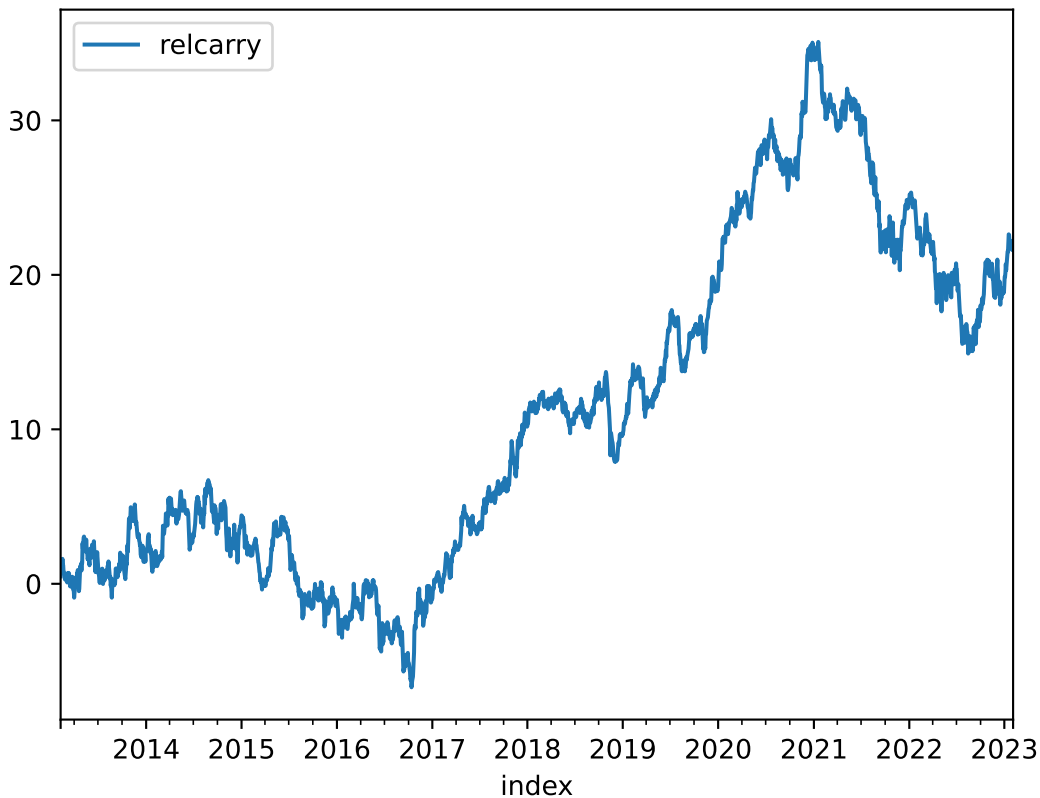
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -0.68}
ann. std {'relcarry': 7.231}
ann. SR {'relcarry': -0.09}



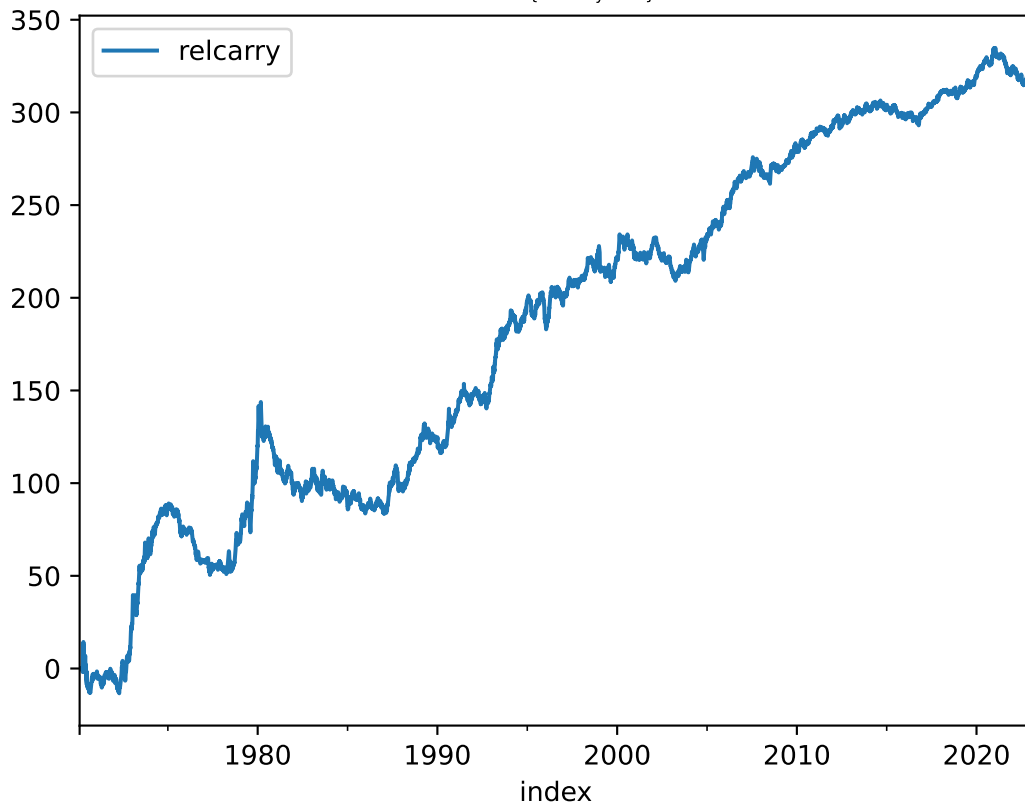
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.36}
ann. std {'relcarry': 6.849}
ann. SR {'relcarry': -0.05}



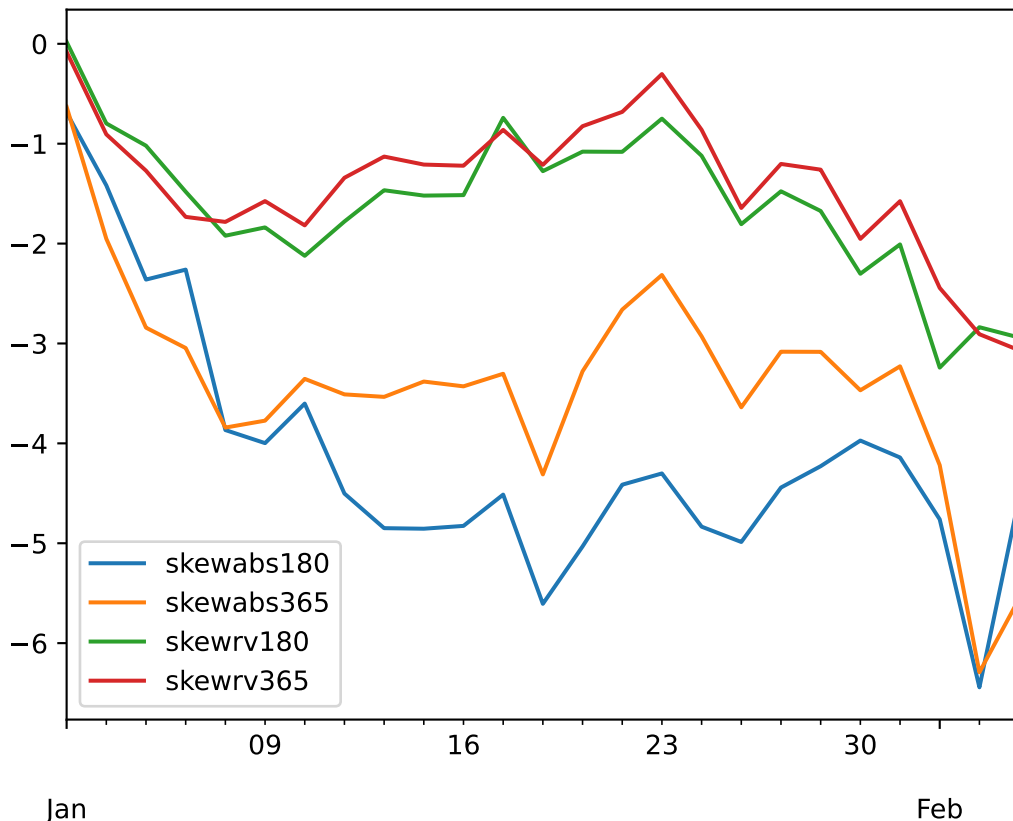
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.151}
