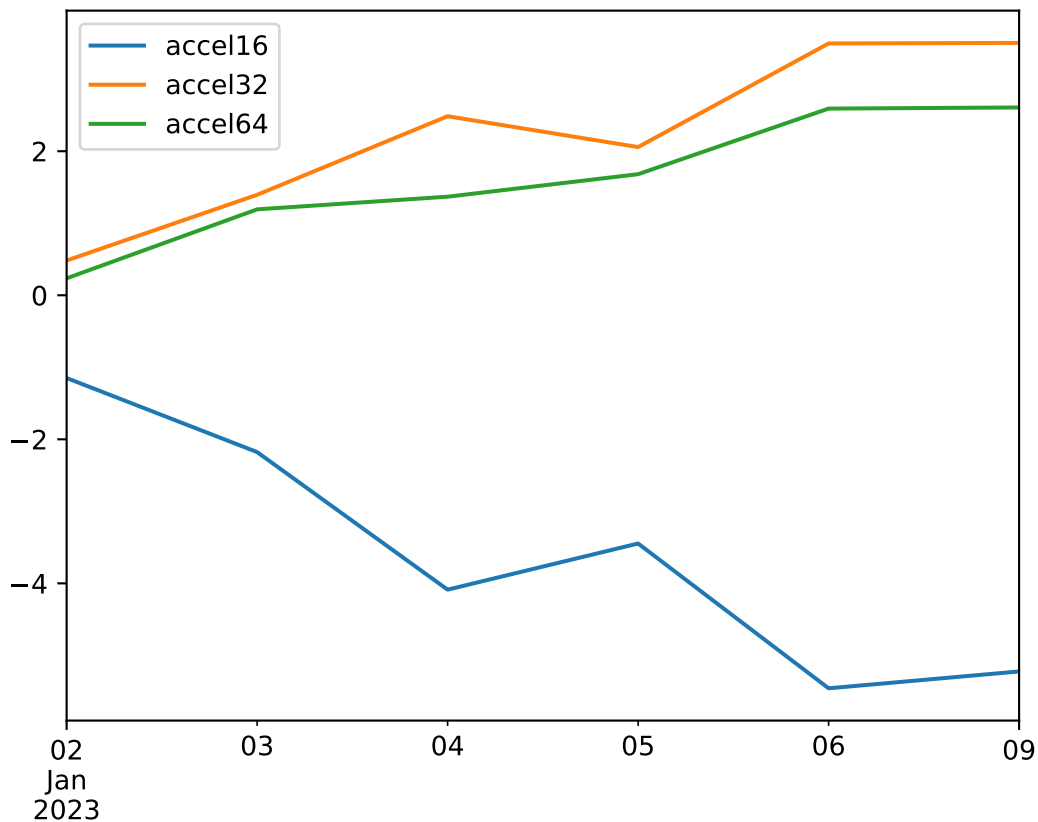
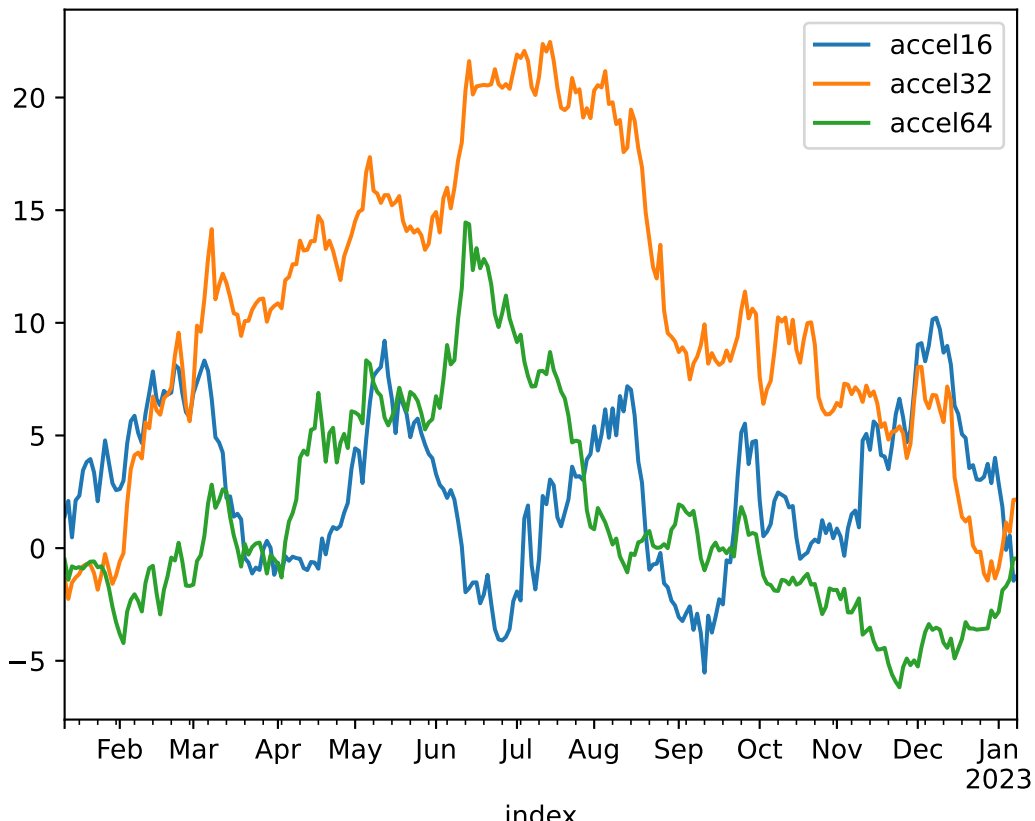


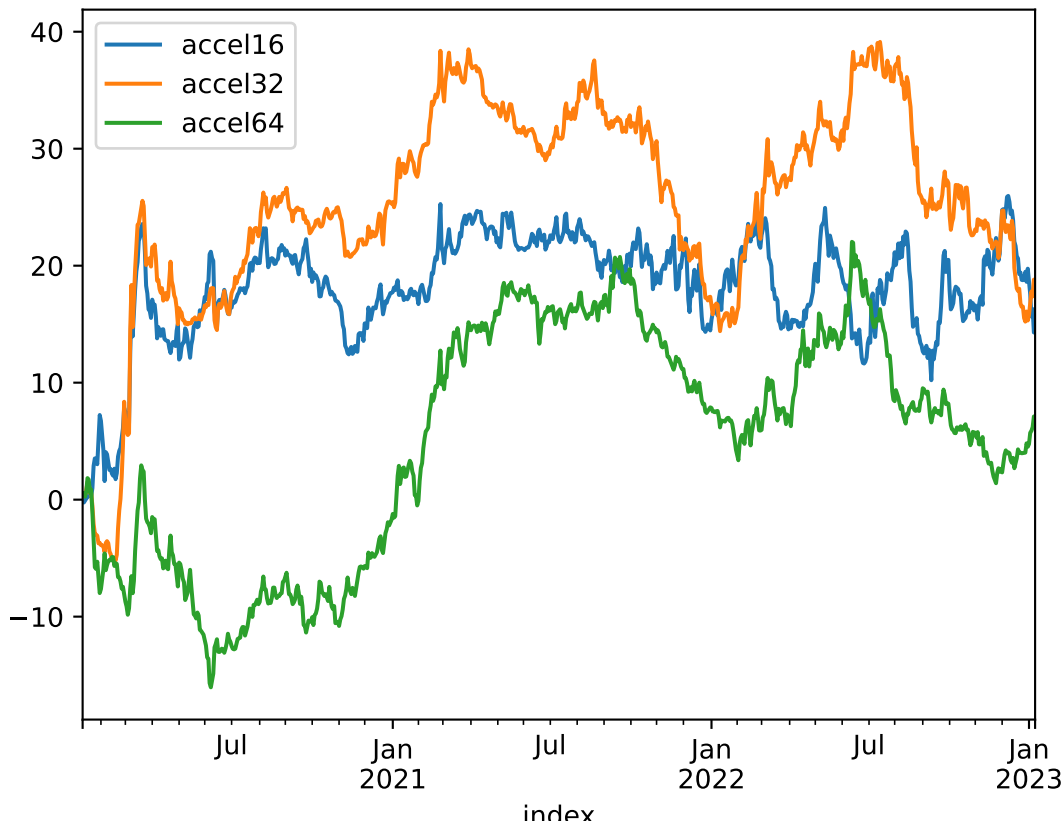
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -222.853, 'accel32': 149.499, 'accel64': 111.254}
ann. std {'accel16': 17.508, 'accel32': 11.229, 'accel64': 6.39}
ann. SR {'accel16': -12.73, 'accel32': 13.31, 'accel64': 17.41}



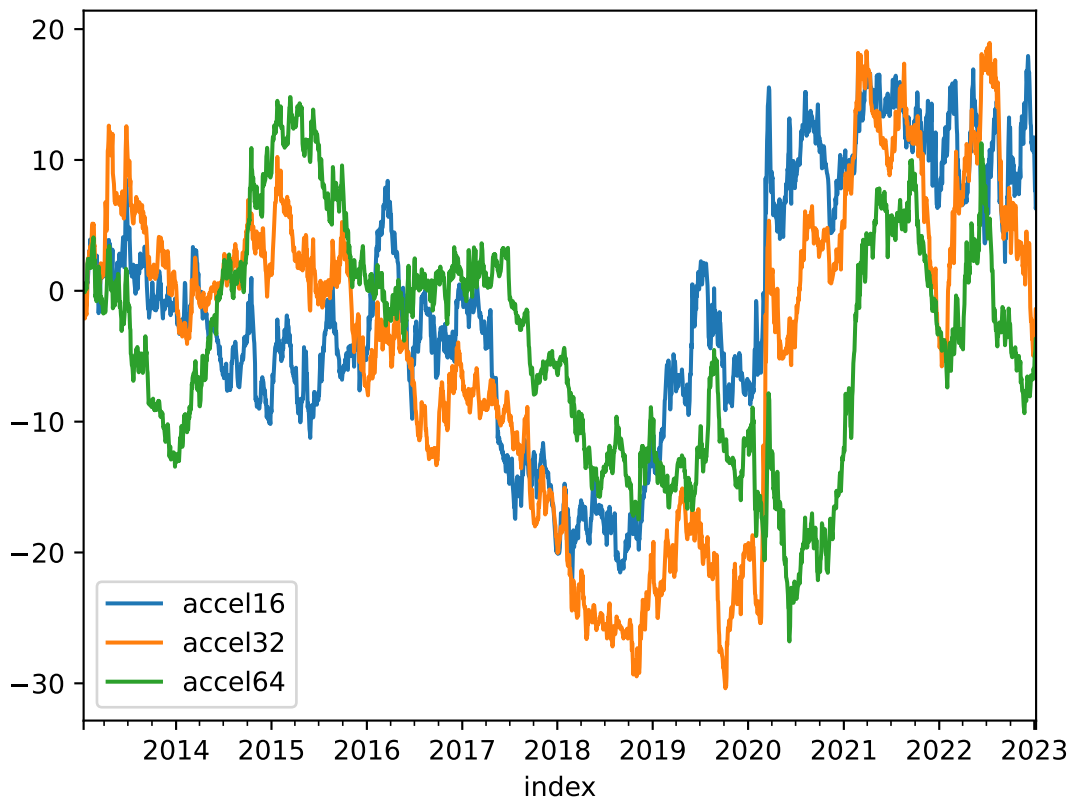
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -1.195, 'accel32': 2.123, 'accel64': -0.448}
ann. std {'accel16': 16.421, 'accel32': 14.755, 'accel64': 11.721}
ann. SR {'accel16': -0.07, 'accel32': 0.14, 'accel64': -0.04}



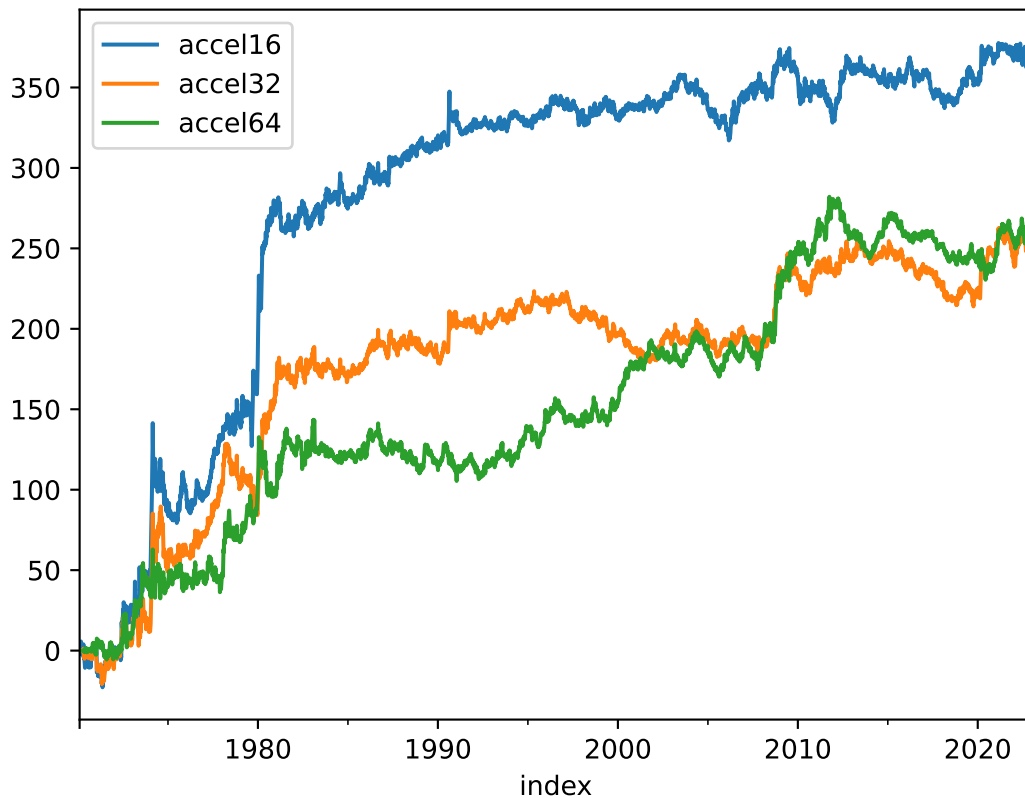
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 4.76, 'accel32': 6.168, 'accel64': 2.336}
ann. std {'accel16': 15.041, 'accel32': 14.33, 'accel64': 11.685}
ann. SR {'accel16': 0.32, 'accel32': 0.43, 'accel64': 0.2}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.639, 'accel32': -0.134, 'accel64': -0.357}
ann. std {'accel16': 11.966, 'accel32': 11.229, 'accel64': 9.586}
ann. SR {'accel16': 0.05, 'accel32': -0.01, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.801, 'accel32': 4.503, 'accel64': 4.702}
ann. std {'accel16': 15.732, 'accel32': 13.801, 'accel64': 13.326}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

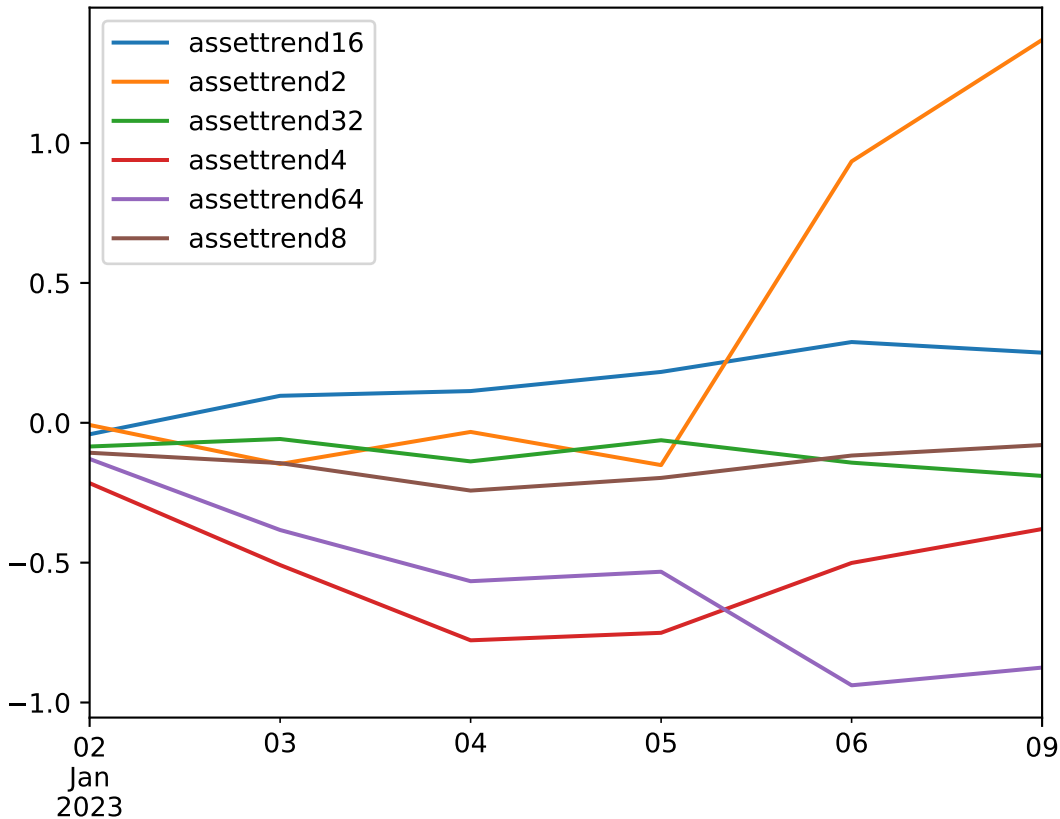


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 10.7, 'assettrend2': 58.407, 'assettrend32': -8.101, 'assettrend4': -16.205, 'assettrend64': -37.341, 'assettrend8': -3.392}

