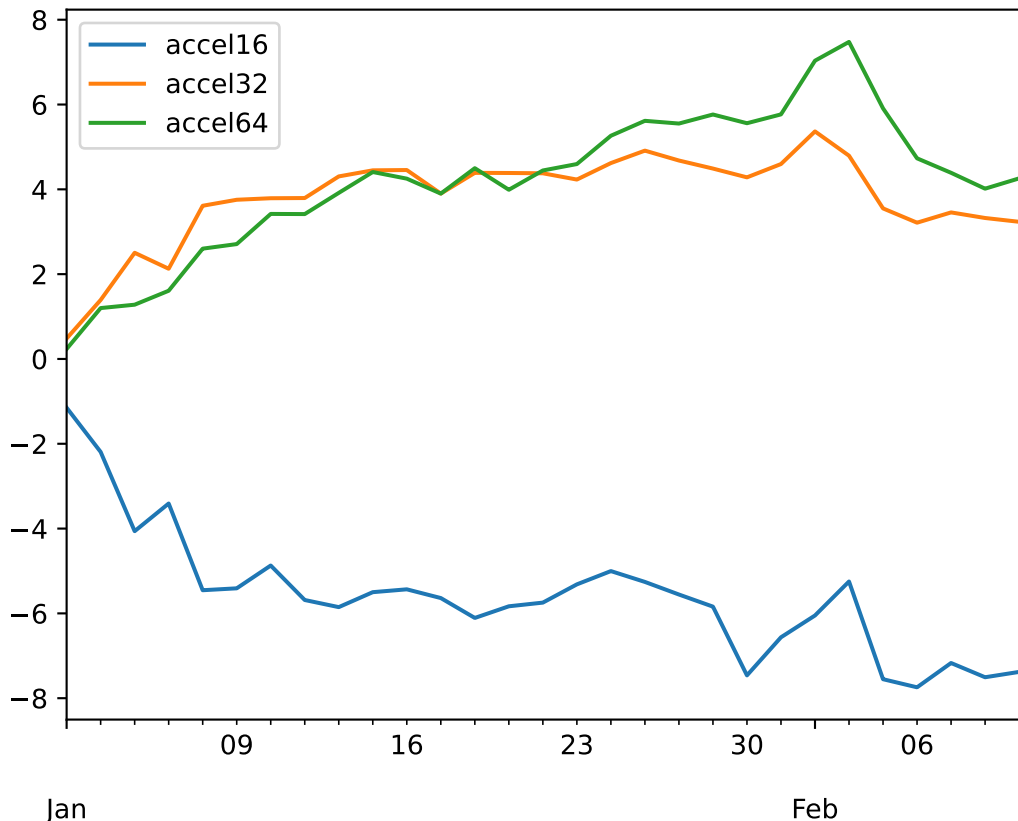
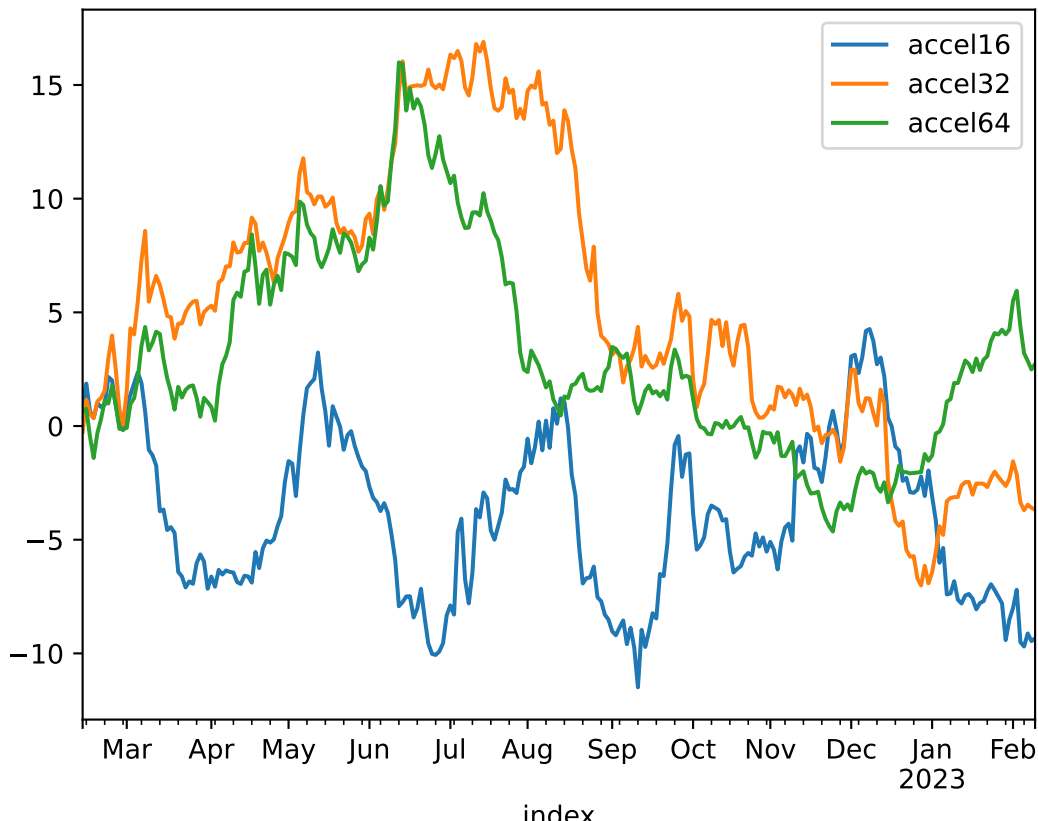


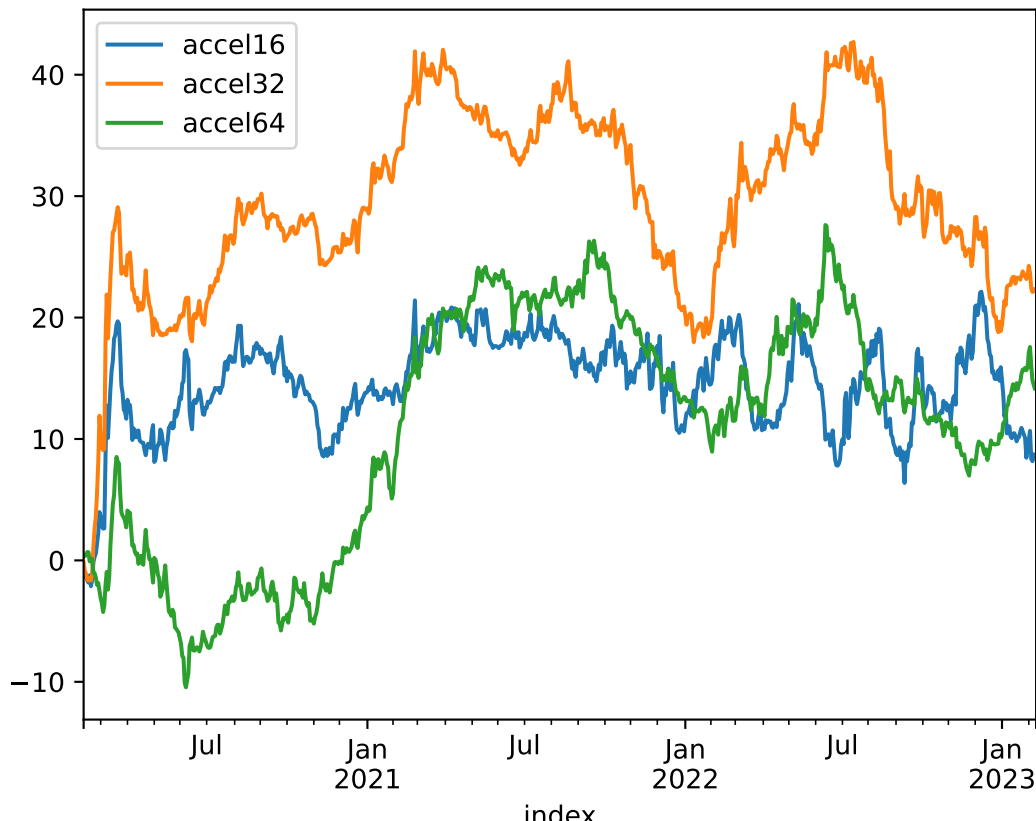
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -65.149, 'accel32': 28.554, 'accel64': 37.591}
ann. std {'accel16': 13.773, 'accel32': 8.706, 'accel64': 9.625}
ann. SR {'accel16': -4.73, 'accel32': 3.28, 'accel64': 3.91}



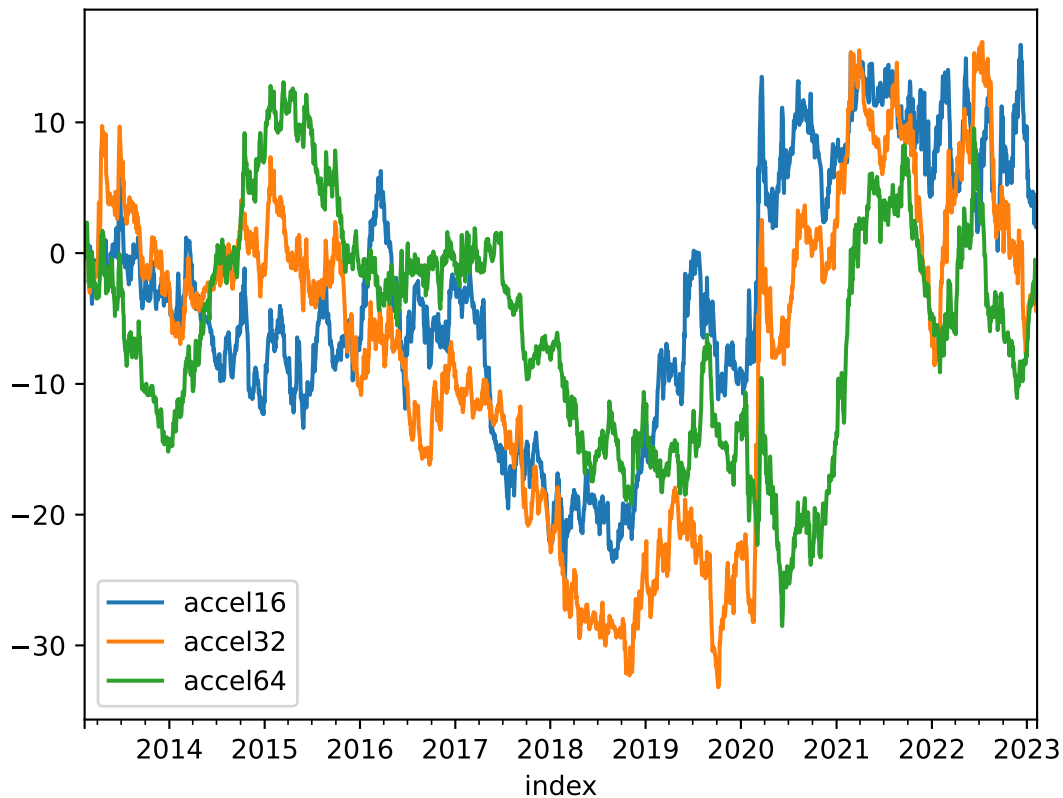
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -9.19, 'accel32': -3.625, 'accel64': 2.69}
ann. std {'accel16': 16.073, 'accel32': 14.315, 'accel64': 11.758}
ann. SR {'accel16': -0.57, 'accel32': -0.25, 'accel64': 0.23}



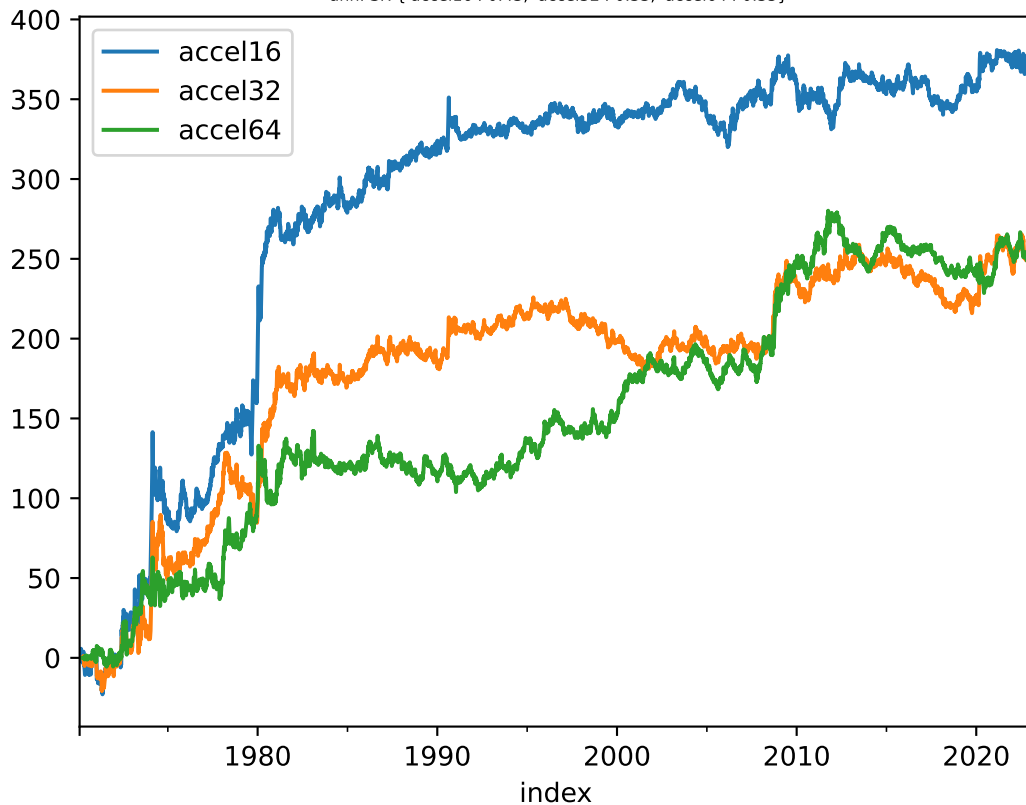
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 2.791, 'accel32': 7.234, 'accel64': 4.695}
ann. std {'accel16': 14.822, 'accel32': 14.273, 'accel64': 11.398}
ann. SR {'accel16': 0.19, 'accel32': 0.51, 'accel64': 0.41}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.229, 'accel32': -0.434, 'accel64': -0.364}
ann. std {'accel16': 11.959, 'accel32': 11.184, 'accel64': 9.603}
ann. SR {'accel16': 0.02, 'accel32': -0.04, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.809, 'accel32': 4.529, 'accel64': 4.69}
ann. std {'accel16': 15.695, 'accel32': 13.78, 'accel64': 13.301}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

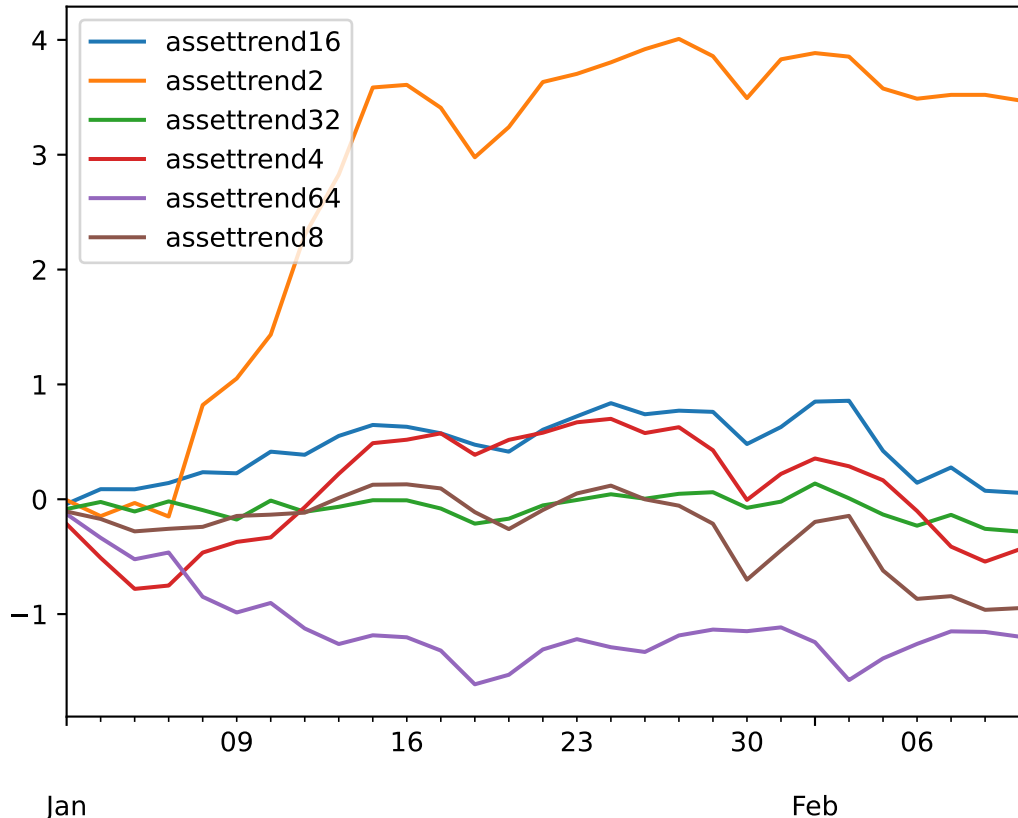


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 0.495, 'assettrend2': 30.664, 'assettrend32': -2.478, 'assettrend4': -3.864, 'assettrend64': -10.558, 'assettrend8': -8.369}

ann. std {'assettrend16': 2.473, 'assettrend2': 5.43, 'assettrend32': 1.482, 'assettrend4': 3.197, 'assettrend64': 2.497, 'assettrend8': 2.814}

ann. SR {'assettrend16': 0.2, 'assettrend2': 5.65, 'assettrend32': -1.67, 'assettrend4': -1.21, 'assettrend64': -4.23, 'assettrend8': -2.97}

