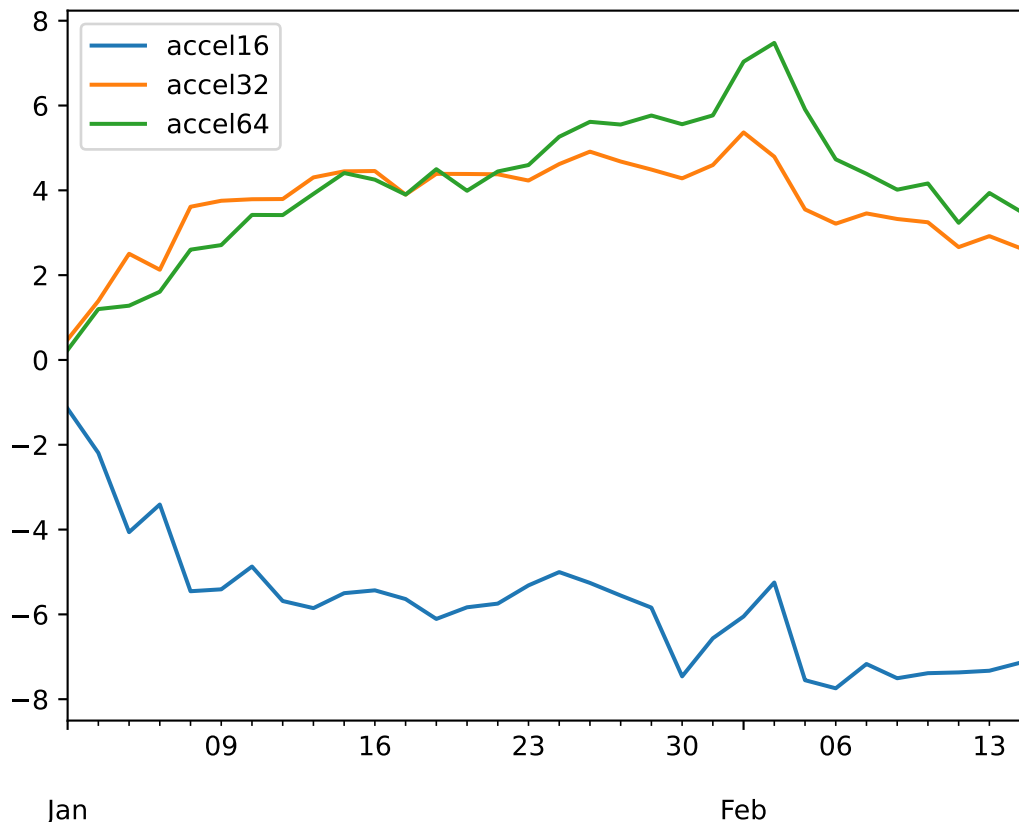
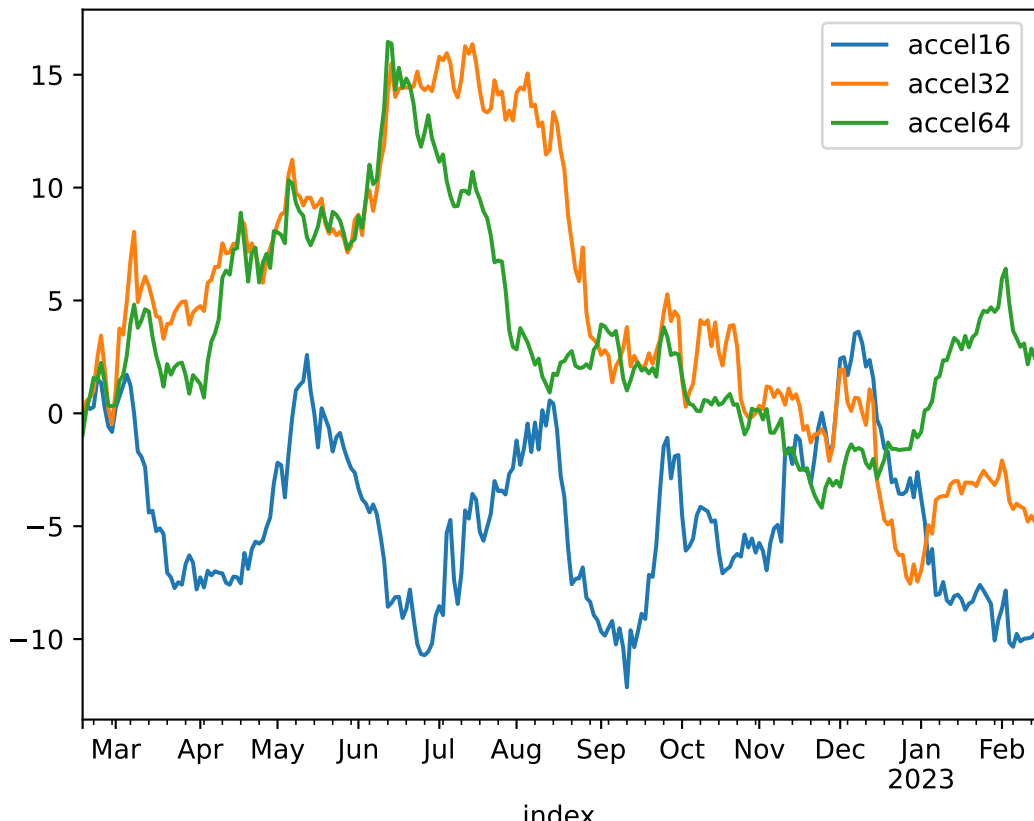


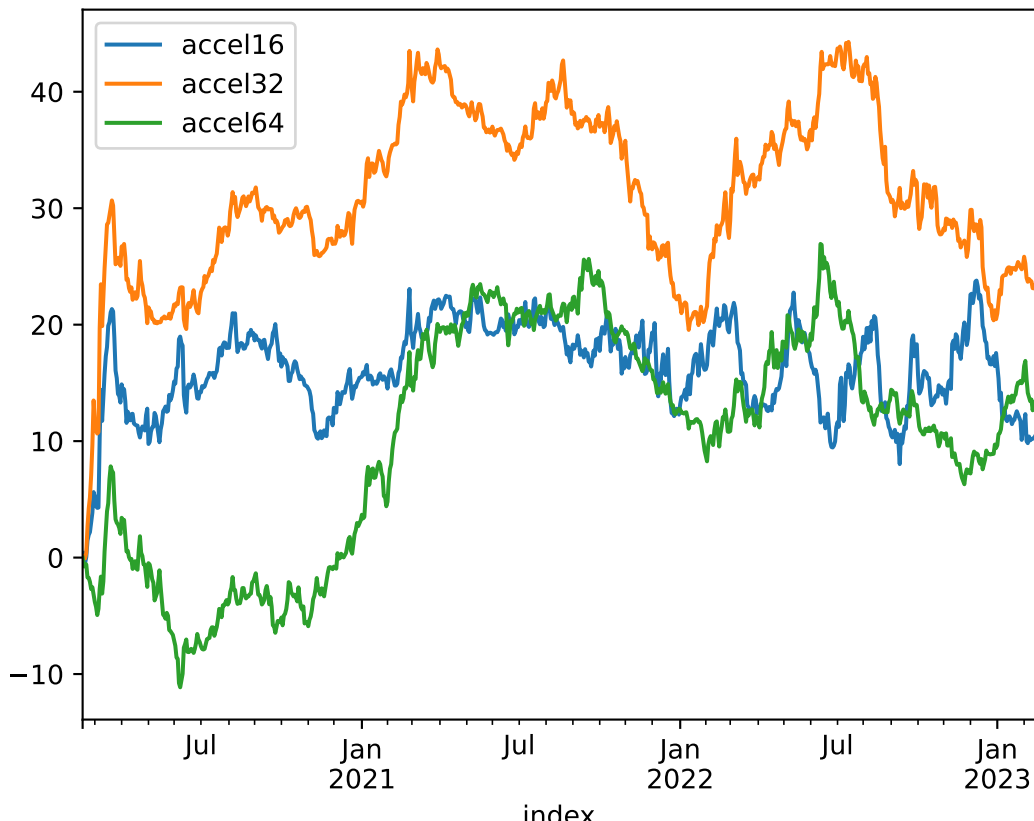
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -57.123, 'accel32': 21.111, 'accel64': 28.069}
ann. std {'accel16': 13.19, 'accel32': 8.583, 'accel64': 9.903}
ann. SR {'accel16': -4.33, 'accel32': 2.46, 'accel64': 2.83}



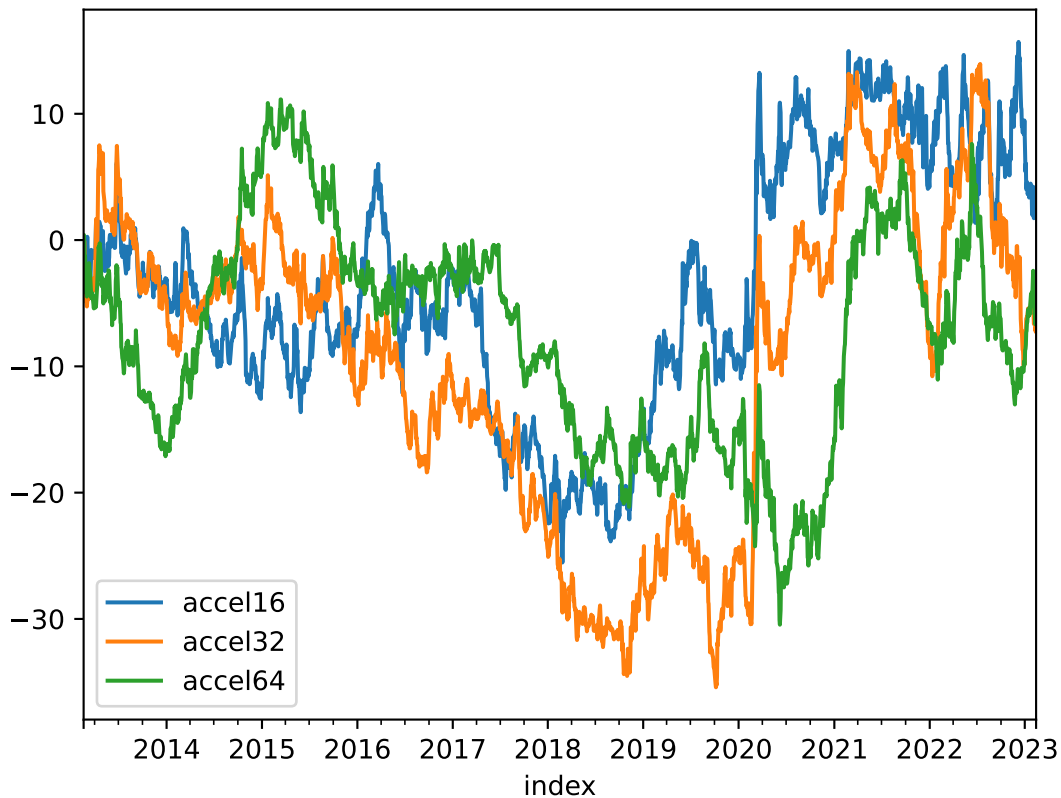
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -9.589, 'accel32': -4.743, 'accel64': 2.403}
ann. std {'accel16': 15.974, 'accel32': 14.246, 'accel64': 11.741}
ann. SR {'accel16': -0.6, 'accel32': -0.33, 'accel64': 0.2}



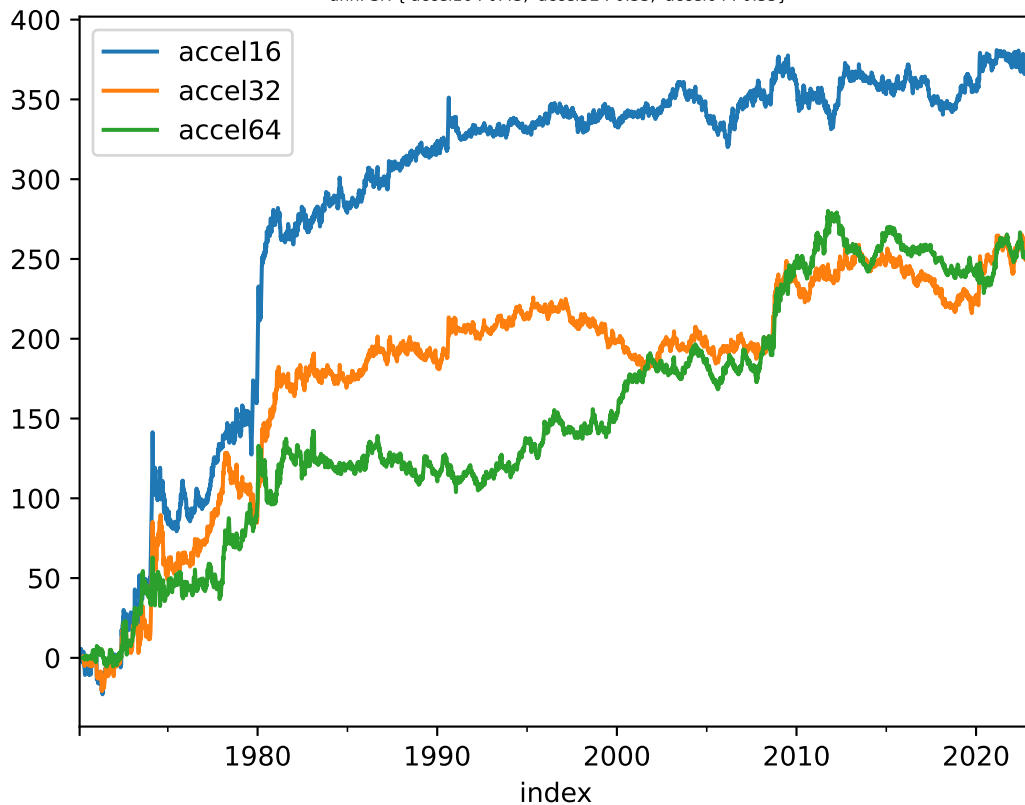
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 3.414, 'accel32': 7.565, 'accel64': 4.23}
ann. std {'accel16': 14.82, 'accel32': 14.278, 'accel64': 11.425}
ann. SR {'accel16': 0.23, 'accel32': 0.53, 'accel64': 0.37}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.229, 'accel32': -0.71, 'accel64': -0.628}
ann. std {'accel16': 11.962, 'accel32': 11.183, 'accel64': 9.61}
ann. SR {'accel16': 0.02, 'accel32': -0.06, 'accel64': -0.07}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.814, 'accel32': 4.518, 'accel64': 4.675}
ann. std {'accel16': 15.693, 'accel32': 13.779, 'accel64': 13.301}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

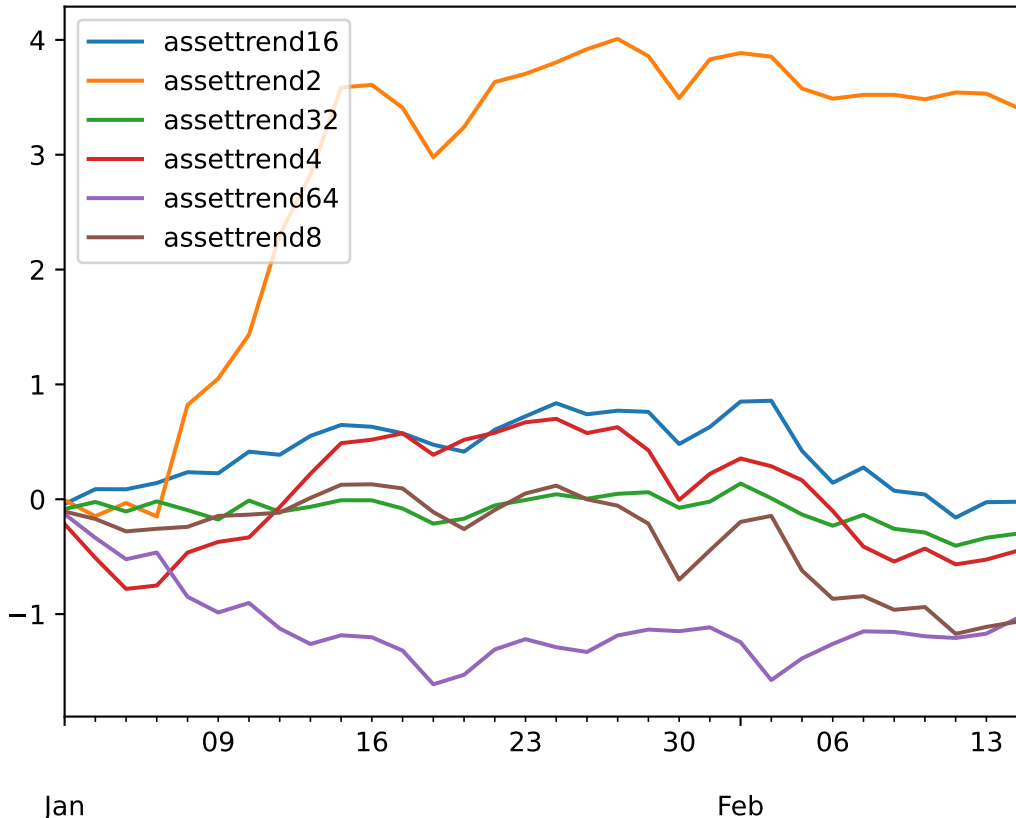


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -0.175, 'assettrend2': 27.288, 'assettrend32': -2.397, 'assettrend4': -3.601, 'assettrend64': -8.291, 'assettrend8': -8.533}

ann. std {'assettrend16': 2.452, 'assettrend2': 5.216, 'assettrend32': 1.466, 'assettrend4': 3.076, 'assettrend64': 2.433, 'assettrend8': 2.76}

ann. SR {'assettrend16': -0.07, 'assettrend2': 5.23, 'assettrend32': -1.64, 'assettrend4': -1.17, 'assettrend64': -3.41, 'assettrend8': -3.09}