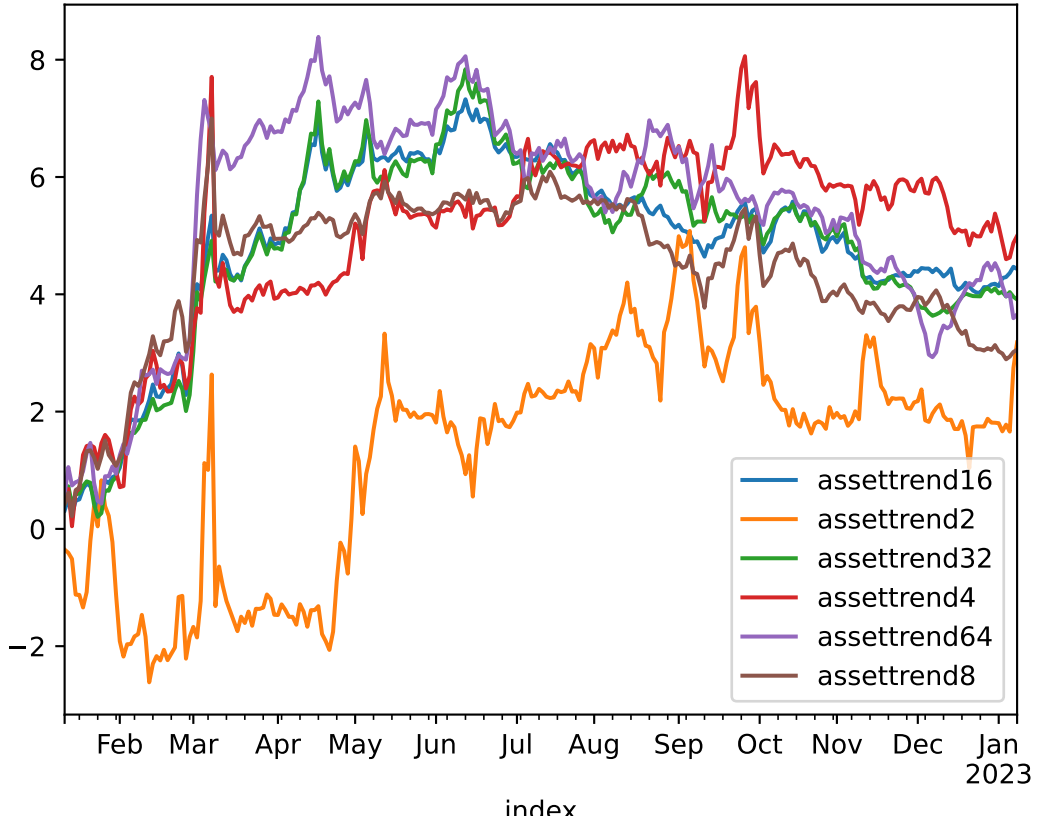
ann. std {'assettrend16': 1.196, 'assettrend2': 7.511, 'assettrend32': 1.078, 'assettrend4': 3.638, 'assettrend64': 2.836, 'assettrend8': 1.266}

ann. SR {'assettrend16': 8.94, 'assettrend2': 7.78, 'assettrend32': -7.51, 'assettrend4': -4.45, 'assettrend64': -13.16, 'assettrend8': -2.68}



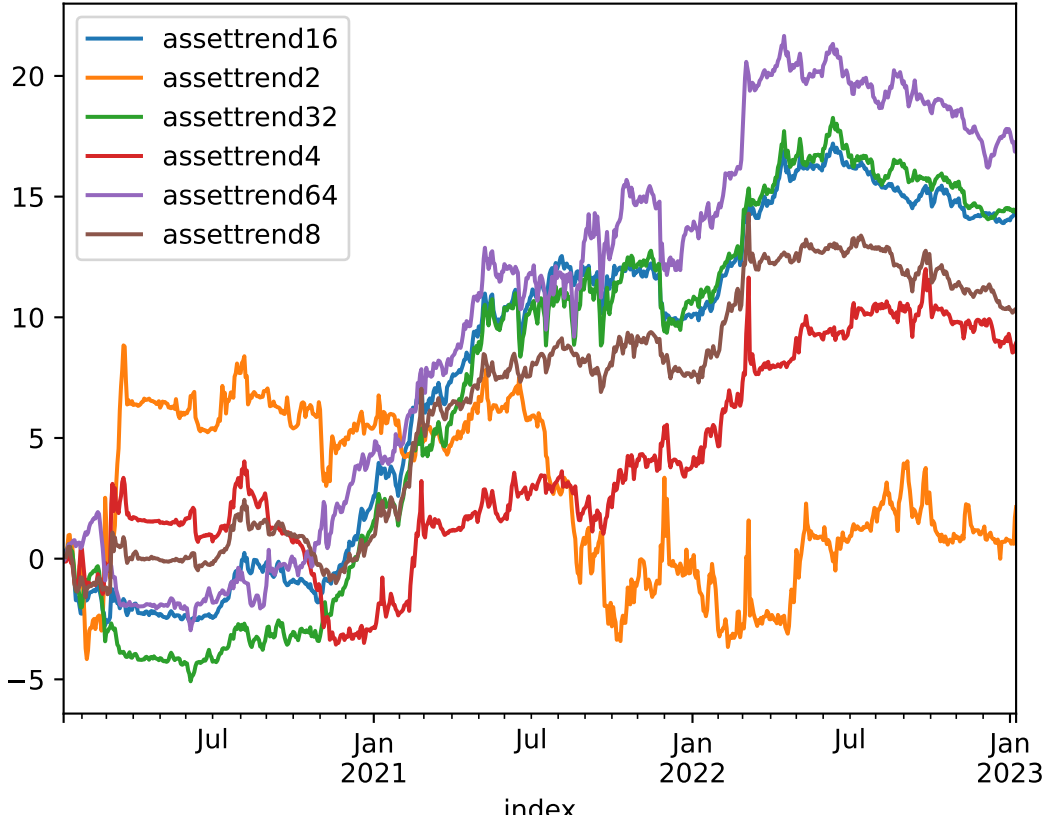
Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.363, 'assettrend2': 3.13, 'assettrend32': 3.851, 'assettrend4': 4.92, 'assettrend64': 3.6, 'assettrend8': 3.008}
ann. std {'assettrend16': 3.024, 'assettrend2': 7.714, 'assettrend32': 3.314, 'assettrend4': 5.749, 'assettrend64': 3.992, 'assettrend8': 3.745}
ann. SR {'assettrend16': 1.44, 'assettrend2': 0.41, 'assettrend32': 1.16, 'assettrend4': 0.86, 'assettrend64': 0.9, 'assettrend8': 0.8}



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

ann. mean {'assettrend16': 4.689, 'assettrend2': 0.7, 'assettrend32': 4.699, 'assettrend4': 2.929, 'assettrend64': 5.548, 'assettrend8': 3.393}
ann. std {'assettrend16': 3.605, 'assettrend2': 7.792, 'assettrend32': 4.424, 'assettrend4': 5.365, 'assettrend64': 5.139, 'assettrend8': 3.745}
ann. SR {'assettrend16': 1.3, 'assettrend2': 0.09, 'assettrend32': 1.06, 'assettrend4': 0.55, 'assettrend64': 1.08, 'assettrend8': 0.91}

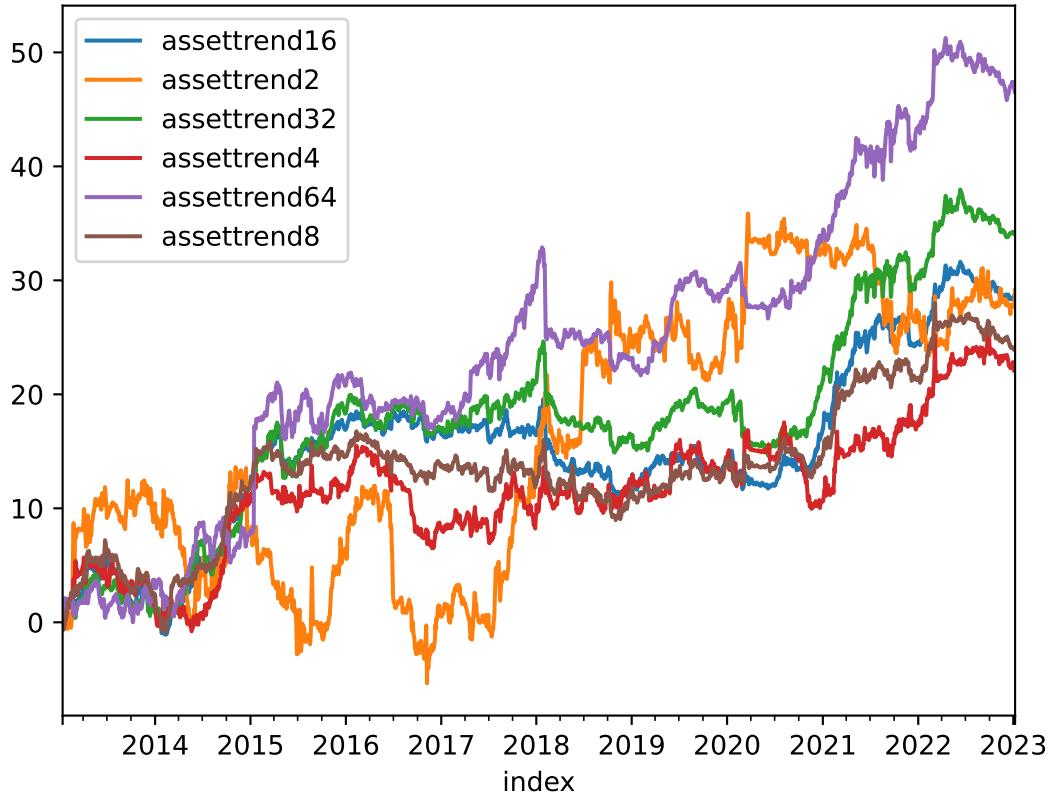


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.822, 'assettrend2': 2.864, 'assettrend32': 3.343, 'assettrend4': 2.205, 'assettrend64': 4.57, 'assettrend8': 2.363}

ann. std {'assettrend16': 3.269, 'assettrend2': 8.405, 'assettrend32': 3.747, 'assettrend4': 5.007, 'assettrend64': 5.31, 'assettrend8': 3.568}

ann. SR {'assettrend16': 0.86, 'assettrend2': 0.34, 'assettrend32': 0.89, 'assettrend4': 0.44, 'assettrend64': 0.86, 'assettrend8': 0.66}

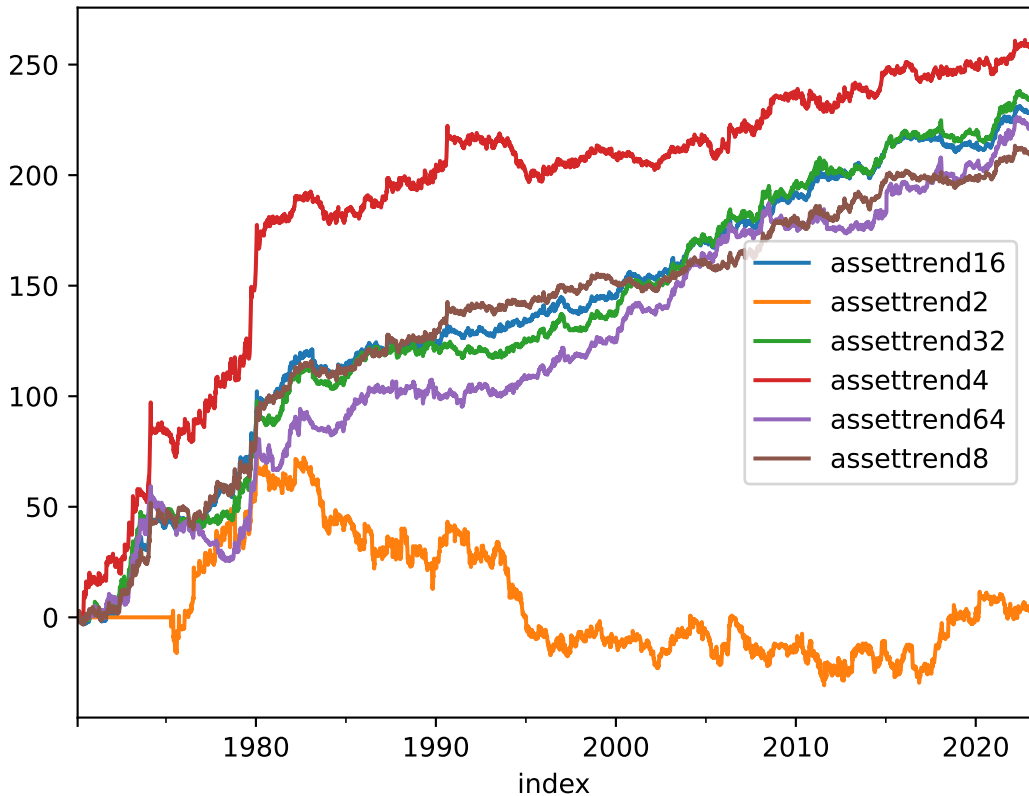


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.234, 'assettrend2': 0.091, 'assettrend32': 4.342, 'assettrend4': 4.785, 'assettrend64': 4.109, 'assettrend8': 3.881}

ann. std {'assettrend16': 4.66, 'assettrend2': 10.05, 'assettrend32': 4.895, 'assettrend4': 7.349, 'assettrend64': 5.47, 'assettrend8': 5.035}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.01, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}

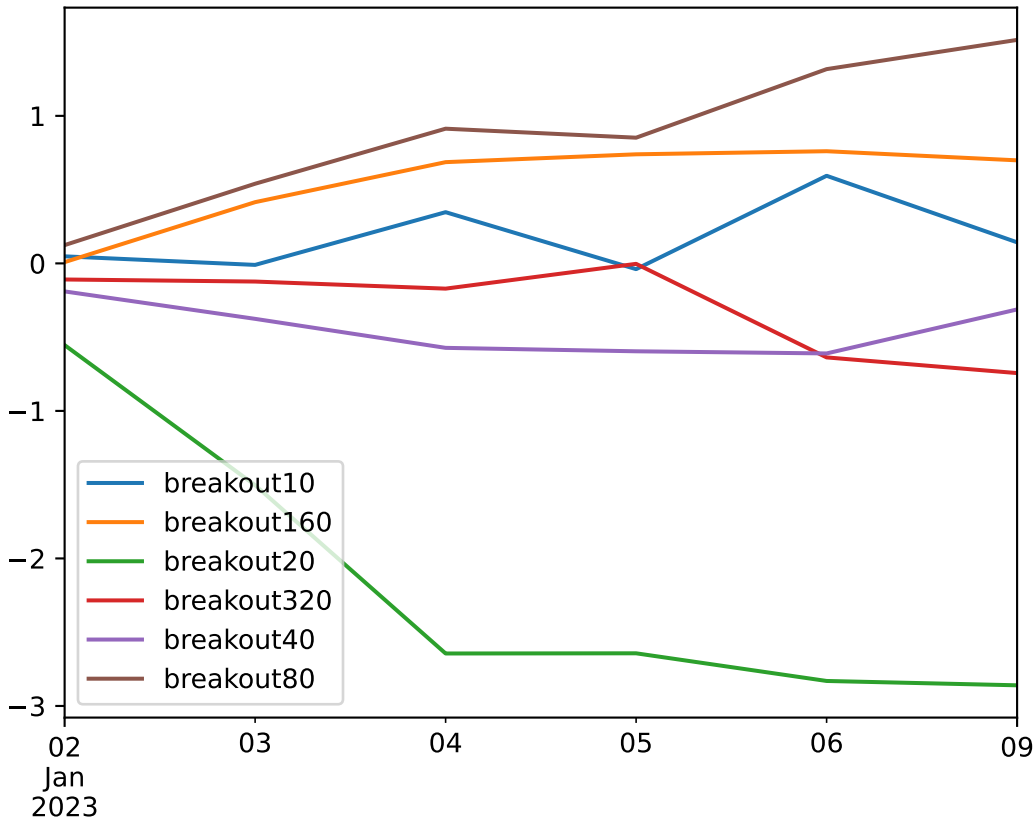


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 6.089, 'breakout160': 29.804, 'breakout20': -122.026, 'breakout320': -31.727, 'breakout40': -13.318, 'breakout80': 64.635}

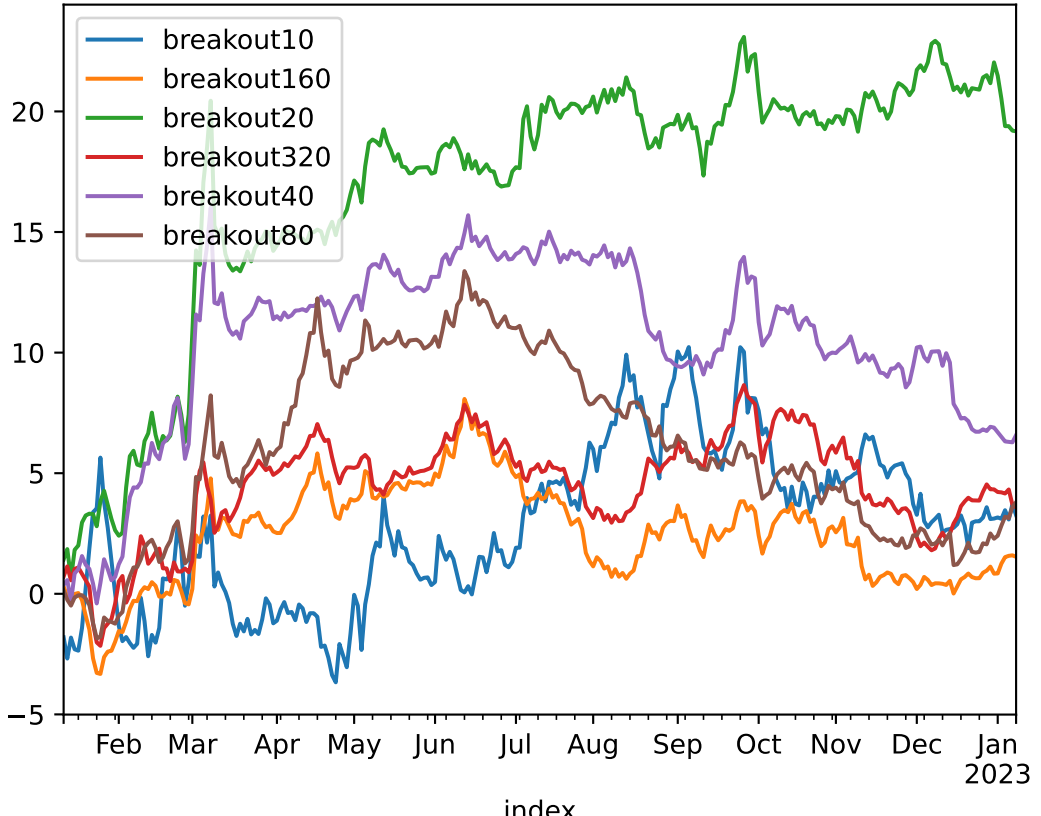
ann. std {'breakout10': 6.725, 'breakout160': 2.903, 'breakout20': 7.782, 'breakout320': 4.317, 'breakout40': 3.059, 'breakout80': 3.232}

ann. SR {'breakout10': 0.91, 'breakout160': 10.27, 'breakout20': -15.68, 'breakout320': -7.35, 'breakout40': -4.35, 'breakout80': 20.0}



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

ann. mean {'breakout10': 3.211, 'breakout160': 1.509, 'breakout20': 18.878, 'breakout320': 3.53, 'breakout40': 6.477, 'breakout80': 3.74}
 ann. std {'breakout10': 13.462, 'breakout160': 7.077, 'breakout20': 12.034, 'breakout320': 7.372, 'breakout40': 9.655, 'breakout80': 7.94}
 ann. SR {'breakout10': 0.24, 'breakout160': 0.21, 'breakout20': 1.57, 'breakout320': 0.48, 'breakout40': 0.67, 'breakout80': 0.47}

