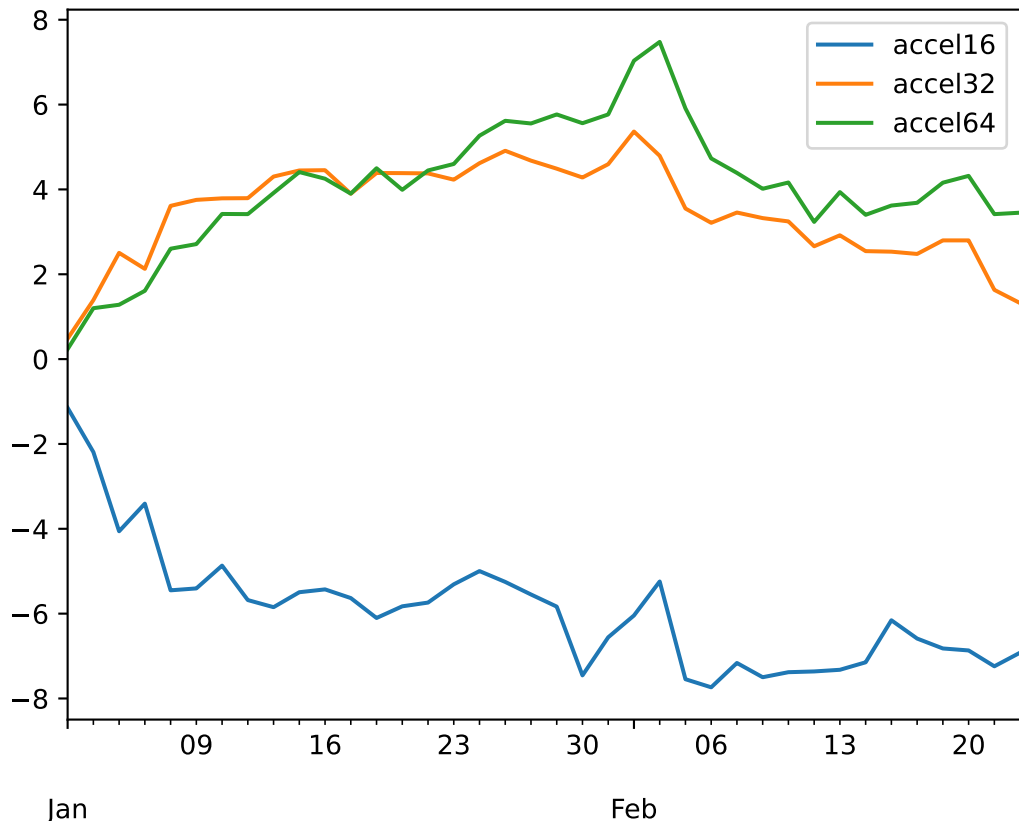
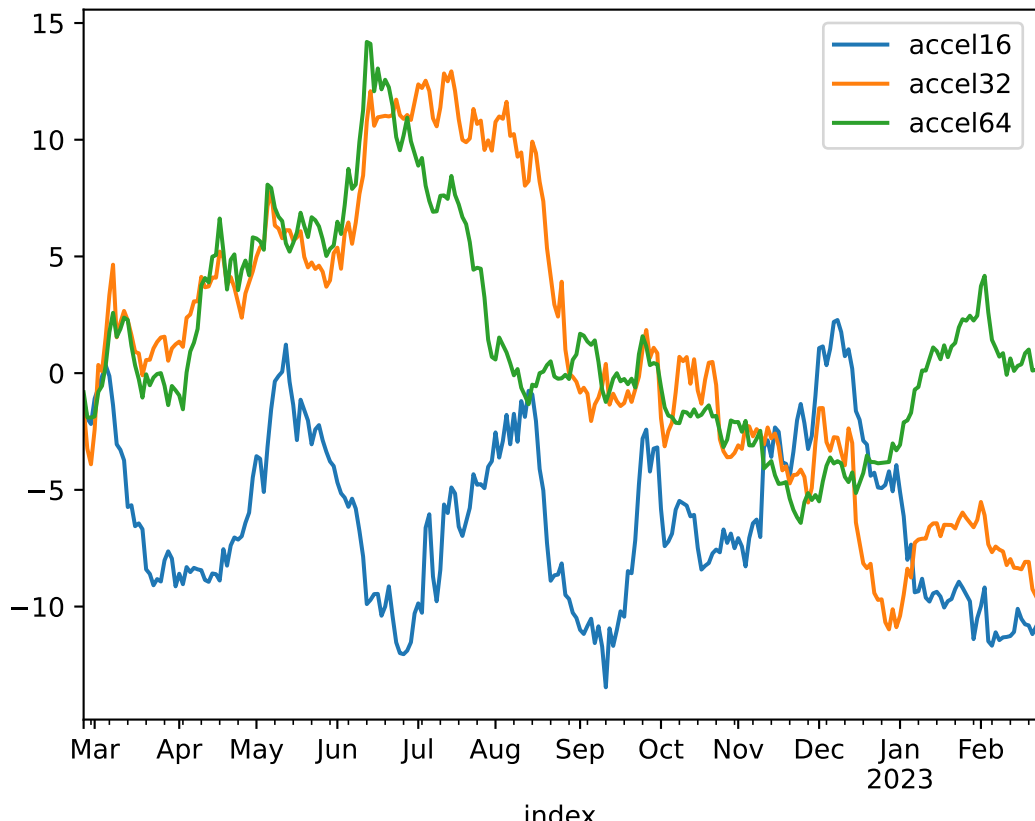


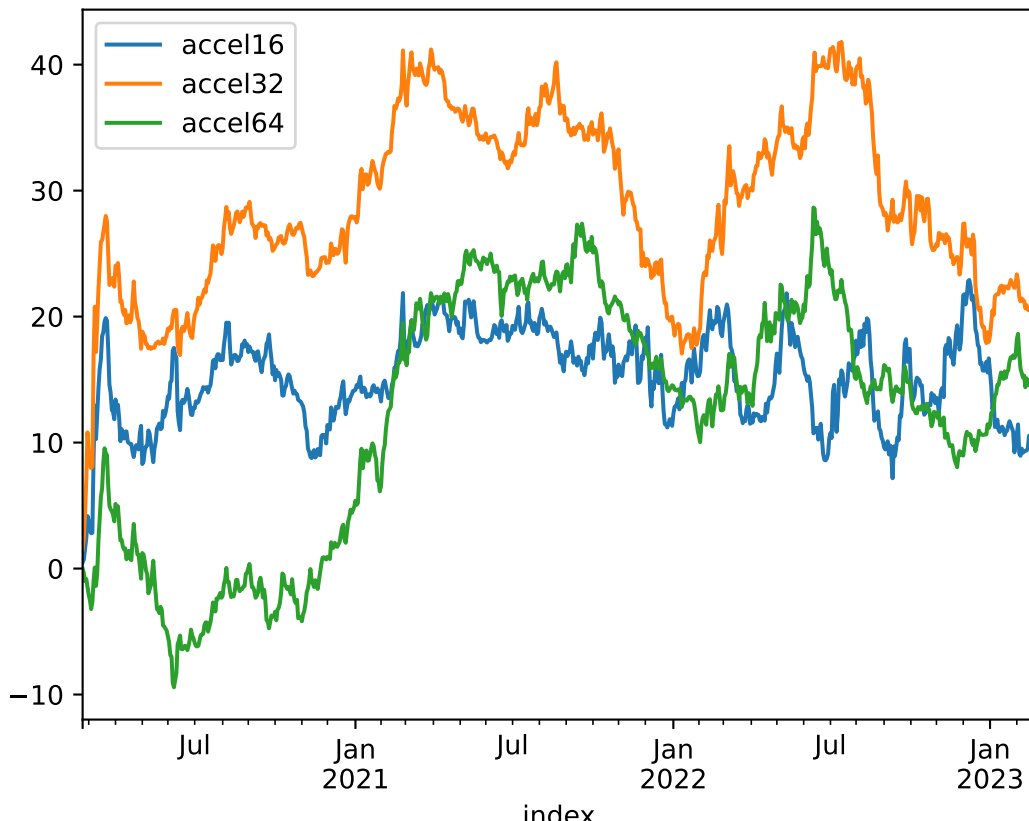
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -46.617, 'accel32': 8.897, 'accel64': 23.253}
ann. std {'accel16': 12.572, 'accel32': 8.608, 'accel64': 9.545}
ann. SR {'accel16': -3.71, 'accel32': 1.03, 'accel64': 2.44}



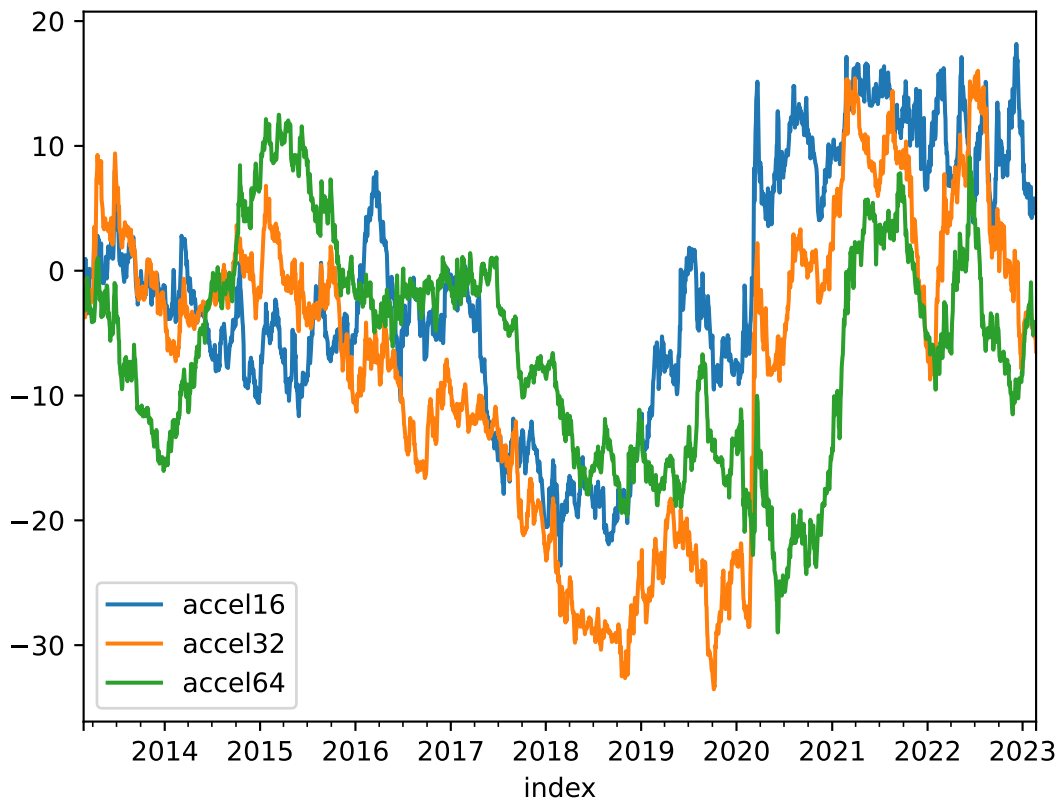
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -10.692, 'accel32': -9.416, 'accel64': 0.142}
ann. std {'accel16': 15.932, 'accel32': 14.154, 'accel64': 11.618}
ann. SR {'accel16': -0.67, 'accel32': -0.67, 'accel64': 0.01}



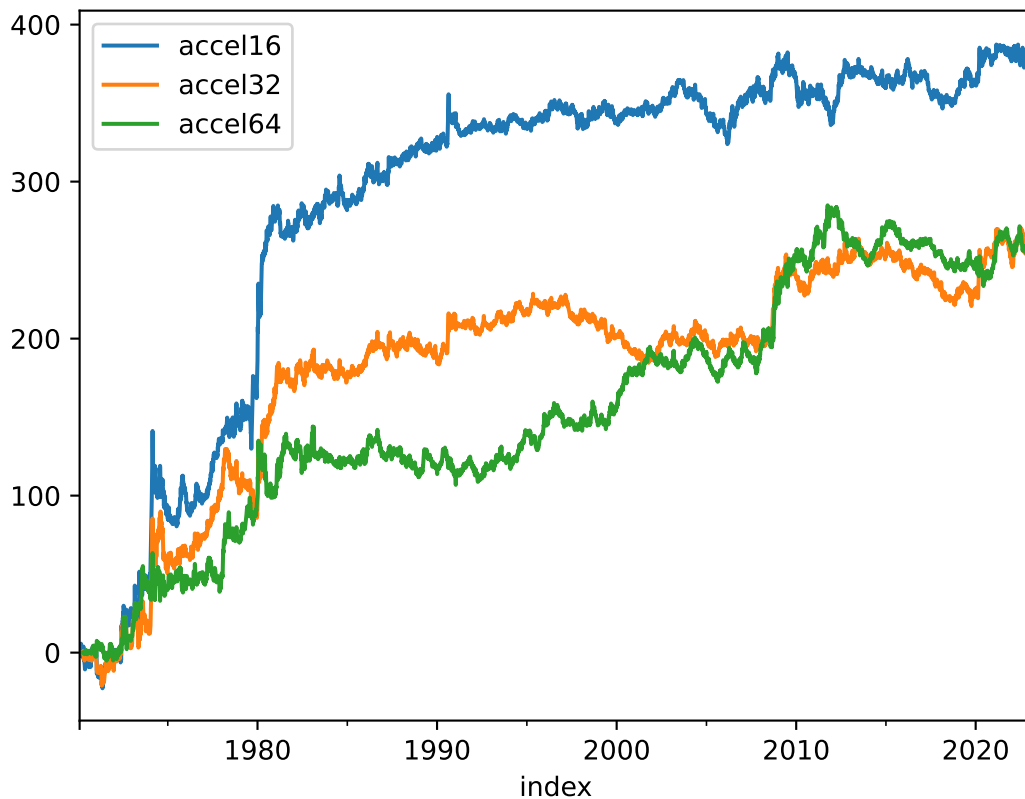
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 3.193, 'accel32': 6.314, 'accel64': 4.776}
ann. std {'accel16': 14.783, 'accel32': 14.218, 'accel64': 11.393}
ann. SR {'accel16': 0.22, 'accel32': 0.44, 'accel64': 0.42}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.494, 'accel32': -0.635, 'accel64': -0.486}
ann. std {'accel16': 11.988, 'accel32': 11.181, 'accel64': 9.583}
ann. SR {'accel16': 0.04, 'accel32': -0.06, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.939, 'accel32': 4.583, 'accel64': 4.763}
ann. std {'accel16': 15.662, 'accel32': 13.74, 'accel64': 13.252}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.36}

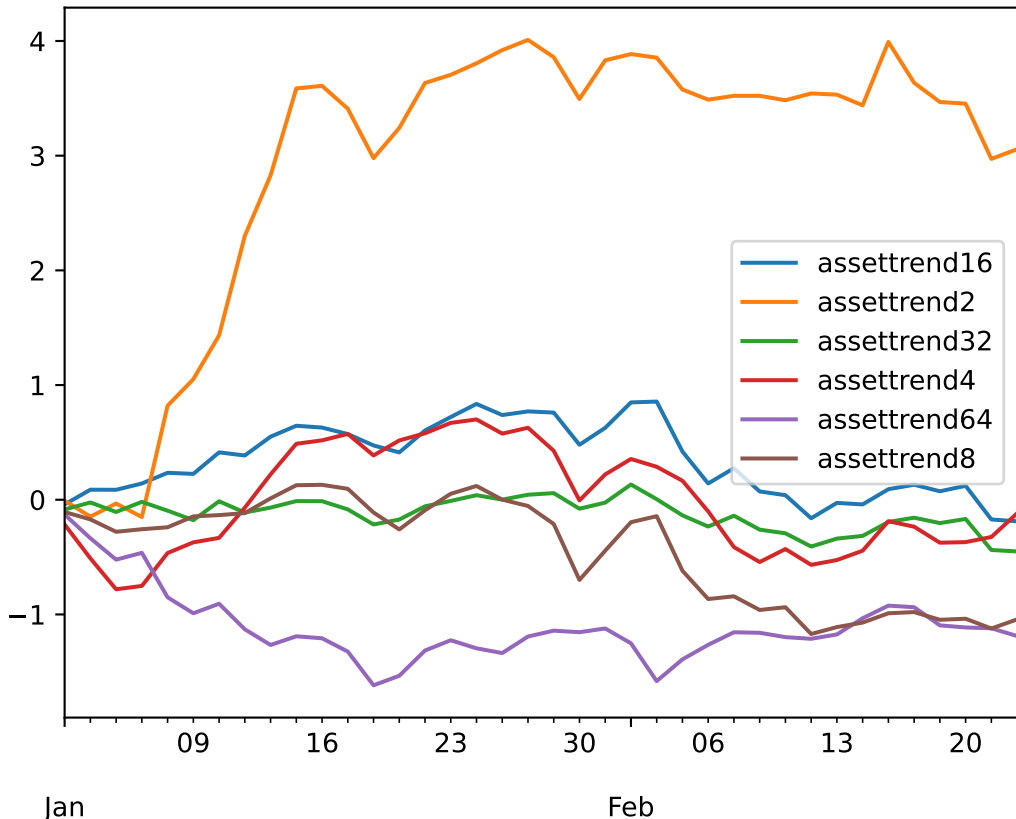


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -1.265, 'assettrend2': 20.589, 'assettrend32': -3.036, 'assettrend4': -0.797, 'assettrend64': -8.004, 'assettrend8': -7.028}

ann. std {'assettrend16': 2.409, 'assettrend2': 5.331, 'assettrend32': 1.555, 'assettrend4': 2.983, 'assettrend64': 2.295, 'assettrend8': 2.569}

ann. SR {'assettrend16': -0.53, 'assettrend2': 3.86, 'assettrend32': -1.95, 'assettrend4': -0.27, 'assettrend64': -3.49, 'assettrend8': -2.74}