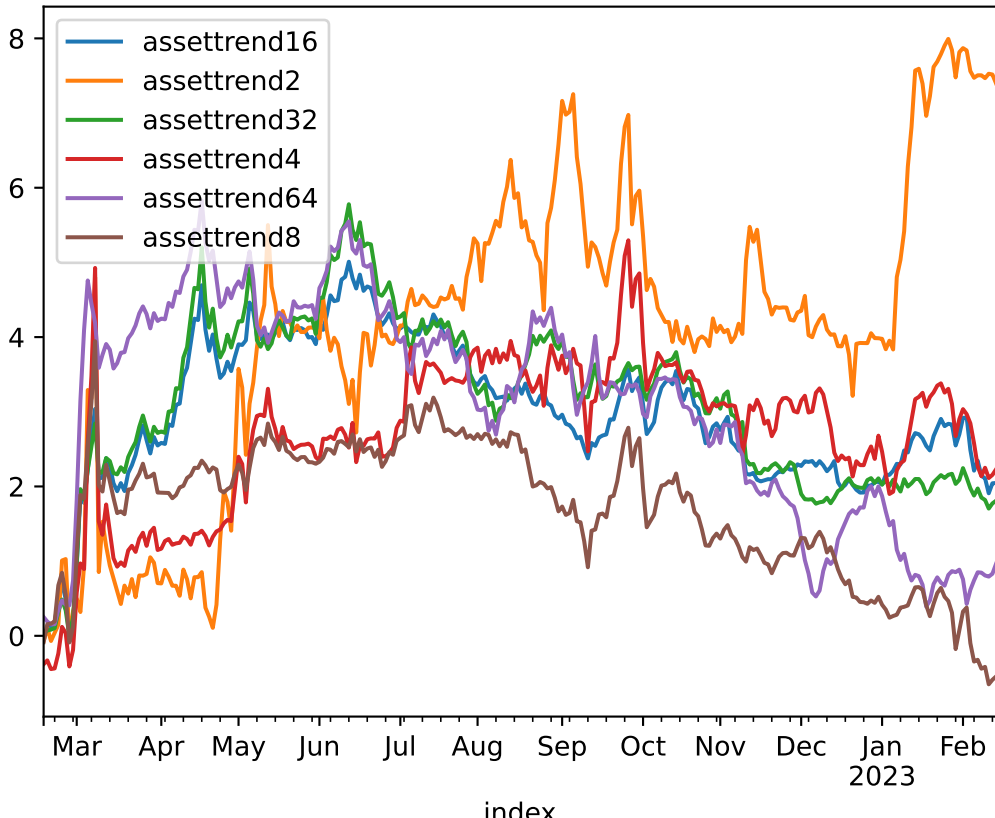


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 2.015, 'assettrend2': 7.282, 'assettrend32': 1.781, 'assettrend4': 2.196, 'assettrend64': 0.95, 'assettrend8': -0.536}

ann. std {'assettrend16': 2.99, 'assettrend2': 7.496, 'assettrend32': 3.169, 'assettrend4': 5.566, 'assettrend64': 3.687, 'assettrend8': 3.674}

ann. SR {'assettrend16': 0.67, 'assettrend2': 0.97, 'assettrend32': 0.56, 'assettrend4': 0.39, 'assettrend64': 0.26, 'assettrend8': -0.15}

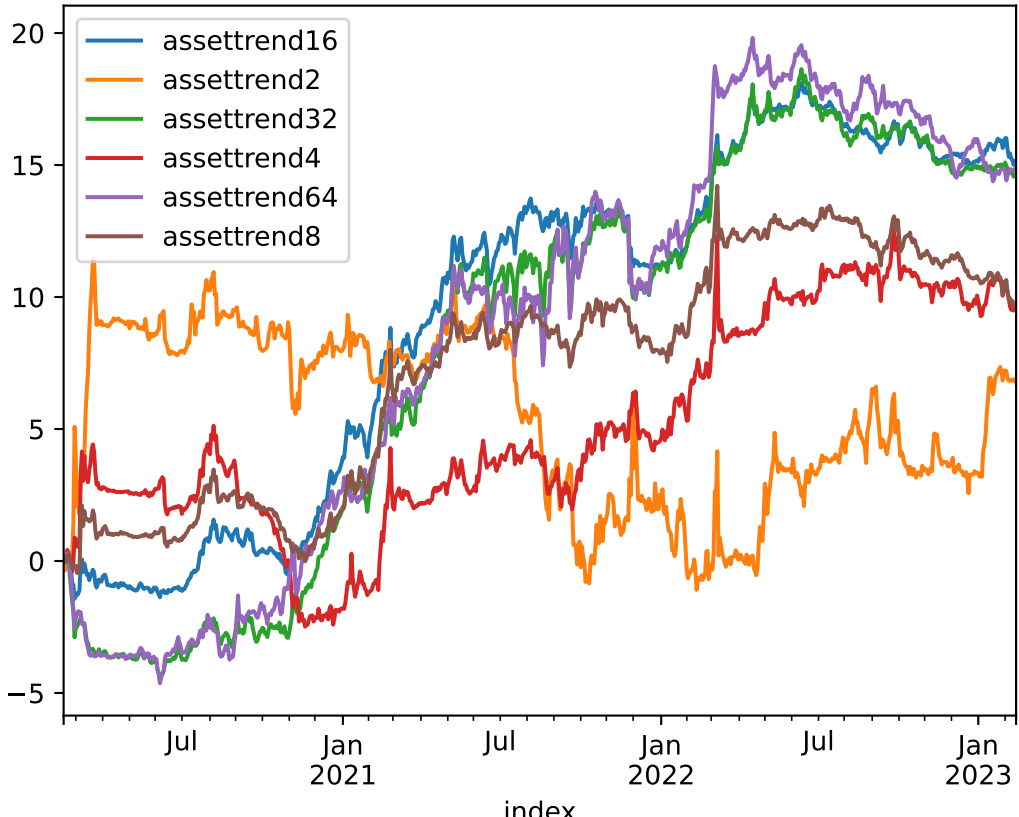


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.957, 'assettrend2': 2.21, 'assettrend32': 4.799, 'assettrend4': 3.144, 'assettrend64': 4.895, 'assettrend8': 3.184}

ann. std {'assettrend16': 3.532, 'assettrend2': 7.648, 'assettrend32': 4.326, 'assettrend4': 5.28, 'assettrend64': 5.116, 'assettrend8': 3.731}

ann. SR {'assettrend16': 1.4, 'assettrend2': 0.29, 'assettrend32': 1.11, 'assettrend4': 0.6, 'assettrend64': 0.96, 'assettrend8': 0.85}

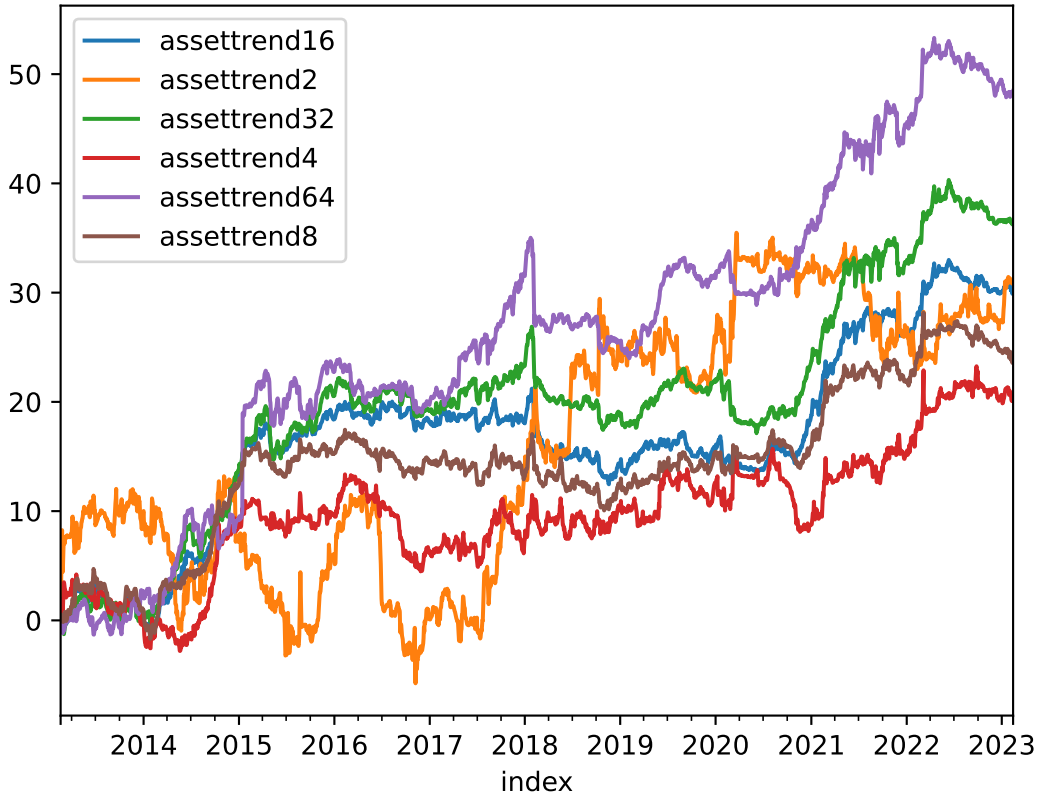


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.949, 'assettrend2': 3.028, 'assettrend32': 3.569, 'assettrend4': 1.983, 'assettrend64': 4.758, 'assettrend8': 2.325}

ann. std {'assettrend16': 3.257, 'assettrend2': 8.389, 'assettrend32': 3.724, 'assettrend4': 5.001, 'assettrend64': 5.319, 'assettrend8': 3.564}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.36, 'assettrend32': 0.96, 'assettrend4': 0.4, 'assettrend64': 0.89, 'assettrend8': 0.65}

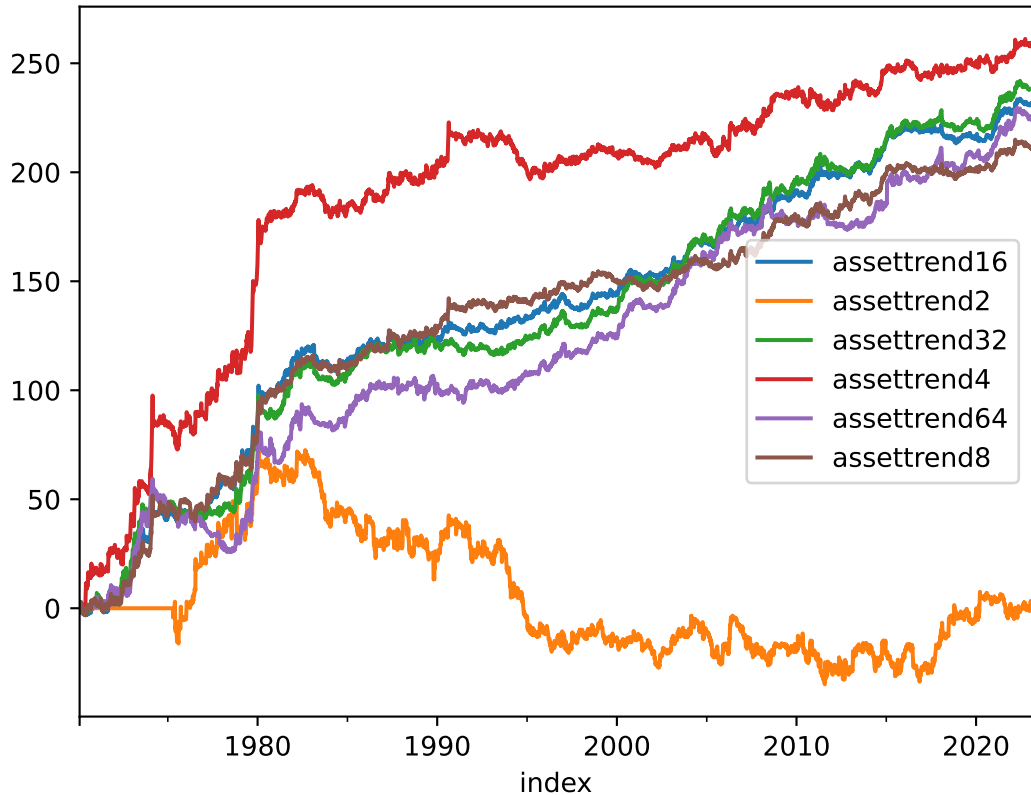


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.271, 'assettrend2': 0.053, 'assettrend32': 4.403, 'assettrend4': 4.776, 'assettrend64': 4.158, 'assettrend8': 3.894}

ann. std {'assettrend16': 4.645, 'assettrend2': 10.021, 'assettrend32': 4.871, 'assettrend4': 7.34, 'assettrend64': 5.451, 'assettrend8': 5.022}

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

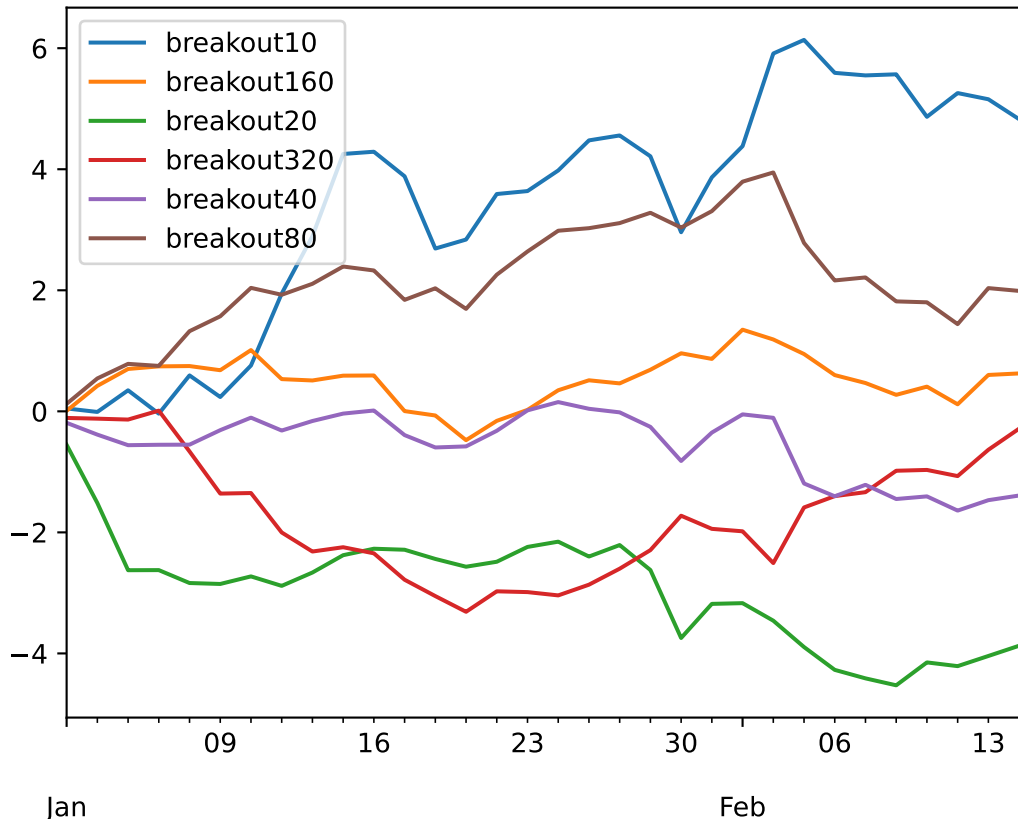


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 38.62, 'breakout160': 5.01, 'breakout20': -30.985, 'breakout320': -2.293, 'breakout40': -11.129, 'breakout80': 15.917}

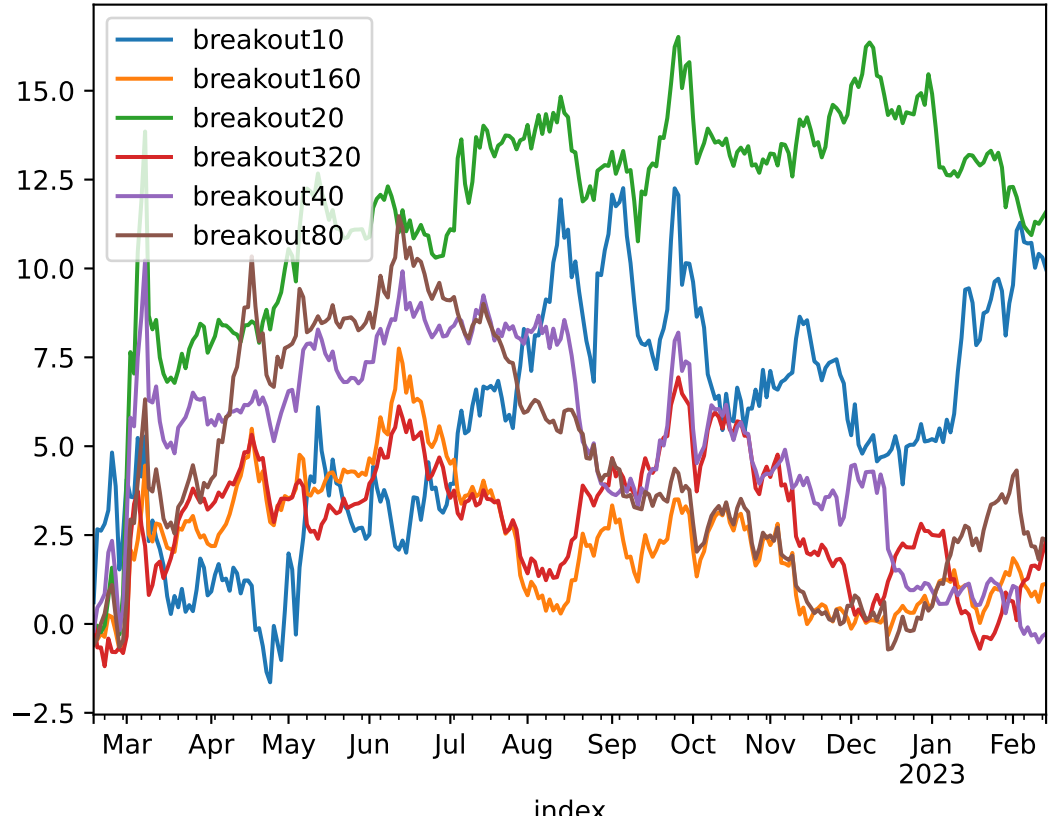
ann. std {'breakout10': 10.481, 'breakout160': 4.401, 'breakout20': 6.318, 'breakout320': 5.84, 'breakout40': 4.764, 'breakout80': 6.203}

ann. SR {'breakout10': 3.68, 'breakout160': 1.14, 'breakout20': -4.9, 'breakout320': -0.39, 'breakout40': -2.34, 'breakout80': 2.57}