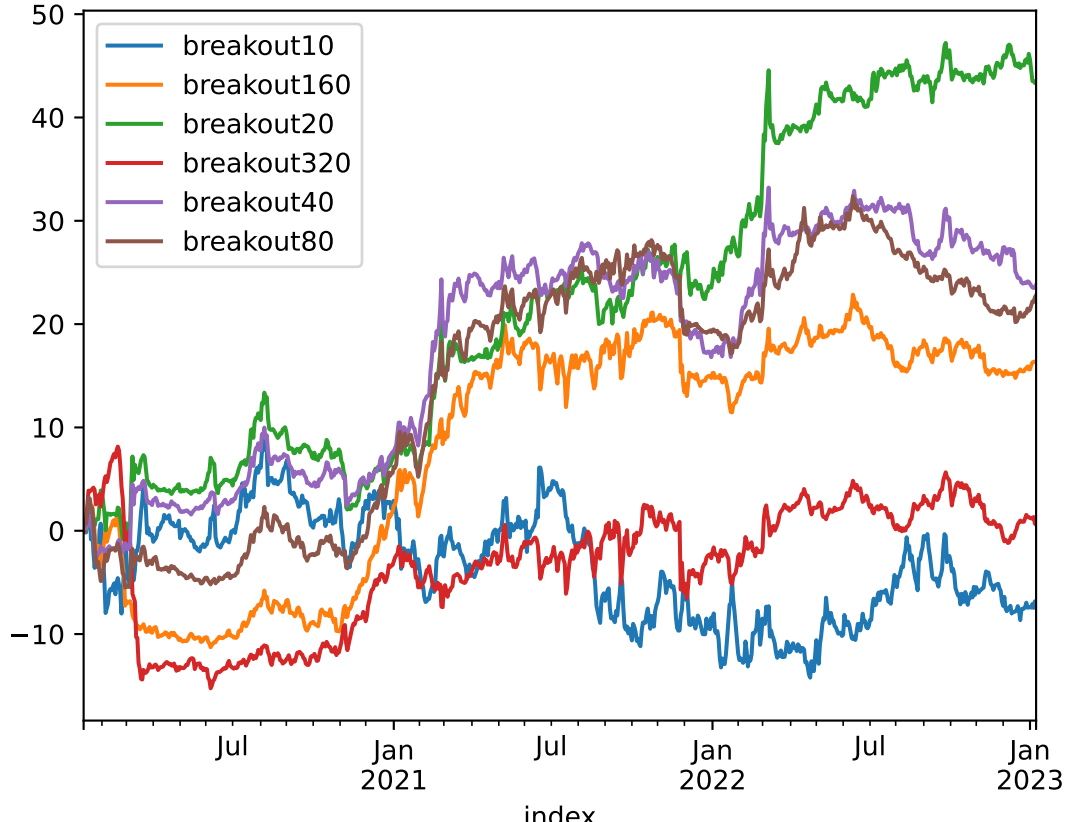


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -2.388, 'breakout160': 5.346, 'breakout20': 14.194, 'breakout320': 0.193, 'breakout40': 7.798, 'breakout80': 7.474}

ann. std {'breakout10': 14.5, 'breakout160': 9.728, 'breakout20': 11.508, 'breakout320': 10.718, 'breakout40': 9.97, 'breakout80': 9.538}

ann. SR {'breakout10': -0.16, 'breakout160': 0.55, 'breakout20': 1.23, 'breakout320': 0.02, 'breakout40': 0.78, 'breakout80': 0.78}

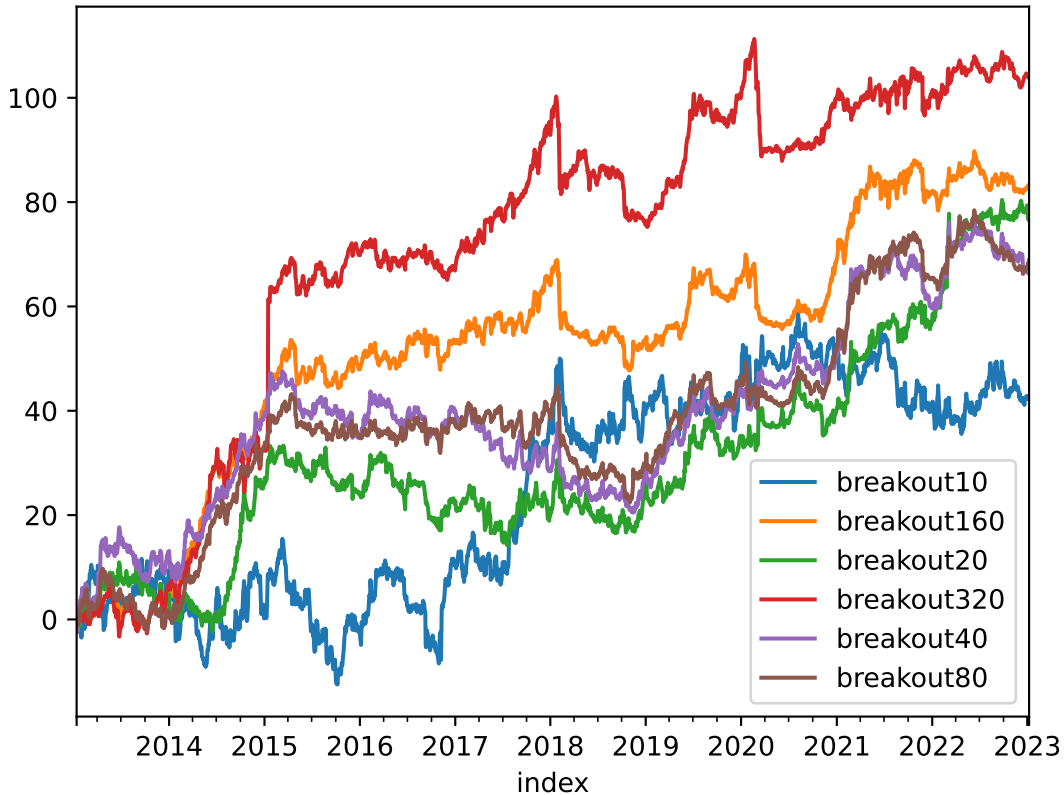


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.172, 'breakout160': 8.173, 'breakout20': 7.513, 'breakout320': 10.186, 'breakout40': 6.539, 'breakout80': 6.762}

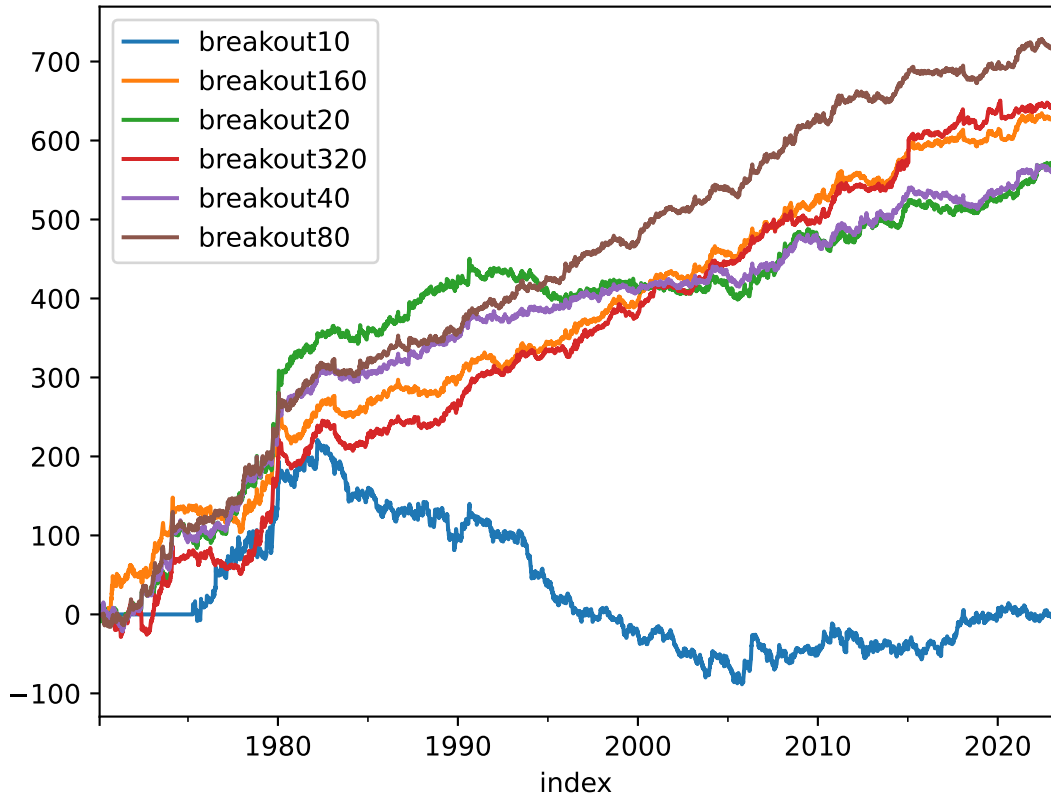
ann. std {'breakout10': 15.686, 'breakout160': 9.117, 'breakout20': 11.202, 'breakout320': 13.333, 'breakout40': 9.829, 'breakout80': 9.02}

ann. SR {'breakout10': 0.27, 'breakout160': 0.9, 'breakout20': 0.67, 'breakout320': 0.76, 'breakout40': 0.67, 'breakout80': 0.75}



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

ann. mean {'breakout10': -0.035, 'breakout160': 11.643, 'breakout20': 10.527, 'breakout320': 11.92, 'breakout40': 10.375, 'breakout80': 13.329}
 ann. std {'breakout10': 20.833, 'breakout160': 12.496, 'breakout20': 16.102, 'breakout320': 13.049, 'breakout40': 13.234, 'breakout80': 12.756}
 ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}

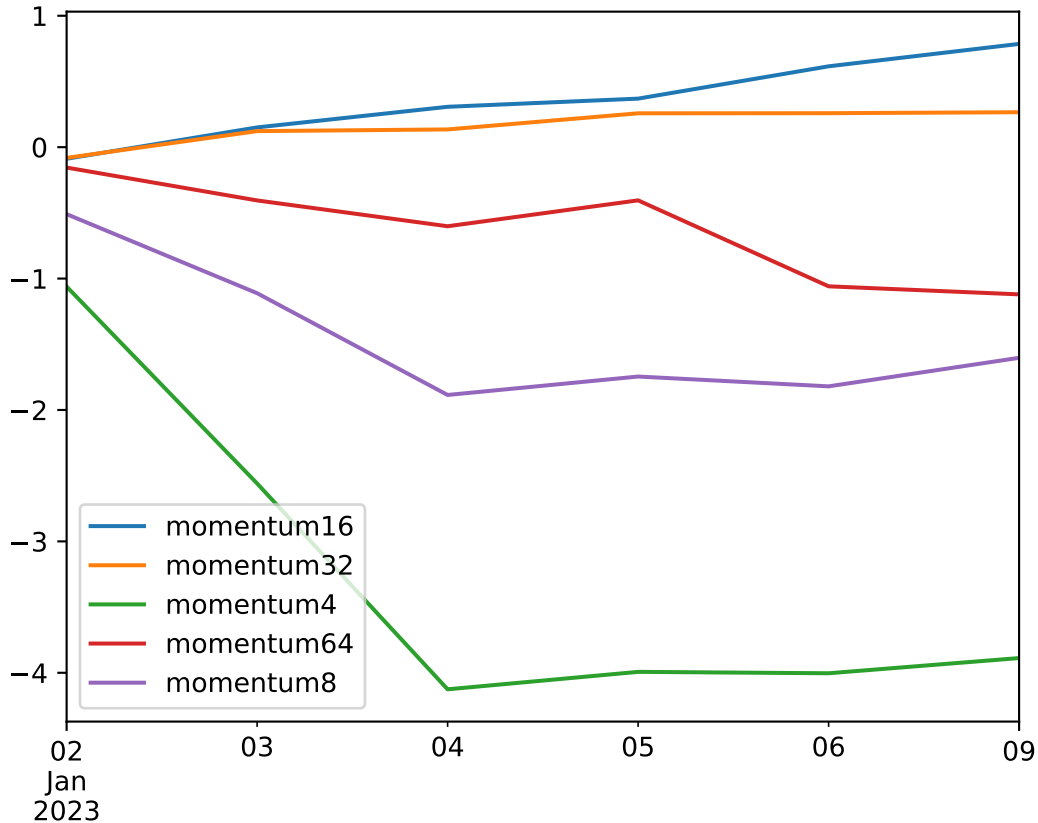


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 33.527, 'momentum32': 11.343, 'momentum4': -165.888, 'momentum64': -47.797, 'momentum8': -68.401}

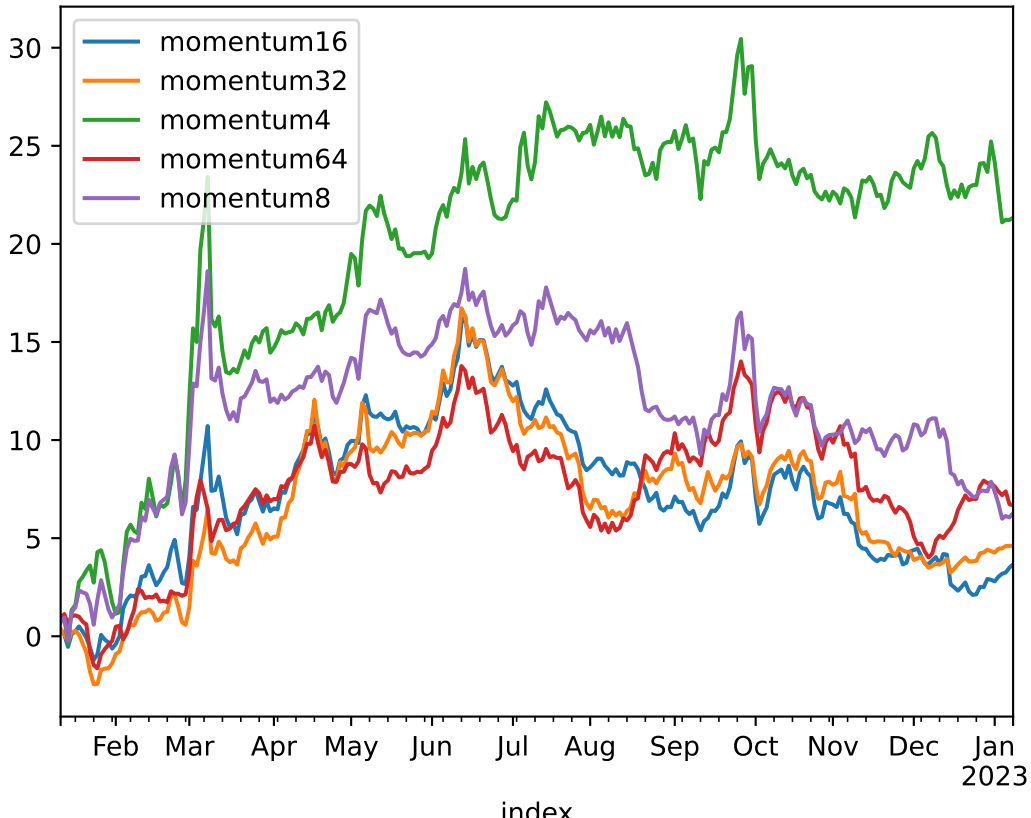
ann. std {'momentum16': 2.022, 'momentum32': 1.626, 'momentum4': 13.069, 'momentum64': 4.45, 'momentum8': 6.657}

ann. SR {'momentum16': 16.58, 'momentum32': 6.98, 'momentum4': -12.69, 'momentum64': -10.74, 'momentum8': -10.28}



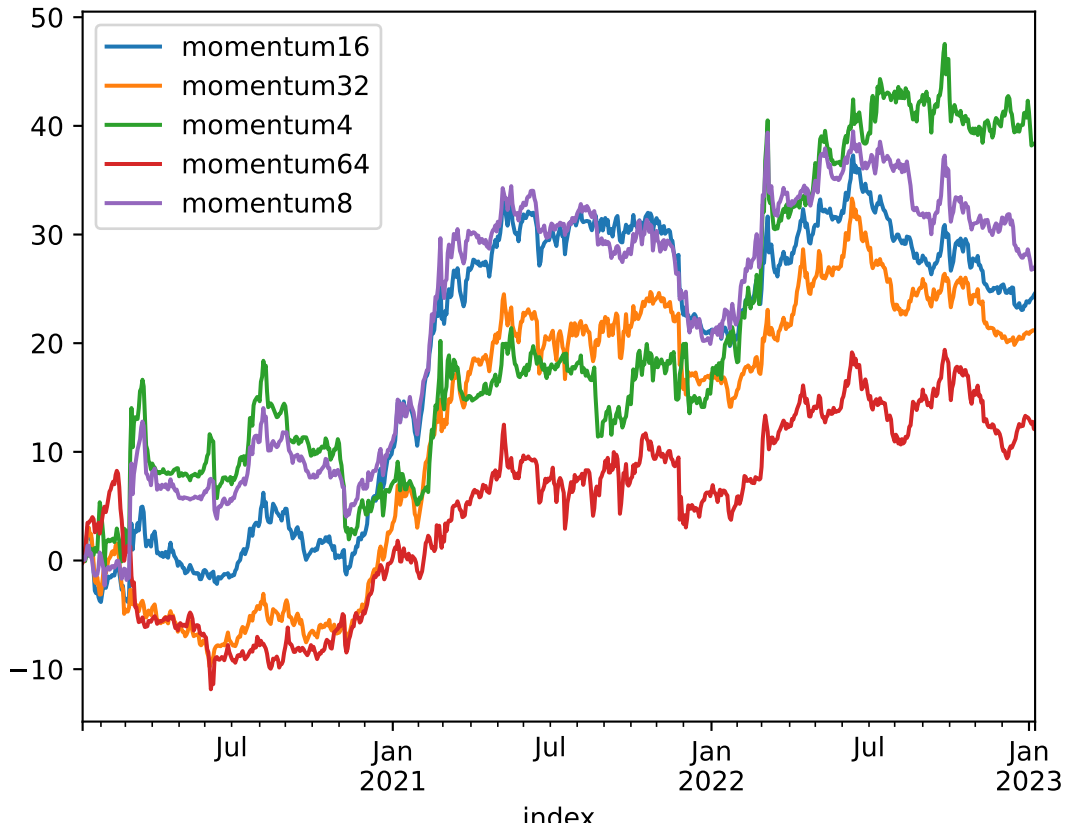
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 3.609, 'momentum32': 4.538, 'momentum4': 21.006, 'momentum64': 6.569, 'momentum8': 6.178}
ann. std {'momentum16': 10.086, 'momentum32': 9.608, 'momentum4': 17.367, 'momentum64': 9.323, 'momentum8': 13.203}
ann. SR {'momentum16': 0.36, 'momentum32': 0.47, 'momentum4': 1.21, 'momentum64': 0.7, 'momentum8': 0.47}