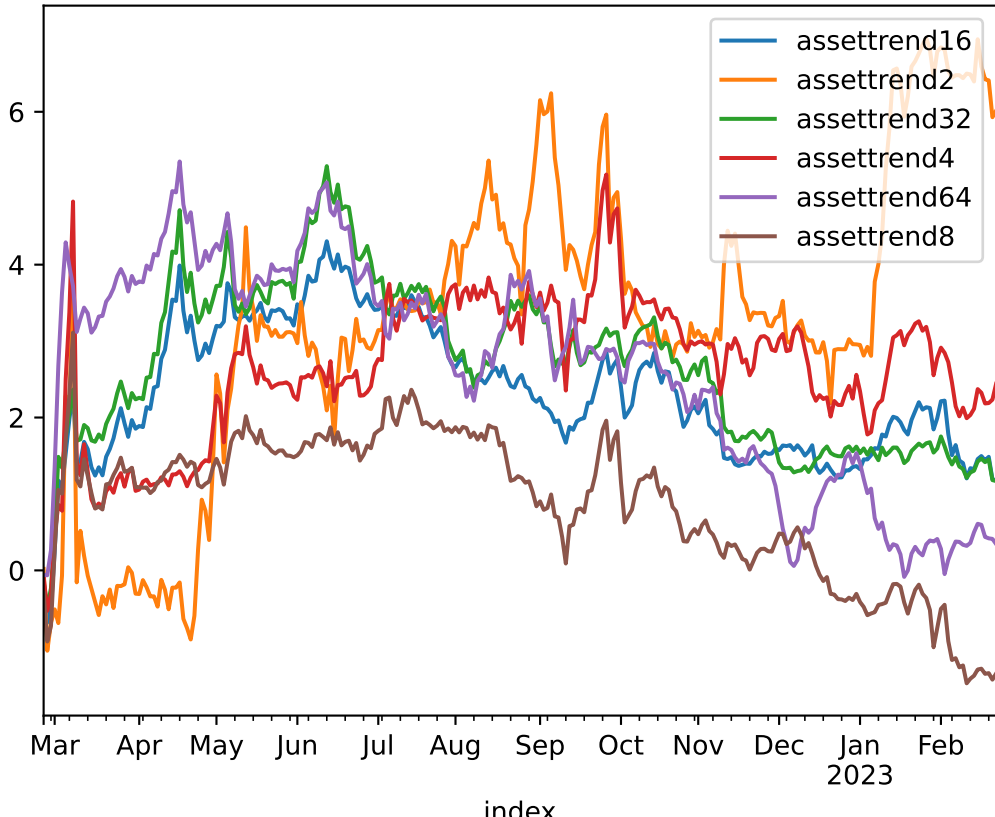


Total Trading Rule P&L for period '1Y'

ann. mean {'assetrend16': 1.159, 'assetrend2': 5.921, 'assetrend32': 1.151, 'assetrend4': 2.403, 'assetrend64': 0.34, 'assetrend8': -1.329}

ann. std {'assetrend16': 2.983, 'assetrend2': 7.49, 'assetrend32': 3.169, 'assetrend4': 5.555, 'assetrend64': 3.678, 'assetrend8': 3.633}

ann. SR {'assetrend16': 0.39, 'assetrend2': 0.79, 'assetrend32': 0.36, 'assetrend4': 0.43, 'assetrend64': 0.09, 'assetrend8': -0.37}

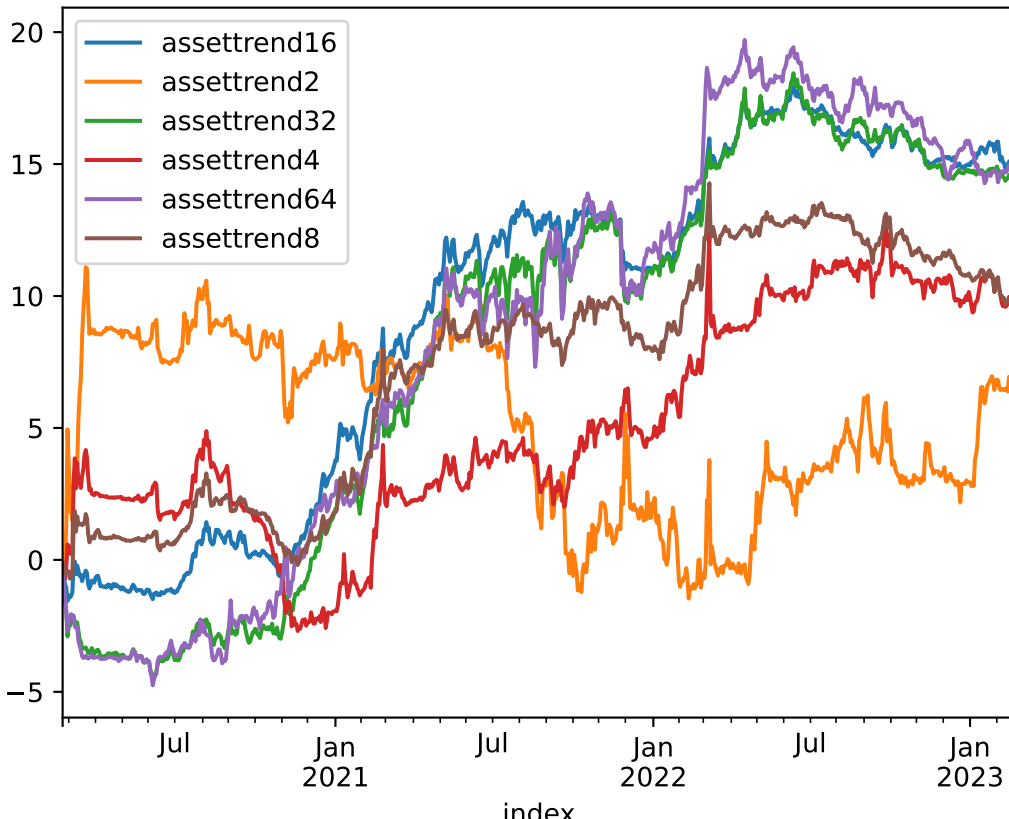


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.842, 'assettrend2': 1.963, 'assettrend32': 4.683, 'assettrend4': 3.282, 'assettrend64': 4.806, 'assettrend8': 3.208}

ann. std {'assettrend16': 3.536, 'assettrend2': 7.669, 'assettrend32': 4.313, 'assettrend4': 5.28, 'assettrend64': 5.088, 'assettrend8': 3.736}

ann. SR {'assettrend16': 1.37, 'assettrend2': 0.26, 'assettrend32': 1.09, 'assettrend4': 0.62, 'assettrend64': 0.94, 'assettrend8': 0.86}

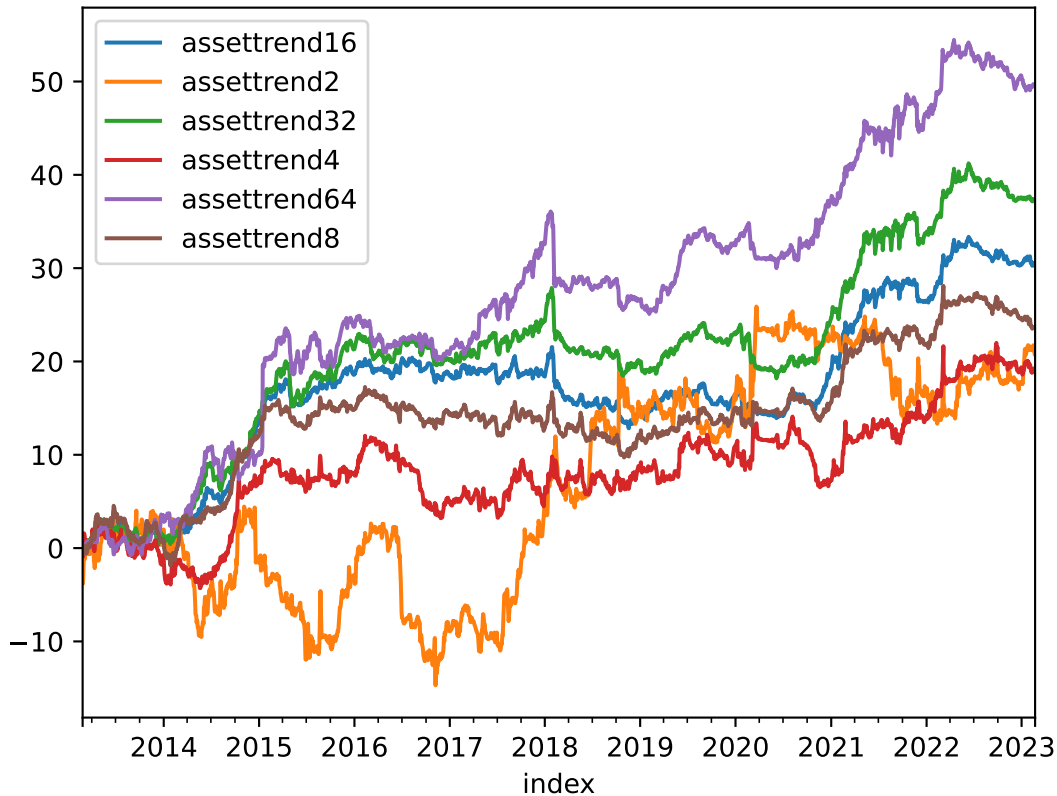


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.967, 'assettrend2': 2.042, 'assettrend32': 3.643, 'assettrend4': 1.89, 'assettrend64': 4.854, 'assettrend8': 2.32}

ann. std {'assettrend16': 3.245, 'assettrend2': 8.279, 'assettrend32': 3.704, 'assettrend4': 5.006, 'assettrend64': 5.286, 'assettrend8': 3.57}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.25, 'assettrend32': 0.98, 'assettrend4': 0.38, 'assettrend64': 0.92, 'assettrend8': 0.65}

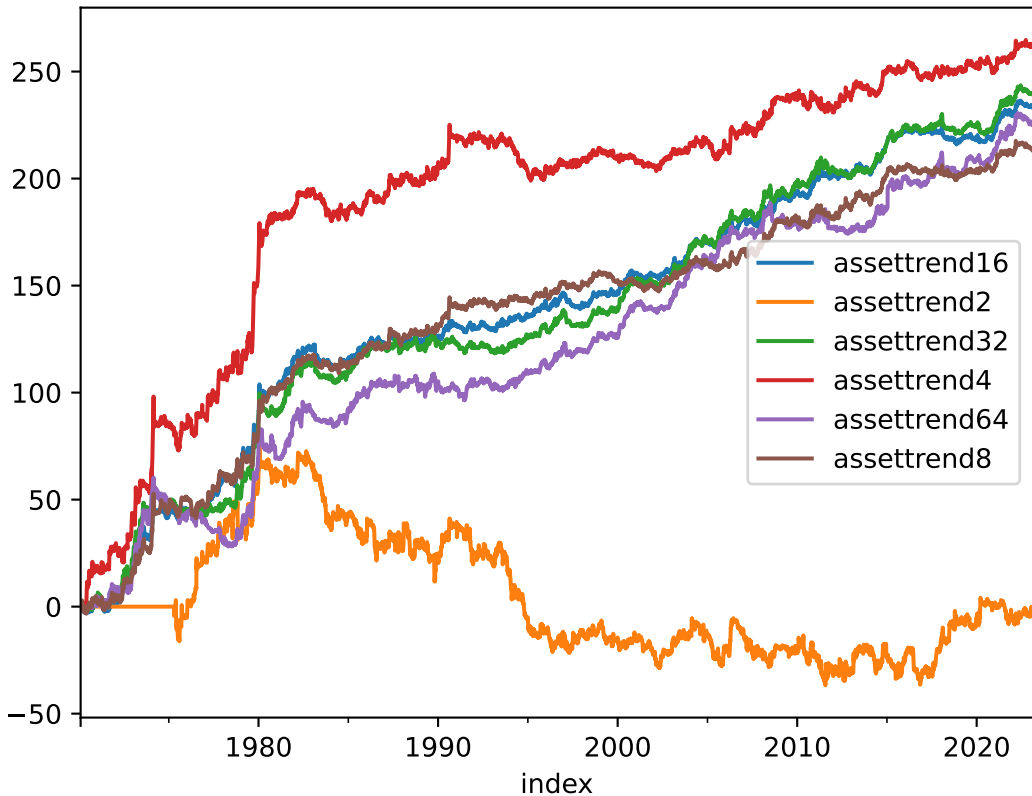


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.315, 'assettrend2': -0.018, 'assettrend32': 4.429, 'assettrend4': 4.846, 'assettrend8': 3.942}

ann. std {'assettrend16': 4.634, 'assettrend2': 10.018, 'assettrend32': 4.848, 'assettrend4': 7.338, 'assettrend64': 5.407, 'assettrend8': 5.016}

ann. SR {'assettrend16': 0.93, 'assettrend2': -0.0, 'assettrend32': 0.91, 'assettrend4': 0.66, 'assettrend64': 0.77, 'assettrend8': 0.79}

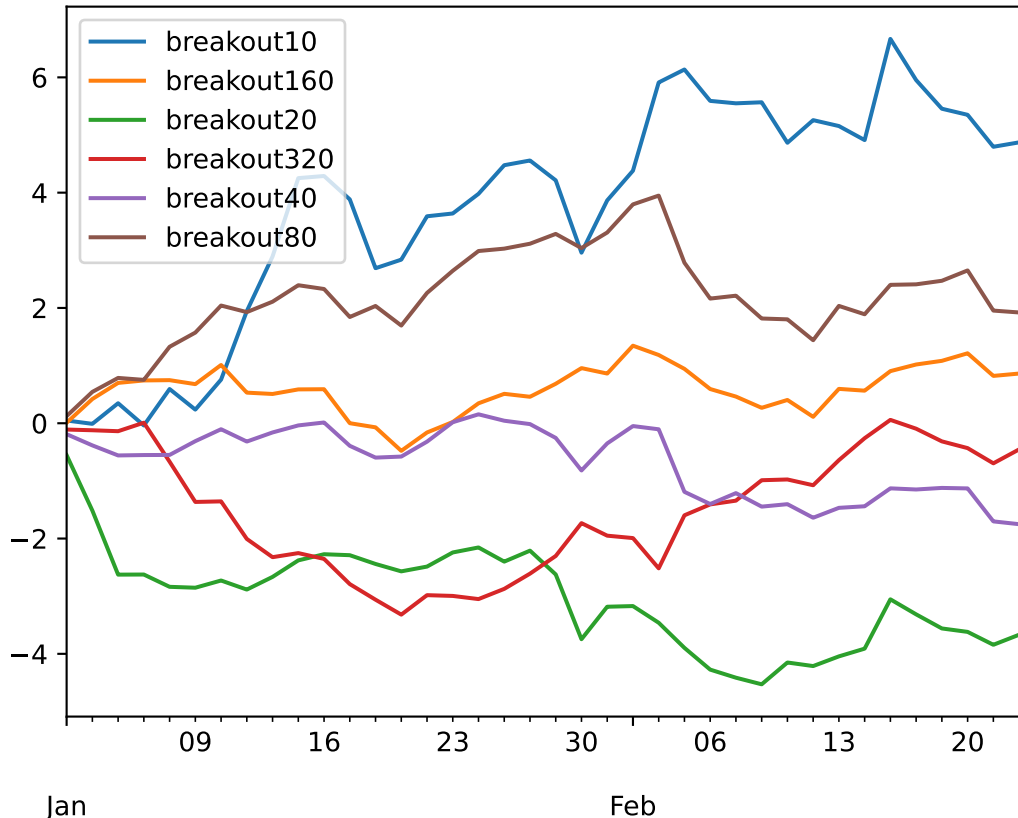


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 32.825, 'breakout160': 5.807, 'breakout20': -24.715, 'breakout320': -3.058, 'breakout40': -11.796, 'breakout80': 12.946}

ann. std {'breakout10': 11.01, 'breakout160': 4.278, 'breakout20': 6.381, 'breakout320': 5.566, 'breakout40': 4.669, 'breakout80': 6.166}

ann. SR {'breakout10': 2.98, 'breakout160': 1.36, 'breakout20': -3.87, 'breakout320': -0.55, 'breakout40': -2.53, 'breakout80': 2.1}

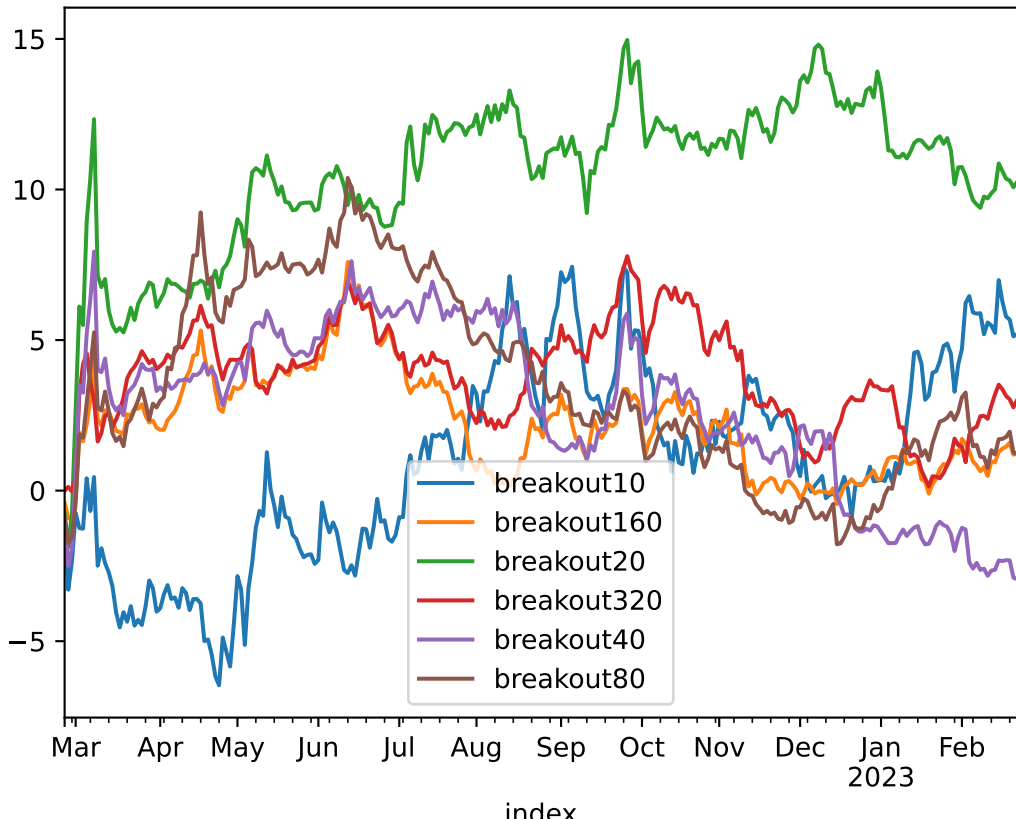


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 5.118, 'breakout160': 1.218, 'breakout20': 10.092, 'breakout320': 2.96, 'breakout40': -2.894, 'breakout80': 1.211}