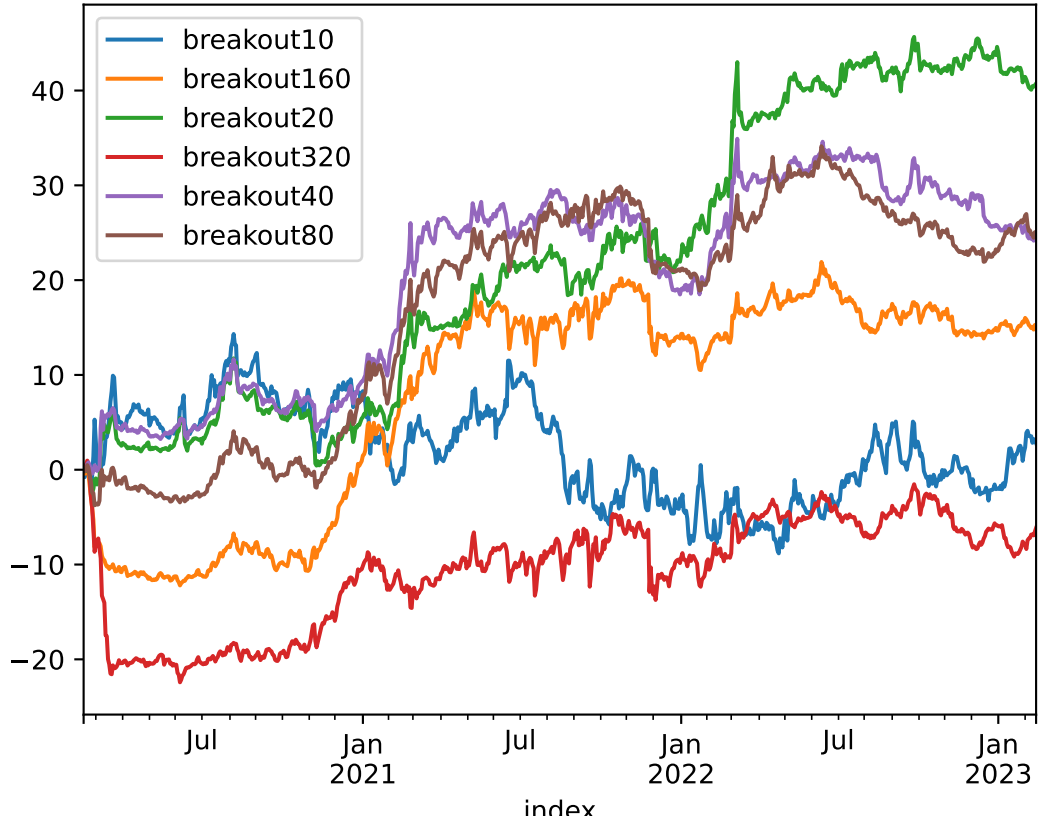
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 9.827, 'breakout160': 1.111, 'breakout20': 11.413, 'breakout320': 2.29, 'breakout40': -0.266, 'breakout80': 2.326}
ann. std {'breakout10': 12.571, 'breakout160': 6.878, 'breakout20': 11.472, 'breakout320': 6.887, 'breakout40': 9.212, 'breakout80': 7.947}
ann. SR {'breakout10': 0.78, 'breakout160': 0.16, 'breakout20': 0.99, 'breakout320': 0.33, 'breakout40': -0.03, 'breakout80': 0.29}



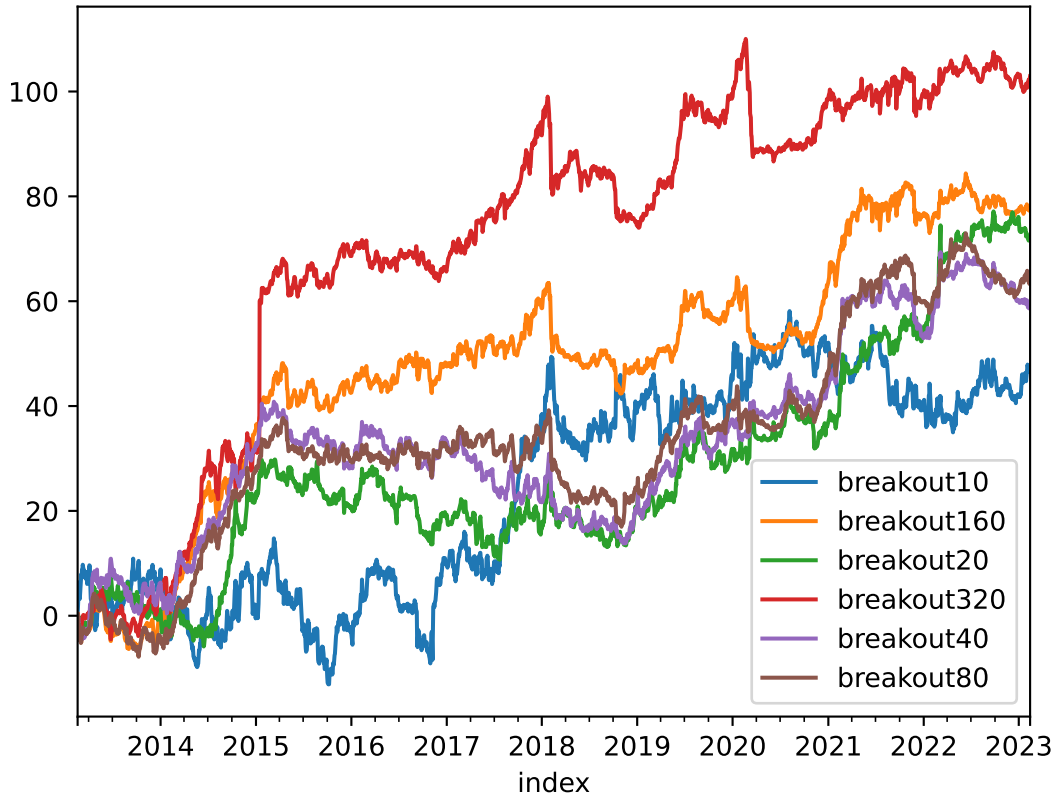
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 0.917, 'breakout160': 5.007, 'breakout20': 13.335, 'breakout320': -2.011, 'breakout40': 7.991, 'breakout80': 8.19}
ann. std {'breakout10': 13.932, 'breakout160': 9.454, 'breakout20': 11.354, 'breakout320': 10.565, 'breakout40': 9.89, 'breakout80': 9.254}
ann. SR {'breakout10': 0.07, 'breakout160': 0.53, 'breakout20': 1.17, 'breakout320': -0.19, 'breakout40': 0.81, 'breakout80': 0.89}



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

ann. mean {'breakout10': 4.576, 'breakout160': 7.636, 'breakout20': 7.091, 'breakout320': 10.107, 'breakout40': 5.779, 'breakout80': 6.27}
ann. std {'breakout10': 15.676, 'breakout160': 9.092, 'breakout20': 11.148, 'breakout320': 13.331, 'breakout40': 9.727, 'breakout80': 8.988}
ann. SR {'breakout10': 0.29, 'breakout160': 0.84, 'breakout20': 0.64, 'breakout320': 0.76, 'breakout40': 0.59, 'breakout80': 0.7}

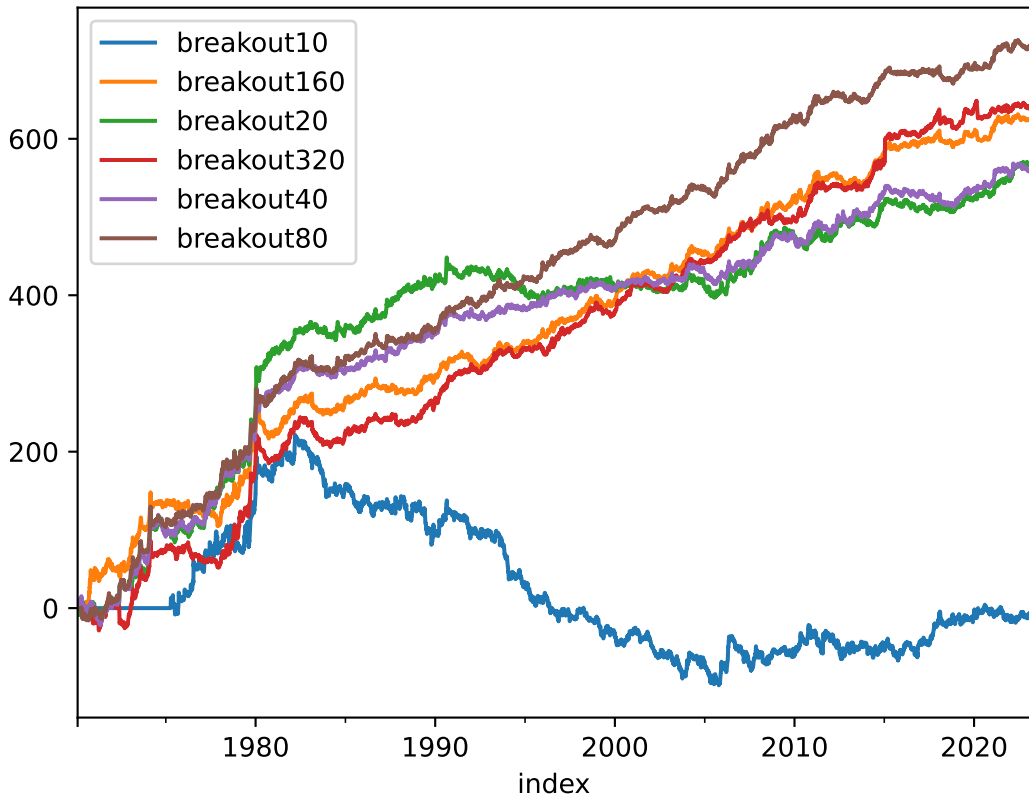


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.132, 'breakout160': 11.562, 'breakout20': 10.466, 'breakout320': 11.87, 'breakout40': 10.324, 'breakout80': 13.272}

ann. std {'breakout10': 20.771, 'breakout160': 12.46, 'breakout20': 16.038, 'breakout320': 13.016, 'breakout40': 13.197, 'breakout80': 12.717}

ann. SR {'breakout10': -0.01, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}

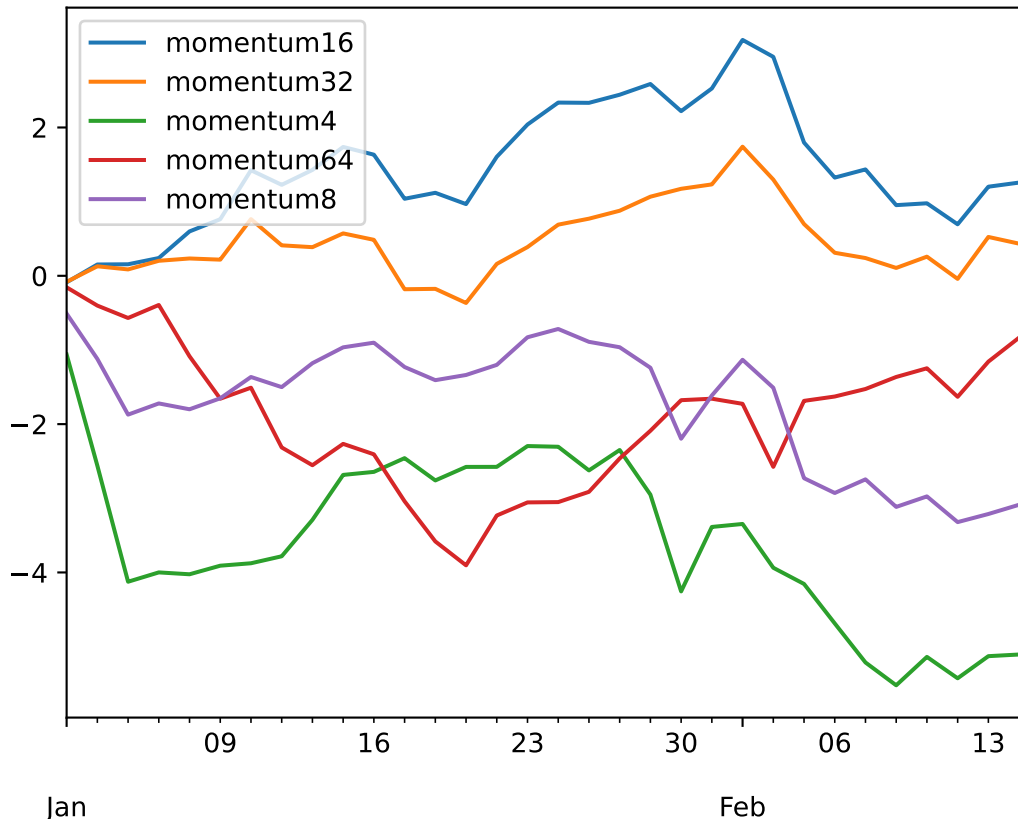


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 10.056, 'momentum32': 3.468, 'momentum4': -40.852, 'momentum64': -6.67, 'momentum8': -24.698}

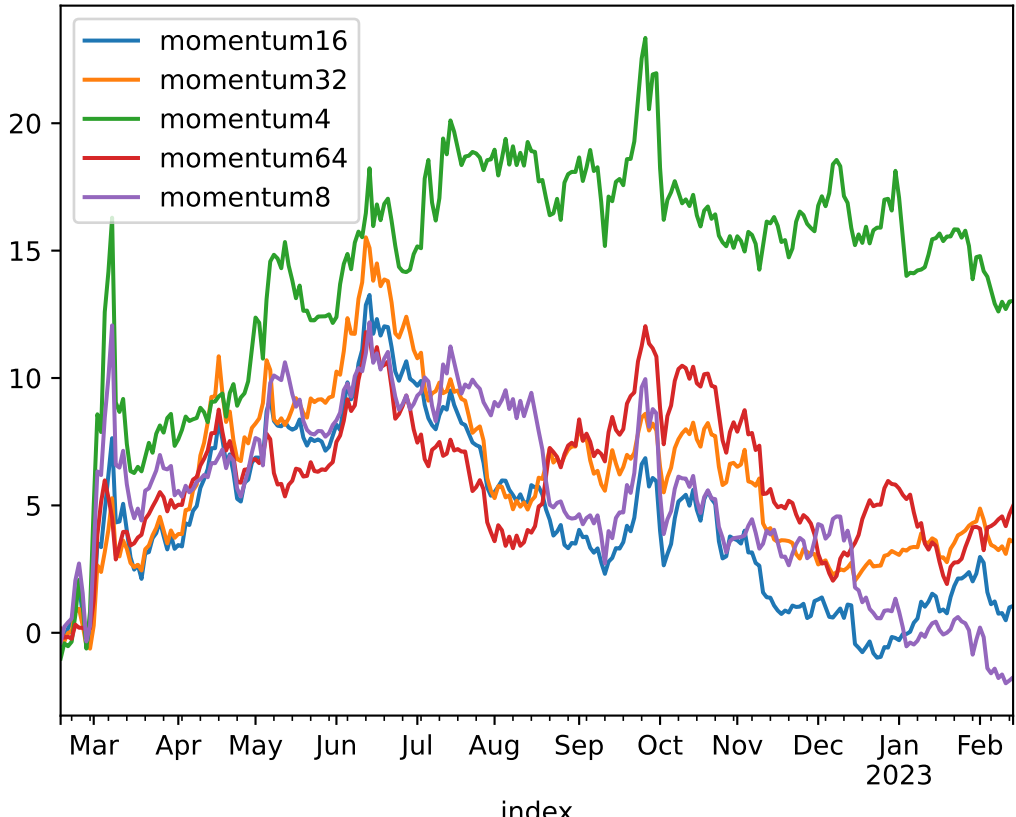
ann. std {'momentum16': 6.266, 'momentum32': 4.916, 'momentum4': 9.208, 'momentum64': 6.814, 'momentum8': 6.508}

ann. SR {'momentum16': 1.6, 'momentum32': 0.71, 'momentum4': -4.44, 'momentum64': -0.98, 'momentum8': -3.8}



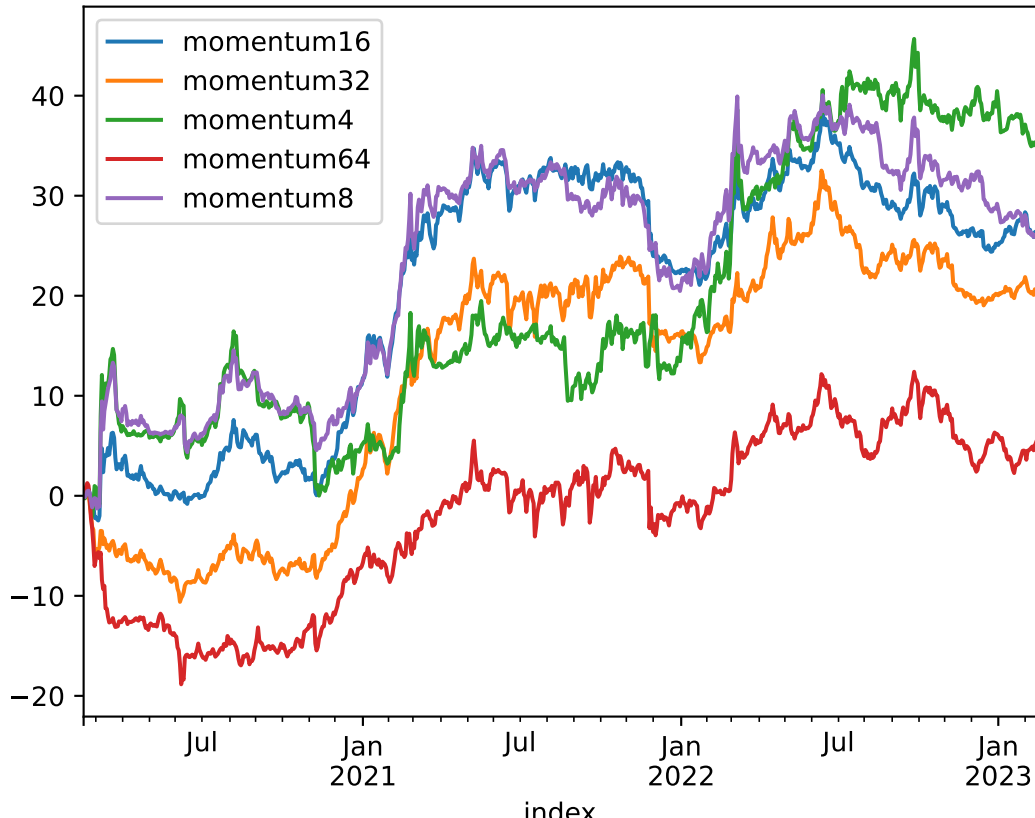
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 1.037, 'momentum32': 3.516, 'momentum4': 12.825, 'momentum64': 4.907, 'momentum8': -1.722}
ann. std {'momentum16': 9.975, 'momentum32': 9.537, 'momentum4': 16.721, 'momentum64': 9.2, 'momentum8': 12.684}
ann. SR {'momentum16': 0.1, 'momentum32': 0.37, 'momentum4': 0.77, 'momentum64': 0.53, 'momentum8': -0.14}



