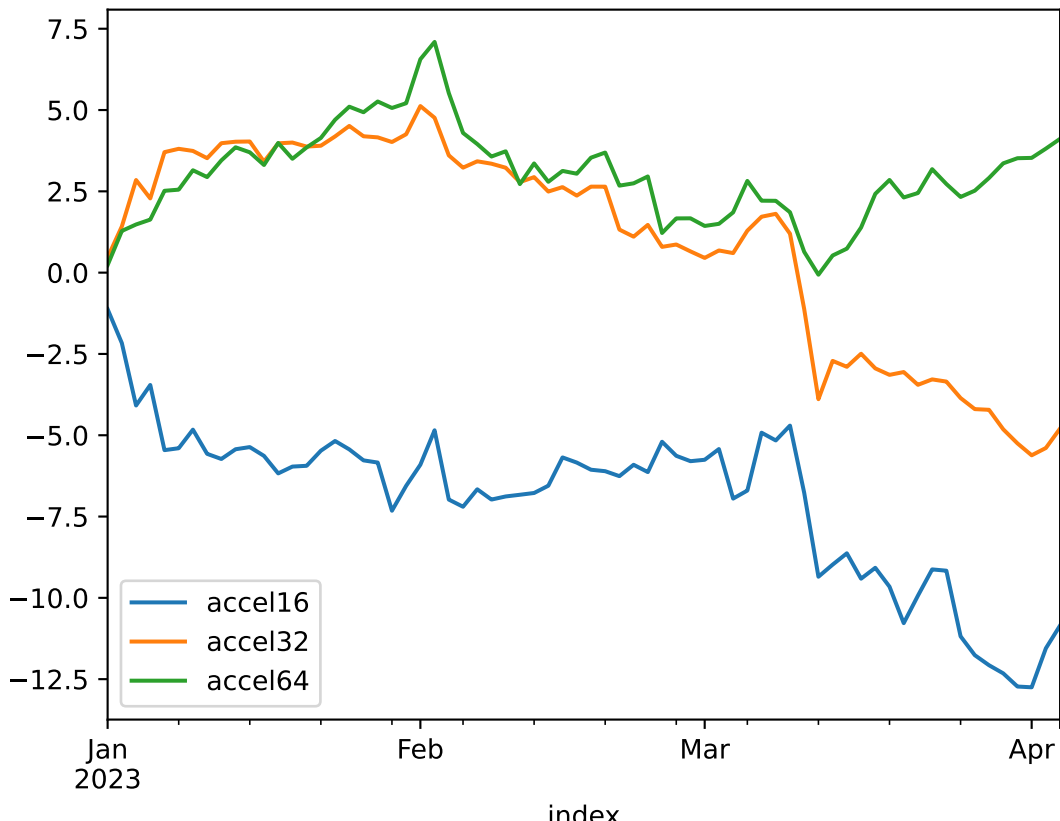
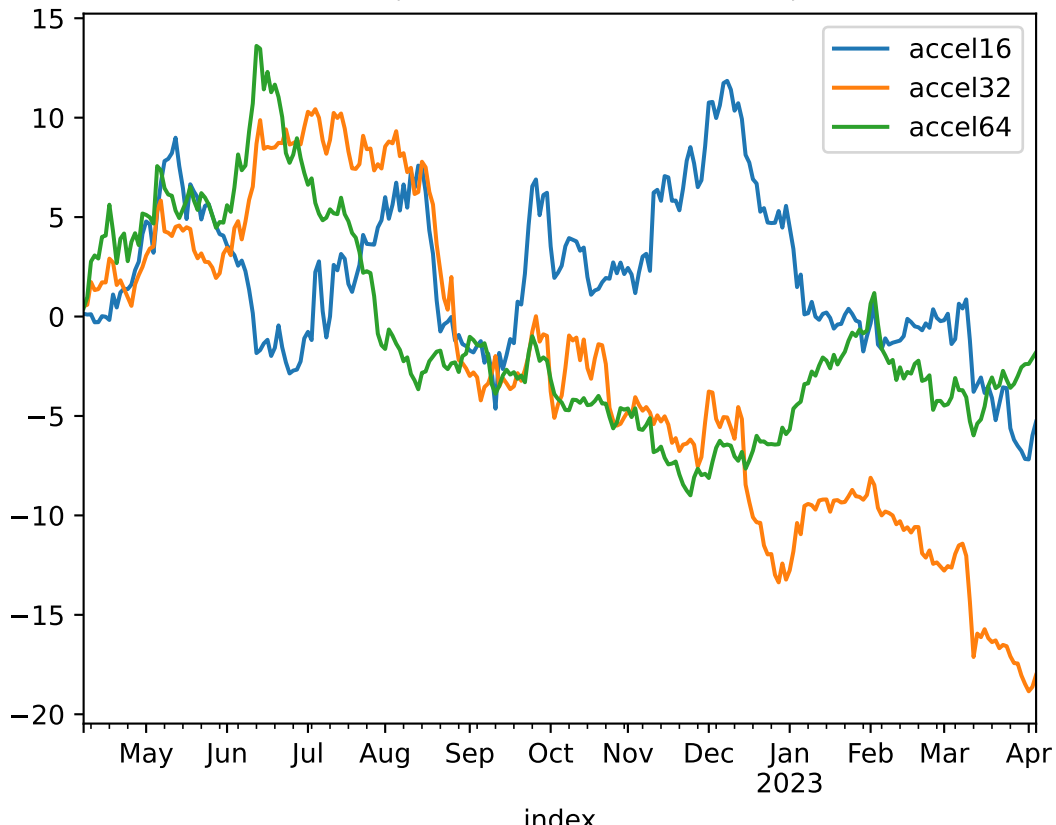


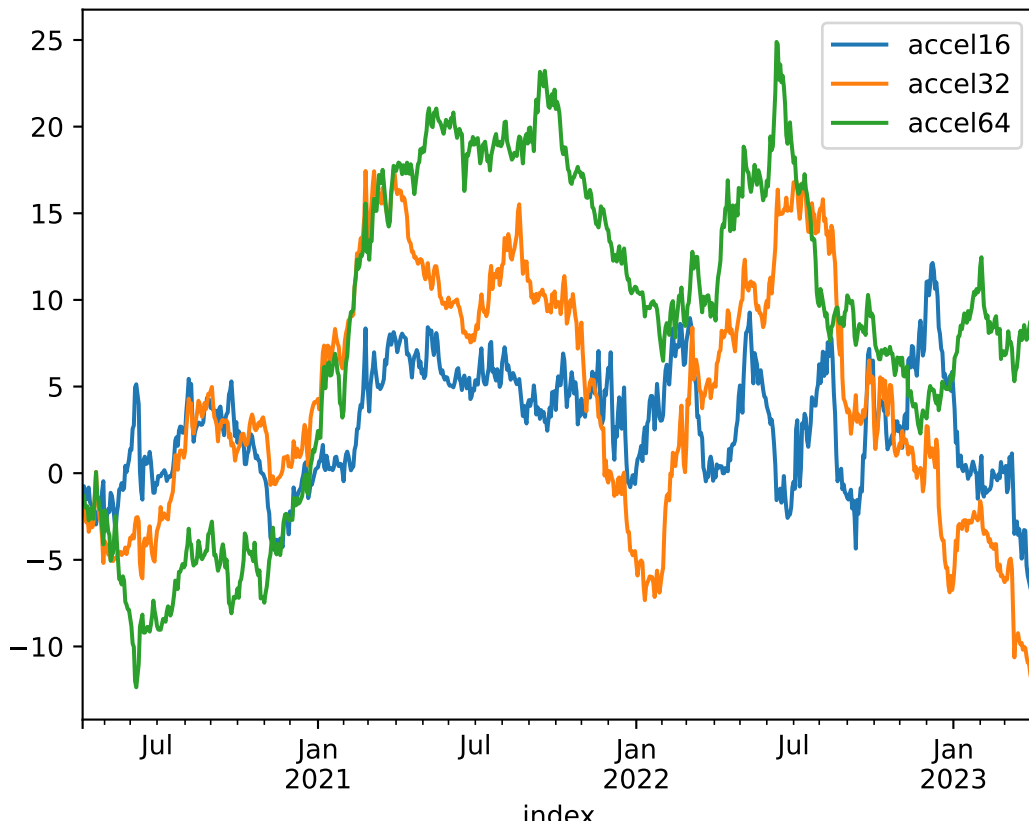
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -40.845, 'accel32': -18.042, 'accel64': 15.492}
ann. std {'accel16': 13.76, 'accel32': 10.64, 'accel64': 9.699}
ann. SR {'accel16': -2.97, 'accel32': -1.7, 'accel64': 1.6}



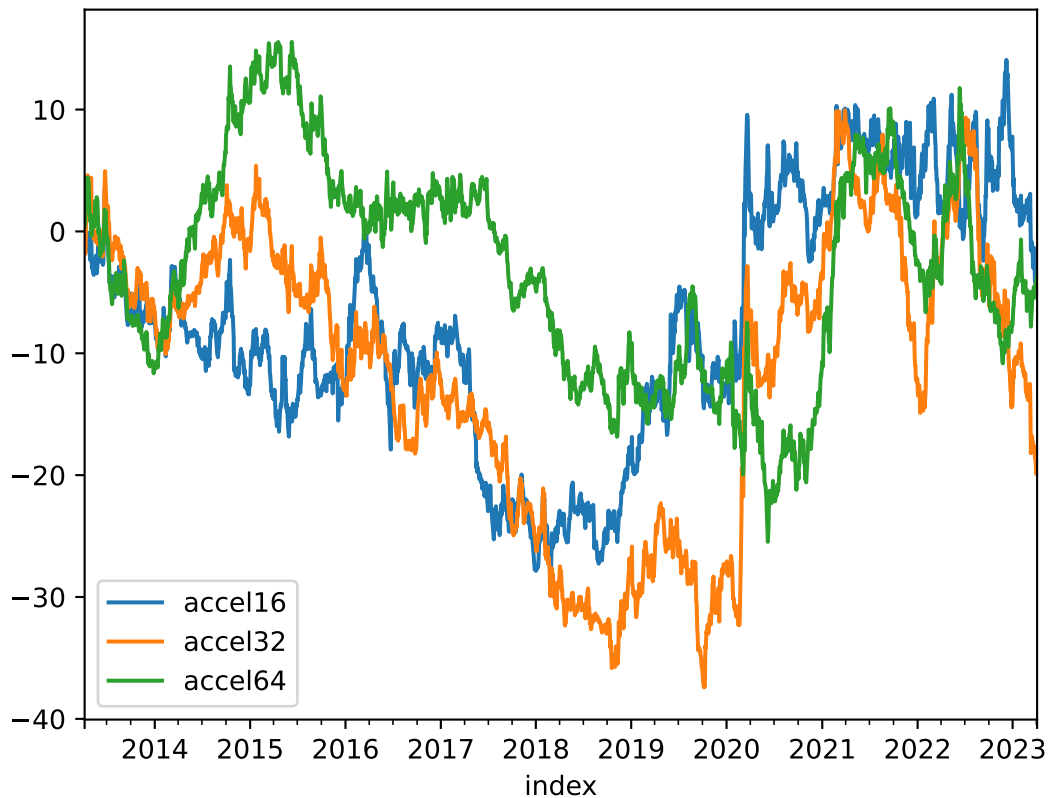