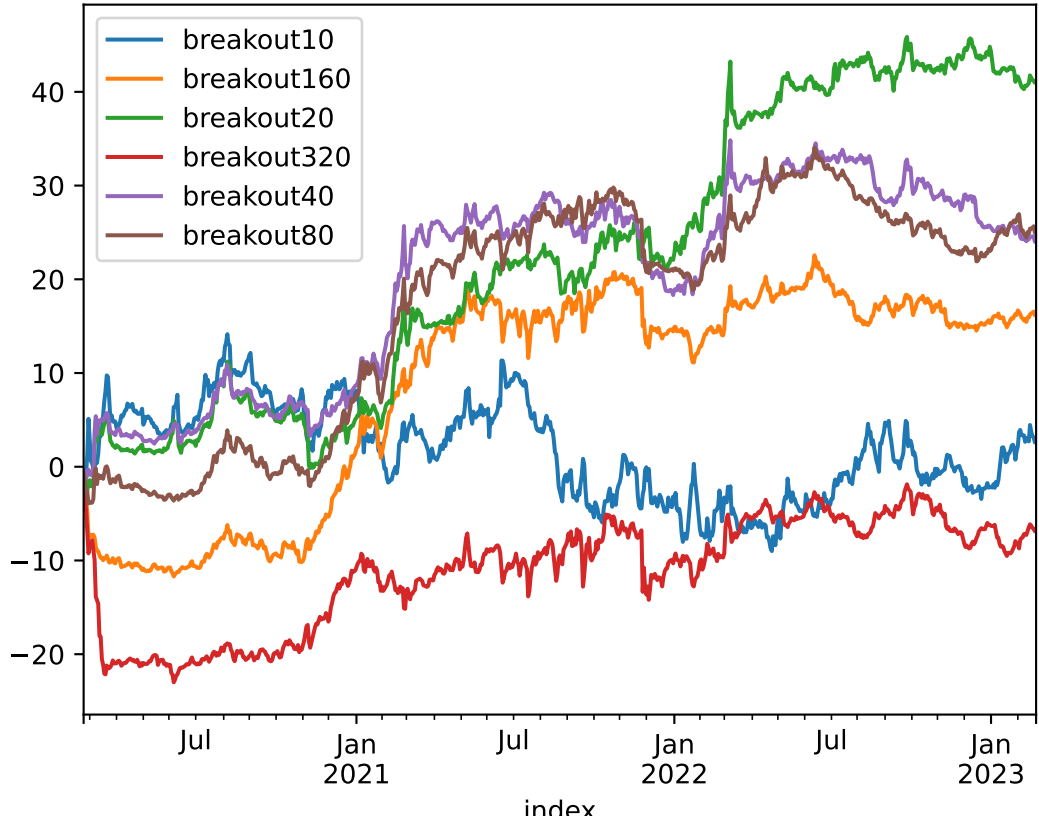
ann. std {'breakout10': 12.451, 'breakout160': 6.86, 'breakout20': 11.454, 'breakout320': 6.801, 'breakout40': 9.132, 'breakout80': 7.931}

ann. SR {'breakout10': 0.41, 'breakout160': 0.18, 'breakout20': 0.88, 'breakout320': 0.44, 'breakout40': -0.32, 'breakout80': 0.15}



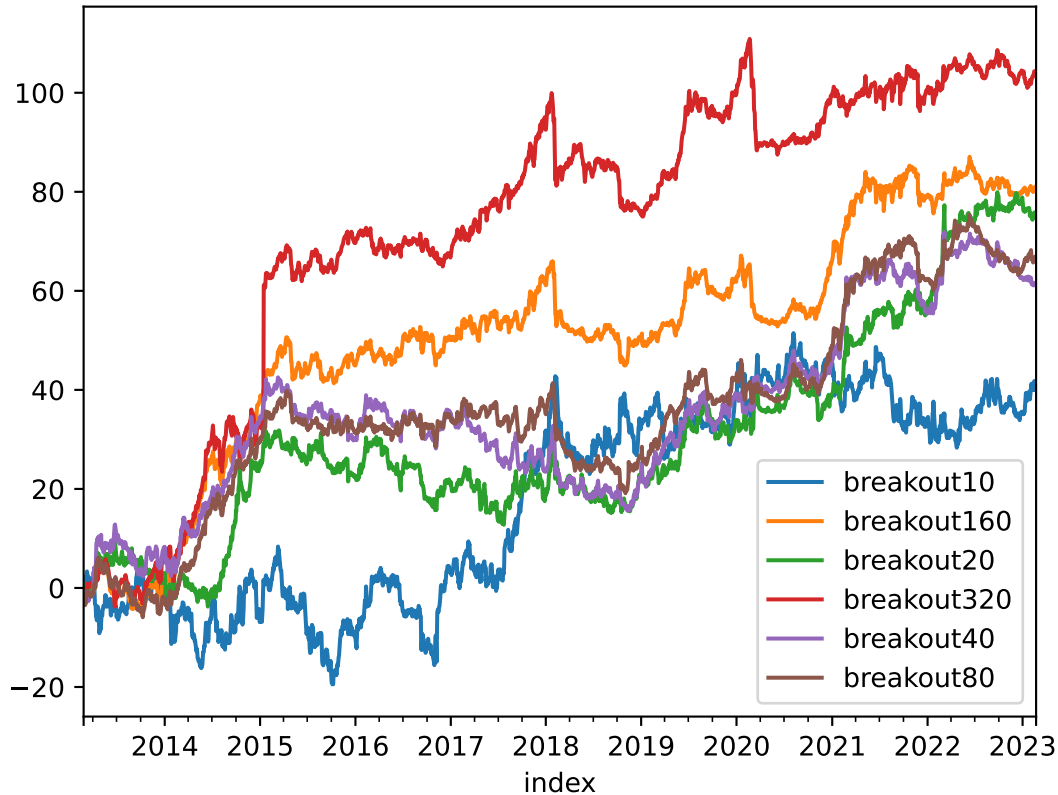
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 0.871, 'breakout160': 5.299, 'breakout20': 13.452, 'breakout320': -2.175, 'breakout40': 7.831, 'breakout80': 8.151}
ann. std {'breakout10': 13.934, 'breakout160': 9.427, 'breakout20': 11.377, 'breakout320': 10.558, 'breakout40': 9.909, 'breakout80': 9.259}
ann. SR {'breakout10': 0.06, 'breakout160': 0.56, 'breakout20': 1.18, 'breakout320': -0.21, 'breakout40': 0.79, 'breakout80': 0.88}



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

ann. mean {'breakout10': 3.925, 'breakout160': 7.922, 'breakout20': 7.382, 'breakout320': 10.193, 'breakout40': 5.987, 'breakout80': 6.498}
ann. std {'breakout10': 15.634, 'breakout160': 9.054, 'breakout20': 11.166, 'breakout320': 13.317, 'breakout40': 9.723, 'breakout80': 8.963}
ann. SR {'breakout10': 0.25, 'breakout160': 0.87, 'breakout20': 0.66, 'breakout320': 0.77, 'breakout40': 0.62, 'breakout80': 0.72}

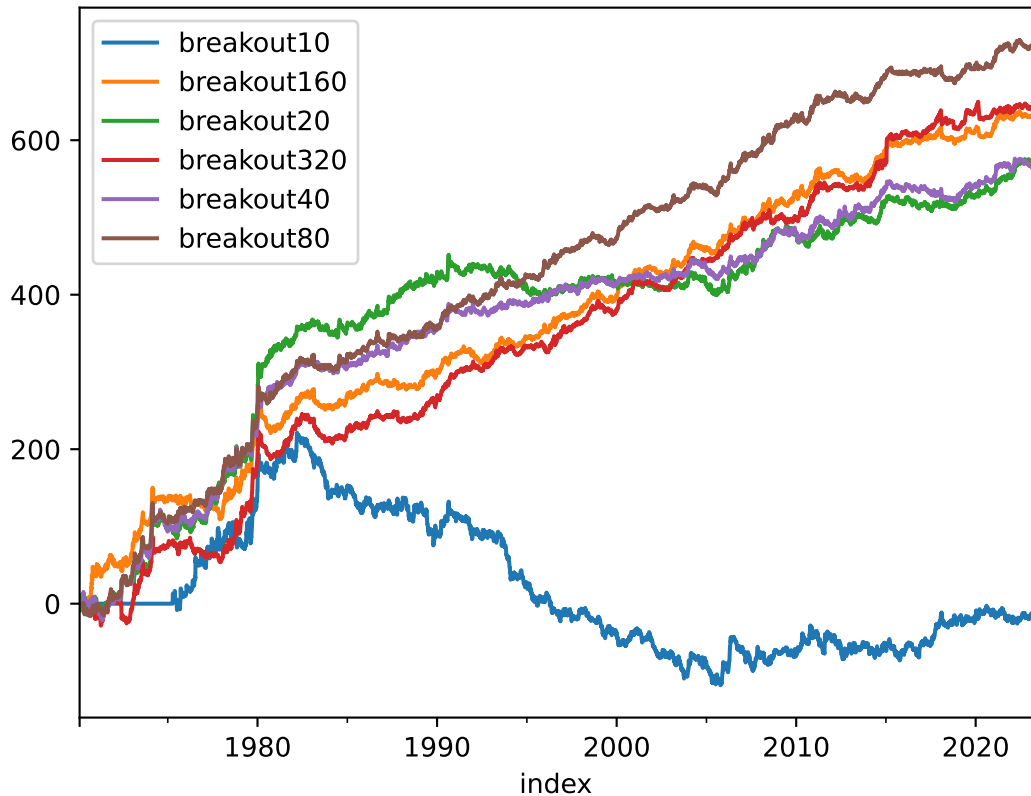


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.261, 'breakout160': 11.678, 'breakout20': 10.559, 'breakout320': 11.888, 'breakout40': 10.457, 'breakout80': 13.329}

ann. std {'breakout10': 20.757, 'breakout160': 12.438, 'breakout20': 15.985, 'breakout320': 13.002, 'breakout40': 13.184, 'breakout80': 12.685}

ann. SR {'breakout10': -0.01, 'breakout160': 0.94, 'breakout20': 0.66, 'breakout320': 0.91, 'breakout40': 0.79, 'breakout80': 1.05}

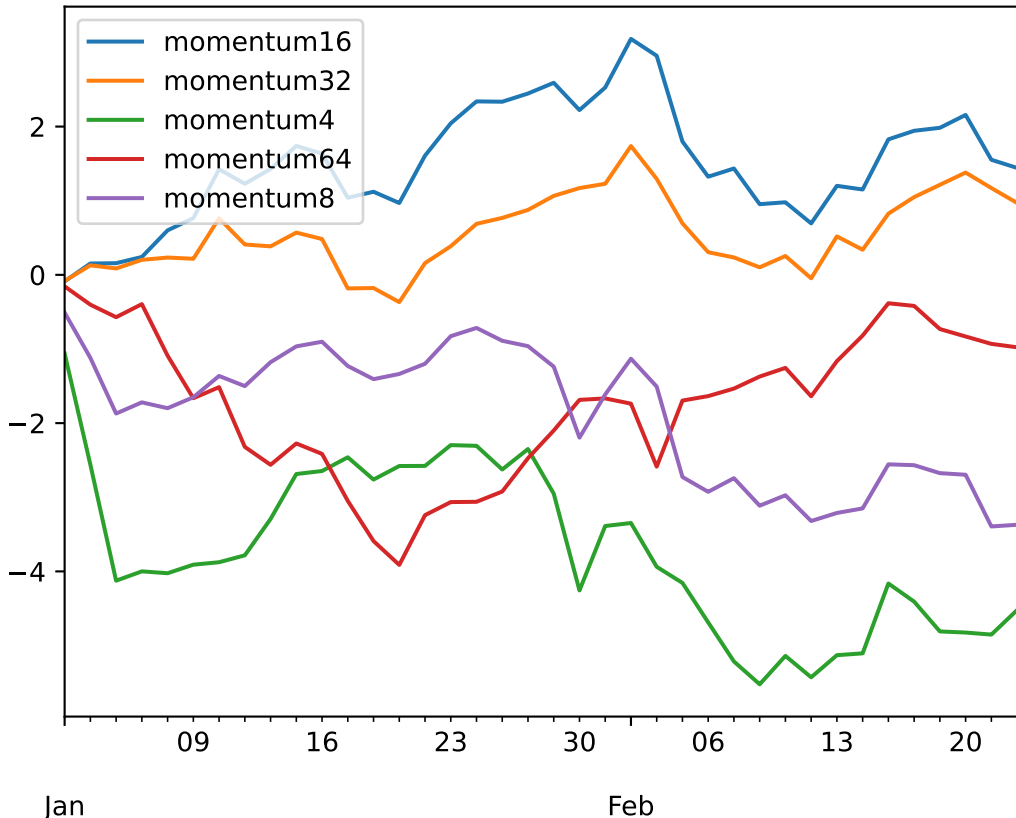


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 9.718, 'momentum32': 6.535, 'momentum4': -30.463, 'momentum64': -6.582, 'momentum8': -22.711}

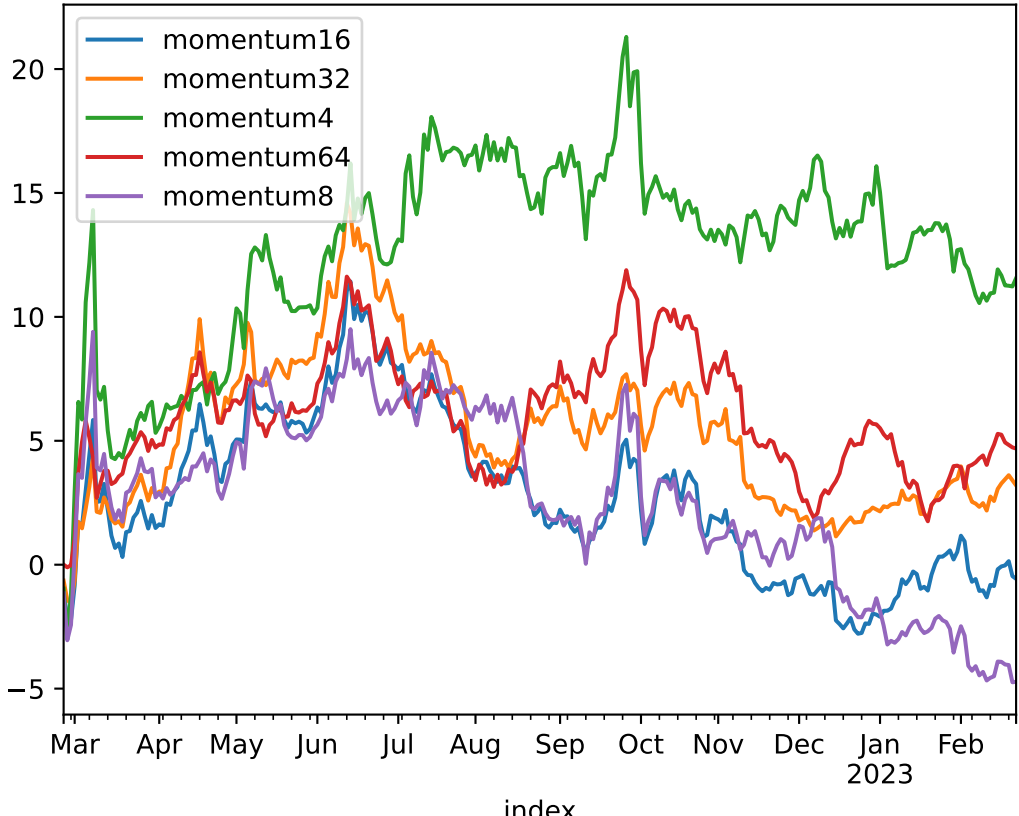
ann. std {'momentum16': 6.244, 'momentum32': 4.82, 'momentum4': 9.021, 'momentum64': 6.418, 'momentum8': 6.424}

ann. SR {'momentum16': 1.56, 'momentum32': 1.36, 'momentum4': -3.38, 'momentum64': -1.03, 'momentum8': -3.54}



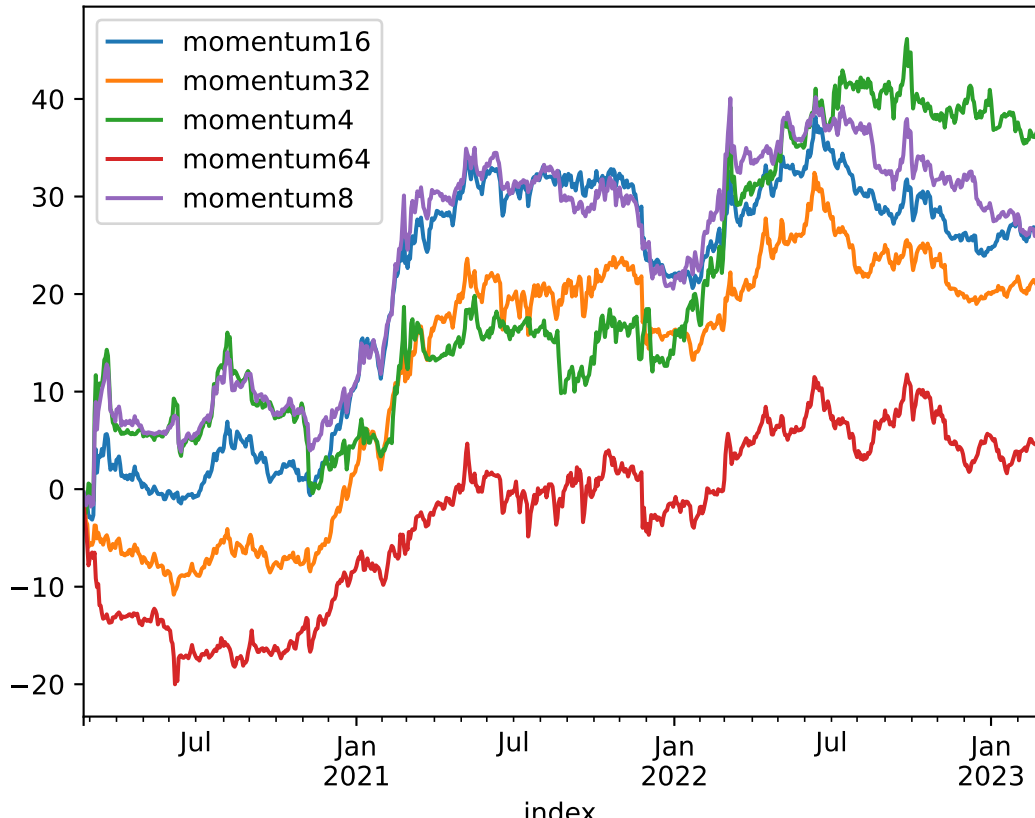
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -0.561, 'momentum32': 3.152, 'momentum4': 11.381, 'momentum64': 4.615, 'momentum8': -4.65}
ann. std {'momentum16': 9.939, 'momentum32': 9.507, 'momentum4': 16.656, 'momentum64': 9.203, 'momentum8': 12.589}
ann. SR {'momentum16': -0.06, 'momentum32': 0.33, 'momentum4': 0.68, 'momentum64': 0.5, 'momentum8': -0.37}