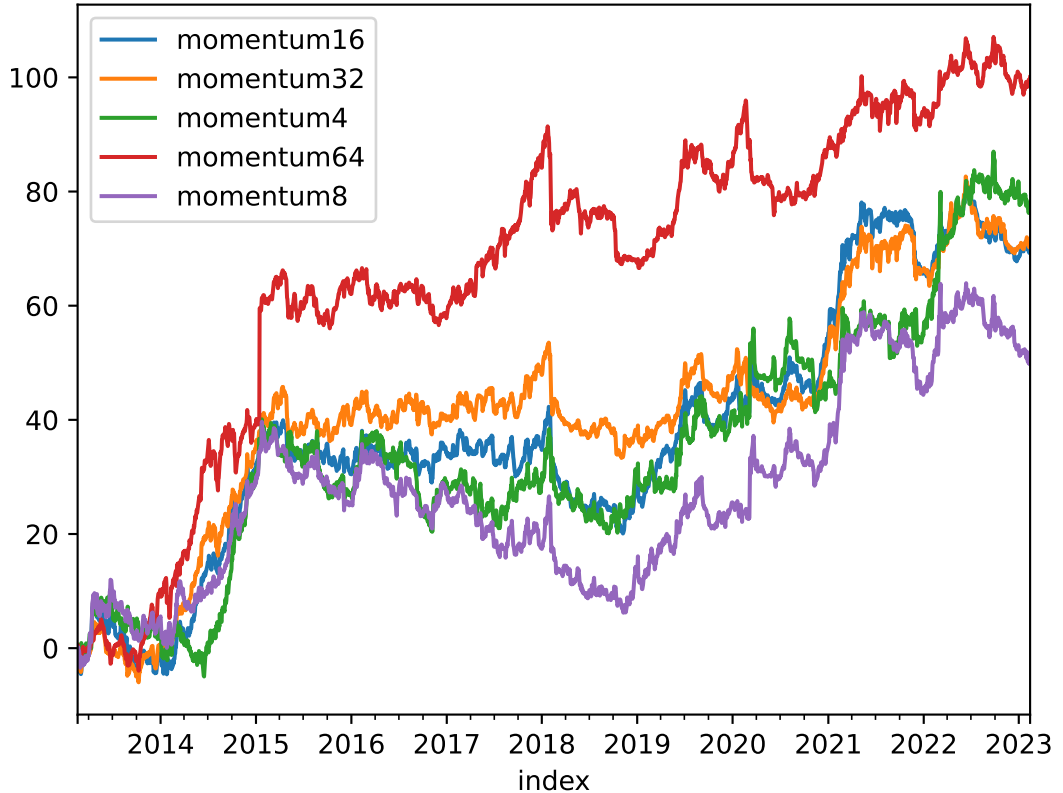
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.65, 'momentum32': 6.73, 'momentum4': 11.573, 'momentum64': 1.75, 'momentum8': 8.548}
ann. std {'momentum16': 10.844, 'momentum32': 10.63, 'momentum4': 15.86, 'momentum64': 10.837, 'momentum8': 12.692}
ann. SR {'momentum16': 0.8, 'momentum32': 0.63, 'momentum4': 0.73, 'momentum64': 0.16, 'momentum8': 0.67}



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

ann. mean {'momentum16': 6.854, 'momentum32': 6.942, 'momentum4': 7.529, 'momentum64': 9.823, 'momentum8': 4.911}
ann. std {'momentum16': 9.909, 'momentum32': 9.473, 'momentum4': 13.678, 'momentum64': 12.014, 'momentum8': 11.264}
ann. SR {'momentum16': 0.69, 'momentum32': 0.73, 'momentum4': 0.55, 'momentum64': 0.82, 'momentum8': 0.44}

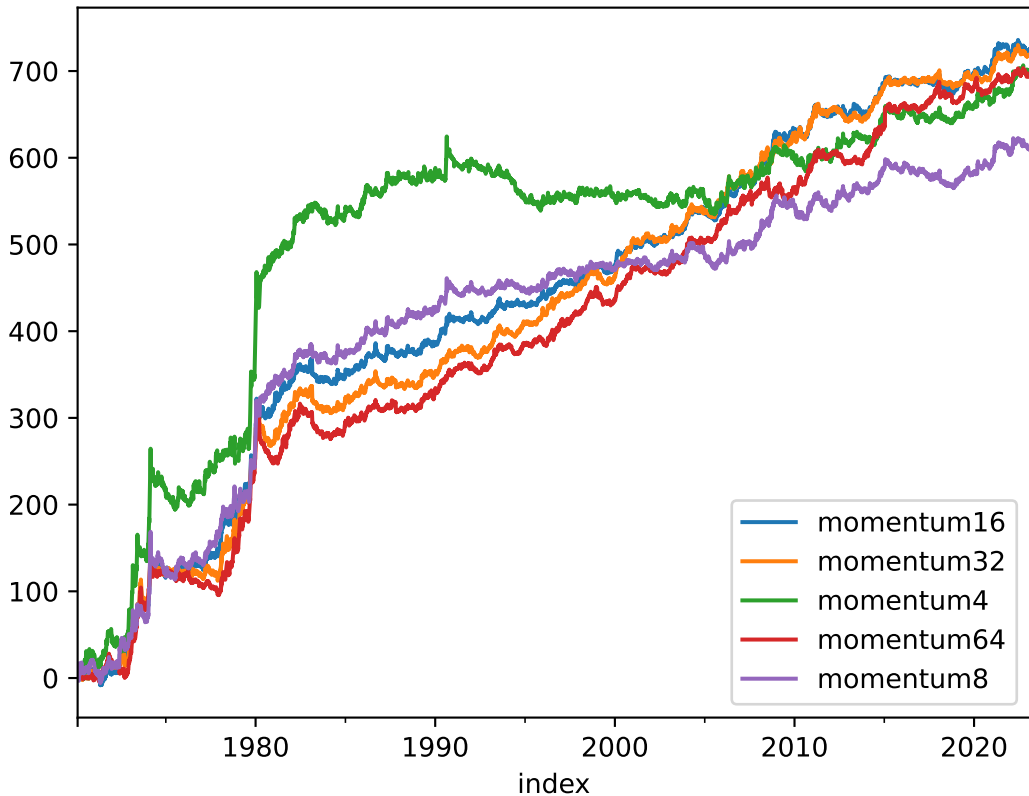


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.39, 'momentum32': 13.286, 'momentum4': 12.883, 'momentum64': 12.883, 'momentum8': 11.264}

ann. std {'momentum16': 14.185, 'momentum32': 13.807, 'momentum4': 20.043, 'momentum64': 13.442, 'momentum8': 15.83}

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

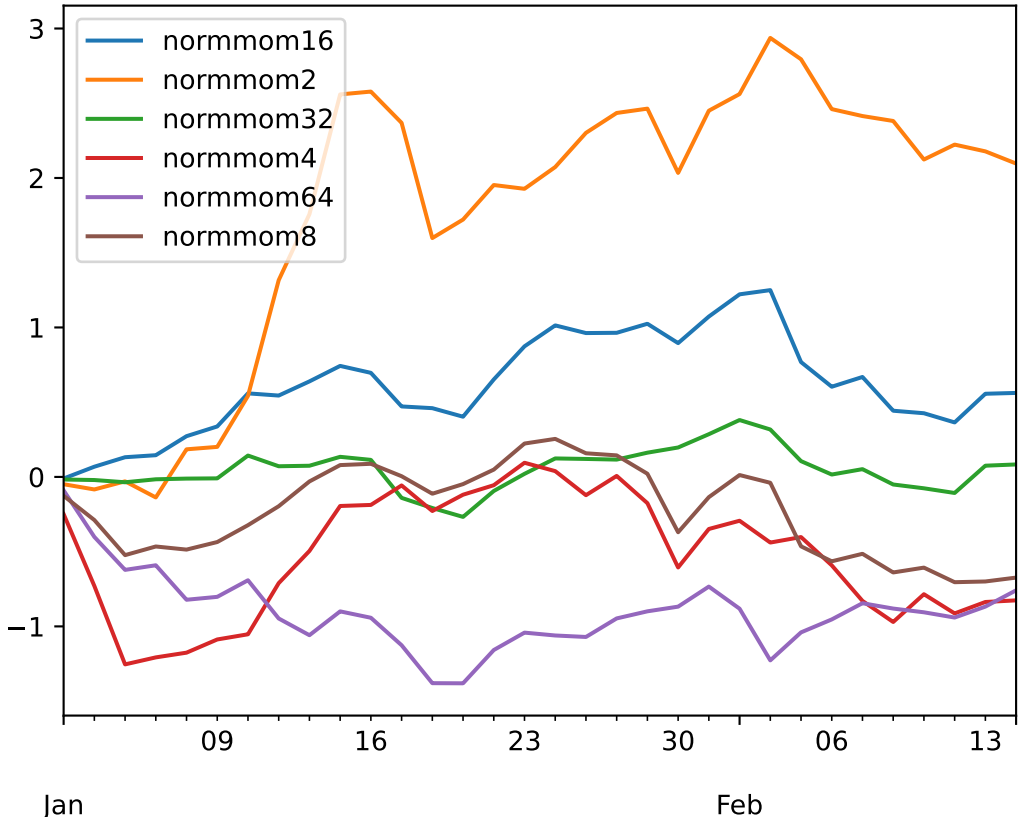


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 4.496, 'normmom2': 16.773, 'normmom32': 0.668, 'normmom4': -6.607, 'normmom64': -6.069, 'normmom8': -5.388}

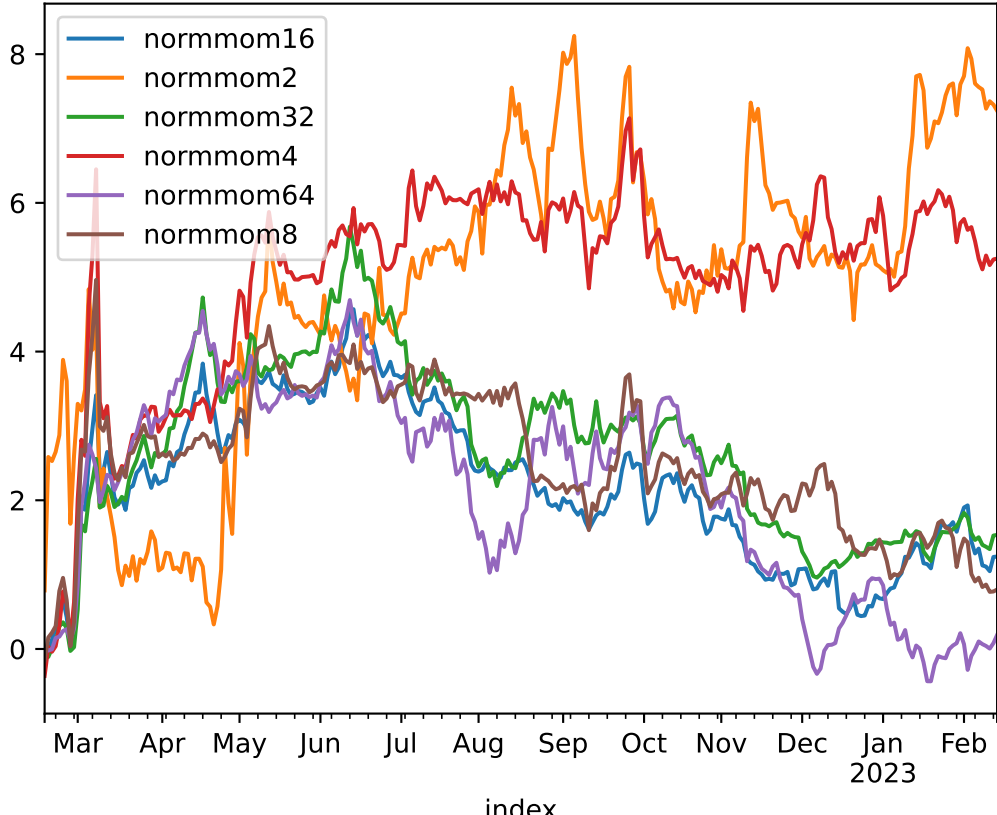
ann. std {'normmom16': 2.42, 'normmom2': 5.034, 'normmom32': 1.531, 'normmom4': 3.428, 'normmom64': 2.442, 'normmom8': 2.406}

ann. SR {'normmom16': 1.86, 'normmom2': 3.33, 'normmom32': 0.44, 'normmom4': -1.93, 'normmom64': -2.49, 'normmom8': -2.24}



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

ann. mean {'normmom16': 1.224, 'normmom2': 7.129, 'normmom32': 1.51, 'normmom4': 5.17, 'normmom64': 0.184, 'normmom8': 0.787}
ann. std {'normmom16': 3.101, 'normmom2': 7.484, 'normmom32': 3.053, 'normmom4': 5.791, 'normmom64': 3.381, 'normmom8': 4.093}
ann. SR {'normmom16': 0.39, 'normmom2': 0.95, 'normmom32': 0.49, 'normmom4': 0.89, 'normmom64': 0.05, 'normmom8': 0.19}

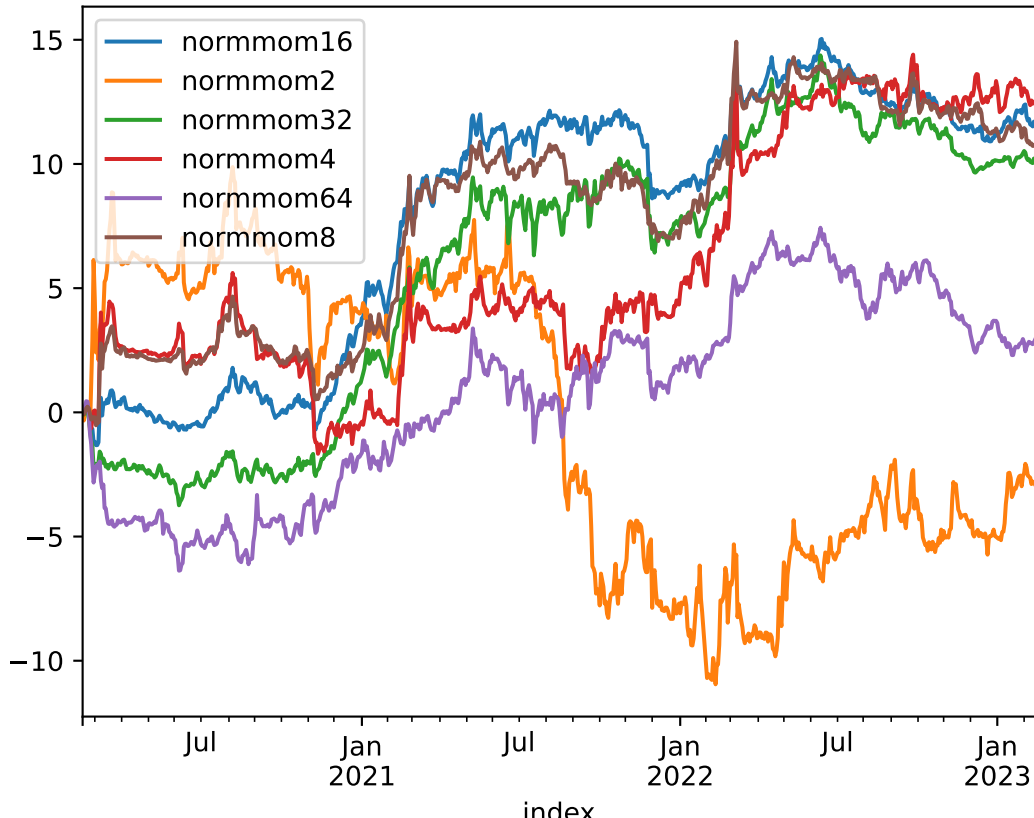


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.833, 'normmom2': -0.954, 'normmom32': 3.348, 'normmom4': 4.097, 'normmom64': 0.958, 'normmom8': 3.522}

ann. std {'normmom16': 3.63, 'normmom2': 8.191, 'normmom32': 3.96, 'normmom4': 5.687, 'normmom64': 4.283, 'normmom8': 4.192}

ann. SR {'normmom16': 1.06, 'normmom2': -0.12, 'normmom32': 0.85, 'normmom4': 0.72, 'normmom64': 0.22, 'normmom8': 0.84}

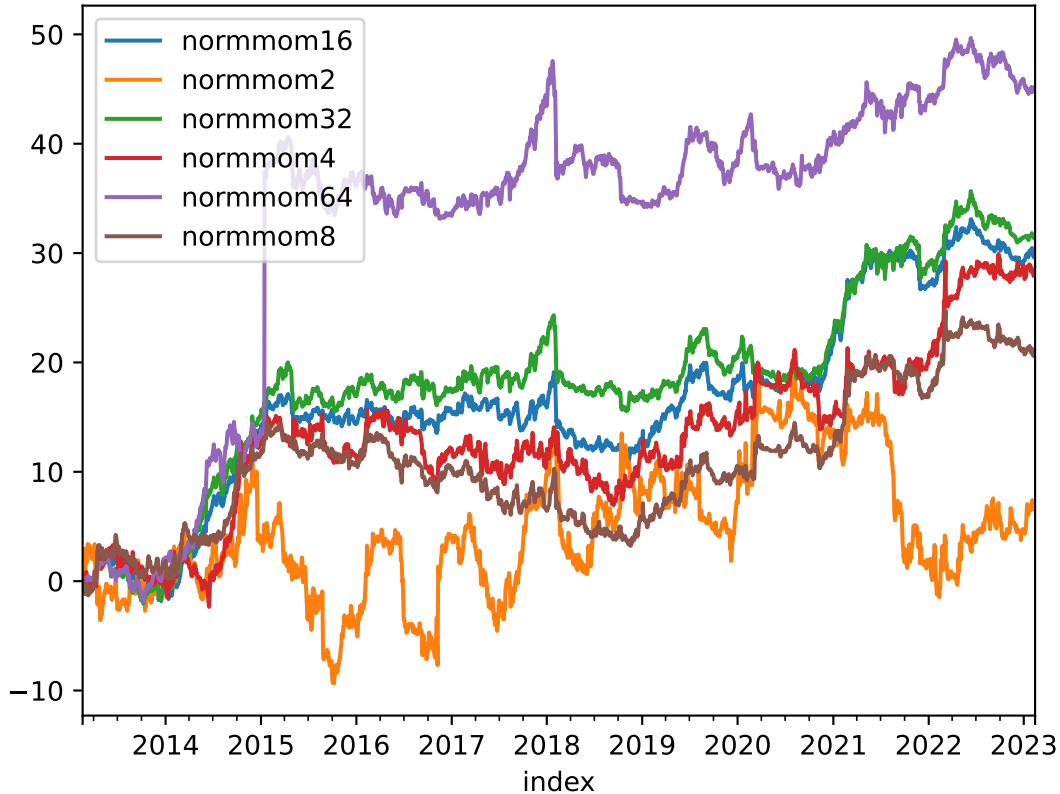


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.924, 'normmom2': 0.645, 'normmom32': 3.096, 'normmom4': 2.754, 'normmom64': 4.436, 'normmom8': 2.021}

ann. std {'normmom16': 3.565, 'normmom2': 9.04, 'normmom32': 3.719, 'normmom4': 5.47, 'normmom64': 8.562, 'normmom8': 4.024}

ann. SR {'normmom16': 0.82, 'normmom2': 0.07, 'normmom32': 0.83, 'normmom4': 0.5, 'normmom64': 0.52, 'normmom8': 0.5}