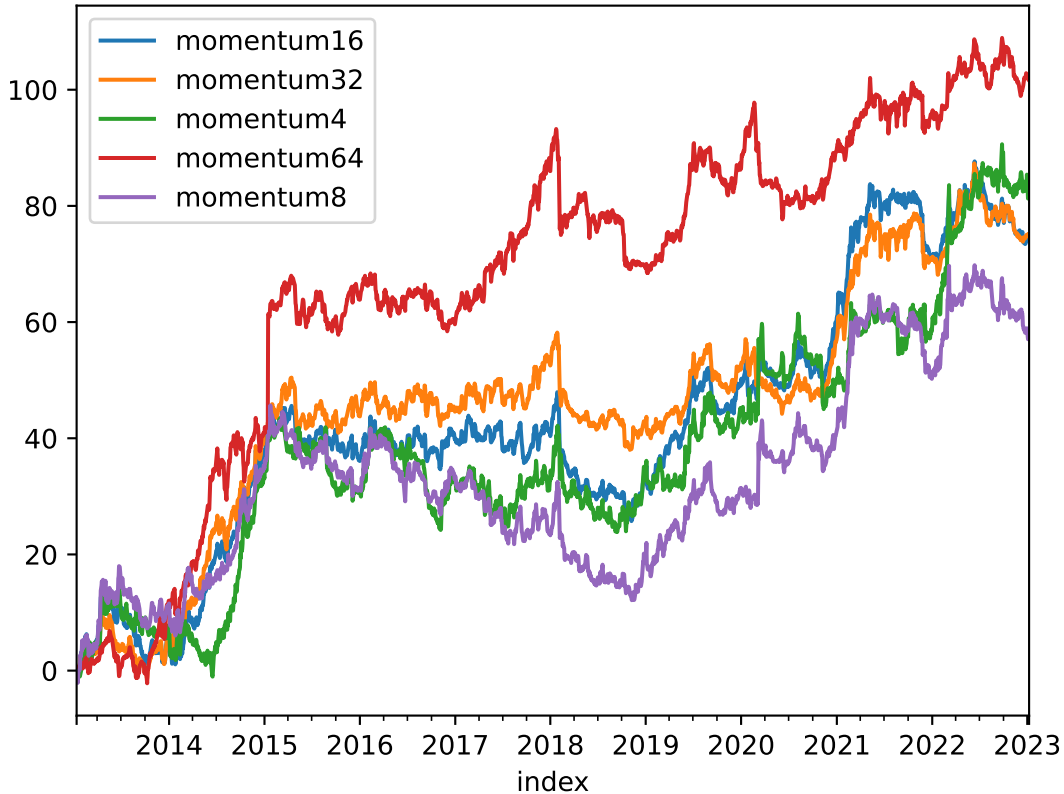
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.066, 'momentum32': 6.948, 'momentum4': 12.596, 'momentum64': 3.951, 'momentum8': 8.862}
ann. std {'momentum16': 11.004, 'momentum32': 10.847, 'momentum4': 16.113, 'momentum64': 10.921, 'momentum8': 12.79}
ann. SR {'momentum16': 0.73, 'momentum32': 0.64, 'momentum4': 0.78, 'momentum64': 0.36, 'momentum8': 0.69}



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

ann. mean {'momentum16': 7.364, 'momentum32': 7.384, 'momentum4': 8.003, 'momentum64': 9.975, 'momentum8': 5.63}
ann. std {'momentum16': 9.948, 'momentum32': 9.488, 'momentum4': 13.707, 'momentum64': 12.004, 'momentum8': 11.319}
ann. SR {'momentum16': 0.74, 'momentum32': 0.78, 'momentum4': 0.58, 'momentum64': 0.83, 'momentum8': 0.5}

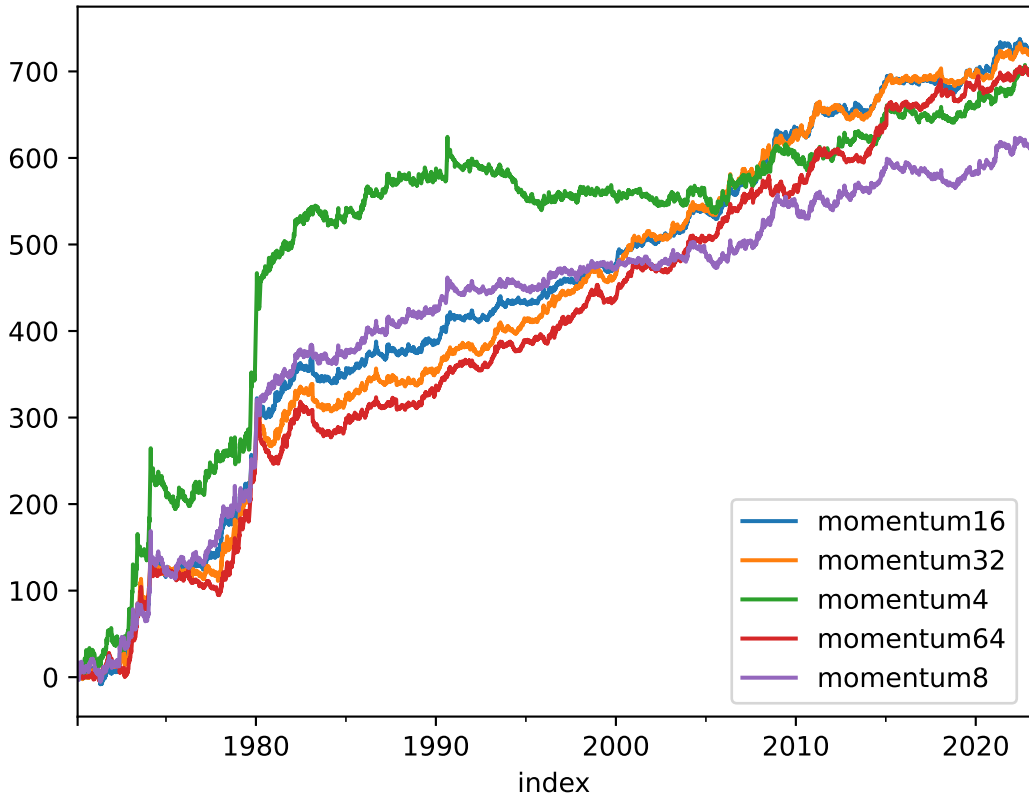


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.438, 'momentum32': 13.357, 'momentum4': 12.946, 'momentum64': 12.945, 'momentum8': 11.324}

ann. std {'momentum16': 14.223, 'momentum32': 13.852, 'momentum4': 20.079, 'momentum64': 13.489, 'momentum8': 15.872}

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

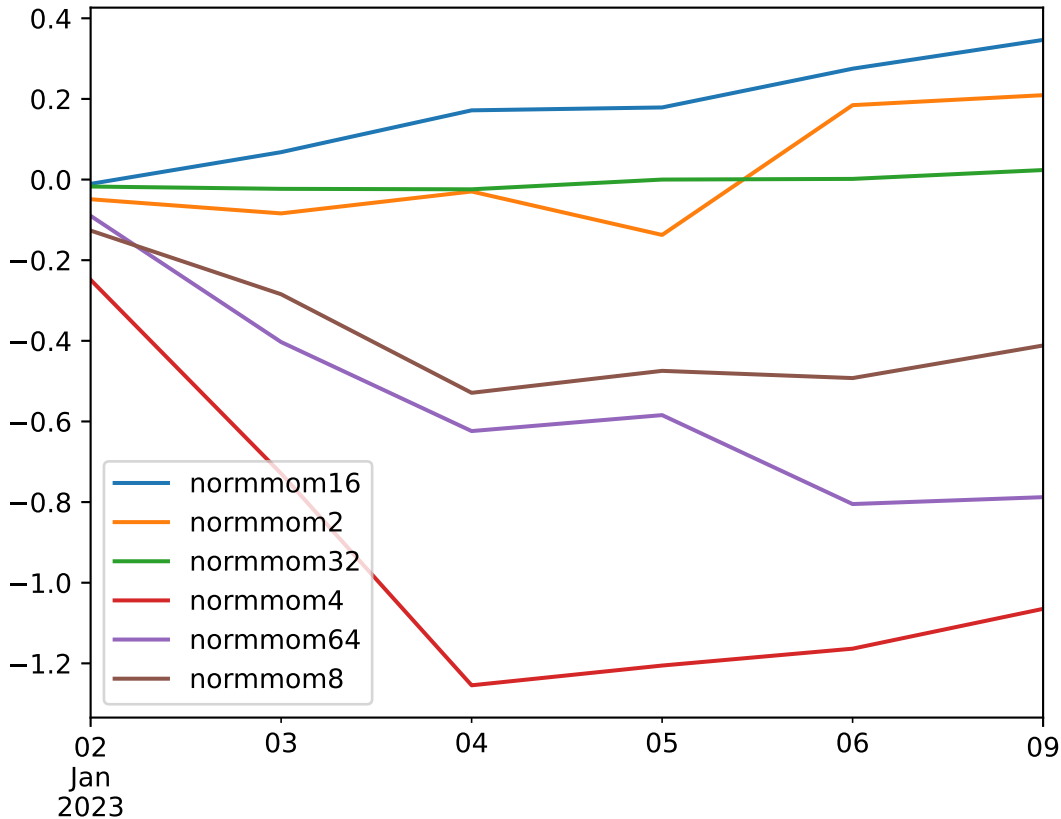


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 14.779, 'normmom2': 8.932, 'normmom32': 1.007, 'normmom4': -45.432, 'normmom64': -33.612, 'normmom8': -17.561}

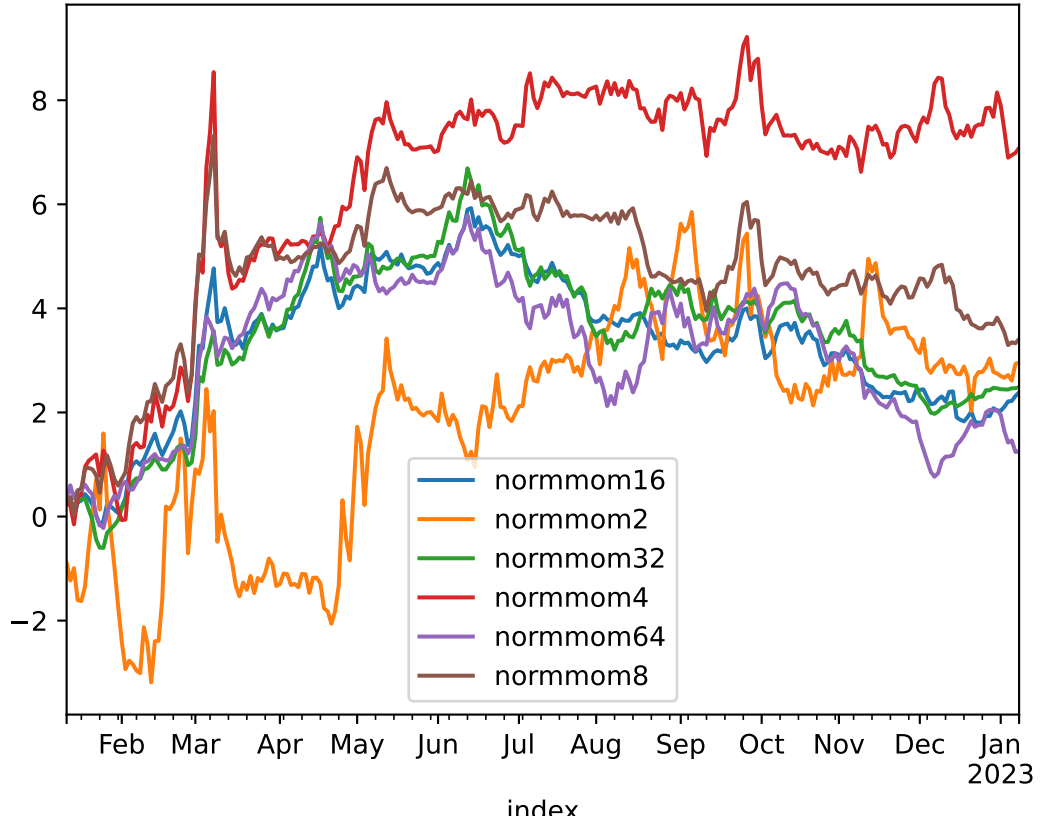
ann. std {'normmom16': 0.766, 'normmom2': 2.428, 'normmom32': 0.259, 'normmom4': 4.489, 'normmom64': 2.284, 'normmom8': 2.053}

ann. SR {'normmom16': 19.3, 'normmom2': 3.68, 'normmom32': 3.89, 'normmom4': -10.12, 'normmom64': -14.71, 'normmom8': -8.55}



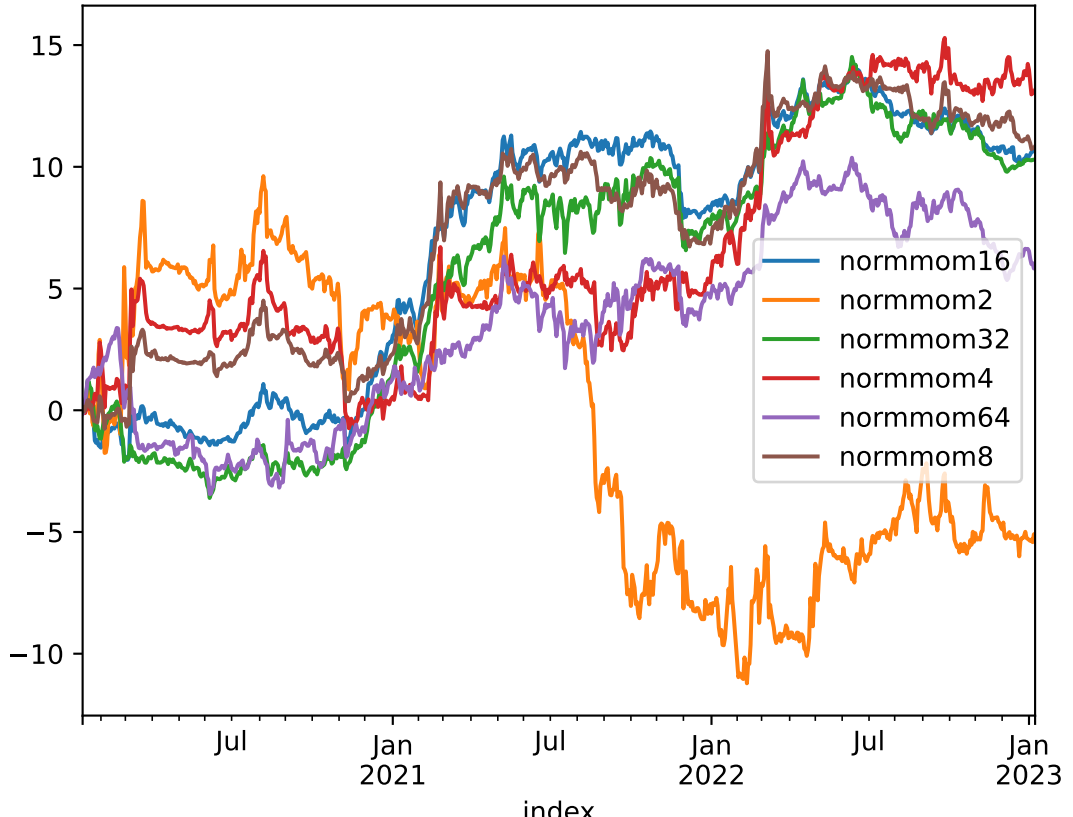
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.35, 'normmom2': 2.913, 'normmom32': 2.449, 'normmom4': 6.976, 'normmom64': 1.238, 'normmom8': 3.359}
ann. std {'normmom16': 3.129, 'normmom2': 8.016, 'normmom32': 3.135, 'normmom4': 5.993, 'normmom64': 3.428, 'normmom8': 4.237}
ann. SR {'normmom16': 0.75, 'normmom2': 0.36, 'normmom32': 0.78, 'normmom4': 1.16, 'normmom64': 0.36, 'normmom8': 0.79}



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

ann. mean {'normmom16': 3.536, 'normmom2': -1.662, 'normmom32': 3.38, 'normmom4': 4.315, 'normmom64': 1.914, 'normmom8': 3.554}
ann. std {'normmom16': 3.703, 'normmom2': 8.465, 'normmom32': 4.043, 'normmom4': 5.837, 'normmom64': 4.314, 'normmom8': 4.244}
ann. SR {'normmom16': 0.95, 'normmom2': -0.2, 'normmom32': 0.84, 'normmom4': 0.74, 'normmom64': 0.44, 'normmom8': 0.84}

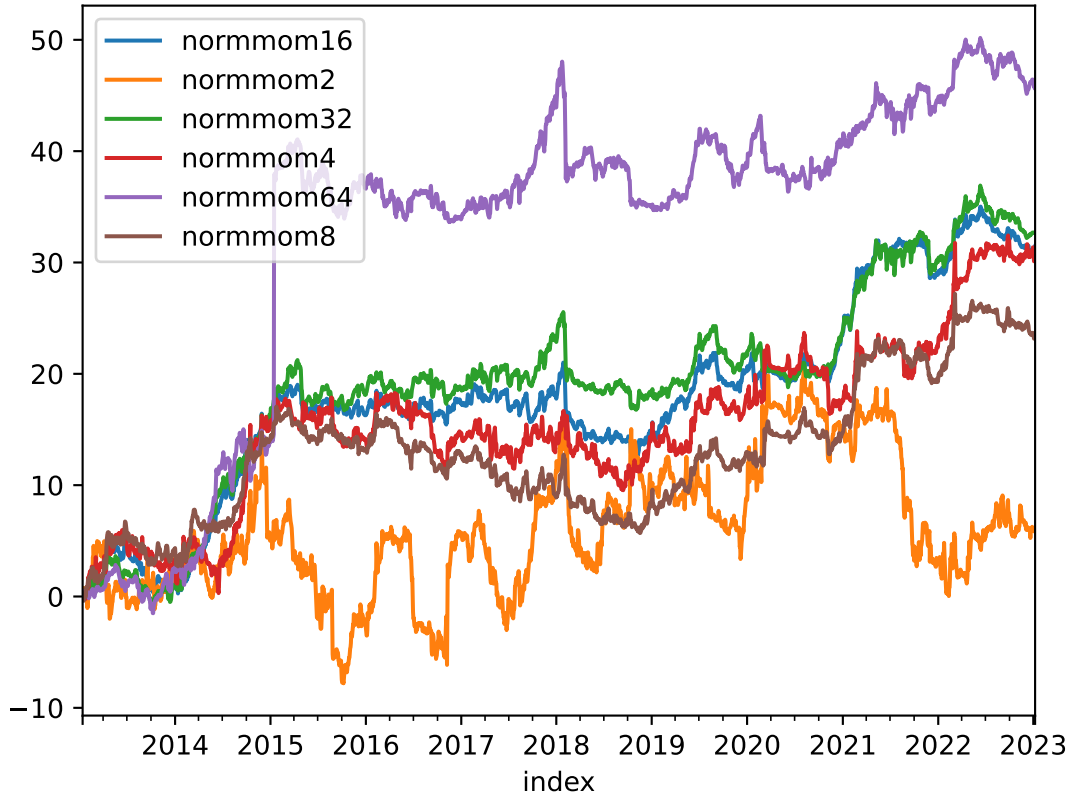


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.092, 'normmom2': 0.607, 'normmom32': 3.212, 'normmom4': 2.975, 'normmom64': 4.482, 'normmom8': 2.286}

ann. std {'normmom16': 3.576, 'normmom2': 9.051, 'normmom32': 3.726, 'normmom4': 5.498, 'normmom64': 8.562, 'normmom8': 4.045}

ann. SR {'normmom16': 0.86, 'normmom2': 0.07, 'normmom32': 0.86, 'normmom4': 0.54, 'normmom64': 0.52, 'normmom8': 0.56}

