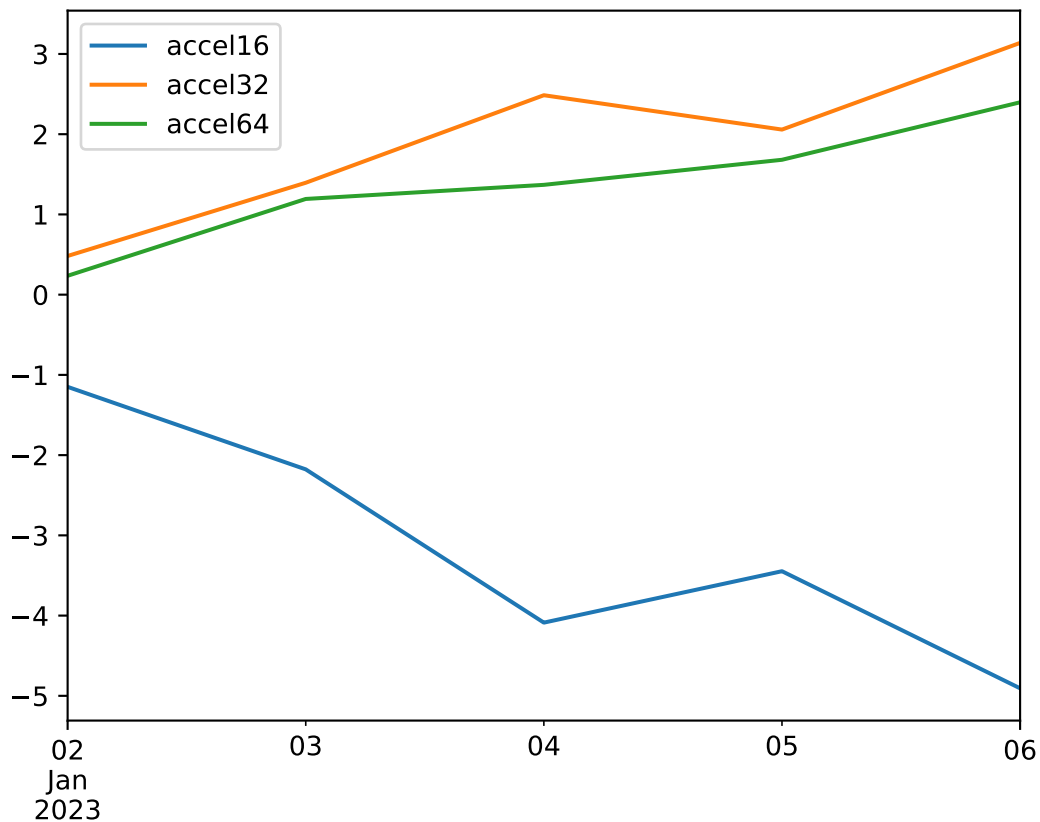
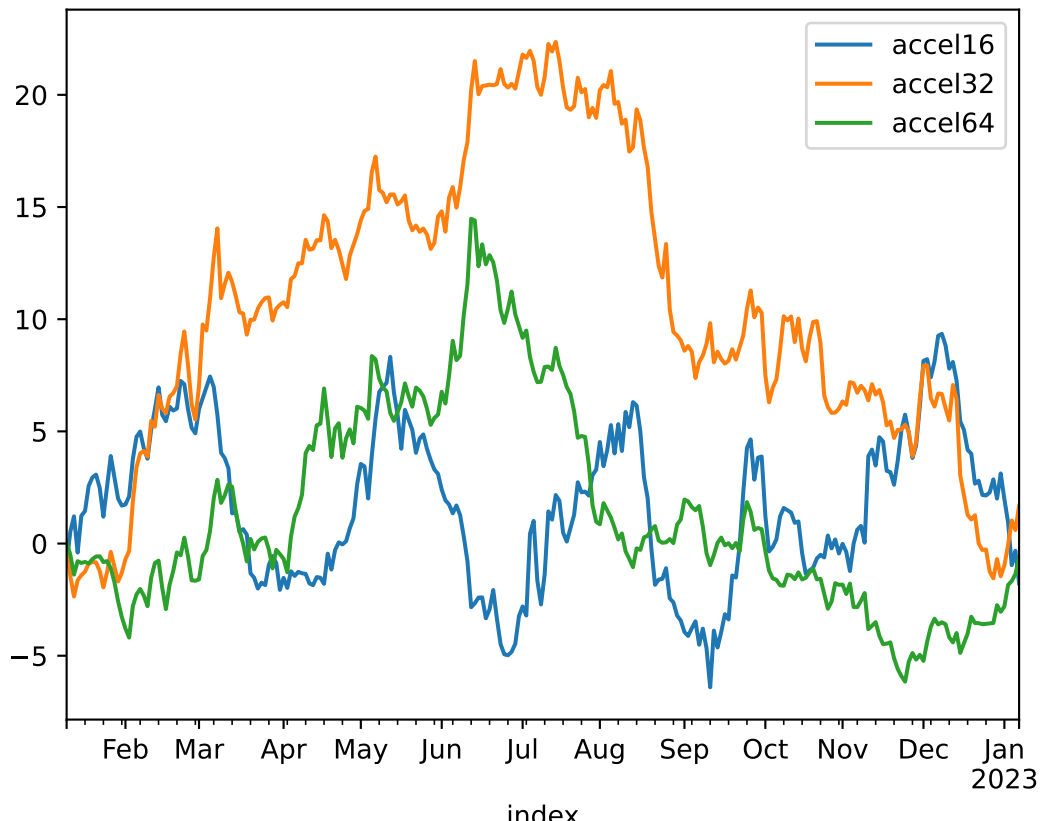


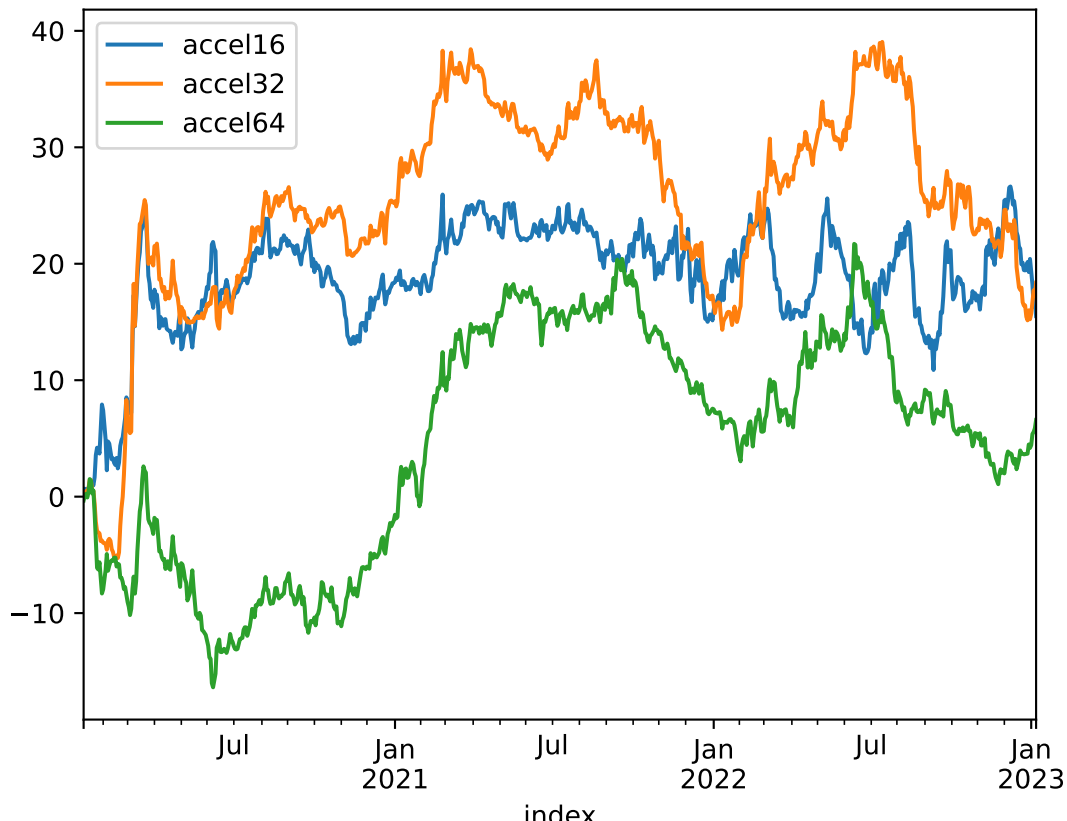
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -251.201, 'accel32': 160.653, 'accel64': 122.75}
ann. std {'accel16': 15.498, 'accel32': 10.234, 'accel64': 5.453}
ann. SR {'accel16': -16.21, 'accel32': 15.7, 'accel64': 22.51}



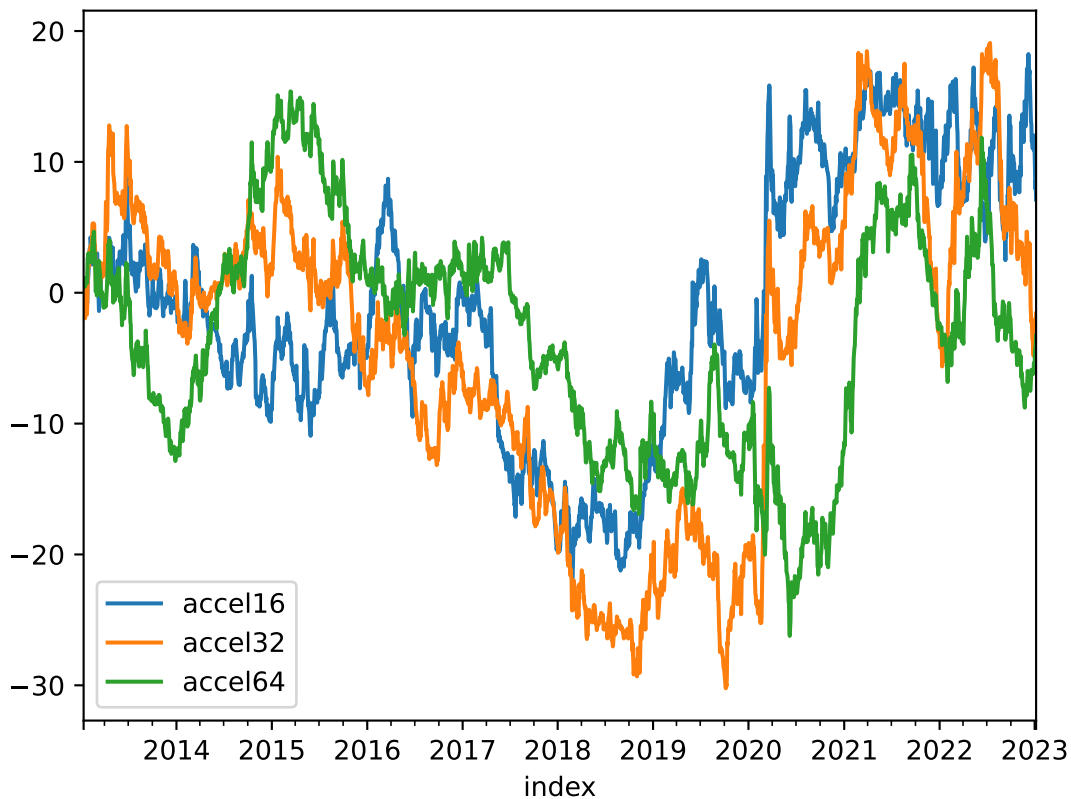
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -1.752, 'accel32': 1.655, 'accel64': -0.634}
ann. std {'accel16': 16.385, 'accel32': 14.726, 'accel64': 11.707}
ann. SR {'accel16': -0.11, 'accel32': 0.11, 'accel64': -0.05}



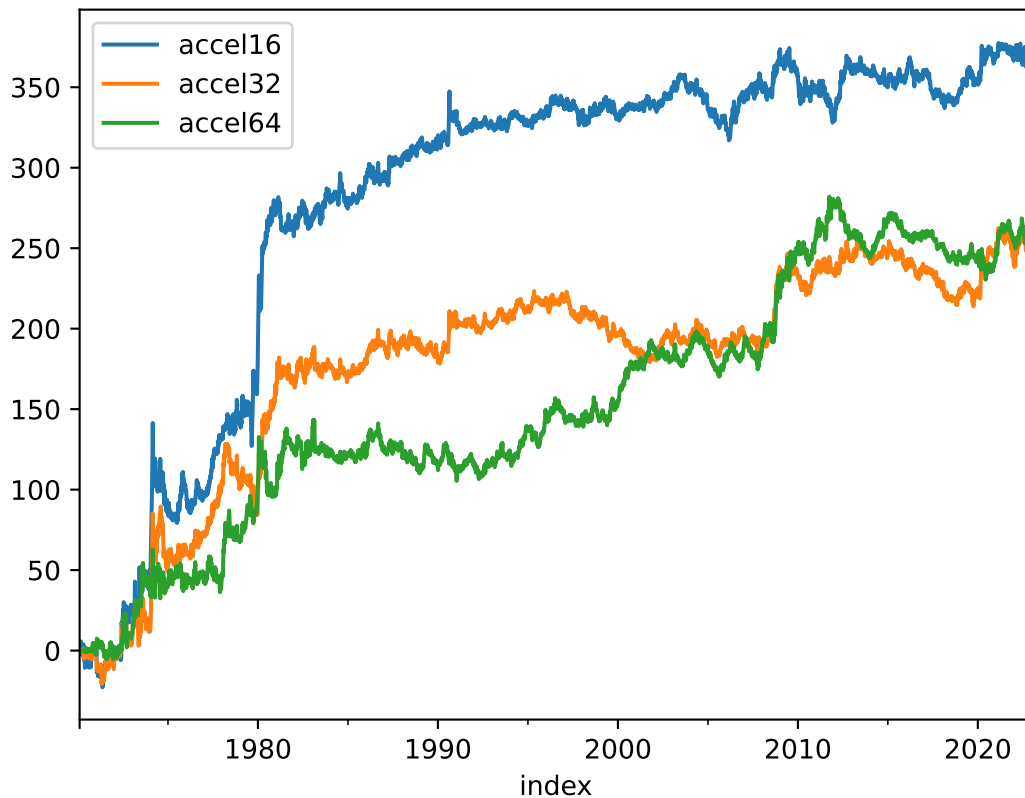
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 5.083, 'accel32': 6.022, 'accel64': 2.158}
ann. std {'accel16': 15.024, 'accel32': 14.32, 'accel64': 11.682}
ann. SR {'accel16': 0.34, 'accel32': 0.42, 'accel64': 0.18}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.699, 'accel32': -0.156, 'accel64': -0.321}
ann. std {'accel16': 11.959, 'accel32': 11.225, 'accel64': 9.586}
ann. SR {'accel16': 0.06, 'accel32': -0.01, 'accel64': -0.03}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.804, 'accel32': 4.495, 'accel64': 4.697}
ann. std {'accel16': 15.732, 'accel32': 13.801, 'accel64': 13.326}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

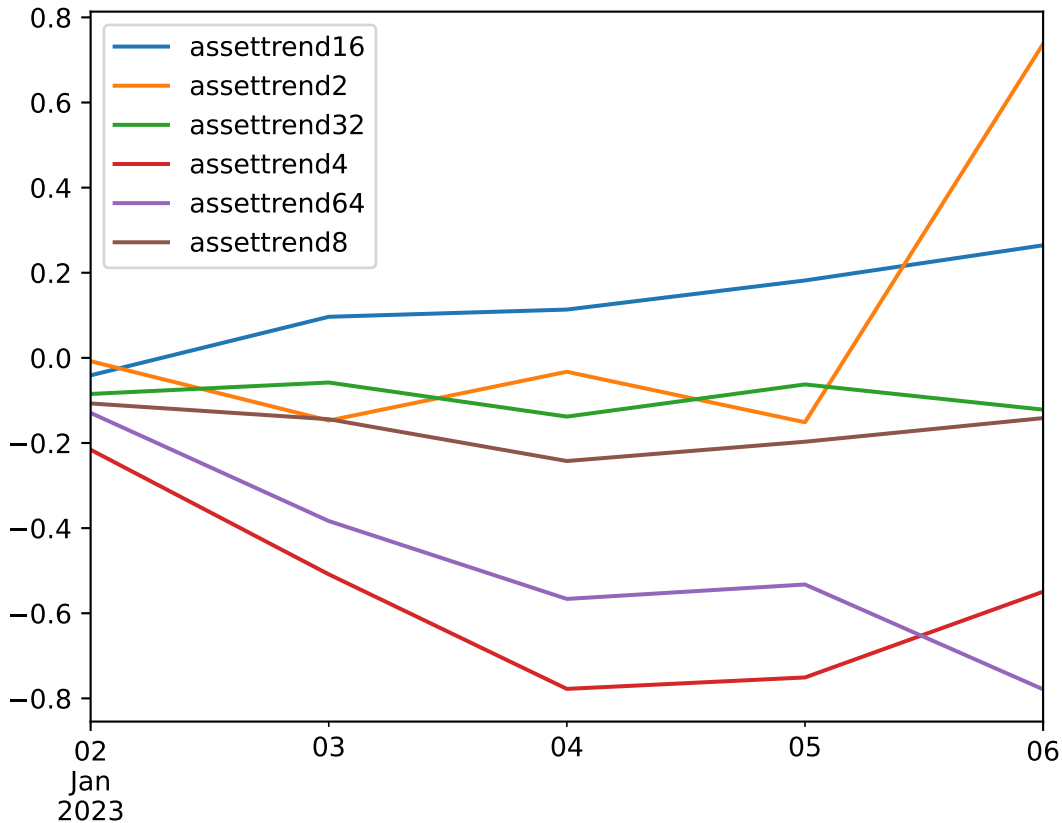


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 13.544, 'assettrend2': 37.769, 'assettrend32': -6.227, 'assettrend4': -28.128, 'assettrend64': -39.869, 'assettrend8': -7.243}

ann. std {'assettrend16': 1.085, 'assettrend2': 6.826, 'assettrend32': 1.148, 'assettrend4': 3.447, 'assettrend64': 1.881, 'assettrend8': 1.23}

ann. SR {'assettrend16': 12.48, 'assettrend2': 5.53, 'assettrend32': -5.42, 'assettrend4': -8.16, 'assettrend64': -21.2, 'assettrend8': -5.89}