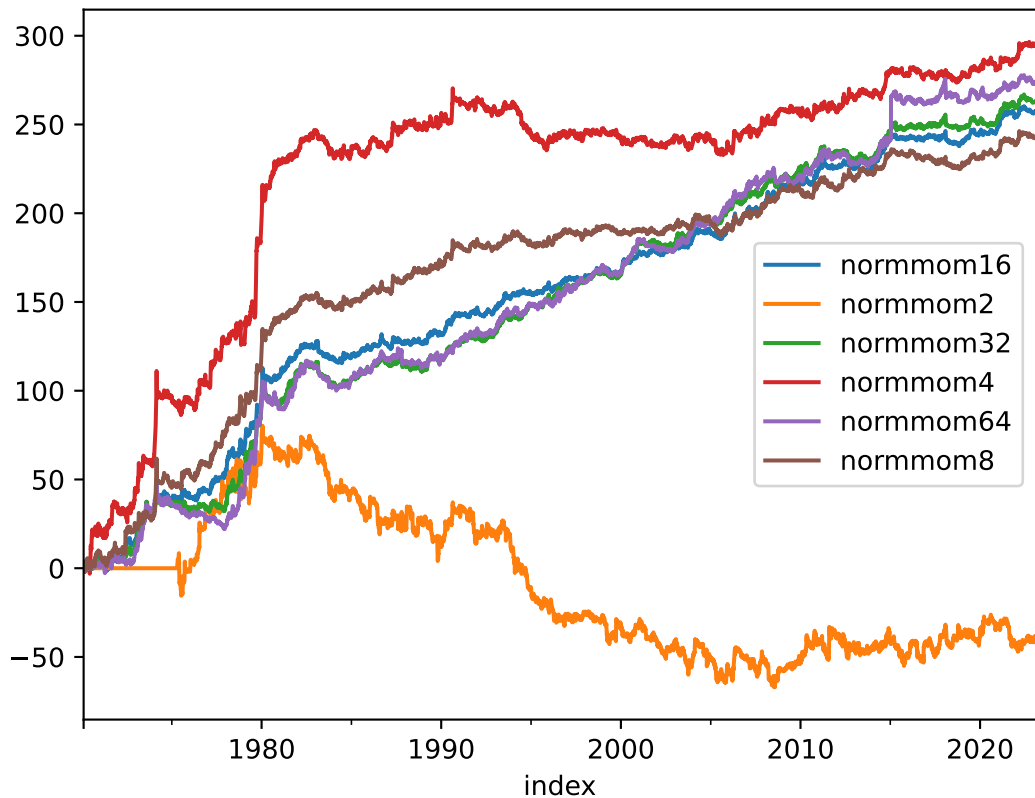


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.755, 'normmom2': -0.721, 'normmom32': 4.862, 'normmom4': 5.452, 'normmom64': 5.057, 'normmom8': 4.48}

ann. std {'normmom16': 4.908, 'normmom2': 11.17, 'normmom32': 4.974, 'normmom4': 8.307, 'normmom64': 6.29, 'normmom8': 5.913}

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': -18.23, 'relmomentum20': -21.138, 'relmomentum40': 13.195, 'relmomentum80': 15.795}

ann. std {'relmomentum10': 5.908, 'relmomentum20': 6.52, 'relmomentum40': 4.796, 'relmomentum80': 4.001}

ann. SR {'relmomentum10': -3.09, 'relmomentum20': -3.24, 'relmomentum40': 2.75, 'relmomentum80': 3.95}

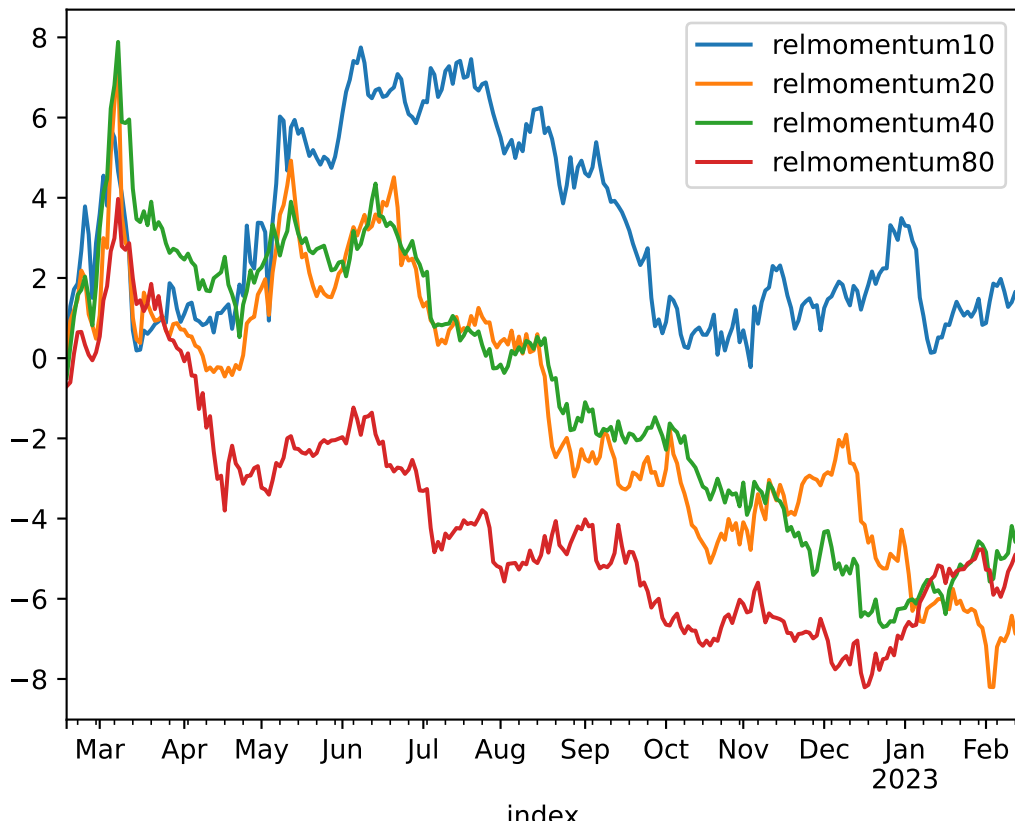


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.196, 'relmomentum20': -6.812, 'relmomentum40': -4.522, 'relmomentum80': -4.947}

ann. std {'relmomentum10': 8.753, 'relmomentum20': 8.46, 'relmomentum40': 6.679, 'relmomentum80': 5.597}

ann. SR {'relmomentum10': 0.14, 'relmomentum20': -0.81, 'relmomentum40': -0.68, 'relmomentum80': -0.88}

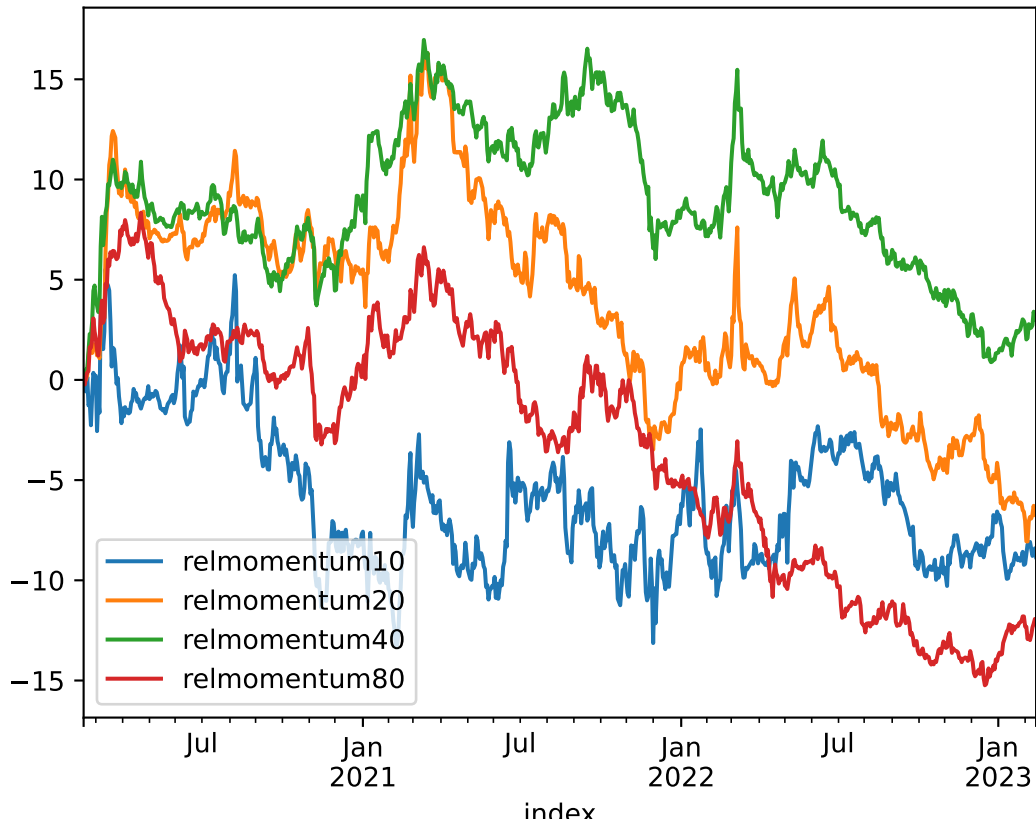


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.896, 'relmomentum20': -2.219, 'relmomentum40': 0.981, 'relmomentum80': -3.947}

ann. std {'relmomentum10': 12.196, 'relmomentum20': 8.914, 'relmomentum40': 7.442, 'relmomentum80': 6.863}

ann. SR {'relmomentum10': -0.24, 'relmomentum20': -0.25, 'relmomentum40': 0.13, 'relmomentum80': -0.58}

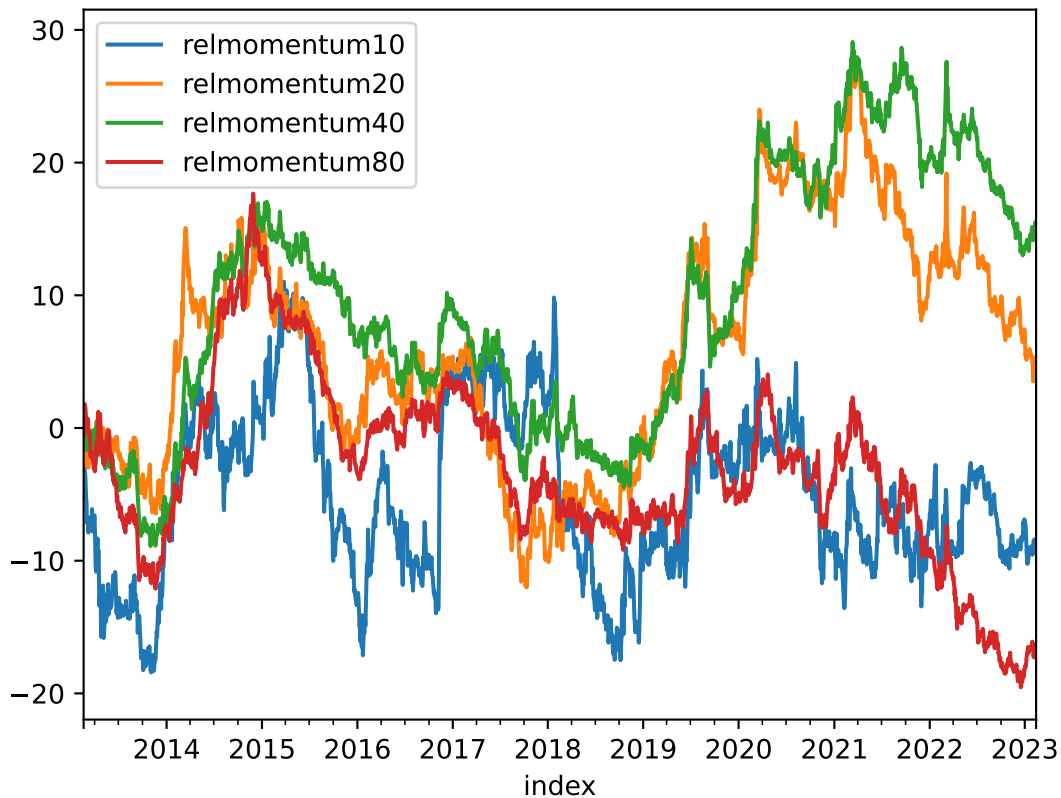


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.9, 'relmomentum20': 0.471, 'relmomentum40': 1.485, 'relmomentum80': -1.606}

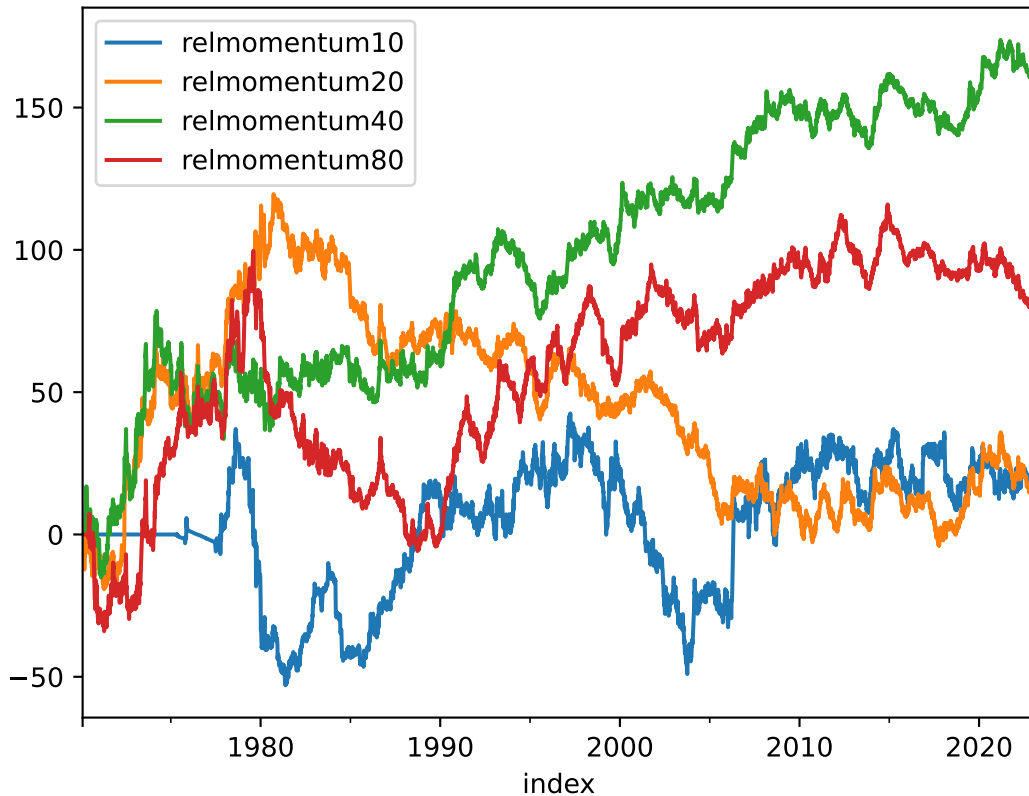
ann. std {'relmomentum10': 12.836, 'relmomentum20': 8.881, 'relmomentum40': 7.27, 'relmomentum80': 6.72}

ann. SR {'relmomentum10': -0.07, 'relmomentum20': 0.05, 'relmomentum40': 0.2, 'relmomentum80': -0.24}

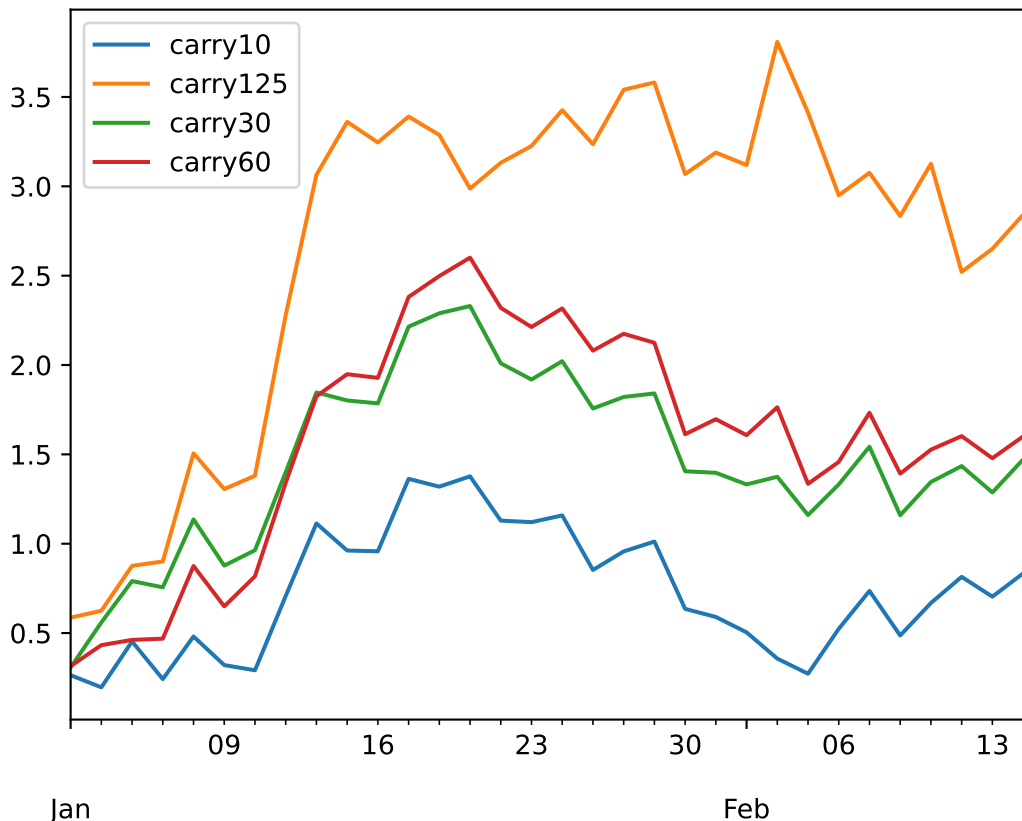


Total Trading Rule P&L for period '99Y'

