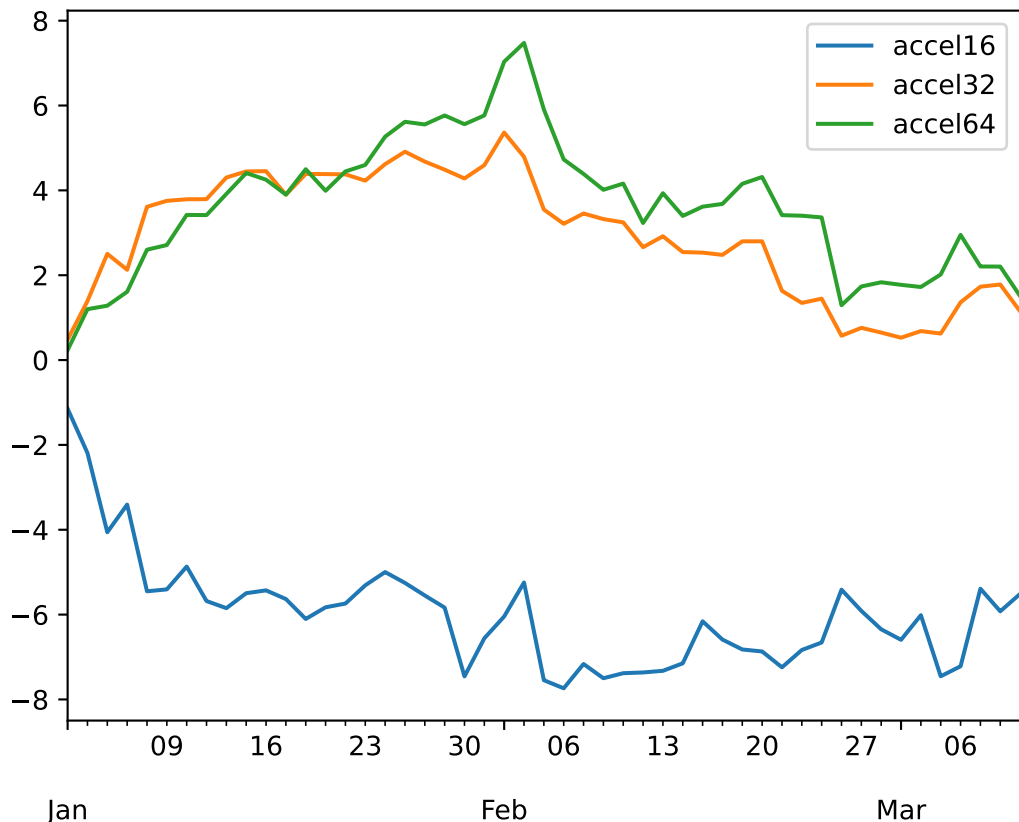
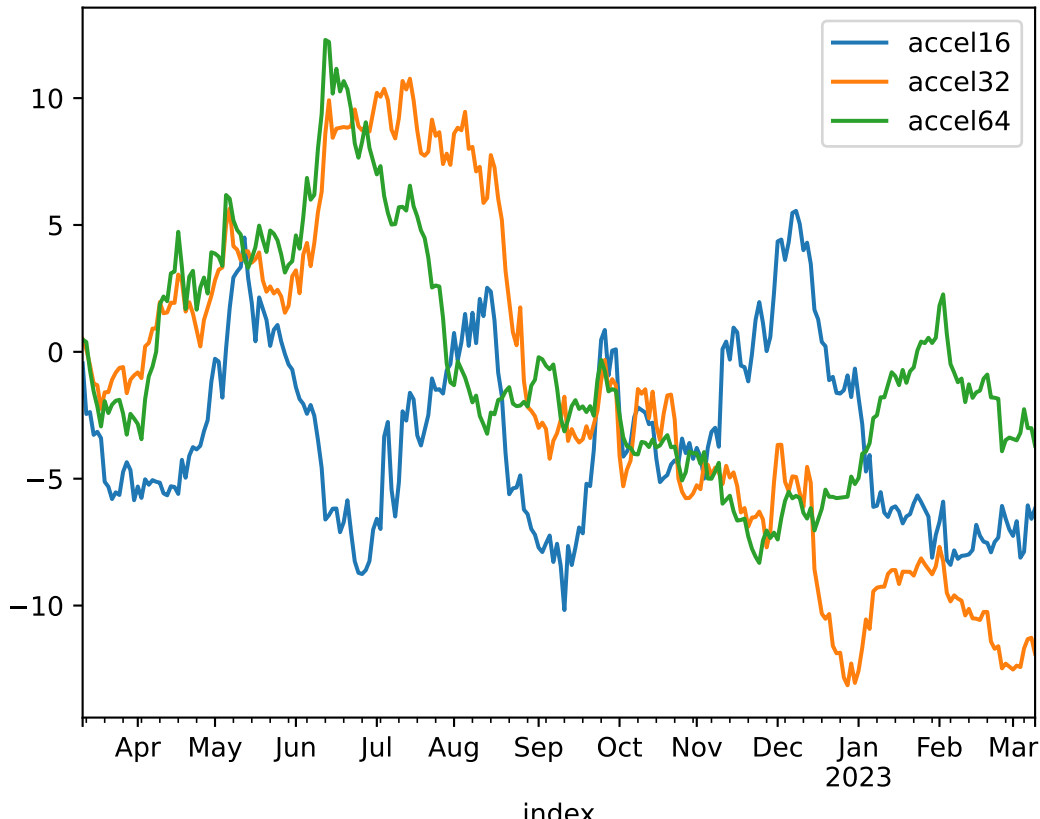


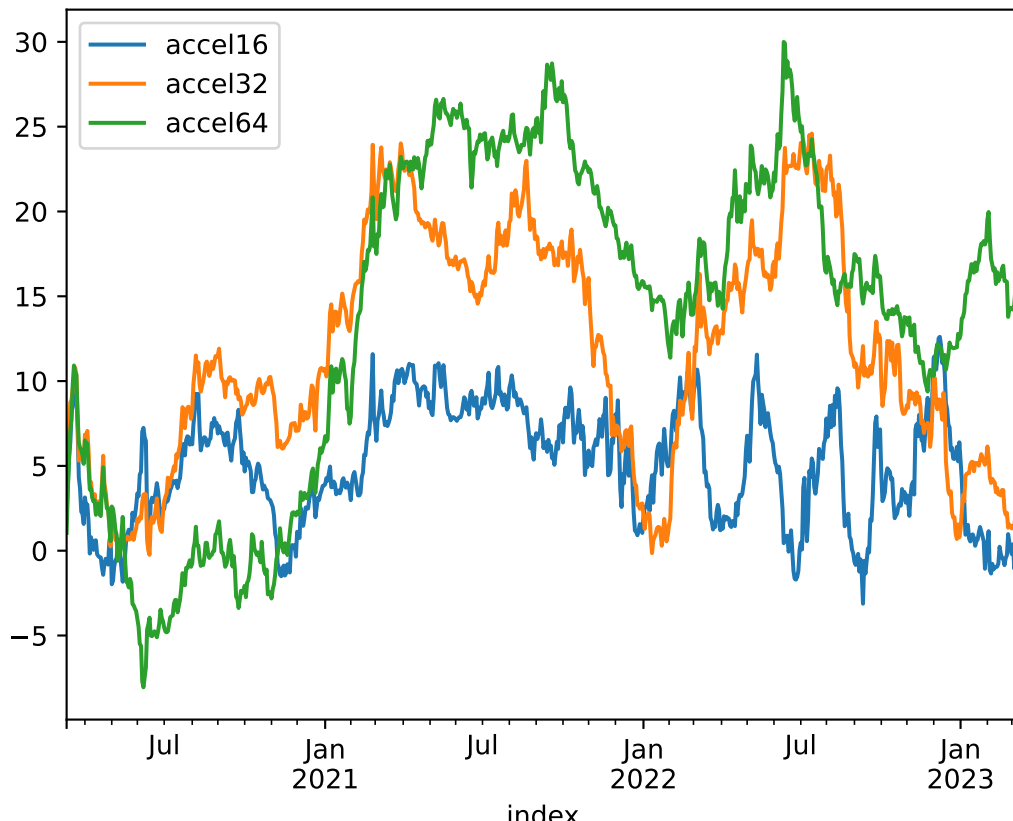
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -28.8, 'accel32': 6.0, 'accel64': 7.88}
ann. std {'accel16': 13.043, 'accel32': 8.216, 'accel64': 10.309}
ann. SR {'accel16': -2.21, 'accel32': 0.73, 'accel64': 0.76}



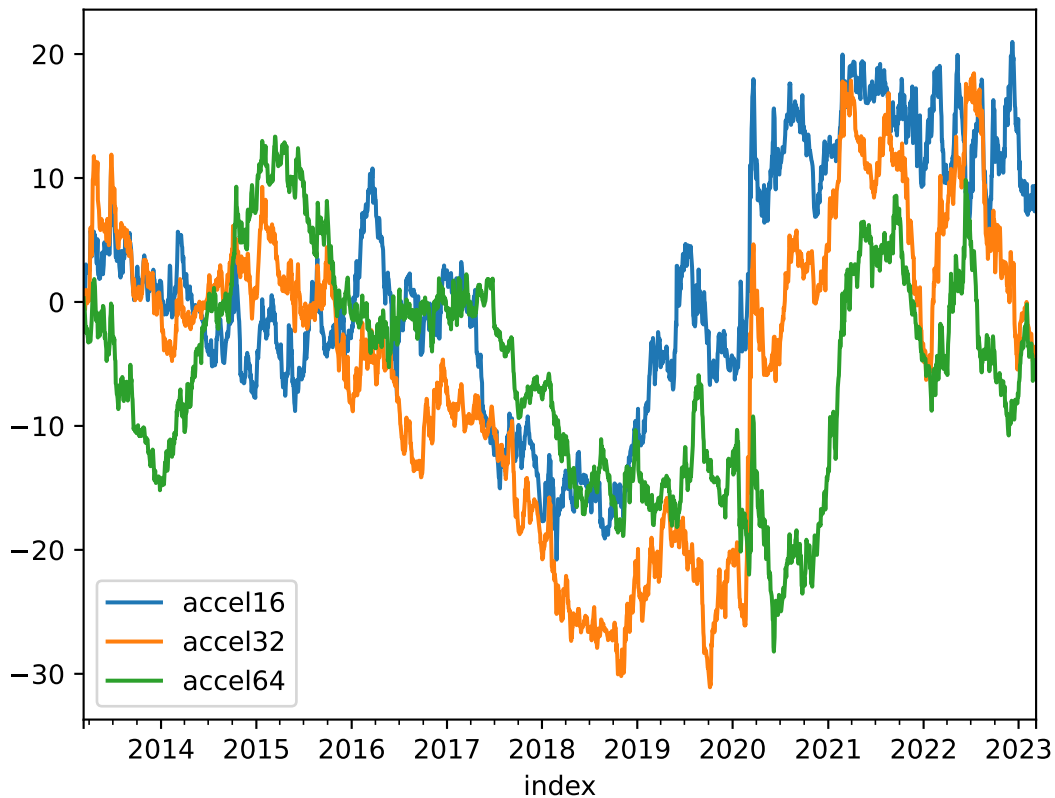
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -6.078, 'accel32': -11.718, 'accel64': -3.647}
ann. std {'accel16': 15.94, 'accel32': 13.023, 'accel64': 11.566}
ann. SR {'accel16': -0.38, 'accel32': -0.9, 'accel64': -0.32}



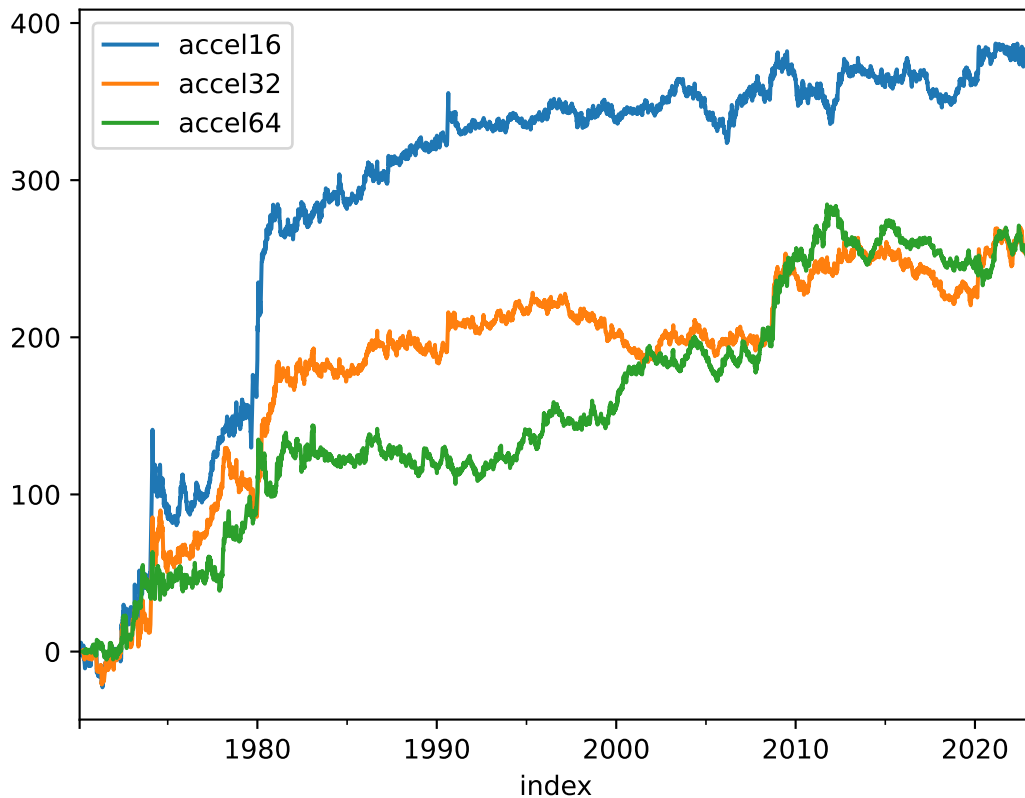
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 0.288, 'accel32': 0.632, 'accel64': 4.583}
ann. std {'accel16': 14.143, 'accel32': 12.554, 'accel64': 11.372}
ann. SR {'accel16': 0.02, 'accel32': 0.05, 'accel64': 0.4}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.908, 'accel32': -0.414, 'accel64': -0.604}
ann. std {'accel16': 11.991, 'accel32': 11.16, 'accel64': 9.579}
ann. SR {'accel16': 0.08, 'accel32': -0.04, 'accel64': -0.06}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.953, 'accel32': 4.569, 'accel64': 4.715}
ann. std {'accel16': 15.661, 'accel32': 13.736, 'accel64': 13.252}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.36}

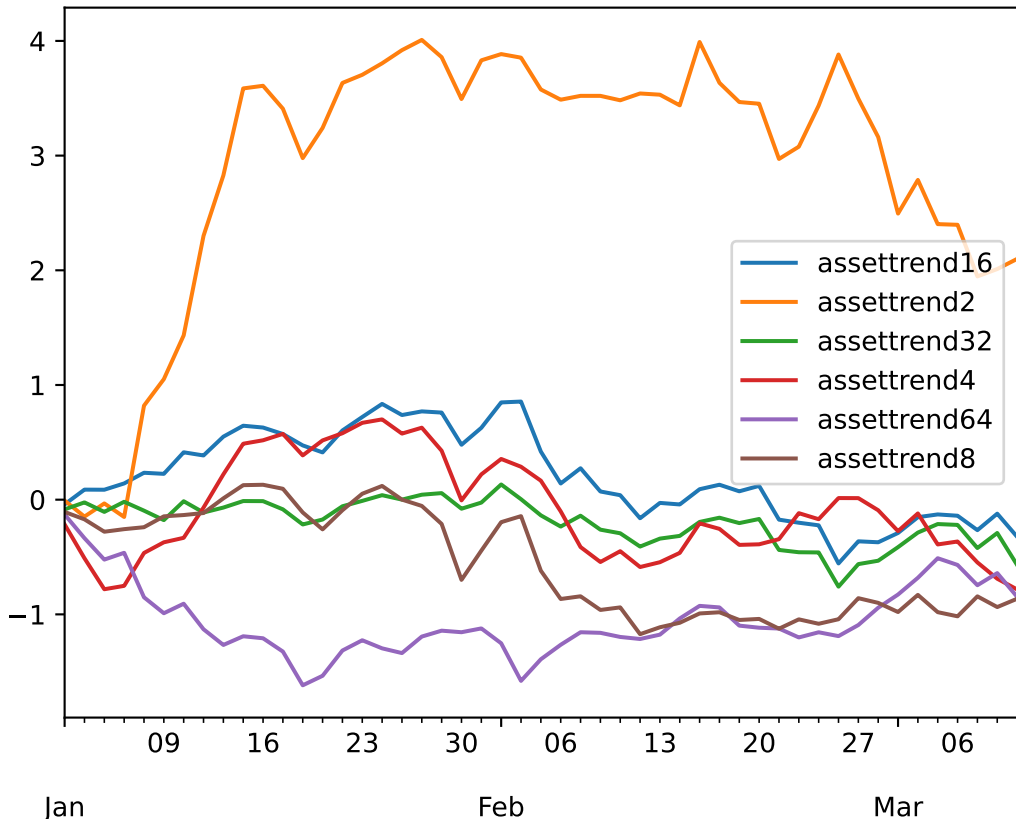


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -1.688, 'assettrend2': 10.968, 'assettrend32': -2.972, 'assettrend4': -4.089, 'assettrend64': -4.422, 'assettrend8': -4.513}

ann. std {'assettrend16': 2.411, 'assettrend2': 5.537, 'assettrend32': 1.859, 'assettrend4': 2.847, 'assettrend64': 2.275, 'assettrend8': 2.425}

ann. SR {'assettrend16': -0.7, 'assettrend2': 1.98, 'assettrend32': -1.6, 'assettrend4': -1.44, 'assettrend64': -1.94, 'assettrend8': -1.86}