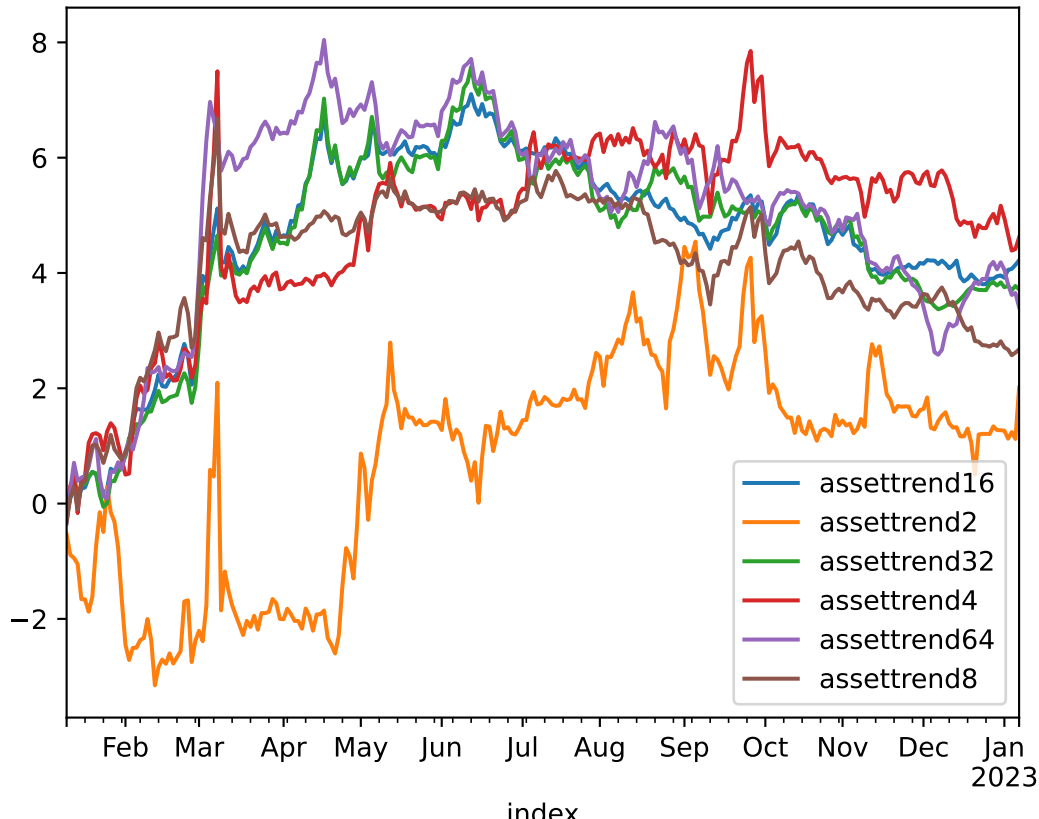


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.157, 'assettrend2': 1.979, 'assettrend32': 3.659, 'assettrend4': 4.546, 'assettrend8': 2.633}

ann. std {'assettrend16': 3.032, 'assettrend2': 7.697, 'assettrend32': 3.325, 'assettrend4': 5.75, 'assettrend64': 3.994, 'assettrend8': 3.759}

ann. SR {'assettrend16': 1.37, 'assettrend2': 0.26, 'assettrend32': 1.1, 'assettrend4': 0.79, 'assettrend64': 0.84, 'assettrend8': 0.7}

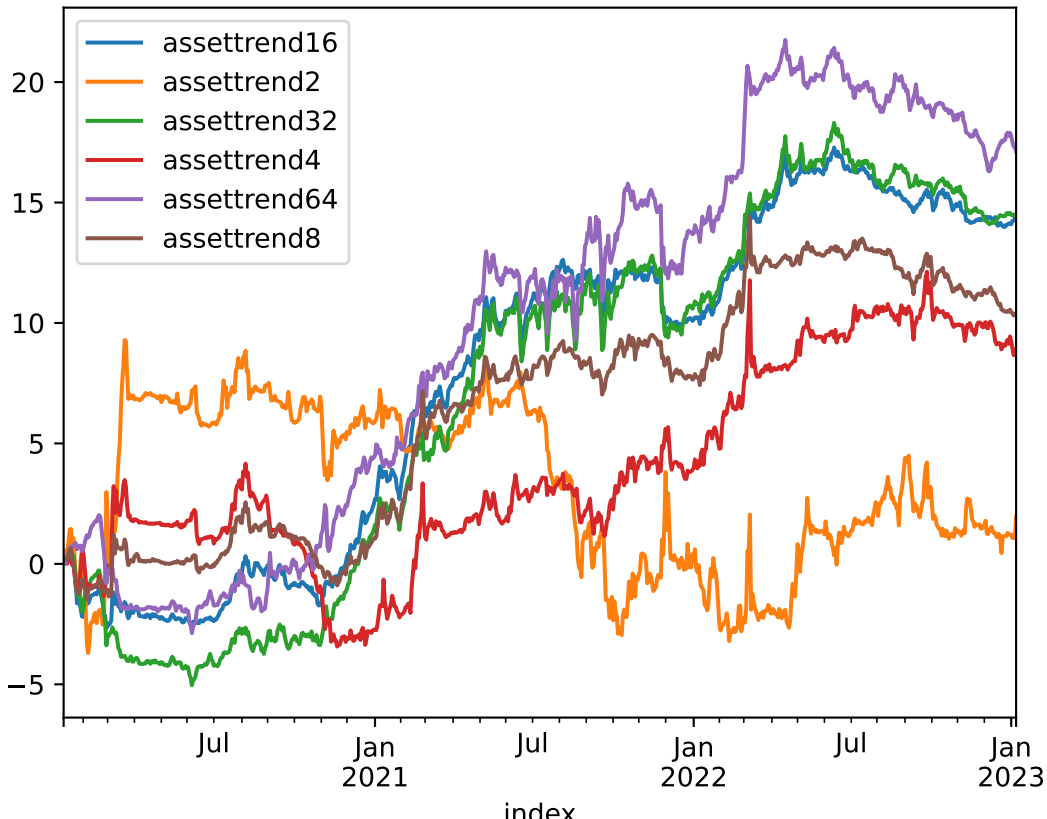


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.721, 'assettrend2': 0.642, 'assettrend32': 4.735, 'assettrend4': 2.915, 'assettrend64': 5.61, 'assettrend8': 3.413}

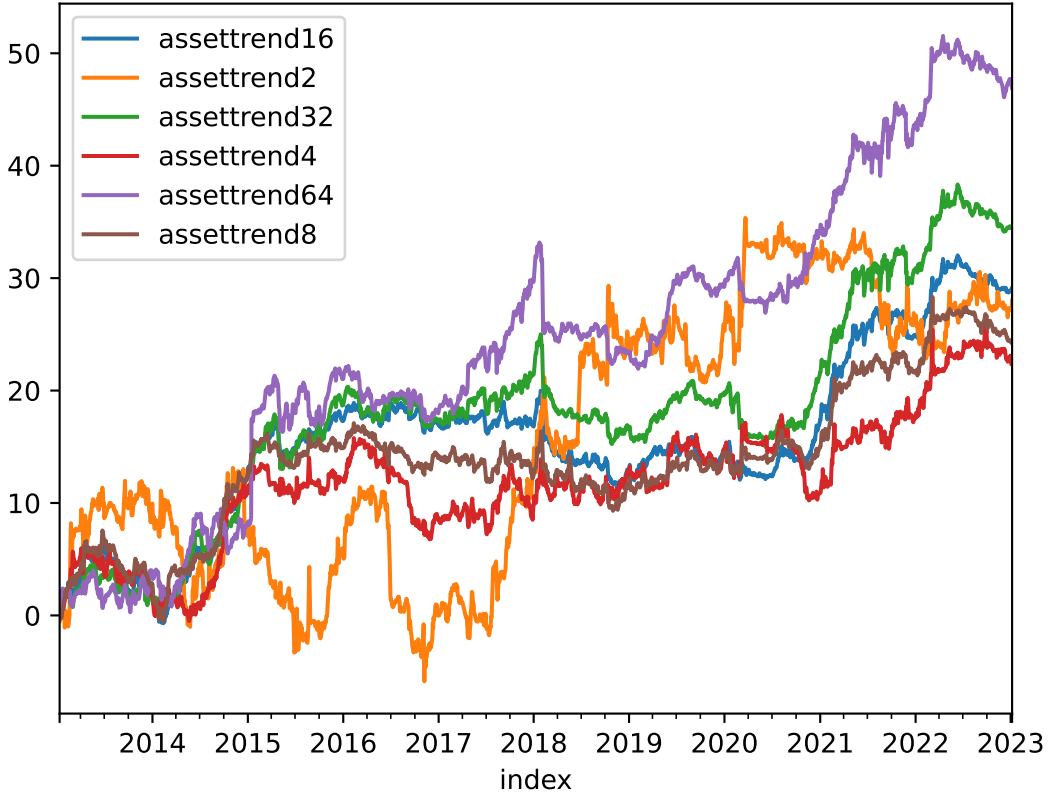
ann. std {'assettrend16': 3.605, 'assettrend2': 7.784, 'assettrend32': 4.423, 'assettrend4': 5.365, 'assettrend64': 5.135, 'assettrend8': 3.745}

ann. SR {'assettrend16': 1.31, 'assettrend2': 0.08, 'assettrend32': 1.07, 'assettrend4': 0.54, 'assettrend64': 1.09, 'assettrend8': 0.91}



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

ann. mean {'assettrend16': 2.862, 'assettrend2': 2.751, 'assettrend32': 3.385, 'assettrend4': 2.215, 'assettrend64': 4.606, 'assettrend8': 2.39}
ann. std {'assettrend16': 3.271, 'assettrend2': 8.404, 'assettrend32': 3.748, 'assettrend4': 5.007, 'assettrend64': 5.309, 'assettrend8': 3.569}
ann. SR {'assettrend16': 0.87, 'assettrend2': 0.33, 'assettrend32': 0.9, 'assettrend4': 0.44, 'assettrend64': 0.87, 'assettrend8': 0.67}

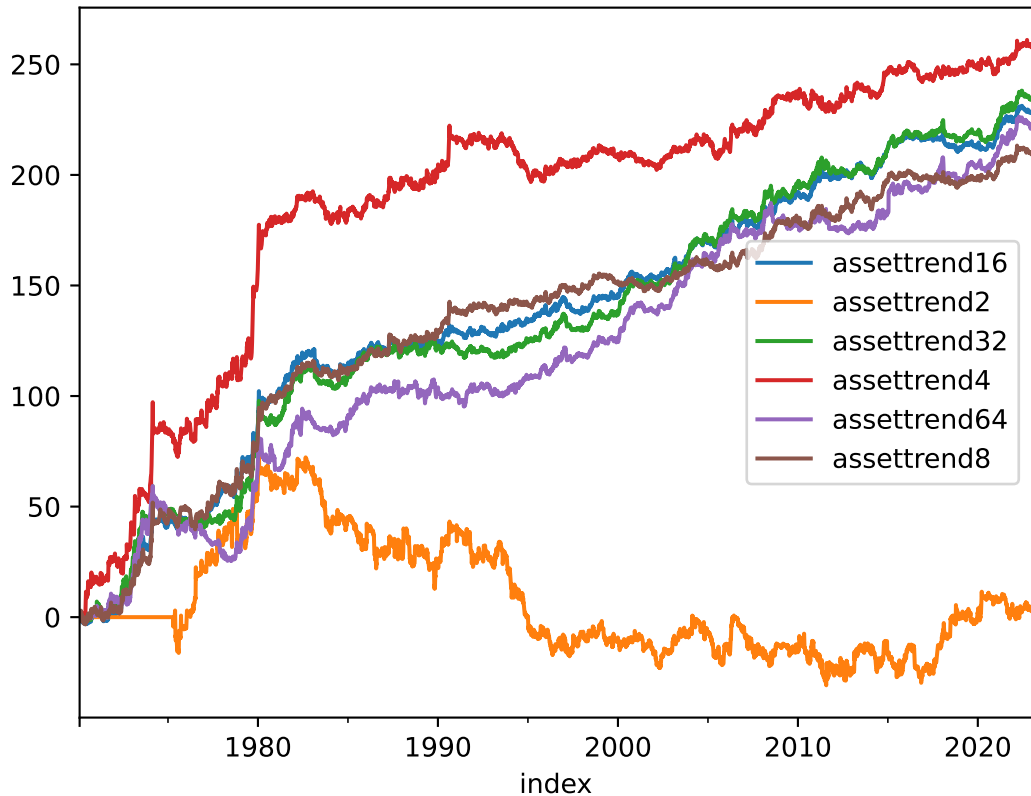


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.234, 'assettrend2': 0.077, 'assettrend32': 4.343, 'assettrend4': 4.78, 'assettrend64': 4.11, 'assettrend8': 3.879}

ann. std {'assettrend16': 4.661, '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}

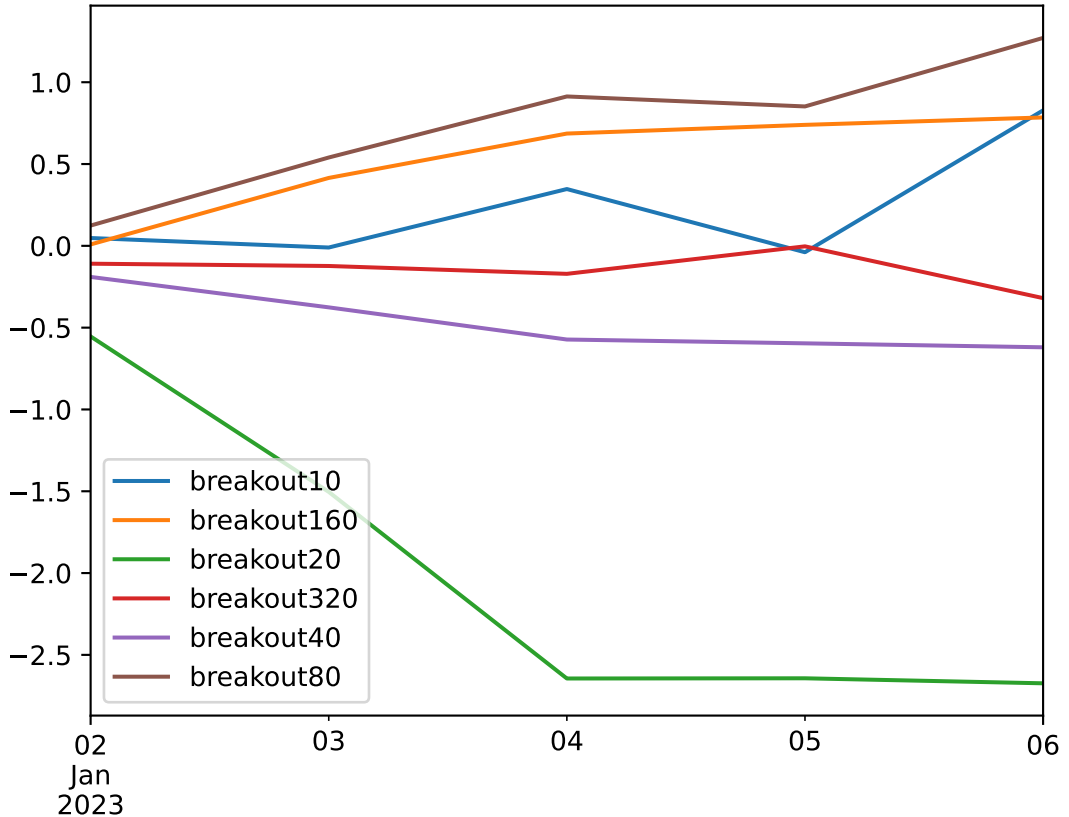


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 42.401, 'breakout160': 40.178, 'breakout20': -136.897, 'breakout320': -16.358, 'breakout40': -31.749, 'breakout80': 65.069}

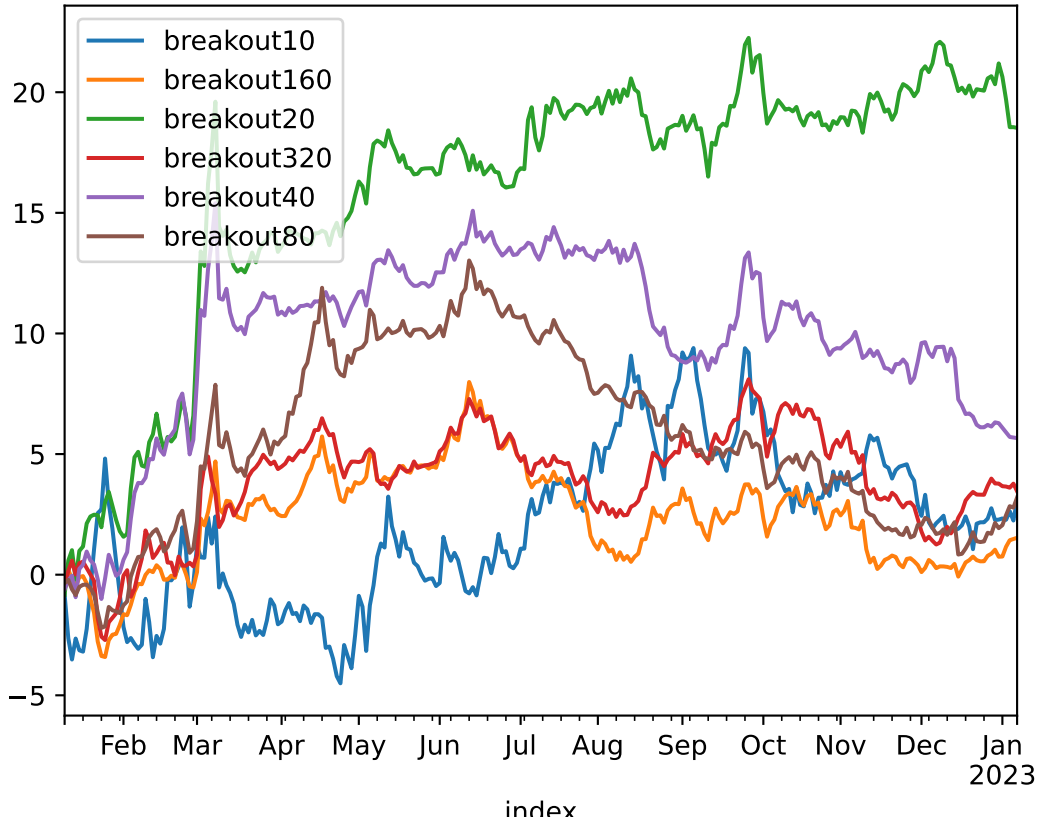
ann. std {'breakout10': 7.579, 'breakout160': 2.777, 'breakout20': 8.318, 'breakout320': 2.798, 'breakout40': 1.466, 'breakout80': 3.429}

ann. SR {'breakout10': 5.59, 'breakout160': 14.47, 'breakout20': -16.46, 'breakout320': -5.85, 'breakout40': -21.66, 'breakout80': 18.97}