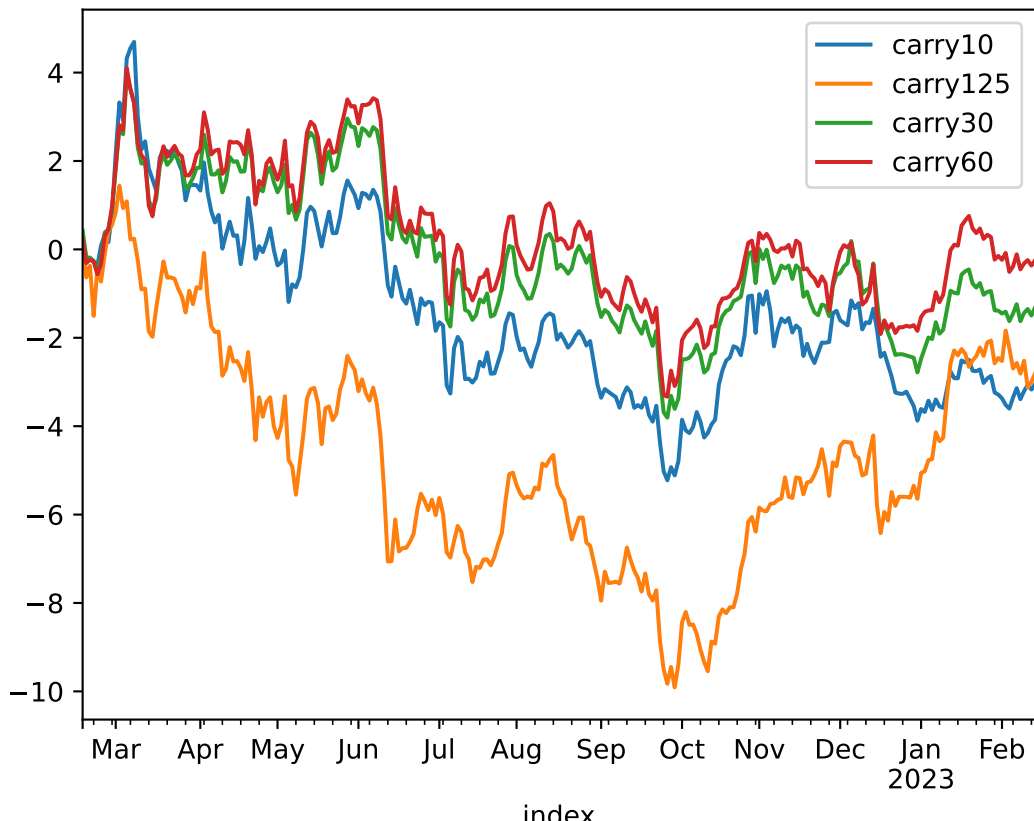
ann. mean {'relmomentum10': 0.313, 'relmomentum20': 0.237, 'relmomentum40': 2.957, 'relmomentum80': 1.516}
ann. std {'relmomentum10': 13.323, 'relmomentum20': 11.517, 'relmomentum40': 10.782, 'relmomentum80': 11.061}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 6.669, 'carry125': 22.726, 'carry30': 11.772, 'carry60': 12.801}
ann. std {'carry10': 3.377, 'carry125': 5.835, 'carry30': 3.753, 'carry60': 4.009}
ann. SR {'carry10': 1.97, 'carry125': 3.89, 'carry30': 3.14, 'carry60': 3.19}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.995, 'carry125': -2.761, 'carry30': -1.292, 'carry60': -0.24}
ann. std {'carry10': 6.591, 'carry125': 7.447, 'carry30': 6.318, 'carry60': 6.518}
ann. SR {'carry10': -0.45, 'carry125': -0.37, 'carry30': -0.2, 'carry60': -0.04}

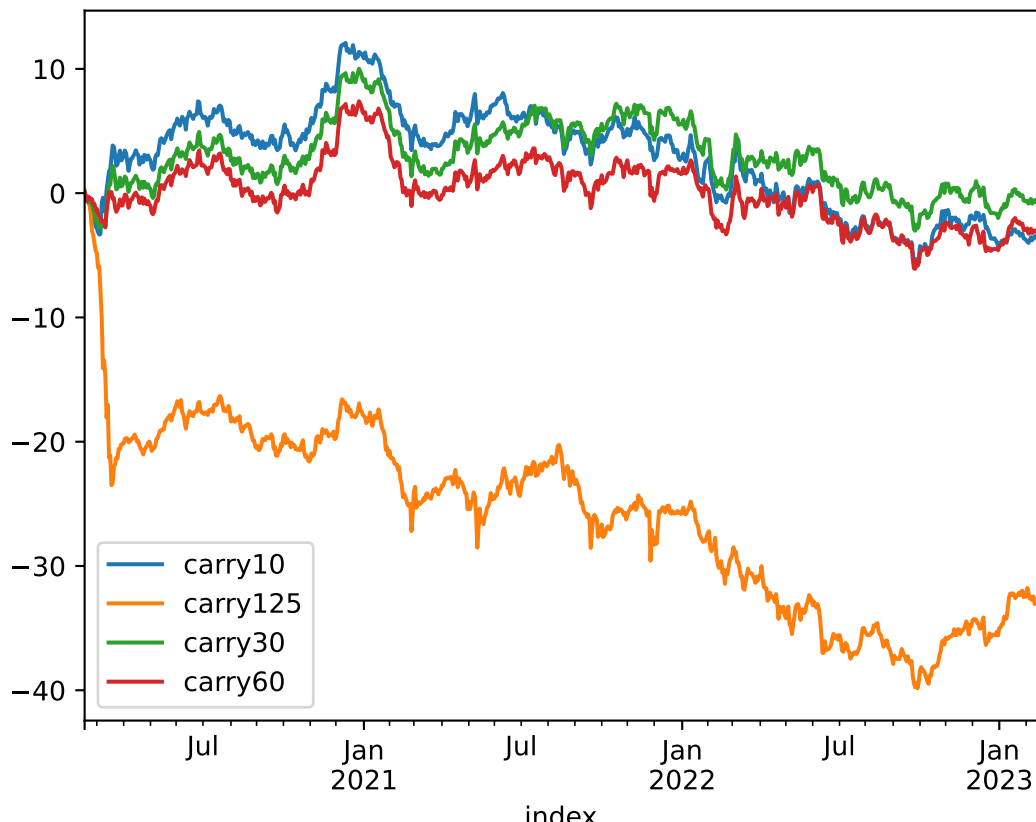


Total Trading Rule P&L for period '3Y'

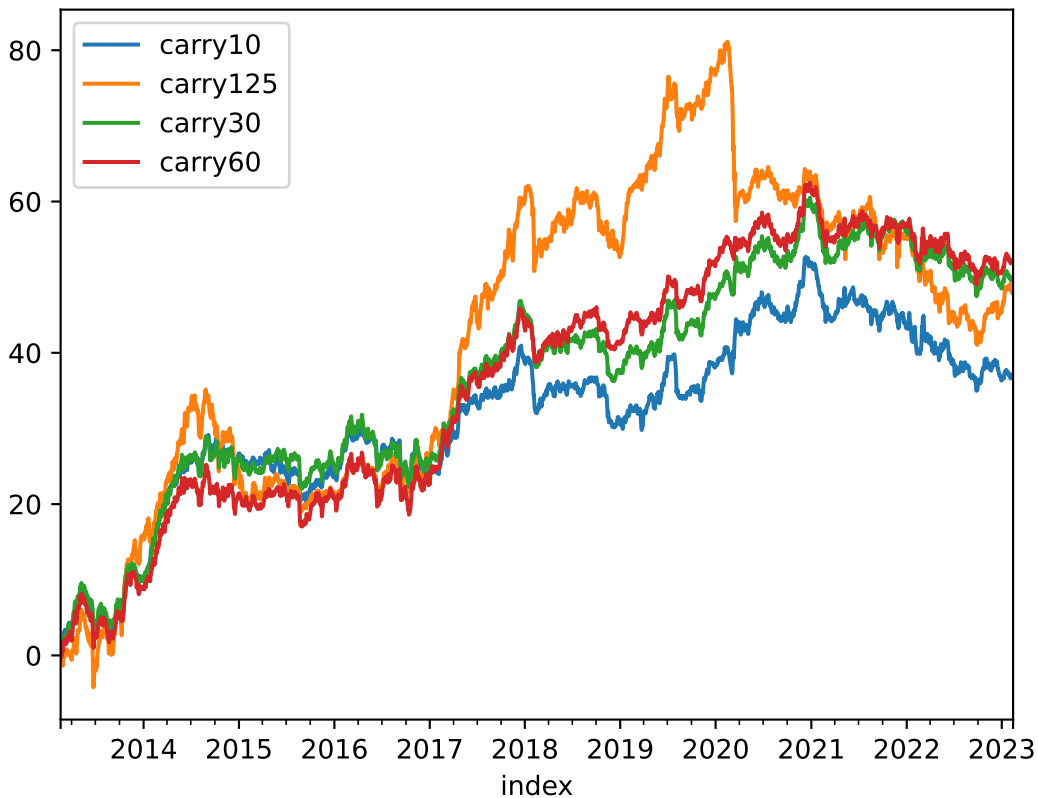
ann. mean {'carry10': -1.127, 'carry125': -10.718, 'carry30': -0.174, 'carry60': -0.982}

ann. std {'carry10': 6.808, 'carry125': 9.386, 'carry30': 6.603, 'carry60': 6.55}

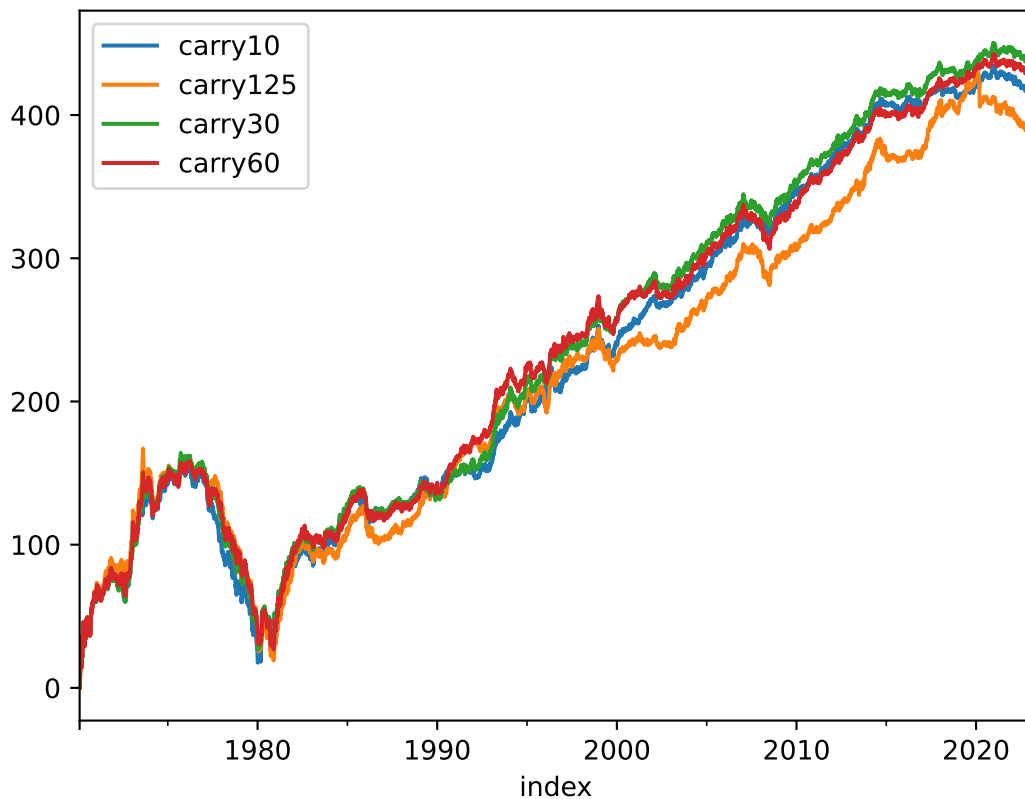
ann. SR {'carry10': -0.17, 'carry125': -1.14, 'carry30': -0.03, 'carry60': -0.15}



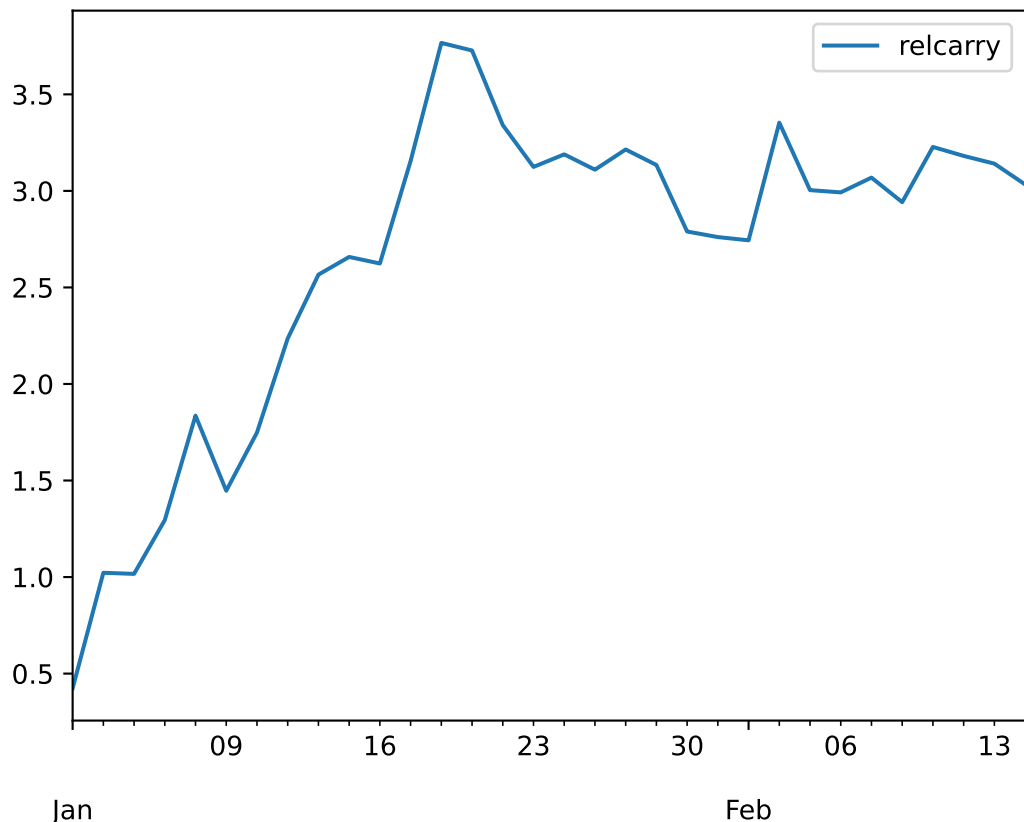
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.649, 'carry125': 4.729, 'carry30': 4.906, 'carry60': 5.117}
ann. std {'carry10': 6.411, 'carry125': 9.117, 'carry30': 6.514, 'carry60': 6.483}
ann. SR {'carry10': 0.57, 'carry125': 0.52, 'carry30': 0.75, 'carry60': 0.79}



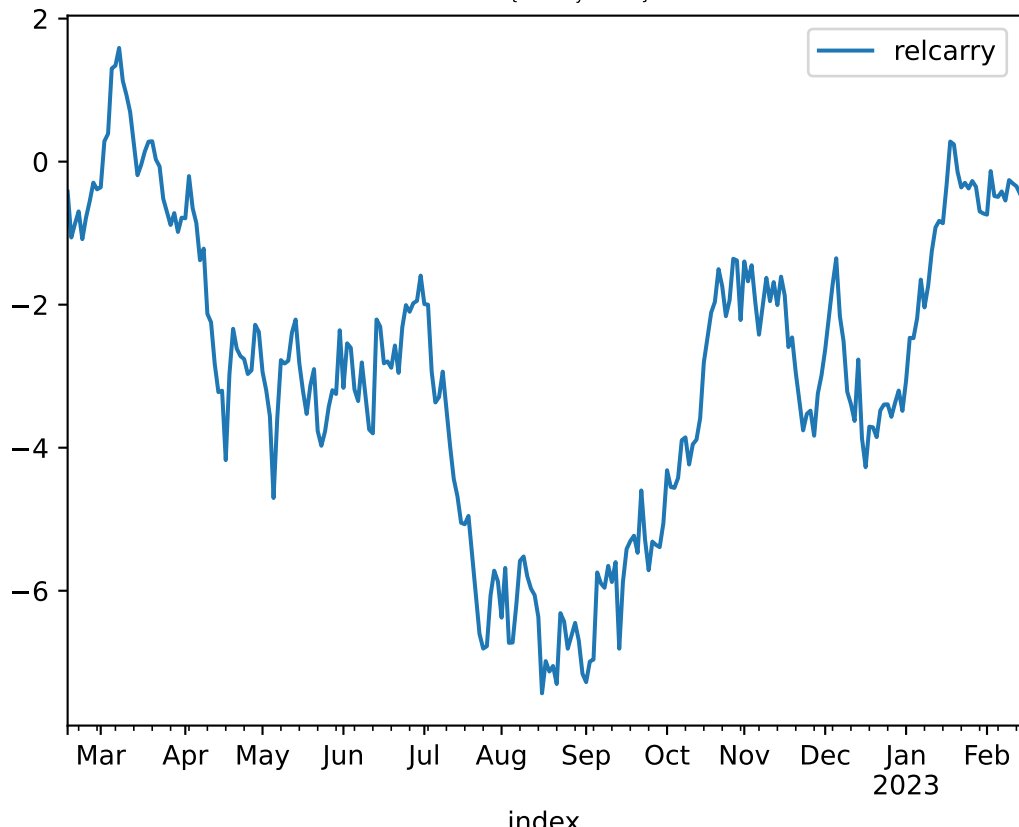
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.752, 'carry125': 7.337, 'carry30': 8.138, 'carry60': 7.996}
ann. std {'carry10': 11.828, 'carry125': 12.063, 'carry30': 11.84, 'carry60': 11.788}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