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -5.203, 'accel32': -17.744, 'accel64': -1.77}
ann. std {'accel16': 16.043, 'accel32': 13.162, 'accel64': 11.352}
ann. SR {'accel16': -0.32, 'accel32': -1.35, 'accel64': -0.16}



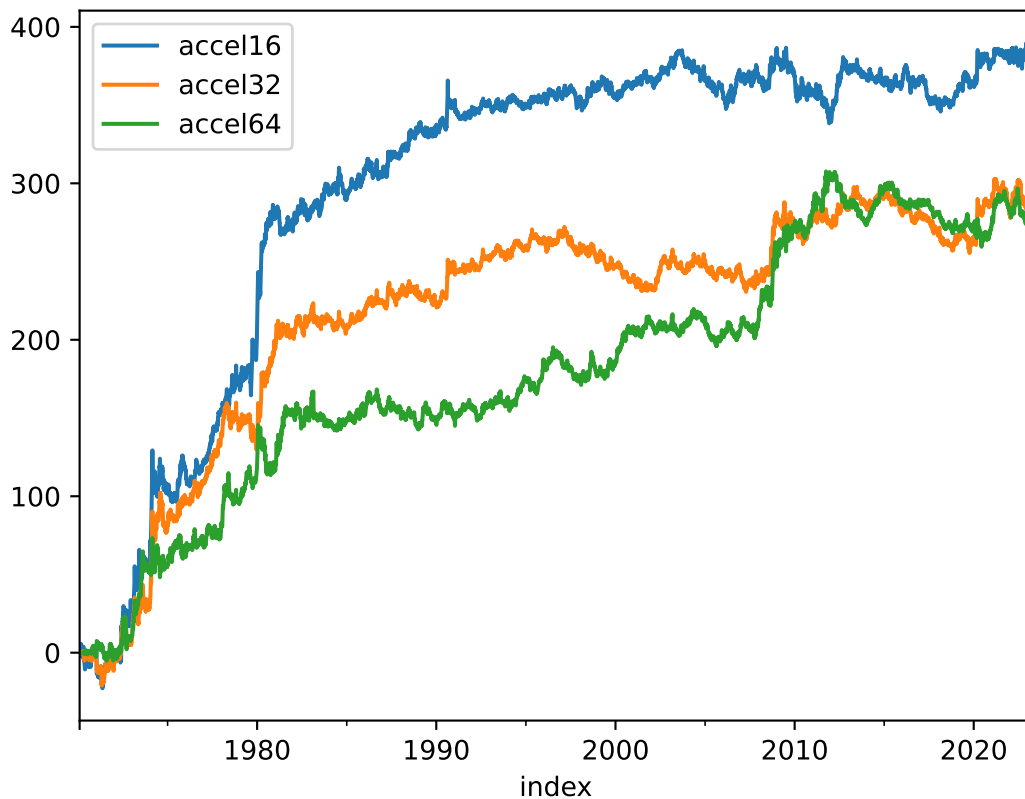
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -1.638, 'accel32': -3.775, 'accel64': 3.104}