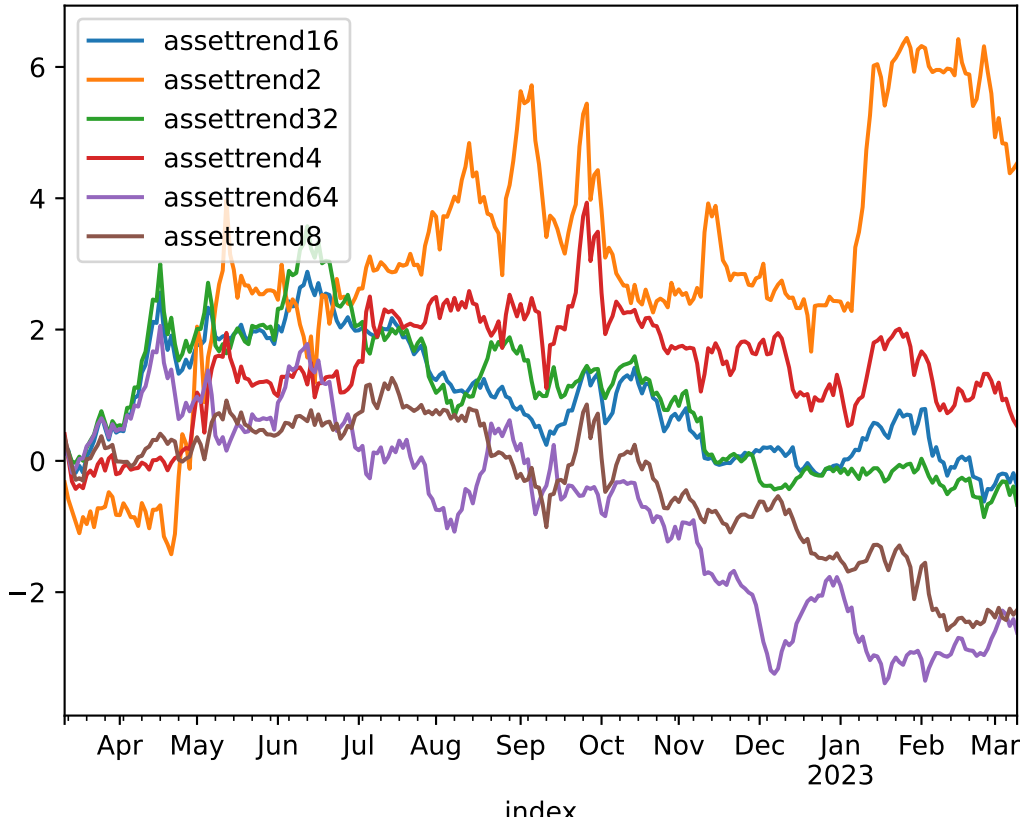


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -0.382, 'assettrend2': 4.463, 'assettrend32': -0.658, 'assettrend4': 0.522, 'assettrend64': -2.576, 'assettrend8': -2.236}

ann. std {'assettrend16': 2.46, 'assettrend2': 5.655, 'assettrend32': 2.799, 'assettrend4': 3.592, 'assettrend64': 2.964, 'assettrend8': 2.459}

ann. SR {'assettrend16': -0.16, 'assettrend2': 0.79, 'assettrend32': -0.24, 'assettrend4': 0.15, 'assettrend64': -0.87, 'assettrend8': -0.91}

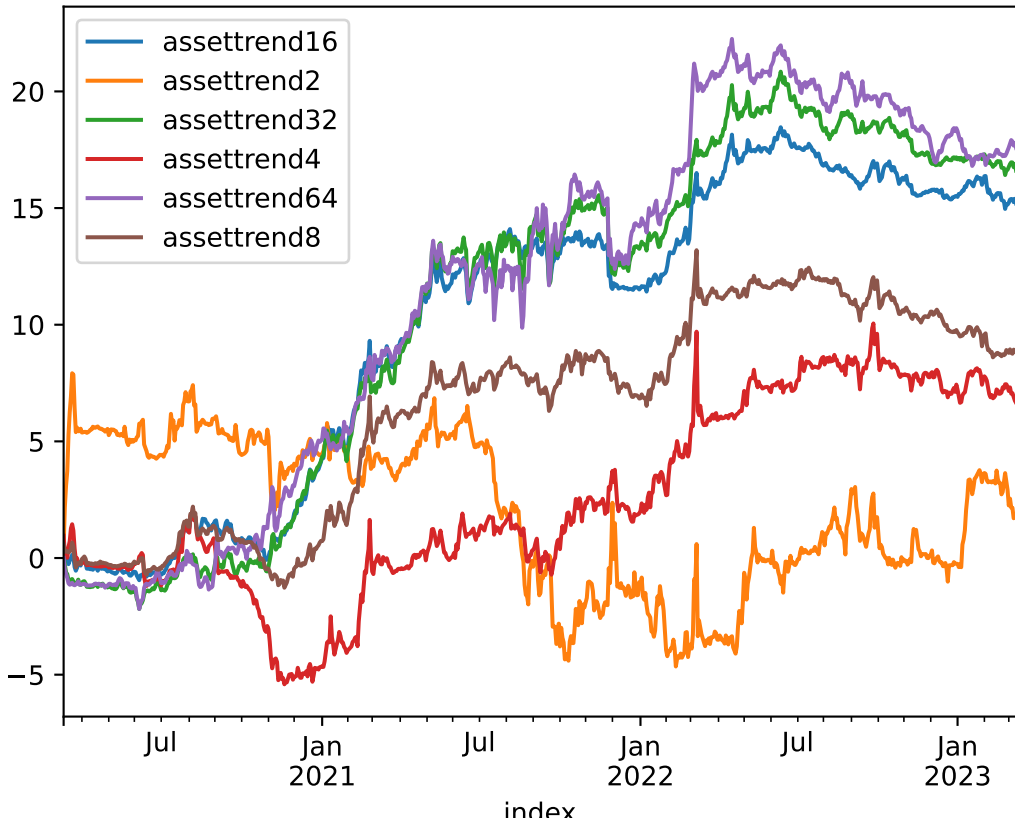


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.974, 'assettrend2': 0.608, 'assettrend32': 5.436, 'assettrend4': 2.177, 'assettrend64': 5.755, 'assettrend8': 2.917}

ann. std {'assettrend16': 3.455, 'assettrend2': 7.189, 'assettrend32': 4.241, 'assettrend4': 4.942, 'assettrend64': 5.034, 'assettrend8': 3.54}

ann. SR {'assettrend16': 1.44, 'assettrend2': 0.08, 'assettrend32': 1.28, 'assettrend4': 0.44, 'assettrend64': 1.14, 'assettrend8': 0.82}

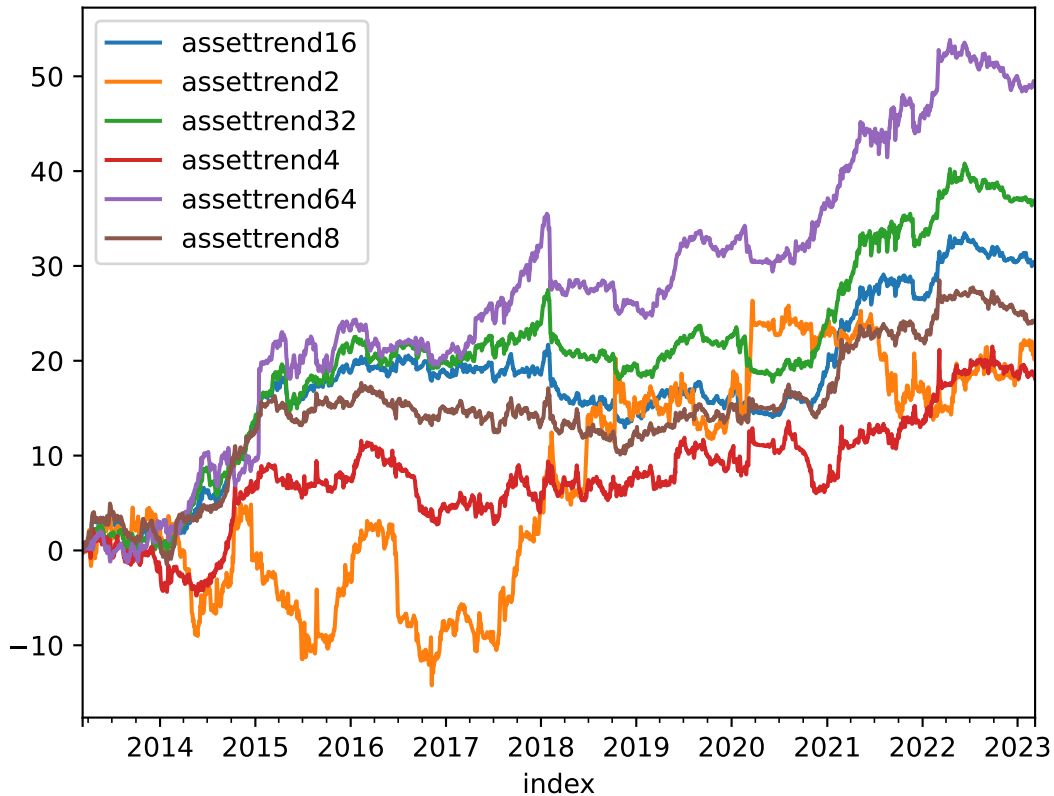


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.963, 'assettrend2': 1.989, 'assettrend32': 3.587, 'assettrend4': 1.776, 'assettrend64': 4.824, 'assettrend8': 2.375}

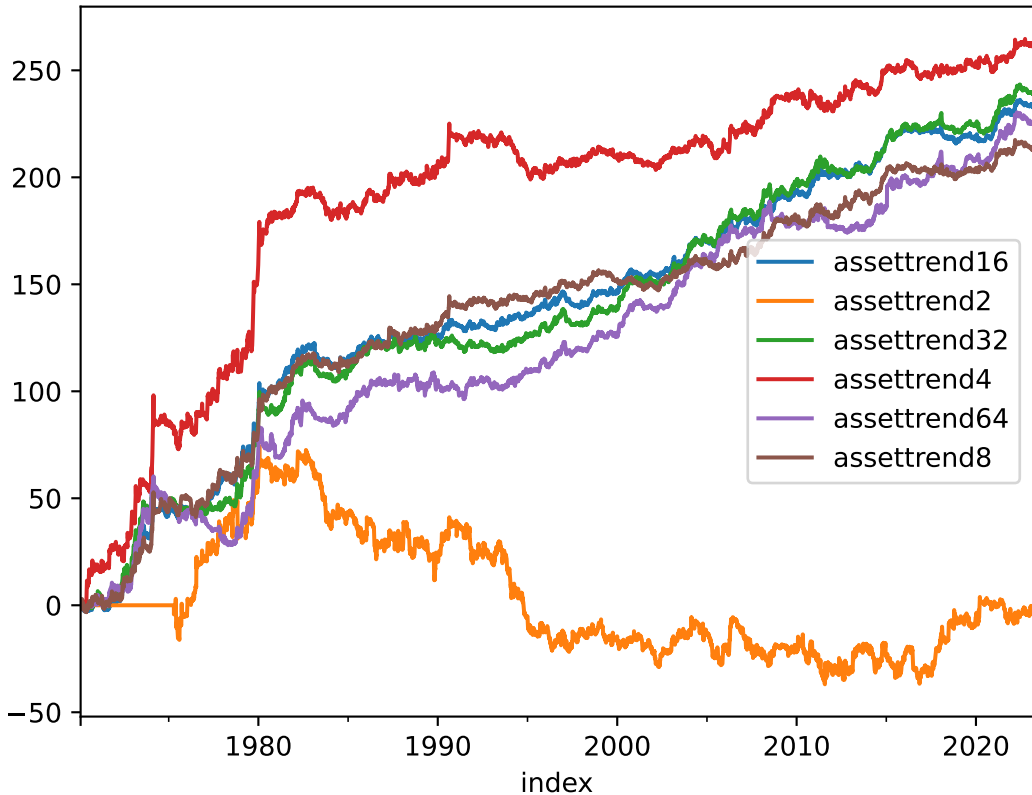
ann. std {'assettrend16': 3.241, 'assettrend2': 8.213, 'assettrend32': 3.699, 'assettrend4': 4.978, 'assettrend64': 5.282, 'assettrend8': 3.561}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.24, 'assettrend32': 0.97, 'assettrend4': 0.36, 'assettrend64': 0.91, 'assettrend8': 0.67}



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

ann. mean {'assettrend16': 4.305, 'assettrend2': -0.04, 'assettrend32': 4.42, 'assettrend4': 4.828, 'assettrend64': 4.171, 'assettrend8': 3.939}
ann. std {'assettrend16': 4.632, 'assettrend2': 10.016, 'assettrend32': 4.847, 'assettrend4': 7.336, 'assettrend64': 5.405, 'assettrend8': 5.015}
ann. SR {'assettrend16': 0.93, 'assettrend2': -0.0, 'assettrend32': 0.91, 'assettrend4': 0.66, 'assettrend64': 0.77, 'assettrend8': 0.79}

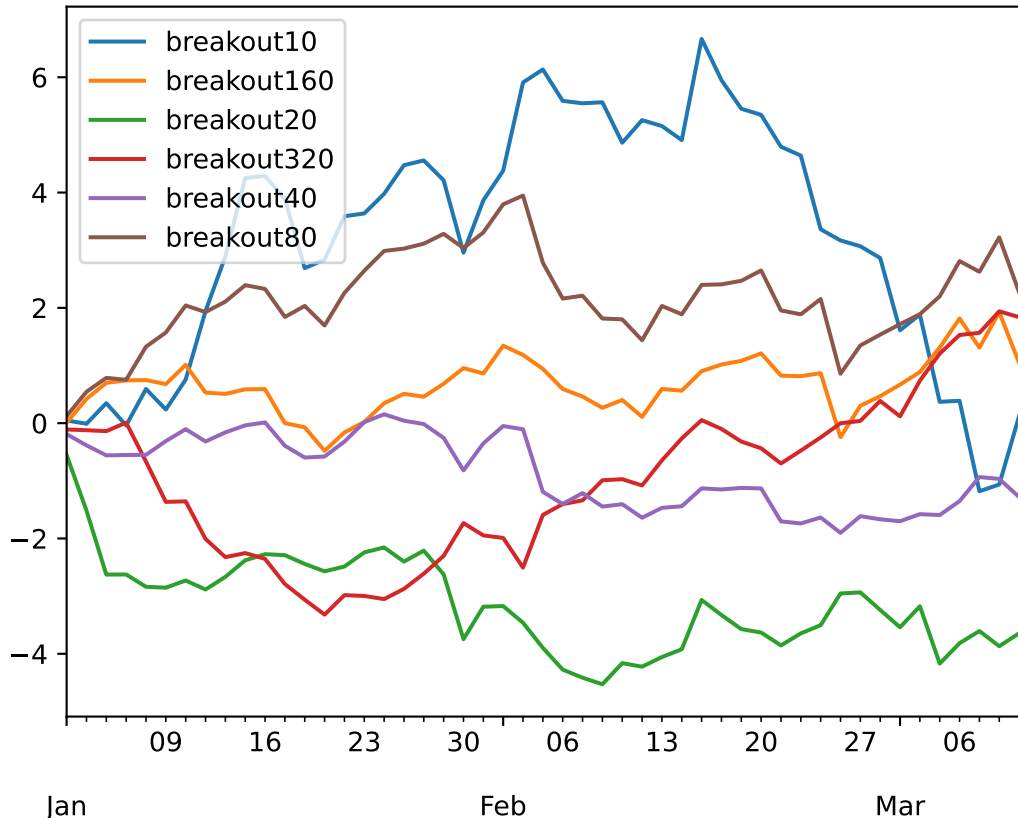


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 0.641, 'breakout160': 5.459, 'breakout20': -19.037, 'breakout320': 9.608, 'breakout40': -6.689, 'breakout80': 11.861}

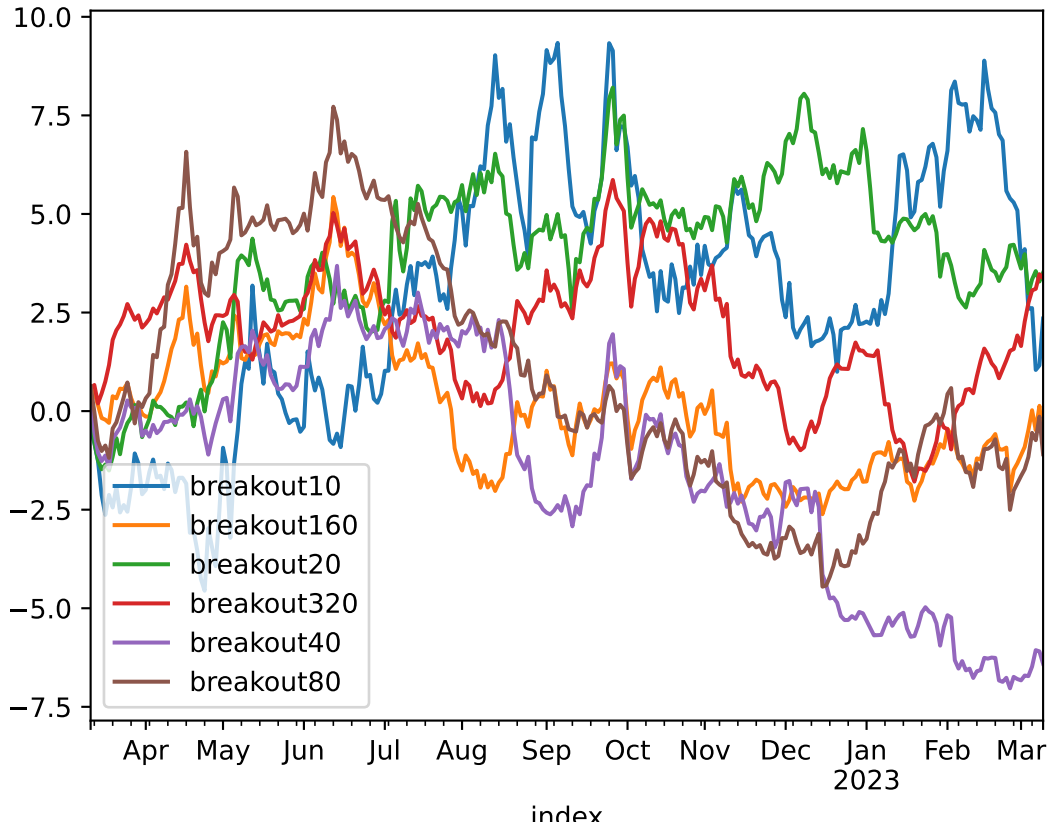
ann. std {'breakout10': 12.156, 'breakout160': 5.718, 'breakout20': 6.488, 'breakout320': 5.439, 'breakout40': 4.451, 'breakout80': 7.057}

ann. SR {'breakout10': 0.05, 'breakout160': 0.95, 'breakout20': -2.93, 'breakout320': 1.77, 'breakout40': -1.5, 'breakout80': 1.68}



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

ann. mean {'breakout10': 2.311, 'breakout160': -0.736, 'breakout20': 3.457, 'breakout320': 3.32, 'breakout40': -6.309, 'breakout80': -1.076}
ann. std {'breakout10': 11.855, 'breakout160': 6.192, 'breakout20': 7.904, 'breakout320': 5.943, 'breakout40': 6.532, 'breakout80': 6.965}
ann. SR {'breakout10': 0.19, 'breakout160': -0.12, 'breakout20': 0.44, 'breakout320': 0.56, 'breakout40': -0.97, 'breakout80': -0.15}