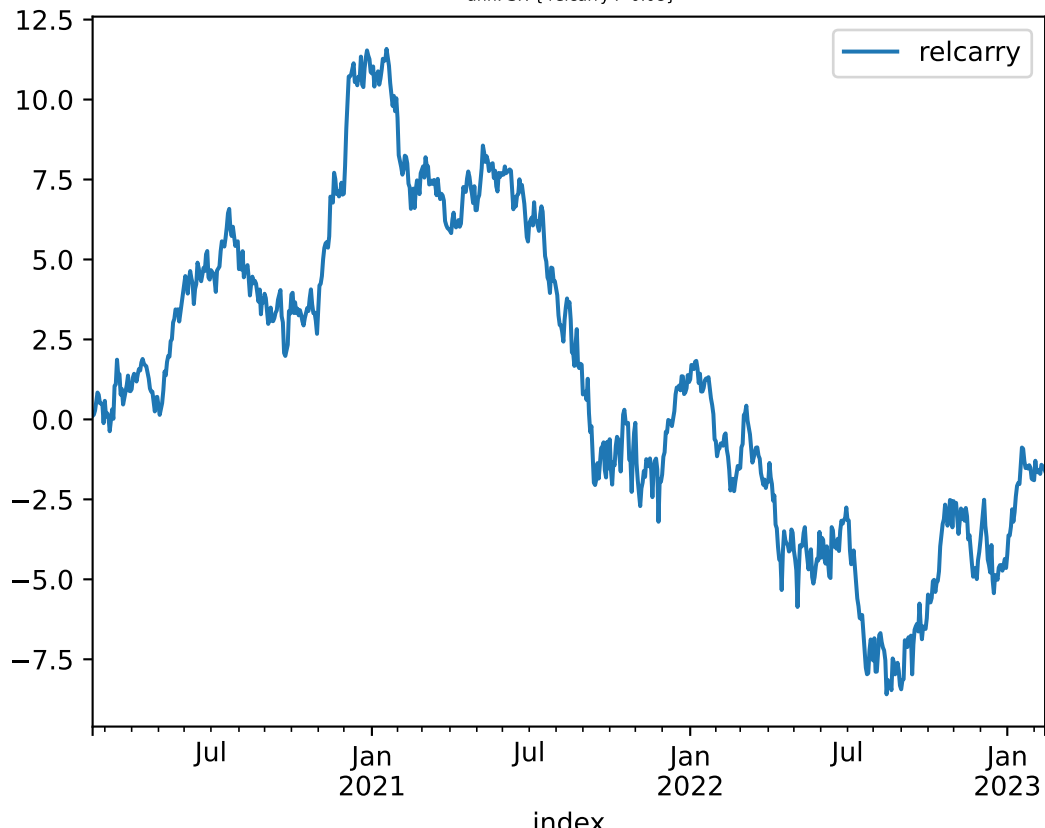
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 24.268}
ann. std {'relcarry': 4.837}
ann. SR {'relcarry': 5.02}



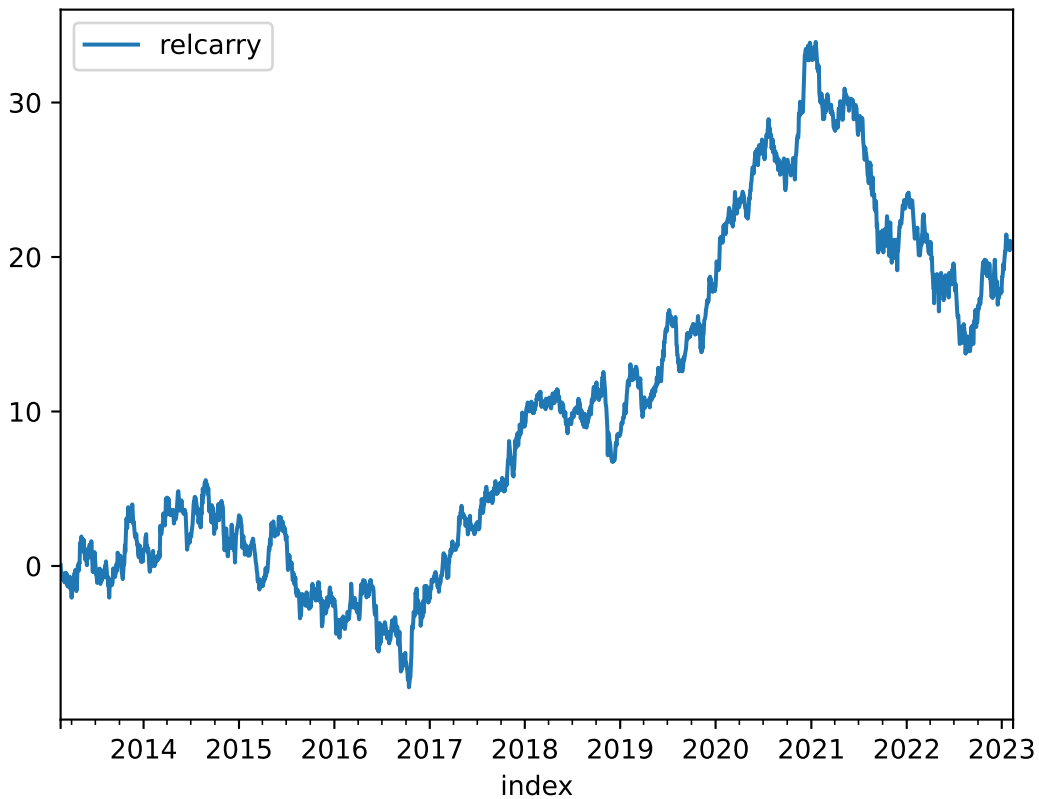
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -0.445}
ann. std {'relcarry': 7.211}
ann. SR {'relcarry': -0.06}



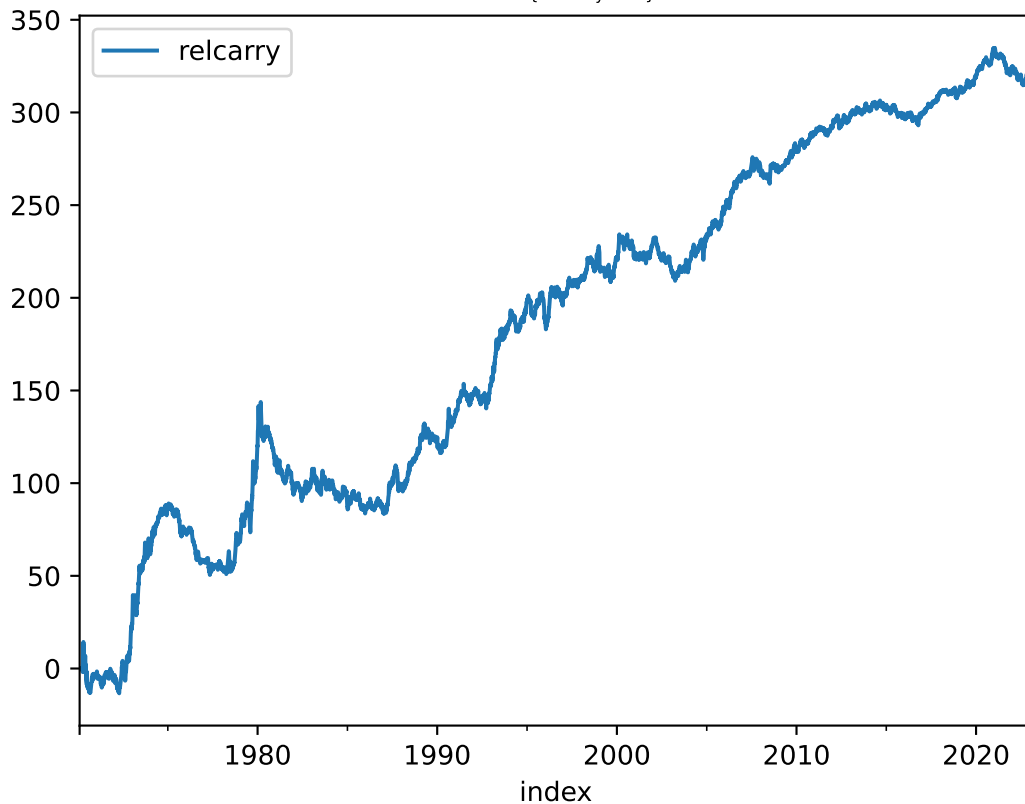
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.528}
ann. std {'relcarry': 6.839}
ann. SR {'relcarry': -0.08}



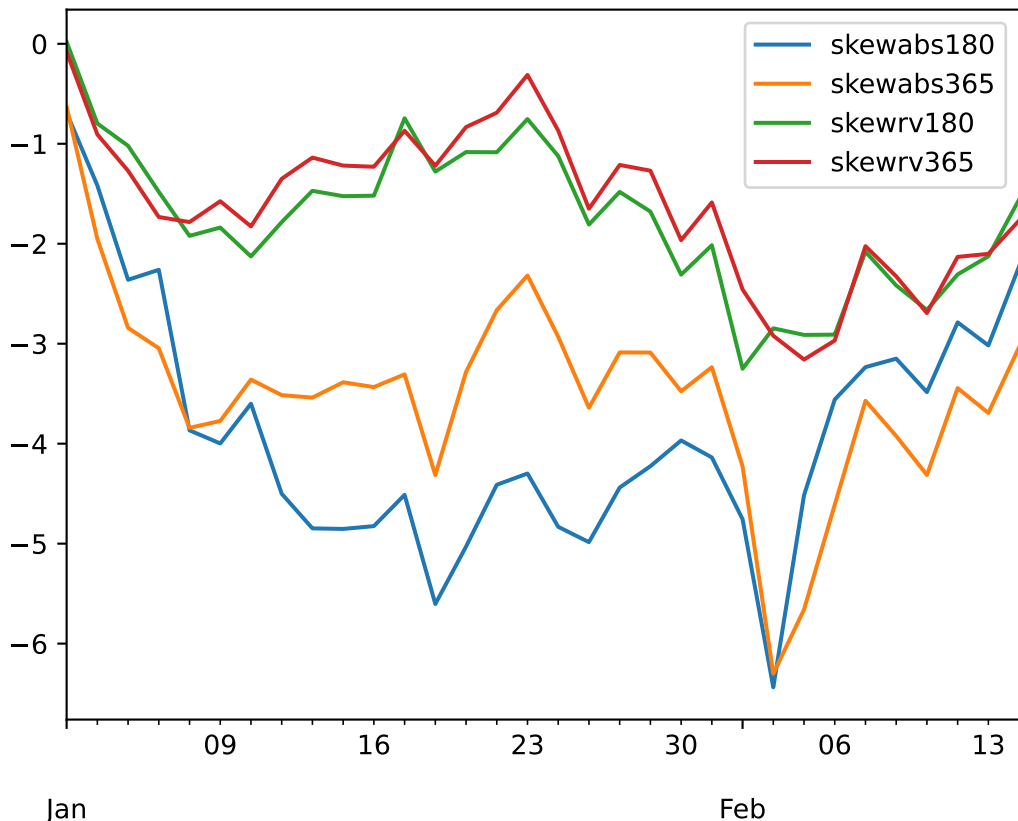
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.035}
ann. std {'relcarry': 6.009}
ann. SR {'relcarry': 0.34}



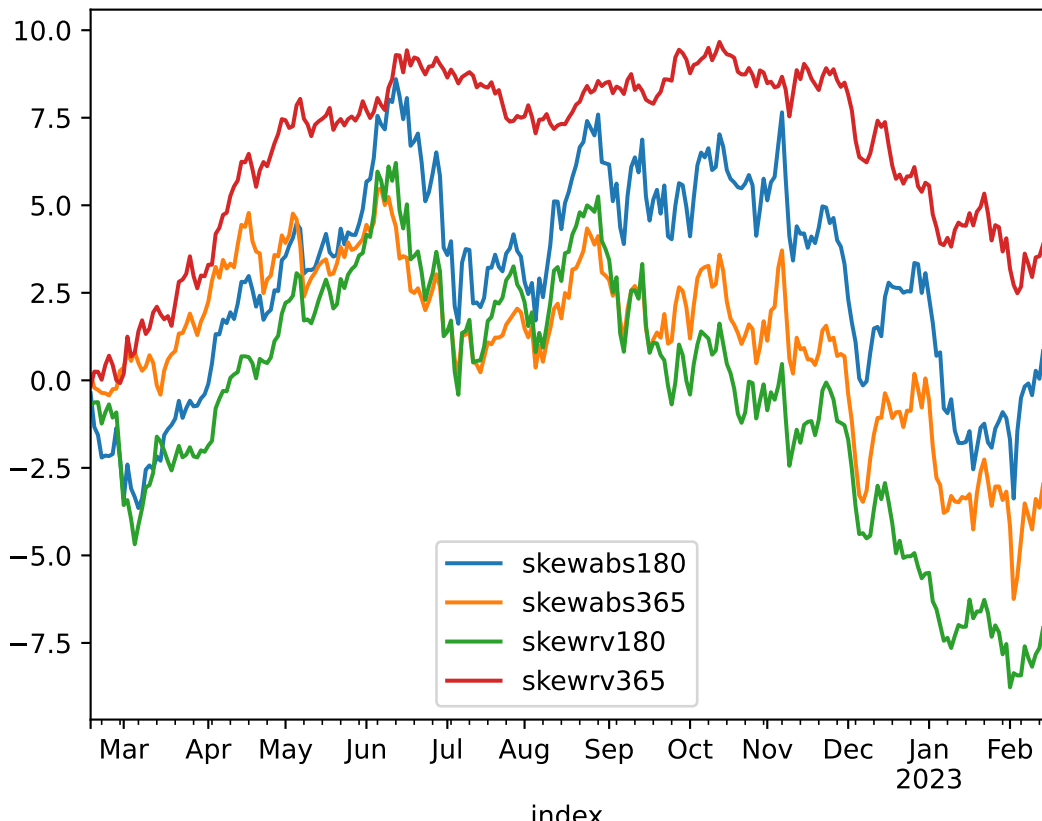
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.951}
ann. std {'relcarry': 9.881}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -17.815, 'skewabs365': -24.275, 'skewrv180': -12.465, 'skewrv365': -14.145}
ann. std {'skewabs180': 11.988, 'skewabs365': 11.83, 'skewrv180': 7.419, 'skewrv365': 7.18}
ann. SR {'skewabs180': -1.49, 'skewabs365': -2.05, 'skewrv180': -1.68, 'skewrv365': -1.97}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 0.821, 'skewabs365': -2.932, 'skewrv180': -6.966, 'skewrv365': 3.817}
ann. std {'skewabs180': 10.543, 'skewabs365': 8.862, 'skewrv180': 9.216, 'skewrv365': 5.35}
ann. SR {'skewabs180': 0.08, 'skewabs365': -0.33, 'skewrv180': -0.76, 'skewrv365': 0.71}

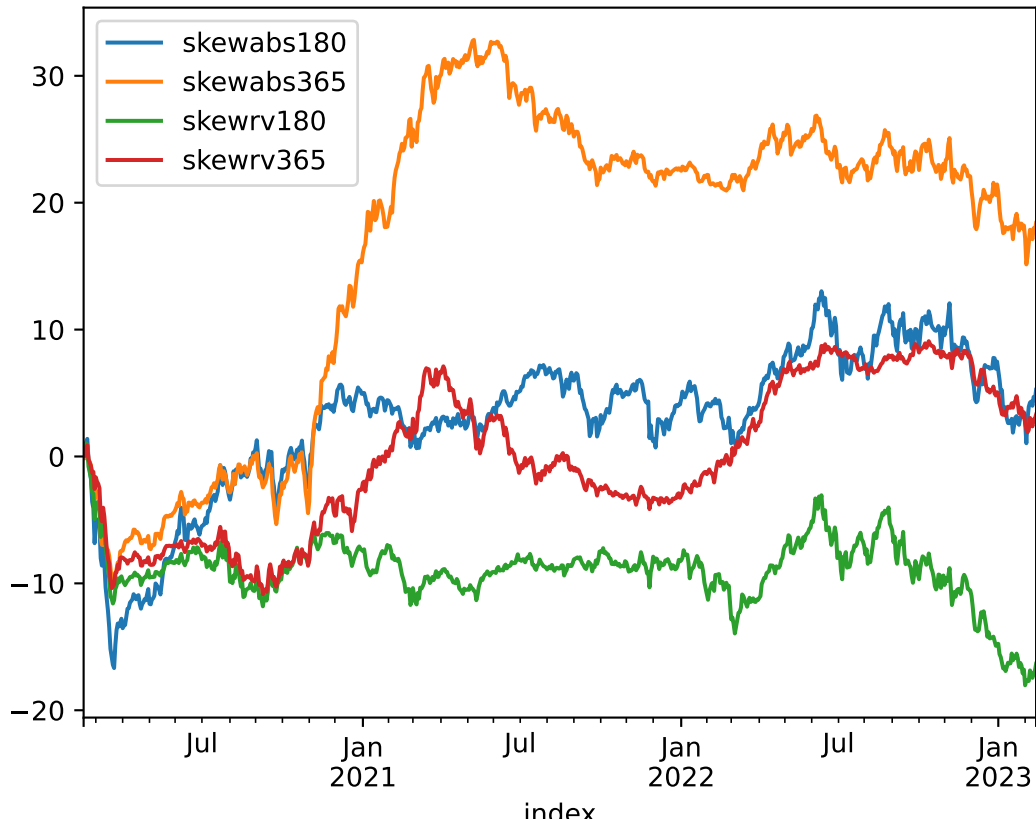


Total Trading Rule P&L for period '3Y'

ann. mean {'skewabs180': 1.72, 'skewabs365': 6.025, 'skewrv180': -5.35, 'skewrv365': 1.079}

ann. std {'skewabs180': 9.721, 'skewabs365': 9.057, 'skewrv180': 7.77, 'skewrv365': 6.682}

ann. SR {'skewabs180': 0.18, 'skewabs365': 0.67, 'skewrv180': -0.69, 'skewrv365': 0.16}