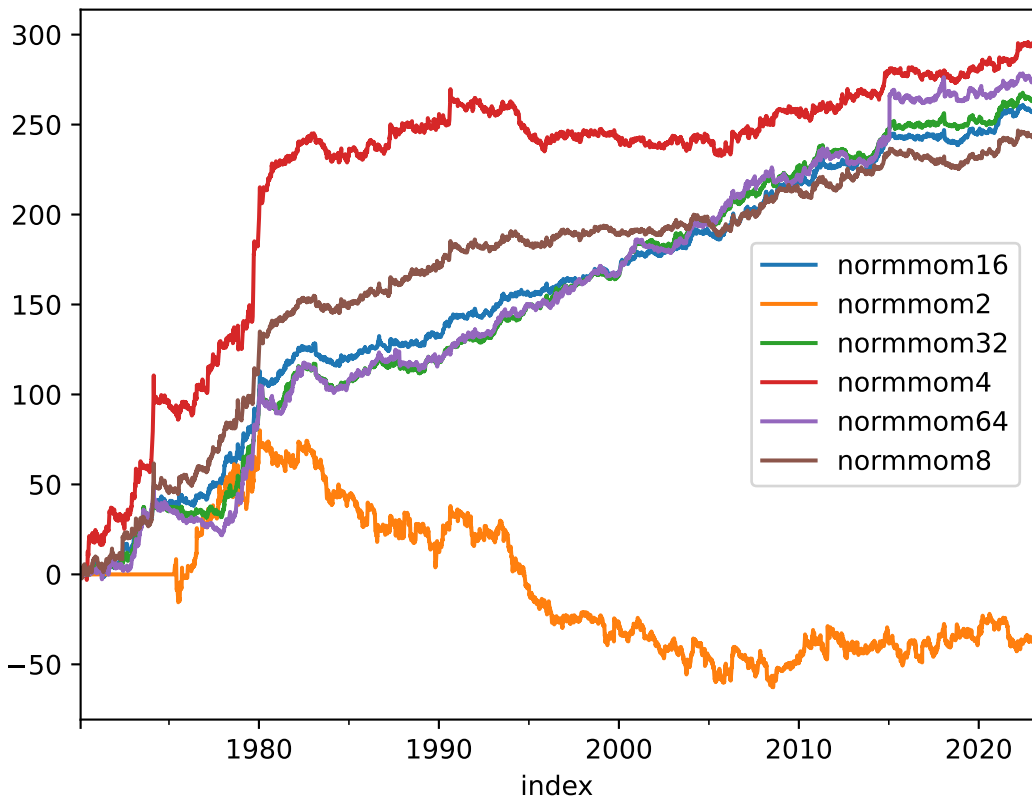


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.772, 'normmom2': -0.679, 'normmom32': 4.885, 'normmom4': 5.447, 'normmom64': 5.078, 'normmom8': 4.502}

ann. std {'normmom16': 4.923, 'normmom2': 11.199, 'normmom32': 4.991, 'normmom4': 8.323, 'normmom64': 6.31, 'normmom8': 5.932}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.8, 'normmom8': 0.76}

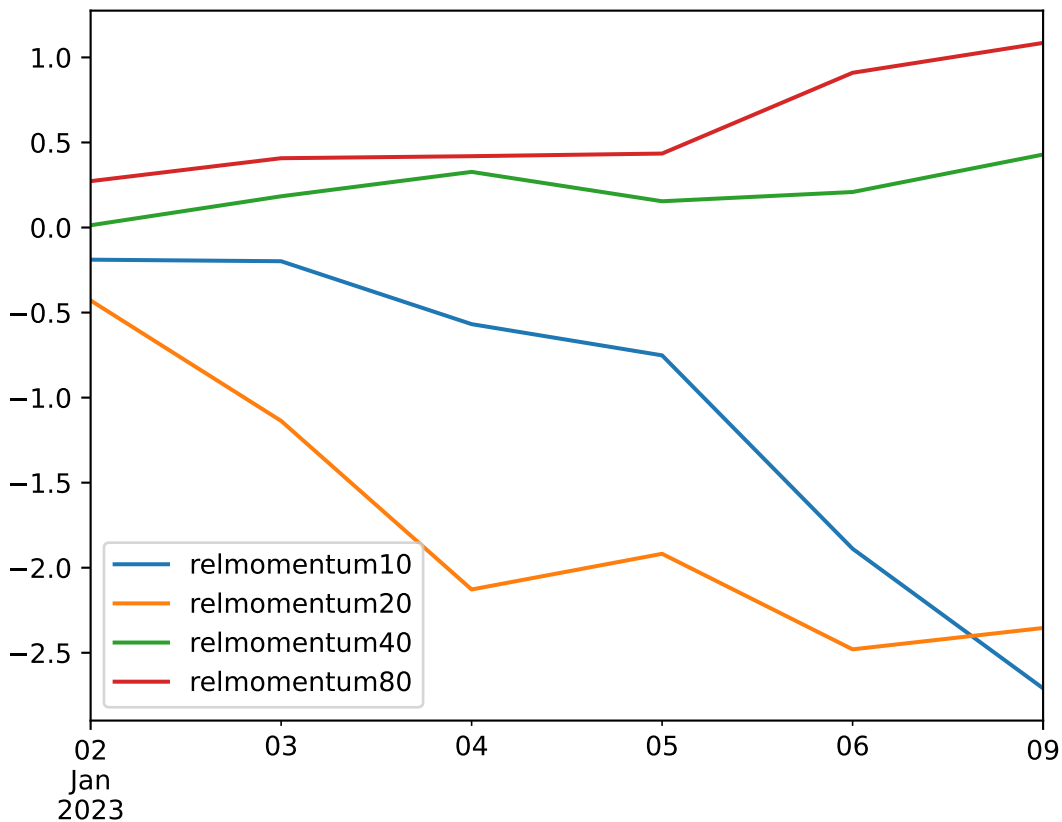


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -115.579, 'relmomentum20': -100.449, 'relmomentum40': 18.306, 'relmomentum80': 46.305}

ann. std {'relmomentum10': 6.969, 'relmomentum20': 7.569, 'relmomentum40': 2.268, 'relmomentum80': 2.798}

ann. SR {'relmomentum10': -16.58, 'relmomentum20': -13.27, 'relmomentum40': 8.07, 'relmomentum80': 16.55}

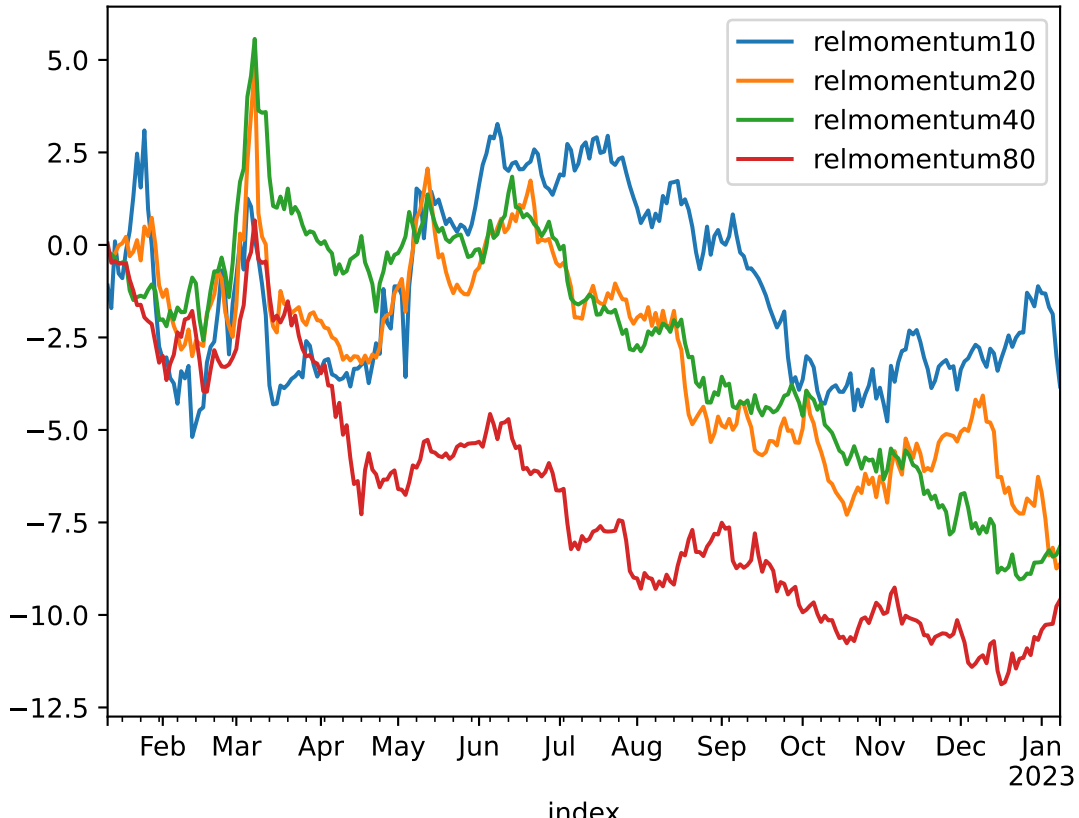


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.766, 'relmomentum20': -8.486, 'relmomentum40': -8.027, 'relmomentum80': -9.443}

ann. std {'relmomentum10': 10.043, 'relmomentum20': 8.516, 'relmomentum40': 6.664, 'relmomentum80': 5.714}

ann. SR {'relmomentum10': -0.37, 'relmomentum20': -1.0, 'relmomentum40': -1.2, 'relmomentum80': -1.65}

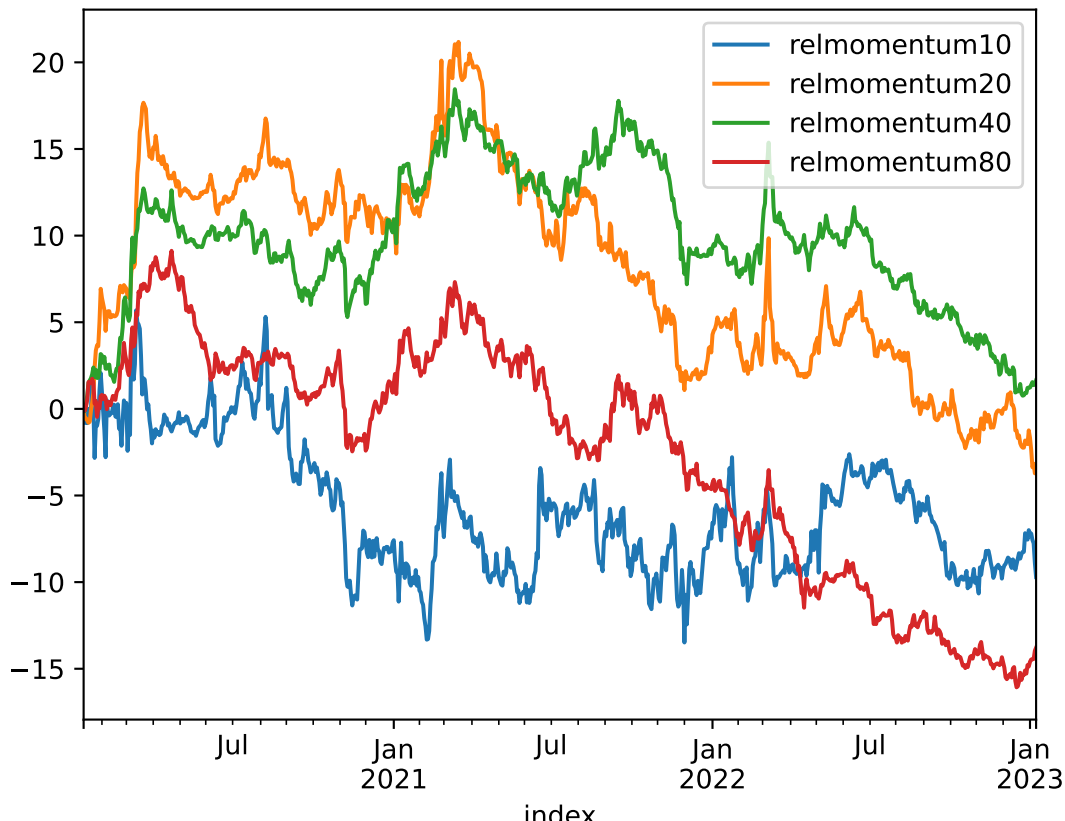


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -3.183, 'relmomentum20': -1.179, 'relmomentum40': 0.54, 'relmomentum80': -4.519}

ann. std {'relmomentum10': 12.706, 'relmomentum20': 9.08, 'relmomentum40': 7.474, 'relmomentum80': 6.954}

ann. SR {'relmomentum10': -0.25, 'relmomentum20': -0.13, 'relmomentum40': 0.07, 'relmomentum80': -0.65}

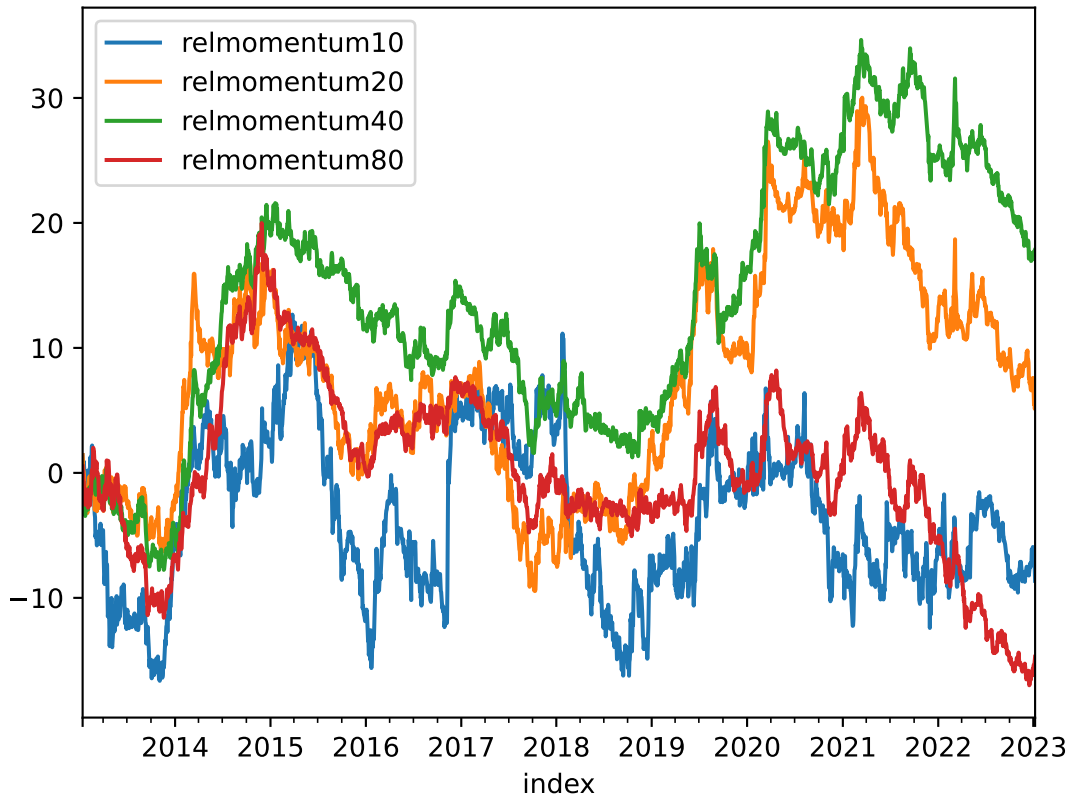


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.848, 'relmomentum20': 0.515, 'relmomentum40': 1.752, 'relmomentum80': -1.445}

ann. std {'relmomentum10': 12.88, 'relmomentum20': 8.969, 'relmomentum40': 7.354, 'relmomentum80': 6.798}

ann. SR {'relmomentum10': -0.07, 'relmomentum20': 0.06, 'relmomentum40': 0.24, 'relmomentum80': -0.21}

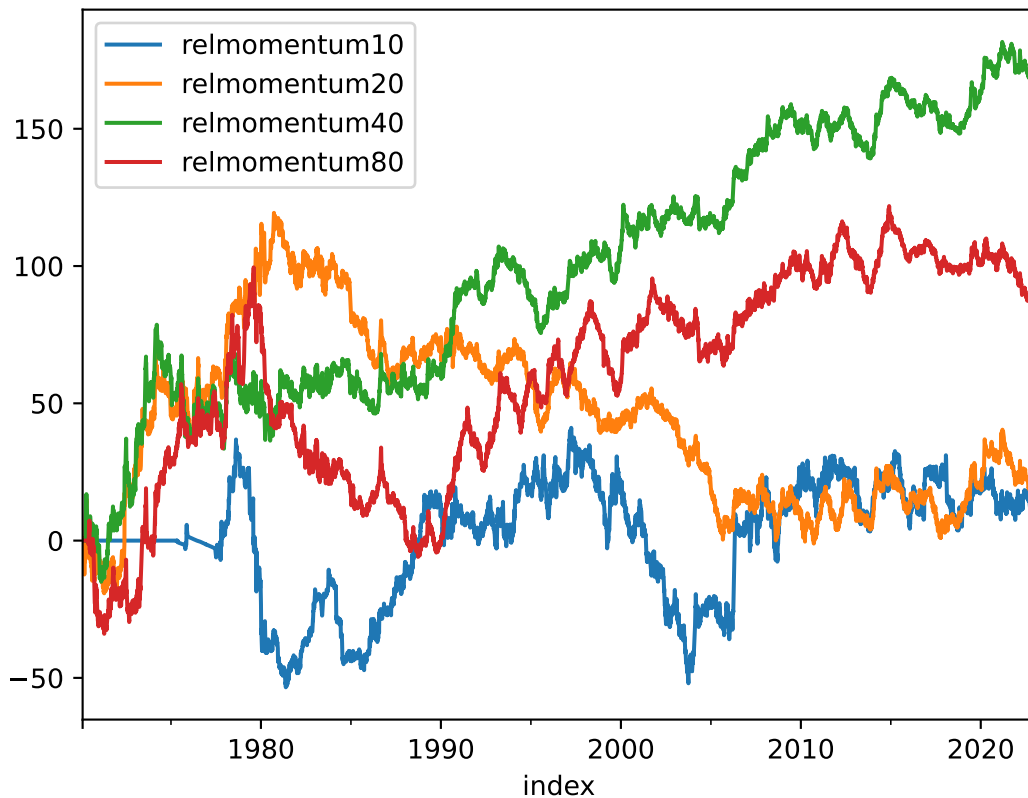


Total Trading Rule P&L for period '99Y'