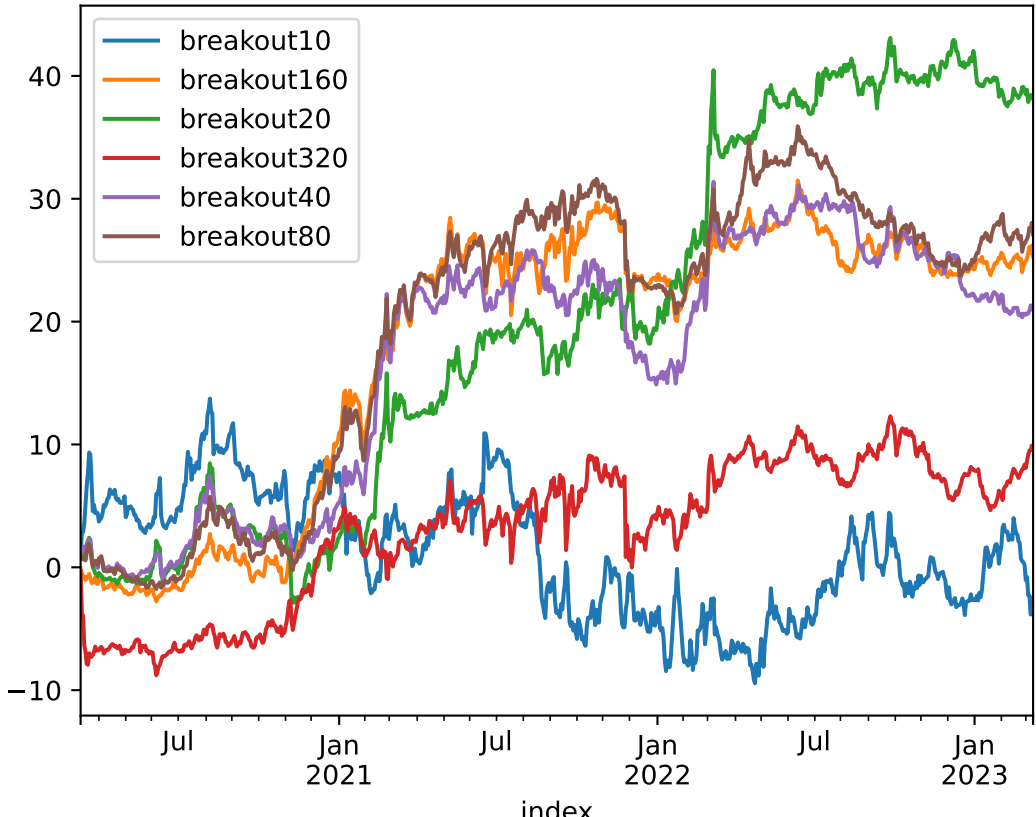


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -0.831, 'breakout160': 8.284, 'breakout20': 12.57, 'breakout320': 3.212, 'breakout40': 6.866, 'breakout80': 8.869}

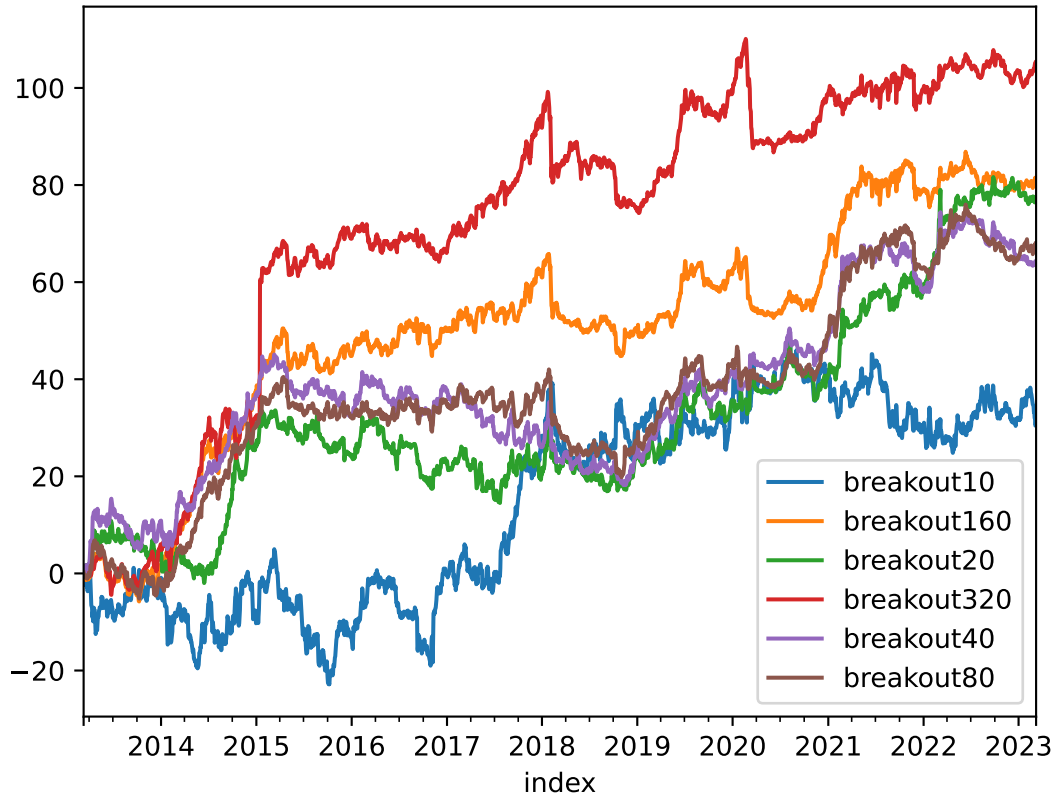
ann. std {'breakout10': 13.59, 'breakout160': 9.208, 'breakout20': 10.916, 'breakout320': 9.991, 'breakout40': 9.466, 'breakout80': 9.067}

ann. SR {'breakout10': -0.06, 'breakout160': 0.9, 'breakout20': 1.15, 'breakout320': 0.32, 'breakout40': 0.73, 'breakout80': 0.98}



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

ann. mean {'breakout10': 3.114, 'breakout160': 7.917, 'breakout20': 7.55, 'breakout320': 10.334, 'breakout40': 6.278, 'breakout80': 6.591}
ann. std {'breakout10': 15.604, 'breakout160': 9.033, 'breakout20': 11.144, 'breakout320': 13.308, 'breakout40': 9.688, 'breakout80': 8.934}
ann. SR {'breakout10': 0.2, 'breakout160': 0.88, 'breakout20': 0.68, 'breakout320': 0.78, 'breakout40': 0.65, 'breakout80': 0.74}

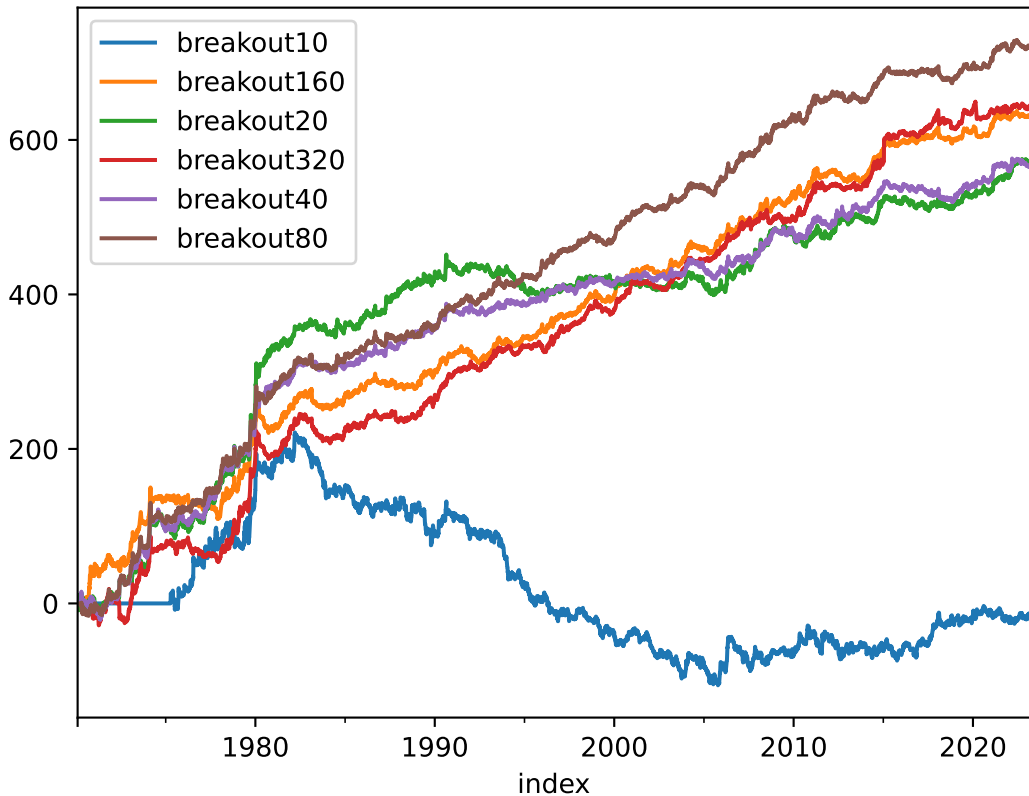


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.36, 'breakout160': 11.668, 'breakout20': 10.546, 'breakout320': 11.916, 'breakout40': 10.451, 'breakout80': 13.318}

ann. std {'breakout10': 20.753, 'breakout160': 12.435, 'breakout20': 15.98, 'breakout320': 12.998, 'breakout40': 13.179, 'breakout80': 12.683}

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

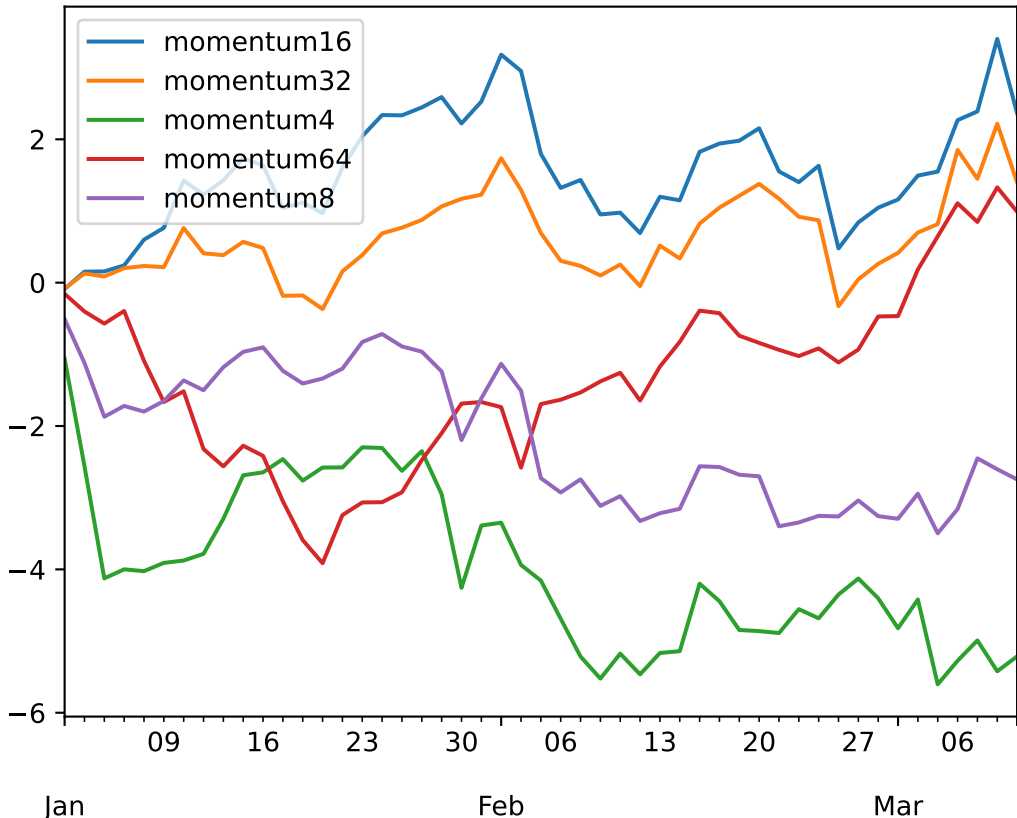


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 12.359, 'momentum32': 7.315, 'momentum4': -27.237, 'momentum64': 5.17, 'momentum8': -14.342}

ann. std {'momentum16': 7.264, 'momentum32': 6.366, 'momentum4': 8.681, 'momentum64': 6.331, 'momentum8': 6.243}

ann. SR {'momentum16': 1.7, 'momentum32': 1.15, 'momentum4': -3.14, 'momentum64': 0.82, 'momentum8': -2.3}

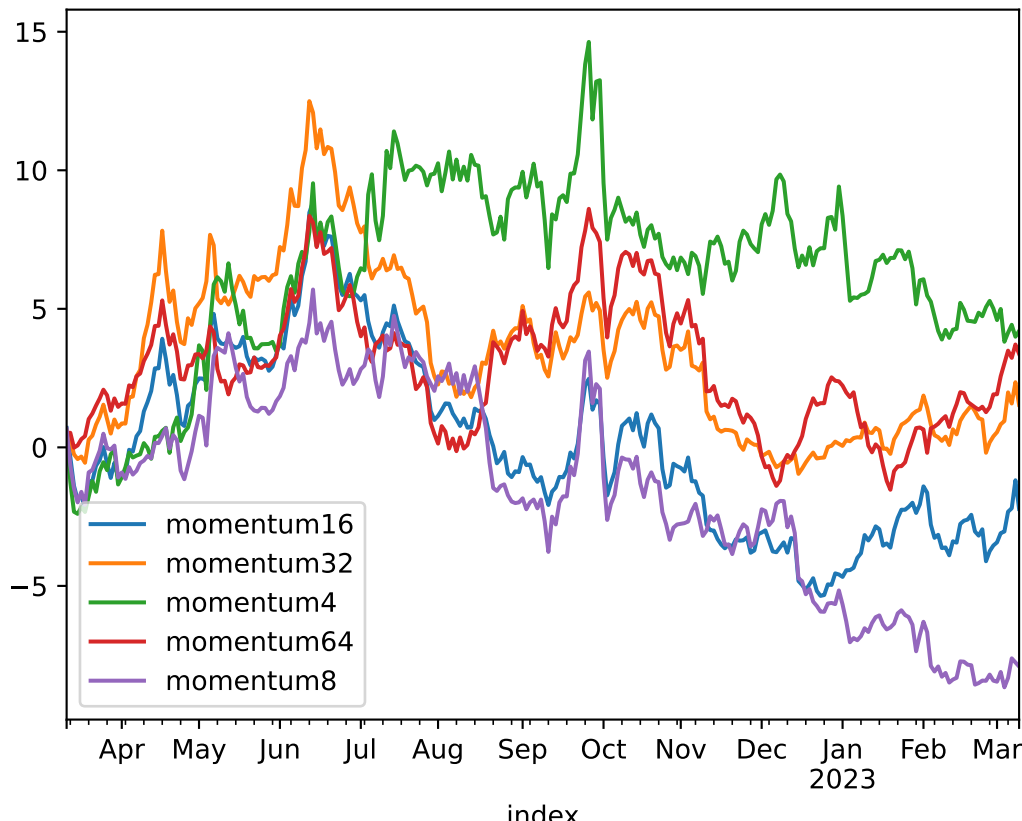


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -2.188, 'momentum32': 1.51, 'momentum4': 4.137, 'momentum64': 3.321, 'momentum8': -7.786}

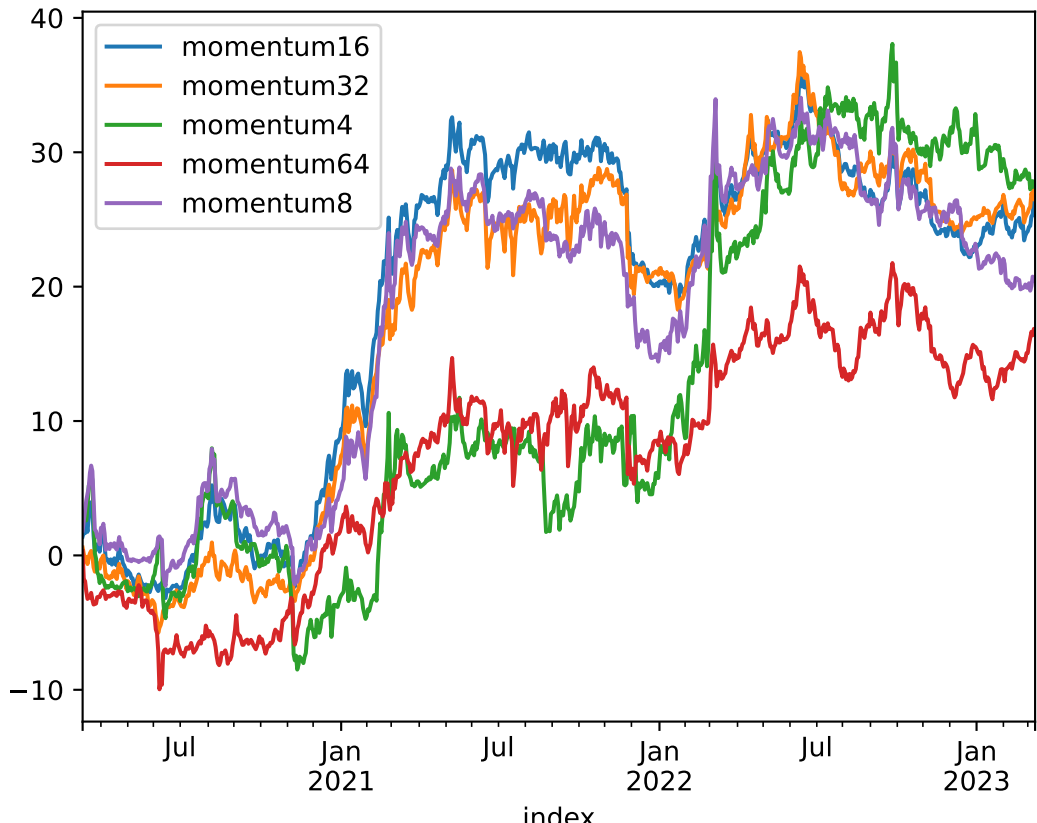
ann. std {'momentum16': 8.68, 'momentum32': 8.903, 'momentum4': 12.725, 'momentum64': 8.482, 'momentum8': 9.724}

ann. SR {'momentum16': -0.25, 'momentum32': 0.17, 'momentum4': 0.33, 'momentum64': 0.39, 'momentum8': -0.8}