ann. std {'relcarry': 6.016}
ann. SR {'relcarry': 0.36}



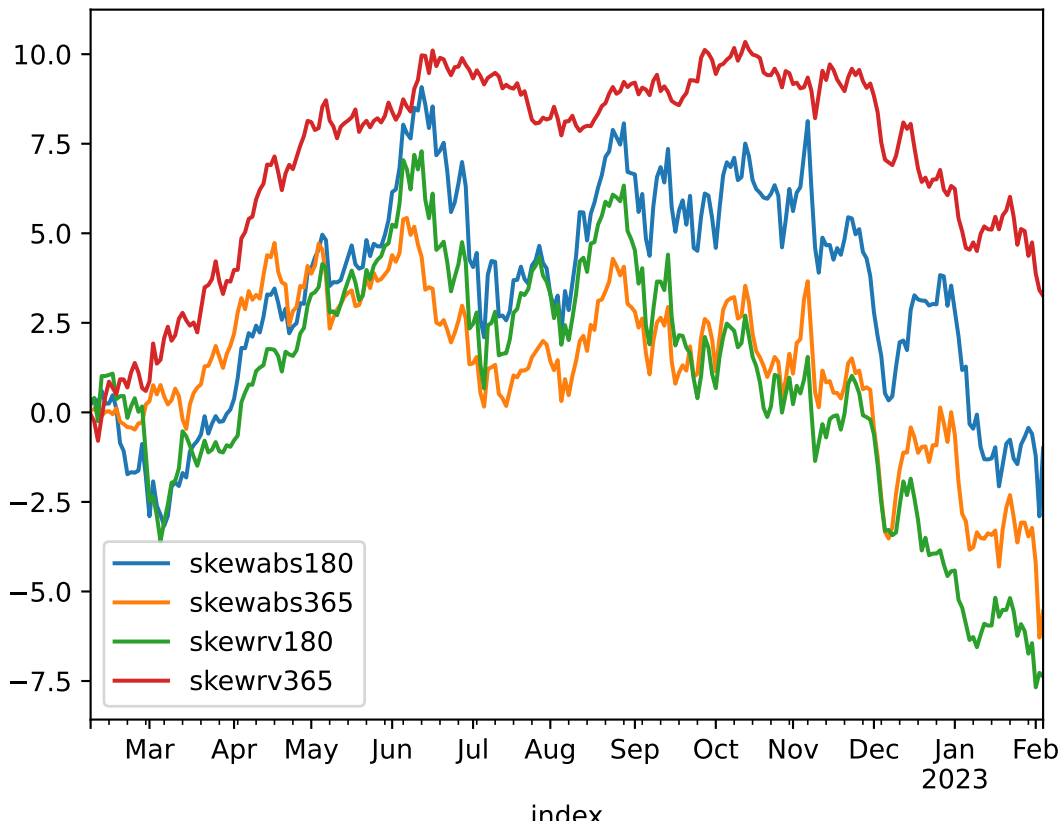
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.954}
ann. std {'relcarry': 9.883}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -46.534, 'skewabs365': -56.883, 'skewrv180': -30.111, 'skewrv365': -31.416}
ann. std {'skewabs180': 12.368, 'skewabs365': 11.512, 'skewrv180': 7.337, 'skewrv365': 6.808}