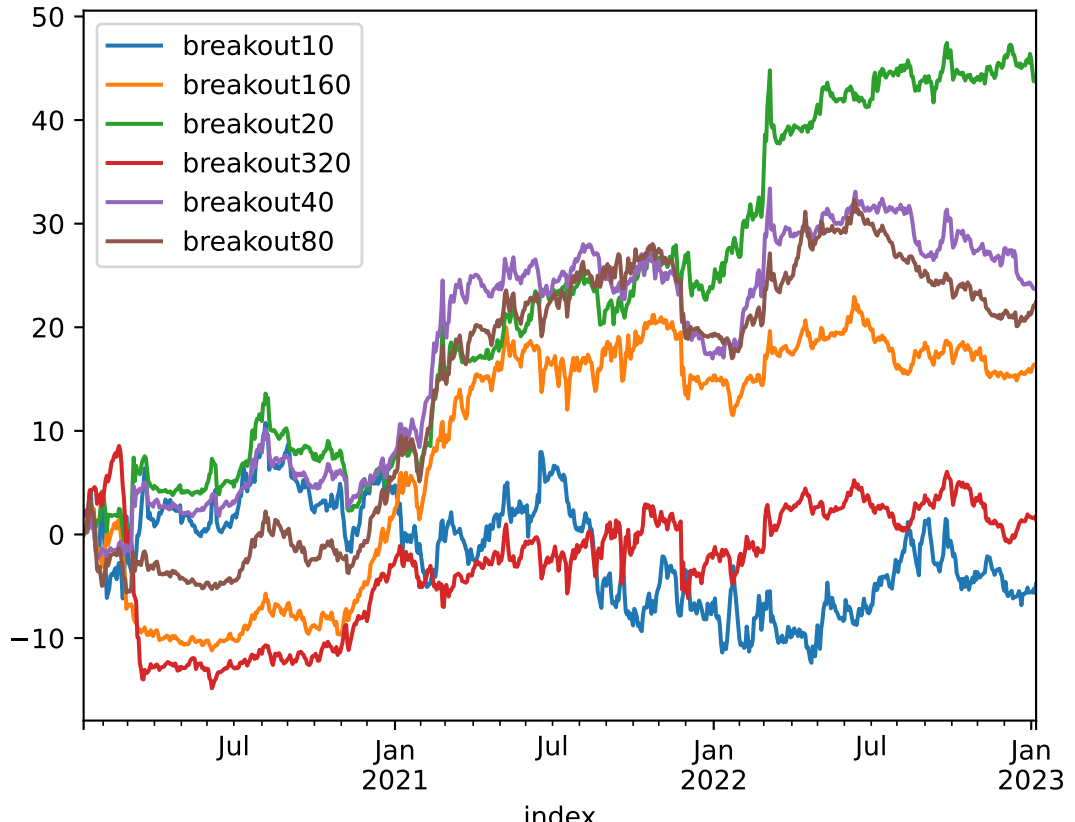
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 3.064, 'breakout160': 1.505, 'breakout20': 18.236, 'breakout320': 3.404, 'breakout40': 5.575, 'breakout80': 3.15}
ann. std {'breakout10': 13.492, 'breakout160': 7.077, 'breakout20': 12.065, 'breakout320': 7.371, 'breakout40': 9.671, 'breakout80': 7.944}
ann. SR {'breakout10': 0.23, 'breakout160': 0.21, 'breakout20': 1.51, 'breakout320': 0.46, 'breakout40': 0.58, 'breakout80': 0.4}



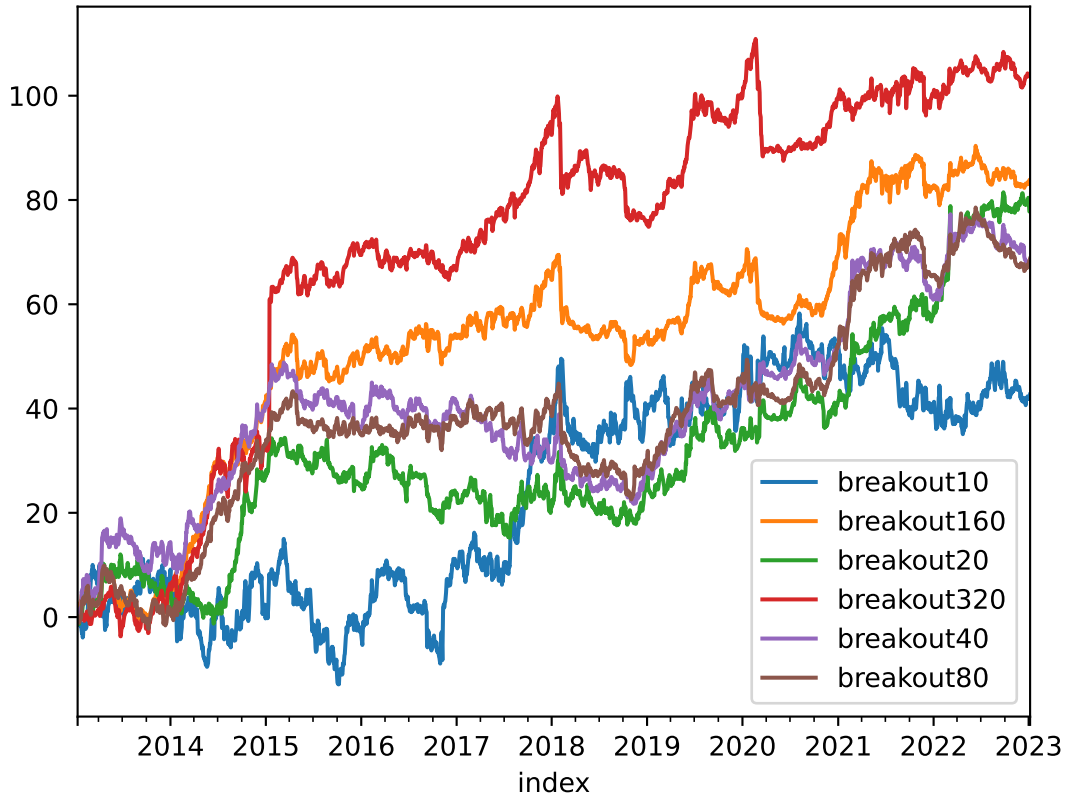
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -1.564, 'breakout160': 5.398, 'breakout20': 14.33, 'breakout320': 0.463, 'breakout40': 7.756, 'breakout80': 7.363}
 ann. std {'breakout10': 14.54, 'breakout160': 9.728, 'breakout20': 11.507, 'breakout320': 10.716, 'breakout40': 9.969, 'breakout80': 9.538}
 ann. SR {'breakout10': -0.11, 'breakout160': 0.55, 'breakout20': 1.25, 'breakout320': 0.04, 'breakout40': 0.78, 'breakout80': 0.77}



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

ann. mean {'breakout10': 4.193, 'breakout160': 8.242, 'breakout20': 7.635, 'breakout320': 10.189, 'breakout40': 6.631, 'breakout80': 6.749}
ann. std {'breakout10': 15.687, 'breakout160': 9.118, 'breakout20': 11.207, 'breakout320': 13.332, 'breakout40': 9.836, 'breakout80': 9.019}
ann. SR {'breakout10': 0.27, 'breakout160': 0.9, 'breakout20': 0.68, 'breakout320': 0.76, 'breakout40': 0.67, 'breakout80': 0.75}

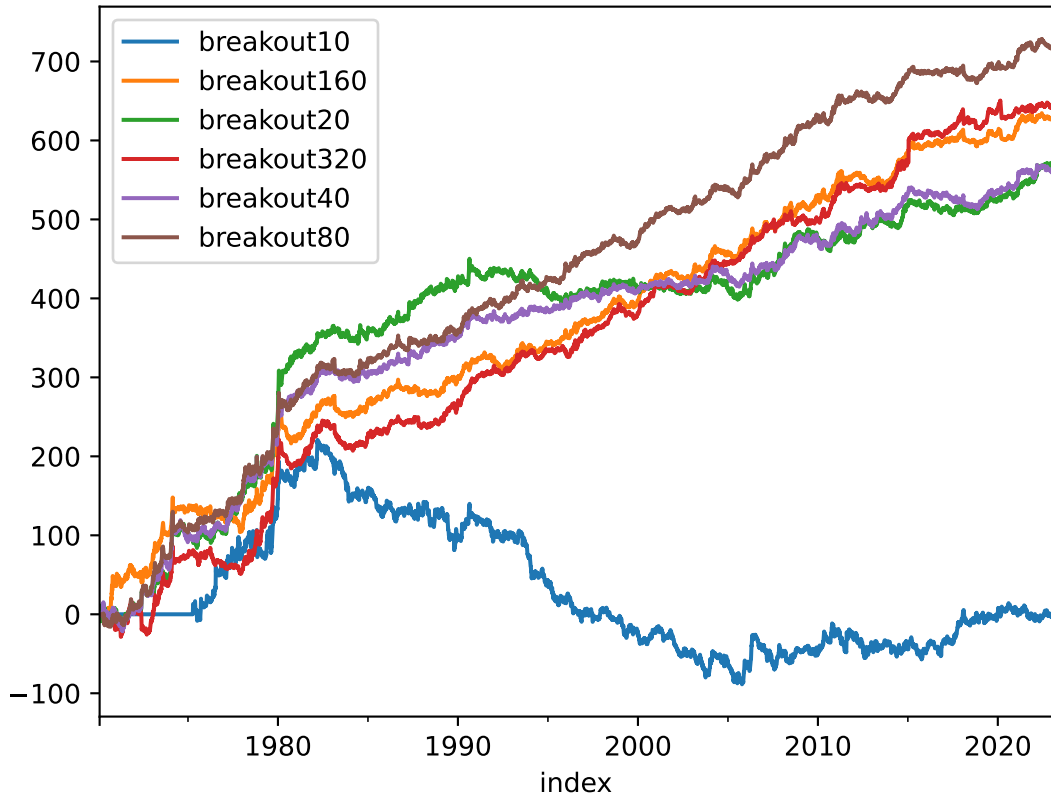


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.026, 'breakout160': 11.645, 'breakout20': 10.528, 'breakout320': 11.928, 'breakout40': 10.368, 'breakout80': 13.325}

ann. std {'breakout10': 20.834, 'breakout160': 12.496, 'breakout20': 16.103, '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}

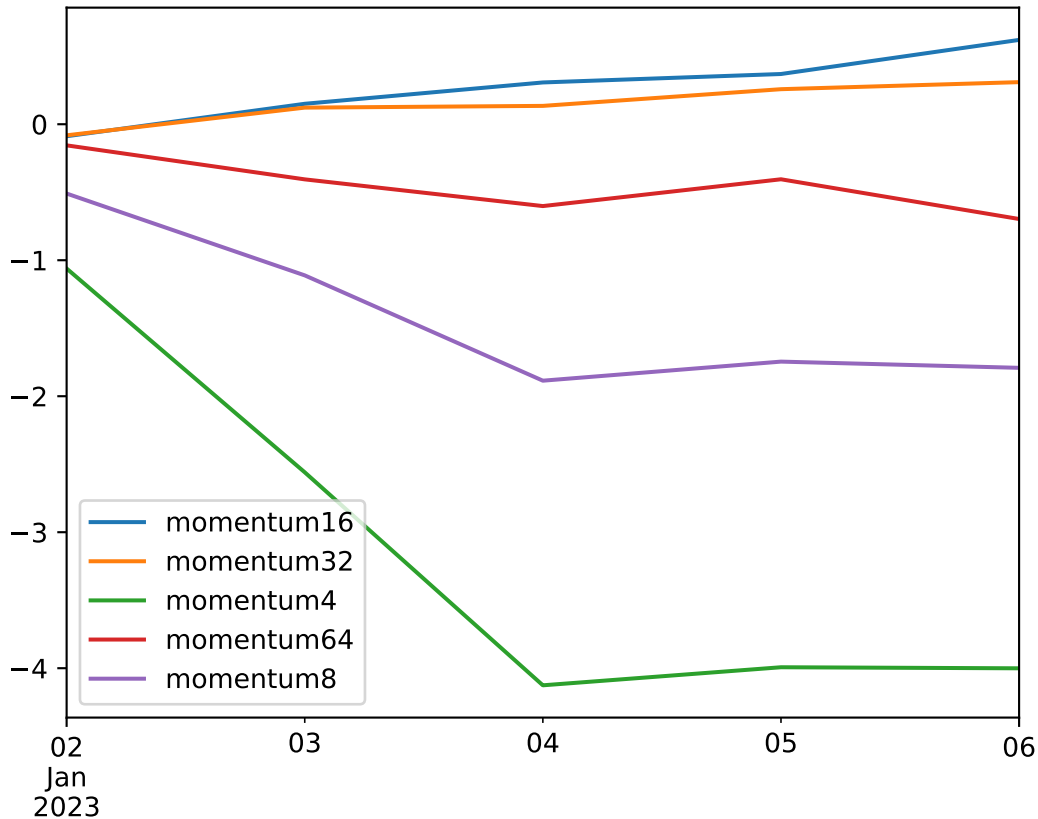


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 31.747, 'momentum32': 15.846, 'momentum4': -204.84, 'momentum64': -35.68, 'momentum8': -91.714}

ann. std {'momentum16': 2.251, 'momentum32': 1.732, 'momentum4': 13.0, 'momentum64': 3.122, 'momentum8': 6.205}

ann. SR {'momentum16': 14.11, 'momentum32': 9.15, 'momentum4': -15.76, 'momentum64': -11.43, 'momentum8': -14.78}

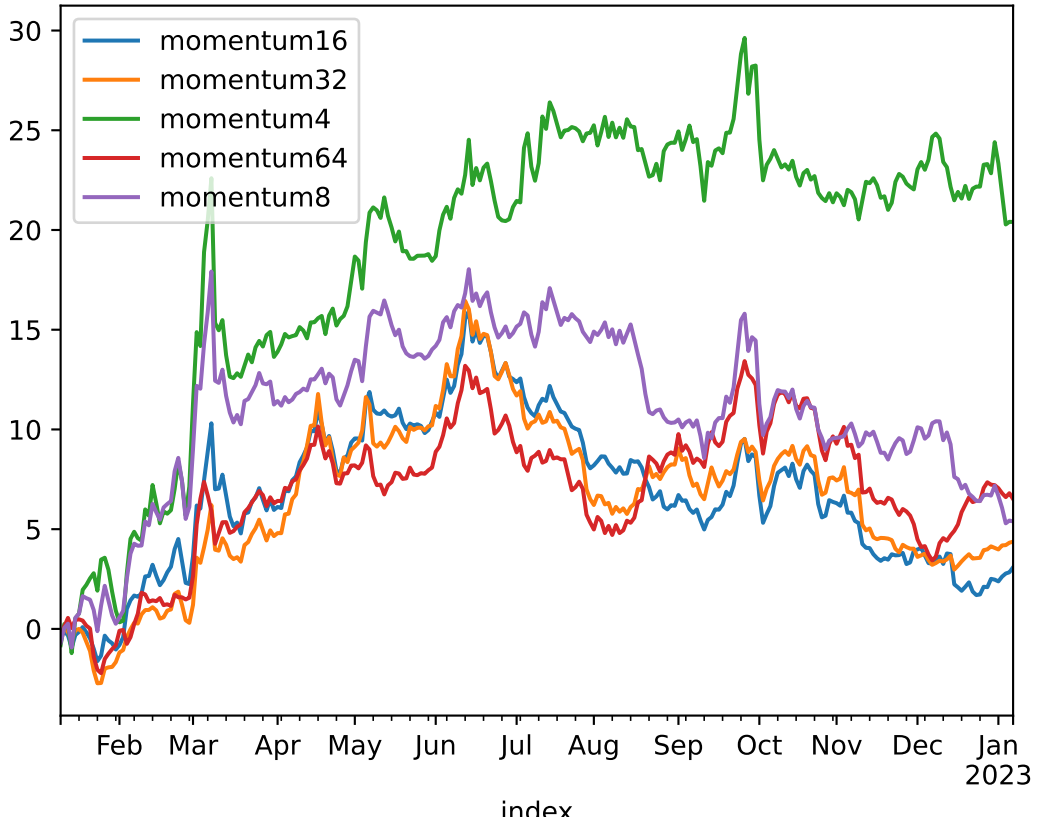


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 3.043, 'momentum32': 4.307, 'momentum4': 20.088, 'momentum64': 6.411, 'momentum8': 5.305}

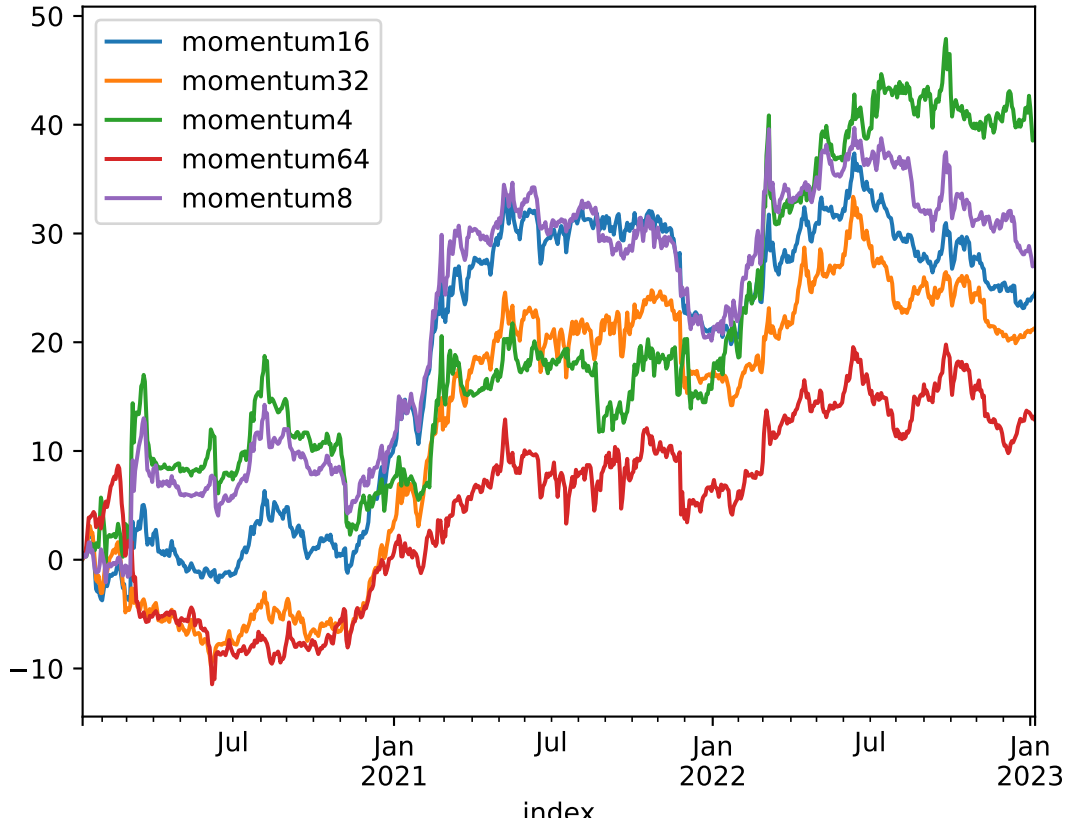
ann. std {'momentum16': 10.094, 'momentum32': 9.612, 'momentum4': 17.39, 'momentum64': 9.323, 'momentum8': 13.221}

ann. SR {'momentum16': 0.3, 'momentum32': 0.45, 'momentum4': 1.16, 'momentum64': 0.69, 'momentum8': 0.4}