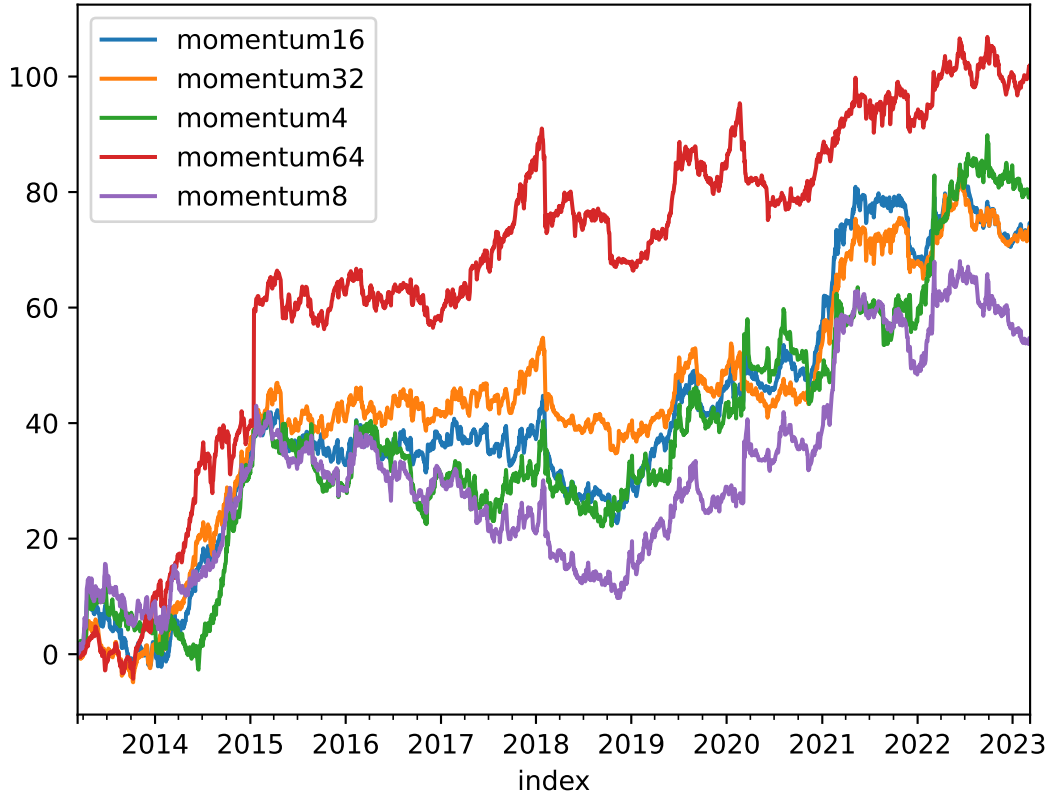
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.291, 'momentum32': 8.674, 'momentum4': 9.046, 'momentum64': 5.409, 'momentum8': 6.696}
ann. std {'momentum16': 10.343, 'momentum32': 10.442, 'momentum4': 14.629, 'momentum64': 10.52, 'momentum8': 11.74}
ann. SR {'momentum16': 0.8, 'momentum32': 0.83, 'momentum4': 0.62, 'momentum64': 0.51, 'momentum8': 0.57}



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

ann. mean {'momentum16': 7.225, 'momentum32': 7.182, 'momentum4': 7.793, 'momentum64': 9.971, 'momentum8': 5.342}
ann. std {'momentum16': 9.864, 'momentum32': 9.403, 'momentum4': 13.678, 'momentum64': 11.958, 'momentum8': 11.248}
ann. SR {'momentum16': 0.73, 'momentum32': 0.76, 'momentum4': 0.57, 'momentum64': 0.83, 'momentum8': 0.47}

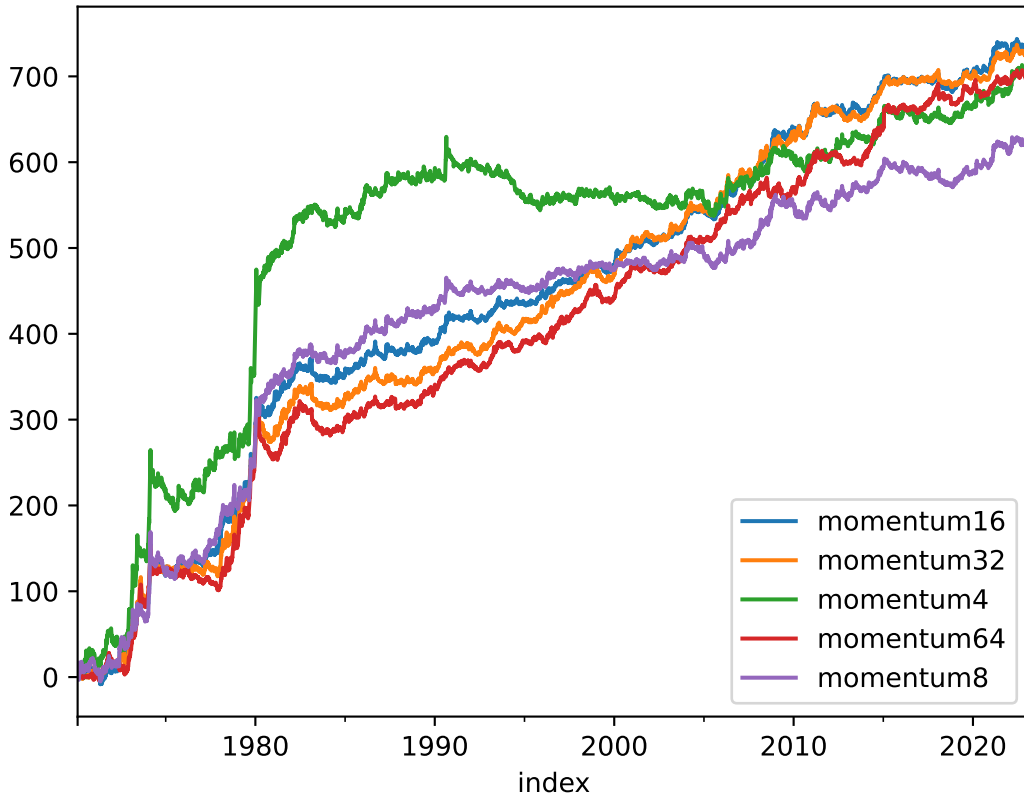


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.538, 'momentum32': 13.415, 'momentum4': 12.988, 'momentum64': 12.974, 'momentum8': 11.376}

ann. std {'momentum16': 14.132, 'momentum32': 13.741, 'momentum4': 19.996, 'momentum64': 13.354, 'momentum8': 15.788}

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

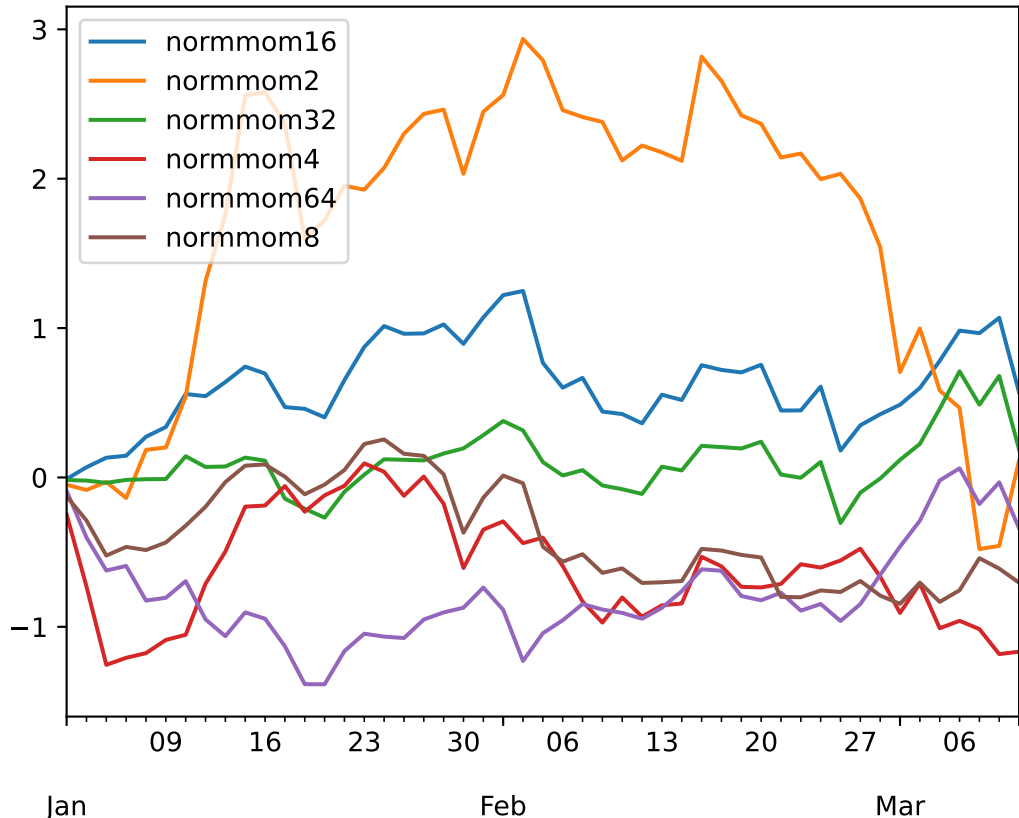


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.978, 'normmom2': 0.601, 'normmom32': 0.973, 'normmom4': -6.093, 'normmom64': -1.777, 'normmom8': -3.68}

ann. std {'normmom16': 2.79, 'normmom2': 5.742, 'normmom32': 2.384, 'normmom4': 3.112, 'normmom64': 2.519, 'normmom8': 2.245}

ann. SR {'normmom16': 1.07, 'normmom2': 0.1, 'normmom32': 0.41, 'normmom4': -1.96, 'normmom64': -0.71, 'normmom8': -1.64}

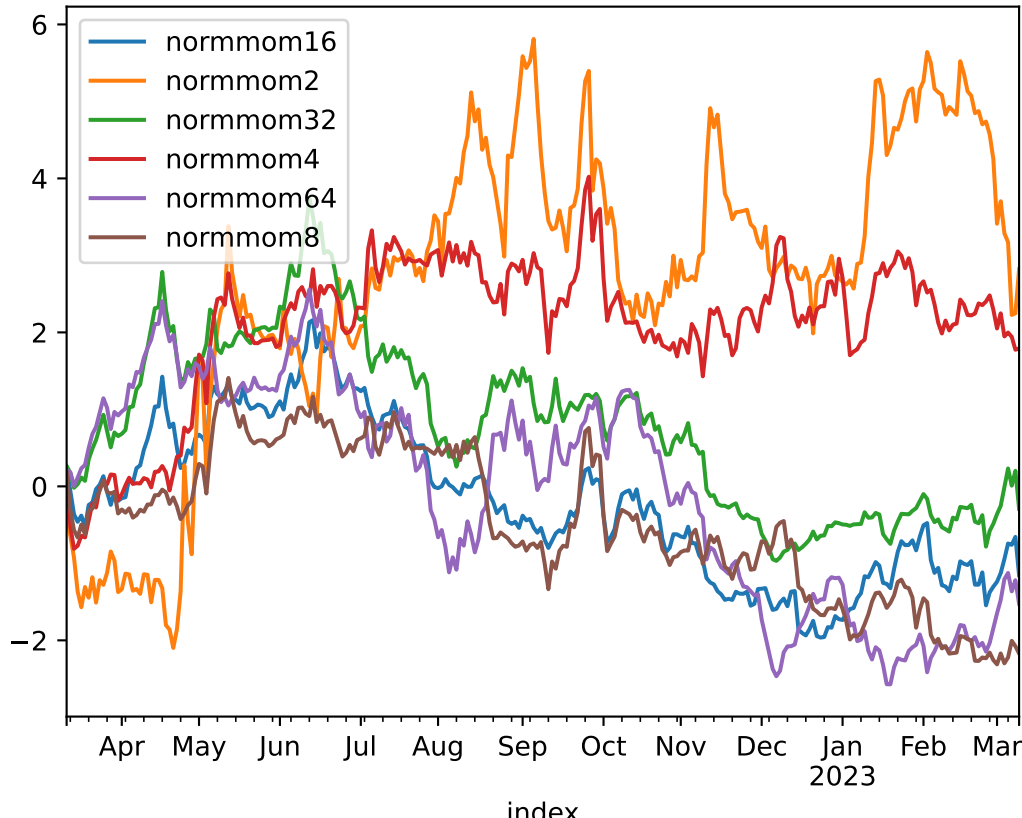


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -1.137, 'normmom2': 2.777, 'normmom32': -0.287, 'normmom4': 1.764, 'normmom64': -1.503, 'normmom8': -2.137}

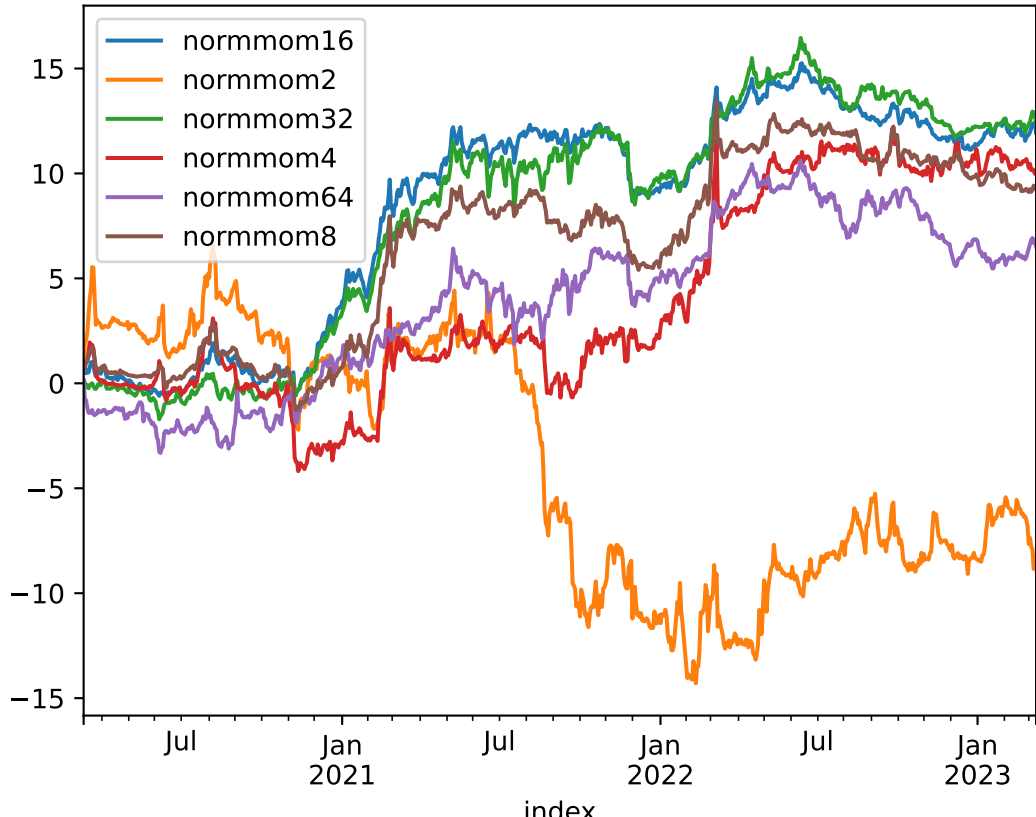
ann. std {'normmom16': 2.534, 'normmom2': 6.324, 'normmom32': 2.754, 'normmom4': 3.849, 'normmom64': 3.117, 'normmom8': 2.762}

ann. SR {'normmom16': -0.45, 'normmom2': 0.44, 'normmom32': -0.1, 'normmom4': 0.46, 'normmom64': -0.48, 'normmom8': -0.77}



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

ann. mean {'normmom16': 3.907, 'normmom2': -2.7, 'normmom32': 4.066, 'normmom4': 3.273, 'normmom64': 2.134, 'normmom8': 3.03}
ann. std {'normmom16': 3.519, 'normmom2': 7.685, 'normmom32': 3.901, 'normmom4': 5.292, 'normmom64': 4.143, 'normmom8': 3.937}
ann. SR {'normmom16': 1.11, 'normmom2': -0.35, 'normmom32': 1.04, 'normmom4': 0.62, 'normmom64': 0.52, 'normmom8': 0.77}

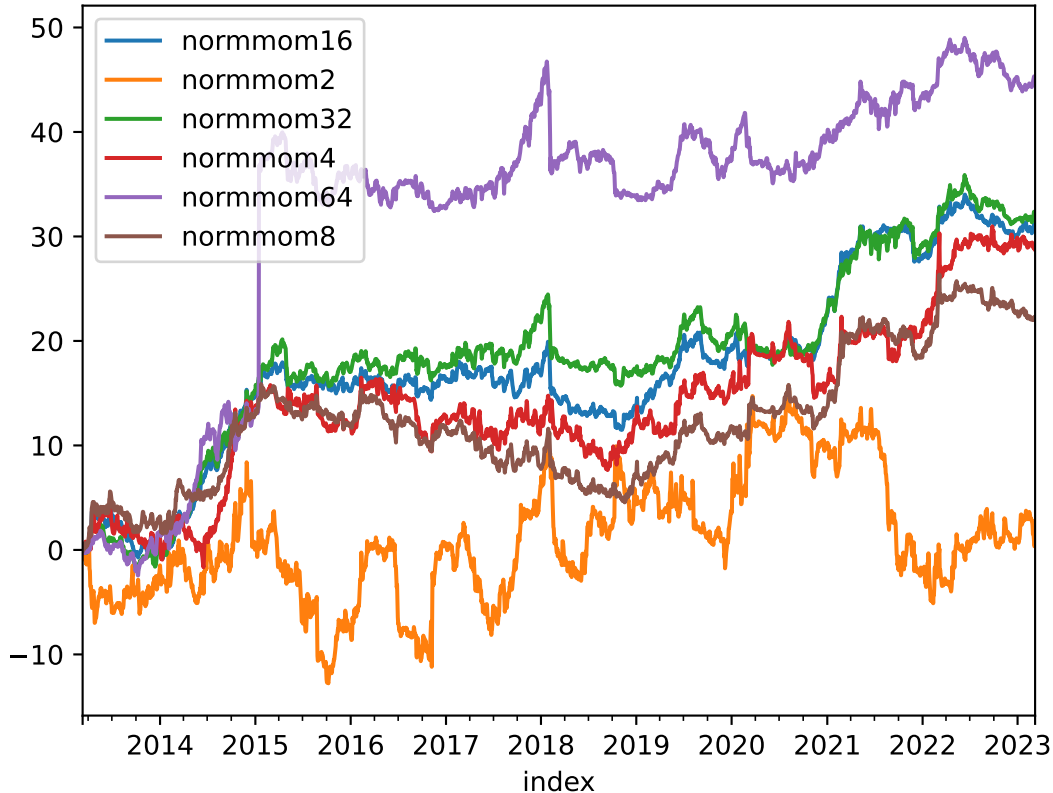


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.012, 'normmom2': 0.092, 'normmom32': 3.125, 'normmom4': 2.819, 'normmom64': 4.408, 'normmom8': 2.173}

ann. std {'normmom16': 3.551, 'normmom2': 8.975, 'normmom32': 3.7, 'normmom4': 5.458, 'normmom64': 8.479, 'normmom8': 4.016}

ann. SR {'normmom16': 0.85, 'normmom2': 0.01, 'normmom32': 0.84, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.54}