ann. SR {'skewabs180': -3.76, 'skewabs365': -4.94, 'skewrv180': -4.1, 'skewrv365': -4.61}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -0.988, 'skewabs365': -5.464, 'skewrv180': -7.261, 'skewrv365': 3.204}
ann. std {'skewabs180': 10.45, 'skewabs365': 8.658, 'skewrv180': 9.257, 'skewrv365': 5.323}
ann. SR {'skewabs180': -0.09, 'skewabs365': -0.63, 'skewrv180': -0.78, 'skewrv365': 0.6}

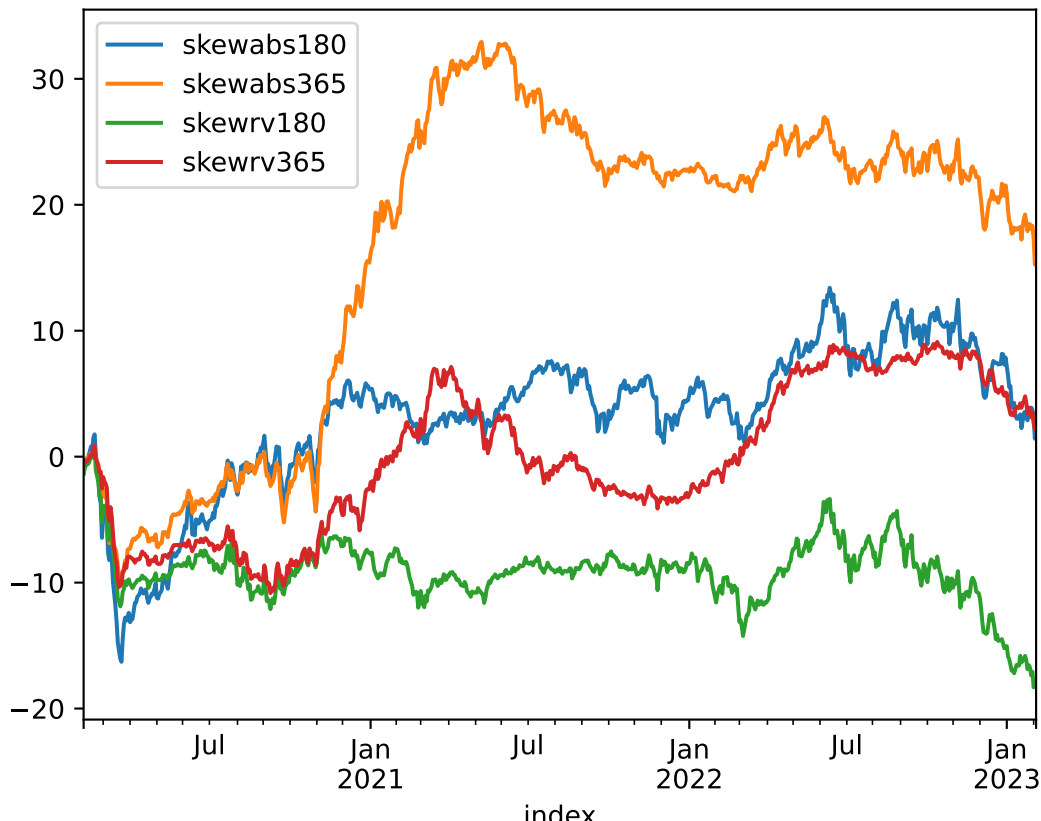