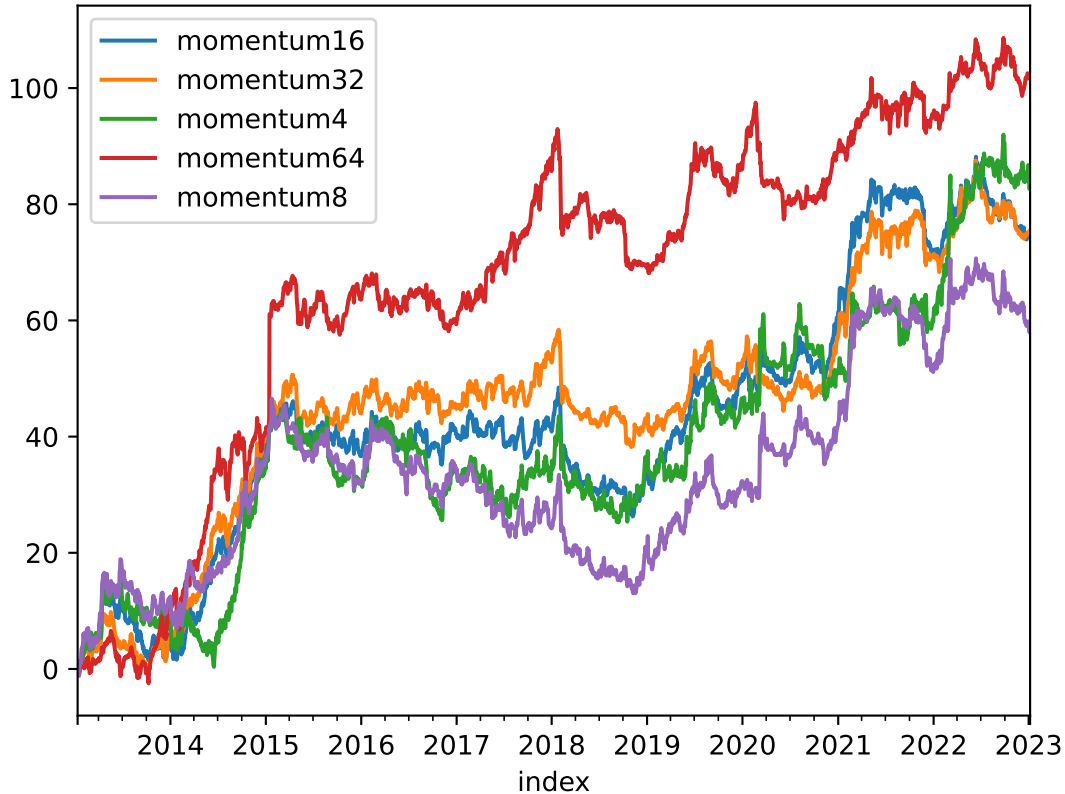
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.038, 'momentum32': 6.983, 'momentum4': 12.674, 'momentum64': 4.22, 'momentum8': 8.871}
ann. std {'momentum16': 11.004, 'momentum32': 10.847, 'momentum4': 16.114, 'momentum64': 10.918, 'momentum8': 12.79}
ann. SR {'momentum16': 0.73, 'momentum32': 0.64, 'momentum4': 0.79, 'momentum64': 0.39, 'momentum8': 0.69}



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

ann. mean {'momentum16': 7.398, 'momentum32': 7.409, 'momentum4': 8.126, 'momentum64': 9.989, 'momentum8': 5.699}
ann. std {'momentum16': 9.949, 'momentum32': 9.488, 'momentum4': 13.713, 'momentum64': 12.003, 'momentum8': 11.323}
ann. SR {'momentum16': 0.74, 'momentum32': 0.78, 'momentum4': 0.59, 'momentum64': 0.83, 'momentum8': 0.5}

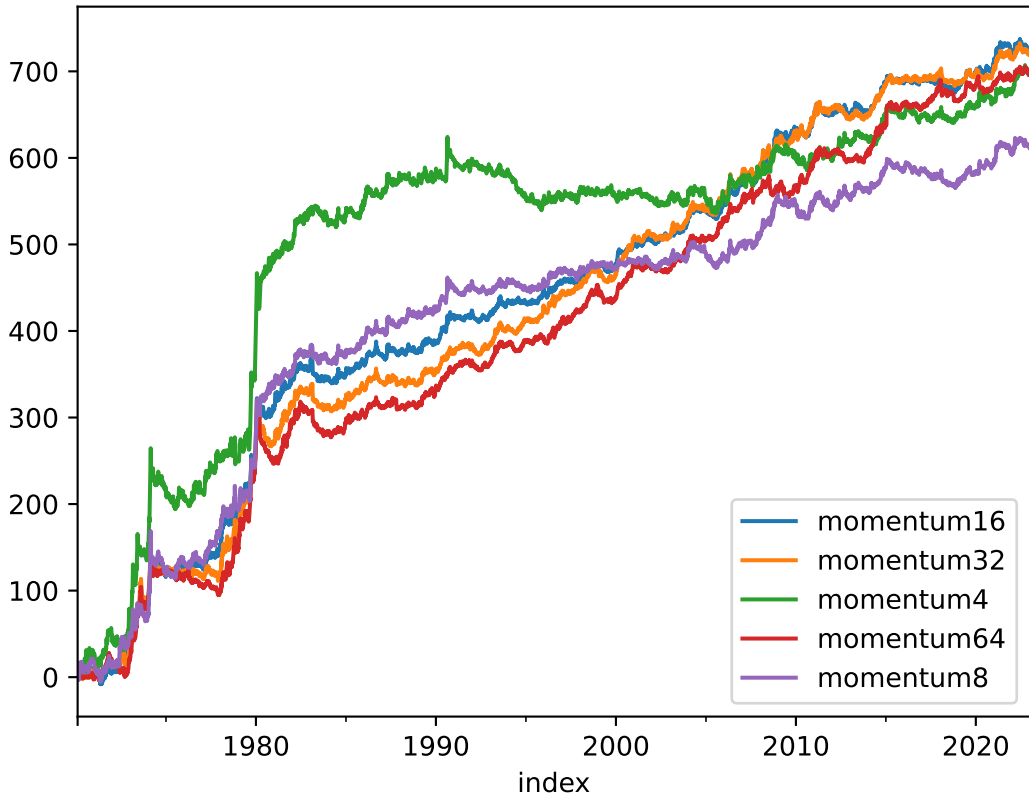


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.434, 'momentum32': 13.358, 'momentum4': 12.94, 'momentum64': 12.953, 'momentum8': 11.319}

ann. std {'momentum16': 14.223, 'momentum32': 13.853, 'momentum4': 20.08, 'momentum64': 13.49, 'momentum8': 15.873}

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

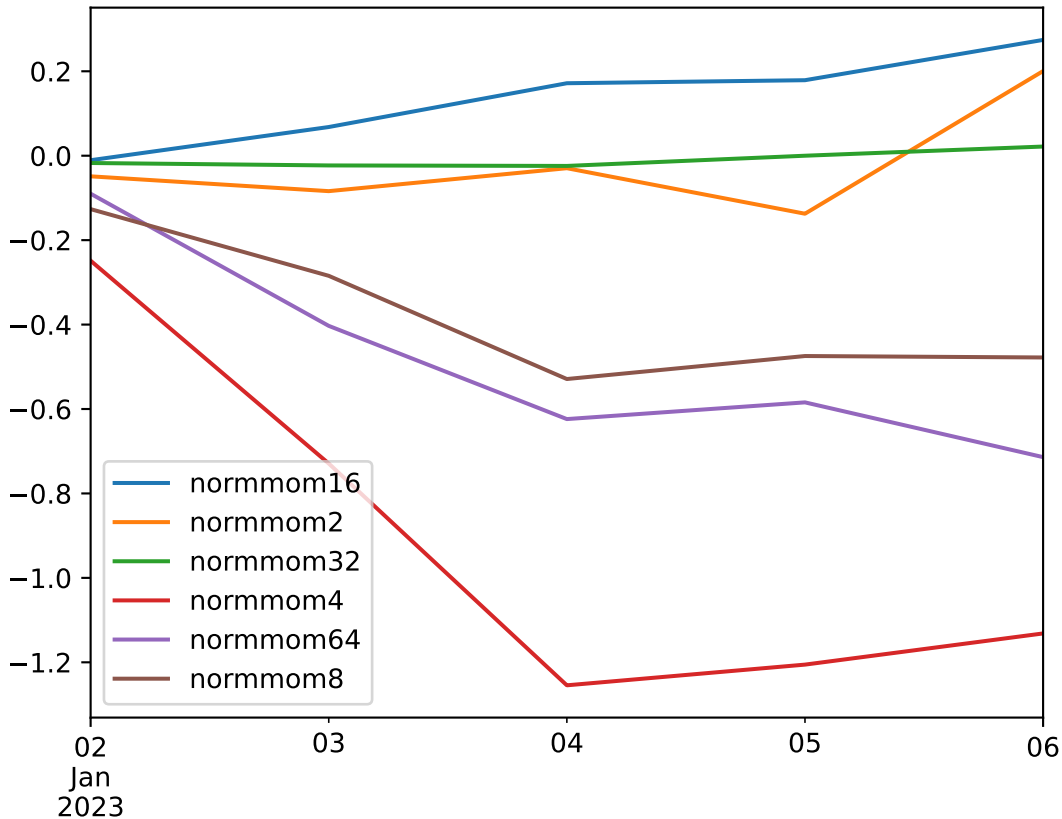


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 14.045, 'normmom2': 10.266, 'normmom32': 1.112, 'normmom4': -57.938, 'normmom64': -36.555, 'normmom8': -24.469}

ann. std {'normmom16': 0.845, 'normmom2': 2.821, 'normmom32': 0.288, 'normmom4': 4.528, 'normmom64': 2.136, 'normmom8': 1.927}

ann. SR {'normmom16': 16.61, 'normmom2': 3.64, 'normmom32': 3.86, 'normmom4': -12.79, 'normmom64': -17.12, 'normmom8': -12.7}

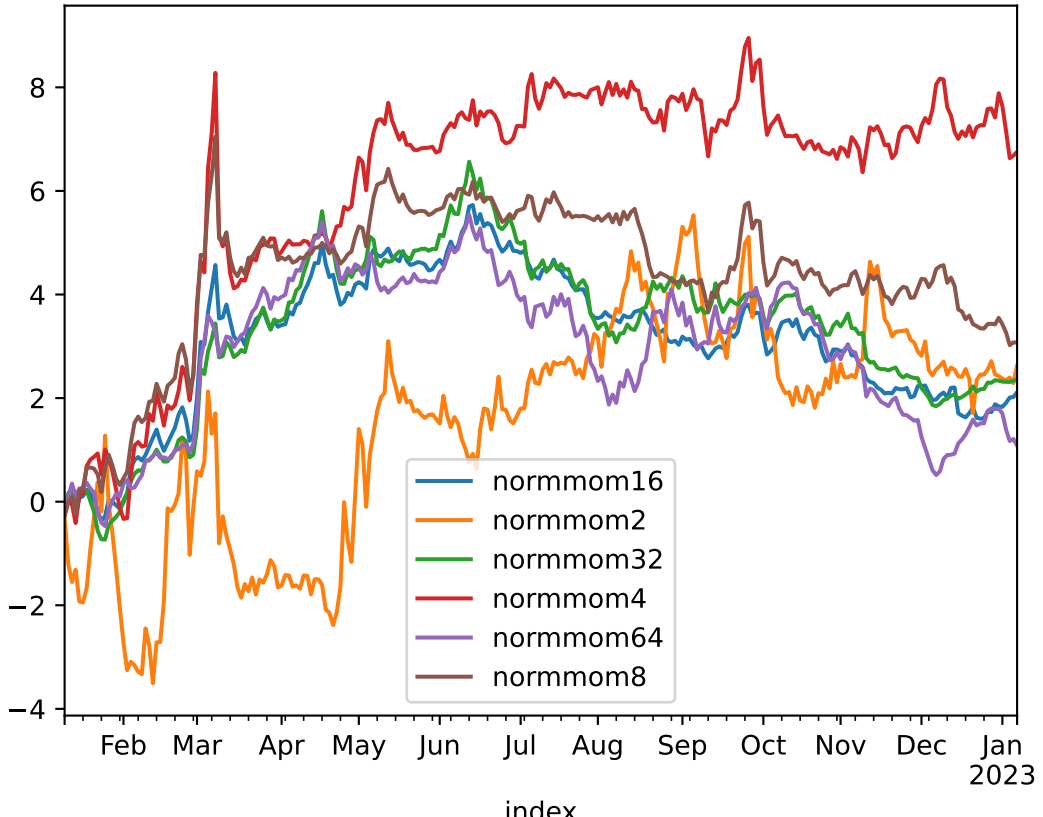


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.083, 'normmom2': 2.586, 'normmom32': 2.321, 'normmom4': 6.651, 'normmom64': 1.064, 'normmom8': 3.026}

ann. std {'normmom16': 3.135, 'normmom2': 8.023, 'normmom32': 3.138, 'normmom4': 5.999, 'normmom64': 3.432, 'normmom8': 4.245}

ann. SR {'normmom16': 0.66, 'normmom2': 0.32, 'normmom32': 0.74, 'normmom4': 1.11, 'normmom64': 0.31, 'normmom8': 0.71}

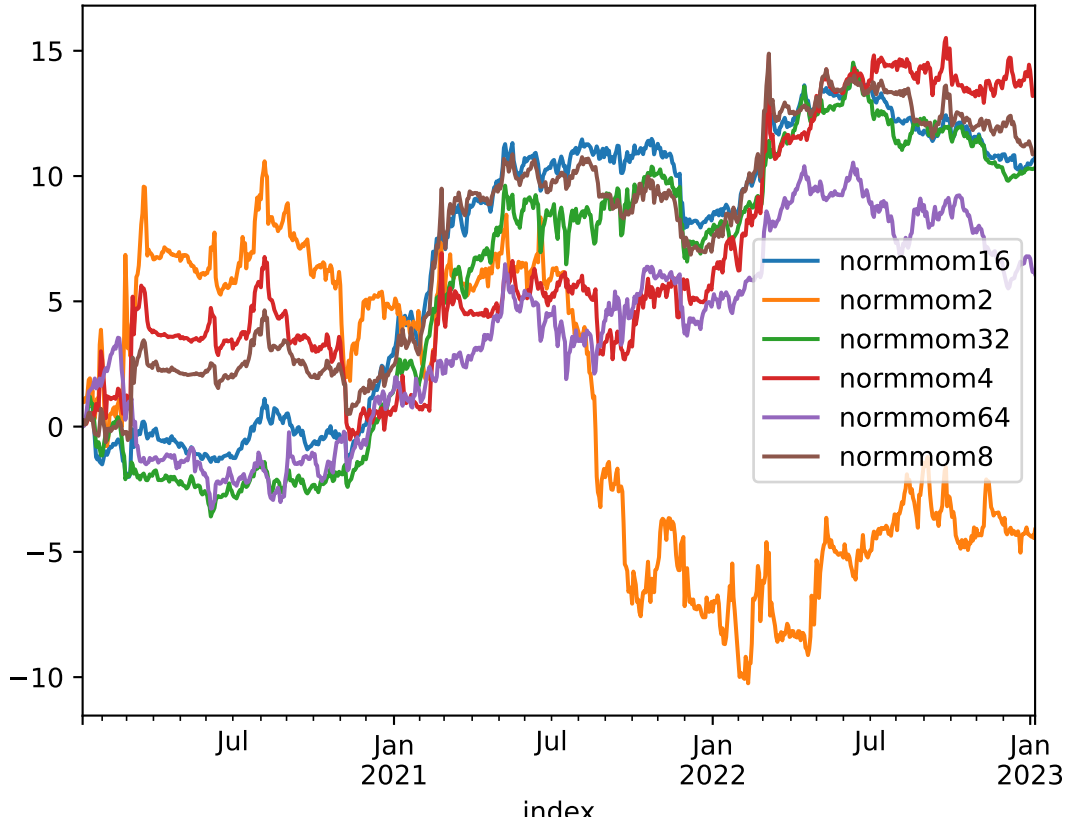


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.521, 'normmom2': -1.348, 'normmom32': 3.384, 'normmom4': 4.364, 'normmom64': 1.993, 'normmom8': 3.577}

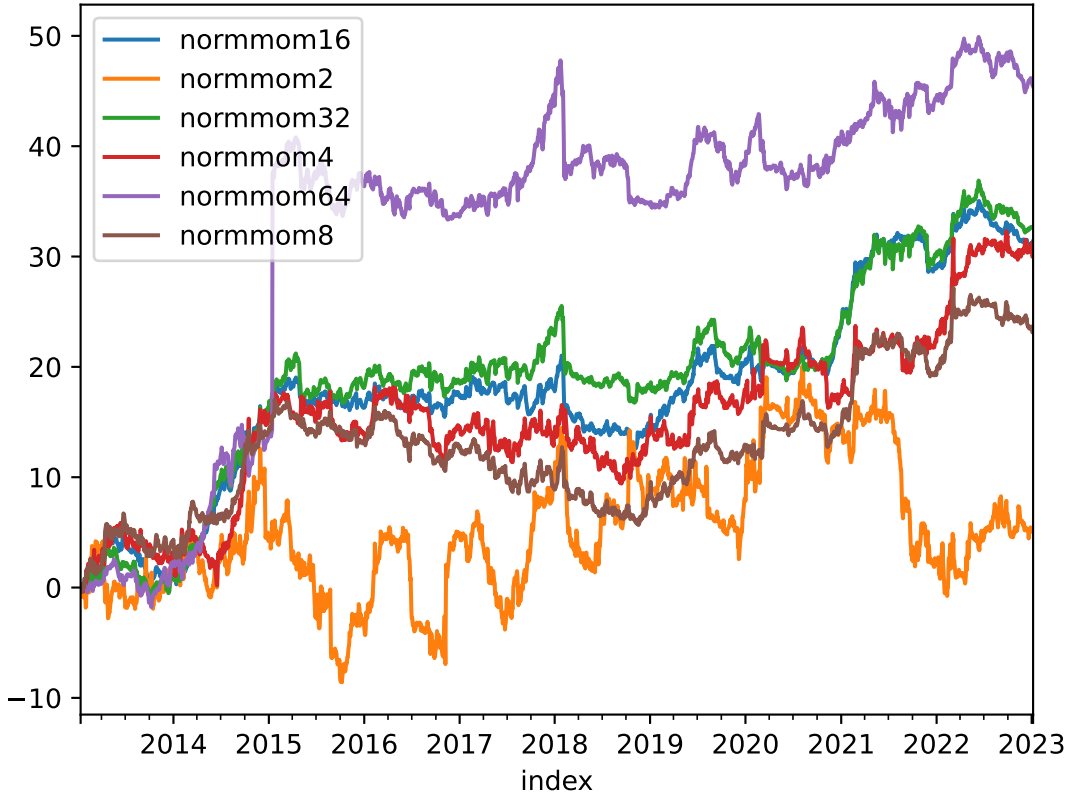
ann. std {'normmom16': 3.703, 'normmom2': 8.484, 'normmom32': 4.043, 'normmom4': 5.838, 'normmom64': 4.313, 'normmom8': 4.245}

ann. SR {'normmom16': 0.95, 'normmom2': -0.16, 'normmom32': 0.84, 'normmom4': 0.75, 'normmom64': 0.46, 'normmom8': 0.84}