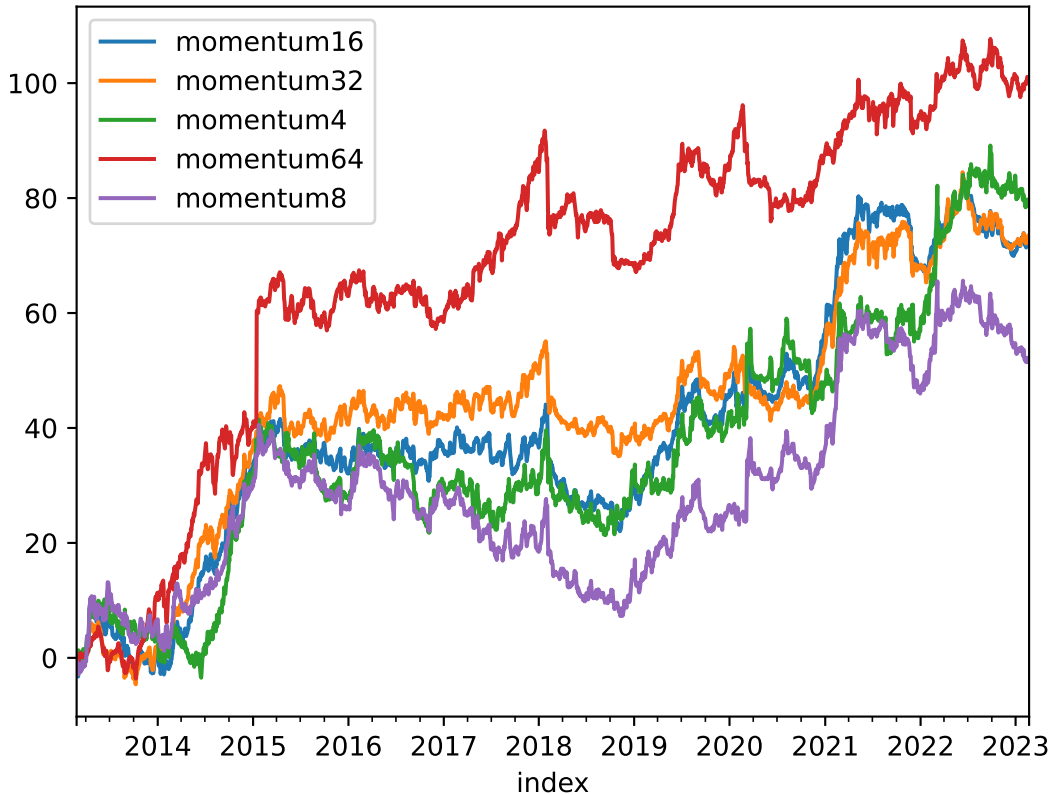
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.547, 'momentum32': 6.881, 'momentum4': 11.907, 'momentum64': 1.491, 'momentum8': 8.487}
ann. std {'momentum16': 10.837, 'momentum32': 10.589, 'momentum4': 15.864, 'momentum64': 10.835, 'momentum8': 12.709}
ann. SR {'momentum16': 0.79, 'momentum32': 0.65, 'momentum4': 0.75, 'momentum64': 0.14, 'momentum8': 0.67}



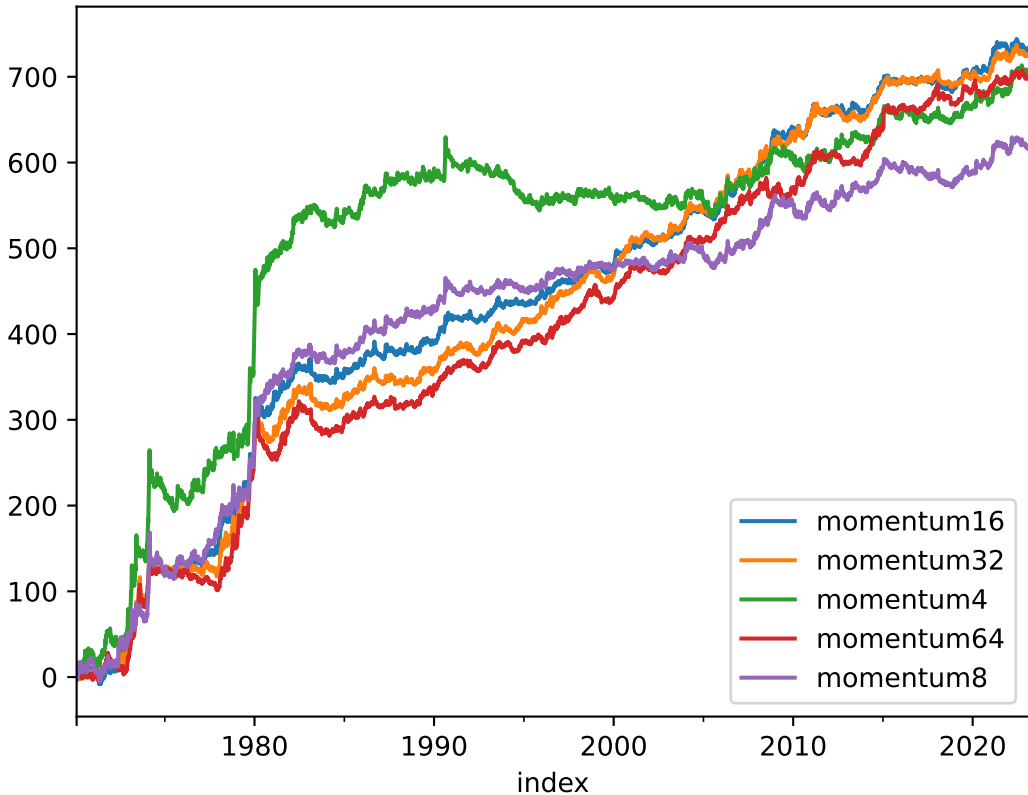
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.082, 'momentum32': 7.178, 'momentum4': 7.794, 'momentum64': 9.865, 'momentum8': 5.045}
ann. std {'momentum16': 9.883, 'momentum32': 9.421, 'momentum4': 13.701, 'momentum64': 11.965, 'momentum8': 11.275}
ann. SR {'momentum16': 0.72, 'momentum32': 0.76, 'momentum4': 0.57, 'momentum64': 0.82, 'momentum8': 0.45}



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

ann. mean {'momentum16': 13.541, 'momentum32': 13.424, 'momentum4': 13.016, 'momentum64': 12.955, 'momentum8': 11.38}
ann. std {'momentum16': 14.134, 'momentum32': 13.744, 'momentum4': 20.003, 'momentum64': 13.358, 'momentum8': 15.793}
ann. SR {'momentum16': 0.96, 'momentum32': 0.98, 'momentum4': 0.65, 'momentum64': 0.97, 'momentum8': 0.72}

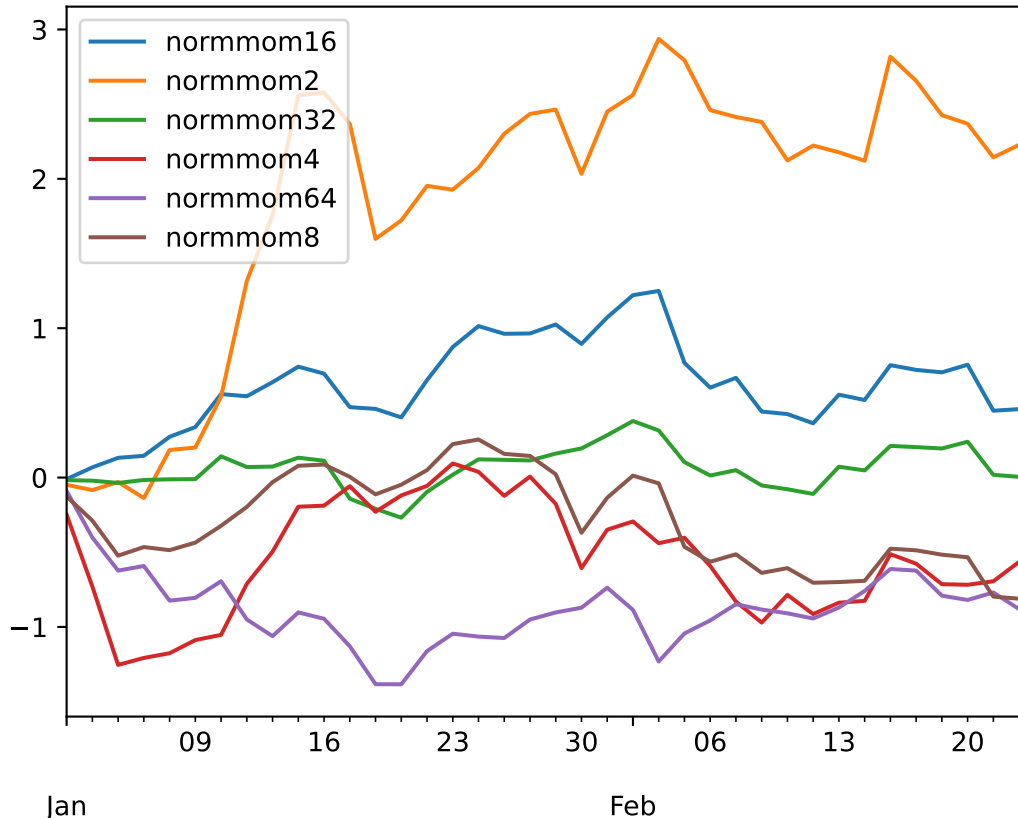


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 3.087, 'normmom2': 15.006, 'normmom32': 0.033, 'normmom4': -3.802, 'normmom64': -5.932, 'normmom8': -5.463}

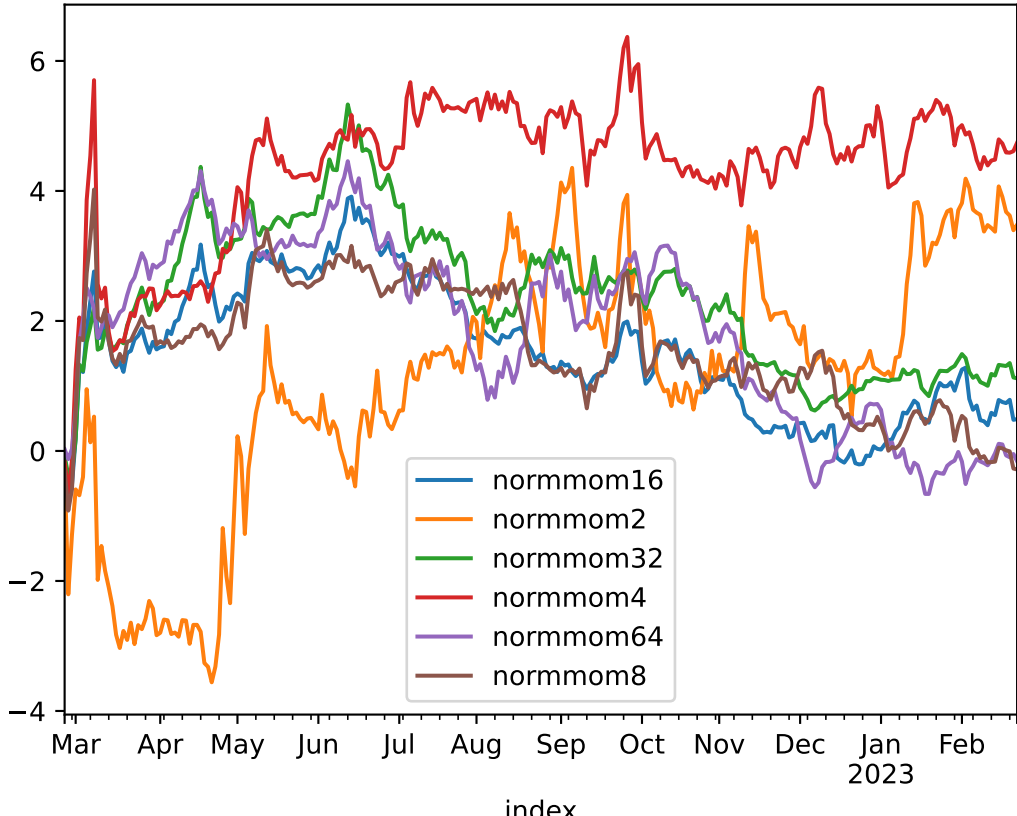
ann. std {'normmom16': 2.452, 'normmom2': 5.059, 'normmom32': 1.584, 'normmom4': 3.301, 'normmom64': 2.335, 'normmom8': 2.374}

ann. SR {'normmom16': 1.26, 'normmom2': 2.97, 'normmom32': 0.02, 'normmom4': -1.15, 'normmom64': -2.54, 'normmom8': -2.3}



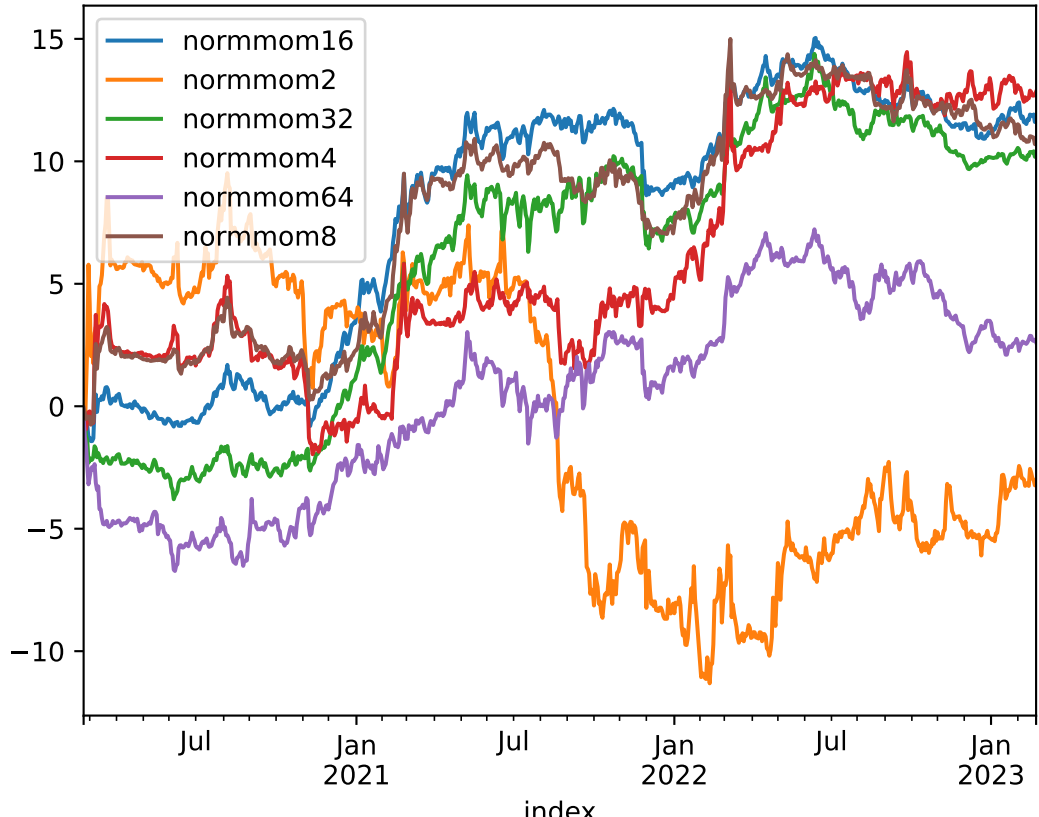
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 0.482, 'normmom2': 3.426, 'normmom32': 1.1, 'normmom4': 4.669, 'normmom64': -0.156, 'normmom8': -0.28}
ann. std {'normmom16': 3.098, 'normmom2': 7.204, 'normmom32': 3.054, 'normmom4': 5.764, 'normmom64': 3.388, 'normmom8': 4.063}
ann. SR {'normmom16': 0.16, 'normmom2': 0.48, 'normmom32': 0.36, 'normmom4': 0.81, 'normmom64': -0.05, 'normmom8': -0.07}



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

ann. mean {'normmom16': 3.798, 'normmom2': -1.029, 'normmom32': 3.326, 'normmom4': 4.197, 'normmom64': 0.853, 'normmom8': 3.495}
ann. std {'normmom16': 3.634, 'normmom2': 8.191, 'normmom32': 3.946, 'normmom4': 5.689, 'normmom64': 4.249, 'normmom8': 4.207}
ann. SR {'normmom16': 1.05, 'normmom2': -0.13, 'normmom32': 0.84, 'normmom4': 0.74, 'normmom64': 0.2, 'normmom8': 0.83}

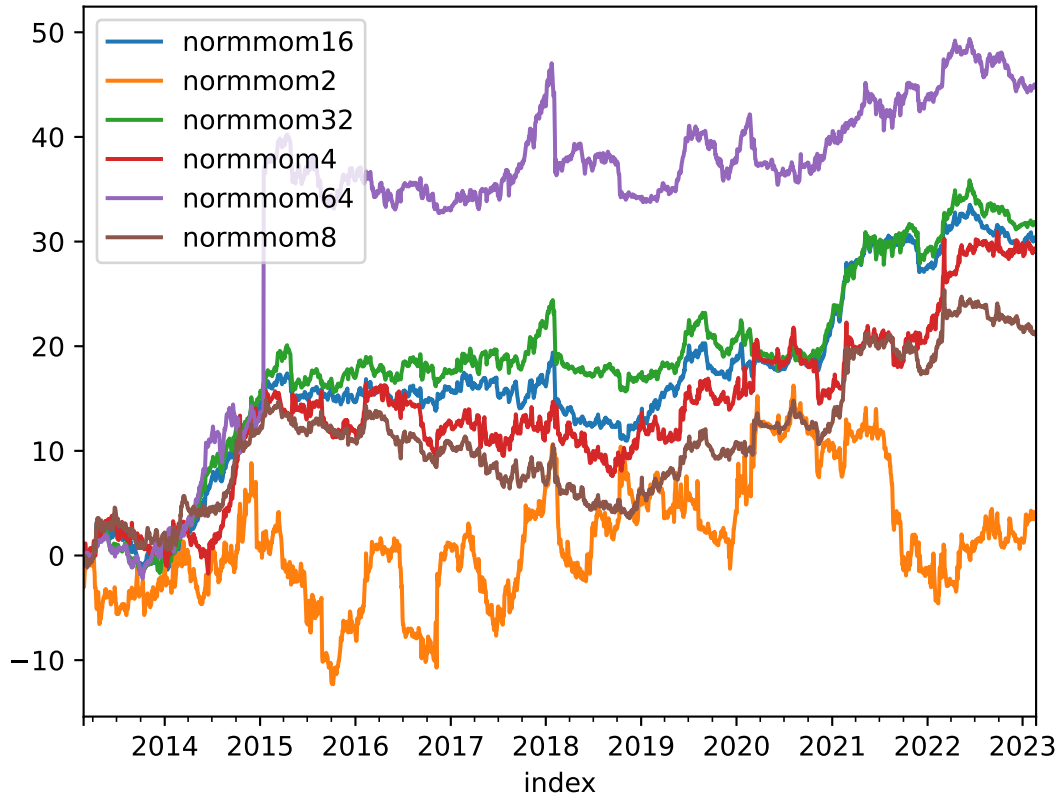


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.954, 'normmom2': 0.351, 'normmom32': 3.107, 'normmom4': 2.875, 'normmom64': 4.393, 'normmom8': 2.067}

ann. std {'normmom16': 3.555, 'normmom2': 9.012, 'normmom32': 3.702, 'normmom4': 5.48, 'normmom64': 8.481, 'normmom8': 4.029}

ann. SR {'normmom16': 0.83, 'normmom2': 0.04, 'normmom32': 0.84, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.51}