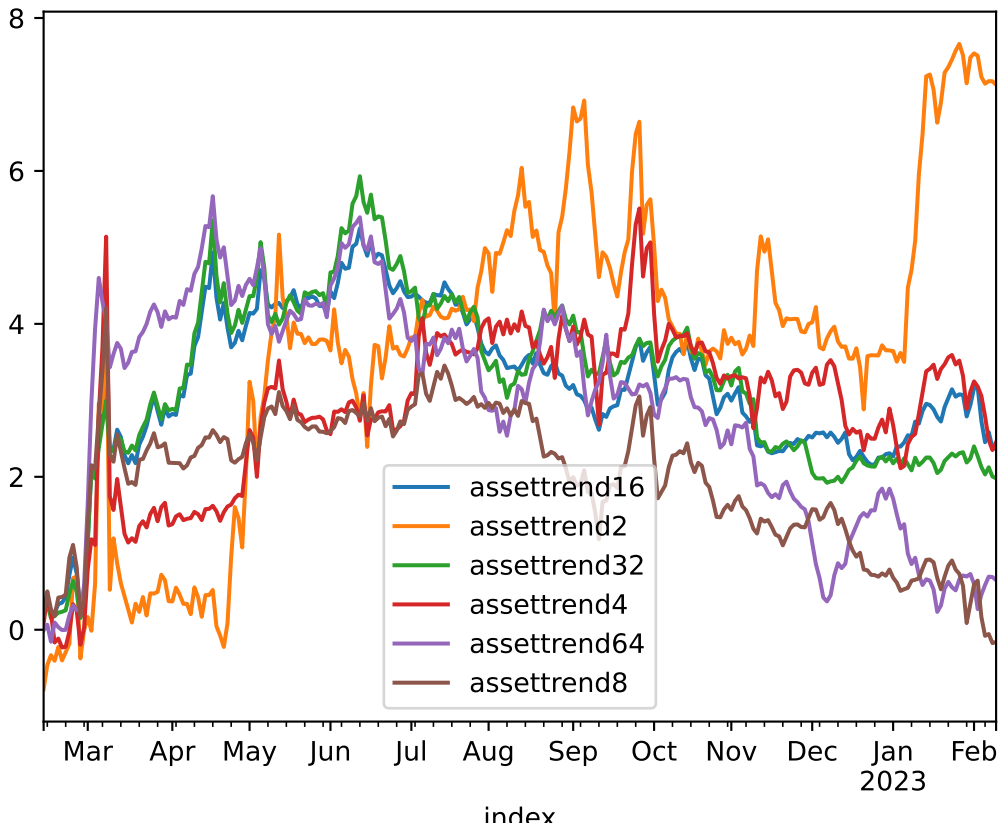


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 2.328, 'assettrend2': 7.017, 'assettrend32': 1.95, 'assettrend4': 2.417, 'assettrend64': 0.639, 'assettrend8': -0.158}

ann. std {'assettrend16': 3.003, 'assettrend2': 7.544, 'assettrend32': 3.18, 'assettrend4': 5.583, 'assettrend64': 3.693, 'assettrend8': 3.692}

ann. SR {'assettrend16': 0.78, 'assettrend2': 0.93, 'assettrend32': 0.61, 'assettrend4': 0.43, 'assettrend64': 0.17, 'assettrend8': -0.04}

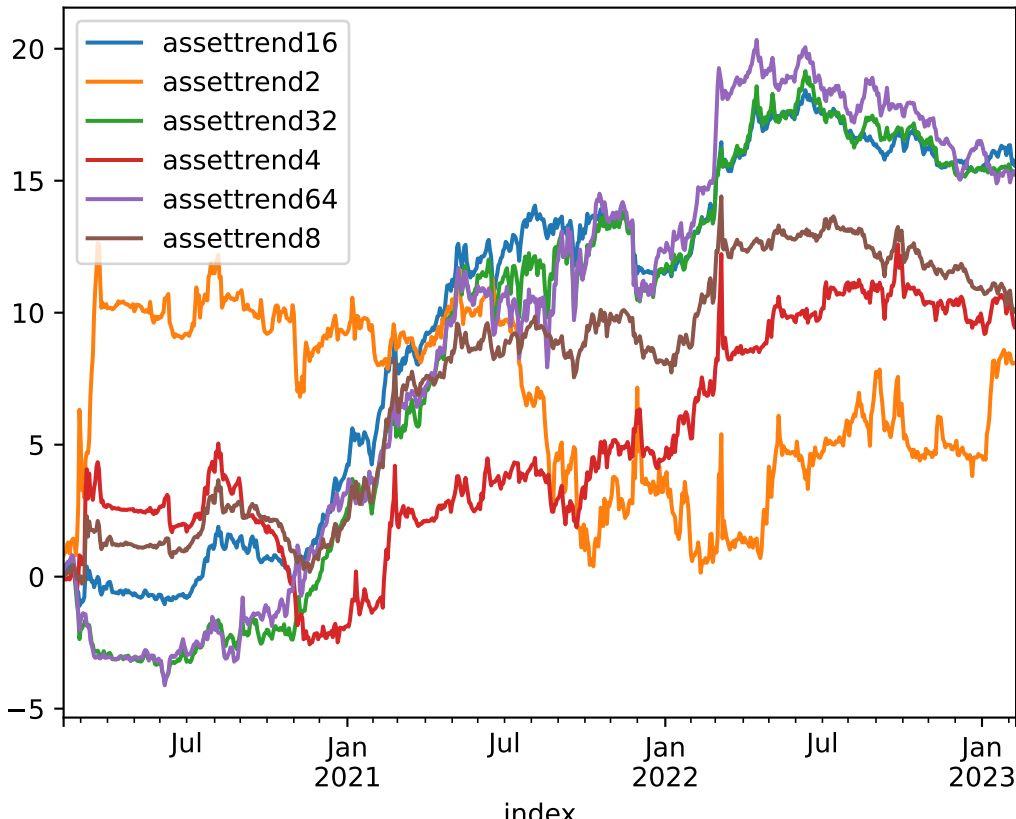


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.083, 'assettrend2': 2.633, 'assettrend32': 4.971, 'assettrend4': 3.118, 'assettrend64': 5.007, 'assettrend8': 3.281}

ann. std {'assettrend16': 3.529, 'assettrend2': 7.658, 'assettrend32': 4.326, 'assettrend4': 5.276, 'assettrend64': 5.115, 'assettrend8': 3.726}

ann. SR {'assettrend16': 1.44, 'assettrend2': 0.34, 'assettrend32': 1.15, 'assettrend4': 0.59, 'assettrend64': 0.98, 'assettrend8': 0.88}

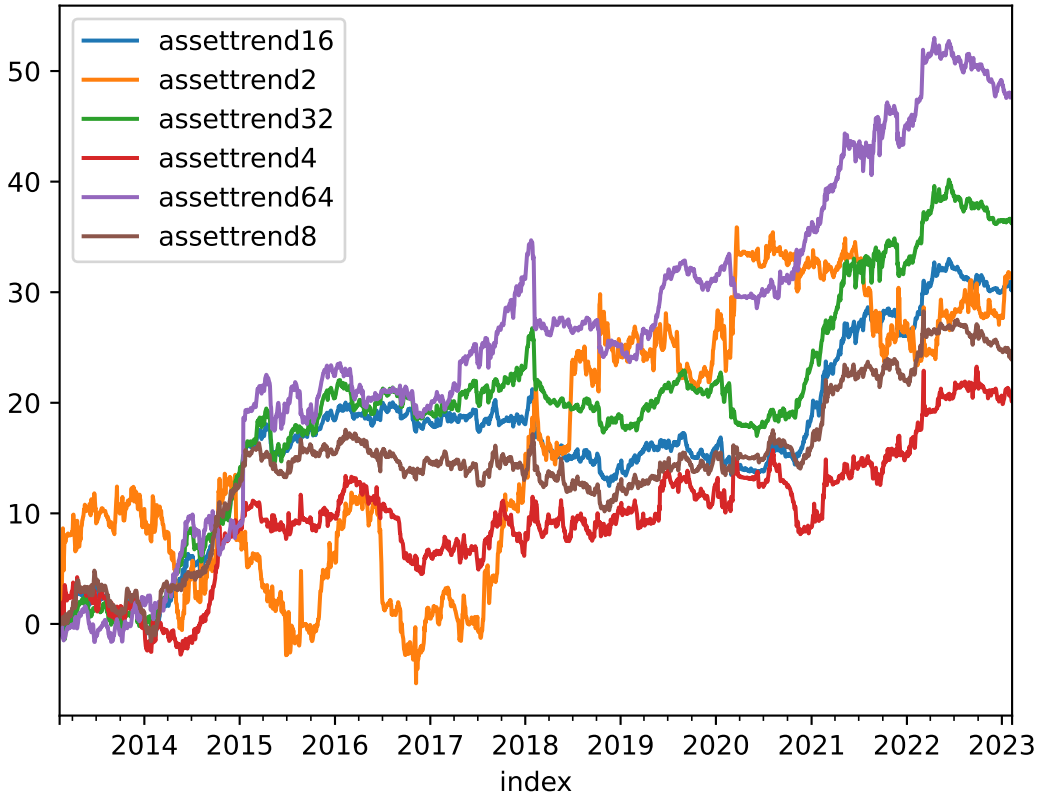


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.956, 'assettrend2': 3.071, 'assettrend32': 3.555, 'assettrend4': 1.984, 'assettrend64': 4.708, 'assettrend8': 2.345}

ann. std {'assettrend16': 3.26, 'assettrend2': 8.389, 'assettrend32': 3.726, 'assettrend4': 5.001, 'assettrend64': 5.318, 'assettrend8': 3.564}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.37, 'assettrend32': 0.95, 'assettrend4': 0.4, 'assettrend64': 0.89, 'assettrend8': 0.66}

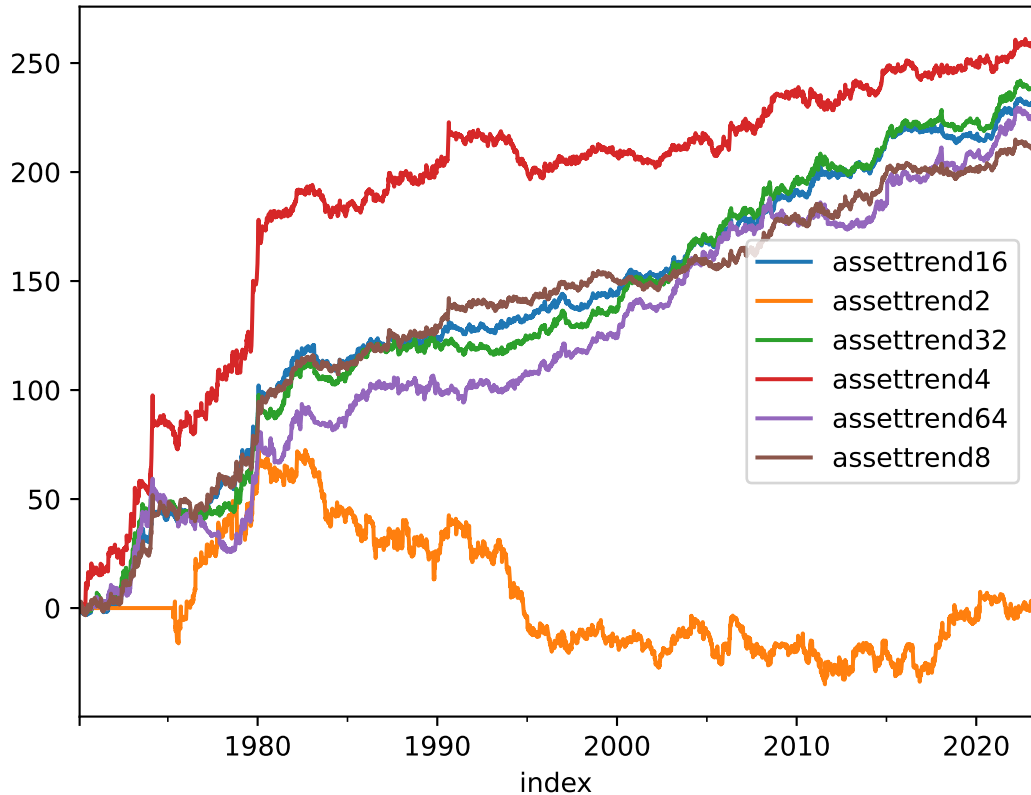


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.273, 'assettrend2': 0.053, 'assettrend32': 4.404, 'assettrend4': 4.775, 'assettrend64': 4.156, 'assettrend8': 3.897}

ann. std {'assettrend16': 4.645, 'assettrend2': 10.022, 'assettrend32': 4.872, 'assettrend4': 7.341, 'assettrend64': 5.452, 'assettrend8': 5.023}

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

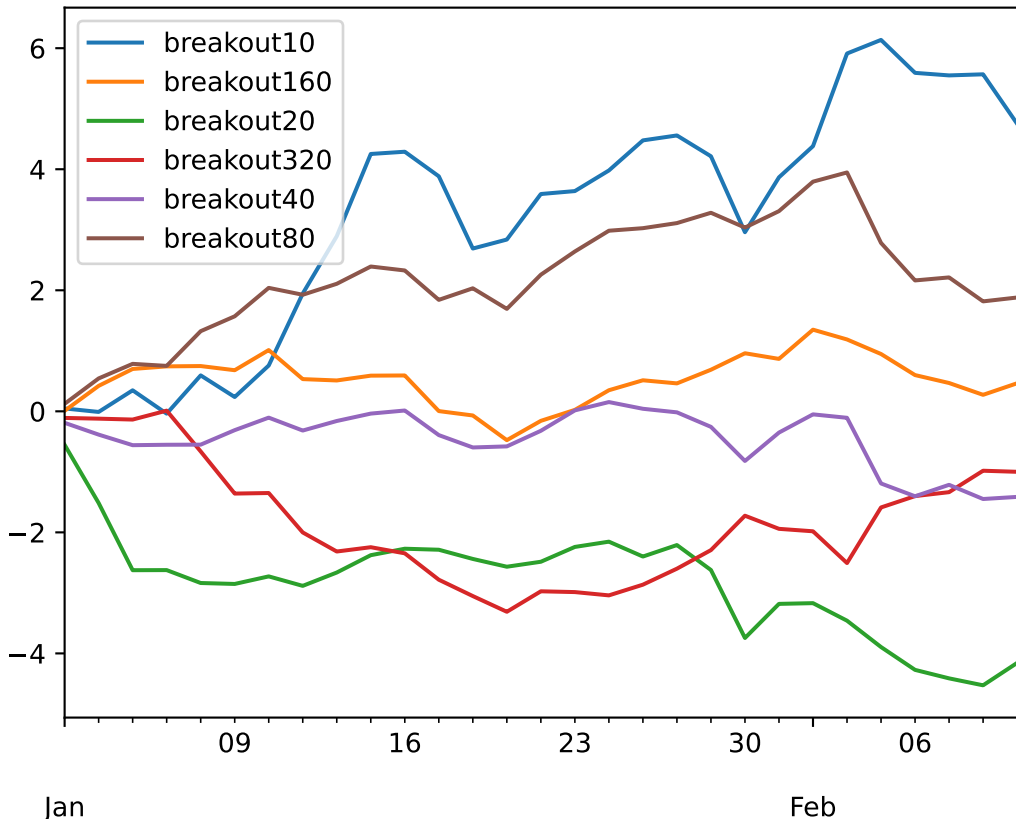


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 41.95, 'breakout160': 4.092, 'breakout20': -36.7, 'breakout320': -8.821, 'breakout40': 16.601}

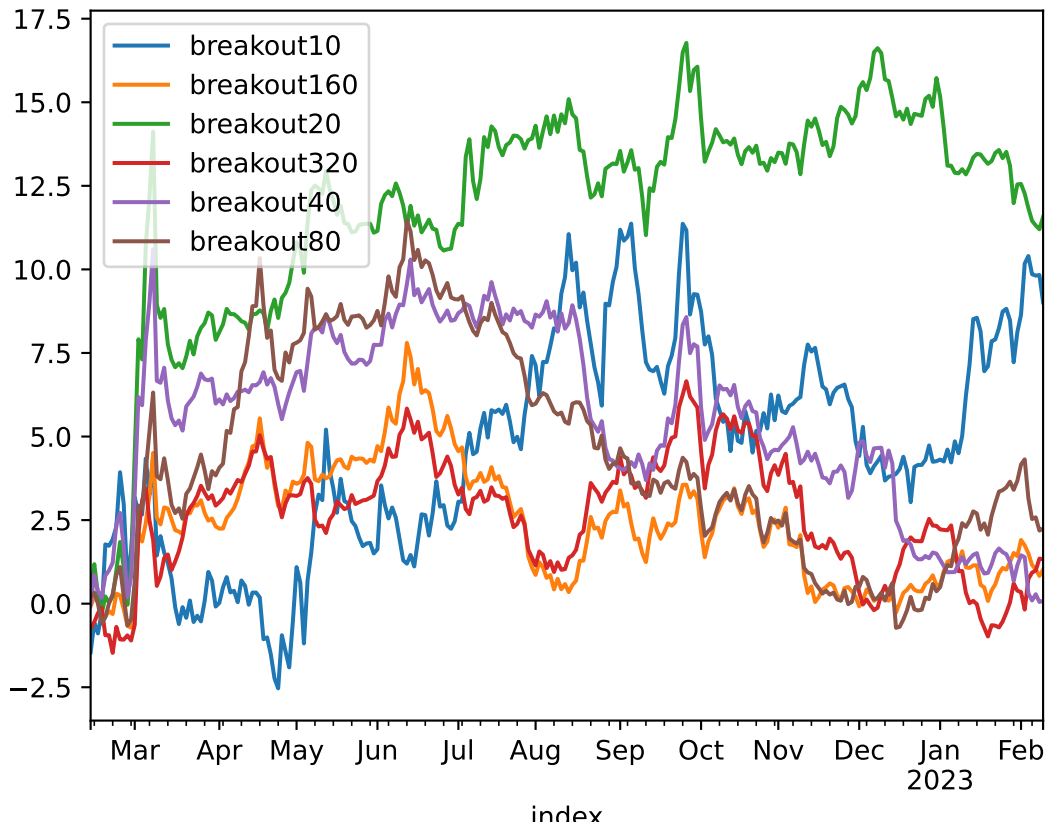
ann. std {'breakout10': 10.966, 'breakout160': 4.326, 'breakout20': 6.513, 'breakout320': 5.877, 'breakout40': 4.921, 'breakout80': 6.181}

ann. SR {'breakout10': 3.83, 'breakout160': 0.95, 'breakout20': -5.63, 'breakout320': -1.5, 'breakout40': -2.54, 'breakout80': 2.69}