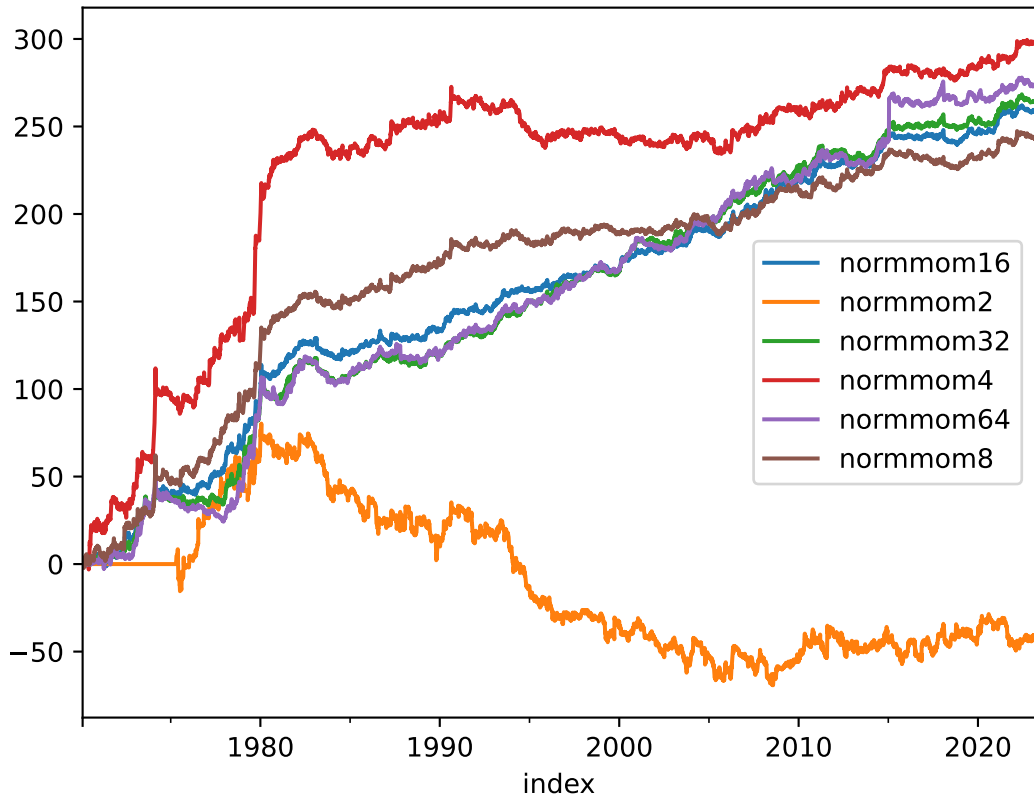


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.783, 'normmom2': -0.801, 'normmom32': 4.885, 'normmom4': 5.493, 'normmom64': 5.061, 'normmom8': 4.494}

ann. std {'normmom16': 4.889, 'normmom2': 11.168, 'normmom32': 4.947, 'normmom4': 8.288, 'normmom64': 6.234, 'normmom8': 5.901}

ann. SR {'normmom16': 0.98, 'normmom2': -0.07, 'normmom32': 0.99, 'normmom4': 0.66, 'normmom64': 0.81, 'normmom8': 0.76}

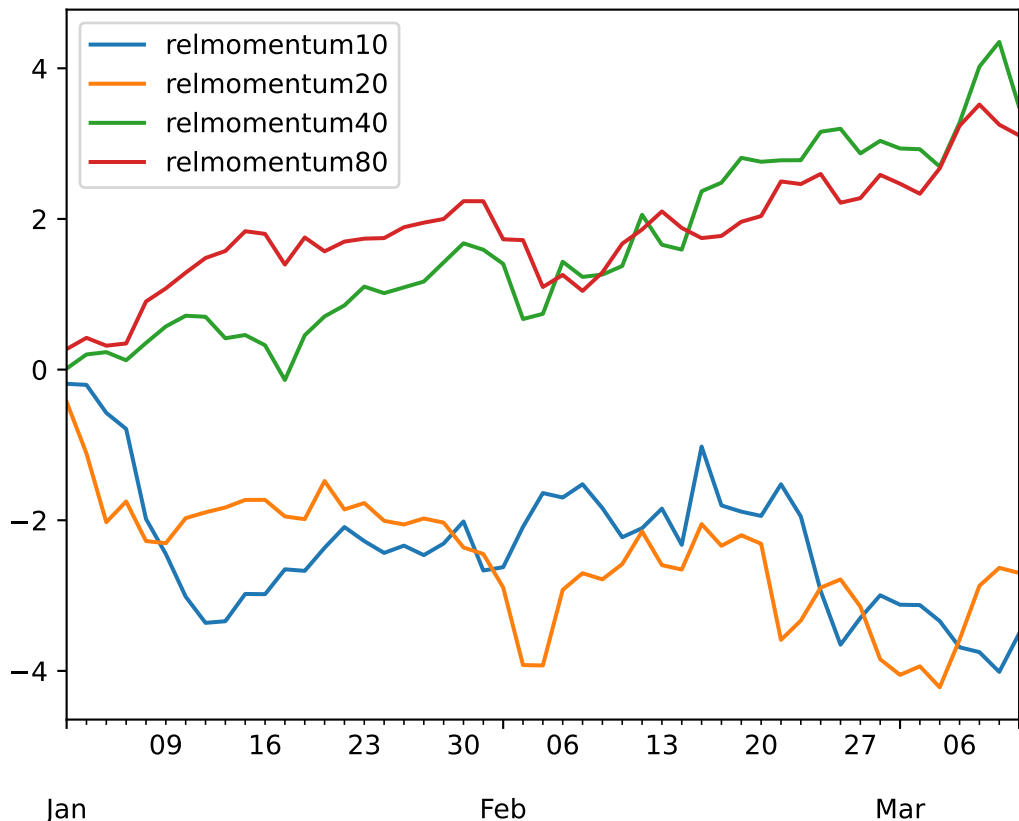


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -18.314, 'relmomentum20': -14.101, 'relmomentum40': 18.231, 'relmomentum80': 16.244}

ann. std {'relmomentum10': 6.955, 'relmomentum20': 7.049, 'relmomentum40': 5.384, 'relmomentum80': 4.05}

ann. SR {'relmomentum10': -2.63, 'relmomentum20': -2.0, 'relmomentum40': 3.39, 'relmomentum80': 4.01}

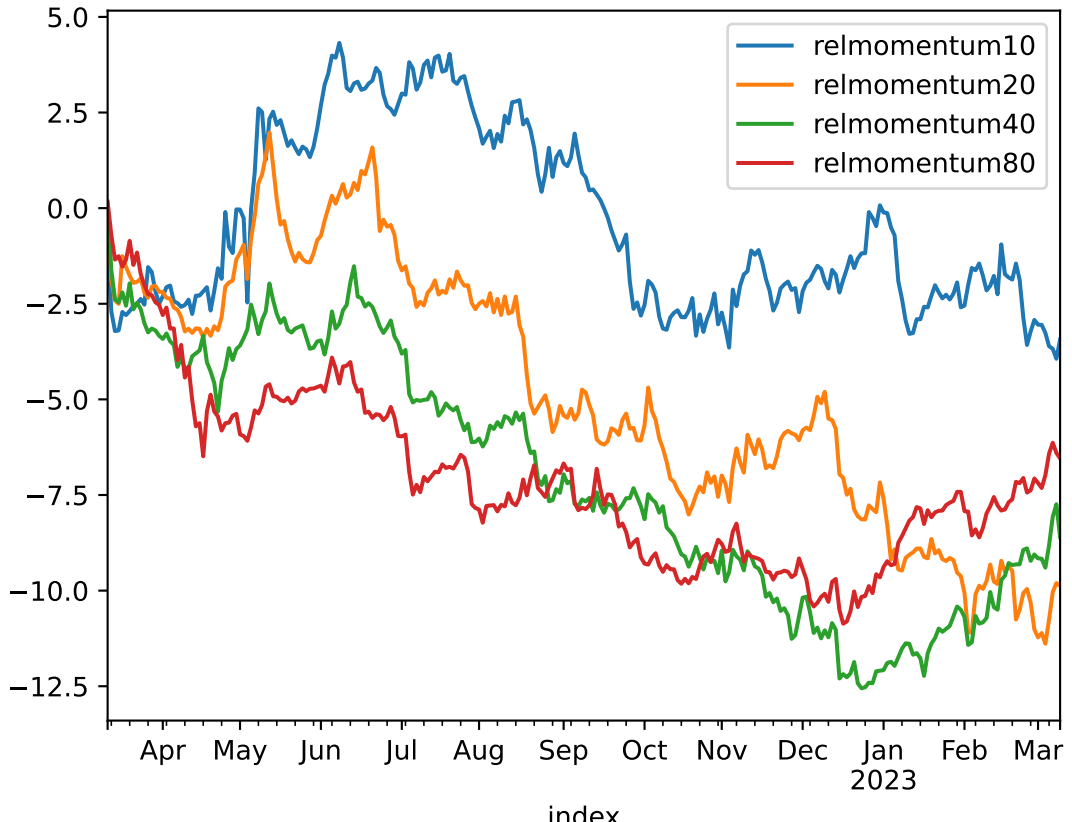


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.378, 'relmomentum20': -9.717, 'relmomentum40': -6.443, 'relmomentum80': -6.443}

ann. std {'relmomentum10': 8.112, 'relmomentum20': 6.704, 'relmomentum40': 5.672, 'relmomentum80': 5.156}

ann. SR {'relmomentum10': -0.42, 'relmomentum20': -1.45, 'relmomentum40': -1.49, 'relmomentum80': -1.25}

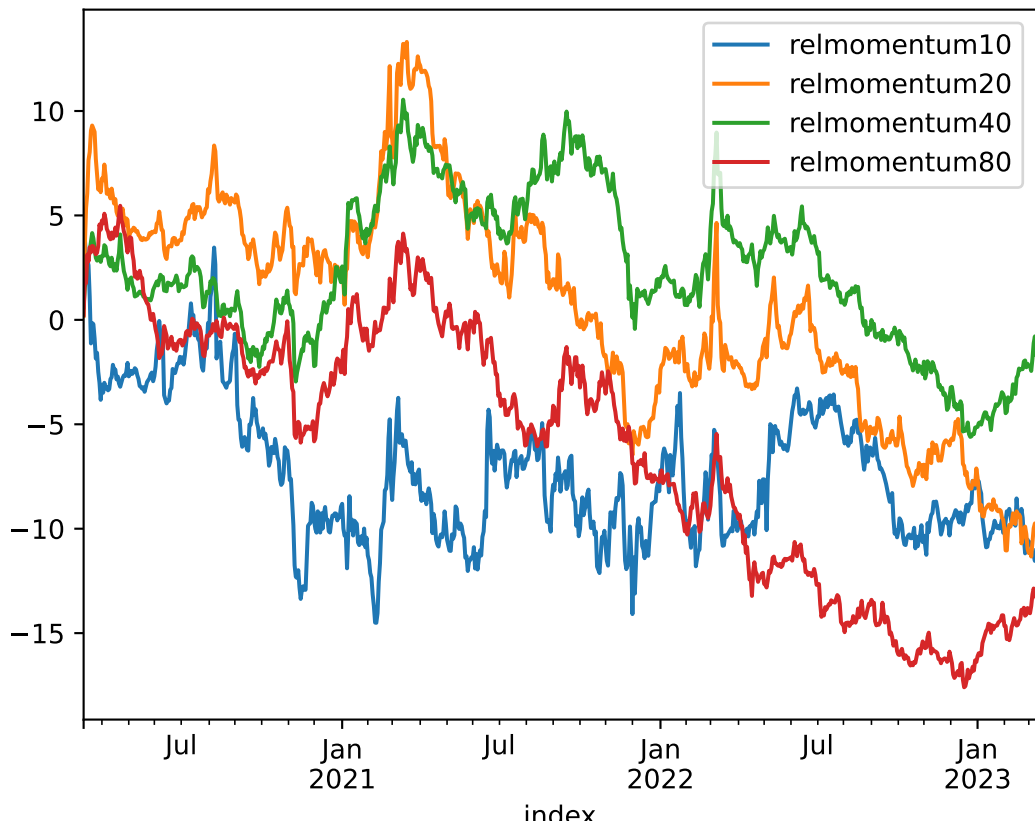


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -3.612, 'relmomentum20': -3.212, 'relmomentum40': -0.541, 'relmomentum80': -4.345}

ann. std {'relmomentum10': 11.586, 'relmomentum20': 8.873, 'relmomentum40': 7.062, 'relmomentum80': 6.675}

ann. SR {'relmomentum10': -0.31, 'relmomentum20': -0.36, 'relmomentum40': -0.08, 'relmomentum80': -0.65}

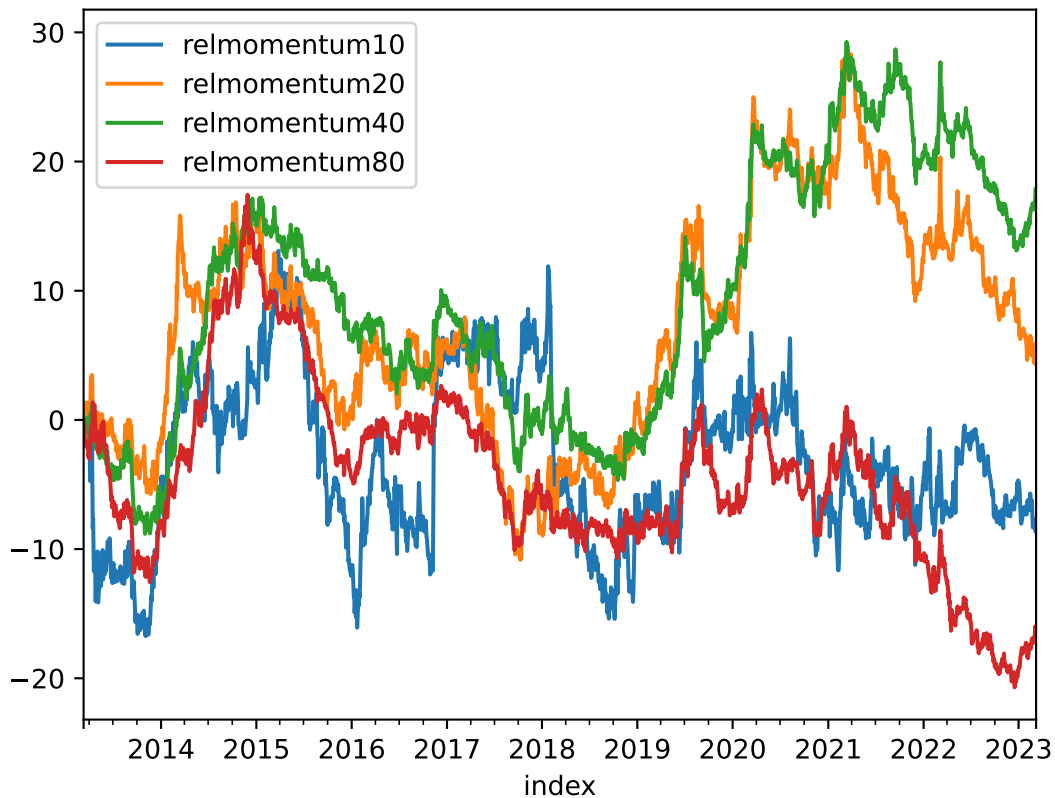


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.802, 'relmomentum20': 0.576, 'relmomentum40': 1.675, 'relmomentum80': -1.607}

ann. std {'relmomentum10': 12.906, 'relmomentum20': 8.907, 'relmomentum40': 7.252, 'relmomentum80': 6.674}

ann. SR {'relmomentum10': -0.06, 'relmomentum20': 0.06, 'relmomentum40': 0.23, 'relmomentum80': -0.24}

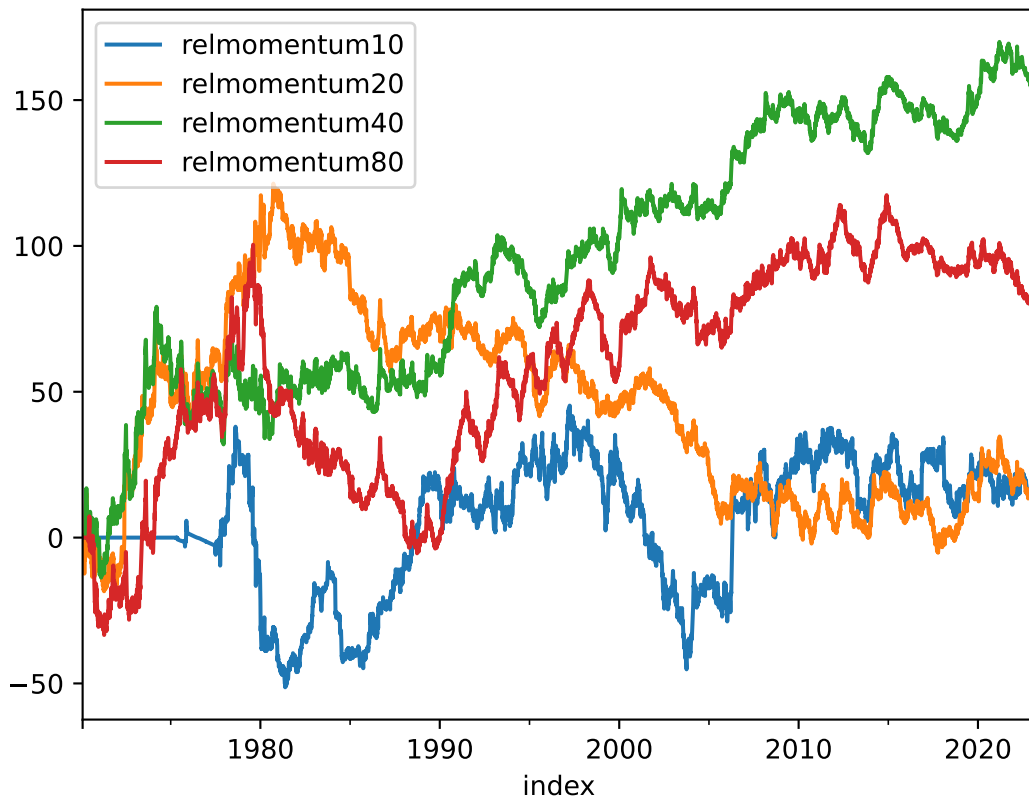


Total Trading Rule P&L for period '99Y'