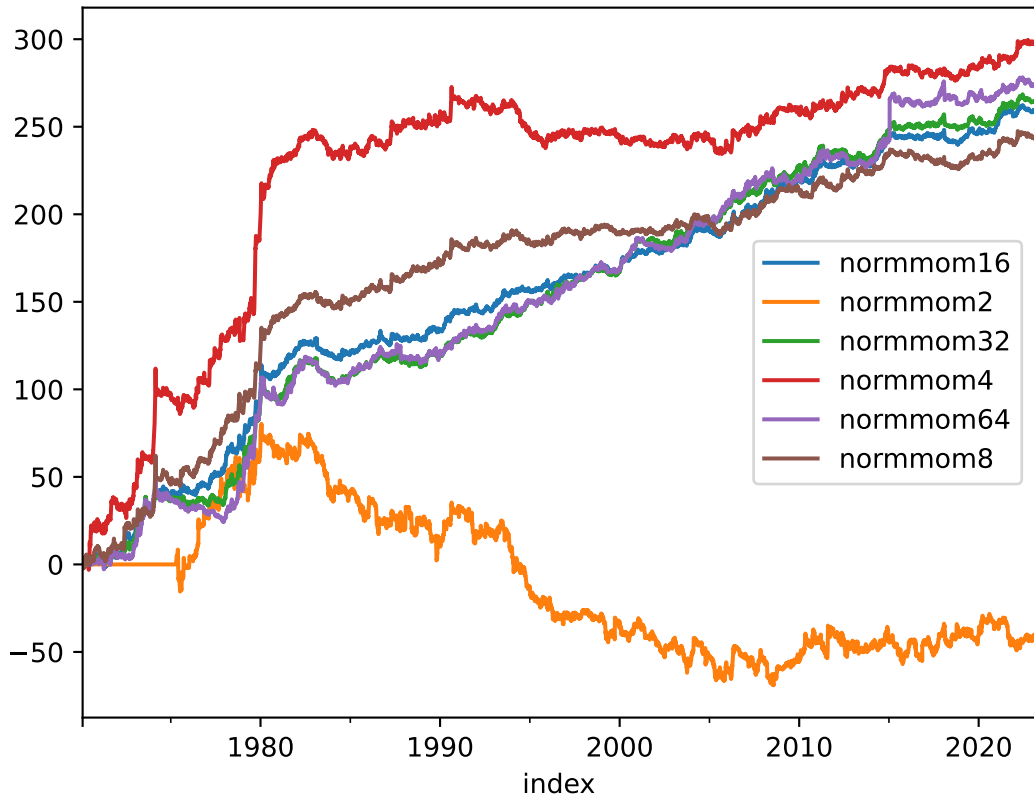


Total Trading Rule P&L for period '99Y'

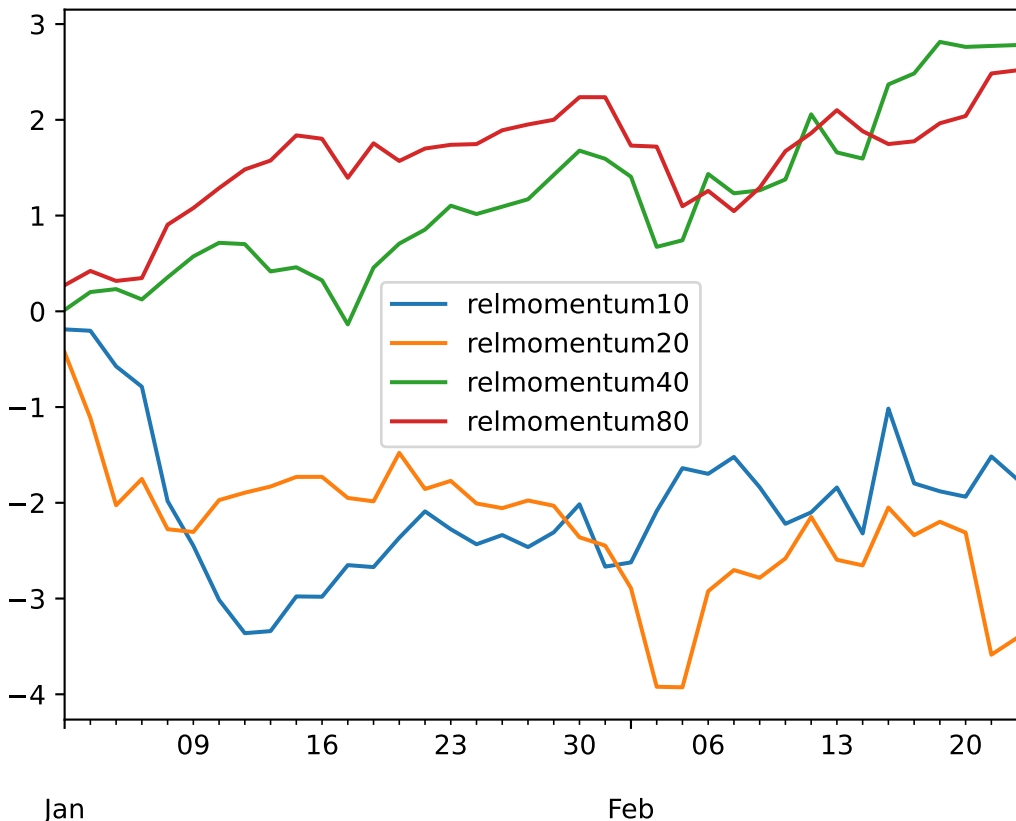
ann. mean {'normmom16': 4.789, 'normmom2': -0.756, 'normmom32': 4.889, 'normmom4': 5.511, 'normmom64': 5.06, 'normmom8': 4.499}

ann. std {'normmom16': 4.89, 'normmom2': 11.171, 'normmom32': 4.948, 'normmom4': 8.291, 'normmom64': 6.236, 'normmom8': 5.904}

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': -11.808, 'relmomentum20': -22.976, 'relmomentum40': 18.735, 'relmomentum80': 16.957}
ann. std {'relmomentum10': 6.906, 'relmomentum20': 7.056, 'relmomentum40': 4.847, 'relmomentum80': 3.896}
ann. SR {'relmomentum10': -1.71, 'relmomentum20': -3.26, 'relmomentum40': 3.87, 'relmomentum80': 4.35}

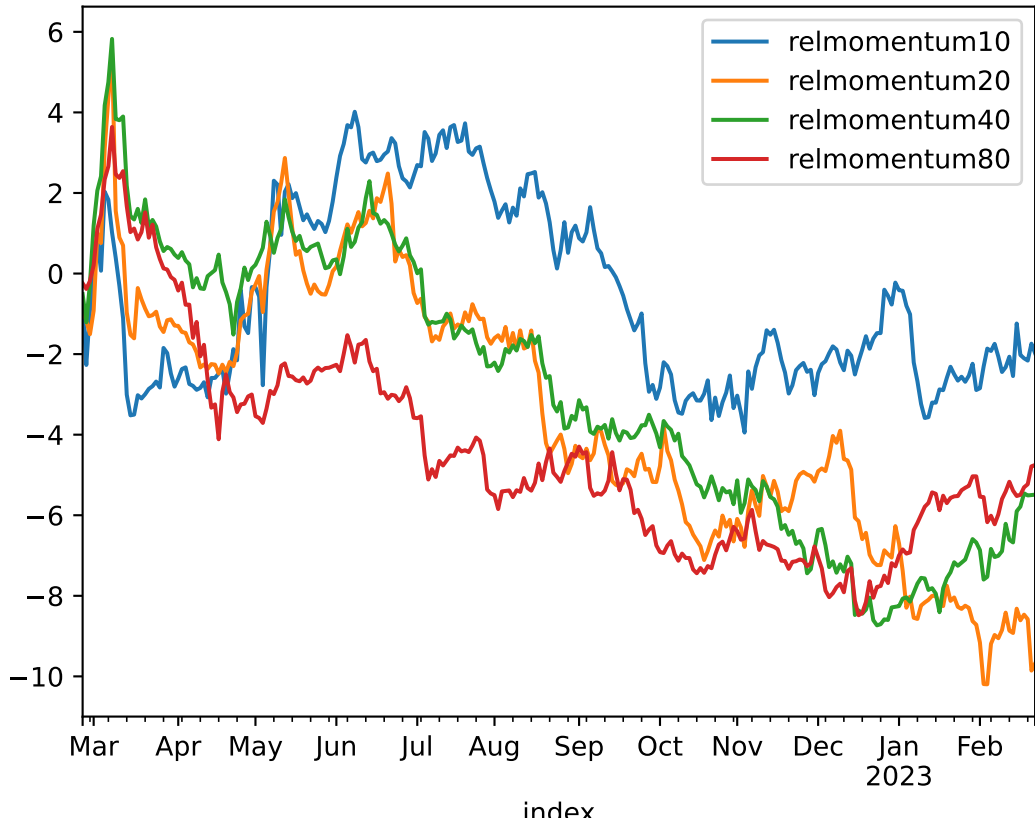


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.947, 'relmomentum20': -9.531, 'relmomentum40': -5.405, 'relmomentum80': -4.68}

ann. std {'relmomentum10': 8.705, 'relmomentum20': 8.482, 'relmomentum40': 6.579, 'relmomentum80': 5.491}

ann. SR {'relmomentum10': -0.22, 'relmomentum20': -1.12, 'relmomentum40': -0.82, 'relmomentum80': -0.85}

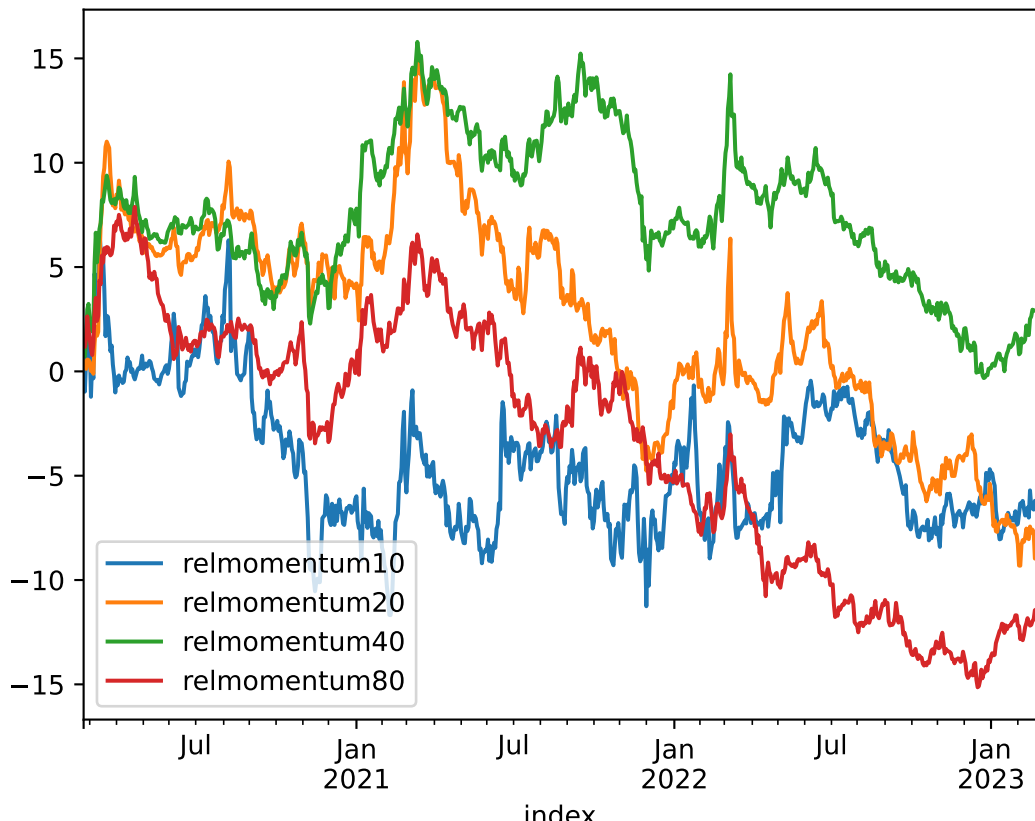


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.106, 'relmomentum20': -2.876, 'relmomentum40': 0.956, 'relmomentum80': -3.731}

ann. std {'relmomentum10': 12.14, 'relmomentum20': 8.9, 'relmomentum40': 7.405, 'relmomentum80': 6.842}

ann. SR {'relmomentum10': -0.17, 'relmomentum20': -0.32, 'relmomentum40': 0.13, 'relmomentum80': -0.55}

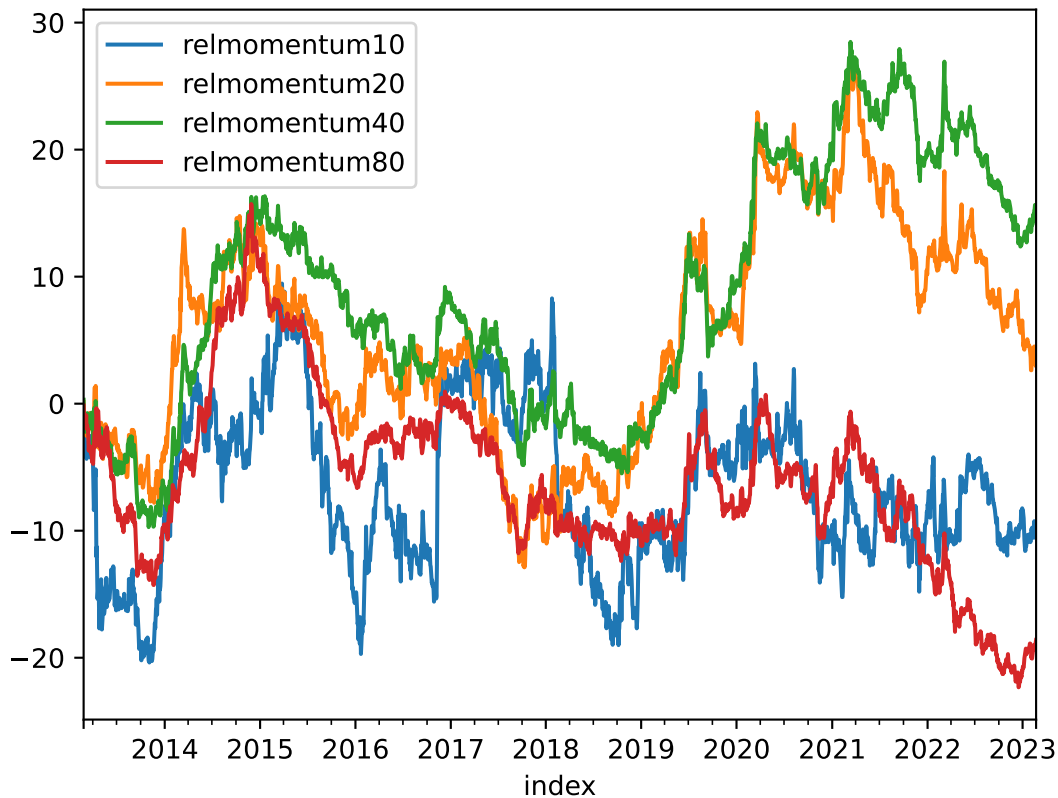


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.98, 'relmomentum20': 0.309, 'relmomentum40': 1.533, 'relmomentum80': -1.826}

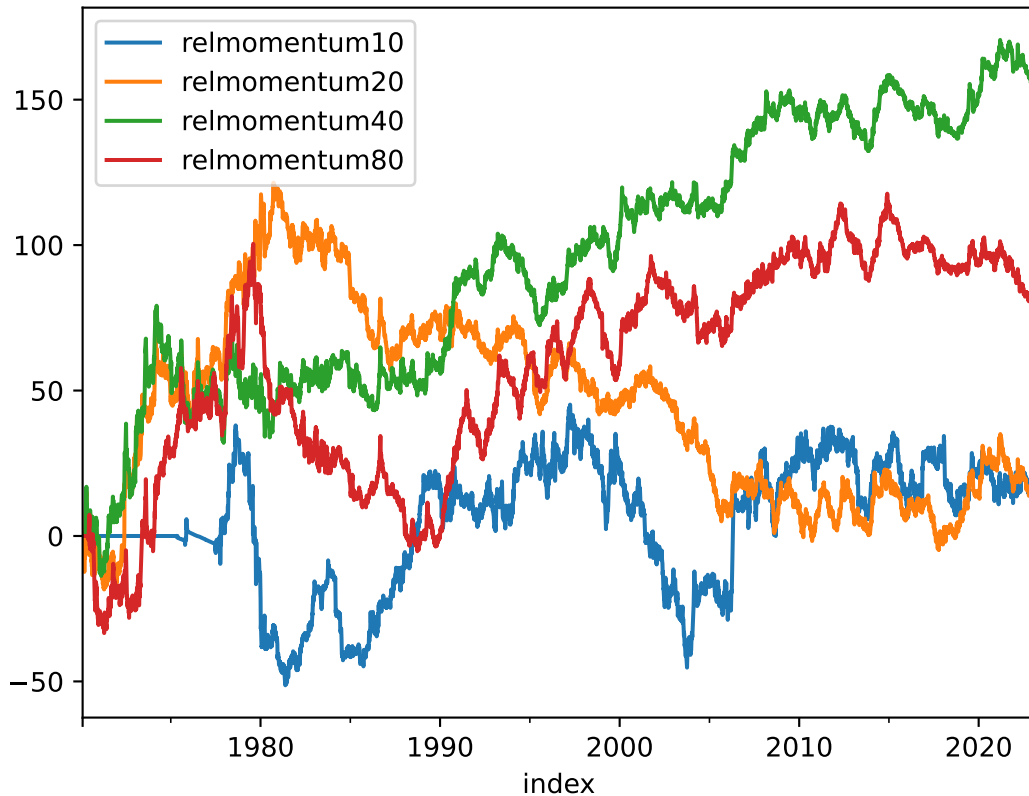
ann. std {'relmomentum10': 12.923, 'relmomentum20': 8.926, 'relmomentum40': 7.269, 'relmomentum80': 6.688}

ann. SR {'relmomentum10': -0.08, 'relmomentum20': 0.03, 'relmomentum40': 0.21, 'relmomentum80': -0.27}