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

ann. mean {'normmom16': 3.086, 'normmom2': 0.527, 'normmom32': 3.209, 'normmom4': 2.956, 'normmom64': 4.463, 'normmom8': 2.276}
ann. std {'normmom16': 3.576, 'normmom2': 9.055, 'normmom32': 3.726, 'normmom4': 5.498, 'normmom64': 8.563, 'normmom8': 4.045}
ann. SR {'normmom16': 0.86, 'normmom2': 0.06, 'normmom32': 0.86, 'normmom4': 0.54, 'normmom64': 0.52, 'normmom8': 0.56}

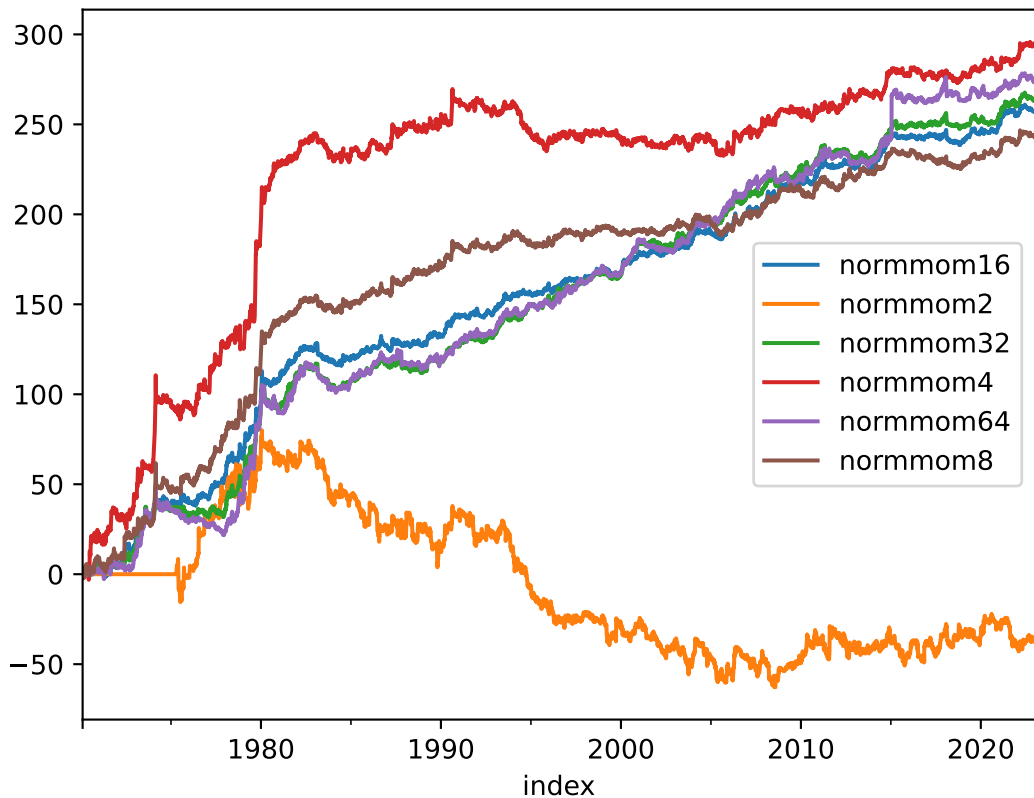


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.771, 'normmom2': -0.681, 'normmom32': 4.885, 'normmom4': 5.443, 'normmom64': 5.079, 'normmom8': 4.499}

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}

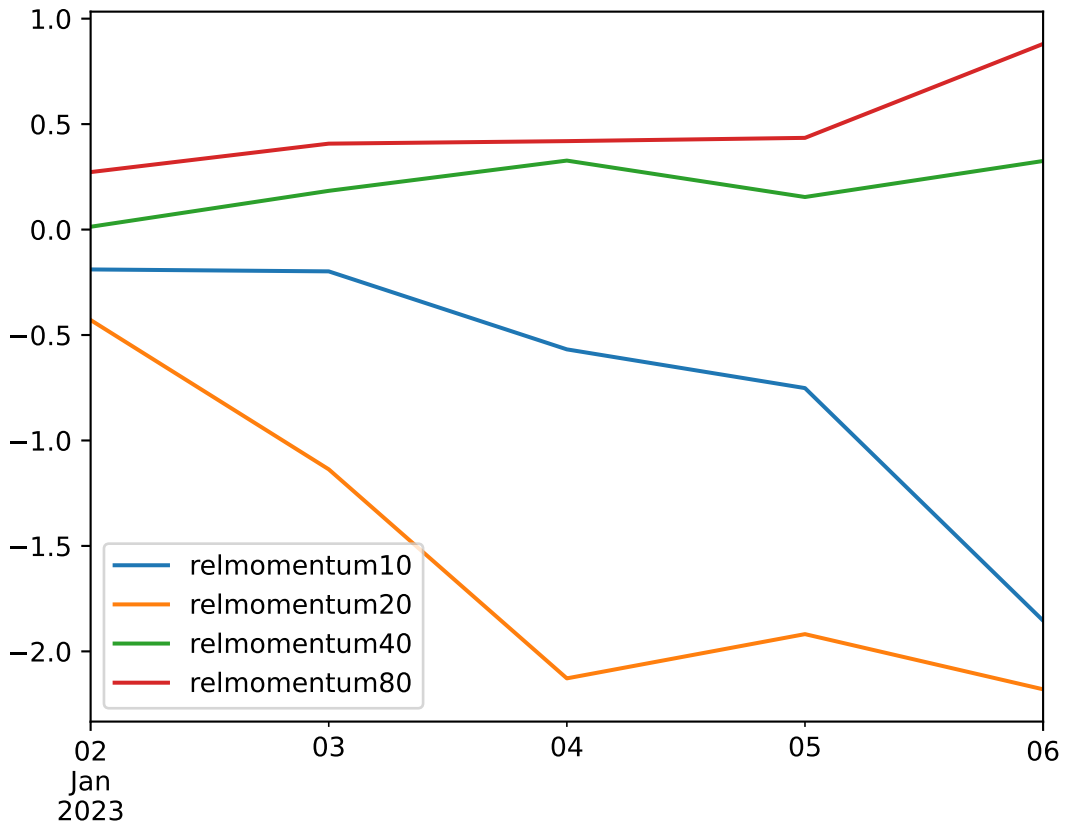


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -94.933, 'relmomentum20': -111.608, 'relmomentum40': 16.647, 'relmomentum80': 45.071}

ann. std {'relmomentum10': 6.855, 'relmomentum20': 7.287, 'relmomentum40': 2.368, 'relmomentum80': 2.954}

ann. SR {'relmomentum10': -13.85, 'relmomentum20': -15.32, 'relmomentum40': 7.03, 'relmomentum80': 15.26}

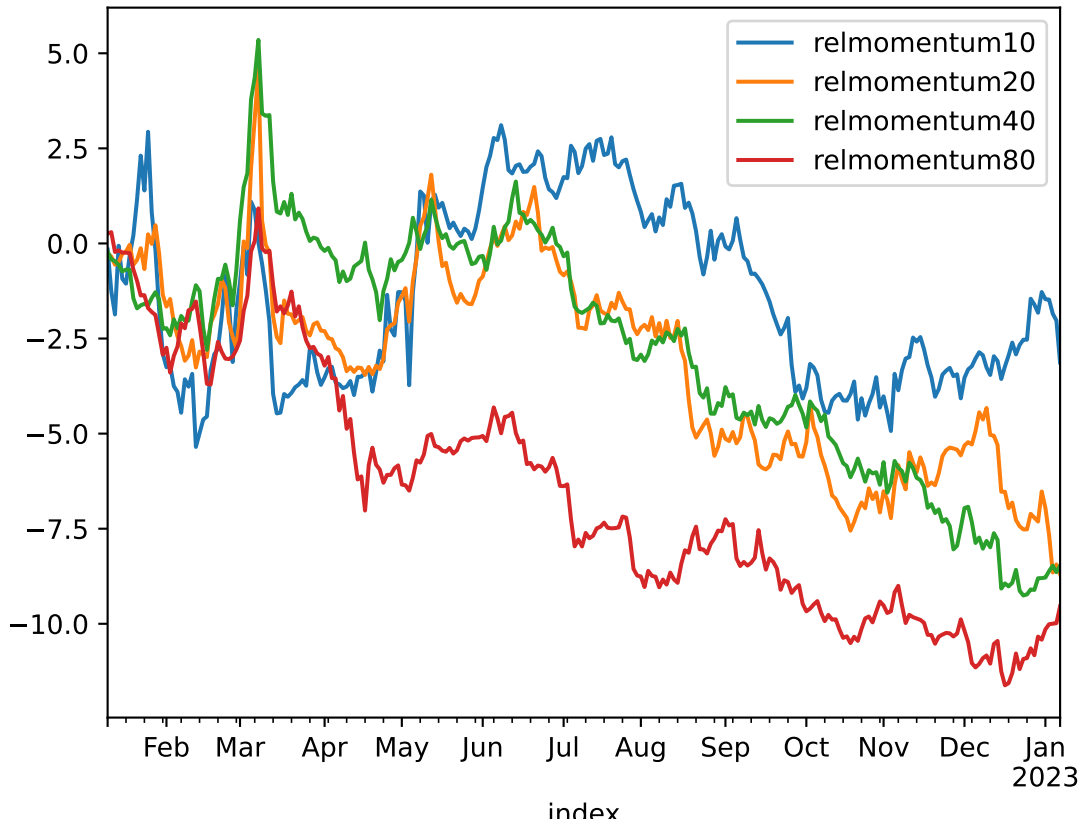


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.083, 'relmomentum20': -8.568, 'relmomentum40': -8.343, 'relmomentum80': -9.391}

ann. std {'relmomentum10': 10.008, 'relmomentum20': 8.504, 'relmomentum40': 6.664, 'relmomentum80': 5.715}

ann. SR {'relmomentum10': -0.31, 'relmomentum20': -1.01, 'relmomentum40': -1.25, 'relmomentum80': -1.64}

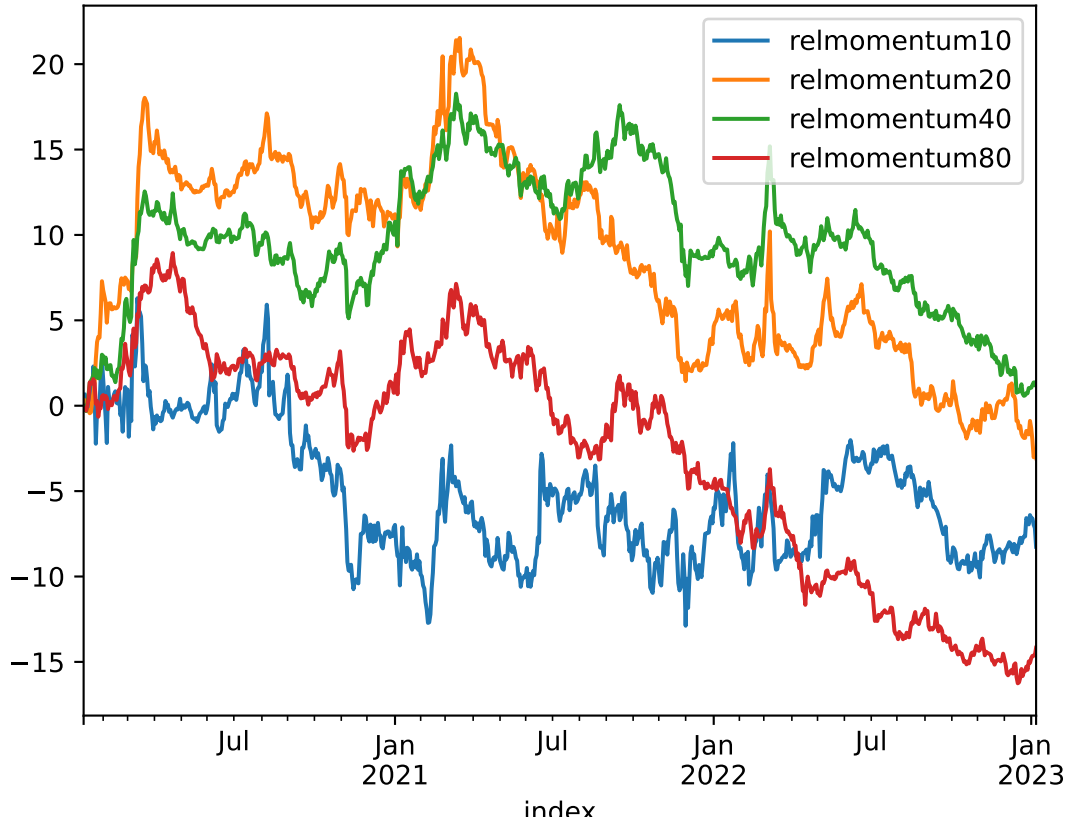


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.707, 'relmomentum20': -1.006, 'relmomentum40': 0.447, 'relmomentum80': -4.646}

ann. std {'relmomentum10': 12.701, 'relmomentum20': 9.078, 'relmomentum40': 7.475, 'relmomentum80': 6.953}

ann. SR {'relmomentum10': -0.21, 'relmomentum20': -0.11, 'relmomentum40': 0.06, 'relmomentum80': -0.67}

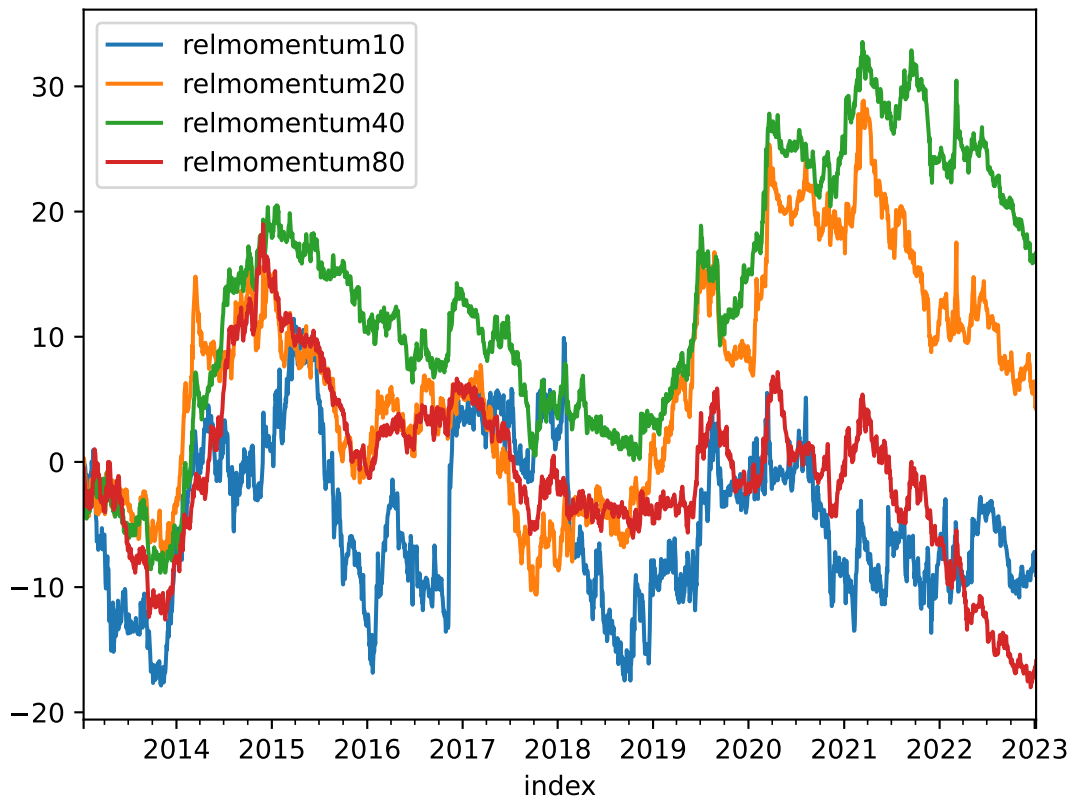


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.887, 'relmomentum20': 0.418, 'relmomentum40': 1.634, 'relmomentum80': -1.564}

ann. std {'relmomentum10': 12.883, 'relmomentum20': 8.974, 'relmomentum40': 7.362, 'relmomentum80': 6.805}

ann. SR {'relmomentum10': -0.07, 'relmomentum20': 0.05, 'relmomentum40': 0.22, 'relmomentum80': -0.23}

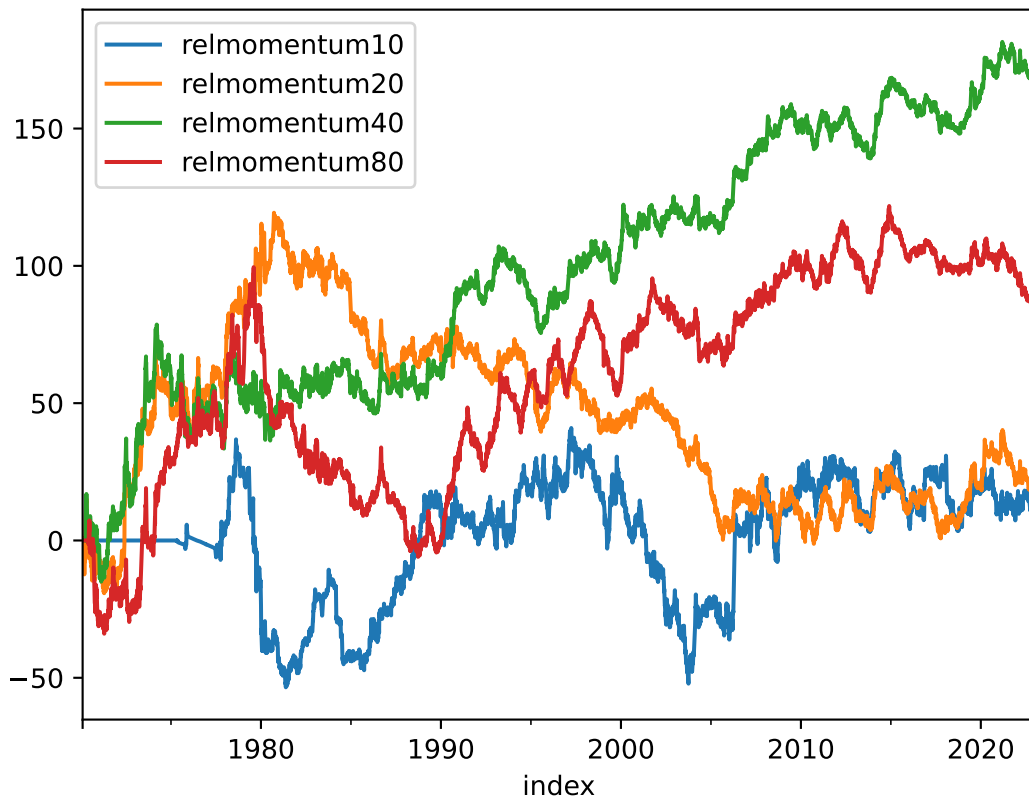


Total Trading Rule P&L for period '99Y'