Total Trading Rule P&L for period '3Y'

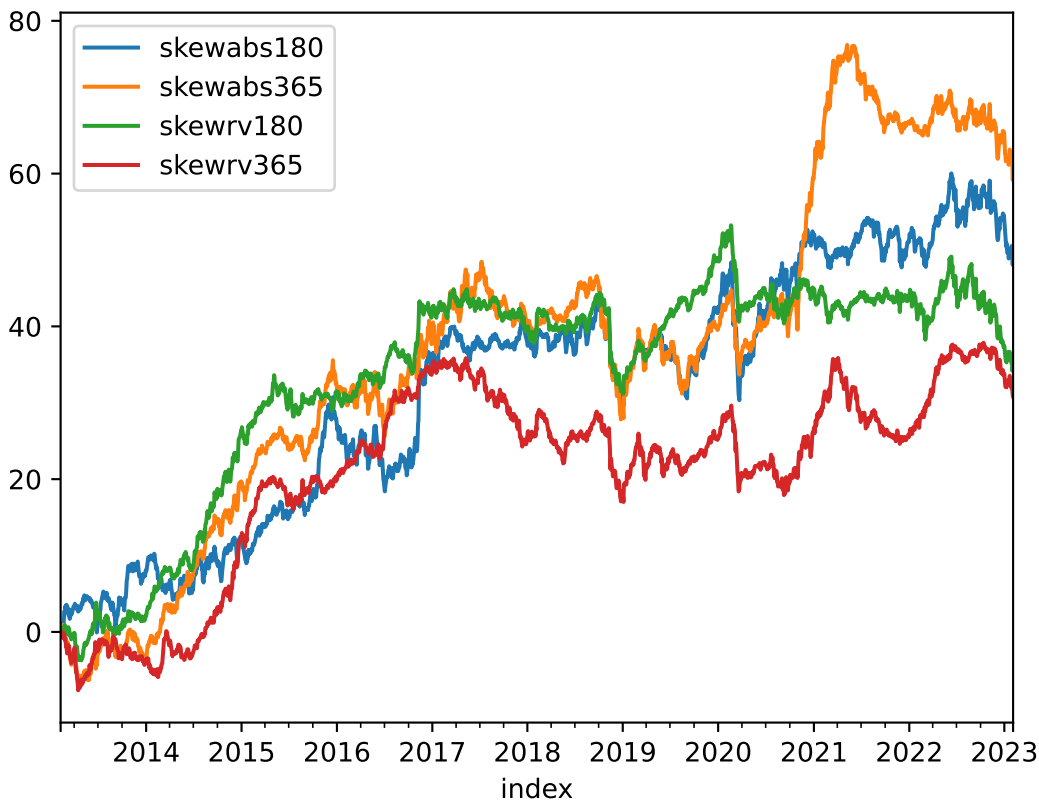
ann. mean {'skewabs180': 1.09, 'skewabs365': 5.241, 'skewrv180': -5.904, 'skewrv365': 0.664}

ann. std {'skewabs180': 9.729, 'skewabs365': 9.019, 'skewrv180': 7.791, 'skewrv365': 6.665}

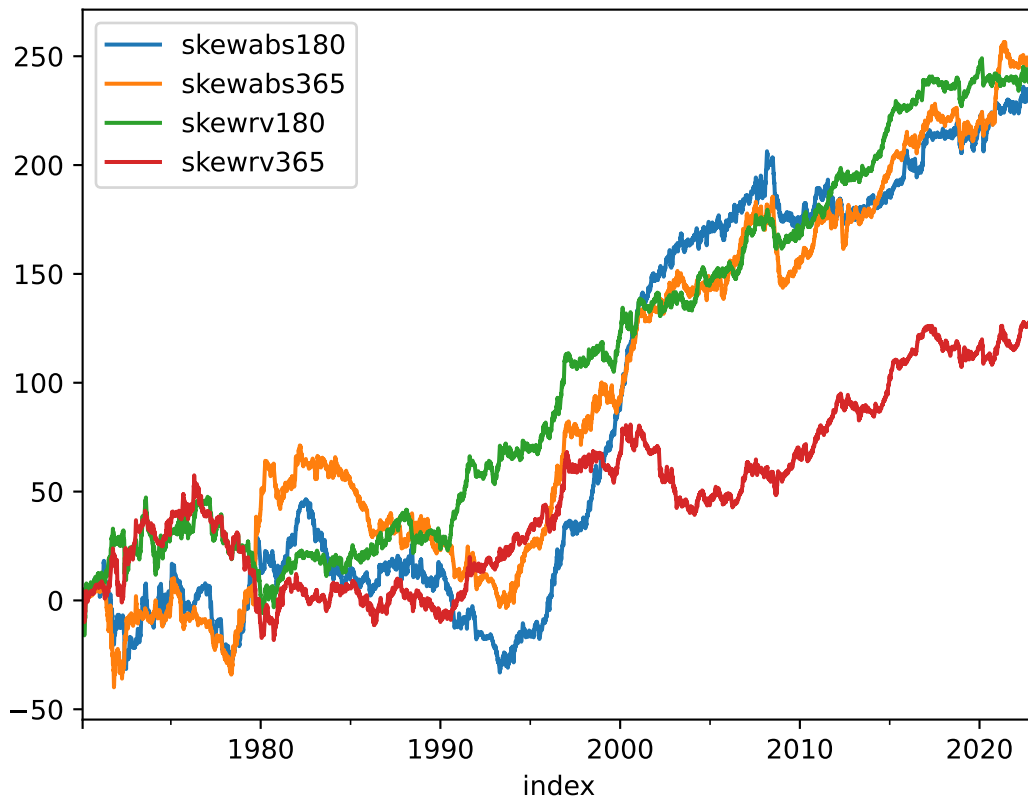
ann. SR {'skewabs180': 0.11, 'skewabs365': 0.58, 'skewrv180': -0.76, 'skewrv365': 0.1}