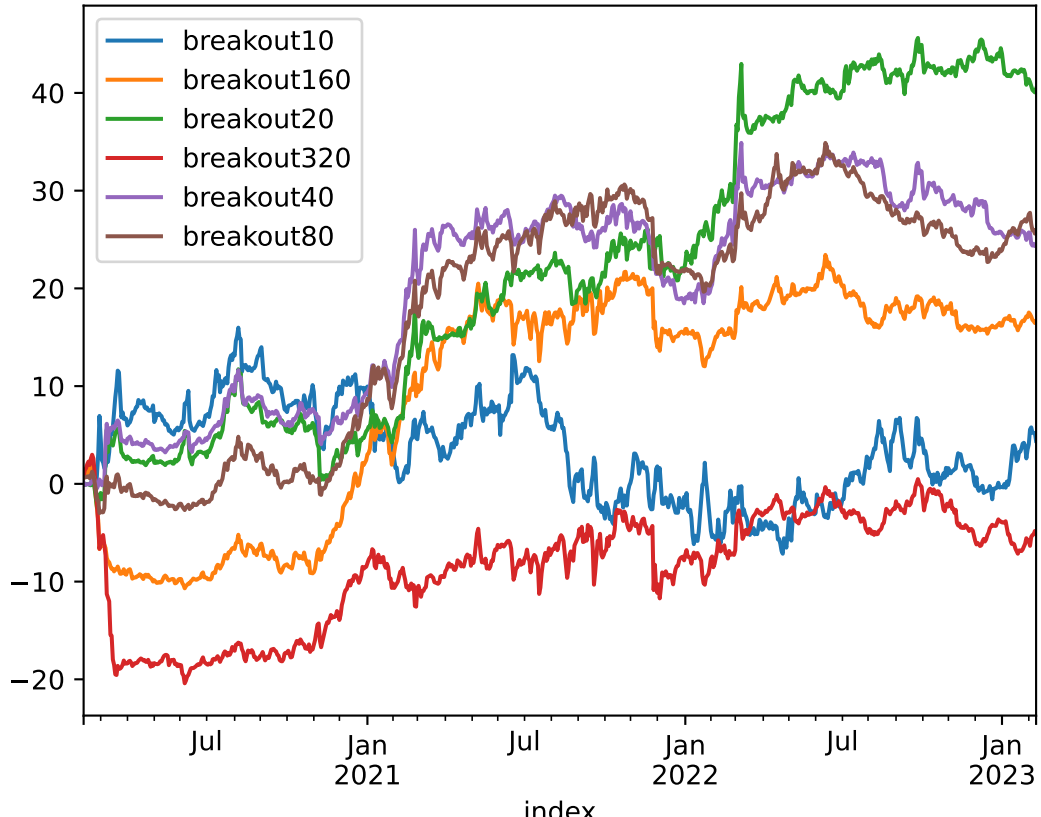
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 8.876, 'breakout160': 1.005, 'breakout20': 11.391, 'breakout320': 1.31, 'breakout40': 0.083, 'breakout80': 2.216}
ann. std {'breakout10': 12.687, 'breakout160': 6.864, 'breakout20': 11.542, 'breakout320': 6.914, 'breakout40': 9.26, 'breakout80': 7.927}
ann. SR {'breakout10': 0.7, 'breakout160': 0.15, 'breakout20': 0.99, 'breakout320': 0.19, 'breakout40': 0.01, 'breakout80': 0.28}



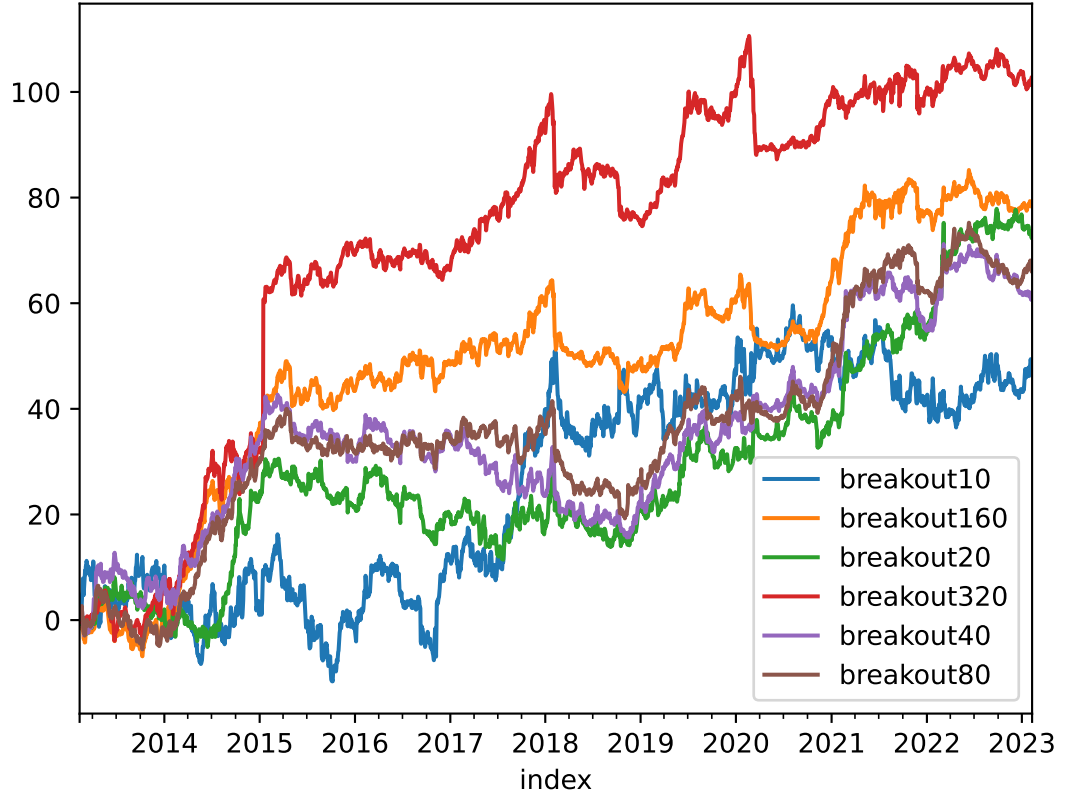
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 1.437, 'breakout160': 5.443, 'breakout20': 13.216, 'breakout320': -1.581, 'breakout40': 7.966, 'breakout80': 8.393}
ann. std {'breakout10': 13.941, 'breakout160': 9.453, 'breakout20': 11.347, 'breakout320': 10.573, 'breakout40': 9.884, 'breakout80': 9.246}
ann. SR {'breakout10': 0.1, 'breakout160': 0.58, 'breakout20': 1.16, 'breakout320': -0.15, 'breakout40': 0.81, 'breakout80': 0.91}



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

ann. mean {'breakout10': 4.712, 'breakout160': 7.697, 'breakout20': 7.13, 'breakout320': 10.086, 'breakout80': 6.479}
ann. std {'breakout10': 15.682, 'breakout160': 9.092, 'breakout20': 11.151, 'breakout320': 13.327, 'breakout40': 9.729, 'breakout80': 8.991}
ann. SR {'breakout10': 0.3, 'breakout160': 0.85, 'breakout20': 0.64, 'breakout320': 0.76, 'breakout40': 0.61, 'breakout80': 0.72}

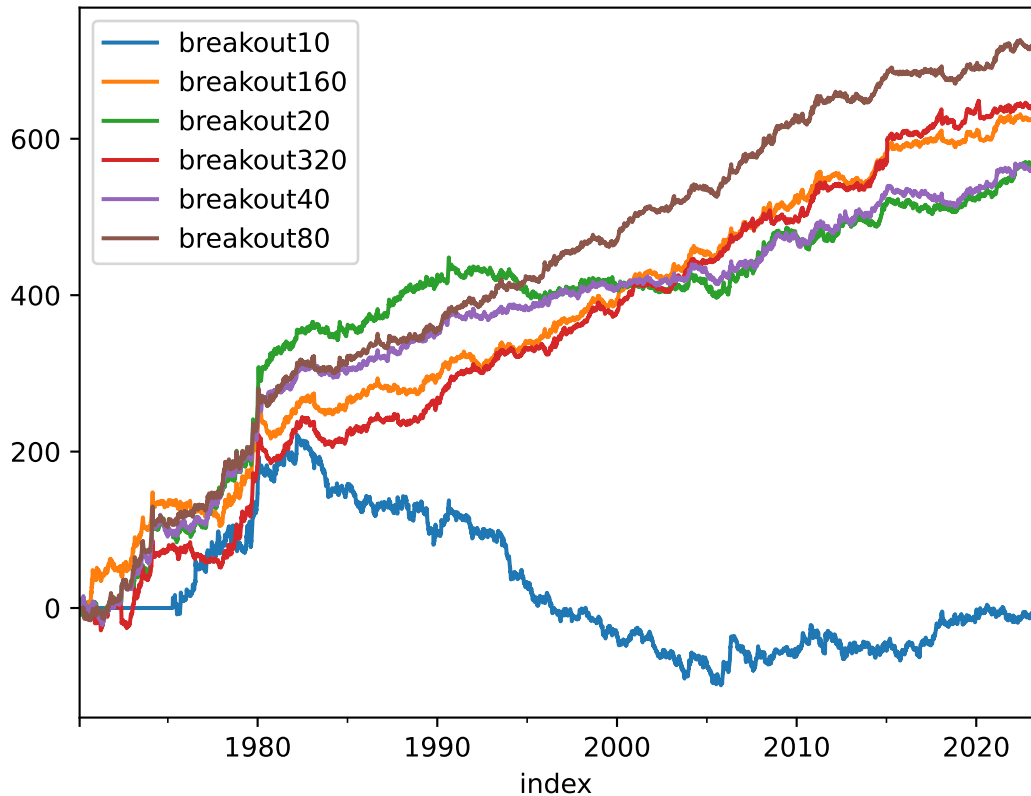


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.136, 'breakout160': 11.561, 'breakout20': 10.46, 'breakout320': 11.86, 'breakout40': 10.325, 'breakout80': 13.273}

ann. std {'breakout10': 20.773, 'breakout160': 12.462, 'breakout20': 16.04, 'breakout320': 13.017, 'breakout40': 13.198, 'breakout80': 12.718}

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

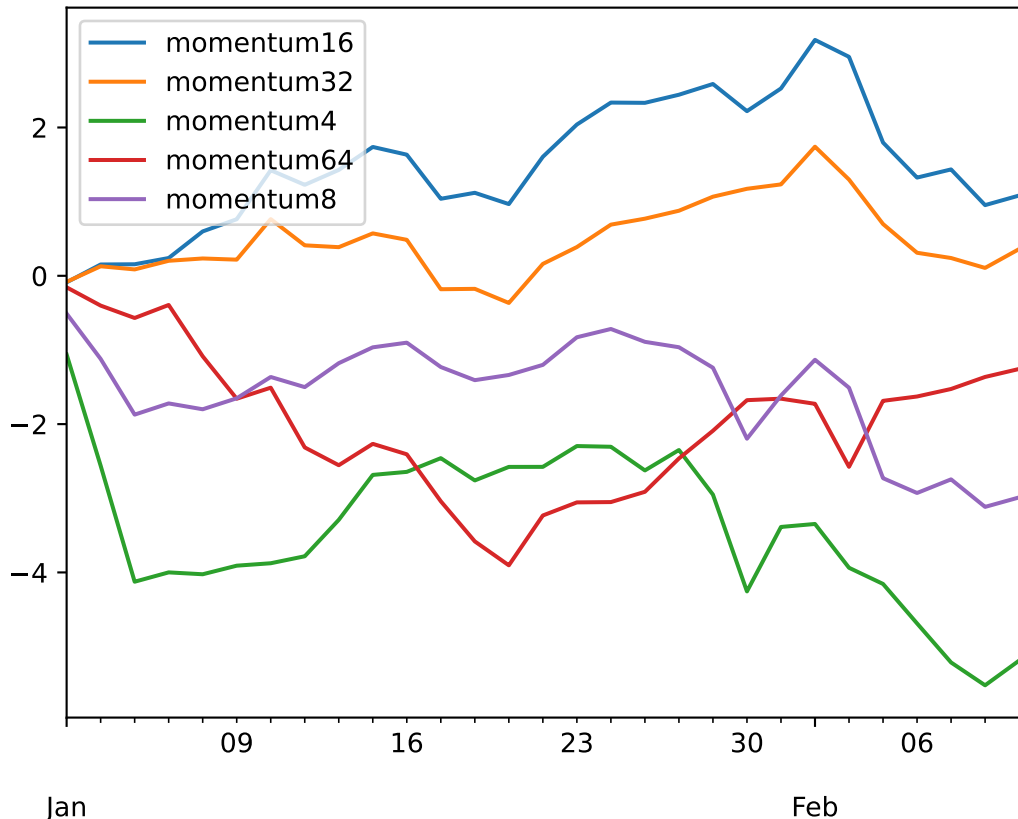


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 9.555, 'momentum32': 3.179, 'momentum4': -45.808, 'momentum64': -11.09, 'momentum8': -26.382}

ann. std {'momentum16': 6.371, 'momentum32': 4.829, 'momentum4': 9.535, 'momentum64': 6.835, 'momentum8': 6.739}

ann. SR {'momentum16': 1.5, 'momentum32': 0.66, 'momentum4': -4.8, 'momentum64': -1.62, 'momentum8': -3.91}

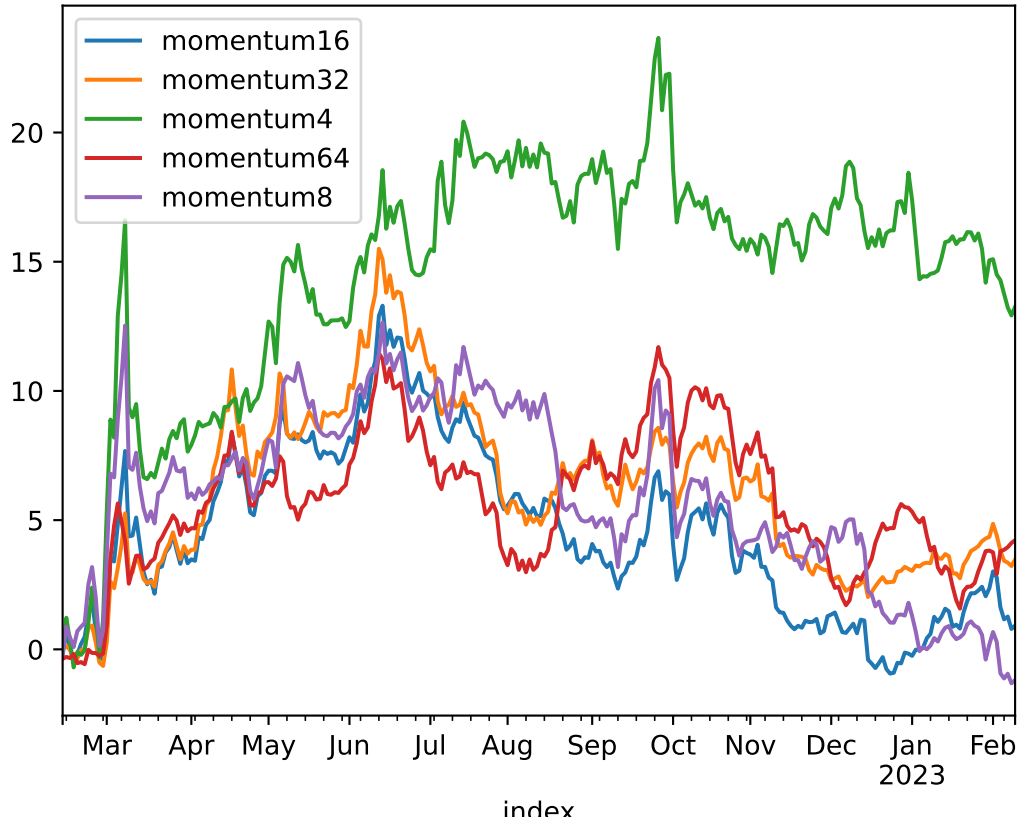


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 0.904, 'momentum32': 3.424, 'momentum4': 13.05, 'momentum64': 4.159, 'momentum8': -1.168}

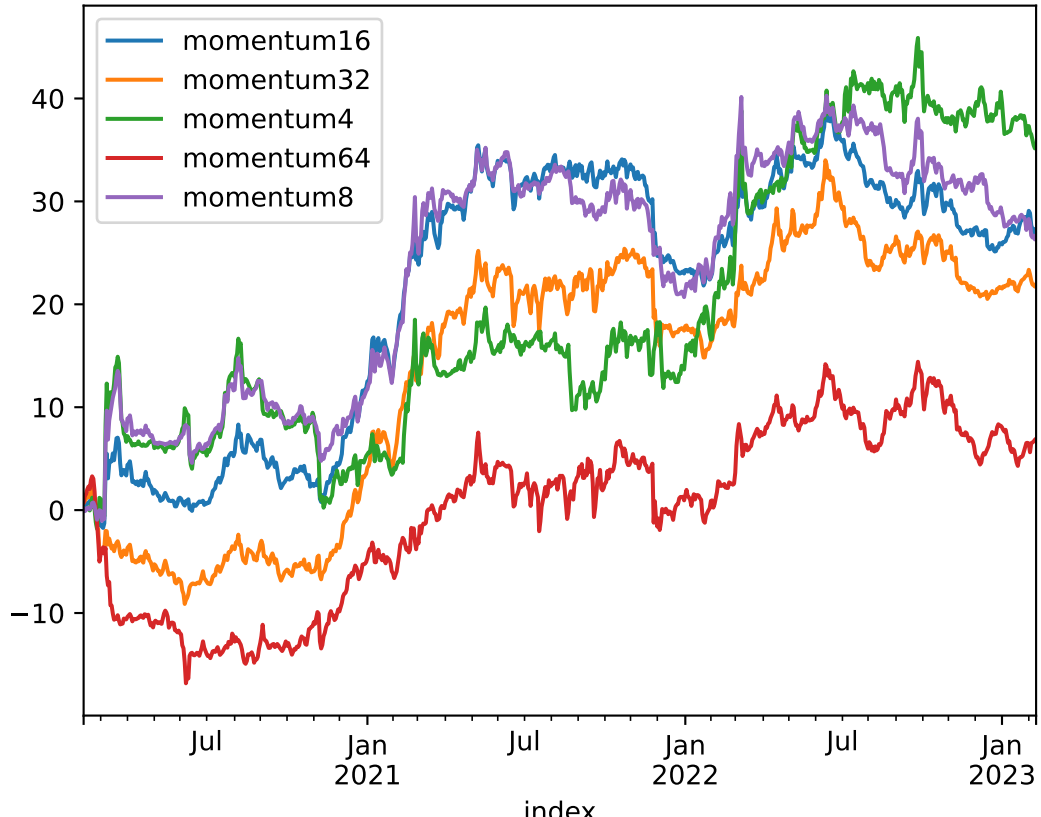
ann. std {'momentum16': 9.99, 'momentum32': 9.52, 'momentum4': 16.811, 'momentum64': 9.184, 'momentum8': 12.732}

ann. SR {'momentum16': 0.09, 'momentum32': 0.36, 'momentum4': 0.78, 'momentum64': 0.45, 'momentum8': -0.09}