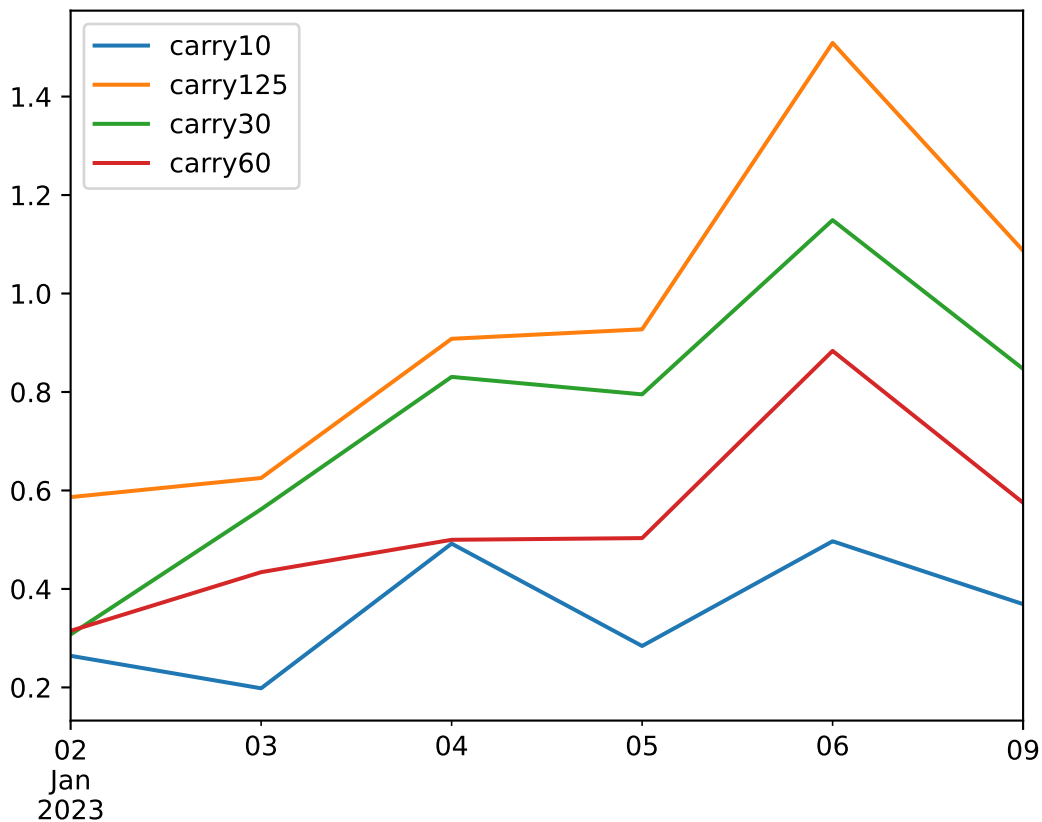
ann. mean {'relmomentum10': 0.21, 'relmomentum20': 0.29, 'relmomentum40': 3.056, 'relmomentum80': 1.615}

ann. std {'relmomentum10': 13.323, 'relmomentum20': 11.525, 'relmomentum40': 10.793, 'relmomentum80': 11.061}

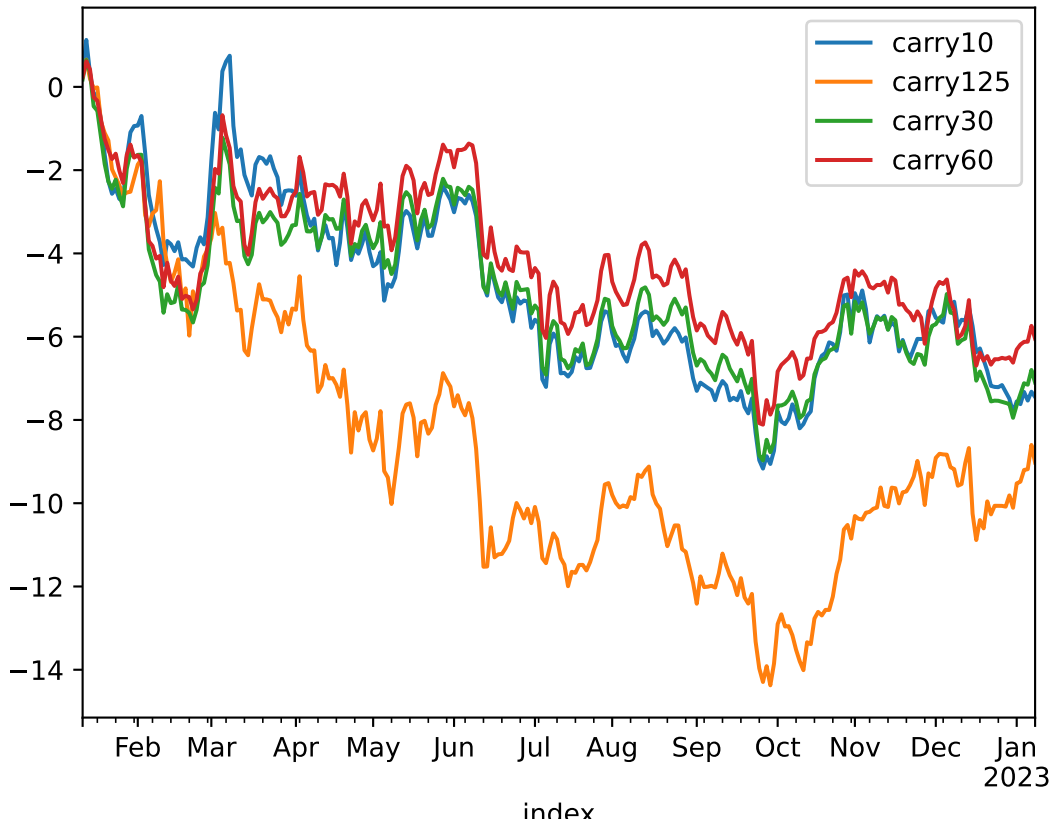
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.15}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 15.751, 'carry125': 46.38, 'carry30': 36.136, 'carry60': 24.536}
ann. std {'carry10': 3.524, 'carry125': 6.177, 'carry30': 4.109, 'carry60': 3.934}
ann. SR {'carry10': 4.47, 'carry125': 7.51, 'carry30': 8.79, 'carry60': 6.24}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -7.335, 'carry125': -8.884, 'carry30': -6.993, 'carry60': -5.956}
ann. std {'carry10': 7.048, 'carry125': 7.678, 'carry30': 6.727, 'carry60': 6.771}
ann. SR {'carry10': -1.04, 'carry125': -1.16, 'carry30': -1.04, 'carry60': -0.88}

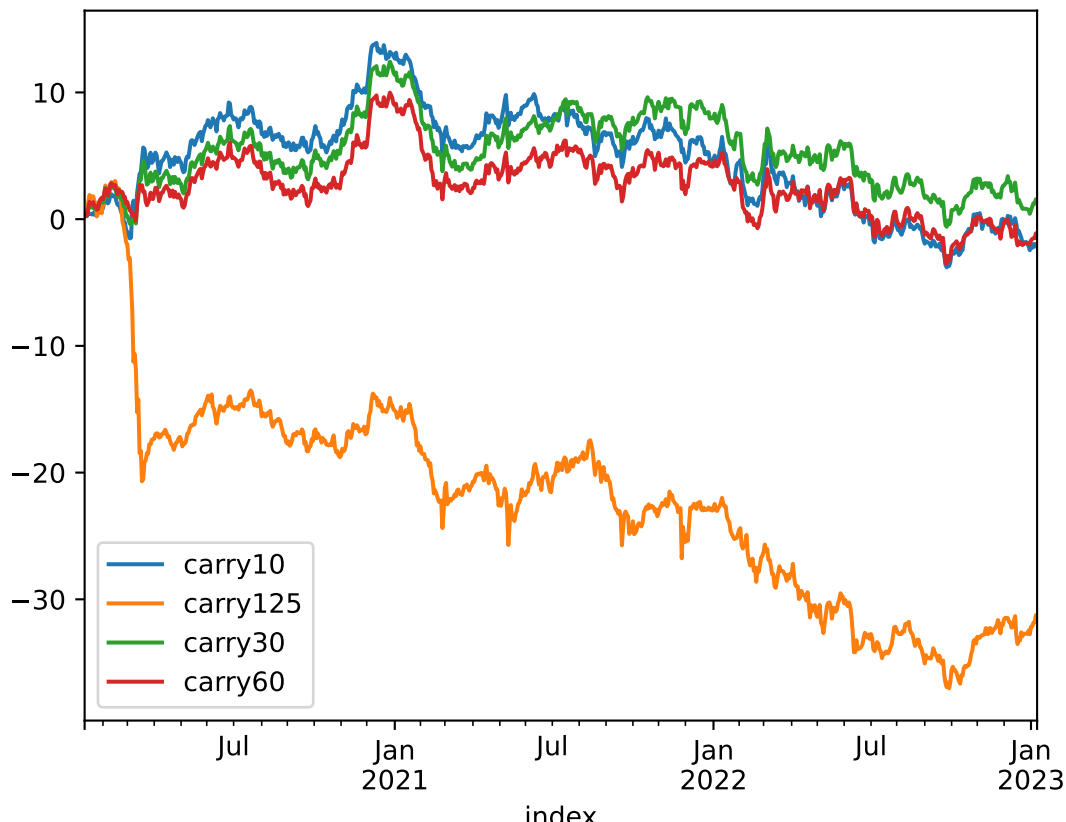


Total Trading Rule P&L for period '3Y'

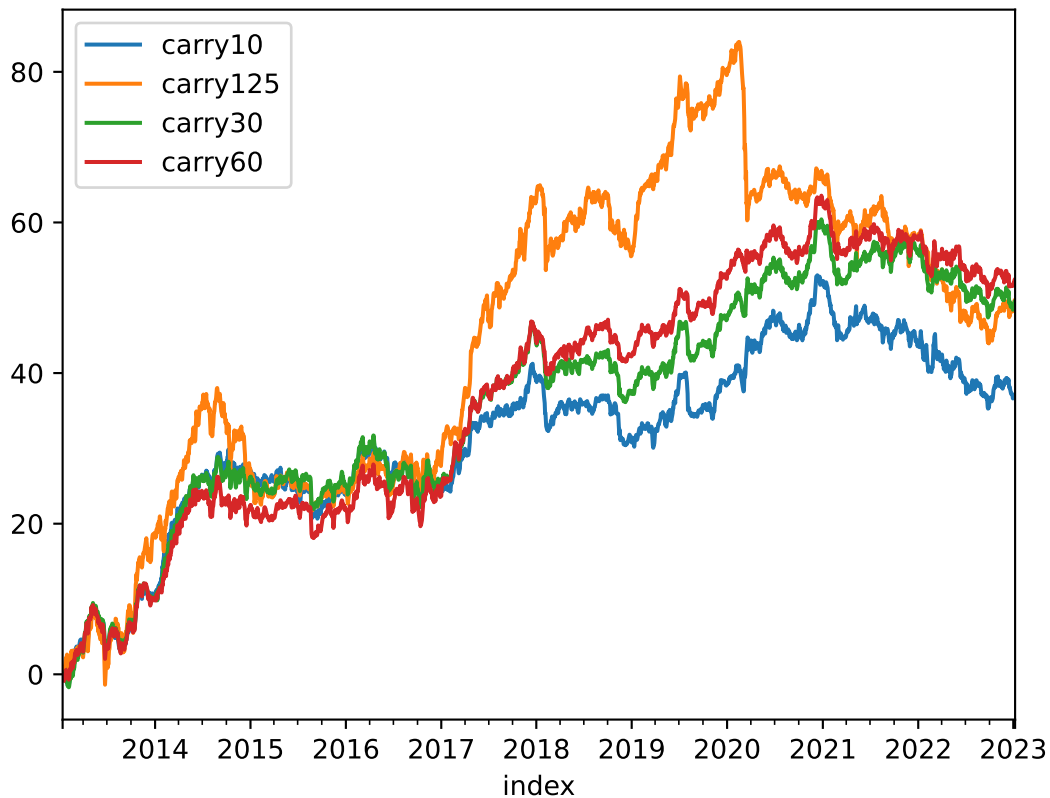
ann. mean {'carry10': -0.683, 'carry125': -10.381, 'carry30': 0.416, 'carry60': -0.467}

ann. std {'carry10': 6.829, 'carry125': 9.452, 'carry30': 6.632, 'carry60': 6.568}

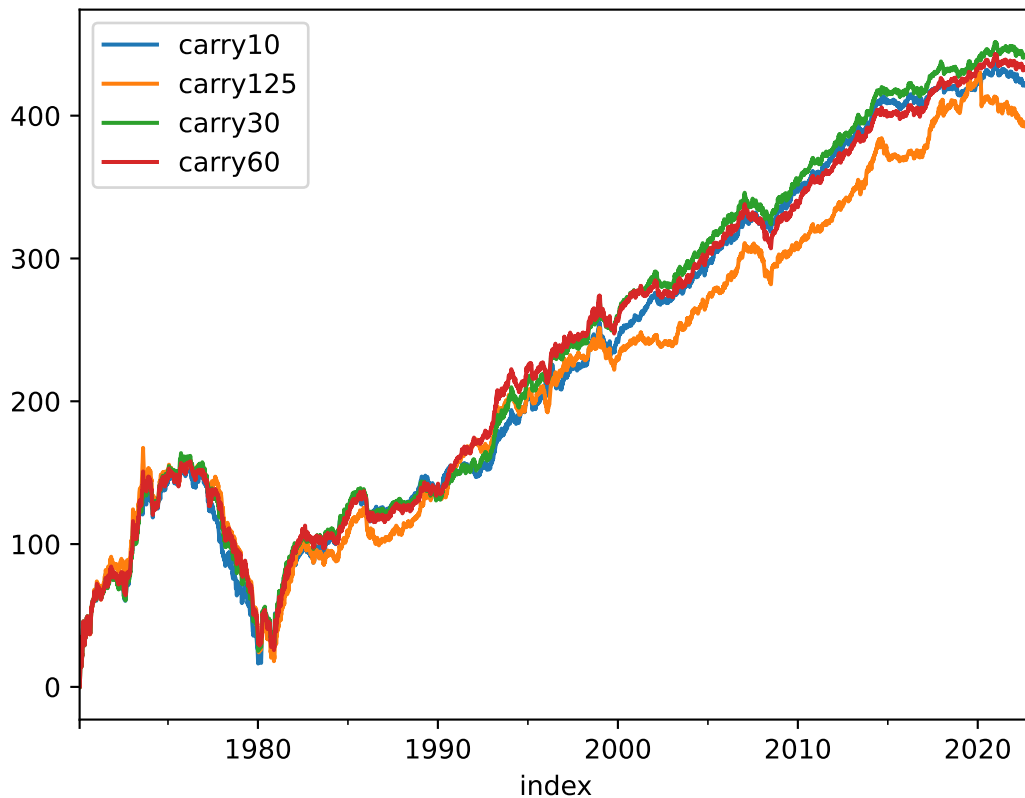
ann. SR {'carry10': -0.1, 'carry125': -1.1, 'carry30': 0.06, 'carry60': -0.07}



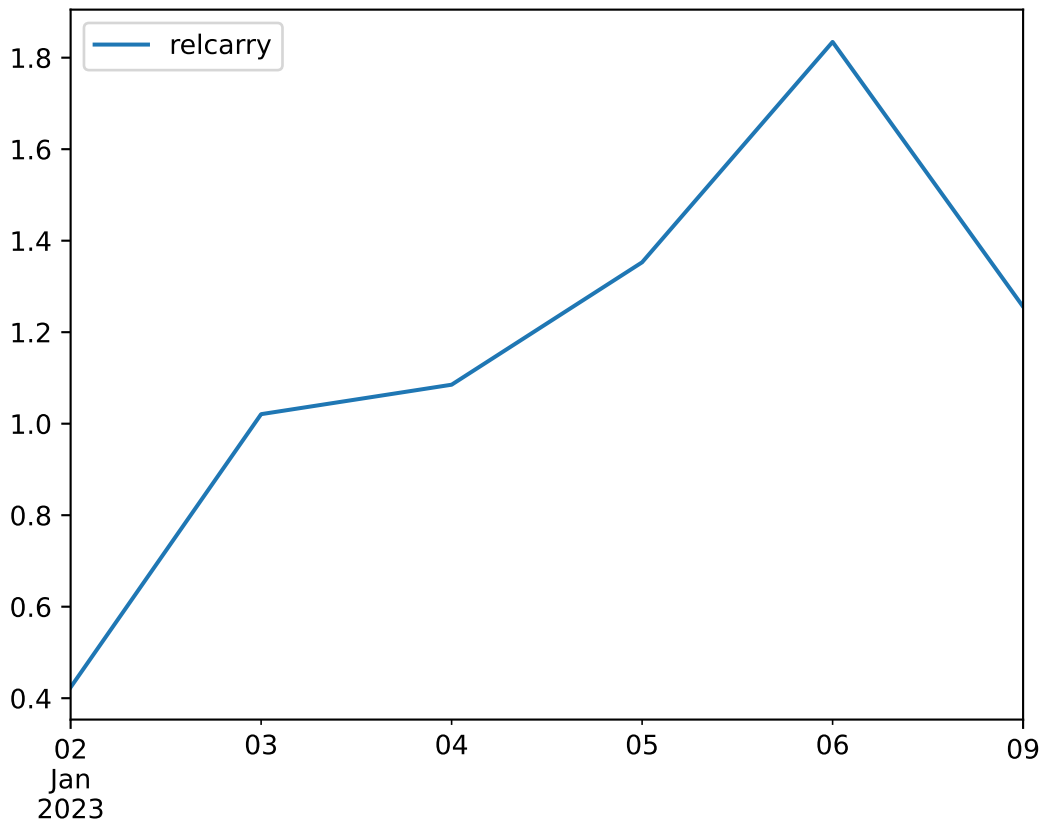
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.633, 'carry125': 4.84, 'carry30': 4.837, 'carry60': 5.121}
ann. std {'carry10': 6.449, 'carry125': 9.132, 'carry30': 6.549, 'carry60': 6.511}
ann. SR {'carry10': 0.56, 'carry125': 0.53, 'carry30': 0.74, 'carry60': 0.79}