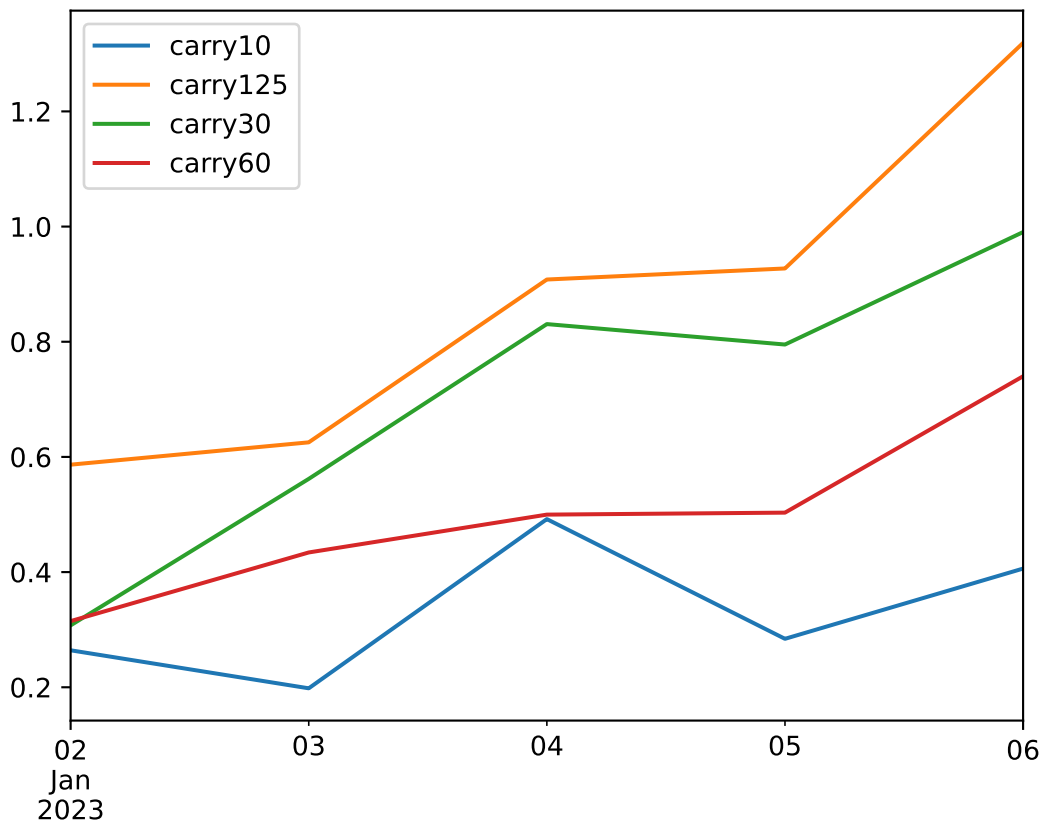
ann. mean {'relmomentum10': 0.221, 'relmomentum20': 0.29, 'relmomentum40': 3.052, 'relmomentum80': 1.611}

ann. std {'relmomentum10': 13.323, 'relmomentum20': 11.525, 'relmomentum40': 10.794, 'relmomentum80': 11.062}

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

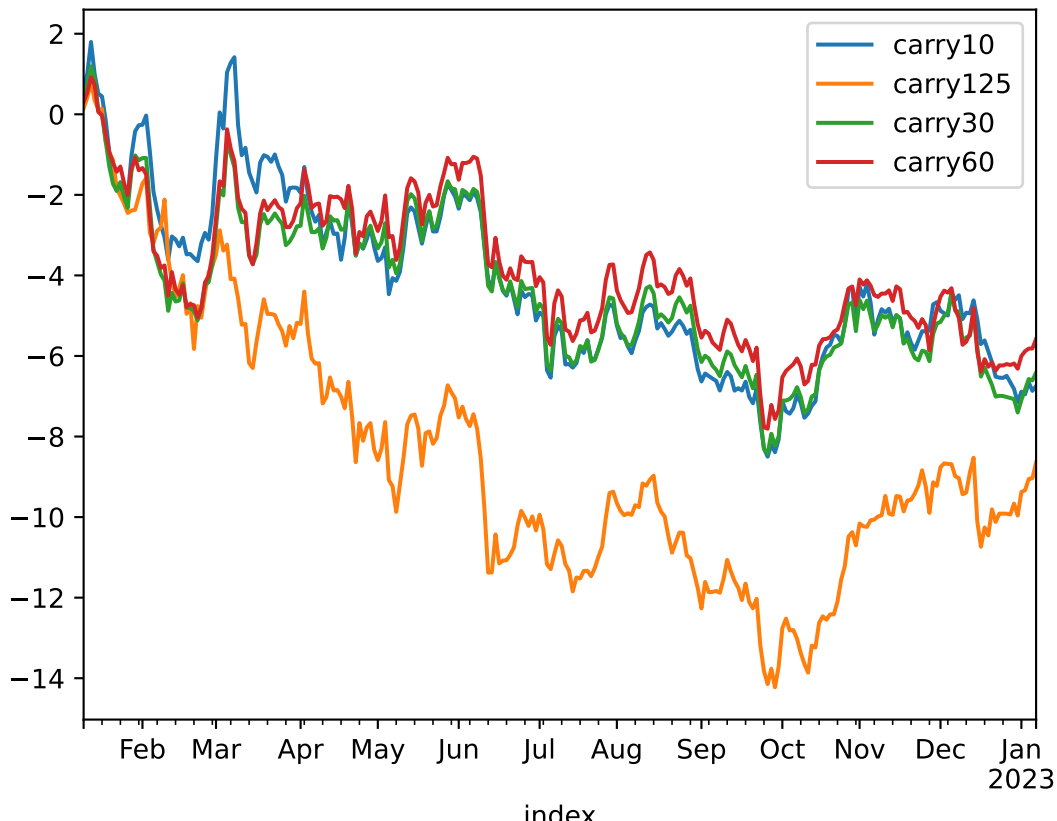


Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 20.793, 'carry125': 67.529, 'carry30': 50.71, 'carry60': 37.892}
ann. std {'carry10': 3.447, 'carry125': 3.848, 'carry30': 2.187, 'carry60': 2.028}
ann. SR {'carry10': 6.03, 'carry125': 17.55, 'carry30': 23.19, 'carry60': 18.69}



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

| | |
|-----------|--|
| ann. mean | {'carry10': -6.641, 'carry125': -8.51, 'carry30': -6.314, 'carry60': -5.491} |
| ann. std | {'carry10': 7.079, 'carry125': 7.657, 'carry30': 6.738, 'carry60': 6.767} |
| ann. SR | {'carry10': -0.94, 'carry125': -1.11, 'carry30': -0.94, 'carry60': -0.81} |

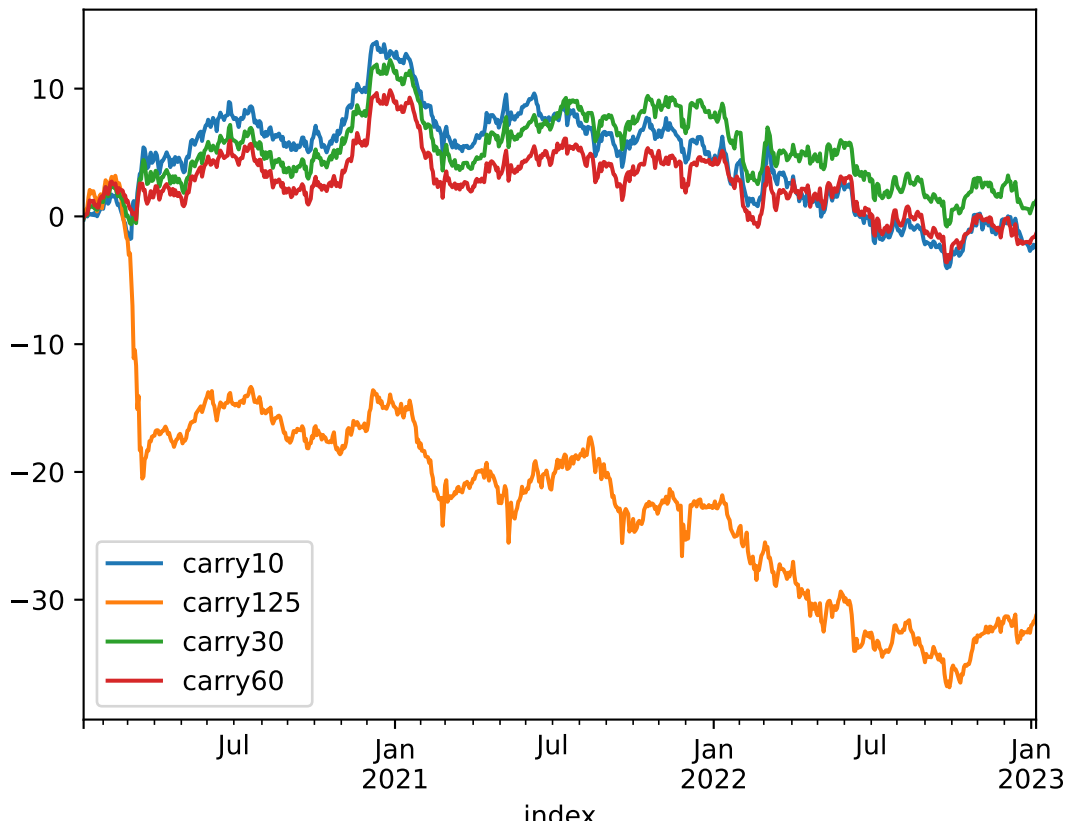


Total Trading Rule P&L for period '3Y'

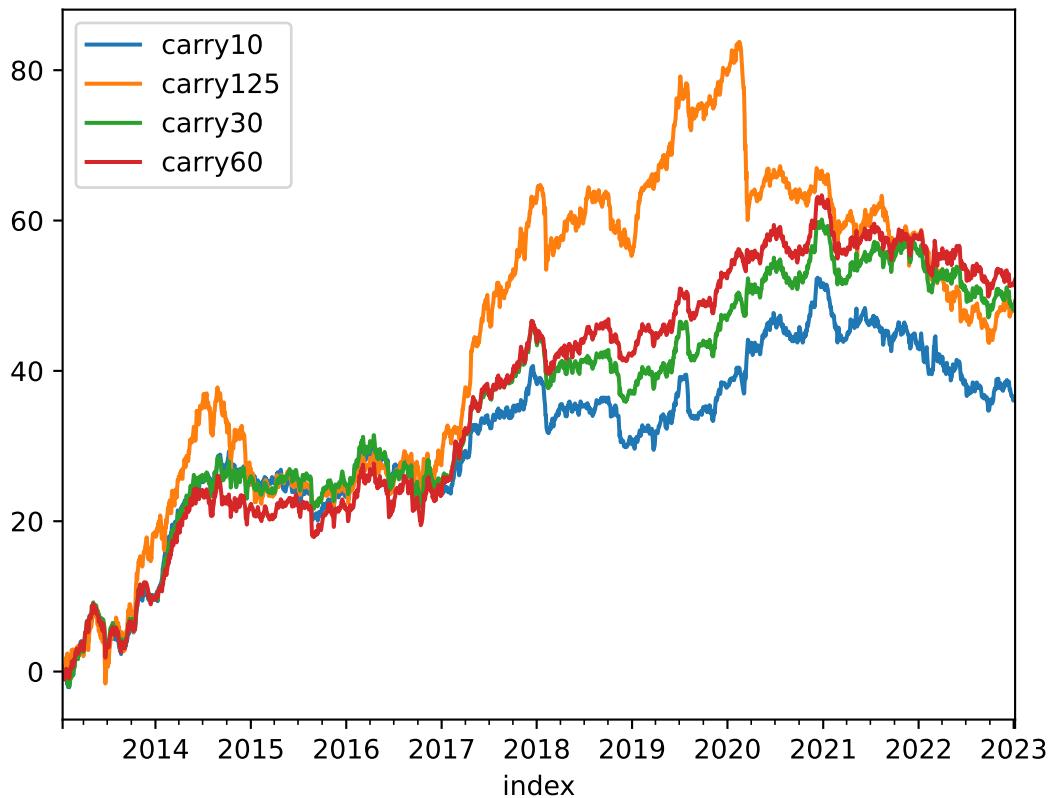
ann. mean {'carry10': -0.754, 'carry125': -10.25, 'carry30': 0.4, 'carry60': -0.448}

ann. std {'carry10': 6.829, 'carry125': 9.447, 'carry30': 6.628, 'carry60': 6.564}

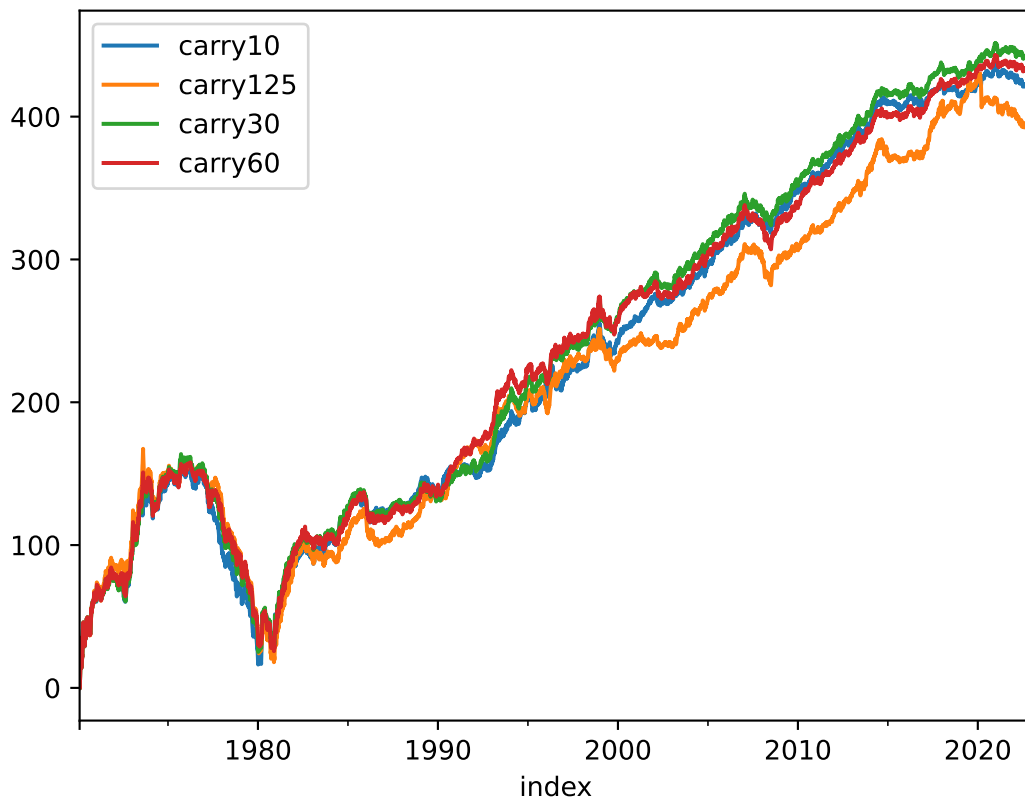
ann. SR {'carry10': -0.11, 'carry125': -1.09, 'carry30': 0.06, 'carry60': -0.07}



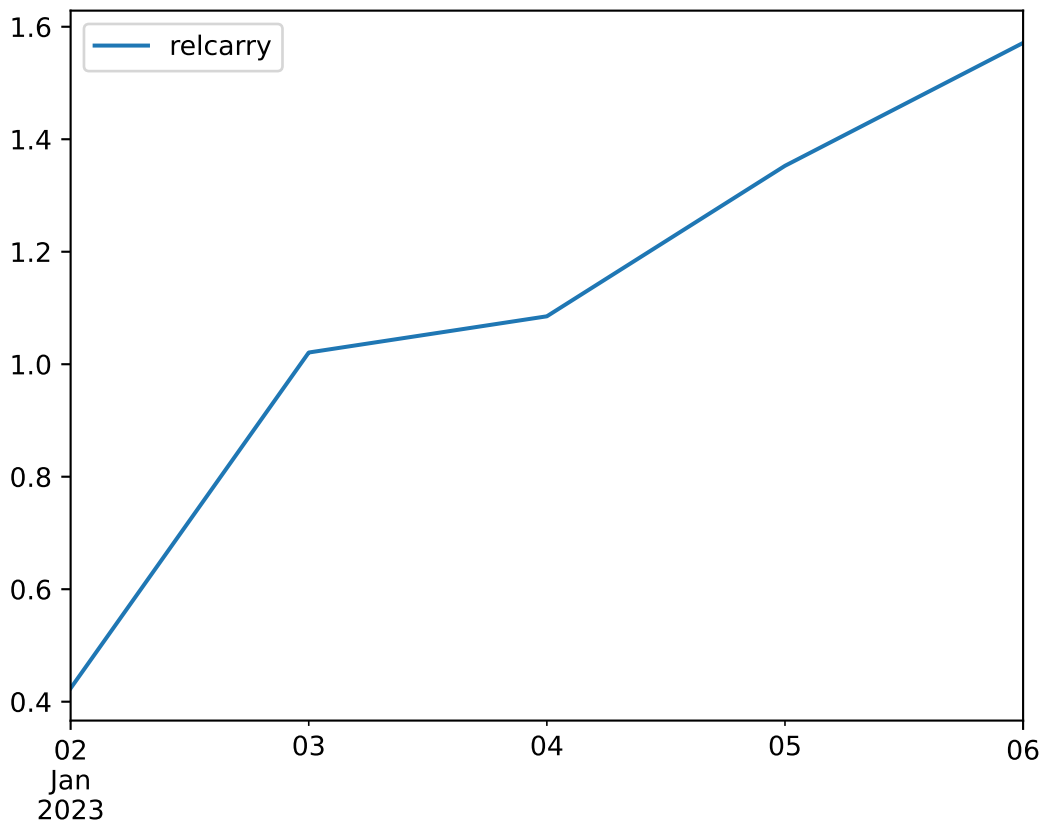
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.579, 'carry125': 4.842, 'carry30': 4.824, 'carry60': 5.118}
ann. std {'carry10': 6.452, 'carry125': 9.13, 'carry30': 6.548, 'carry60': 6.51}
ann. SR {'carry10': 0.55, 'carry125': 0.53, 'carry30': 0.74, 'carry60': 0.79}