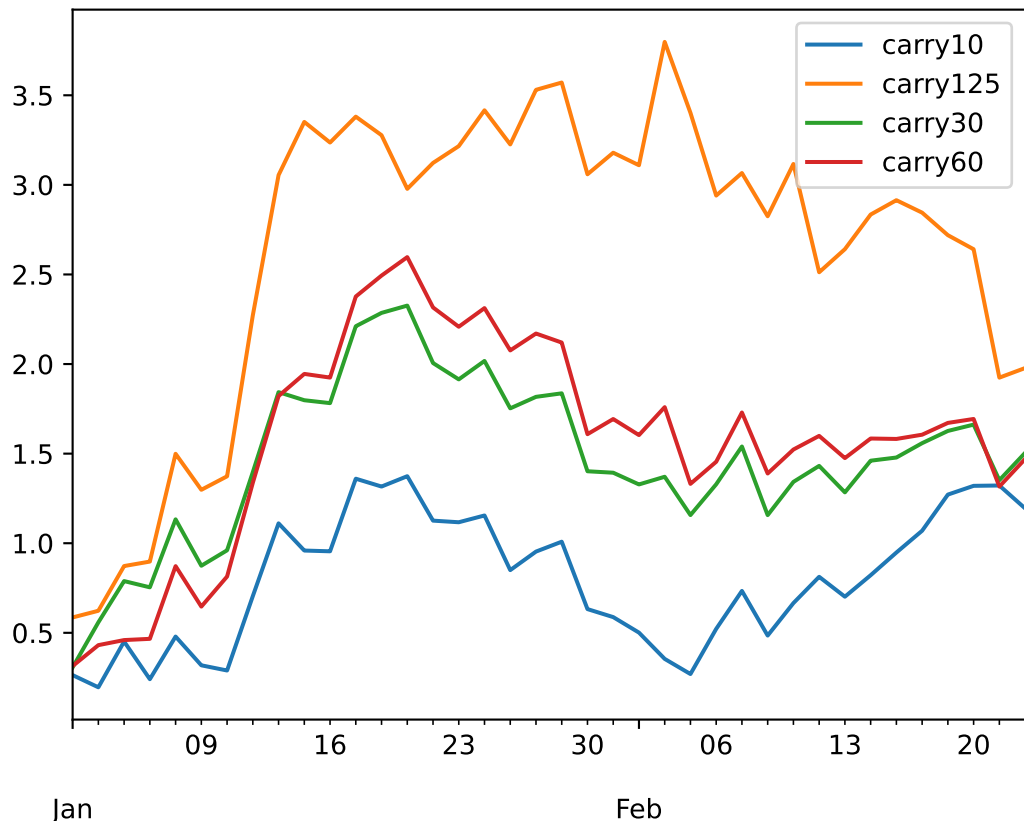


Total Trading Rule P&L for period '99Y'

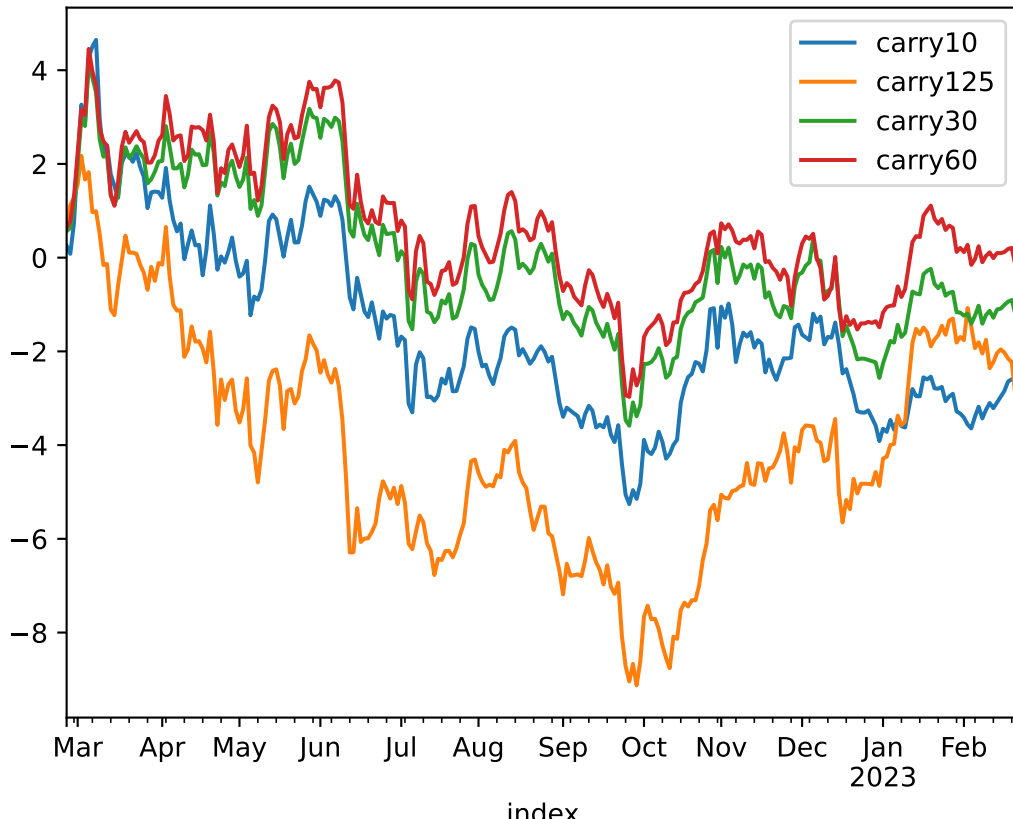
ann. mean {'relmomentum10': 0.298, 'relmomentum20': 0.208, 'relmomentum40': 2.916, 'relmomentum80': 1.542}
ann. std {'relmomentum10': 13.404, 'relmomentum20': 11.503, 'relmomentum40': 10.781, 'relmomentum80': 11.049}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 8.047, 'carry125': 13.323, 'carry30': 10.134, 'carry60': 9.903}
ann. std {'carry10': 3.168, 'carry125': 5.768, 'carry30': 3.568, 'carry60': 3.843}
ann. SR {'carry10': 2.54, 'carry125': 2.31, 'carry30': 2.84, 'carry60': 2.58}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.678, 'carry125': -2.849, 'carry30': -1.046, 'carry60': -0.015}
ann. std {'carry10': 6.567, 'carry125': 7.224, 'carry30': 6.275, 'carry60': 6.494}
ann. SR {'carry10': -0.41, 'carry125': -0.39, 'carry30': -0.17, 'carry60': -0.0}

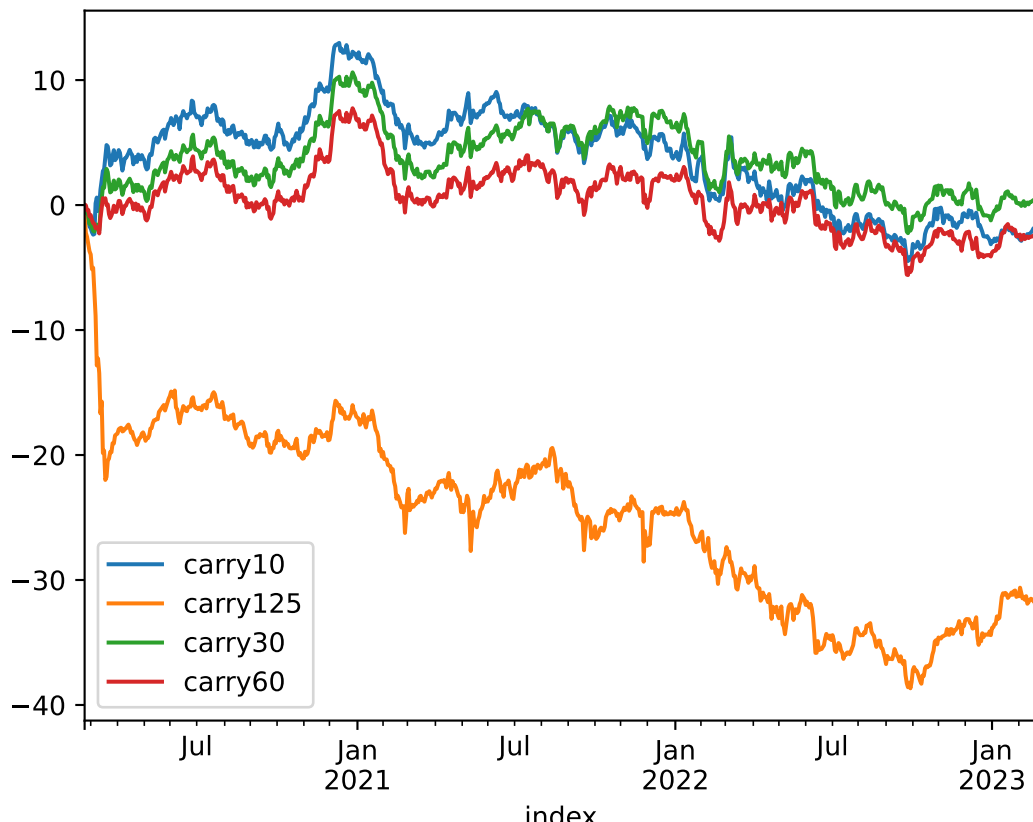


Total Trading Rule P&L for period '3Y'

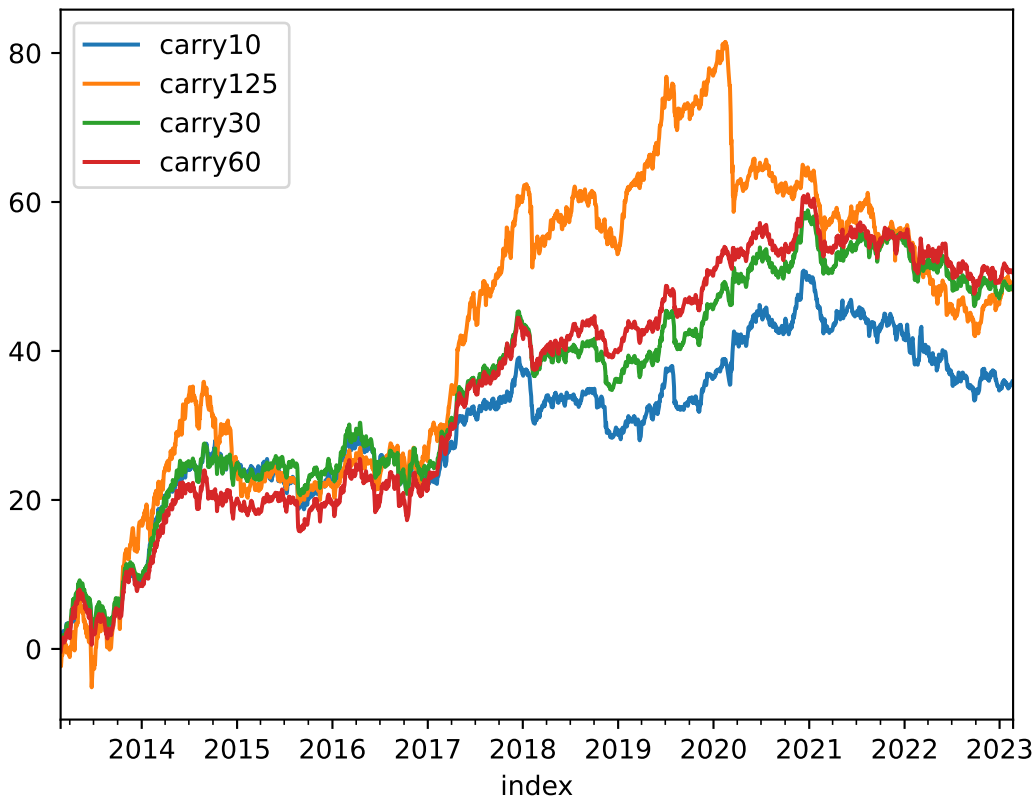
ann. mean {'carry10': -0.634, 'carry125': -10.604, 'carry30': 0.09, 'carry60': -0.865}

ann. std {'carry10': 6.777, 'carry125': 9.278, 'carry30': 6.571, 'carry60': 6.517}

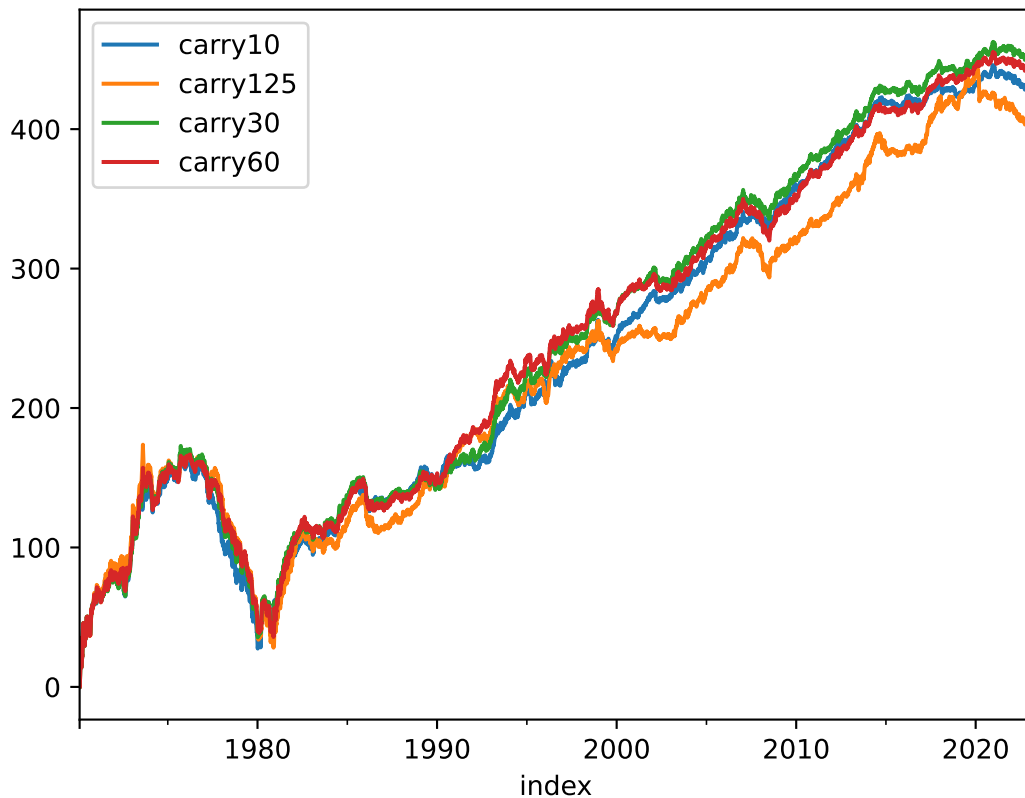
ann. SR {'carry10': -0.09, 'carry125': -1.14, 'carry30': 0.01, 'carry60': -0.13}



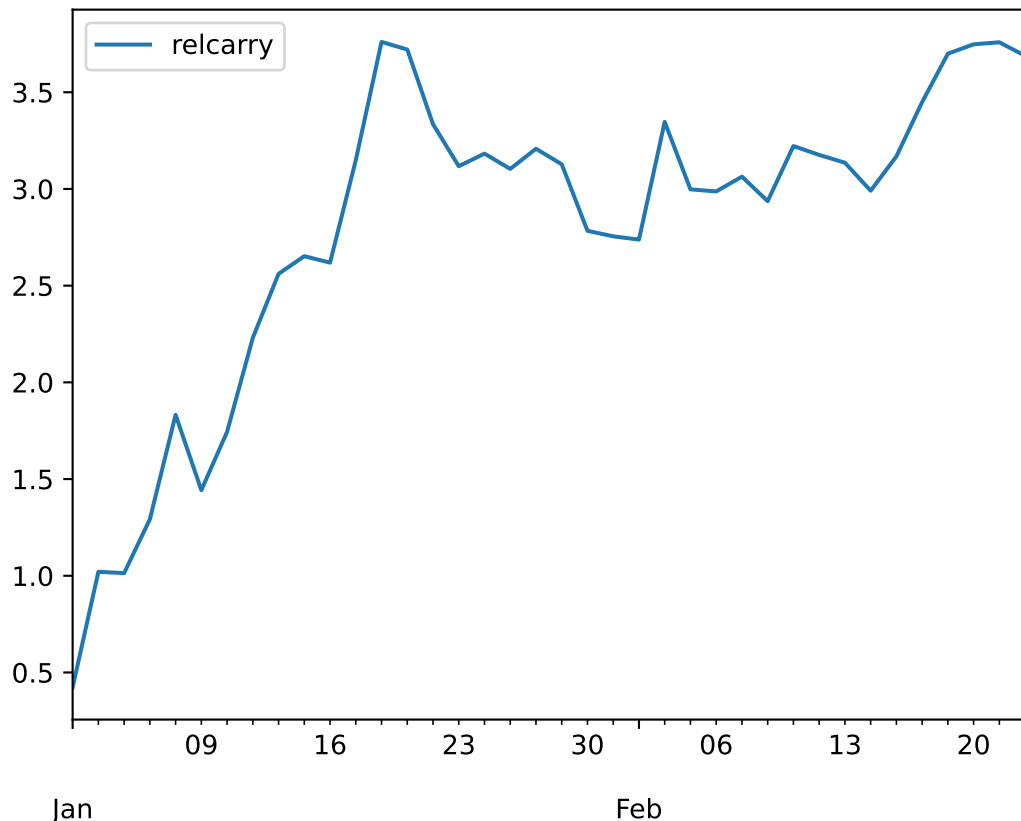
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.522, 'carry125': 4.734, 'carry30': 4.765, 'carry60': 4.971}
ann. std {'carry10': 6.386, 'carry125': 9.264, 'carry30': 6.495, 'carry60': 6.462}
ann. SR {'carry10': 0.55, 'carry125': 0.51, 'carry30': 0.73, 'carry60': 0.77}