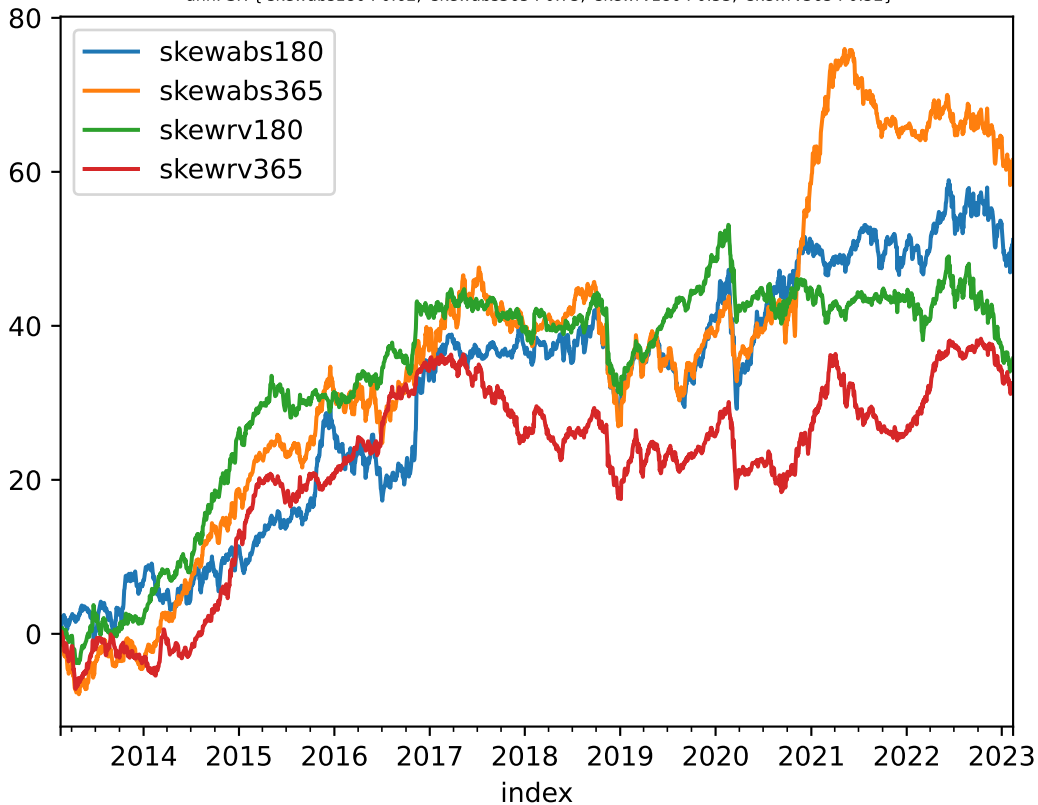


Total Trading Rule P&L for period '10Y'

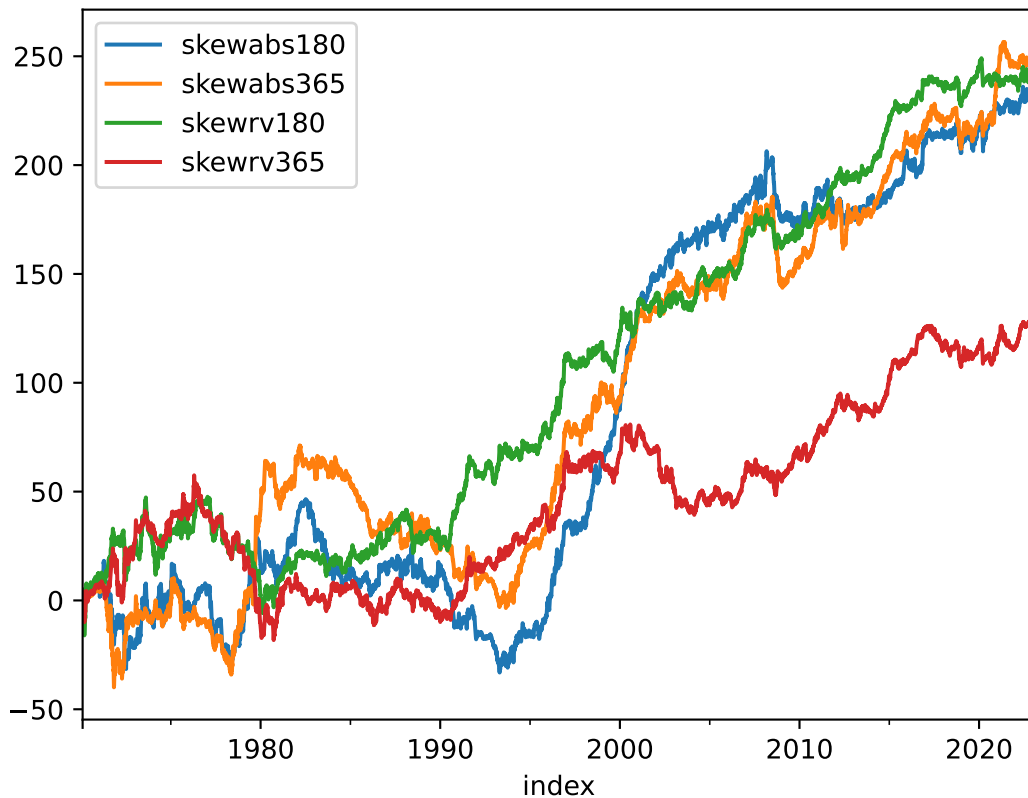
ann. mean {'skewabs180': 5.023, 'skewabs365': 6.043, 'skewrv180': 3.51, 'skewrv365': 3.196}

ann. std {'skewabs180': 8.097, 'skewabs365': 8.065, 'skewrv180': 6.585, 'skewrv365': 6.194}

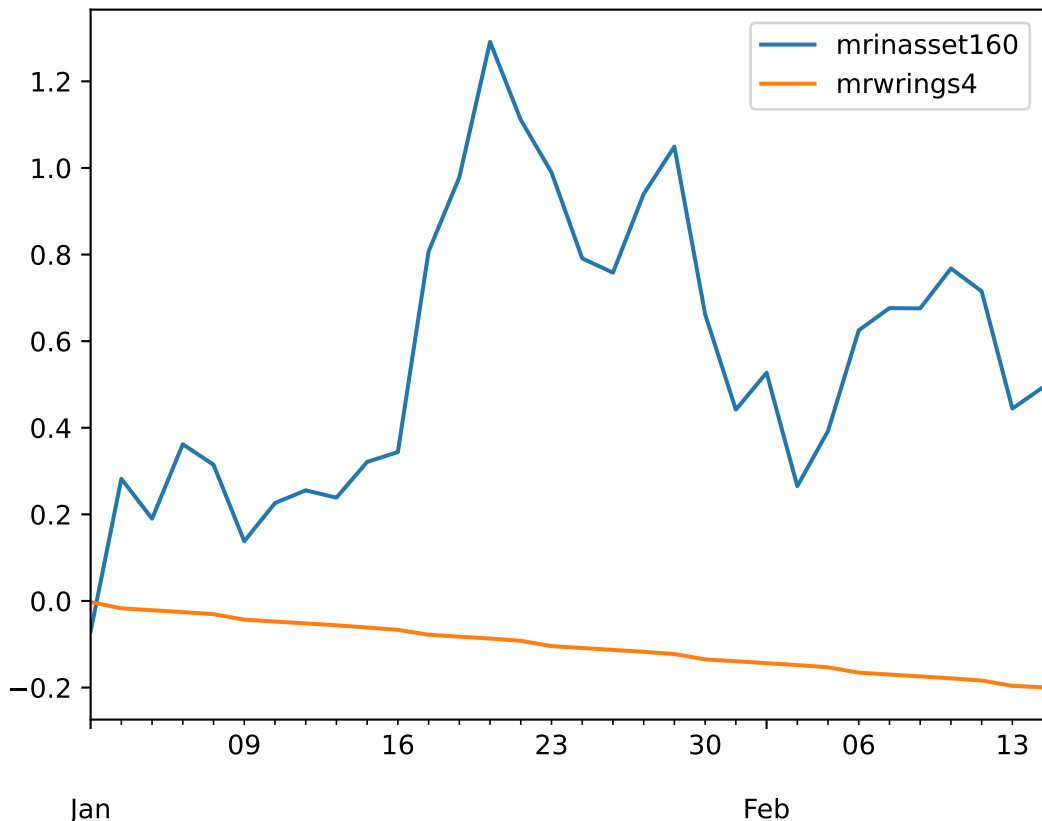
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.75, 'skewrv180': 0.53, 'skewrv365': 0.52}



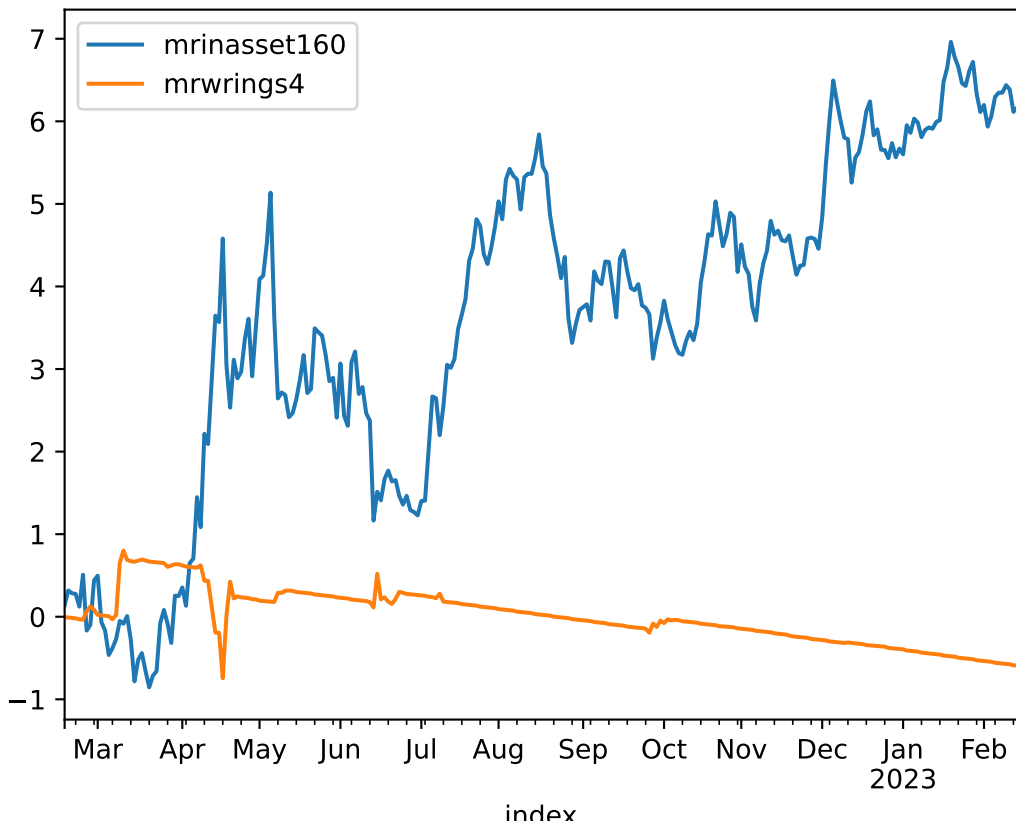
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.223, 'skewabs365': 4.481, 'skewrv180': 4.288, 'skewrv365': 2.265}
ann. std {'skewabs180': 10.793, 'skewabs365': 10.301, 'skewrv180': 9.475, 'skewrv365': 8.784}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



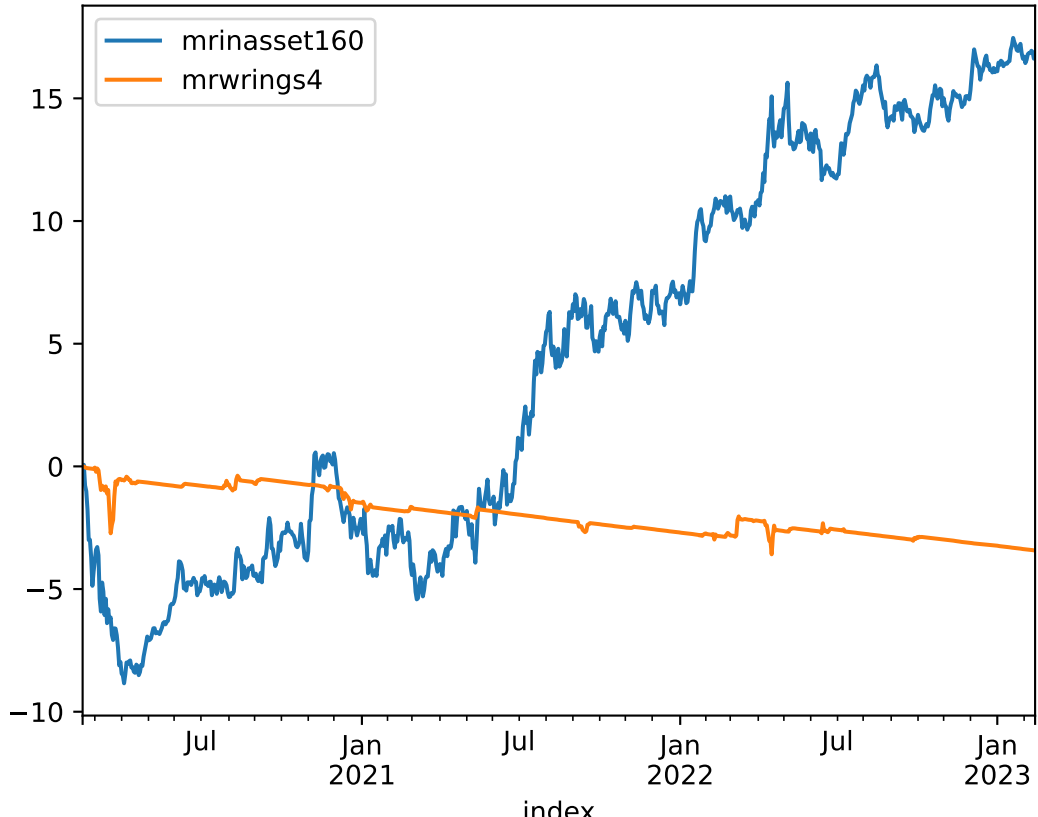
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 3.95, 'mrwrings4': -1.595}
ann. std {'mrinasset160': 3.039, 'mrwrings4': 0.056}
ann. SR {'mrinasset160': 1.3, 'mrwrings4': -28.66}



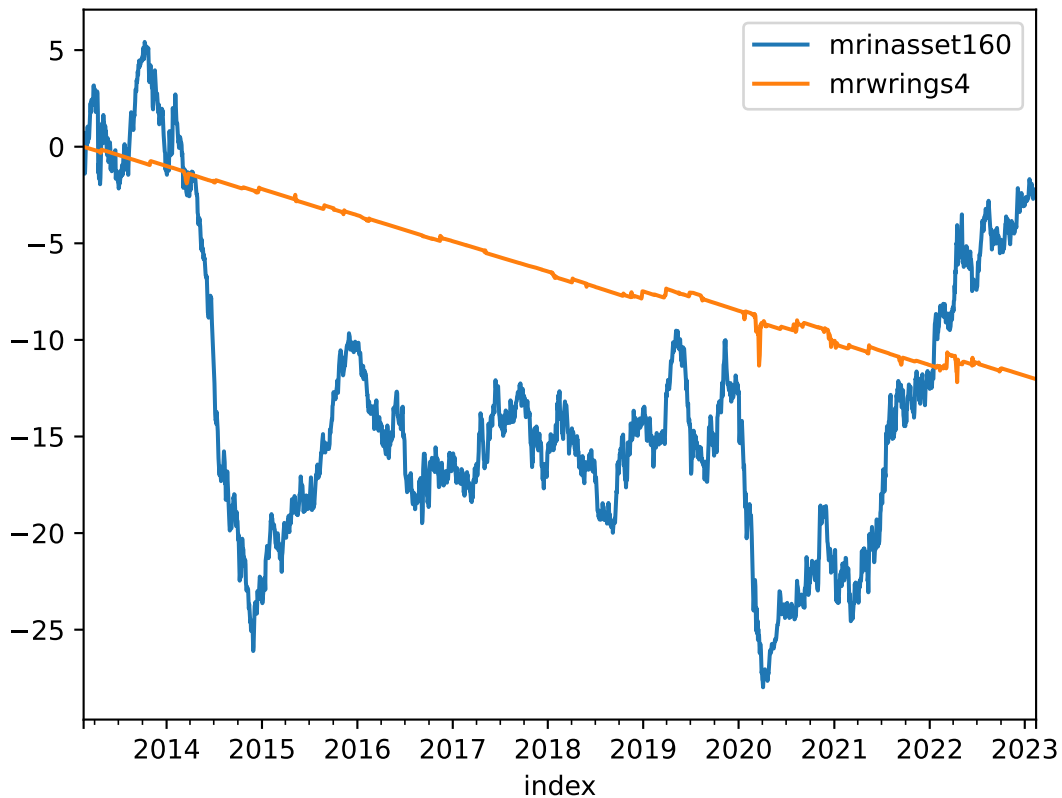
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 6.07, 'mrwrings4': -0.582}
ann. std {'mrinasset160': 5.66, 'mrwrings4': 1.449}
ann. SR {'mrinasset160': 1.07, 'mrwrings4': -0.4}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.456, 'mrwrings4': -1.123}
ann. std {'mrinasset160': 6.697, 'mrwrings4': 1.517}
ann. SR {'mrinasset160': 0.81, 'mrwrings4': -0.74}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.243, 'mrwrings4': -1.182}
ann. std {'mrinasset160': 6.549, 'mrwrings4': 0.899}
ann. SR {'mrinasset160': -0.04, 'mrwrings4': -1.32}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.165, 'mrwrings4': -2.31}
ann. std {'mrinasset160': 11.164, 'mrwrings4': 2.622}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.88}