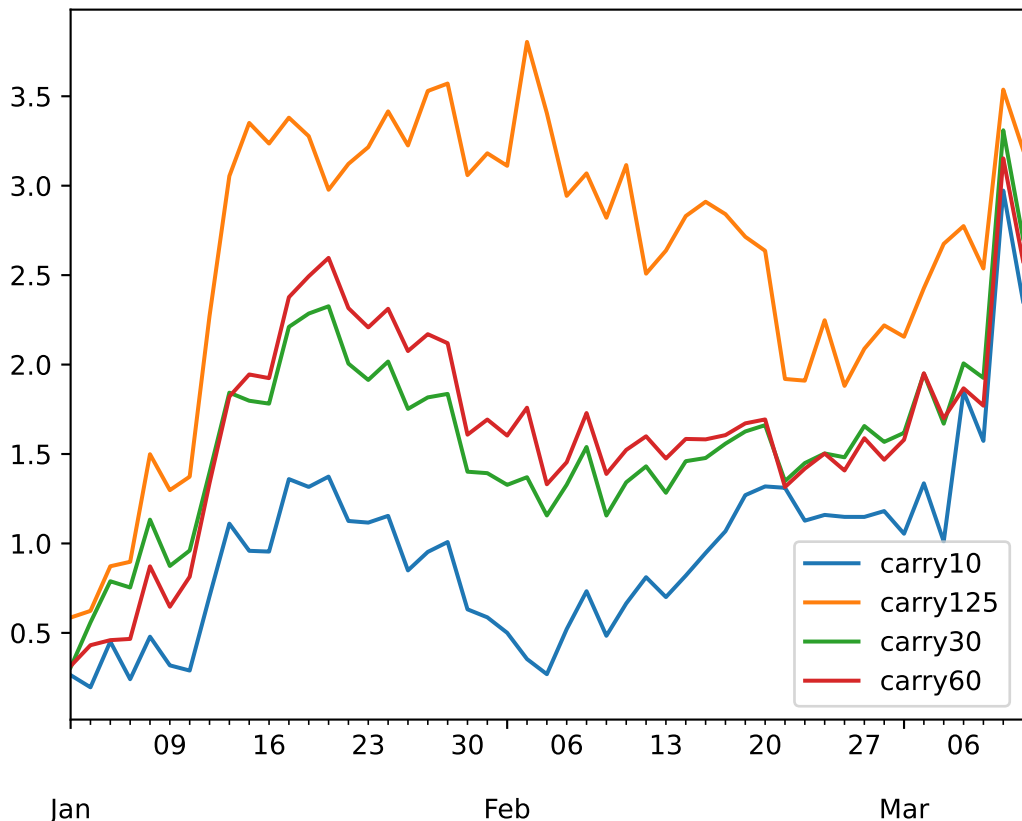
ann. mean {'relmomentum10': 0.265, 'relmomentum20': 0.213, 'relmomentum40': 2.915, 'relmomentum80': 1.545}

ann. std {'relmomentum10': 13.4, 'relmomentum20': 11.5, 'relmomentum40': 10.779, 'relmomentum80': 11.046}

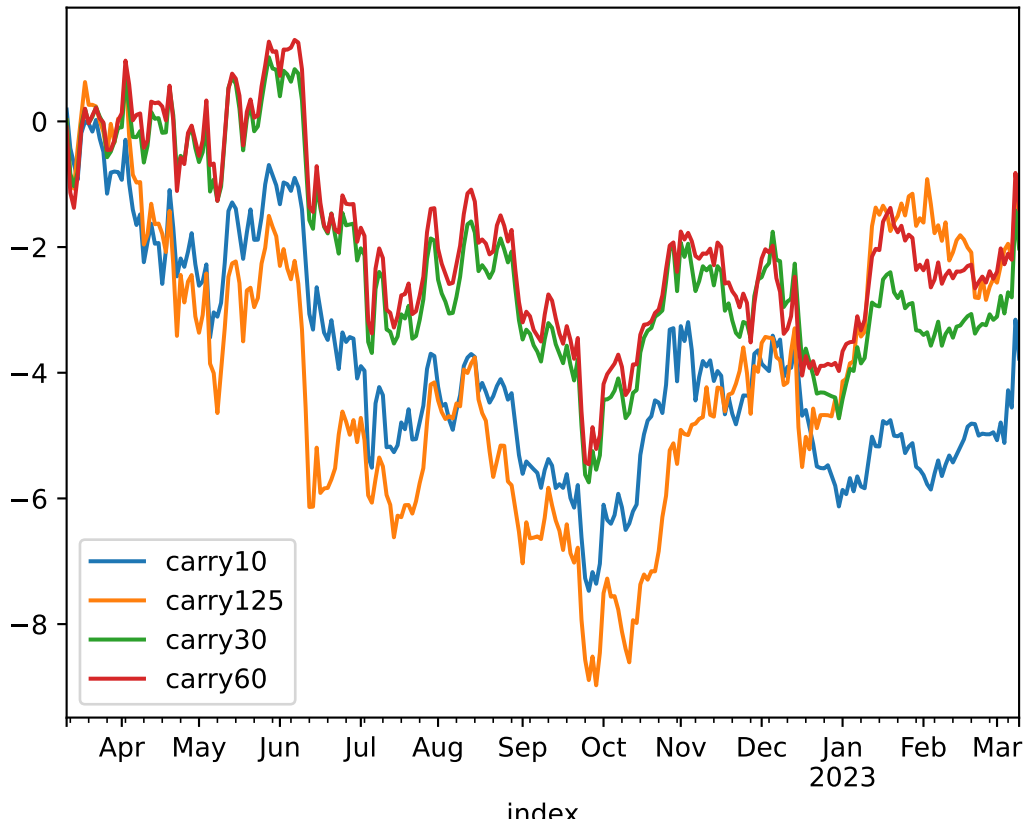
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 12.294, 'carry125': 16.723, 'carry30': 14.132, 'carry60': 13.471}
ann. std {'carry10': 5.017, 'carry125': 5.816, 'carry30': 4.829, 'carry60': 4.953}
ann. SR {'carry10': 2.45, 'carry125': 2.88, 'carry30': 2.93, 'carry60': 2.72}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.717, 'carry125': -1.498, 'carry30': -1.99, 'carry60': -1.373}
ann. std {'carry10': 6.096, 'carry125': 7.146, 'carry30': 6.045, 'carry60': 6.251}
ann. SR {'carry10': -0.61, 'carry125': -0.21, 'carry30': -0.33, 'carry60': -0.22}

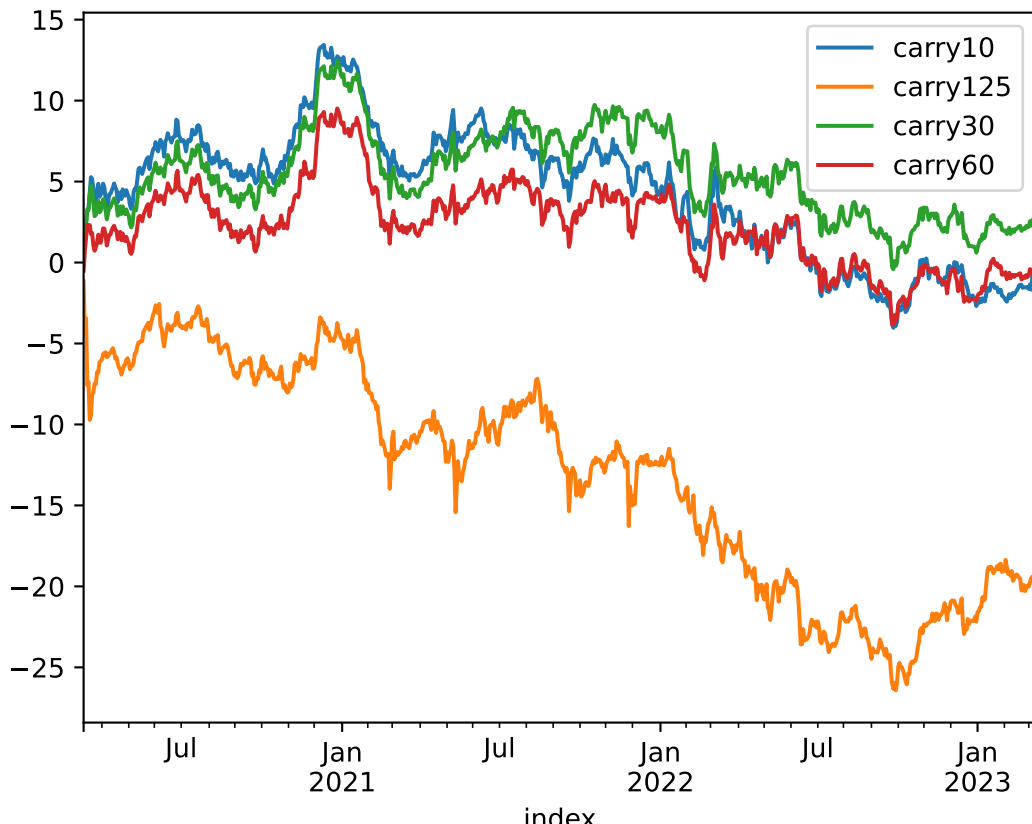


Total Trading Rule P&L for period '3Y'

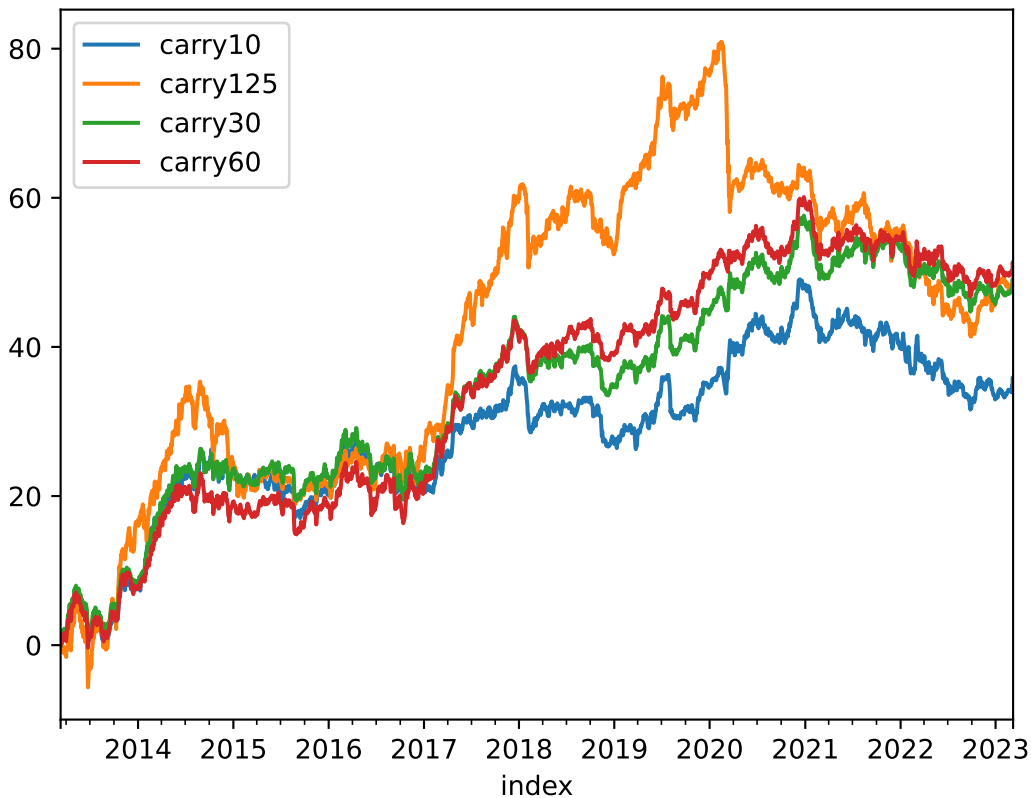
ann. mean {'carry10': -0.109, 'carry125': -6.208, 'carry30': 1.084, 'carry60': 0.071}

ann. std {'carry10': 6.661, 'carry125': 8.818, 'carry30': 6.611, 'carry60': 6.565}

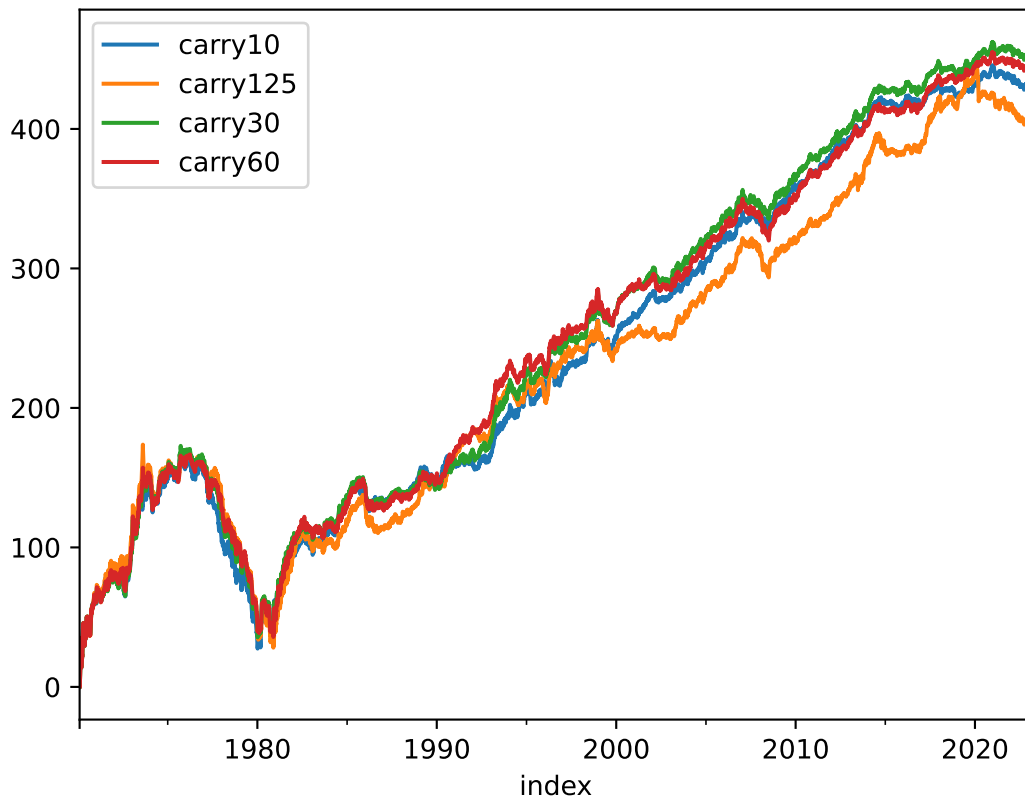
ann. SR {'carry10': -0.02, 'carry125': -0.7, 'carry30': 0.16, 'carry60': 0.01}



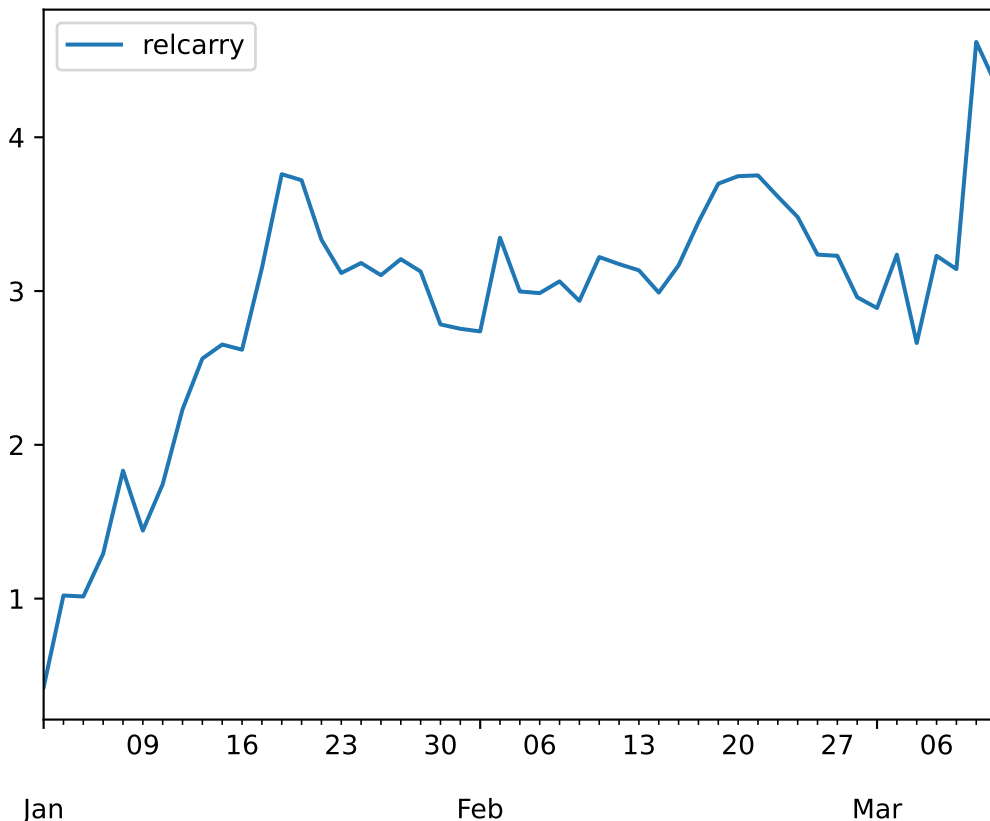
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.463, 'carry125': 4.792, 'carry30': 4.755, 'carry60': 4.985}
ann. std {'carry10': 6.397, 'carry125': 9.237, 'carry30': 6.504, 'carry60': 6.47}
ann. SR {'carry10': 0.54, 'carry125': 0.52, 'carry30': 0.73, 'carry60': 0.77}