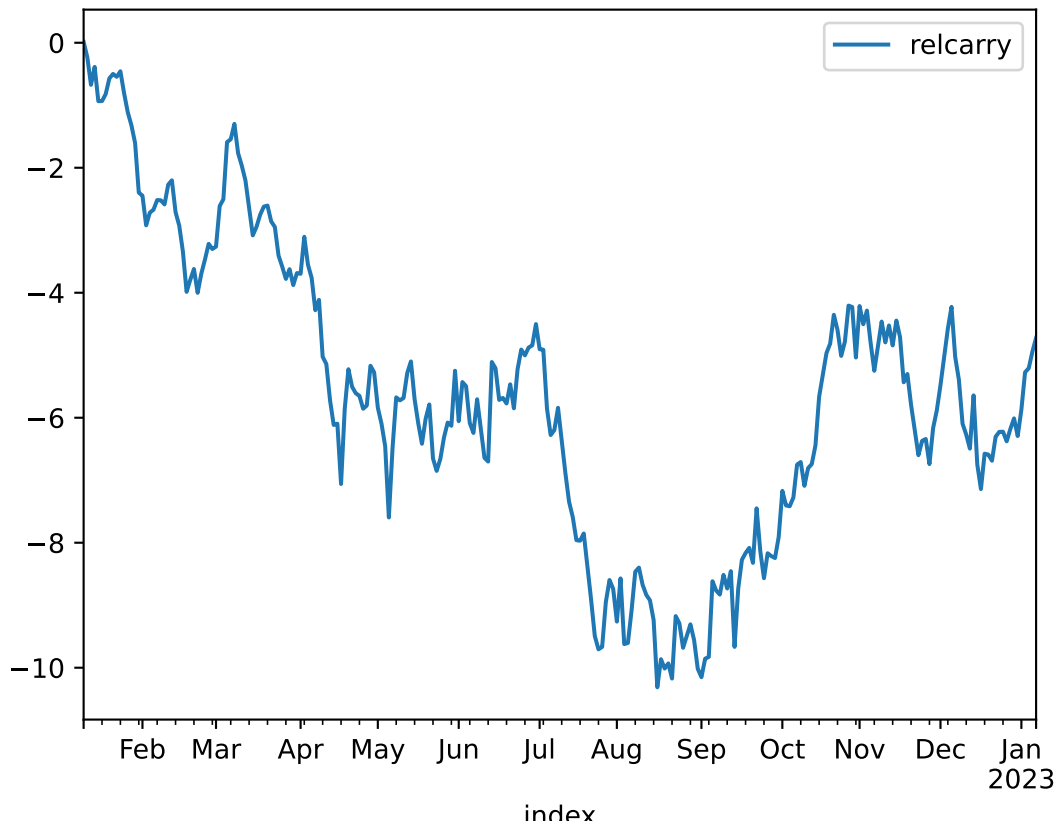
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.801, 'carry125': 7.337, 'carry30': 8.168, 'carry60': 8.006}
ann. std {'carry10': 11.857, 'carry125': 12.099, 'carry30': 11.869, 'carry60': 11.82}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



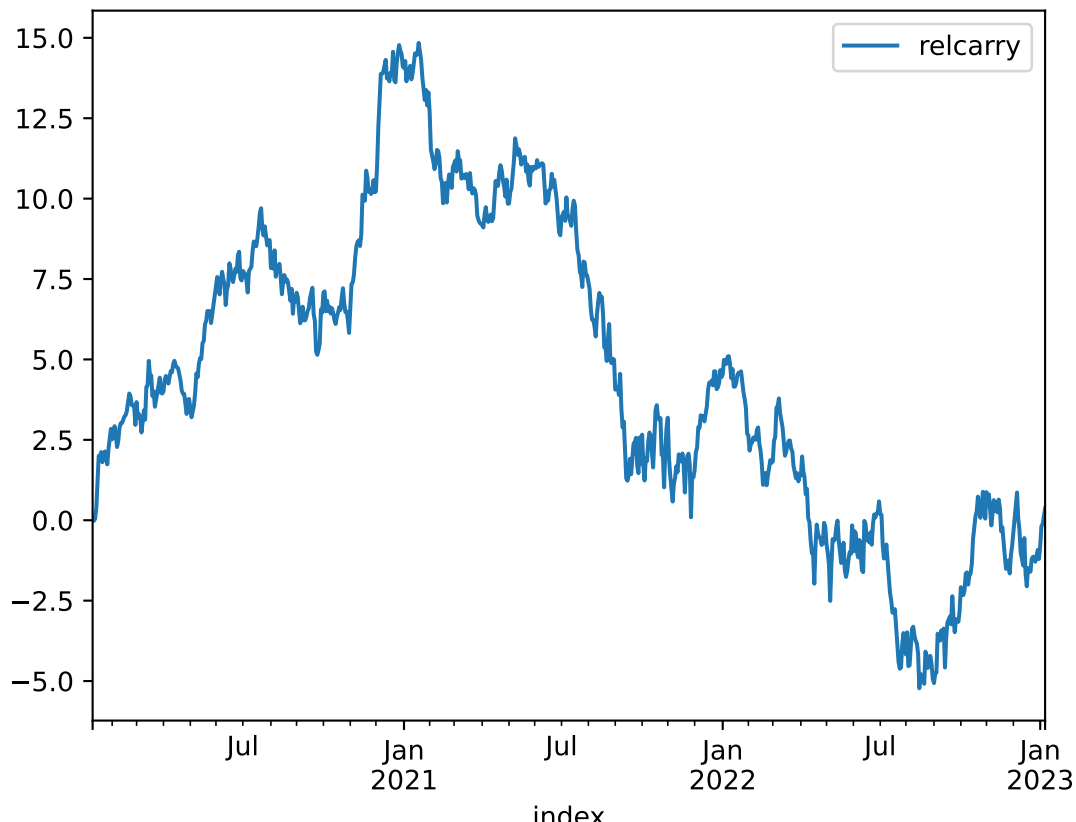
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 80.45}
ann. std {'relcarry': 3.257}
ann. SR {'relcarry': 24.7}



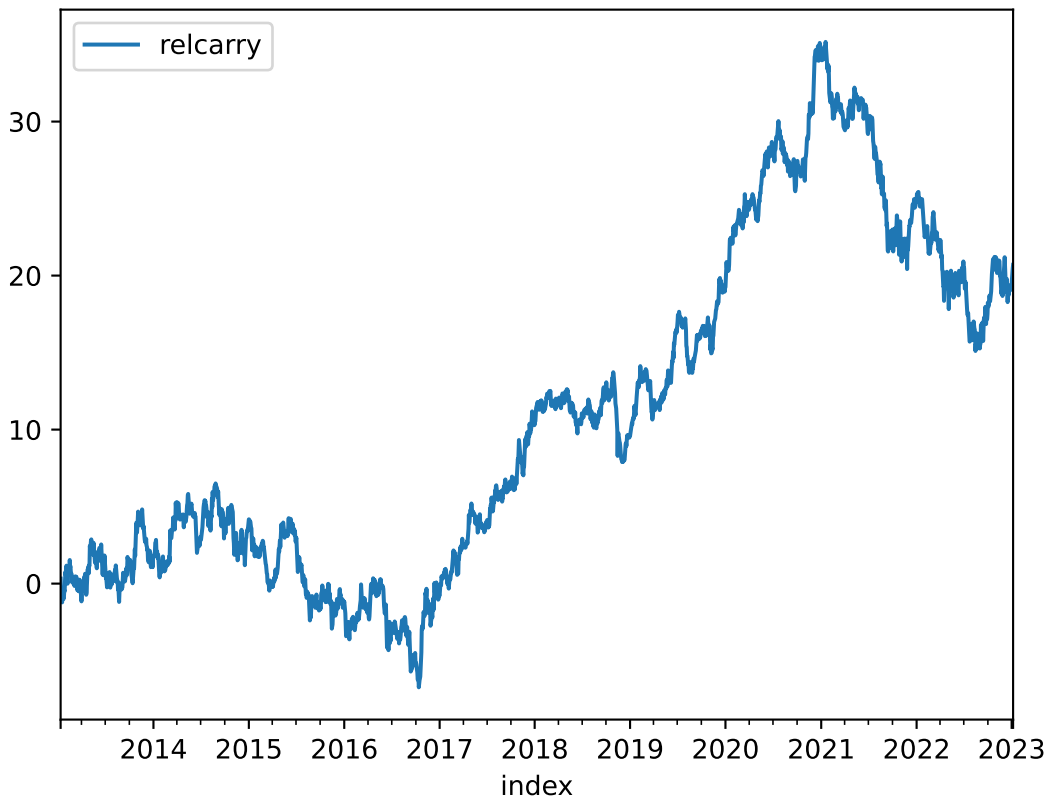
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -4.65}
ann. std {'relcarry': 7.202}
ann. SR {'relcarry': -0.65}



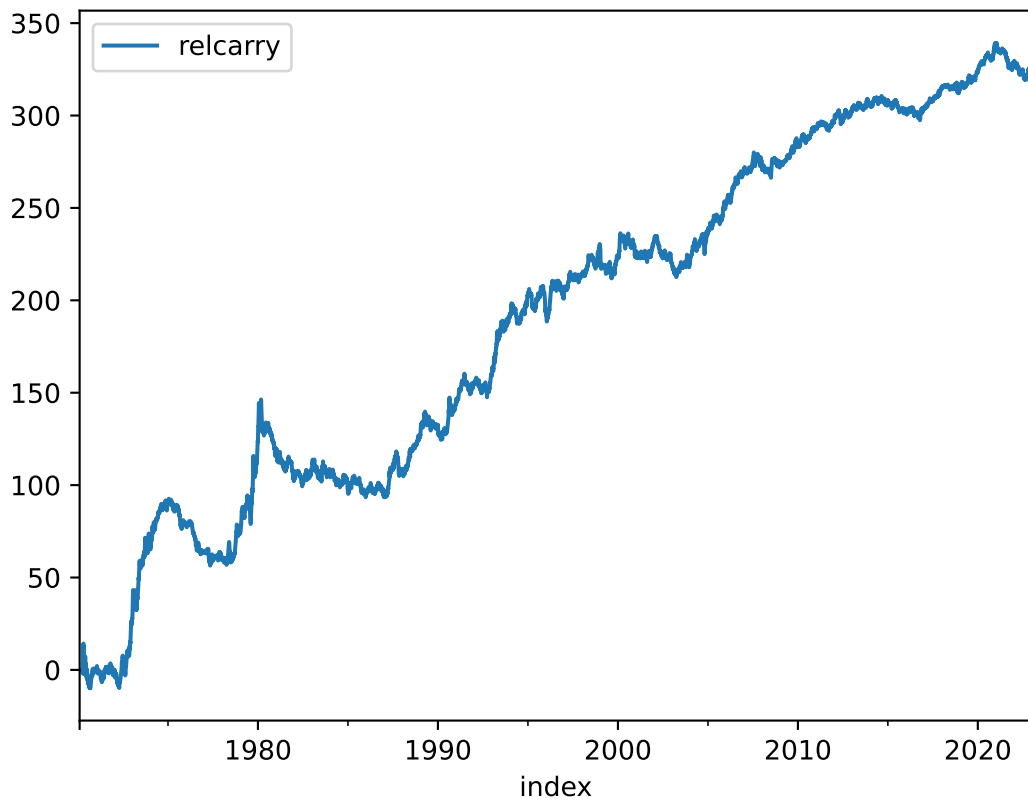
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': 0.12}
ann. std {'relcarry': 6.854}
ann. SR {'relcarry': 0.02}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.032}
ann. std {'relcarry': 6.033}
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.022}
ann. std {'relcarry': 9.557}
ann. SR {'relcarry': 0.63}

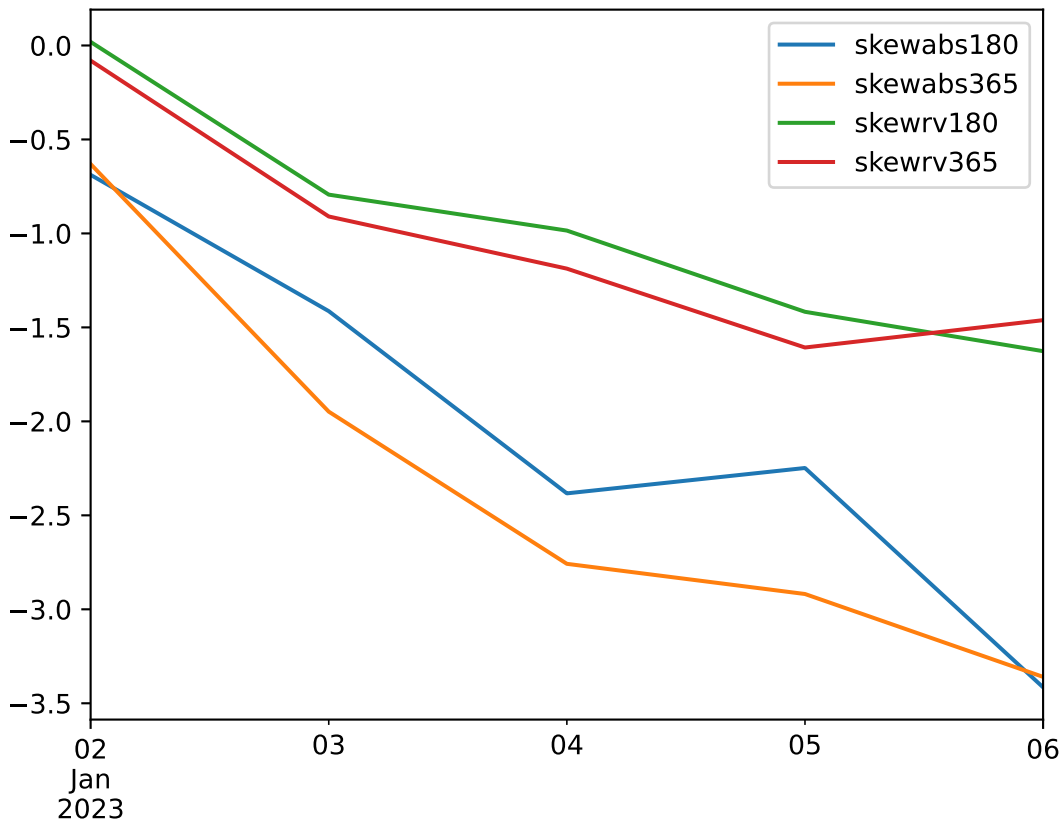


Total Trading Rule P&L for period 'YTD'

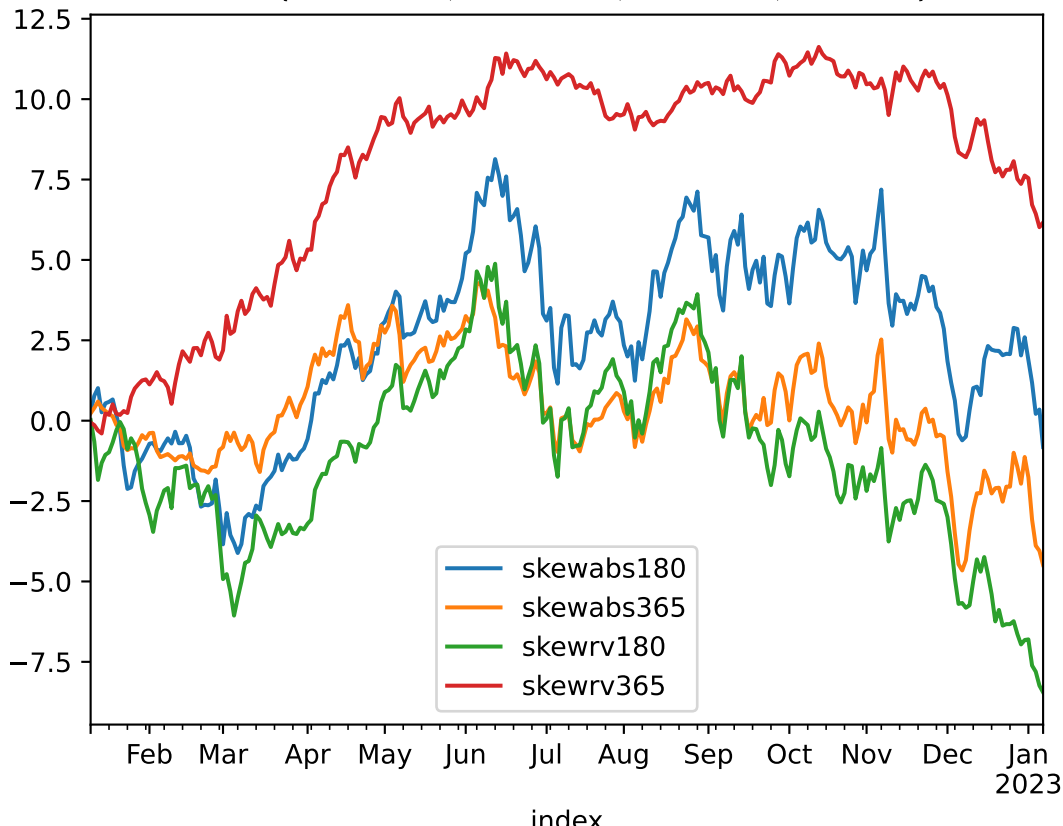
ann. mean {'skewabs180': -174.848, 'skewabs365': -172.007, 'skewrv180': -83.276, 'skewrv365': -74.831}

ann. std {'skewabs180': 7.949, 'skewabs365': 6.938, 'skewrv180': 5.052, 'skewrv365': 5.887}

ann. SR {'skewabs180': -22.0, 'skewabs365': -24.79, 'skewrv180': -16.48, 'skewrv365': -12.71}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -0.807, 'skewabs365': -4.419, 'skewrv180': -8.317, 'skewrv365': 6.068}
ann. std {'skewabs180': 10.057, 'skewabs365': 8.097, 'skewrv180': 9.3, 'skewrv365': 5.075}
ann. SR {'skewabs180': -0.08, 'skewabs365': -0.55, 'skewrv180': -0.89, 'skewrv365': 1.2}

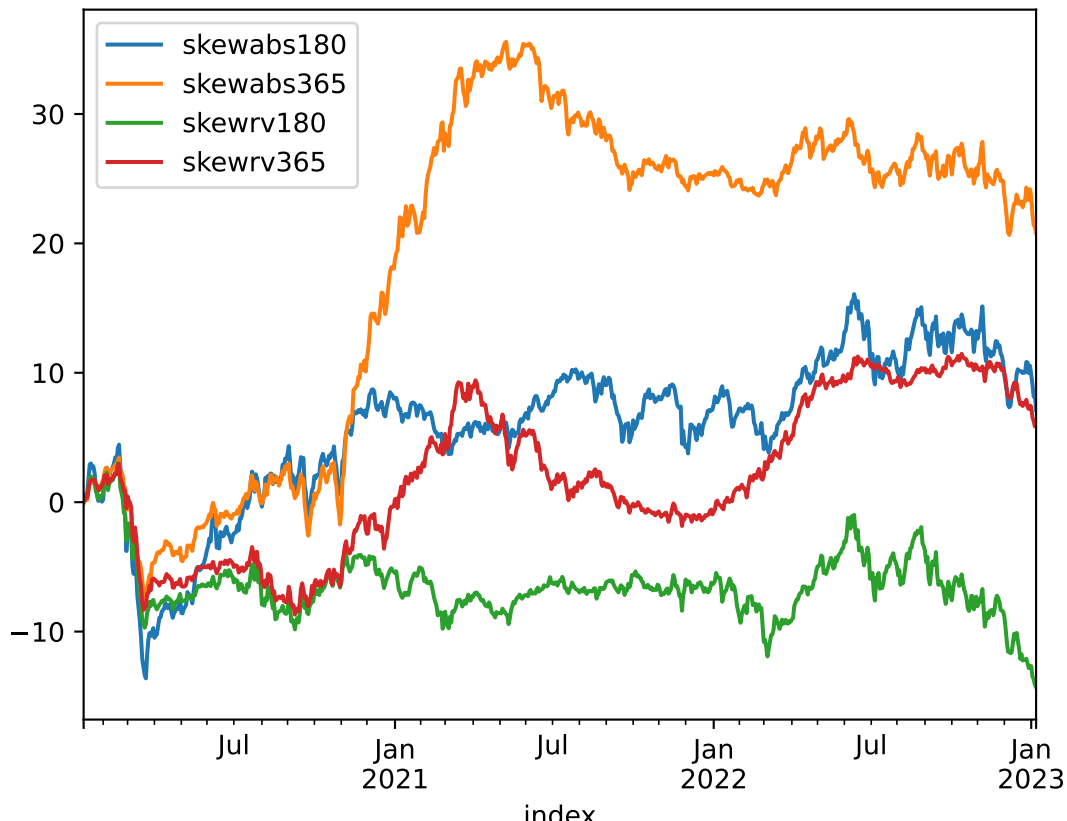


Total Trading Rule P&L for period '3Y'

ann. mean {'skewabs180': 2.336, 'skewabs365': 6.826, 'skewrv180': -4.69, 'skewrv365': 1.968}

ann. std {'skewabs180': 9.66, 'skewabs365': 8.853, 'skewrv180': 7.791, 'skewrv365': 6.614}

ann. SR {'skewabs180': 0.24, 'skewabs365': 0.77, 'skewrv180': -0.6, 'skewrv365': 0.3}