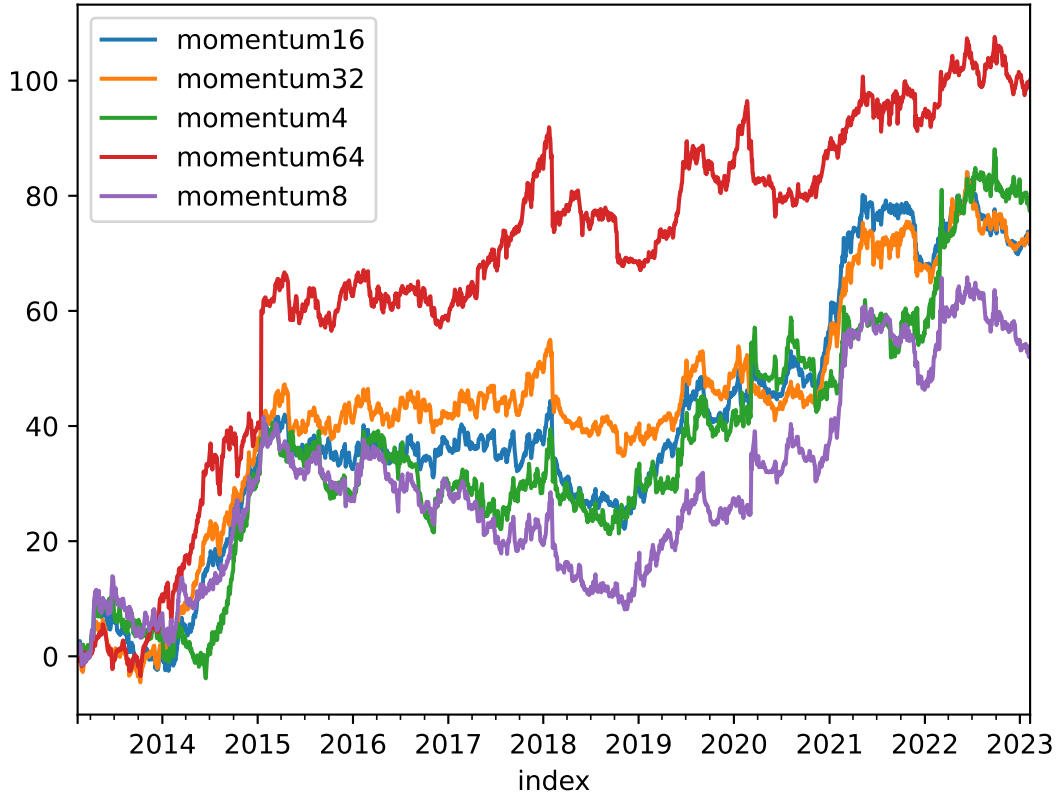
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.823, 'momentum32': 7.184, 'momentum4': 11.6, 'momentum64': 2.27, 'momentum8': 8.642}
ann. std {'momentum16': 10.838, 'momentum32': 10.628, 'momentum4': 15.848, 'momentum64': 10.84, 'momentum8': 12.684}
ann. SR {'momentum16': 0.81, 'momentum32': 0.68, 'momentum4': 0.73, 'momentum64': 0.21, 'momentum8': 0.68}



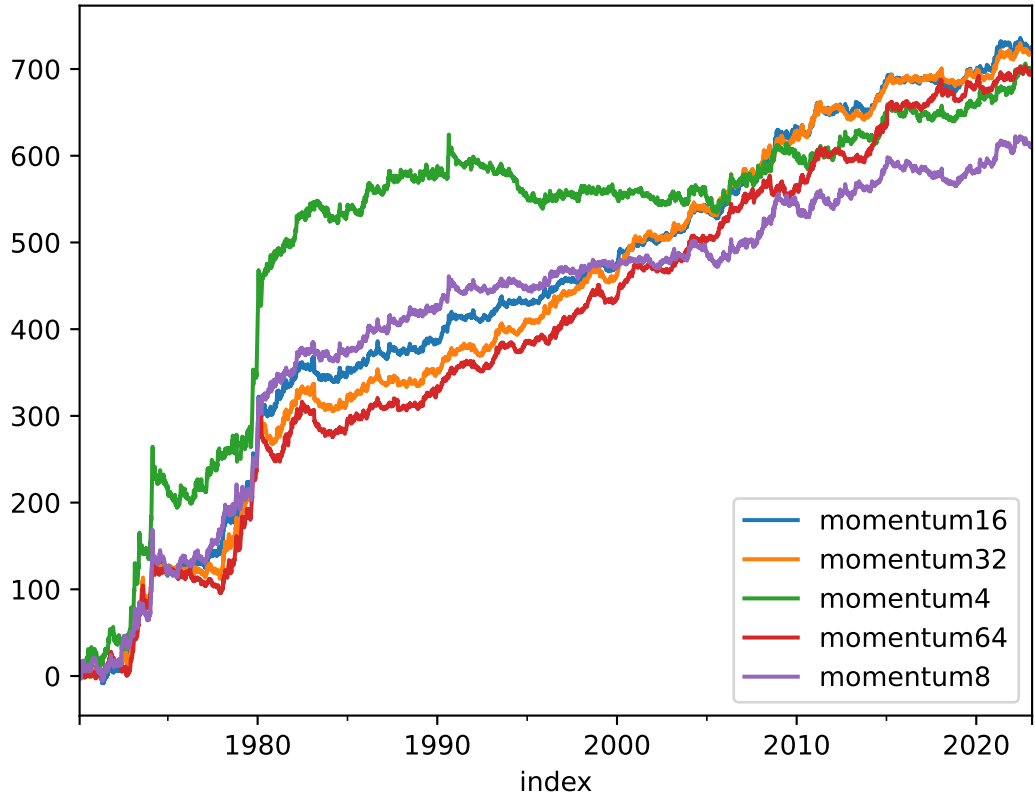
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.034, 'momentum32': 7.073, 'momentum4': 7.622, 'momentum64': 9.825, 'momentum8': 5.104}
ann. std {'momentum16': 9.912, 'momentum32': 9.472, 'momentum4': 13.685, 'momentum64': 12.008, 'momentum8': 11.263}
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': 13.39, 'momentum32': 13.287, 'momentum4': 12.88, 'momentum64': 12.878, 'momentum8': 11.266}
ann. std {'momentum16': 14.186, 'momentum32': 13.808, 'momentum4': 20.045, 'momentum64': 13.443, 'momentum8': 15.832}
ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71}

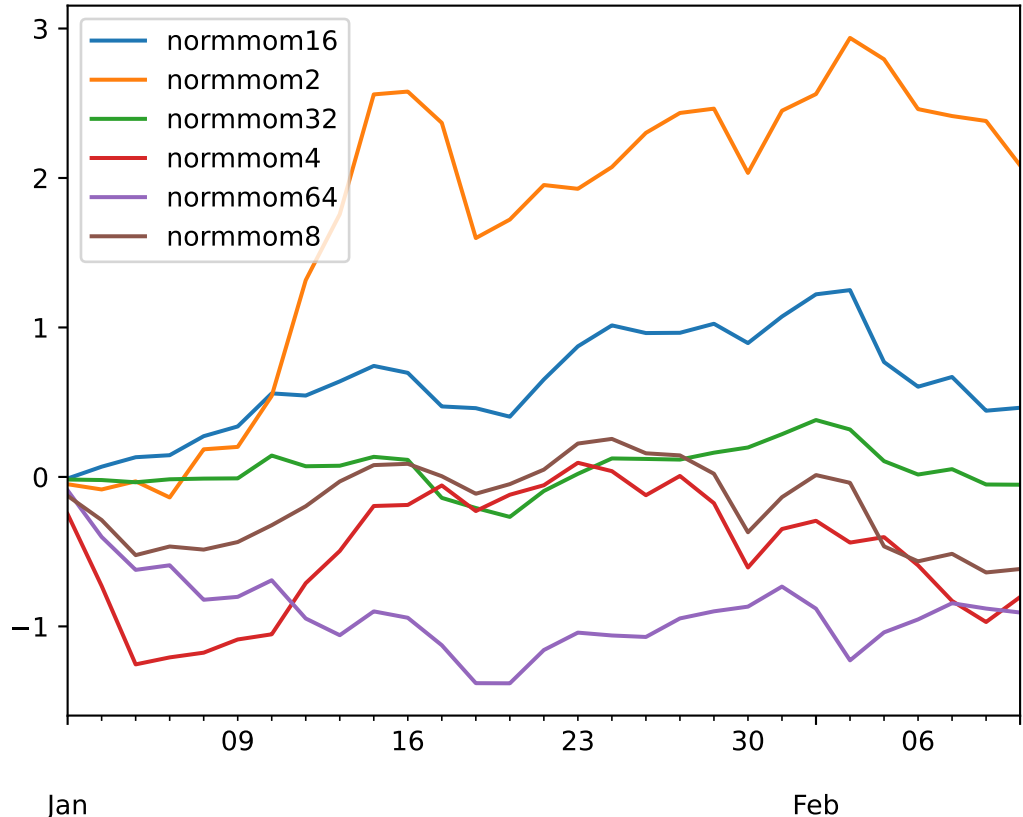


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 4.085, 'normmom2': 18.399, 'normmom32': -0.461, 'normmom4': -7.094, 'normmom64': -8.007, 'normmom8': -5.439}

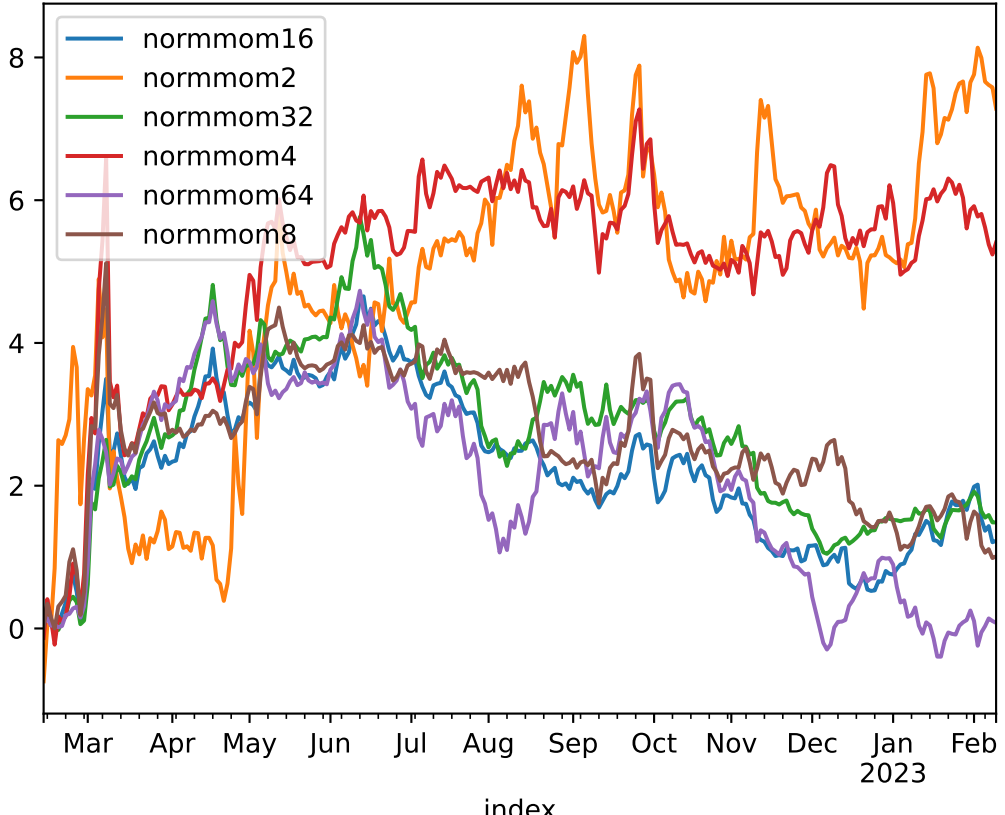
ann. std {'normmom16': 2.478, 'normmom2': 5.289, 'normmom32': 1.508, 'normmom4': 3.569, 'normmom64': 2.518, 'normmom8': 2.514}

ann. SR {'normmom16': 1.65, 'normmom2': 3.48, 'normmom32': -0.31, 'normmom4': -1.99, 'normmom64': -3.18, 'normmom8': -2.16}



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

ann. mean {'normmom16': 1.209, 'normmom2': 7.172, 'normmom32': 1.462, 'normmom4': 5.323, 'normmom64': 0.077, 'normmom8': 0.994}
ann. std {'normmom16': 3.111, 'normmom2': 7.561, 'normmom32': 3.054, 'normmom4': 5.821, 'normmom64': 3.381, 'normmom8': 4.11}
ann. SR {'normmom16': 0.39, 'normmom2': 0.95, 'normmom32': 0.48, 'normmom4': 0.91, 'normmom64': 0.02, 'normmom8': 0.24}

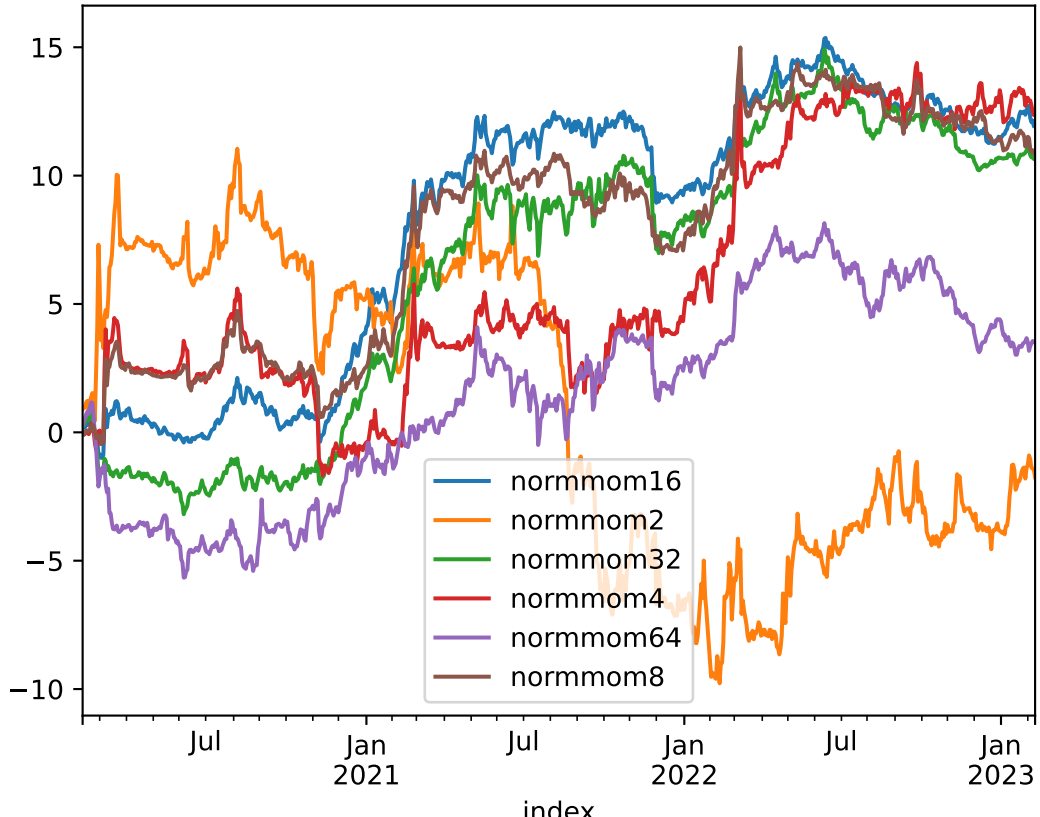


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.903, 'normmom2': -0.573, 'normmom32': 3.48, 'normmom4': 4.095, 'normmom64': 1.143, 'normmom8': 3.559}

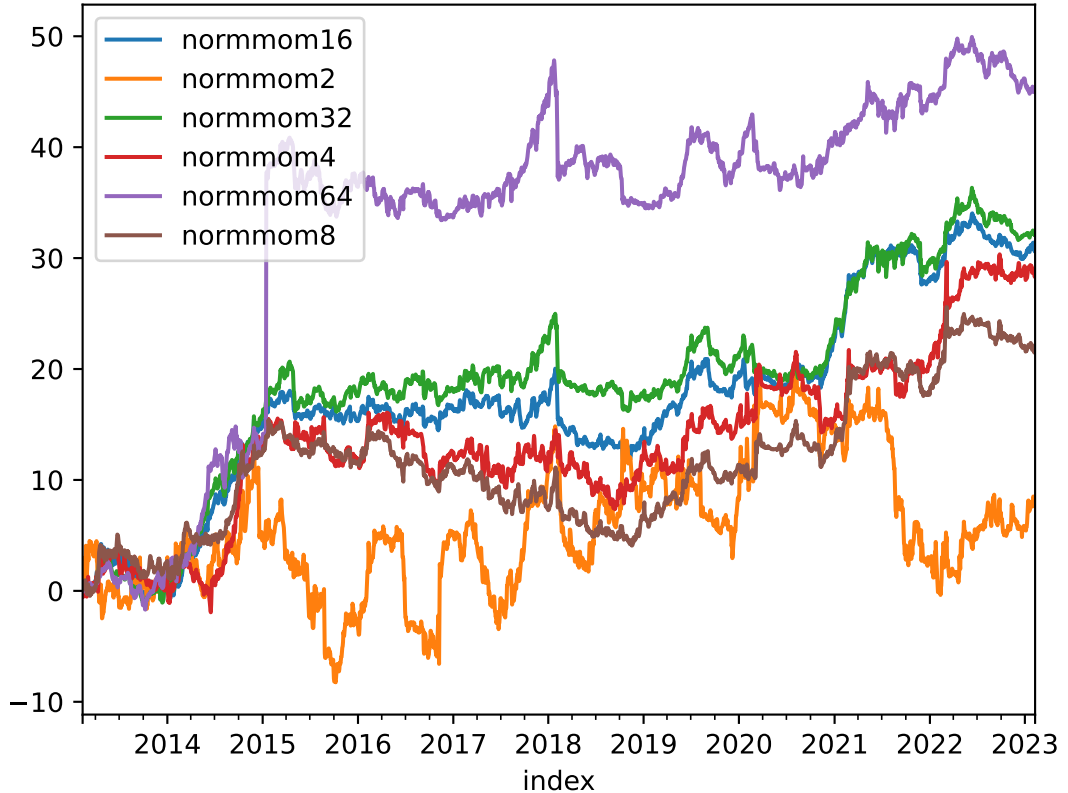
ann. std {'normmom16': 3.628, 'normmom2': 8.202, 'normmom32': 3.959, 'normmom4': 5.683, 'normmom64': 4.285, 'normmom8': 4.19}

ann. SR {'normmom16': 1.08, 'normmom2': -0.07, 'normmom32': 0.88, 'normmom4': 0.72, 'normmom64': 0.27, 'normmom8': 0.85}



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

ann. mean {'normmom16': 3.004, 'normmom2': 0.751, 'normmom32': 3.146, 'normmom4': 2.794, 'normmom64': 4.444, 'normmom8': 2.108}
ann. std {'normmom16': 3.566, 'normmom2': 9.041, 'normmom32': 3.719, 'normmom4': 5.477, 'normmom64': 8.559, 'normmom8': 4.026}
ann. SR {'normmom16': 0.84, 'normmom2': 0.08, 'normmom32': 0.85, 'normmom4': 0.51, 'normmom64': 0.52, 'normmom8': 0.52}