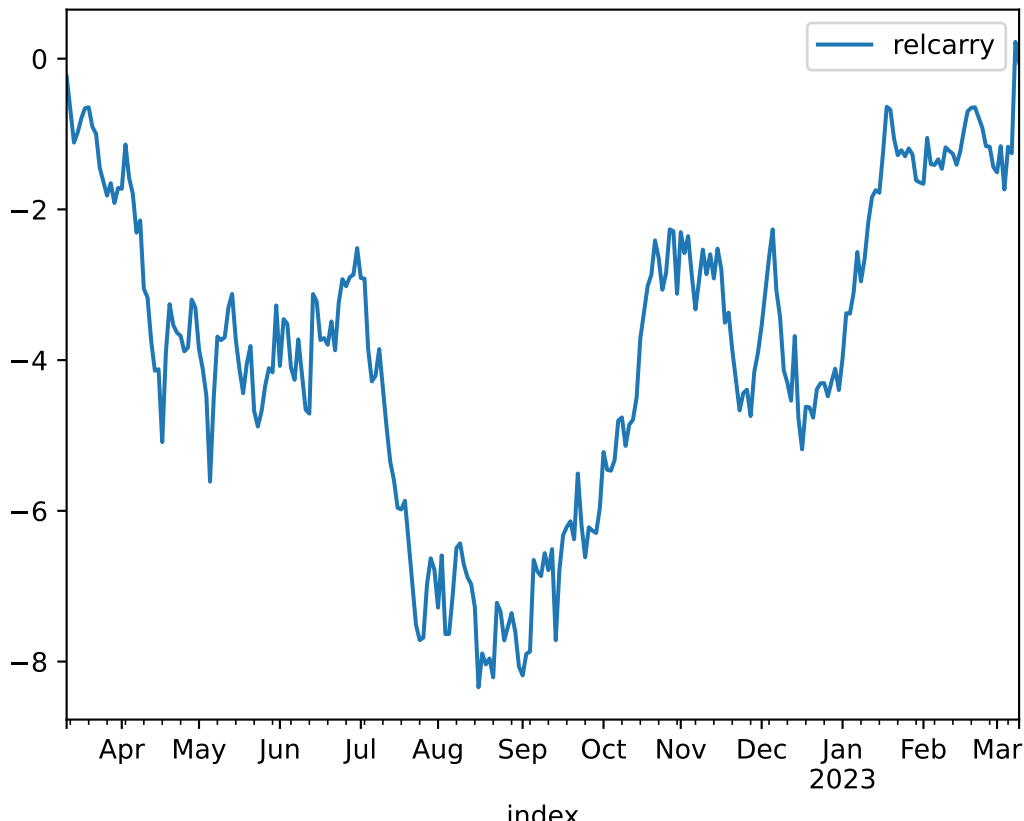
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.979, 'carry125': 7.587, 'carry30': 8.376, 'carry60': 8.238}
ann. std {'carry10': 11.894, 'carry125': 12.171, 'carry30': 11.914, 'carry60': 11.868}
ann. SR {'carry10': 0.67, 'carry125': 0.62, 'carry30': 0.7, 'carry60': 0.69}



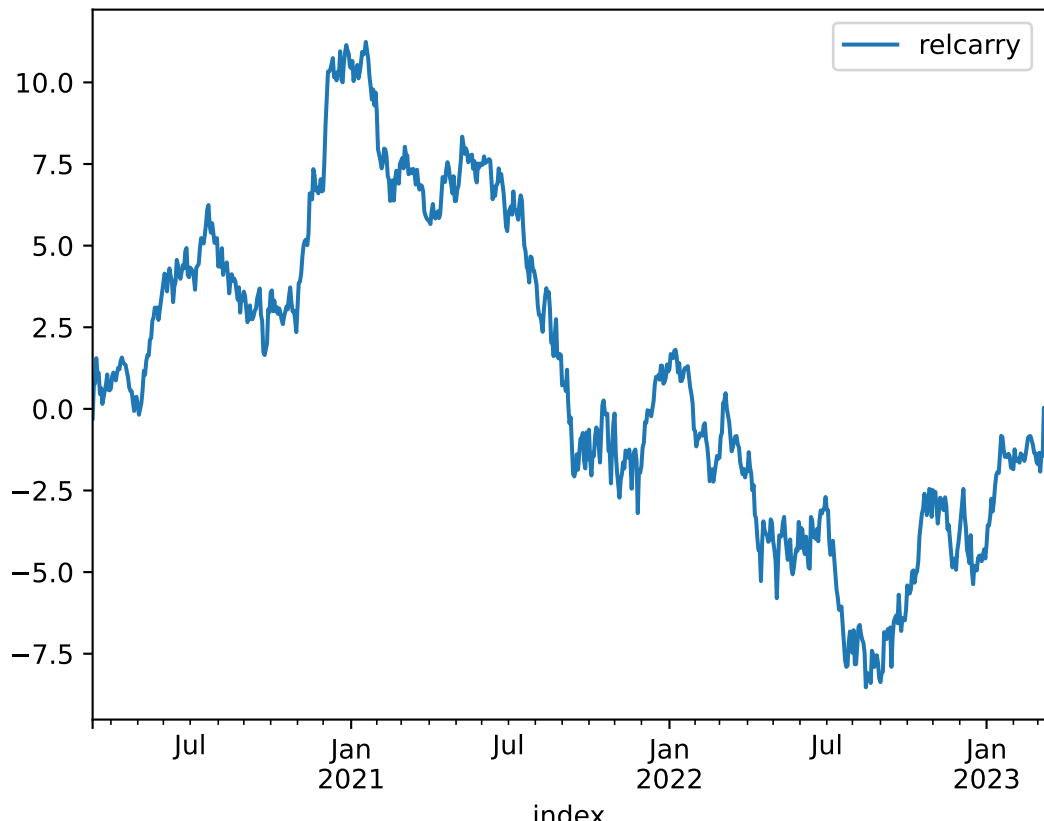
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 22.677}
ann. std {'relcarry': 5.718}
ann. SR {'relcarry': 3.97}



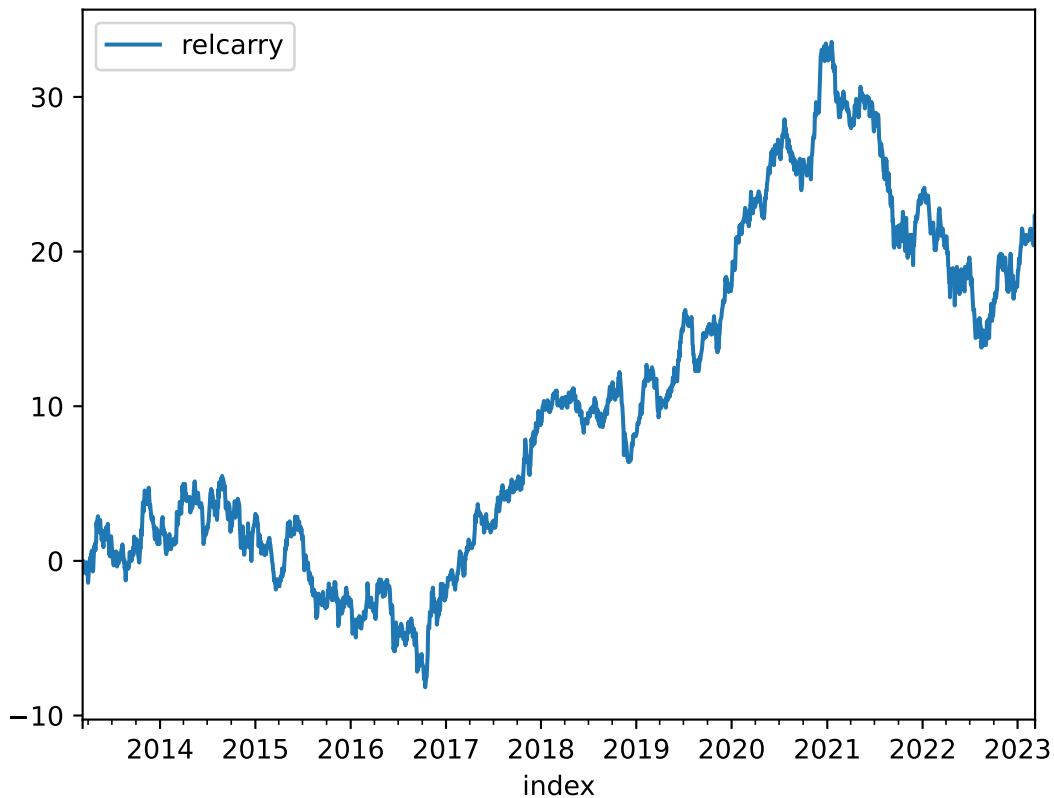
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -0.056}
ann. std {'relcarry': 7.25}
ann. SR {'relcarry': -0.01}



Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.08}
ann. std {'relcarry': 6.836}
ann. SR {'relcarry': -0.01}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.166}
ann. std {'relcarry': 6.009}
ann. SR {'relcarry': 0.36}

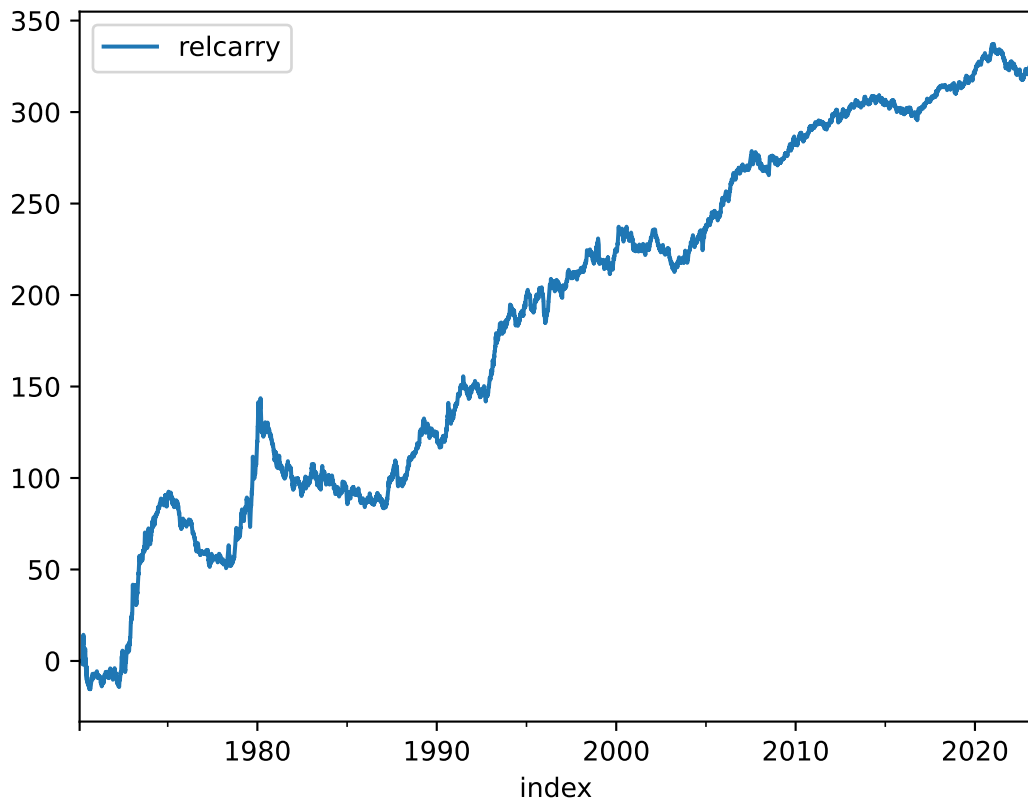


Total Trading Rule P&L for period '99Y'

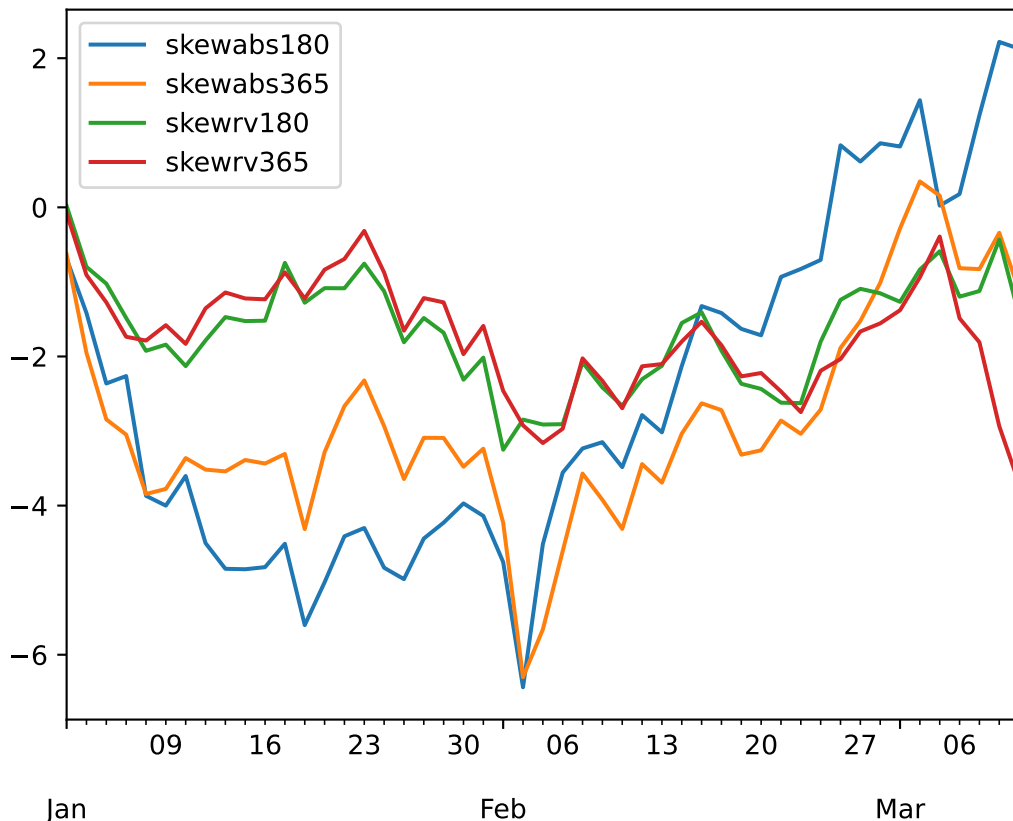
ann. mean {'relcarry': 6.02}

ann. std {'relcarry': 9.976}

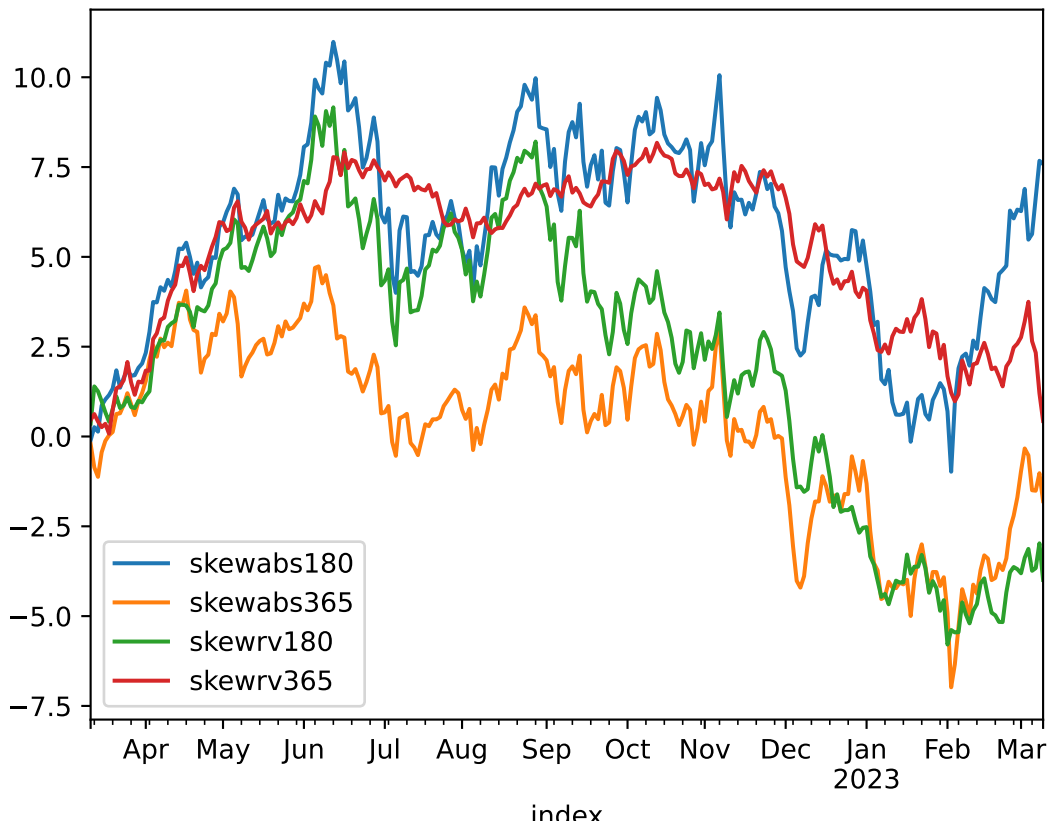
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 11.114, 'skewabs365': -5.838, 'skewrv180': -7.581, 'skewrv365': -19.374}
ann. std {'skewabs180': 11.764, 'skewabs365': 10.799, 'skewrv180': 7.446, 'skewrv365': 7.556}
ann. SR {'skewabs180': 0.94, 'skewabs365': -0.54, 'skewrv180': -1.02, 'skewrv365': -2.56}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 7.467, 'skewabs365': -1.77, 'skewrv180': -3.93, 'skewrv365': 0.426}
ann. std {'skewabs180': 10.614, 'skewabs365': 9.053, 'skewrv180': 9.067, 'skewrv365': 5.509}
ann. SR {'skewabs180': 0.7, 'skewabs365': -0.2, 'skewrv180': -0.43, 'skewrv365': 0.08}

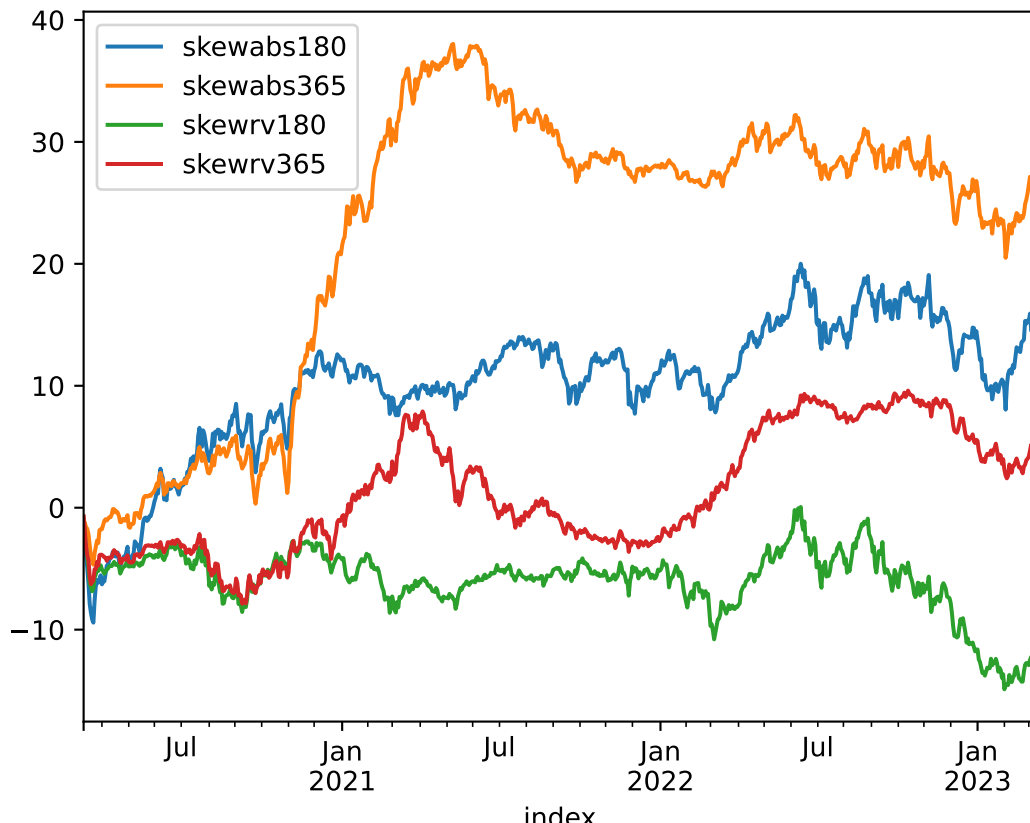


Total Trading Rule P&L for period '3Y'

ann. mean {'skewabs180': 5.437, 'skewabs365': 8.405, 'skewrv180': -4.286, 'skewrv365': 0.609}

ann. std {'skewabs180': 9.374, 'skewabs365': 8.791, 'skewrv180': 7.45, 'skewrv365': 6.49}

ann. SR {'skewabs180': 0.58, 'skewabs365': 0.96, 'skewrv180': -0.58, 'skewrv365': 0.09}