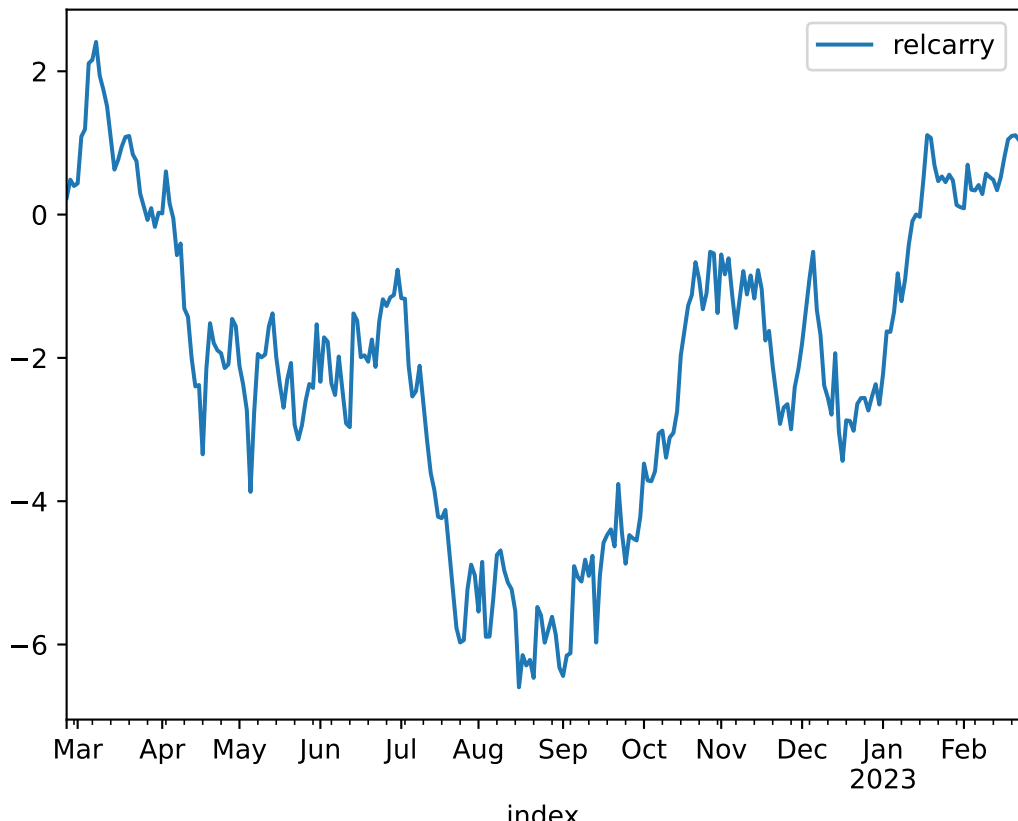
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.968, 'carry125': 7.574, 'carry30': 8.363, 'carry60': 8.226}
ann. std {'carry10': 11.897, 'carry125': 12.175, 'carry30': 11.916, 'carry60': 11.871}
ann. SR {'carry10': 0.67, 'carry125': 0.62, 'carry30': 0.7, 'carry60': 0.69}



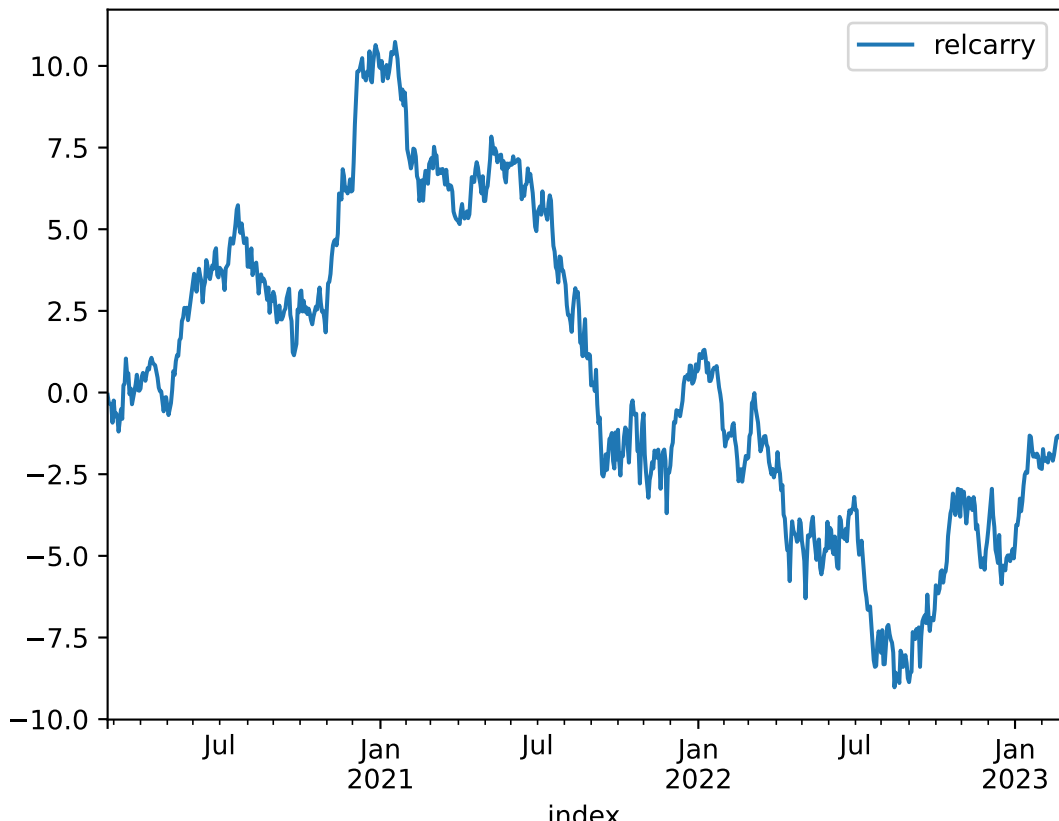
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 24.849}
ann. std {'relcarry': 4.515}
ann. SR {'relcarry': 5.5}



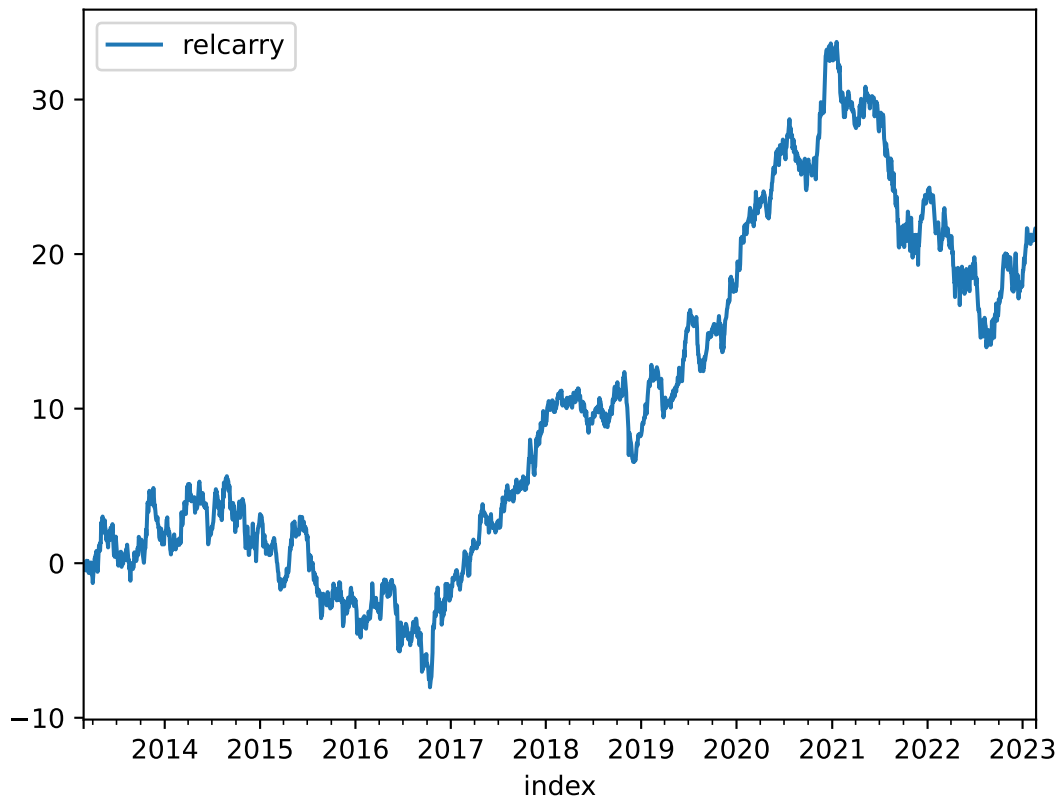
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 1.022}
ann. std {'relcarry': 7.149}
ann. SR {'relcarry': 0.14}



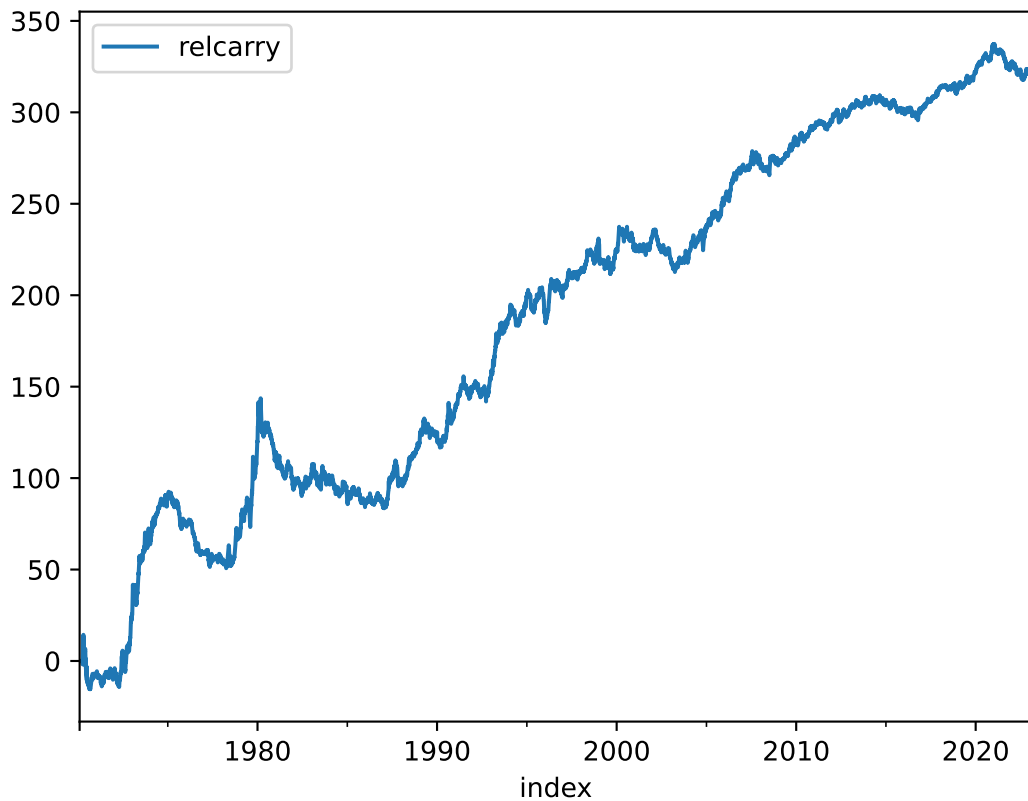
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.454}
ann. std {'relcarry': 6.792}
ann. SR {'relcarry': -0.07}



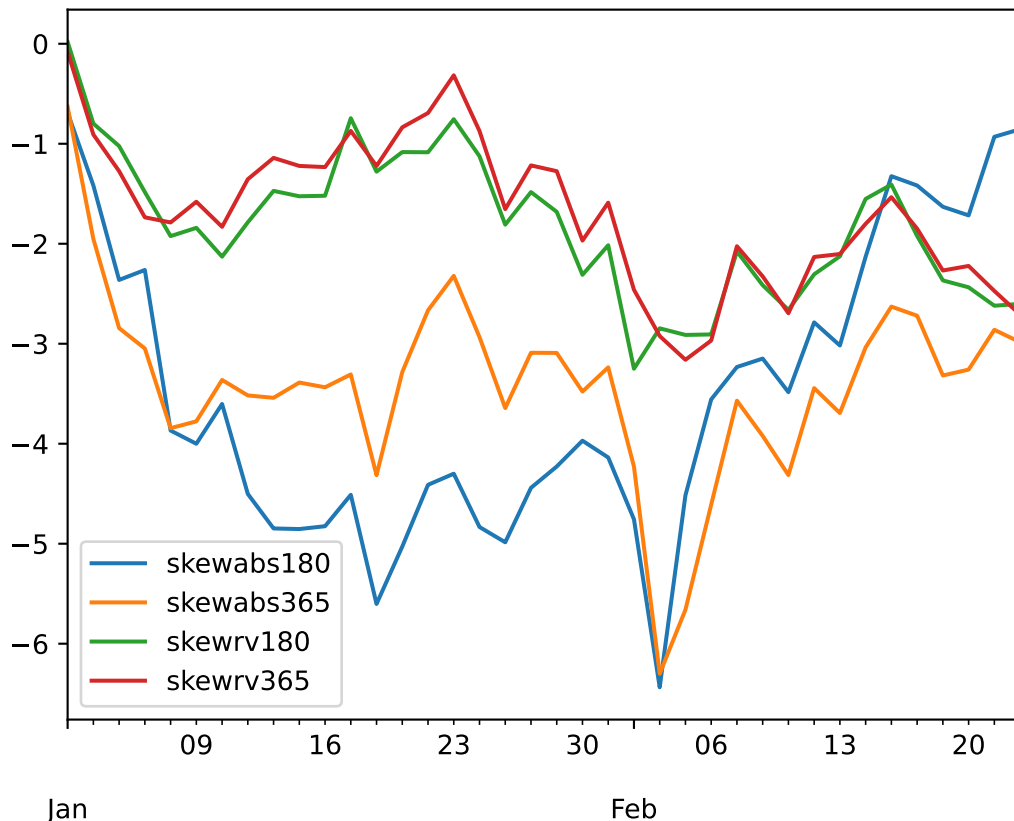
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.121}
ann. std {'relcarry': 5.989}
ann. SR {'relcarry': 0.35}



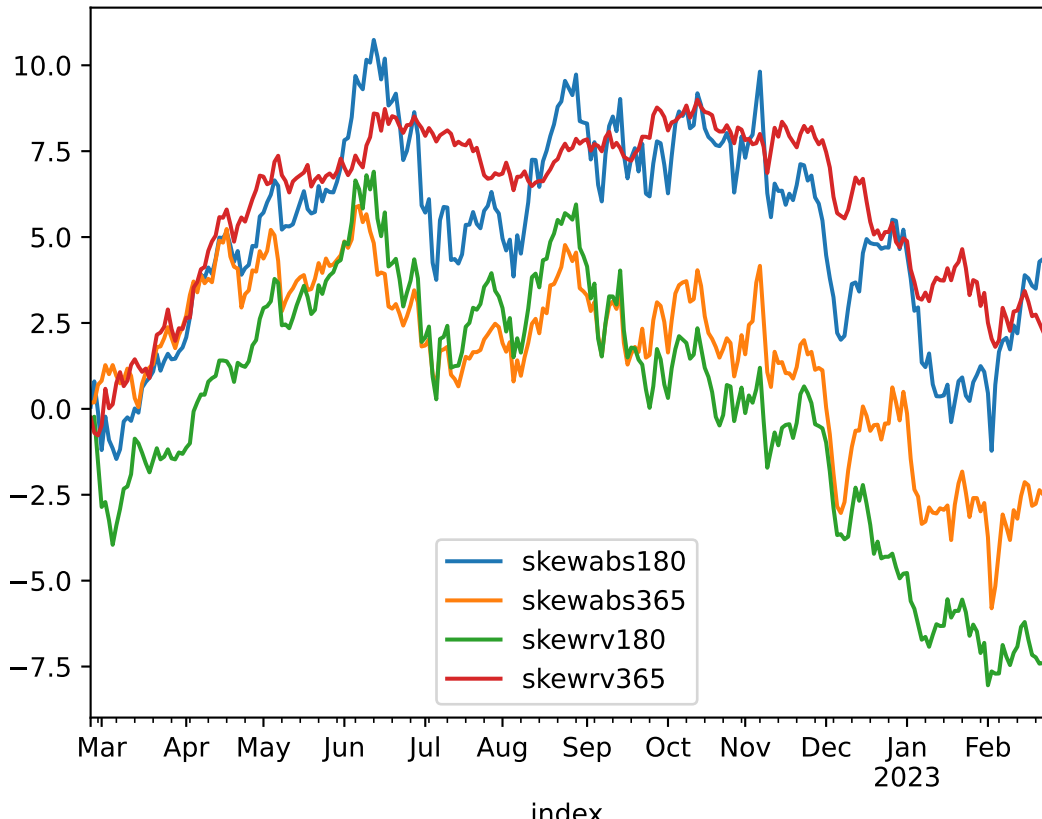
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.016}
ann. std {'relcarry': 9.977}
ann. SR {'relcarry': 0.6}



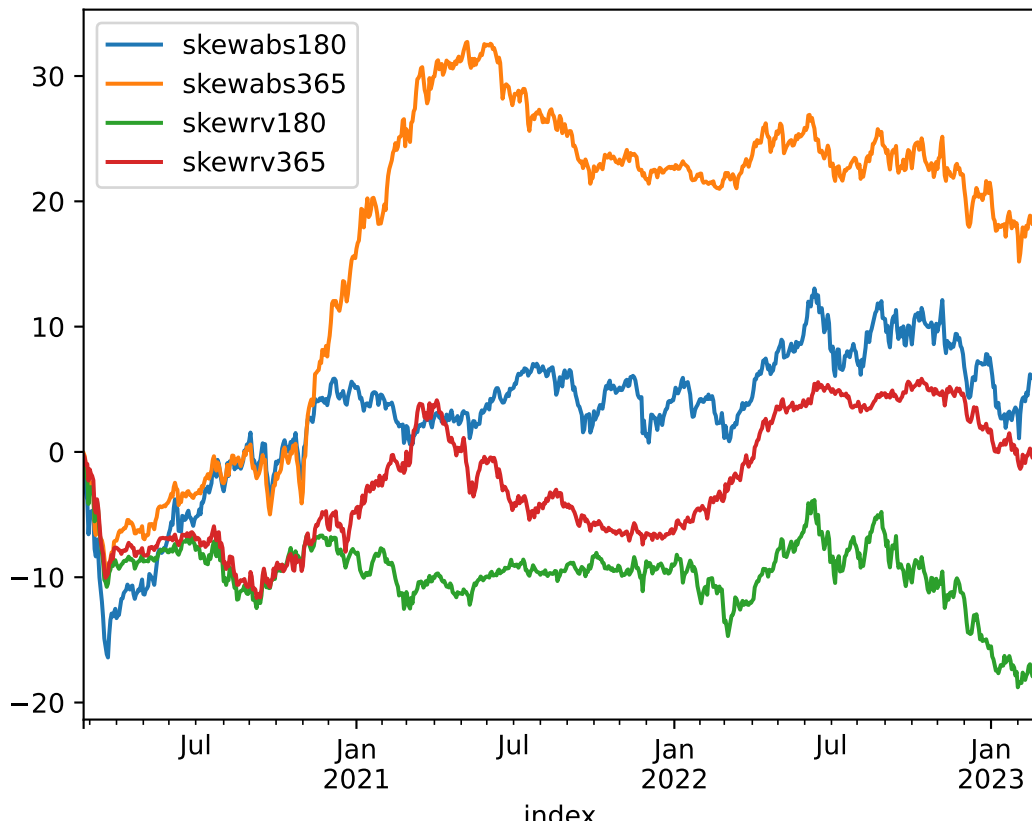
Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -5.756, 'skewabs365': -20.108, 'skewrv180': -17.524, 'skewrv365': -18.253}
ann. std {'skewabs180': 11.475, 'skewabs365': 11.068, 'skewrv180': 7.006, 'skewrv365': 6.756}
ann. SR {'skewabs180': -0.5, 'skewabs365': -1.82, 'skewrv180': -2.5, 'skewrv365': -2.7}