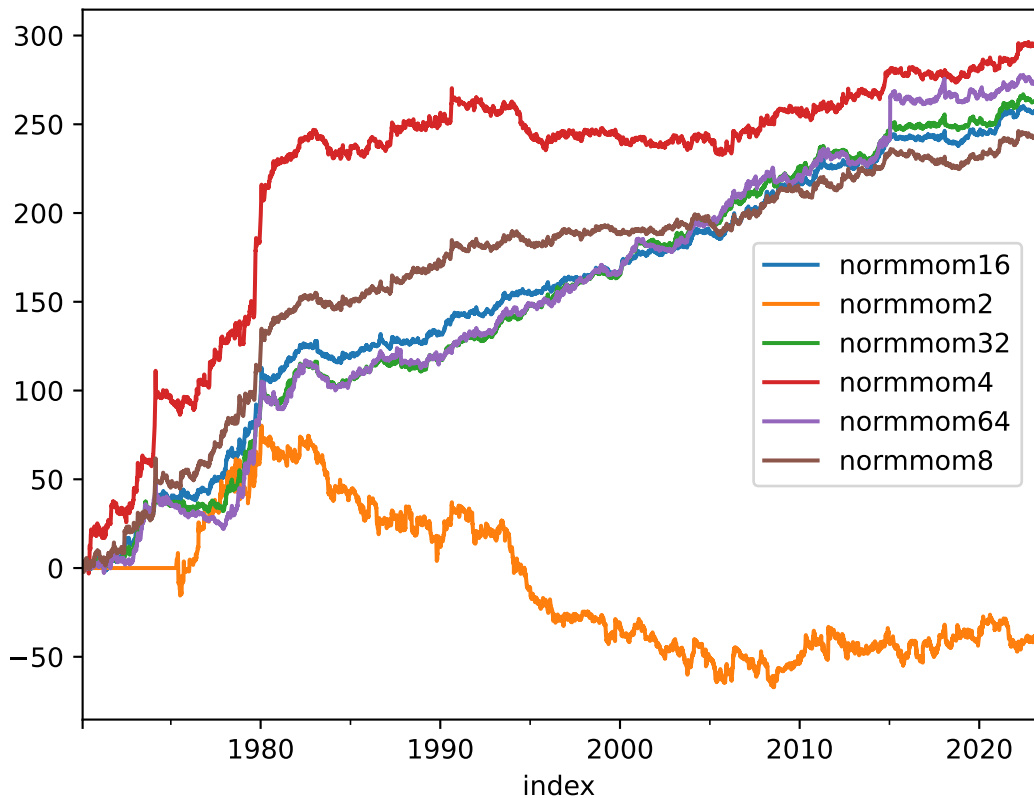


Total Trading Rule P&L for period '99Y'

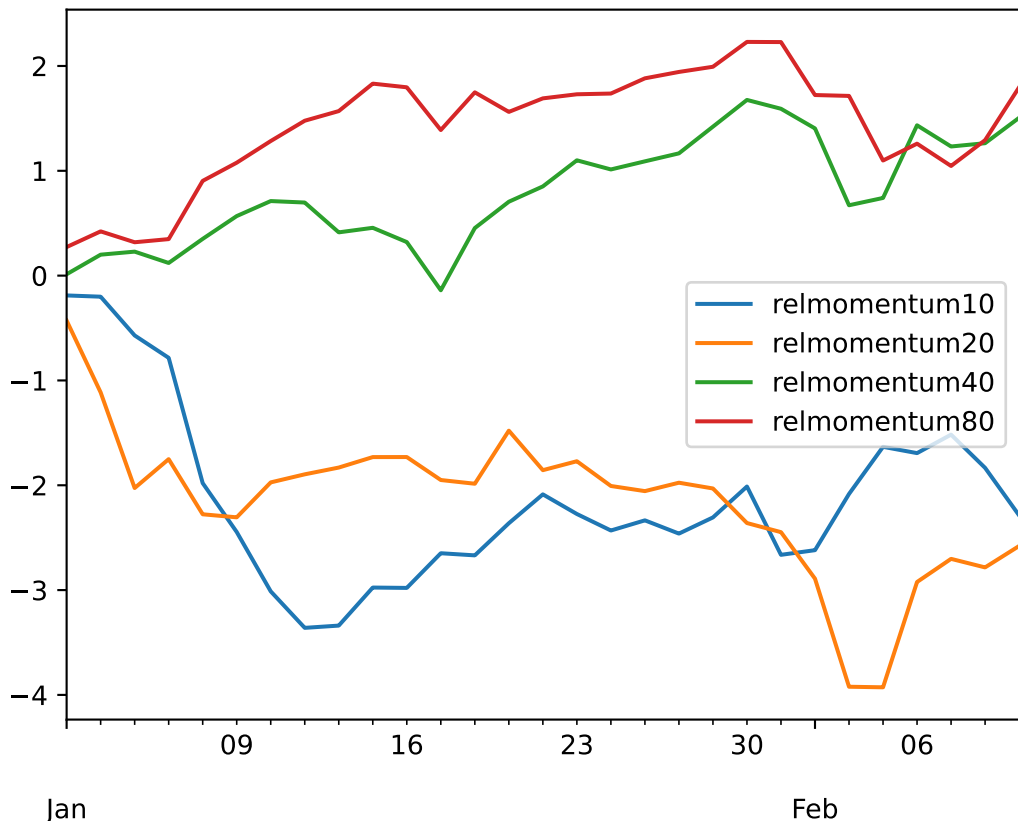
ann. mean {'normmom16': 4.754, 'normmom2': -0.723, 'normmom32': 4.861, 'normmom4': 5.451, 'normmom64': 5.056, 'normmom8': 4.481}

ann. std {'normmom16': 4.909, 'normmom2': 11.171, 'normmom32': 4.974, 'normmom4': 8.308, 'normmom64': 6.291, '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': -20.188, 'relmomentum20': -22.771, 'relmomentum40': 13.29, 'relmomentum80': 15.859}
ann. std {'relmomentum10': 6.04, 'relmomentum20': 6.587, 'relmomentum40': 4.502, 'relmomentum80': 4.22}
ann. SR {'relmomentum10': -3.34, 'relmomentum20': -3.46, 'relmomentum40': 2.95, 'relmomentum80': 3.76}

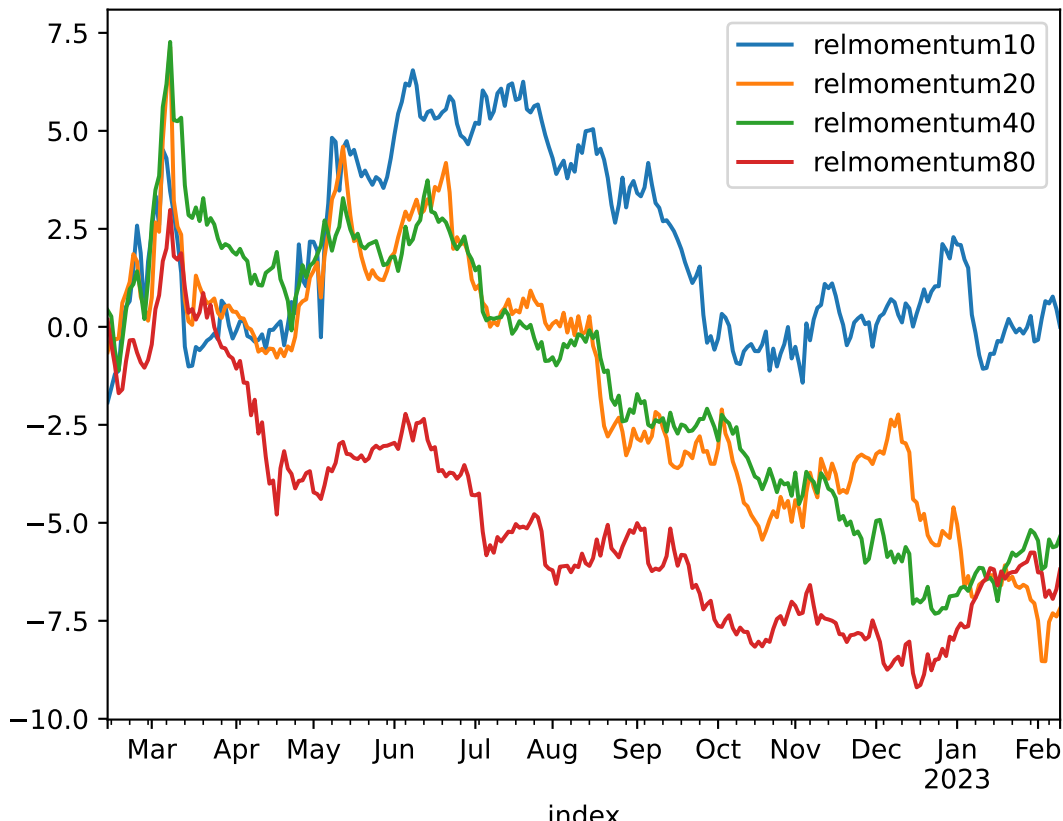


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 0.002, 'relmomentum20': -7.075, 'relmomentum40': -5.27, 'relmomentum80': -6.096}

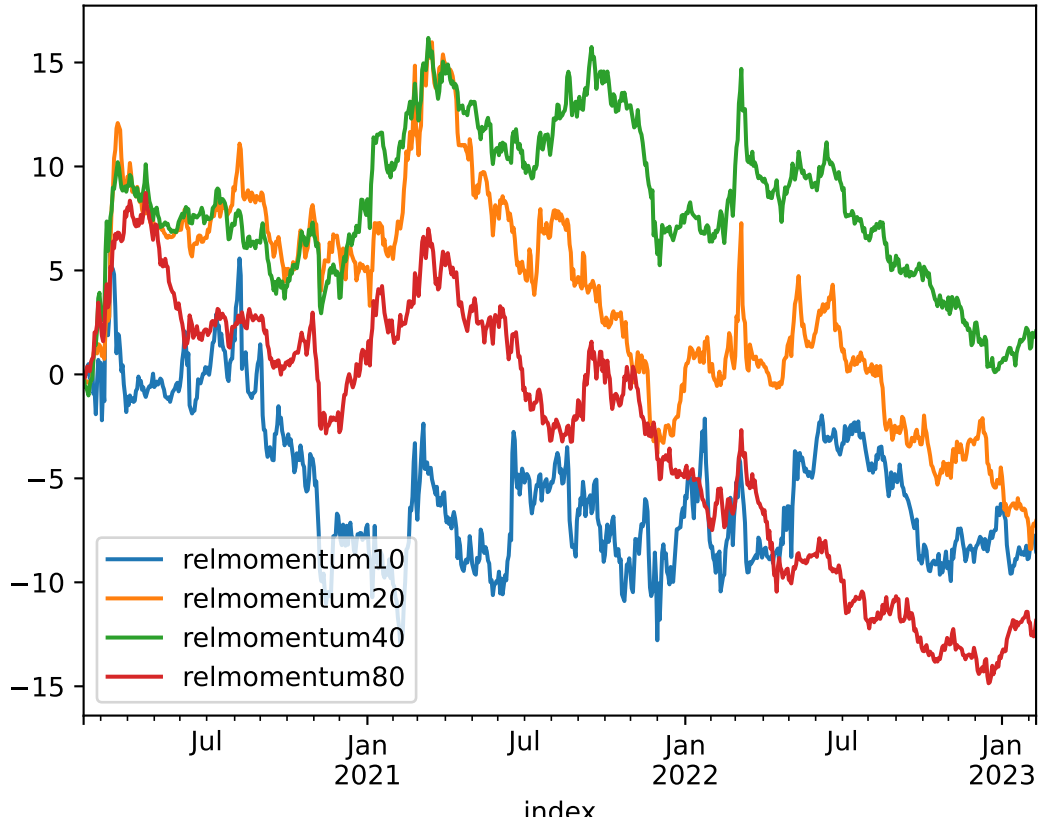
ann. std {'relmomentum10': 8.962, 'relmomentum20': 8.471, 'relmomentum40': 6.707, 'relmomentum80': 5.655}

ann. SR {'relmomentum10': 0.0, 'relmomentum20': -0.84, 'relmomentum40': -0.79, 'relmomentum80': -1.08}



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

ann. mean {'relmomentum10': -2.783, 'relmomentum20': -2.306, 'relmomentum40': 0.678, 'relmomentum80': -3.875}
ann. std {'relmomentum10': 12.188, 'relmomentum20': 8.904, 'relmomentum40': 7.434, 'relmomentum80': 6.863}
ann. SR {'relmomentum10': -0.23, 'relmomentum20': -0.26, 'relmomentum40': 0.09, 'relmomentum80': -0.56}

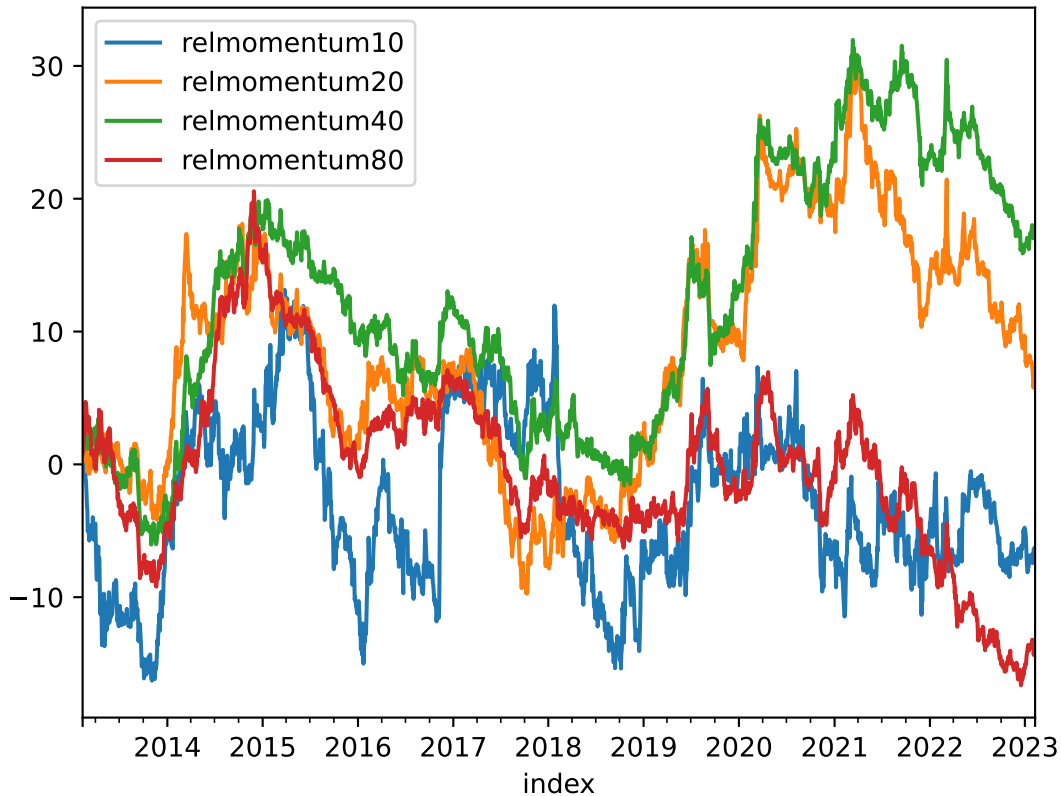


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.692, 'relmomentum20': 0.699, 'relmomentum40': 1.751, 'relmomentum80': -1.337}

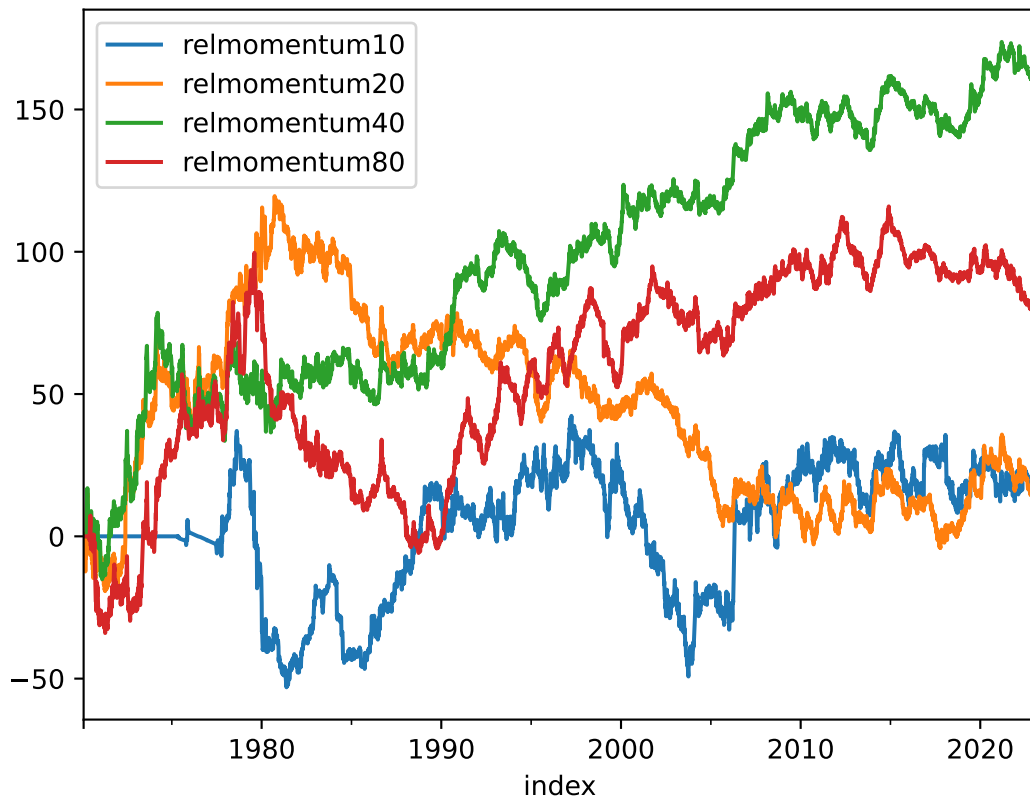
ann. std {'relmomentum10': 12.846, 'relmomentum20': 8.889, 'relmomentum40': 7.28, 'relmomentum80': 6.743}

ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.08, 'relmomentum40': 0.24, 'relmomentum80': -0.2}