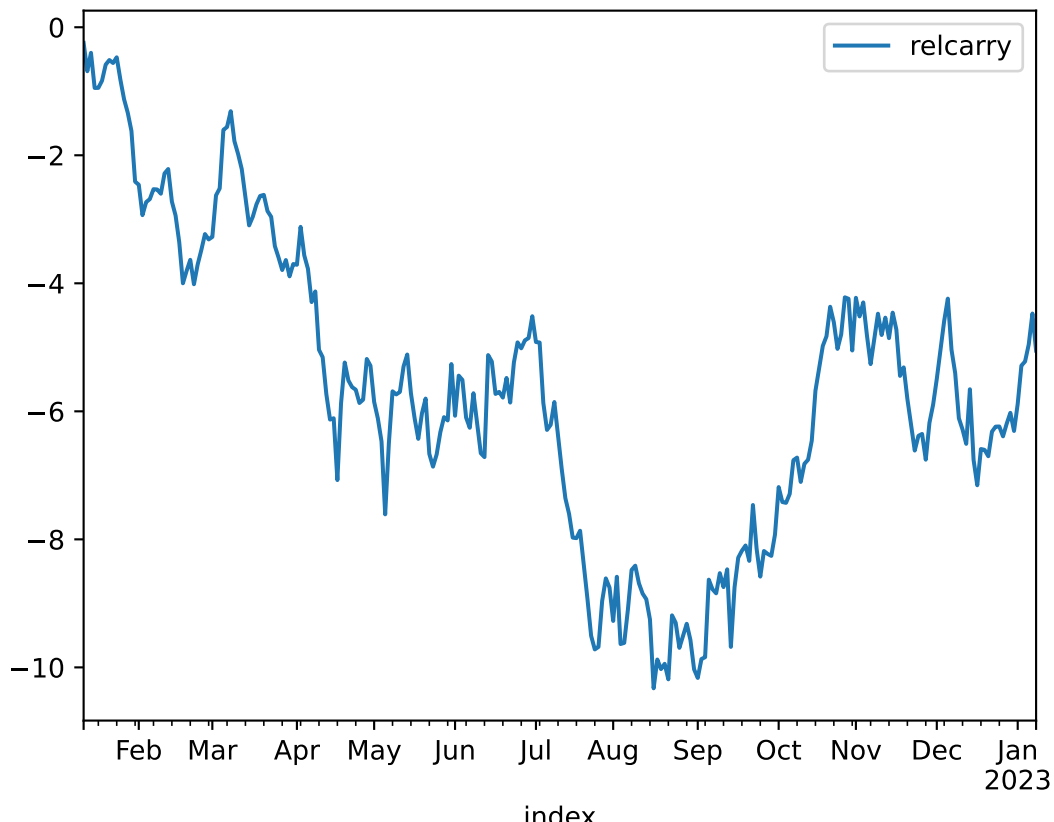
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.801, 'carry125': 7.332, 'carry30': 8.165, 'carry60': 8.003}
ann. std {'carry10': 11.857, 'carry125': 12.099, 'carry30': 11.869, 'carry60': 11.82}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 53.577}
ann. std {'relcarry': 6.848}
ann. SR {'relcarry': 7.82}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -4.973}
ann. std {'relcarry': 7.237}
ann. SR {'relcarry': -0.69}

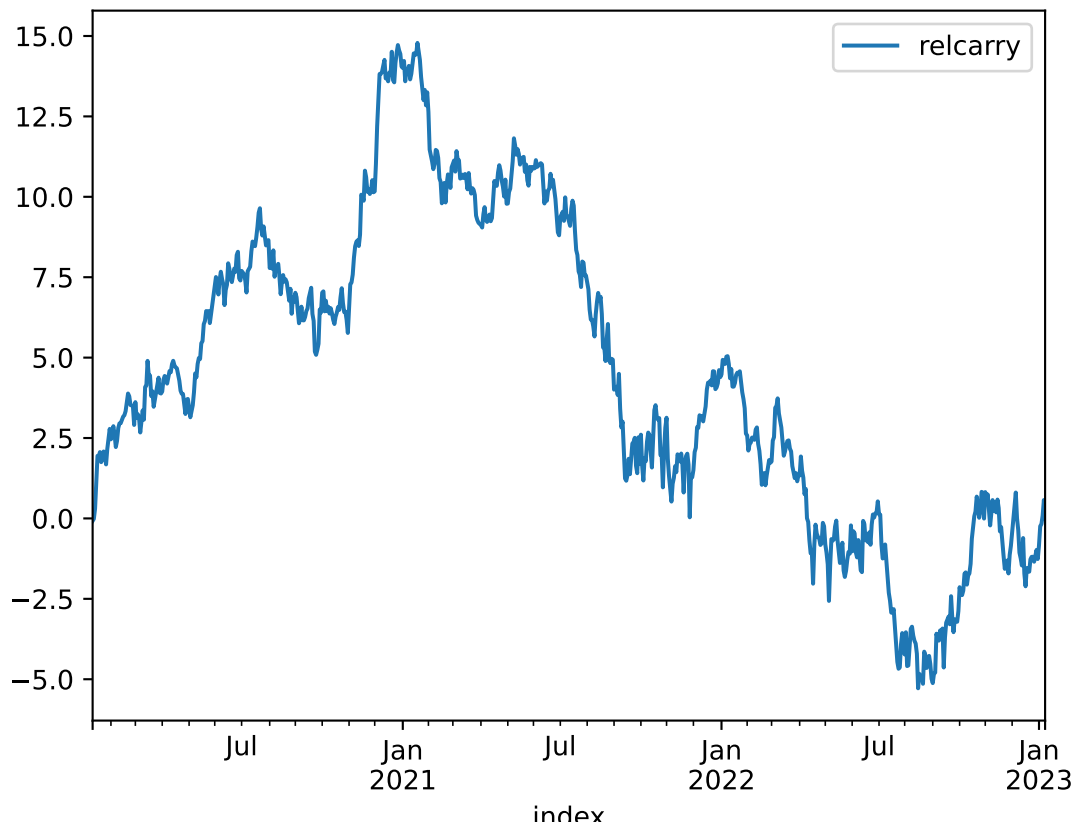


Total Trading Rule P&L for period '3Y'

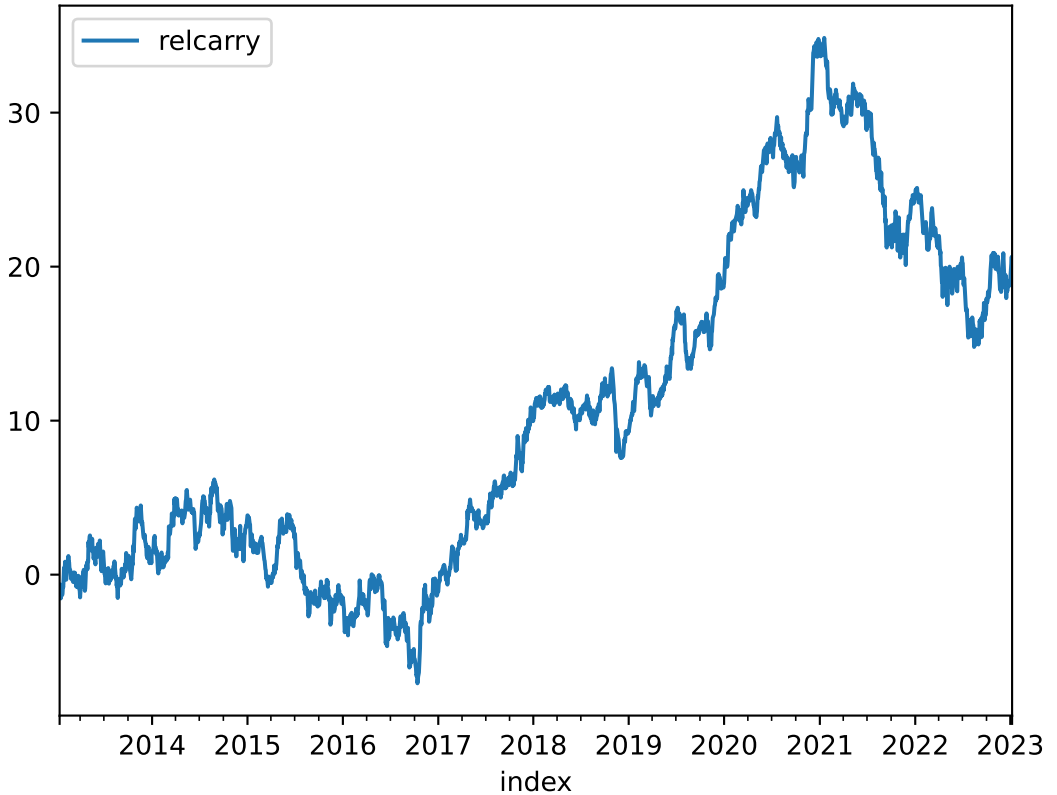
ann. mean {'relcarry': -0.002}

ann. std {'relcarry': 6.866}

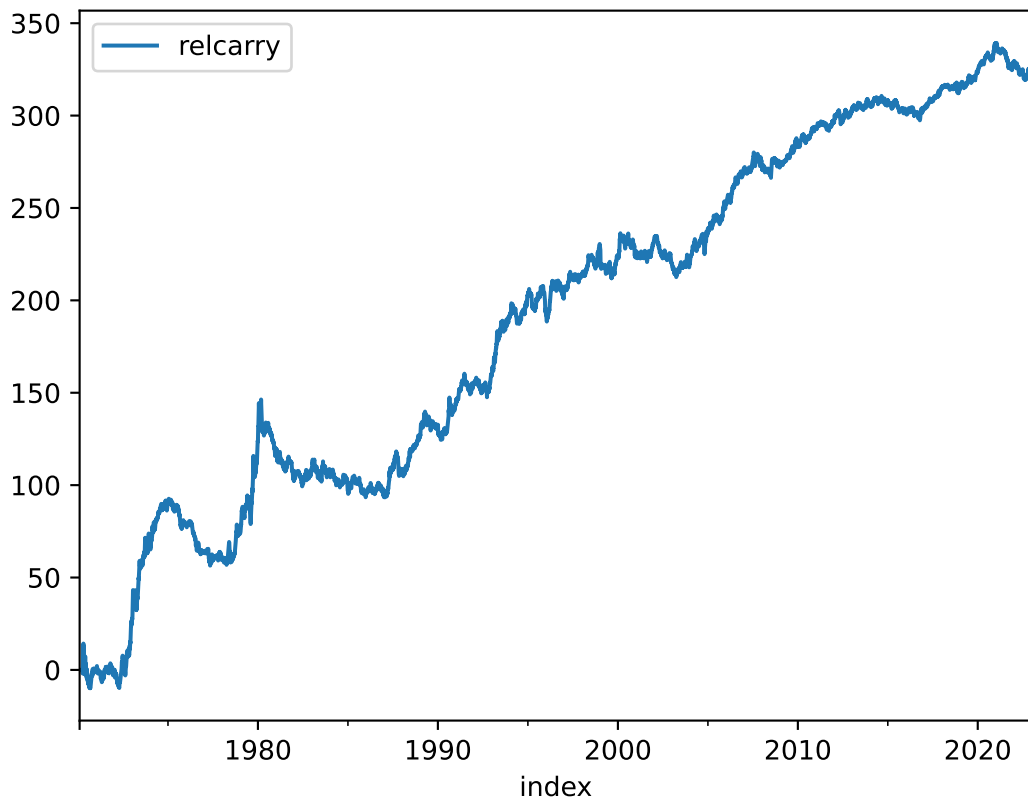
ann. SR {'relcarry': -0.0}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.97}
ann. std {'relcarry': 6.037}
ann. SR {'relcarry': 0.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.016}
ann. std {'relcarry': 9.557}
ann. SR {'relcarry': 0.63}

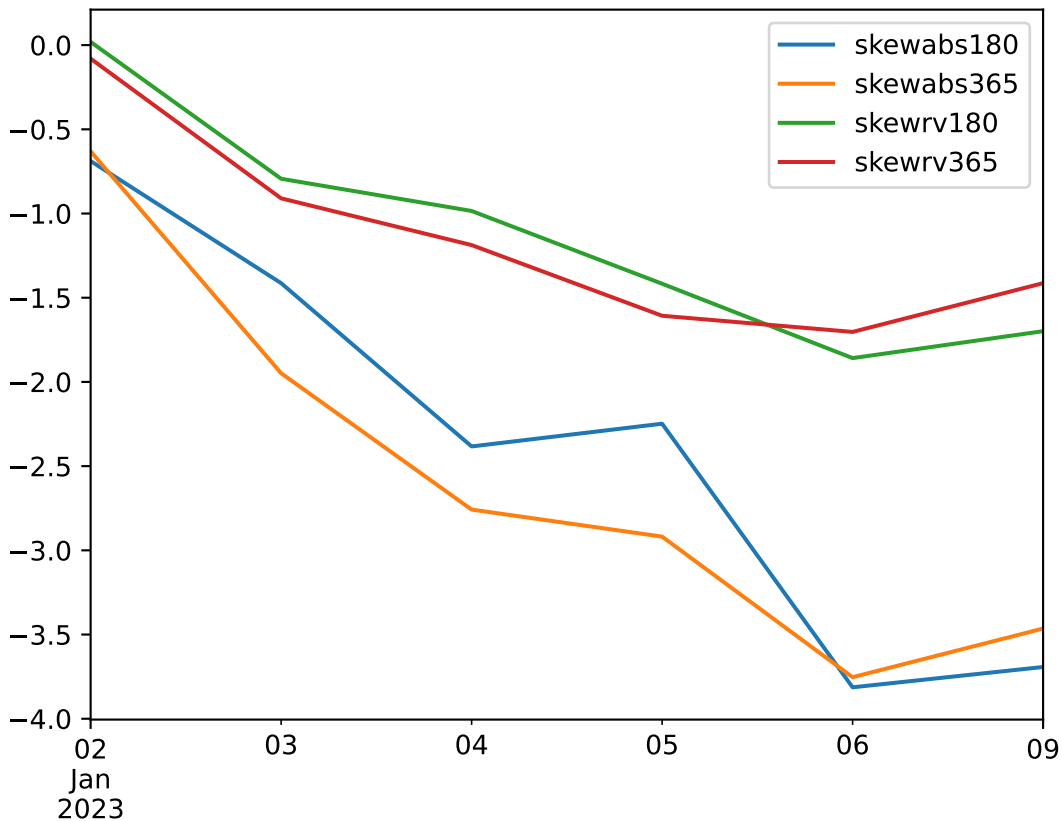


Total Trading Rule P&L for period 'YTD'

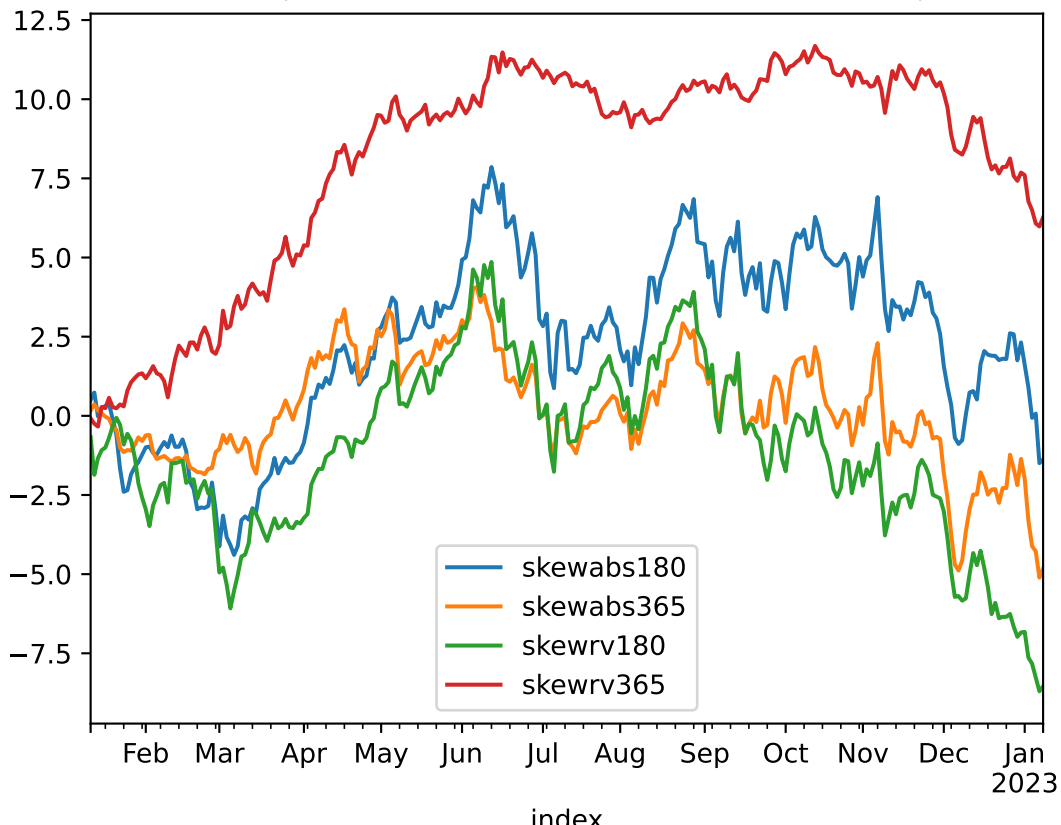
ann. mean {'skewabs180': -157.554, 'skewabs365': -147.818, 'skewrv180': -72.477, 'skewrv365': -60.307}

ann. std {'skewabs180': 10.492, 'skewabs365': 9.036, 'skewrv180': 5.651, 'skewrv365': 6.019}

ann. SR {'skewabs180': -15.02, 'skewabs365': -16.36, 'skewrv180': -12.83, 'skewrv365': -10.02}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -1.354, 'skewabs365': -4.748, 'skewrv180': -8.409, 'skewrv365': 6.174}
ann. std {'skewabs180': 10.107, 'skewabs365': 8.129, 'skewrv180': 9.309, 'skewrv365': 5.081}
ann. SR {'skewabs180': -0.13, 'skewabs365': -0.58, 'skewrv180': -0.9, 'skewrv365': 1.21}

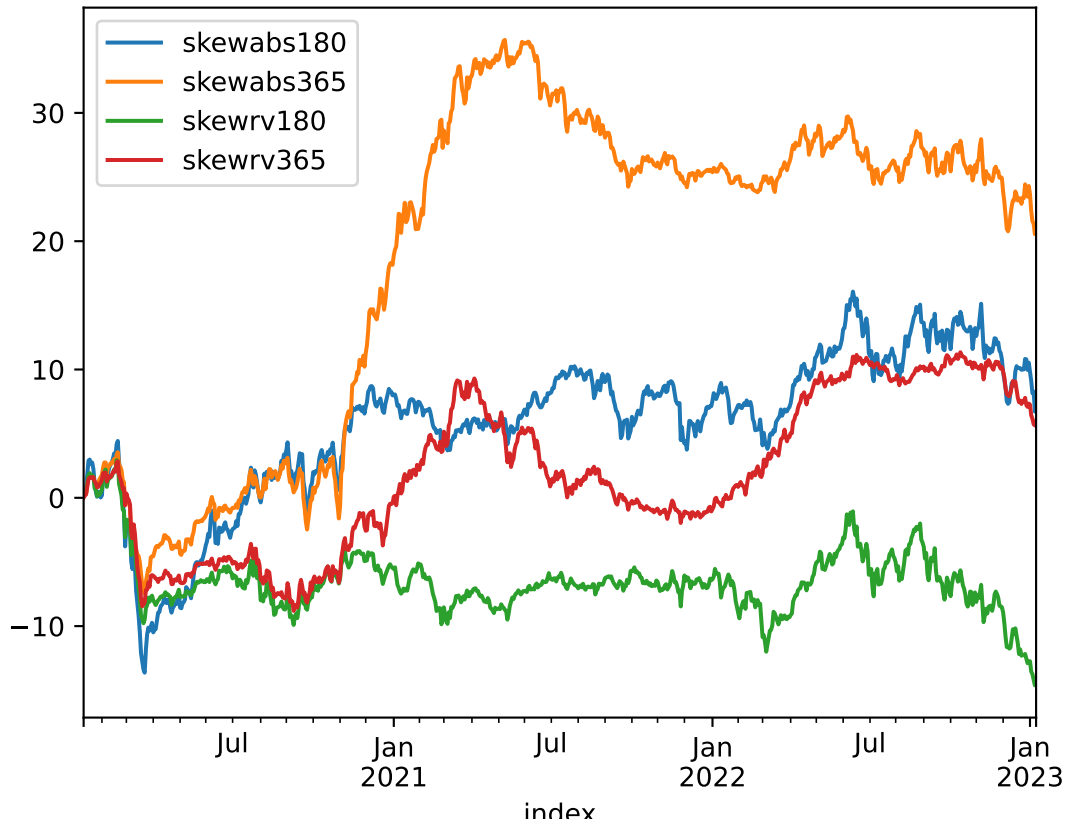


Total Trading Rule P&L for period '3Y'

ann. mean {'skewabs180': 2.242, 'skewabs365': 6.83, 'skewrv180': -4.738, 'skewrv365': 1.944}