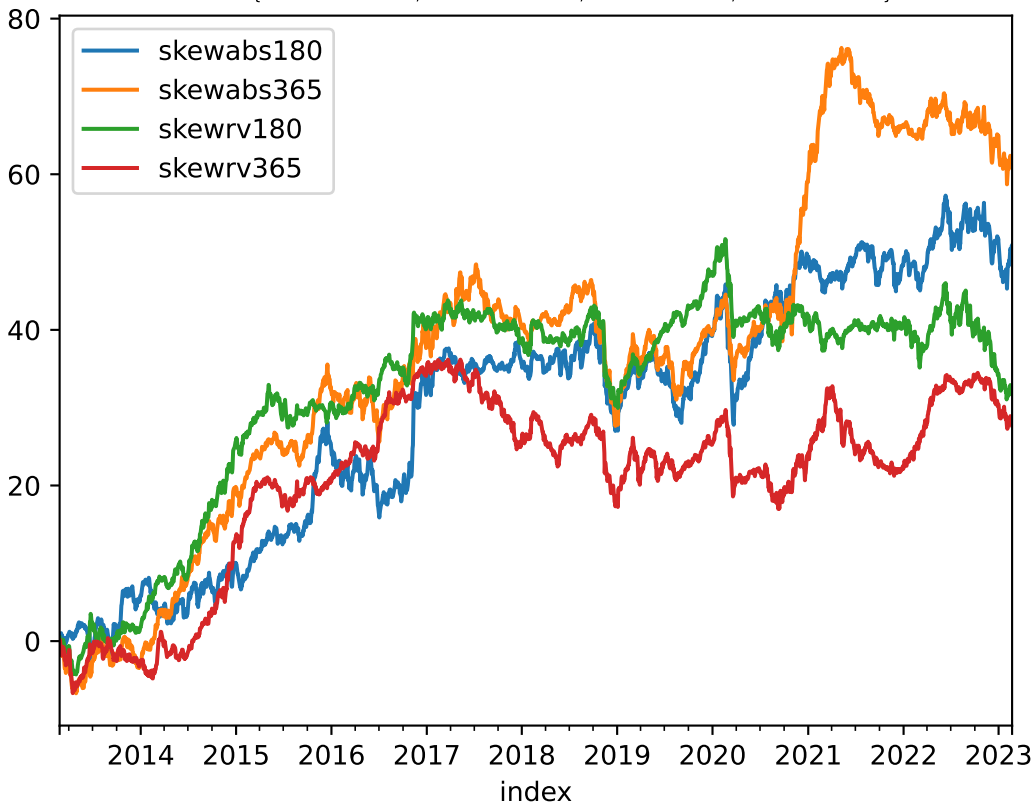
Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 4.294, 'skewabs365': -2.451, 'skewrv180': -7.283, 'skewrv365': 2.221}
ann. std {'skewabs180': 10.523, 'skewabs365': 8.886, 'skewrv180': 9.175, 'skewrv365': 5.353}
ann. SR {'skewabs180': 0.41, 'skewabs365': -0.28, 'skewrv180': -0.79, 'skewrv365': 0.41}



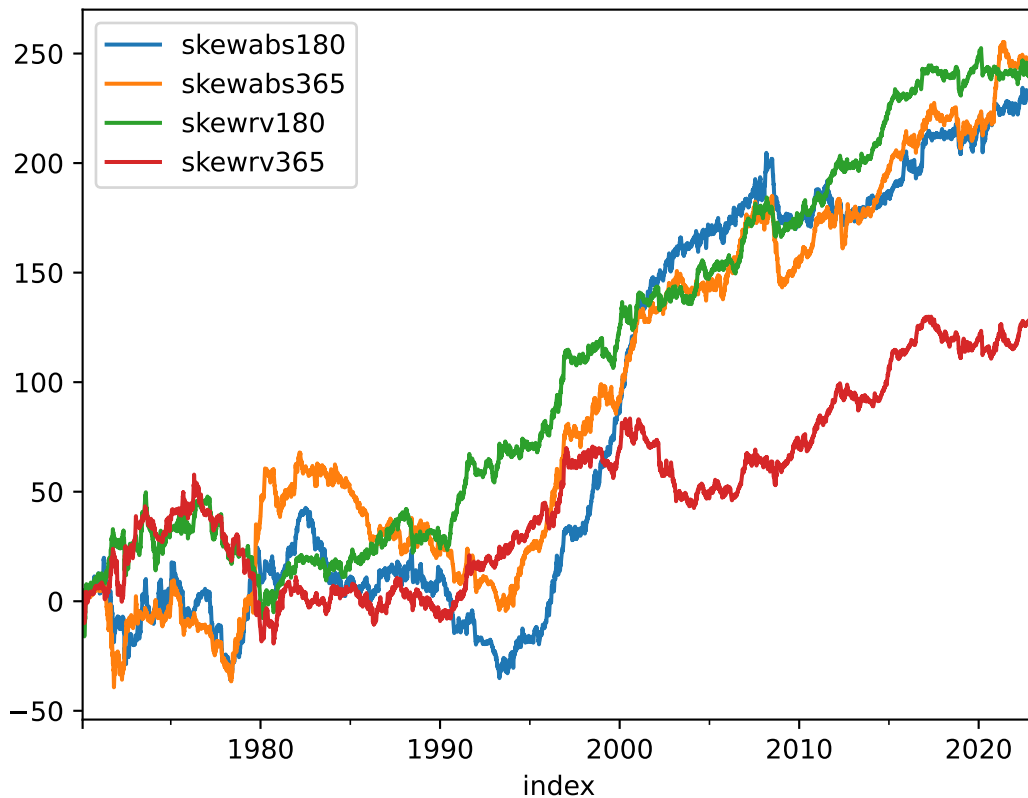
Total Trading Rule P&L for period '3Y'
ann. mean {'skewabs180': 2.18, 'skewabs365': 6.05, 'skewrv180': -5.93, 'skewrv365': -0.295}
ann. std {'skewabs180': 9.661, 'skewabs365': 8.99, 'skewrv180': 7.666, 'skewrv365': 6.616}
ann. SR {'skewabs180': 0.23, 'skewabs365': 0.67, 'skewrv180': -0.77, 'skewrv365': -0.04}



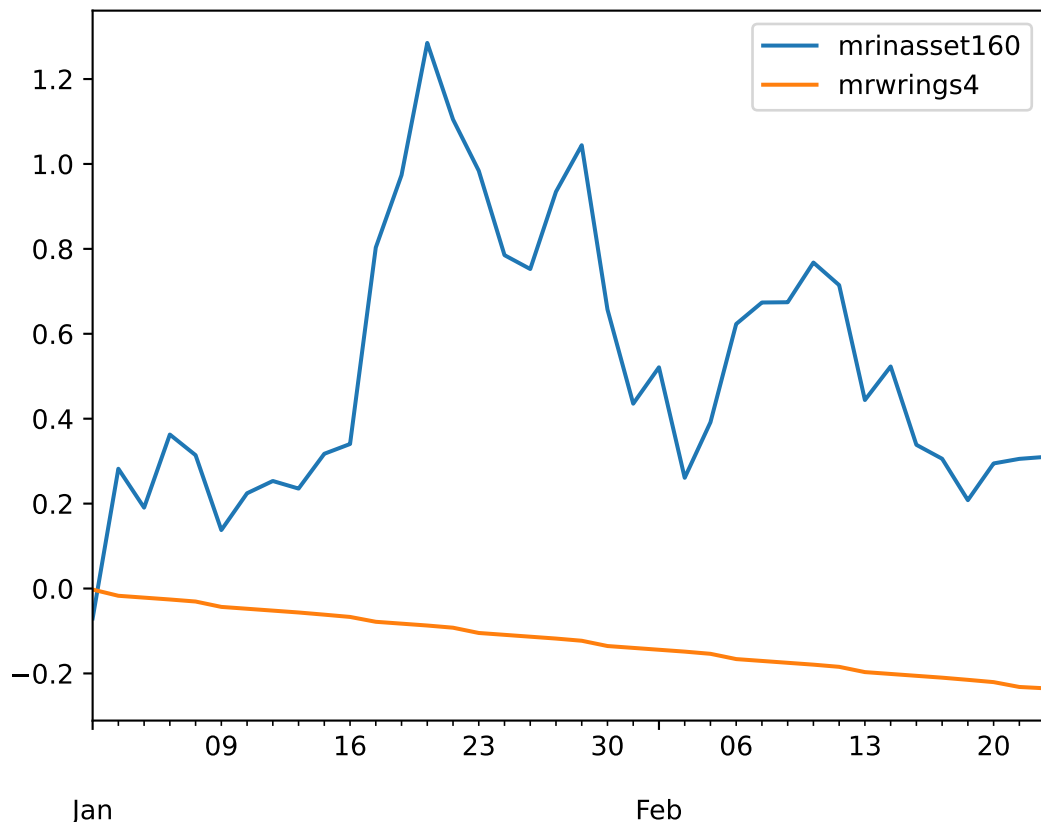
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.994, 'skewabs365': 6.088, 'skewrv180': 3.113, 'skewrv365': 2.722}
ann. std {'skewabs180': 8.073, 'skewabs365': 8.023, 'skewrv180': 6.556, 'skewrv365': 6.148}
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.76, 'skewrv180': 0.47, 'skewrv365': 0.44}



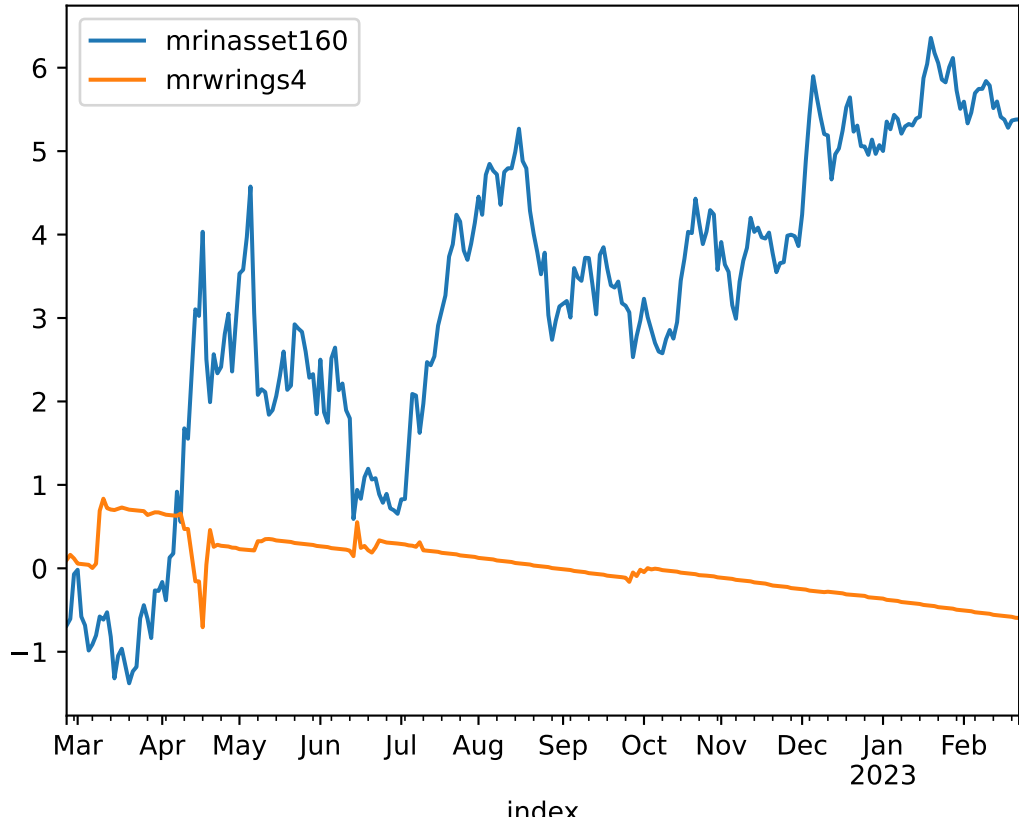
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.216, 'skewabs365': 4.459, 'skewrv180': 4.301, 'skewrv365': 2.247}
ann. std {'skewabs180': 10.779, 'skewabs365': 10.239, 'skewrv180': 9.451, 'skewrv365': 8.743}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



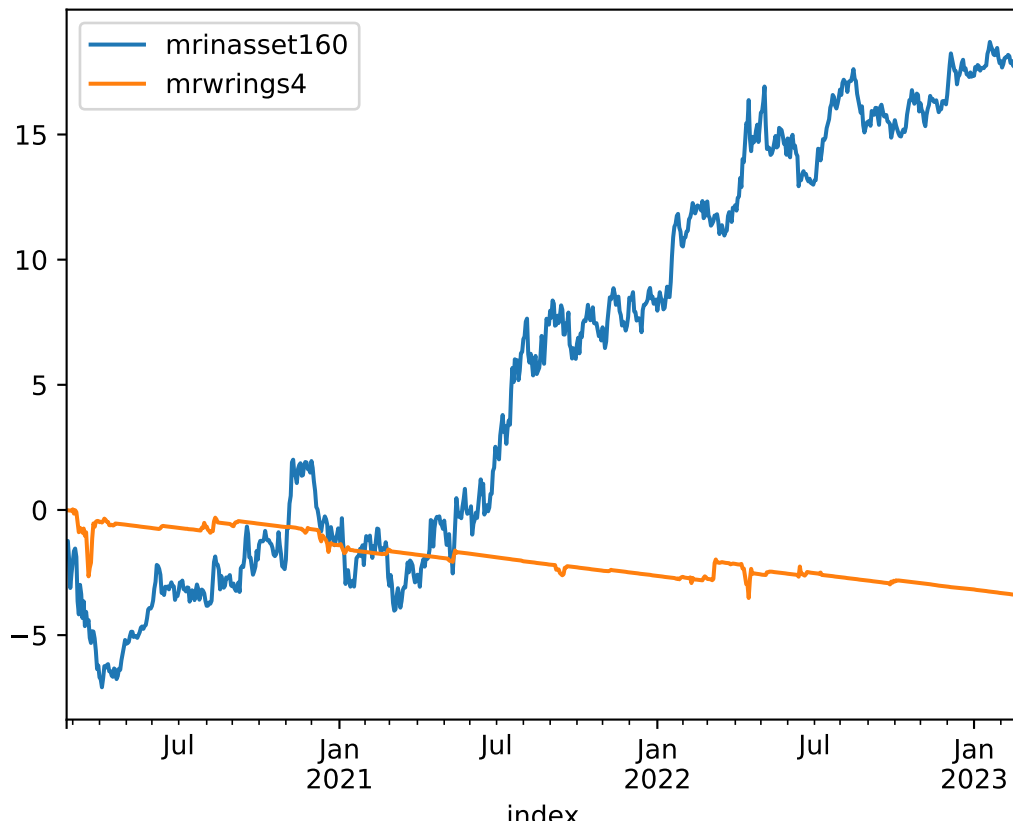
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 2.089, 'mrwrings4': -1.583}
ann. std {'mrinasset160': 2.855, 'mrwrings4': 0.054}
ann. SR {'mrinasset160': 0.73, 'mrwrings4': -29.46}



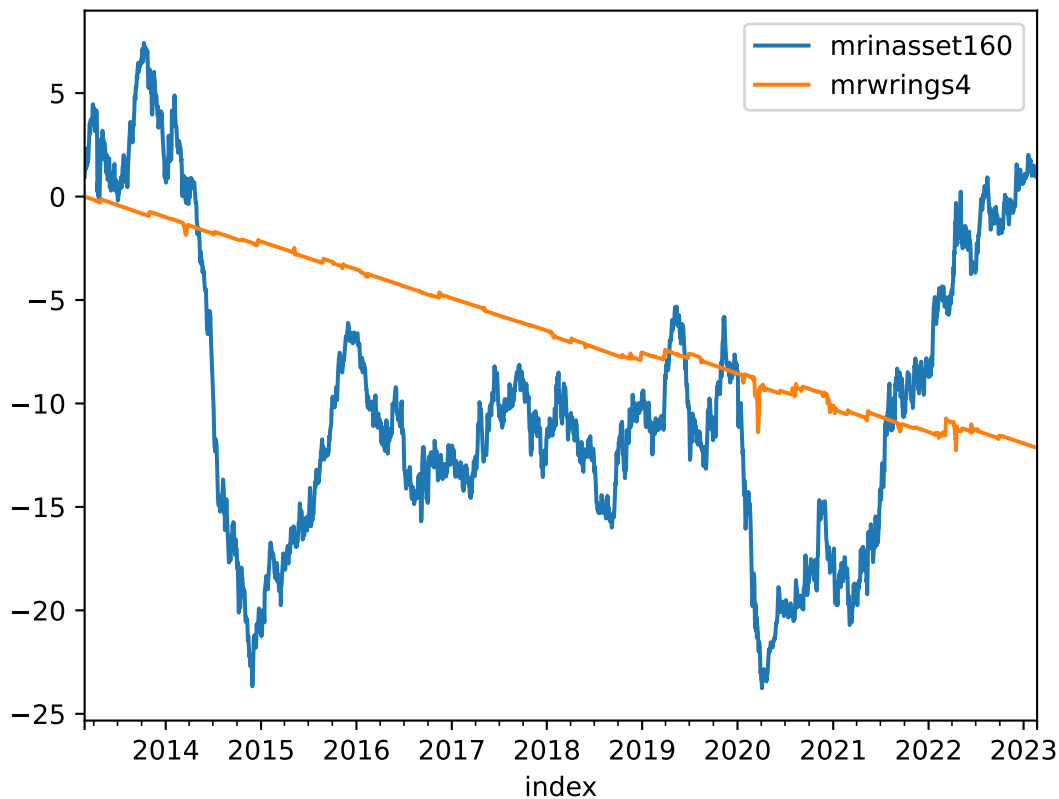
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 5.299, 'mrwrings4': -0.587}
ann. std {'mrinasset160': 5.641, 'mrwrings4': 1.445}
ann. SR {'mrinasset160': 0.94, 'mrwrings4': -0.41}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.795, 'mrwrings4': -1.114}
ann. std {'mrinasset160': 6.649, 'mrwrings4': 1.515}
ann. SR {'mrinasset160': 0.87, 'mrwrings4': -0.74}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': 0.102, 'mrwrings4': -1.193}
ann. std {'mrinasset160': 6.506, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': 0.02, 'mrwrings4': -1.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.132, 'mrwrings4': -2.313}
ann. std {'mrinasset160': 11.153, 'mrwrings4': 2.617}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.88}