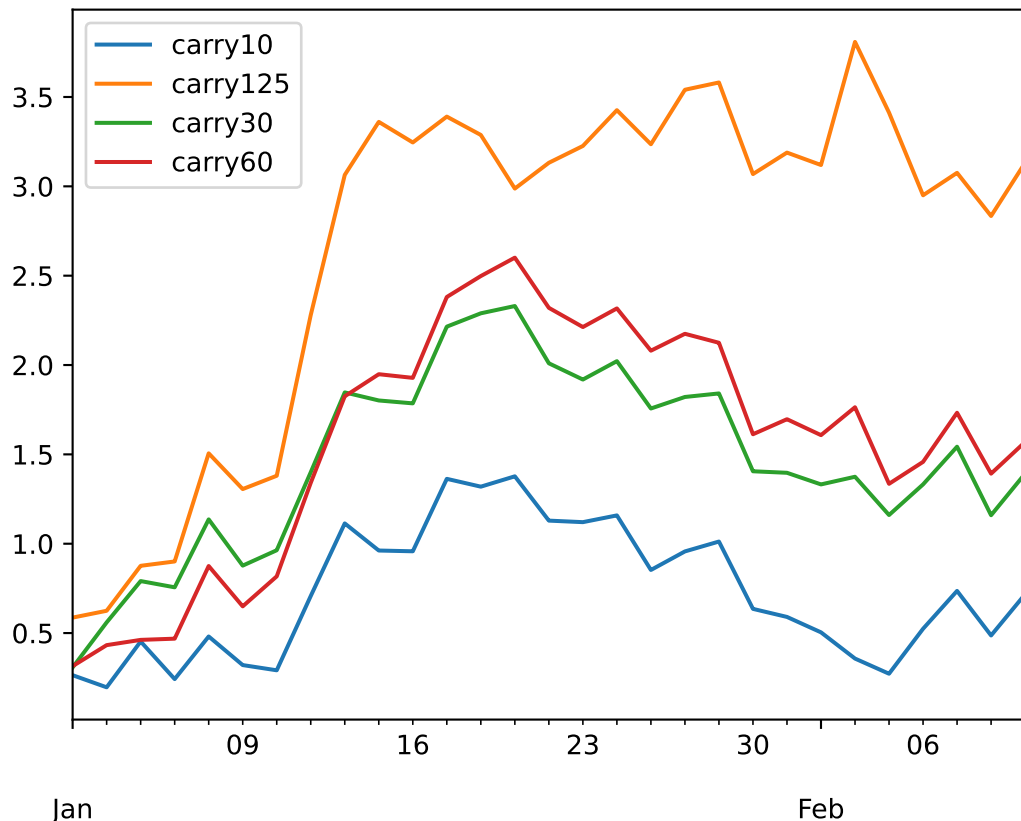


Total Trading Rule P&L for period '99Y'

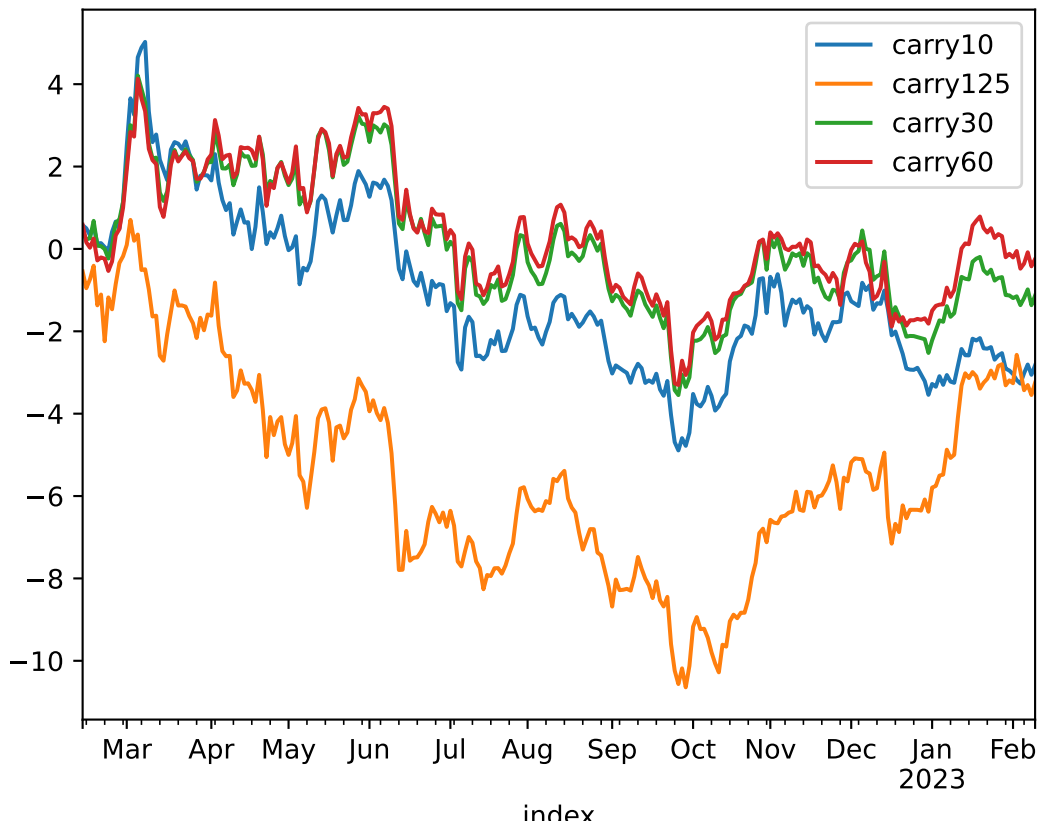
ann. mean {'relmomentum10': 0.308, 'relmomentum20': 0.236, 'relmomentum40': 2.954, 'relmomentum80': 1.513}
ann. std {'relmomentum10': 13.325, 'relmomentum20': 11.518, 'relmomentum40': 10.783, 'relmomentum80': 11.062}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 6.332, 'carry125': 27.65, 'carry30': 12.292, 'carry60': 13.853}
ann. std {'carry10': 3.519, 'carry125': 5.754, 'carry30': 3.899, 'carry60': 4.188}
ann. SR {'carry10': 1.8, 'carry125': 4.81, 'carry30': 3.15, 'carry60': 3.31}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.782, 'carry125': -3.198, 'carry30': -1.116, 'carry60': -0.241}
ann. std {'carry10': 6.616, 'carry125': 7.453, 'carry30': 6.334, 'carry60': 6.558}
ann. SR {'carry10': -0.42, 'carry125': -0.43, 'carry30': -0.18, 'carry60': -0.04}

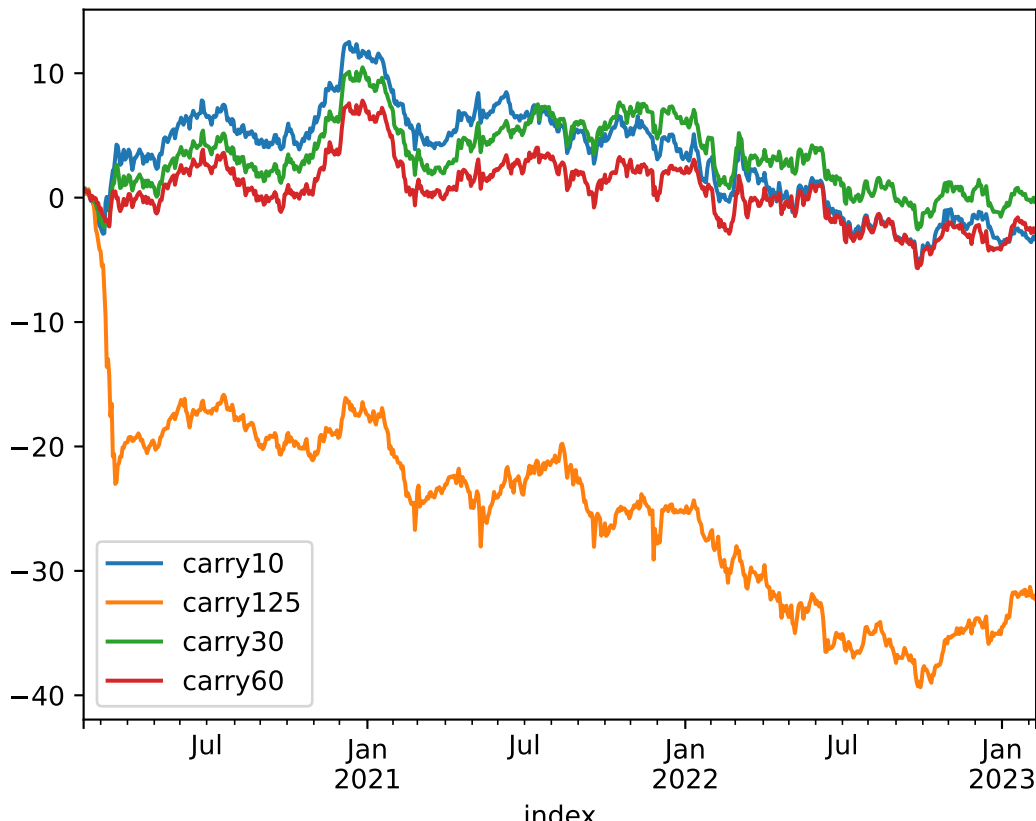


Total Trading Rule P&L for period '3Y'

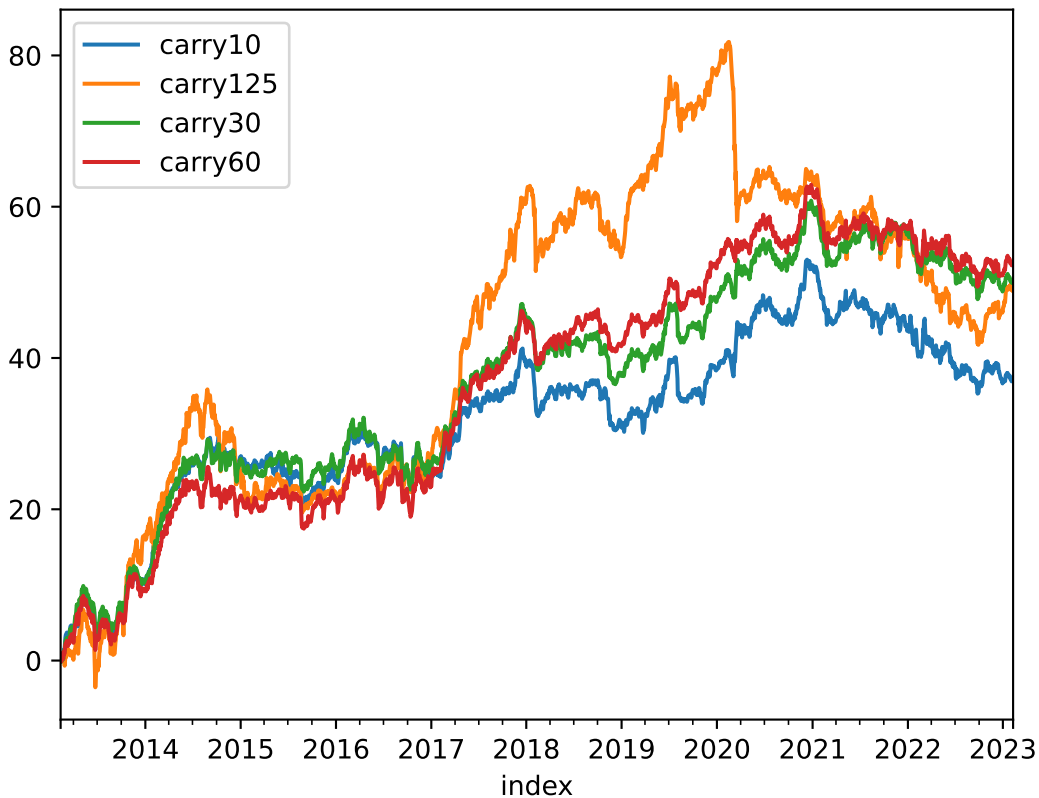
ann. mean {'carry10': -1.024, 'carry125': -10.45, 'carry30': -0.048, 'carry60': -0.855}

ann. std {'carry10': 6.809, 'carry125': 9.38, 'carry30': 6.61, 'carry60': 6.555}

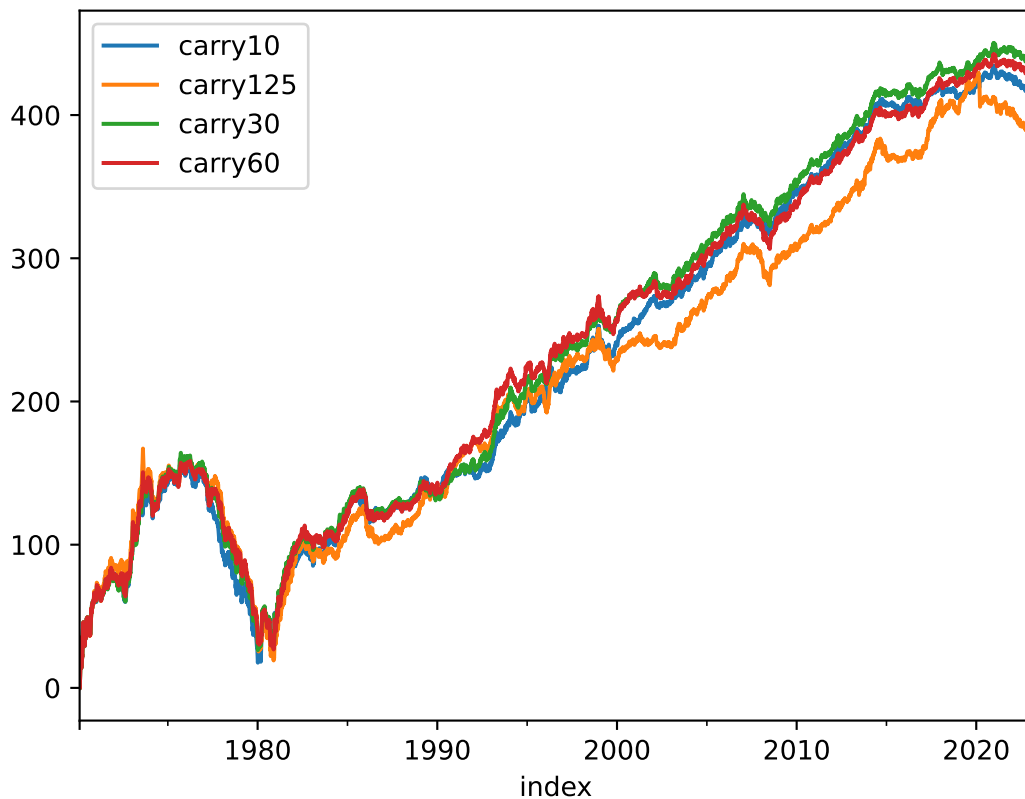
ann. SR {'carry10': -0.15, 'carry125': -1.11, 'carry30': -0.01, 'carry60': -0.13}



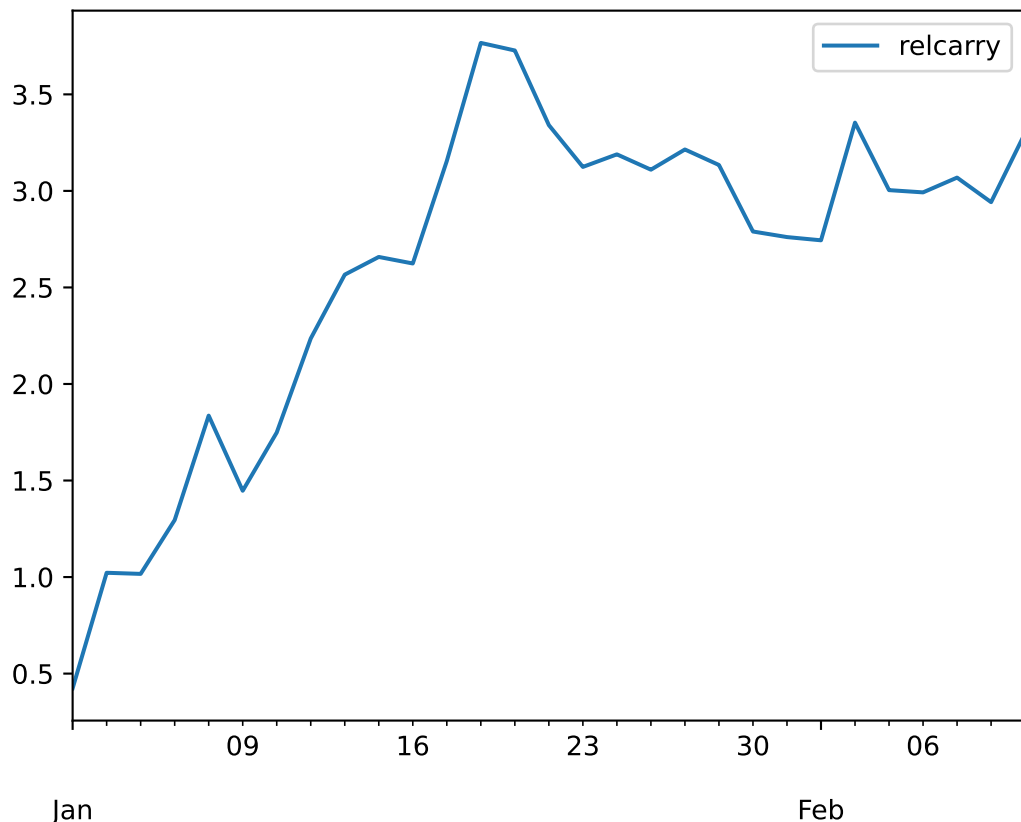
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.665, 'carry125': 4.822, 'carry30': 4.924, 'carry60': 5.15}
ann. std {'carry10': 6.418, 'carry125': 9.117, 'carry30': 6.521, 'carry60': 6.491}
ann. SR {'carry10': 0.57, 'carry125': 0.53, 'carry30': 0.76, 'carry60': 0.79}