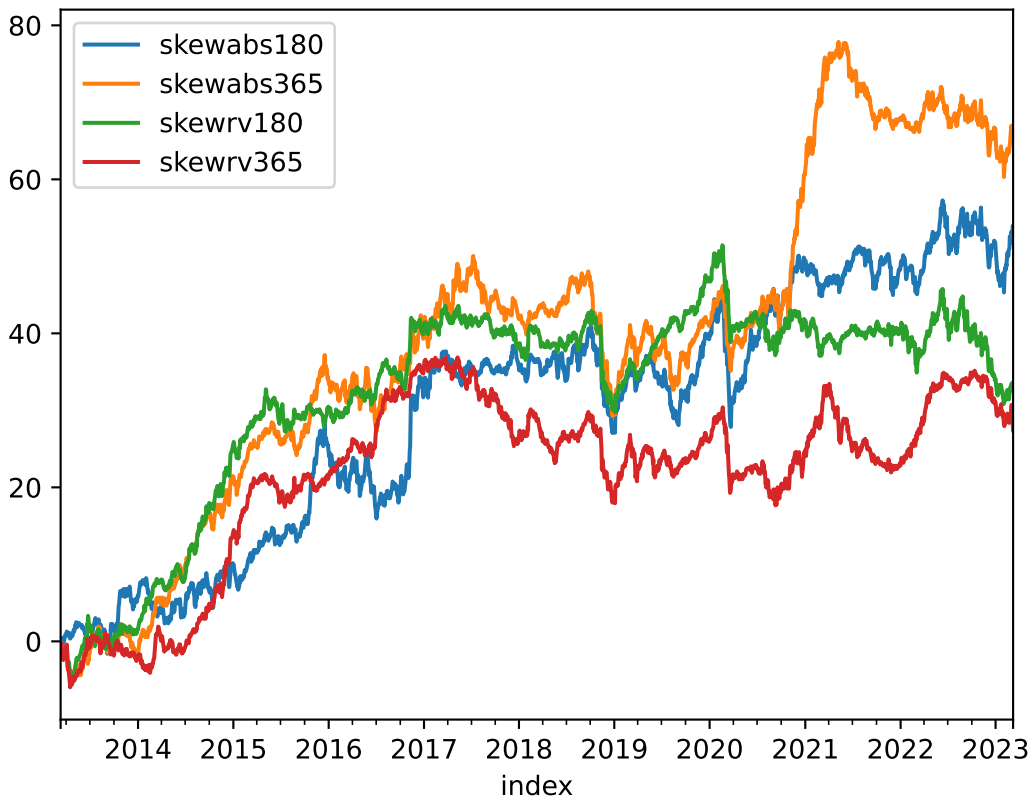


Total Trading Rule P&L for period '10Y'

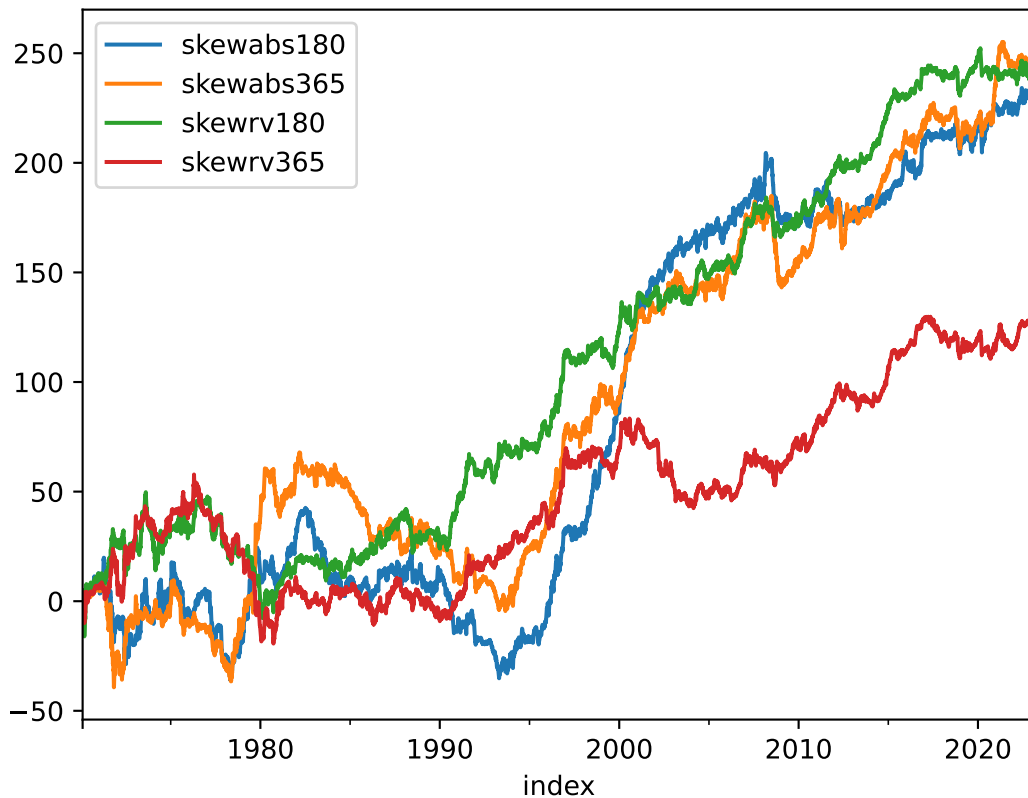
ann. mean {'skewabs180': 5.286, 'skewabs365': 6.426, 'skewrv180': 3.2, 'skewrv365': 2.689}

ann. std {'skewabs180': 8.102, 'skewabs365': 8.028, 'skewrv180': 6.568, 'skewrv365': 6.168}

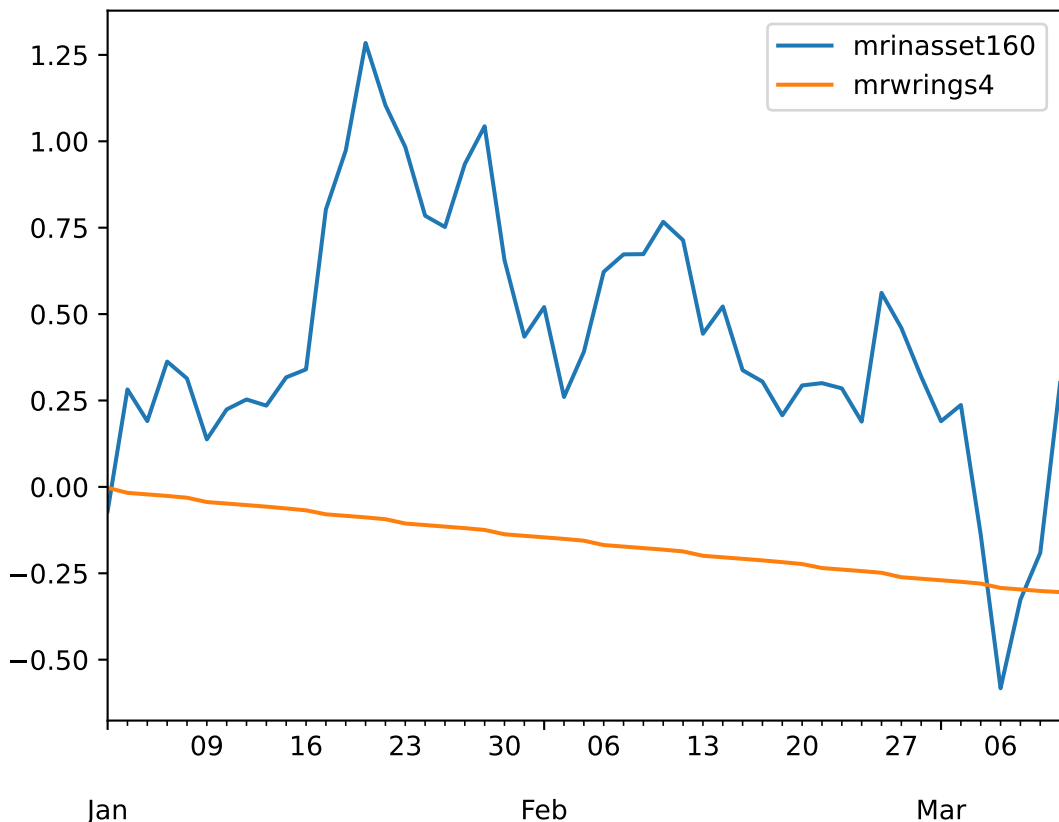
ann. SR {'skewabs180': 0.65, 'skewabs365': 0.8, 'skewrv180': 0.49, 'skewrv365': 0.44}



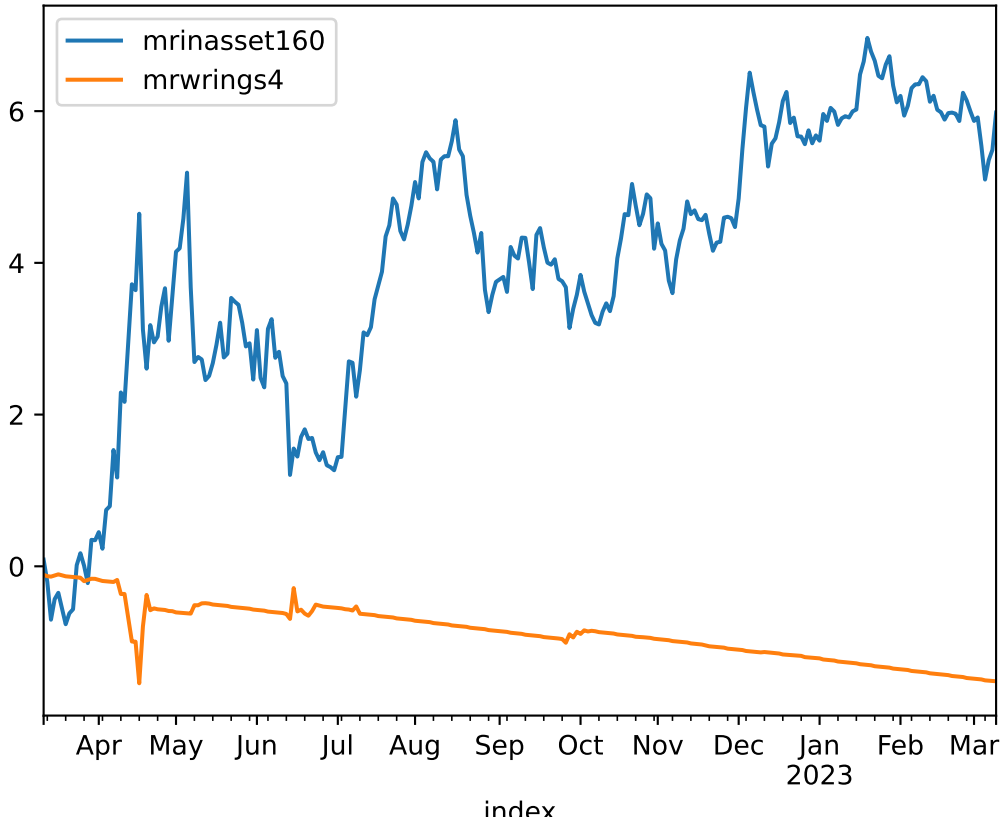
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.264, 'skewabs365': 4.487, 'skewrv180': 4.314, 'skewrv365': 2.223}
ann. std {'skewabs180': 10.78, 'skewabs365': 10.239, 'skewrv180': 9.45, 'skewrv365': 8.744}
ann. SR {'skewabs180': 0.4, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.25}



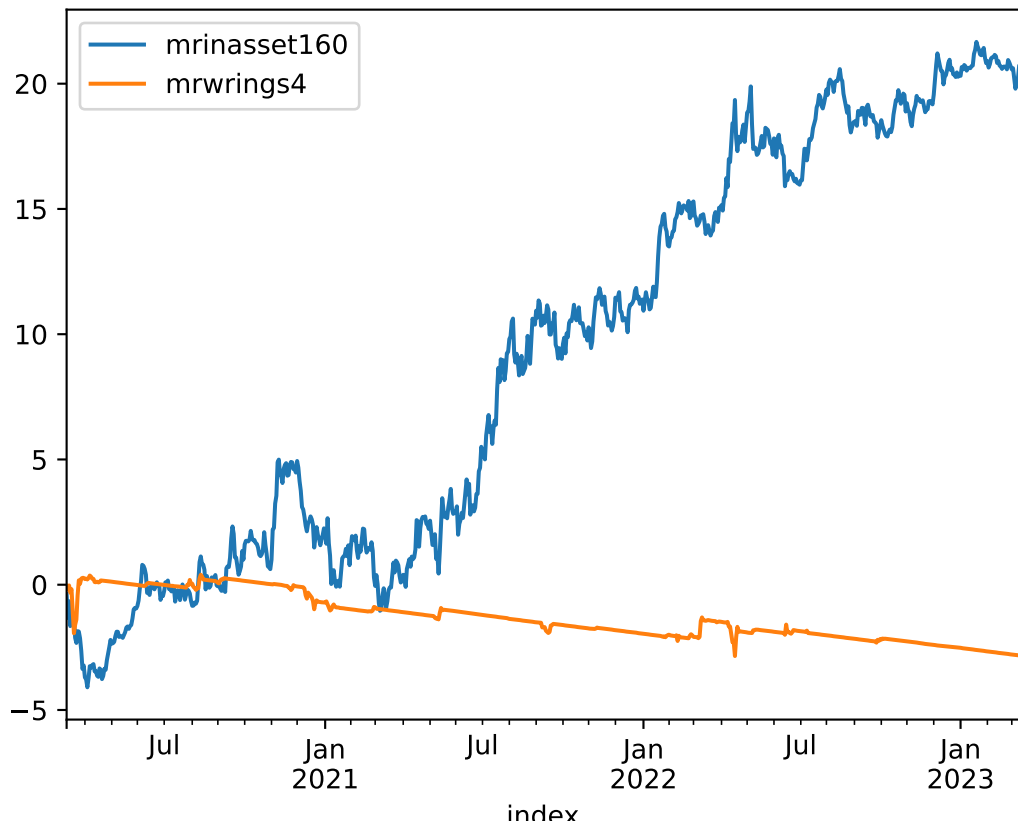
Total Trading Rule P&L for period 'YTD'
ann. mean {'mriasset160': 1.571, 'mrwrings4': -1.591}
ann. std {'mriasset160': 3.298, 'mrwrings4': 0.053}
ann. SR {'mriasset160': 0.48, 'mrwrings4': -29.95}



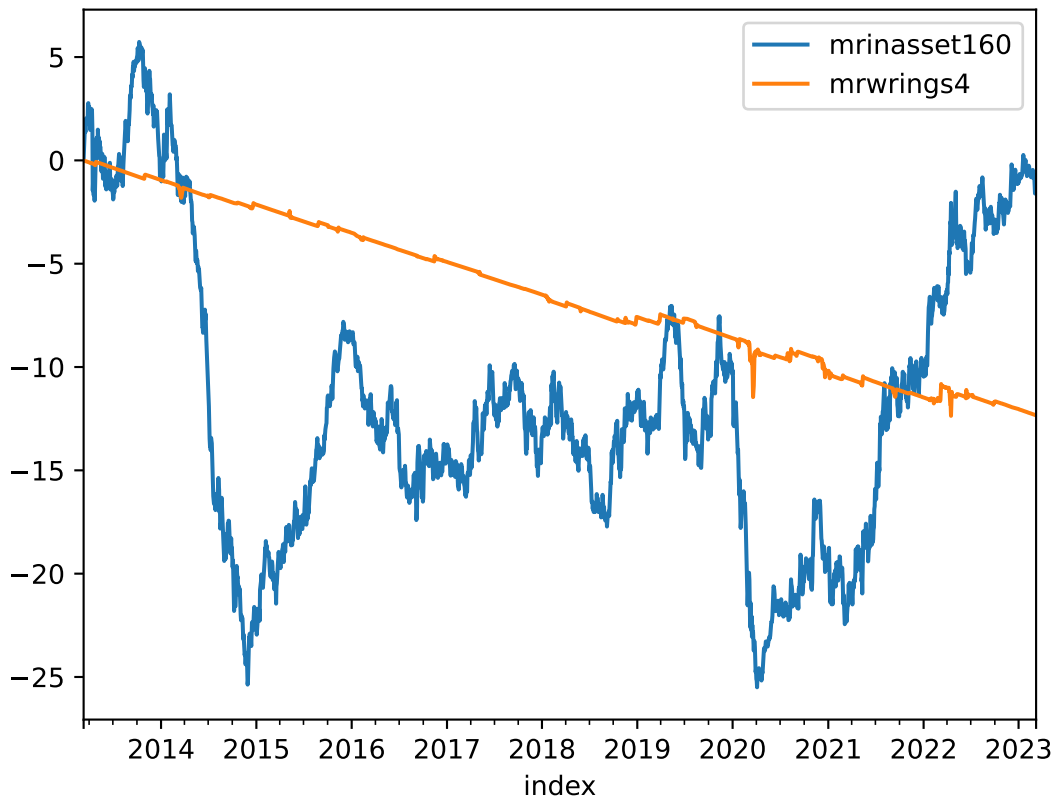
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 5.889, 'mrwrings4': -1.492}
ann. std {'mrinasset160': 5.604, 'mrwrings4': 1.28}
ann. SR {'mrinasset160': 1.05, 'mrwrings4': -1.17}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.771, 'mrwrings4': -0.923}
ann. std {'mrinasset160': 6.444, 'mrwrings4': 1.471}
ann. SR {'mrinasset160': 1.05, 'mrwrings4': -0.63}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.071, 'mrwrings4': -1.211}
ann. std {'mrinasset160': 6.492, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': -0.01, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.134, 'mrwrings4': -2.324}
ann. std {'mrinasset160': 11.149, 'mrwrings4': 2.616}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.89}