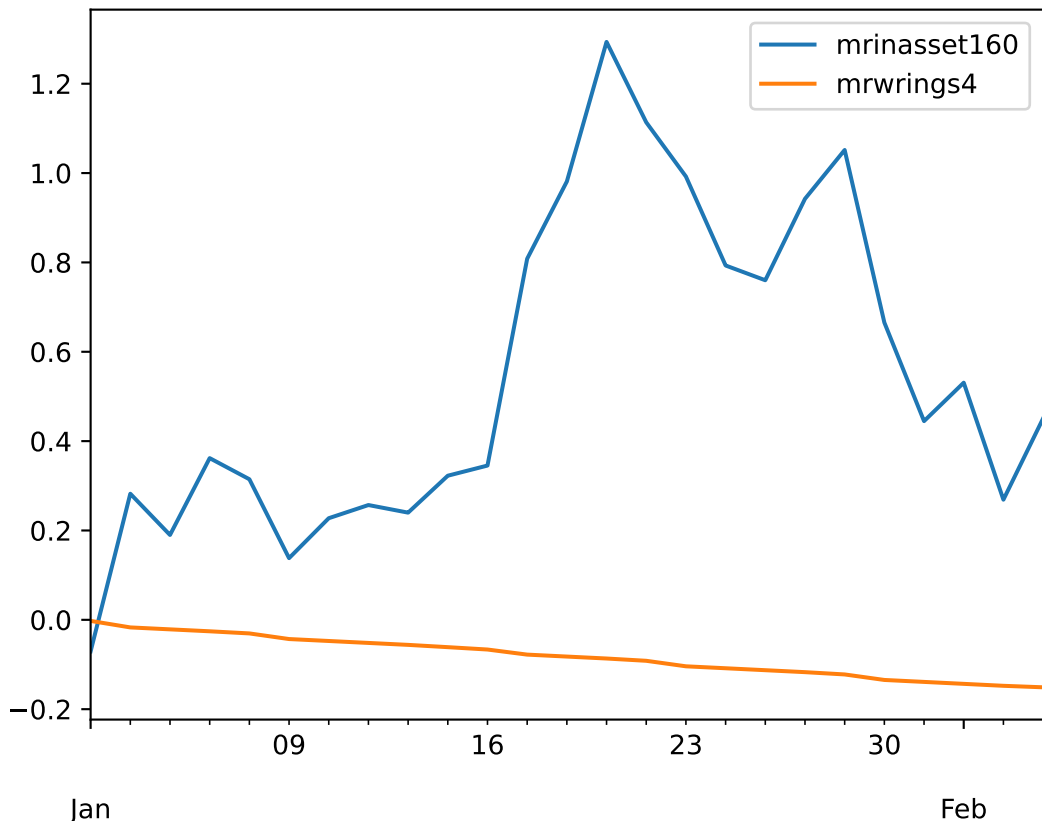
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.905, 'skewabs365': 5.882, 'skewrv180': 3.385, 'skewrv365': 3.022}
ann. std {'skewabs180': 8.094, 'skewabs365': 8.049, 'skewrv180': 6.58, 'skewrv365': 6.186}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.73, 'skewrv180': 0.51, 'skewrv365': 0.49}



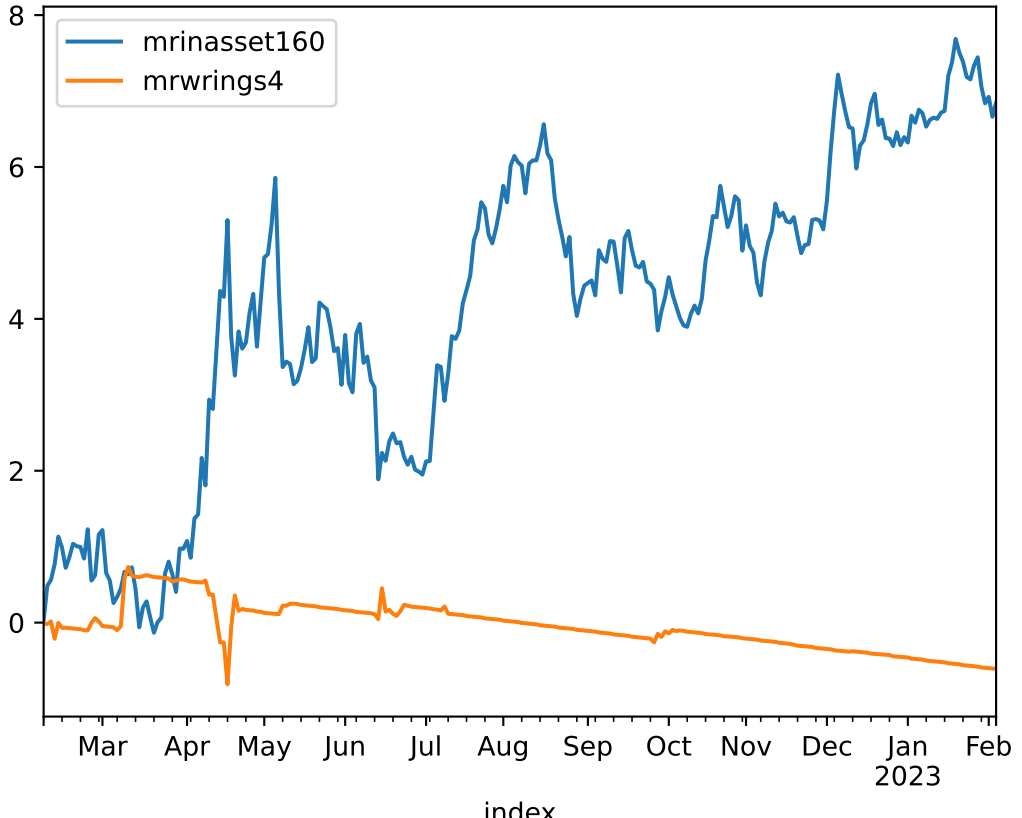