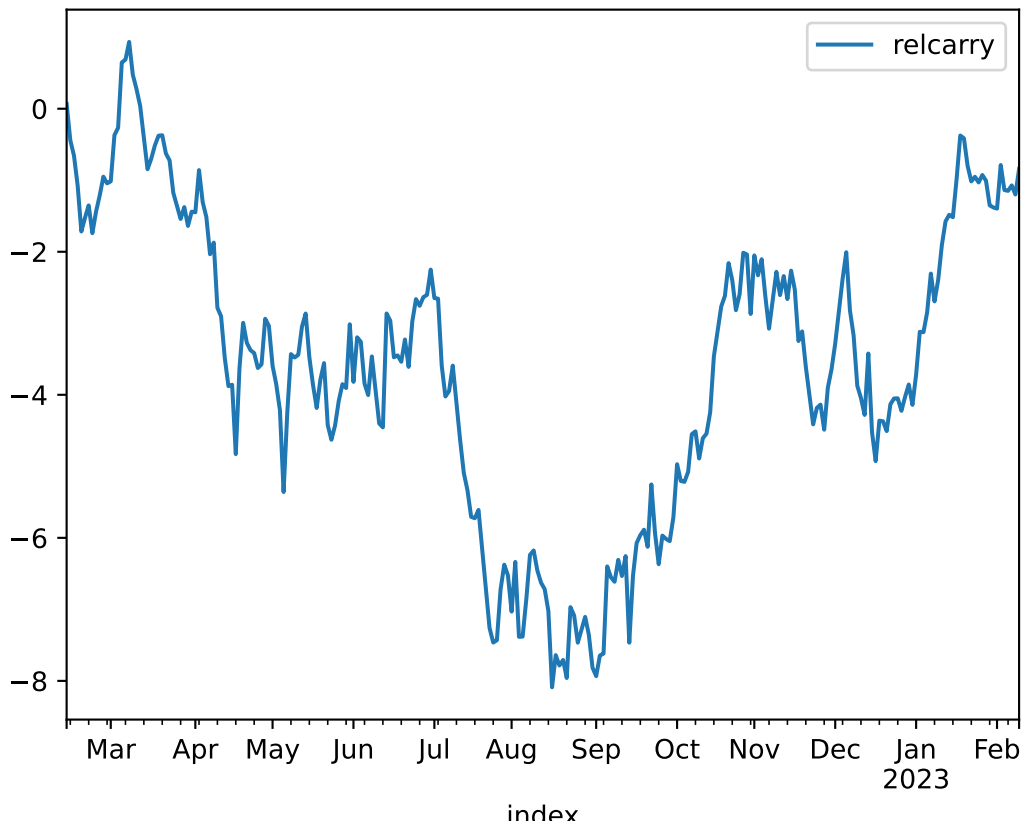
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.751, 'carry125': 7.344, 'carry30': 8.138, 'carry60': 7.997}
ann. std {'carry10': 11.83, 'carry125': 12.064, 'carry30': 11.841, 'carry60': 11.79}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



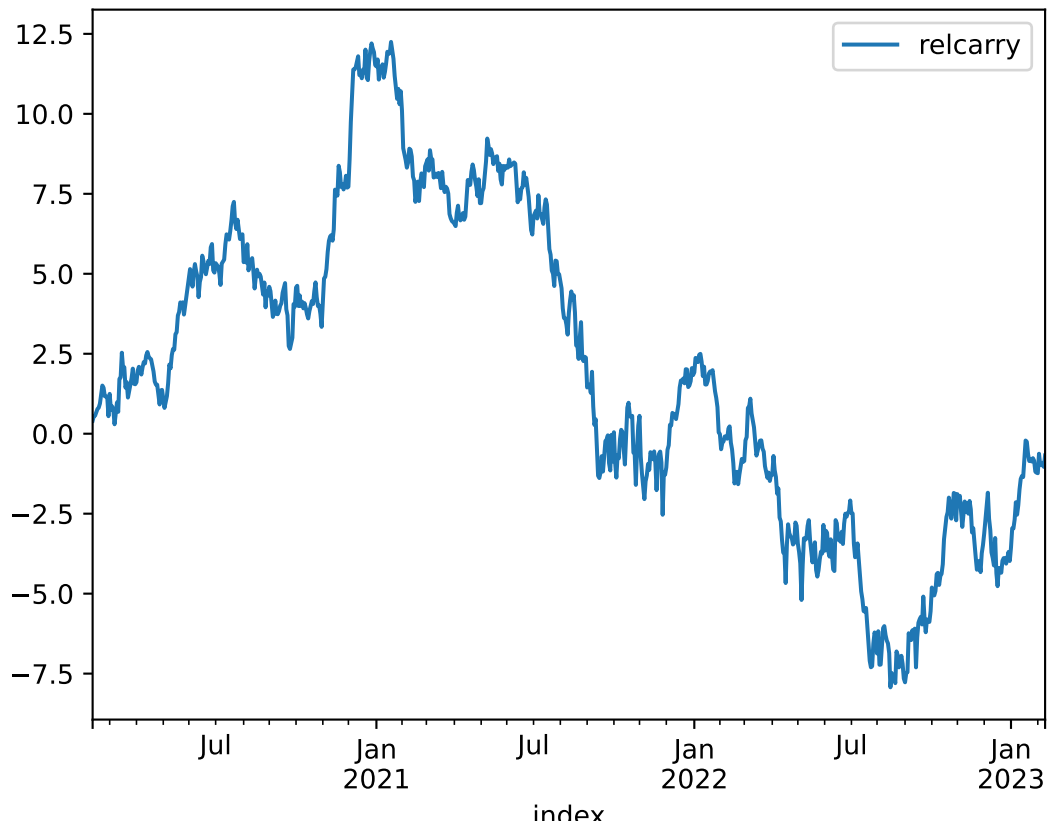
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 29.13}
ann. std {'relcarry': 5.038}
ann. SR {'relcarry': 5.78}



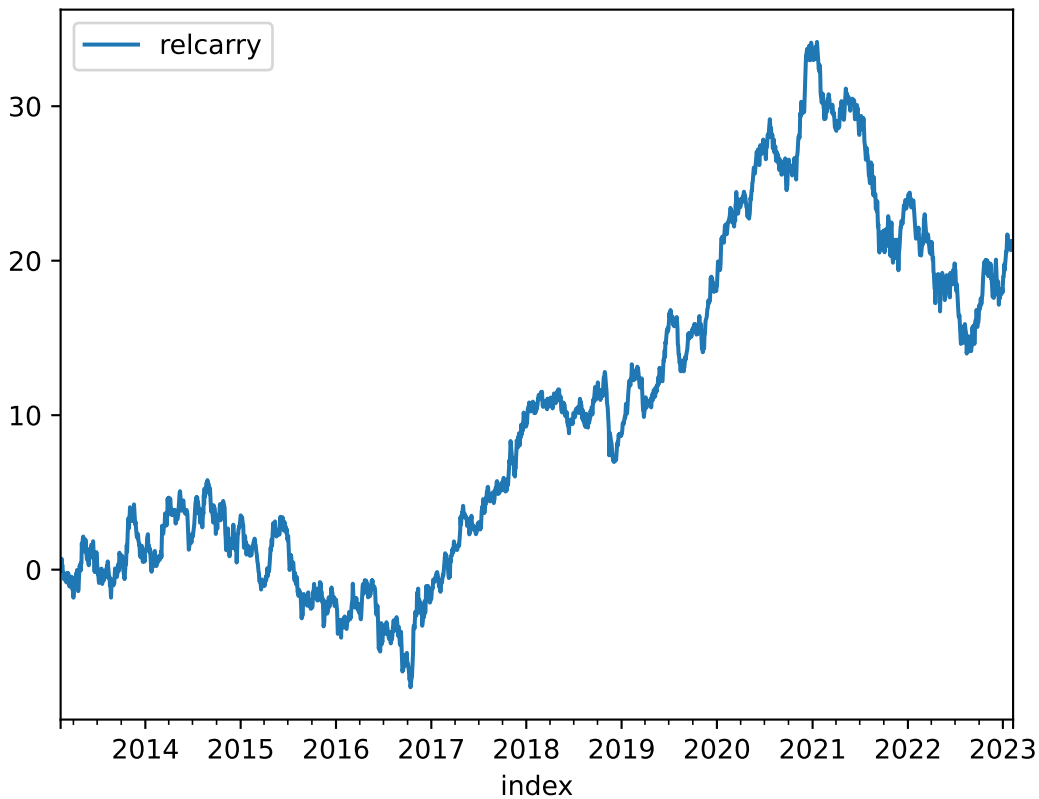
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -0.828}
ann. std {'relcarry': 7.235}
ann. SR {'relcarry': -0.11}



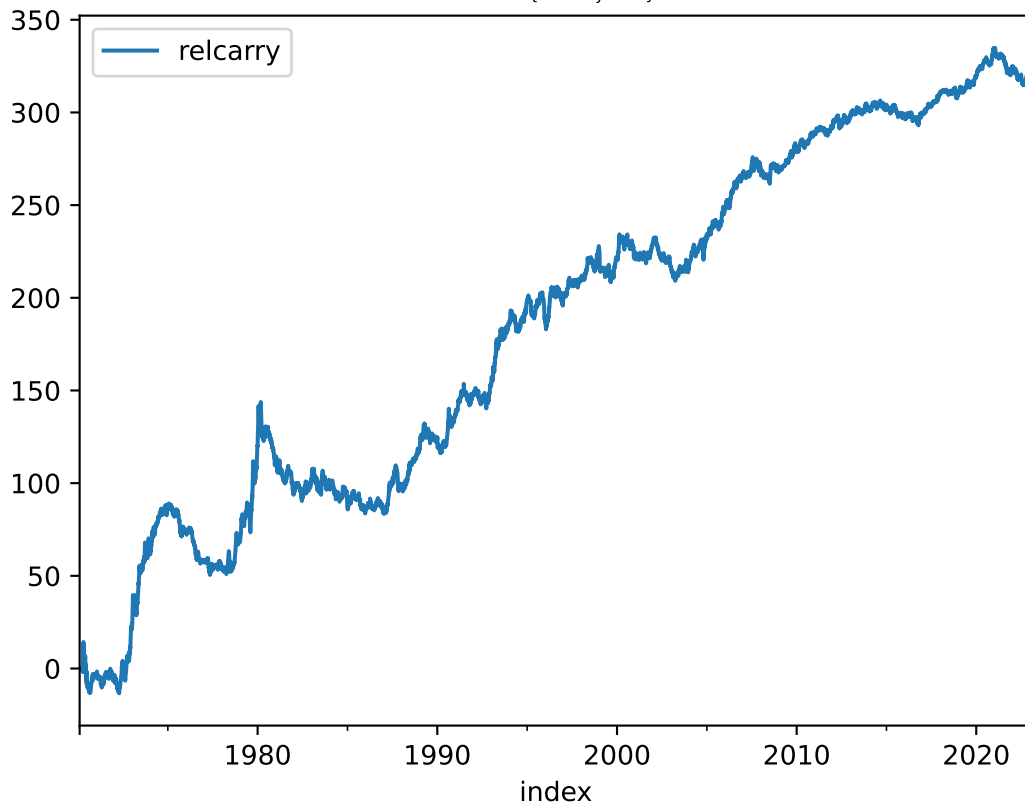
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.222}
ann. std {'relcarry': 6.84}
ann. SR {'relcarry': -0.03}



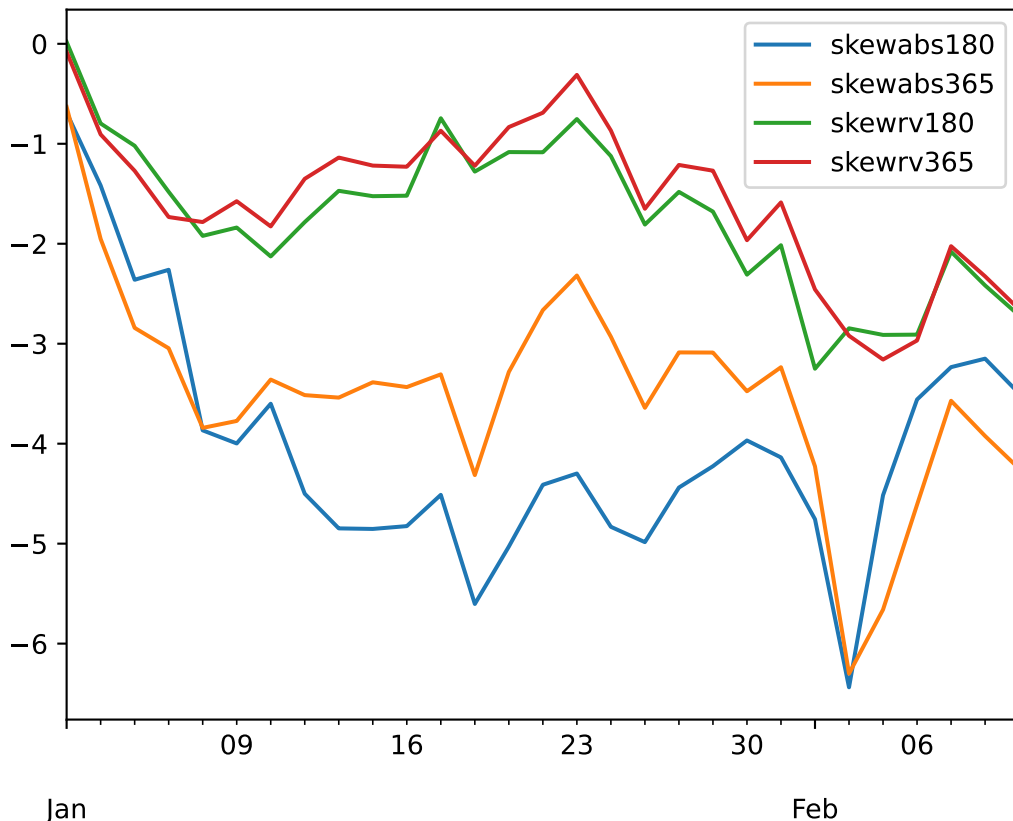
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.084}
ann. std {'relcarry': 6.011}
ann. SR {'relcarry': 0.35}



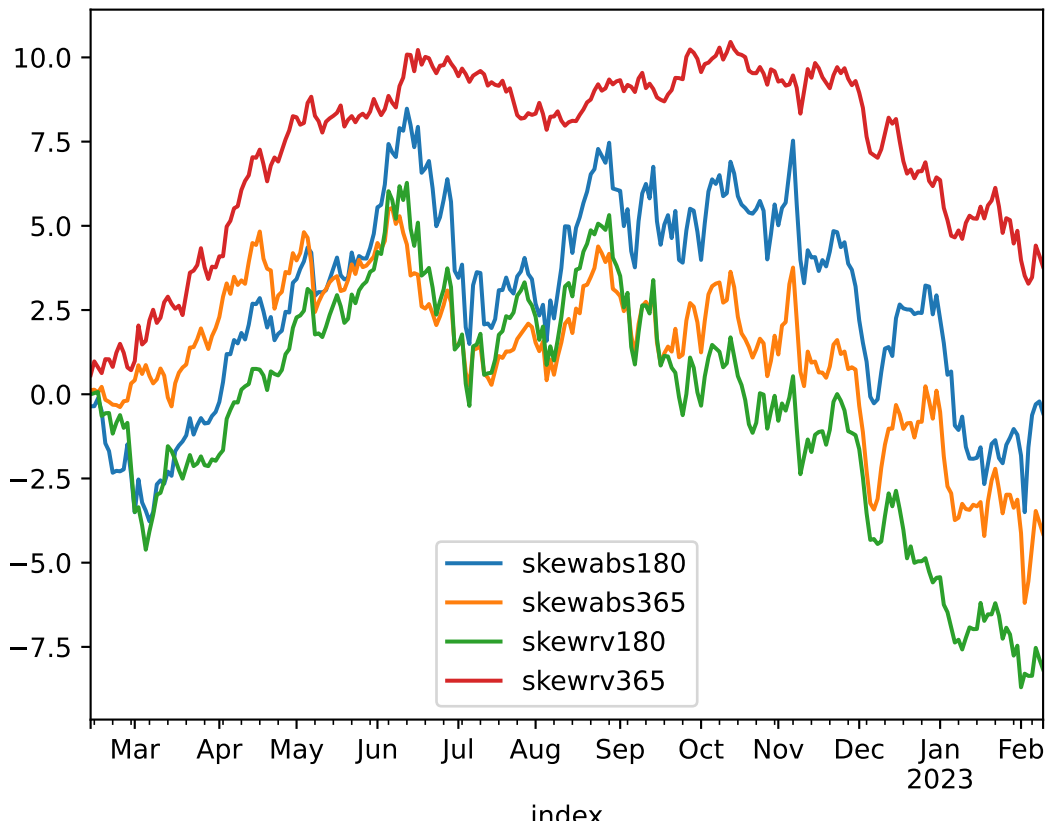
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.957}
ann. std {'relcarry': 9.882}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -30.875, 'skewabs365': -37.511, 'skewrv180': -23.988, 'skewrv365': -23.442}
ann. std {'skewabs180': 12.087, 'skewabs365': 11.833, 'skewrv180': 7.428, 'skewrv365': 7.183}
ann. SR {'skewabs180': -2.55, 'skewabs365': -3.17, 'skewrv180': -3.23, 'skewrv365': -3.26}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -0.552, 'skewabs365': -4.08, 'skewrv180': -8.041, 'skewrv365': 3.725}
ann. std {'skewabs180': 10.497, 'skewabs365': 8.789, 'skewrv180': 9.189, 'skewrv365': 5.357}
ann. SR {'skewabs180': -0.05, 'skewabs365': -0.46, 'skewrv180': -0.88, 'skewrv365': 0.7}

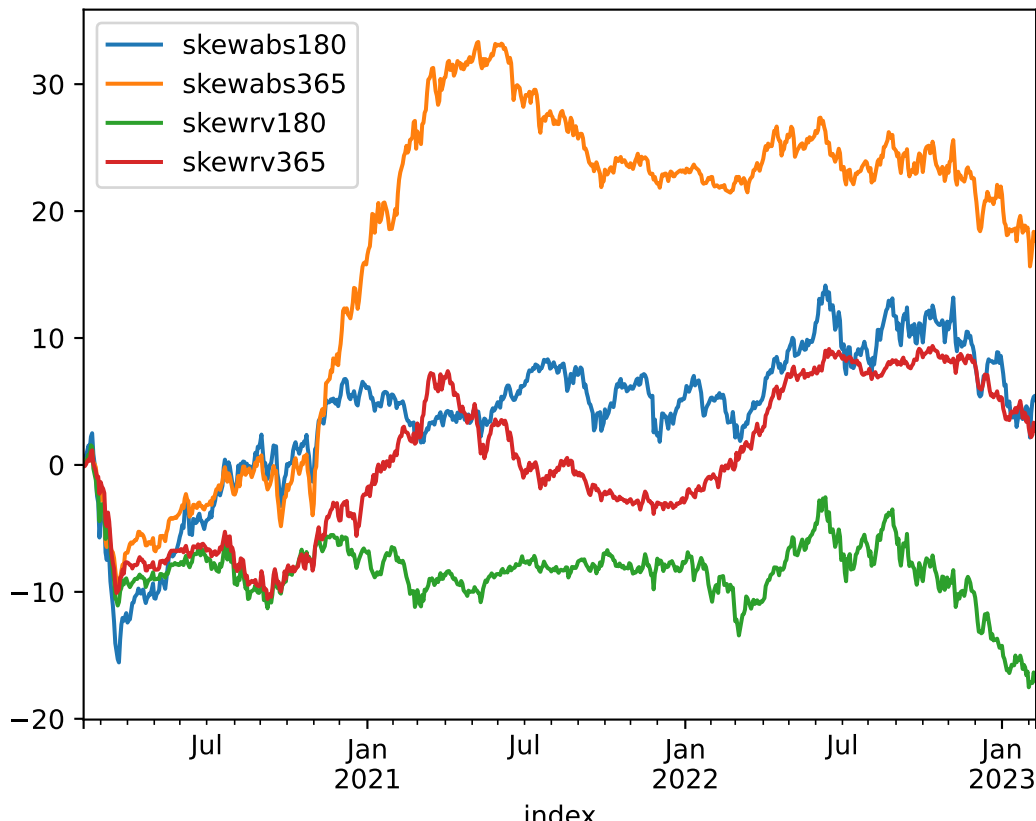


Total Trading Rule P&L for period '3Y'