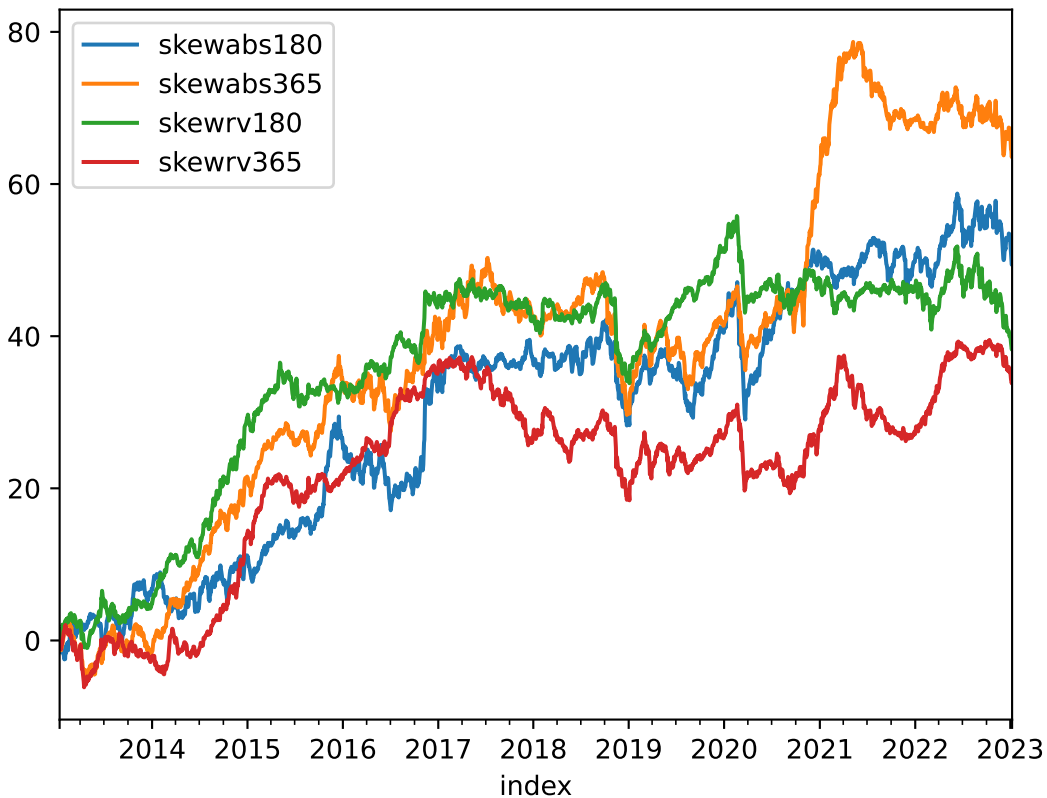
ann. std {'skewabs180': 9.679, 'skewabs365': 8.864, 'skewrv180': 7.795, 'skewrv365': 6.615}

ann. SR {'skewabs180': 0.23, 'skewabs365': 0.77, 'skewrv180': -0.61, 'skewrv365': 0.29}

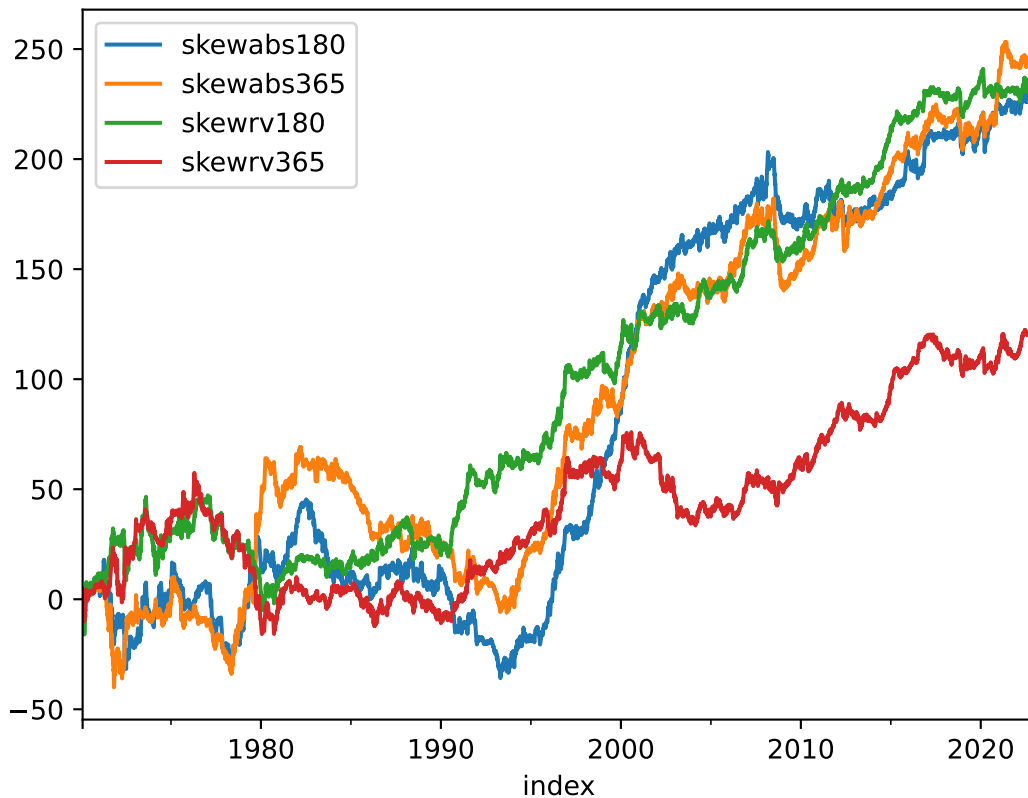


Total Trading Rule P&L for period '10Y'

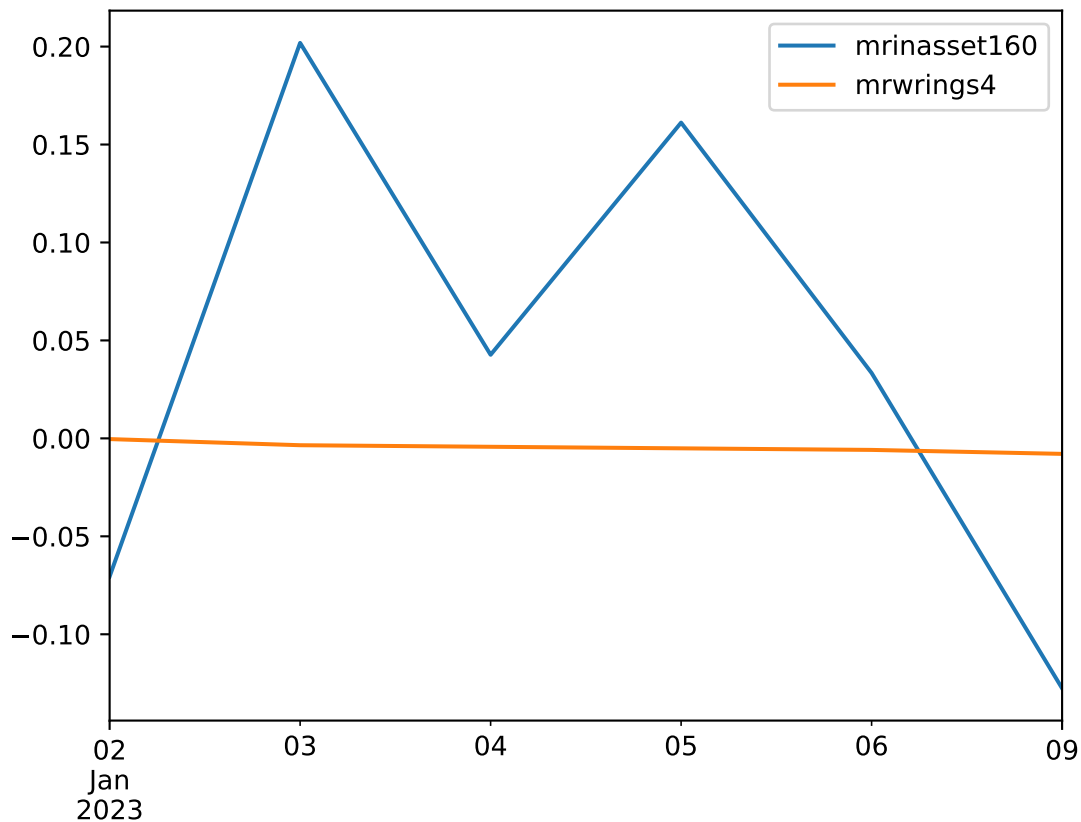
ann. mean	{'skewabs180': 4.862, 'skewabs365': 6.268, 'skewrv180': 3.771, 'skewrv365': 3.348}
ann. std	{'skewabs180': 8.062, 'skewabs365': 8.005, 'skewrv180': 6.591, 'skewrv365': 6.182}
ann. SR	{'skewabs180': 0.6, 'skewabs365': 0.78, 'skewrv180': 0.57, 'skewrv365': 0.54}



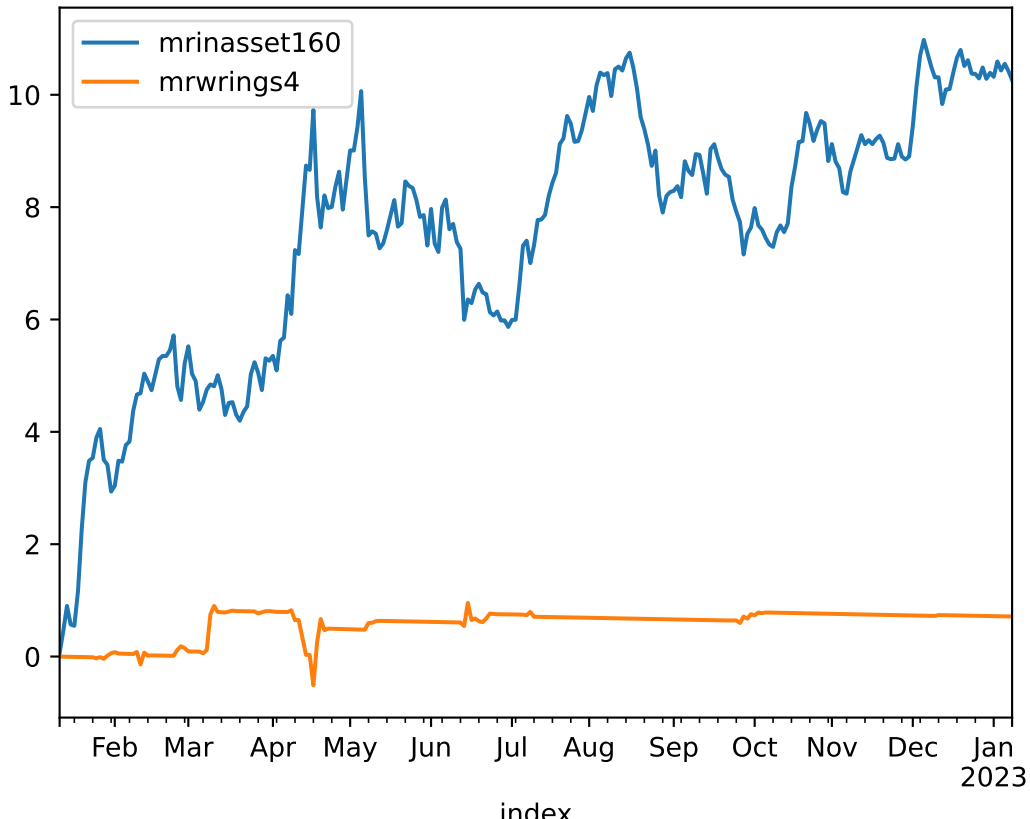
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.145, 'skewabs365': 4.419, 'skewrv180': 4.145, 'skewrv365': 2.172}
ann. std {'skewabs180': 10.793, 'skewabs365': 10.299, 'skewrv180': 9.307, 'skewrv365': 8.601}
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.25}



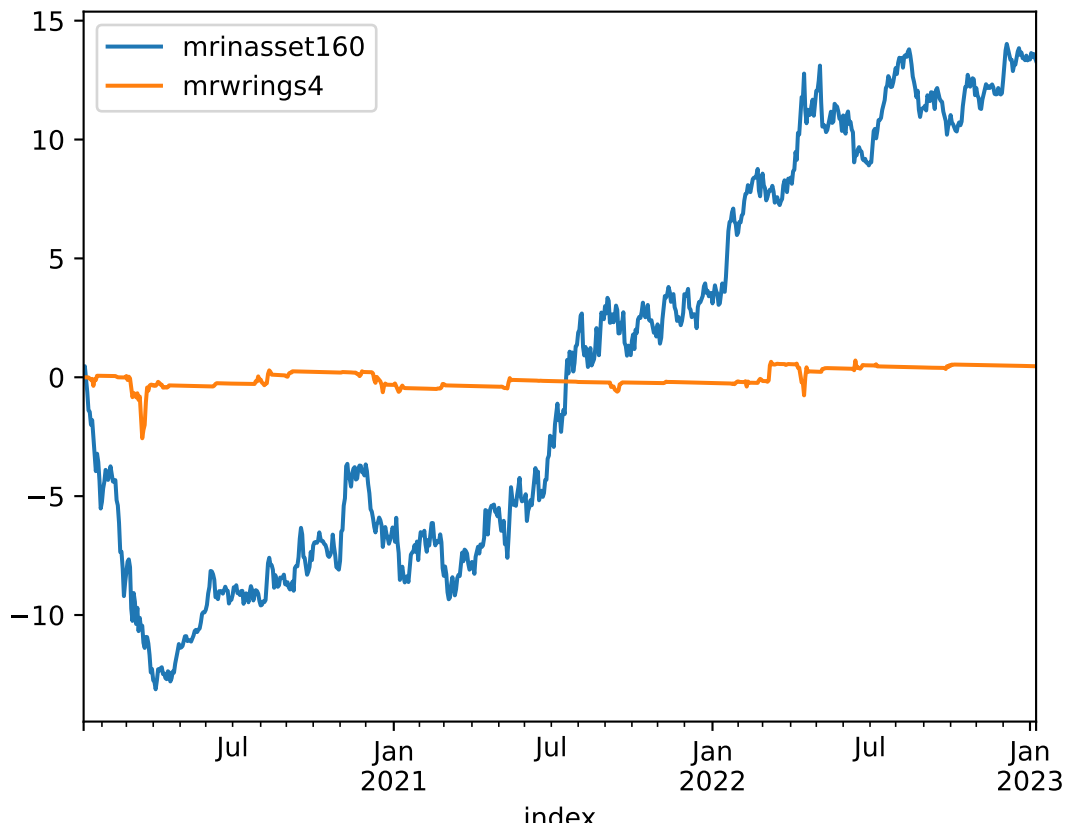
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -5.444, 'mrwrings4': -0.337}
ann. std {'mrinasset160': 2.845, 'mrwrings4': 0.017}
ann. SR {'mrinasset160': -1.91, 'mrwrings4': -20.08}



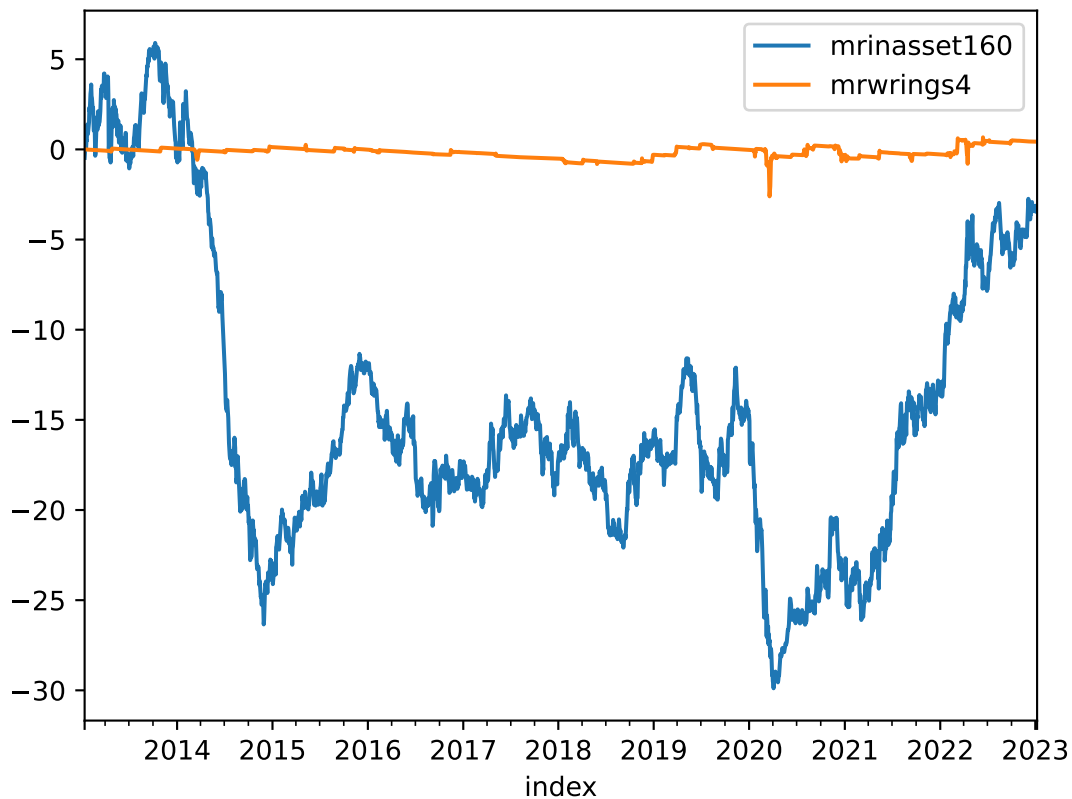
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 10.105, 'mrwrings4': 0.702}
ann. std {'mrinasset160': 6.144, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.64, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 4.362, 'mrwrings4': 0.152}
ann. std {'mrinasset160': 6.916, 'mrwrings4': 1.537}
ann. SR {'mrinasset160': 0.63, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.339, 'mrwrings4': 0.042}
ann. std {'mrinasset160': 6.606, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.05, 'mrwrings4': 0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.343, 'mrwrings4': -1.168}
ann. std {'mrinasset160': 10.918, 'mrwrings4': 2.63}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.44}