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.182, 'skewabs365': 4.436, 'skewrv180': 4.264, 'skewrv365': 2.242}
ann. std {'skewabs180': 10.794, 'skewabs365': 10.301, 'skewrv180': 9.476, 'skewrv365': 8.784}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



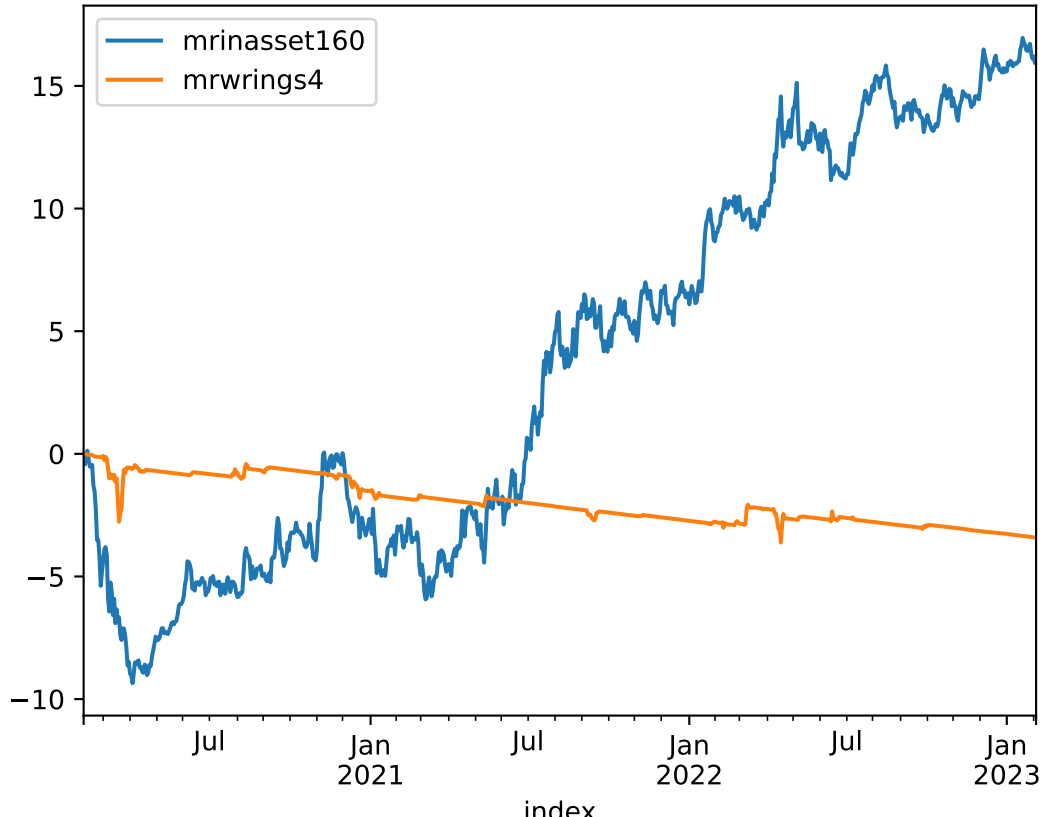
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 4.616, 'mrwrings4': -1.547}
ann. std {'mrinasset160': 3.251, 'mrwrings4': 0.055}