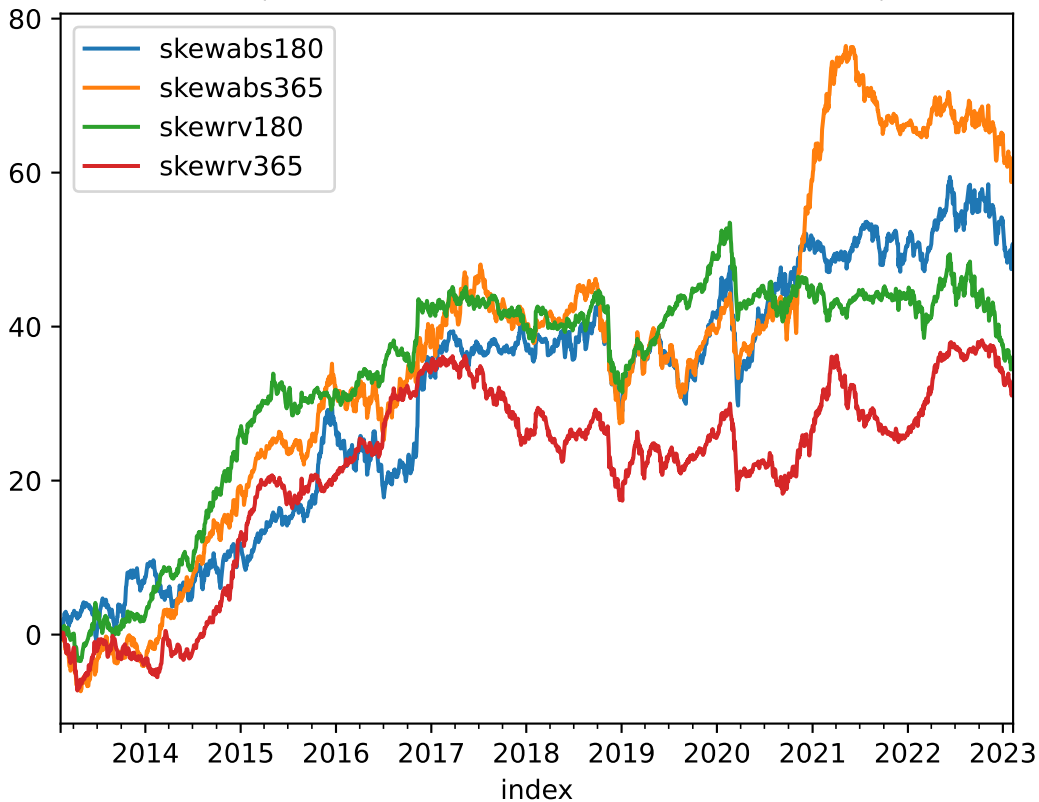
ann. mean {'skewabs180': 1.667, 'skewabs365': 5.784, 'skewrv180': -5.554, 'skewrv365': 0.882}

ann. std {'skewabs180': 9.701, 'skewabs365': 9.03, 'skewrv180': 7.757, 'skewrv365': 6.669}

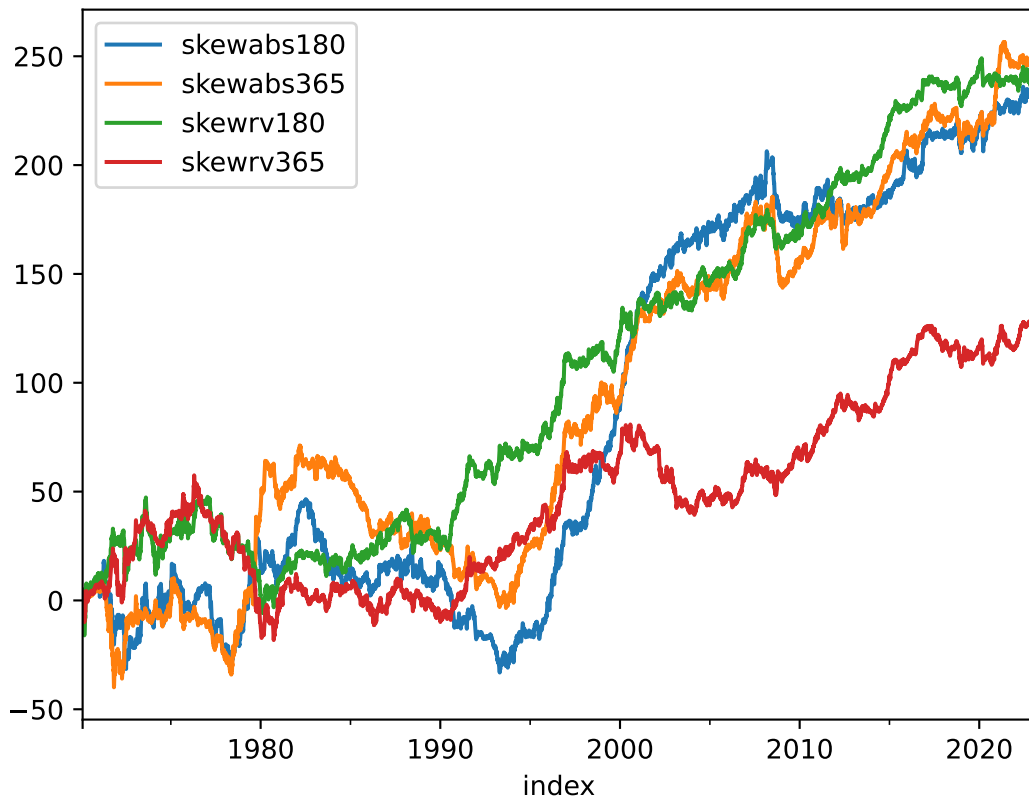
ann. SR {'skewabs180': 0.17, 'skewabs365': 0.64, 'skewrv180': -0.72, 'skewrv365': 0.13}



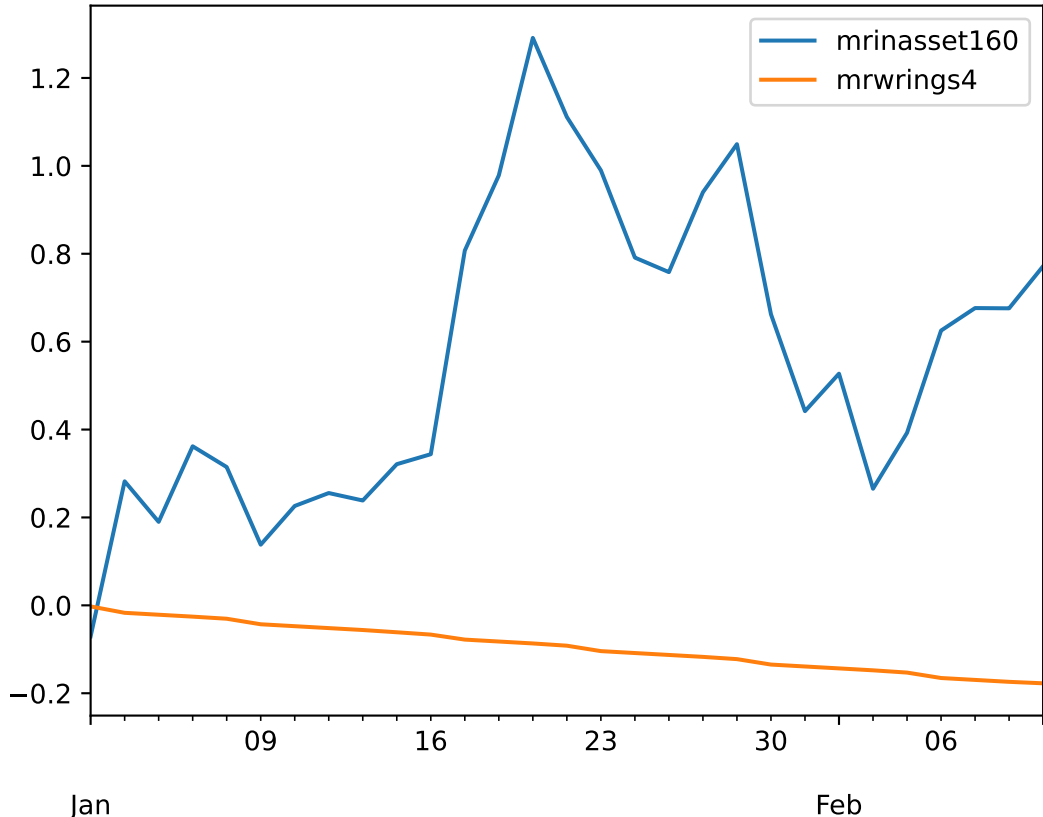
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.946, 'skewabs365': 5.968, 'skewrv180': 3.431, 'skewrv365': 3.096}
ann. std {'skewabs180': 8.095, 'skewabs365': 8.057, 'skewrv180': 6.583, 'skewrv365': 6.191}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.74, 'skewrv180': 0.52, 'skewrv365': 0.5}



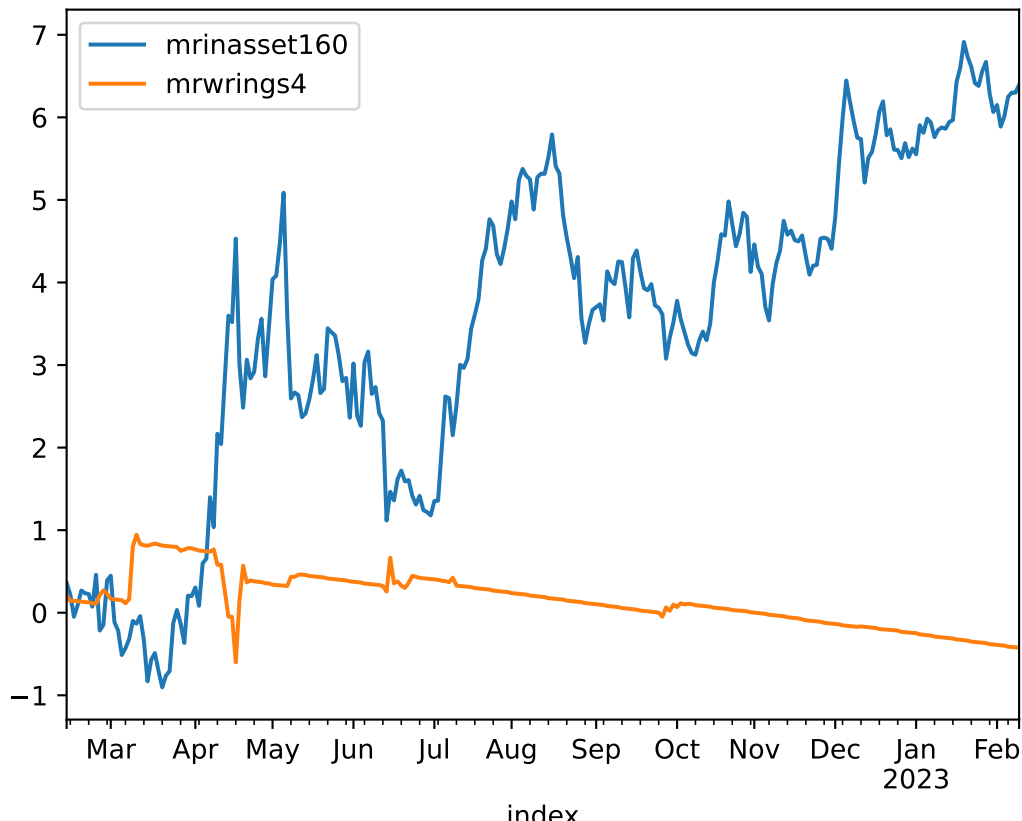
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.2, 'skewabs365': 4.459, 'skewrv180': 4.267, 'skewrv365': 2.249}
ann. std {'skewabs180': 10.793, 'skewabs365': 10.301, 'skewrv180': 9.475, 'skewrv365': 8.784}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



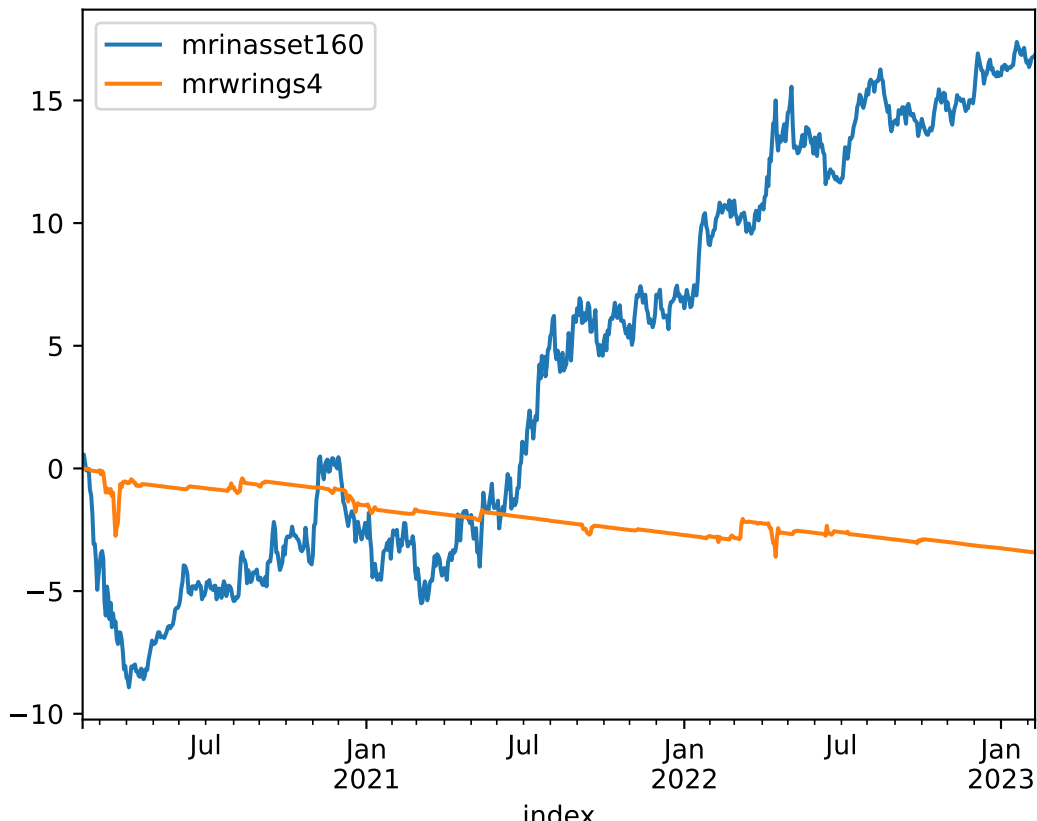
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 6.812, 'mrwrings4': -1.566}
ann. std {'mrinasset160': 3.065, 'mrwrings4': 0.055}
ann. SR {'mrinasset160': 2.22, 'mrwrings4': -28.43}



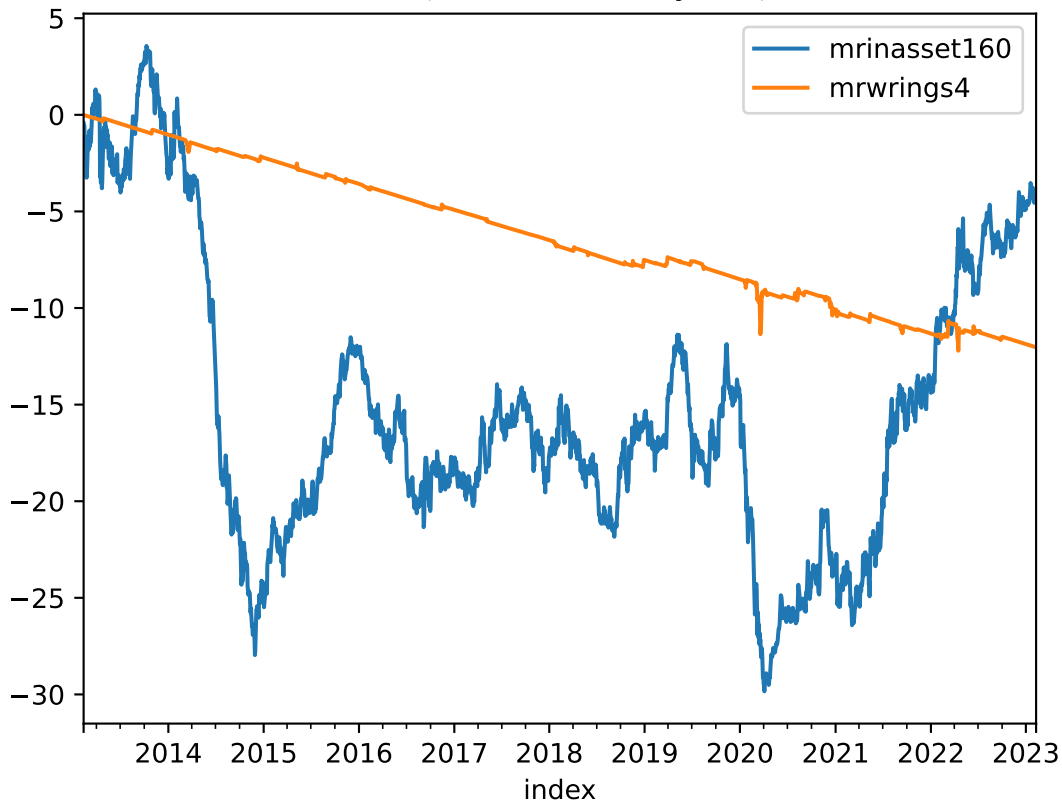
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 6.296, 'mrwrings4': -0.417}
ann. std {'mrinasset160': 5.672, 'mrwrings4': 1.465}
ann. SR {'mrinasset160': 1.11, 'mrwrings4': -0.28}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.514, 'mrwrings4': -1.12}
ann. std {'mrinasset160': 6.699, 'mrwrings4': 1.516}
ann. SR {'mrinasset160': 0.82, 'mrwrings4': -0.74}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.397, 'mrwrings4': -1.181}
ann. std {'mrinasset160': 6.554, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': -0.06, 'mrwrings4': -1.31}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.16, 'mrwrings4': -2.31}
ann. std {'mrinasset160': 11.165, 'mrwrings4': 2.622}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.88}