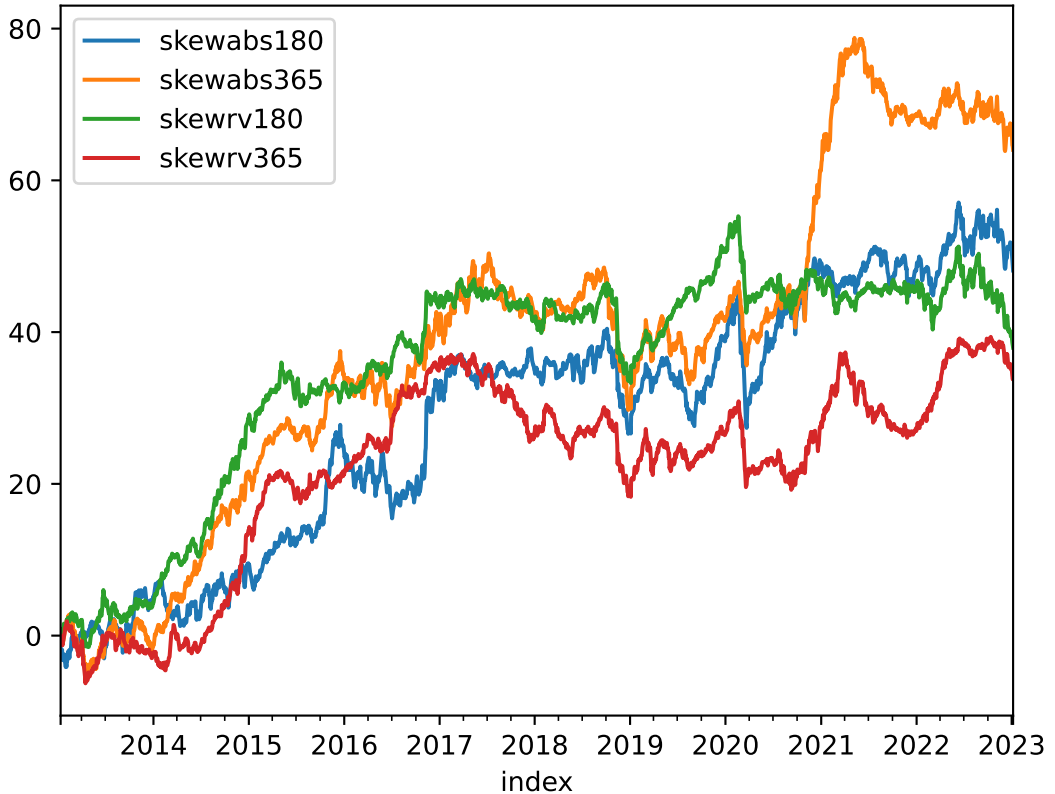


Total Trading Rule P&L for period '10Y'

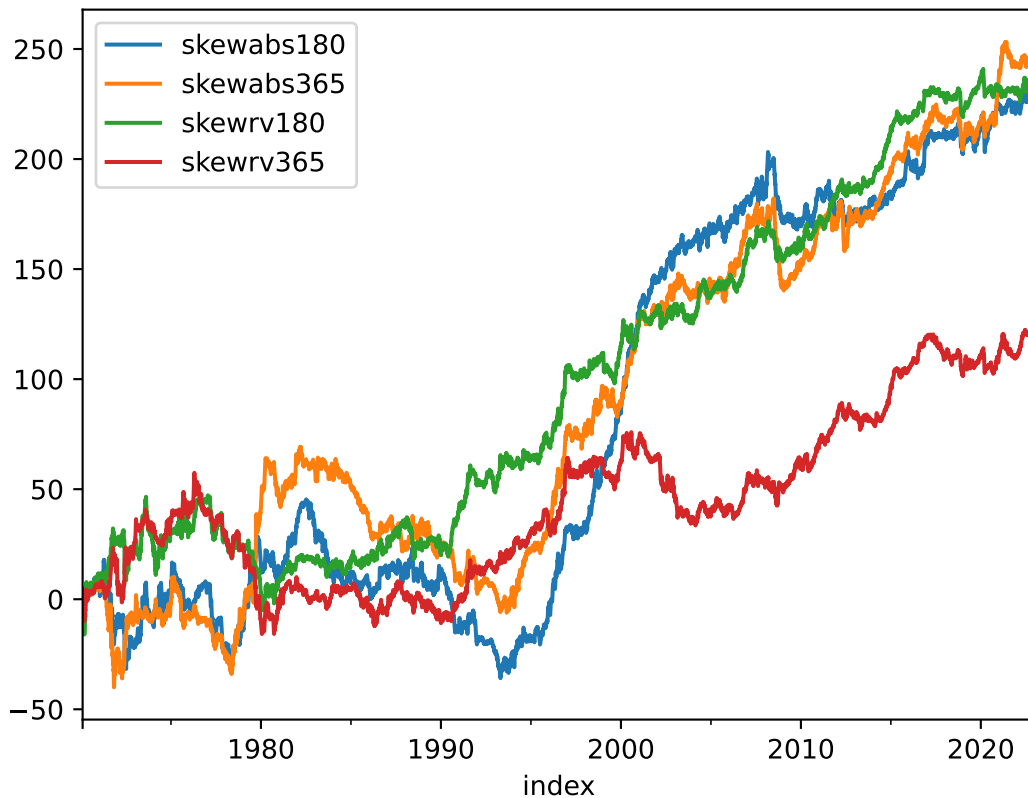
ann. mean {'skewabs180': 4.726, 'skewabs365': 6.287, 'skewrv180': 3.726, 'skewrv365': 3.33}

ann. std {'skewabs180': 8.072, 'skewabs365': 8.001, 'skewrv180': 6.592, 'skewrv365': 6.181}

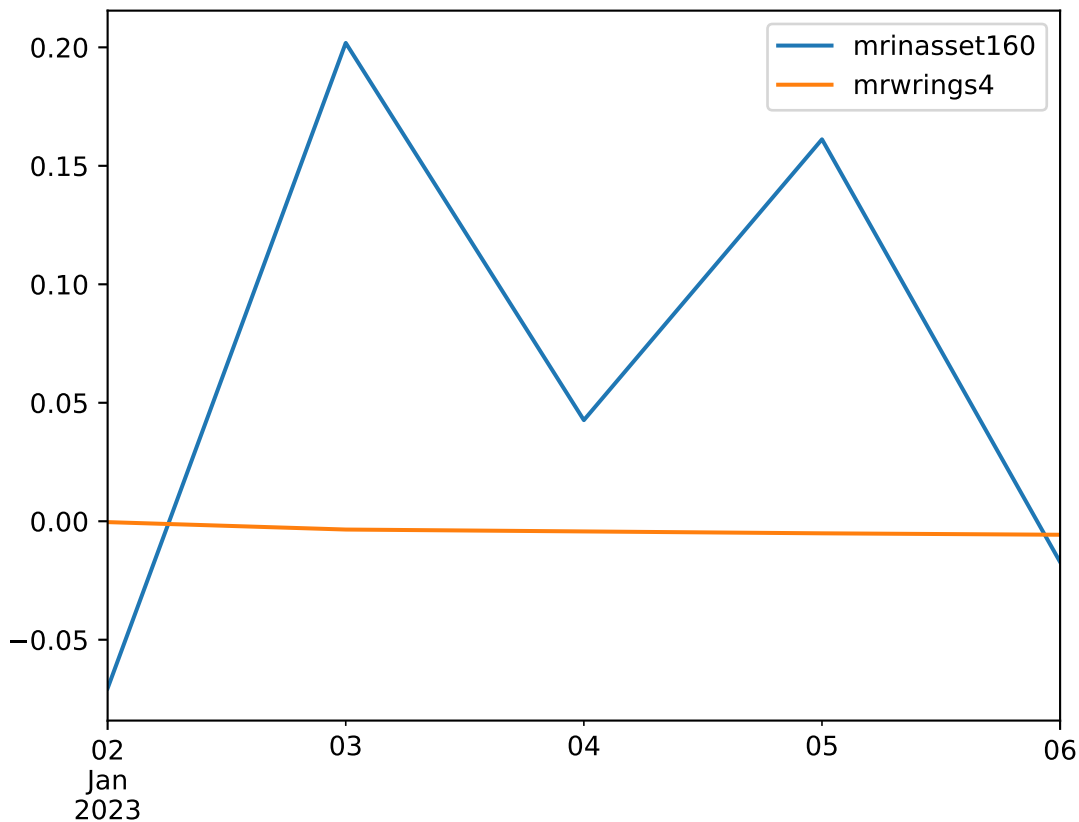
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.79, 'skewrv180': 0.57, 'skewrv365': 0.54}



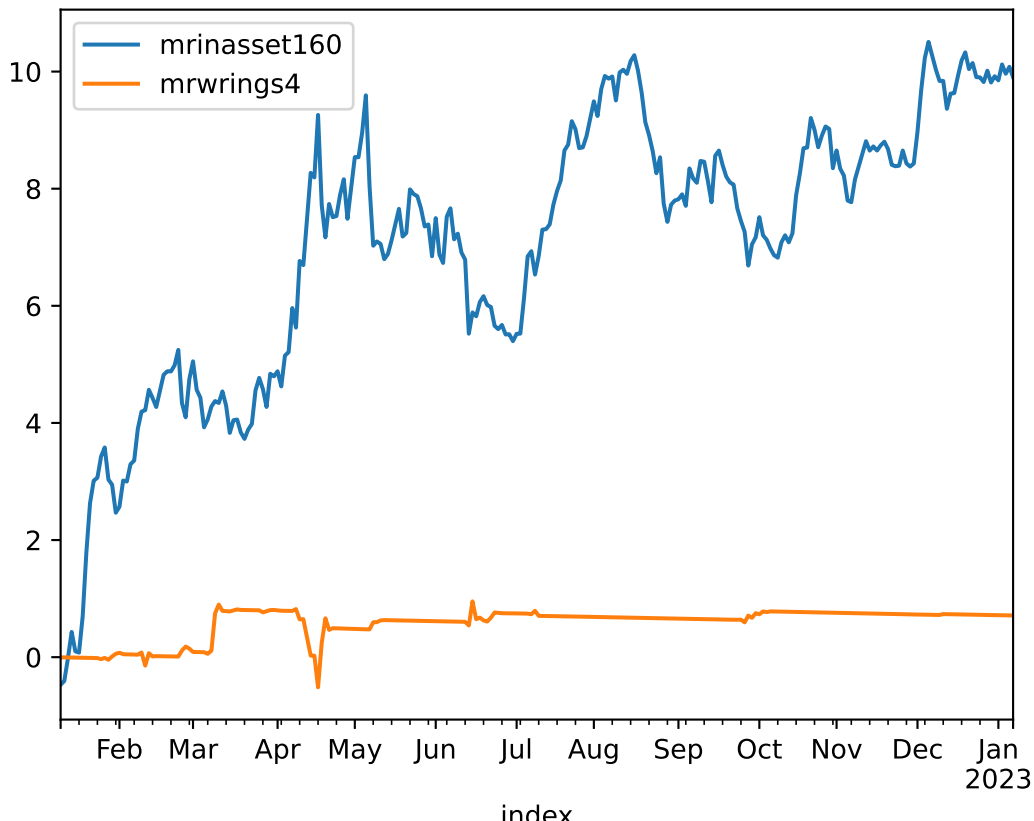
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.15, 'skewabs365': 4.421, 'skewrv180': 4.146, 'skewrv365': 2.171}
ann. std {'skewabs180': 10.793, 'skewabs365': 10.299, 'skewrv180': 9.307, 'skewrv365': 8.602}
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.25}



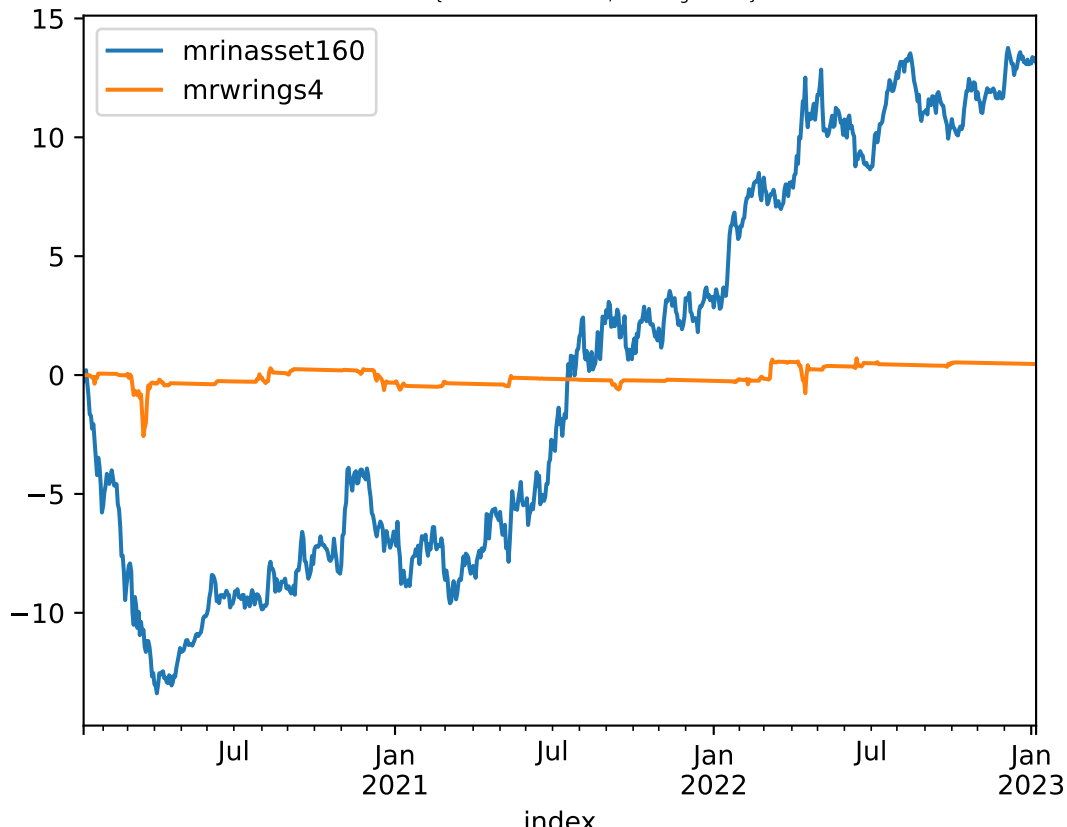
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -0.88, 'mrwrings4': -0.292}
ann. std {'mrinasset160': 3.102, 'mrwrings4': 0.018}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -16.14}



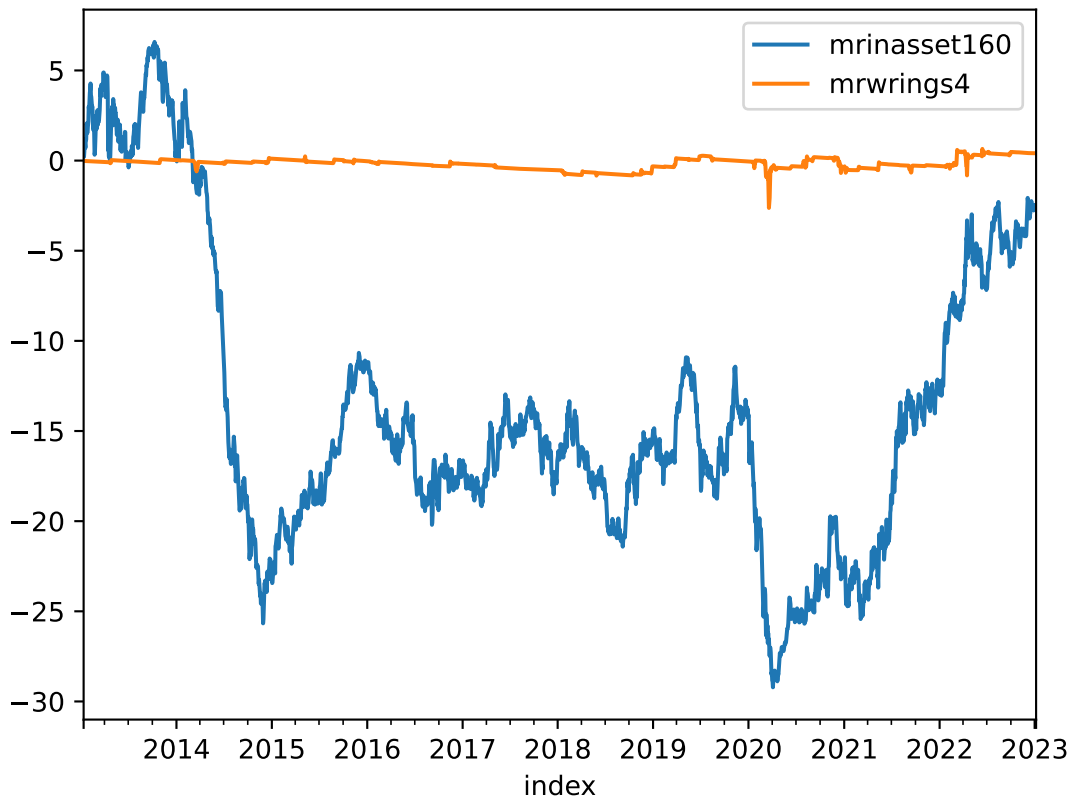
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 9.751, 'mrwrings4': 0.701}
ann. std {'mrinasset160': 6.163, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.58, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 4.313, 'mrwrings4': 0.152}
ann. std {'mrinasset160': 6.918, 'mrwrings4': 1.537}
ann. SR {'mrinasset160': 0.62, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.262, 'mrwrings4': 0.04}
ann. std {'mrinasset160': 6.61, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.04, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.342, 'mrwrings4': -1.168}
ann. std {'mrinasset160': 10.918, 'mrwrings4': 2.63}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.44}