ann. SR {'mrinasset160': 1.42, 'mrwrings4': -28.05}



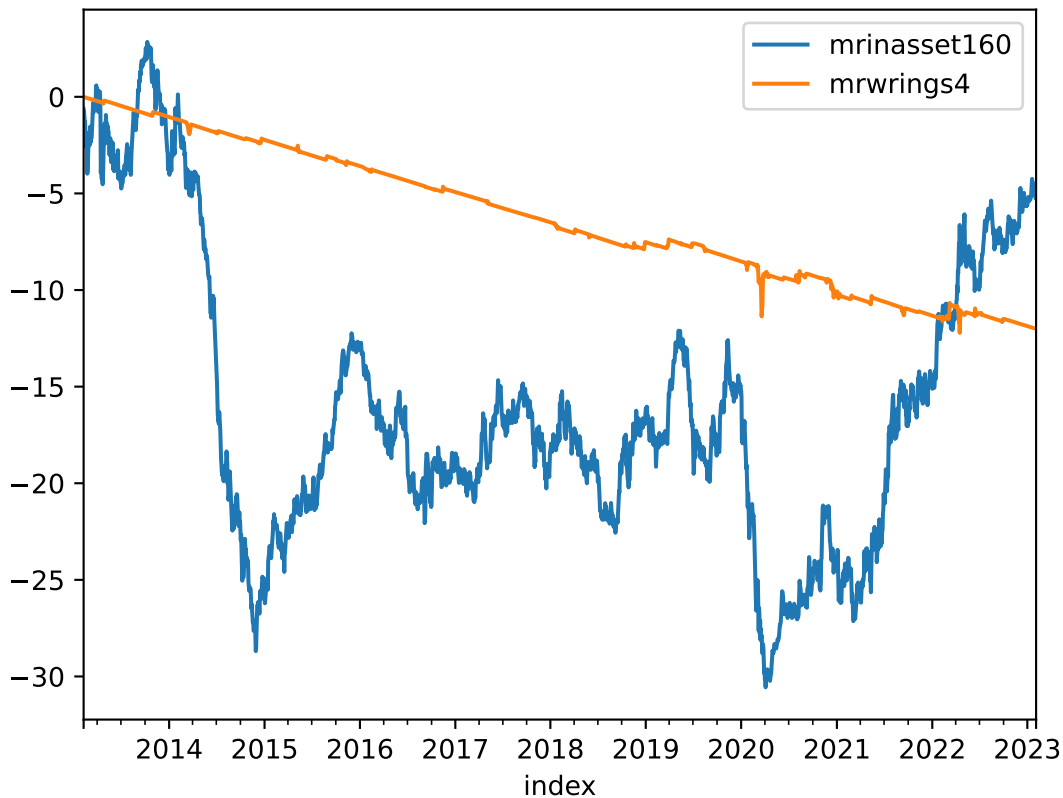
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 6.739, 'mrwrings4': -0.598}
ann. std {'mrinasset160': 5.688, 'mrwrings4': 1.483}
ann. SR {'mrinasset160': 1.18, 'mrwrings4': -0.4}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.282, 'mrwrings4': -1.118}
ann. std {'mrinasset160': 6.71, 'mrwrings4': 1.518}
ann. SR {'mrinasset160': 0.79, 'mrwrings4': -0.74}



Total Trading Rule P&L for period '10Y'
ann. mean {'mriasset160': -0.5, 'mrwrings4': -1.179}
ann. std {'mriasset160': 6.559, 'mrwrings4': 0.899}
ann. SR {'mriasset160': -0.08, 'mrwrings4': -1.31}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.167, 'mrwrings4': -2.311}
ann. std {'mrinasset160': 11.166, 'mrwrings4': 2.623}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.88}