ann. std {'accel16': 13.671, 'accel32': 11.915, 'accel64': 10.708}
ann. SR {'accel16': -0.12, 'accel32': -0.32, 'accel64': 0.29}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.3, 'accel32': -1.875, 'accel64': -0.357}
ann. std {'accel16': 11.712, 'accel32': 10.742, 'accel64': 9.344}
ann. SR {'accel16': -0.03, 'accel32': -0.17, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.876, 'accel32': 5.052, 'accel64': 5.191}
ann. std {'accel16': 14.134, 'accel32': 12.458, 'accel64': 12.107}
ann. SR {'accel16': 0.49, 'accel32': 0.41, 'accel64': 0.43}

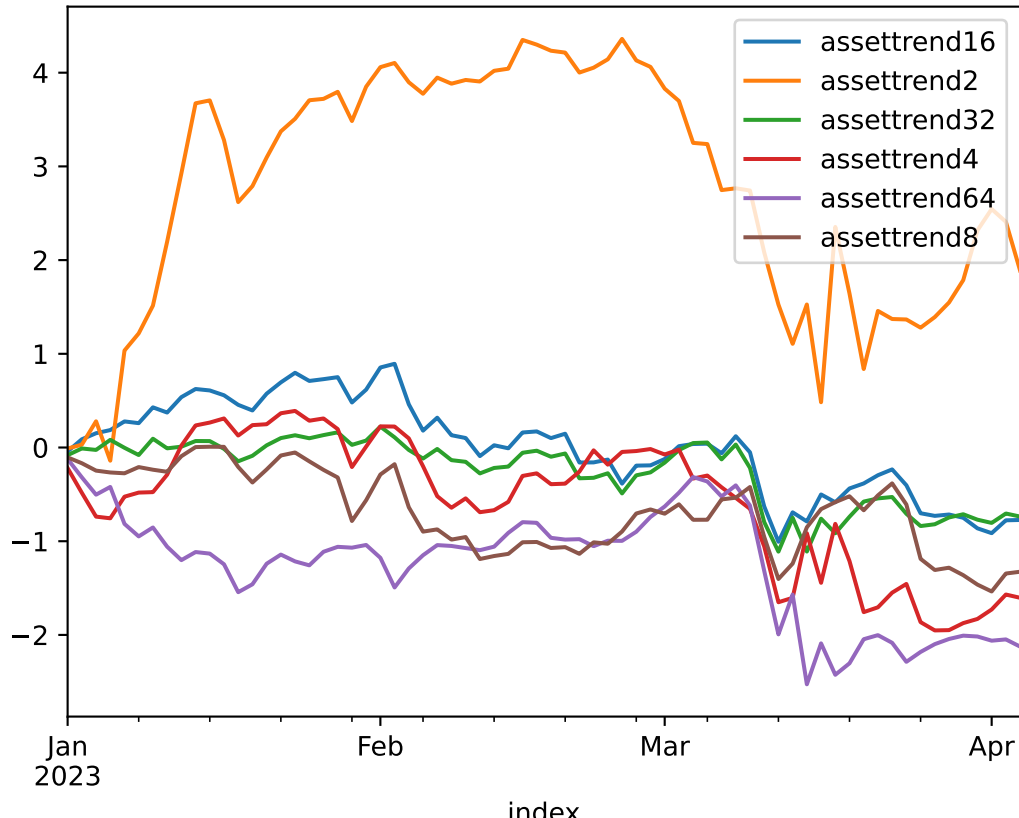


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -2.911, 'assettrend2': 7.109, 'assettrend32': -2.774, 'assettrend4': -6.037, 'assettrend64': -7.998, 'assettrend8': -4.991}

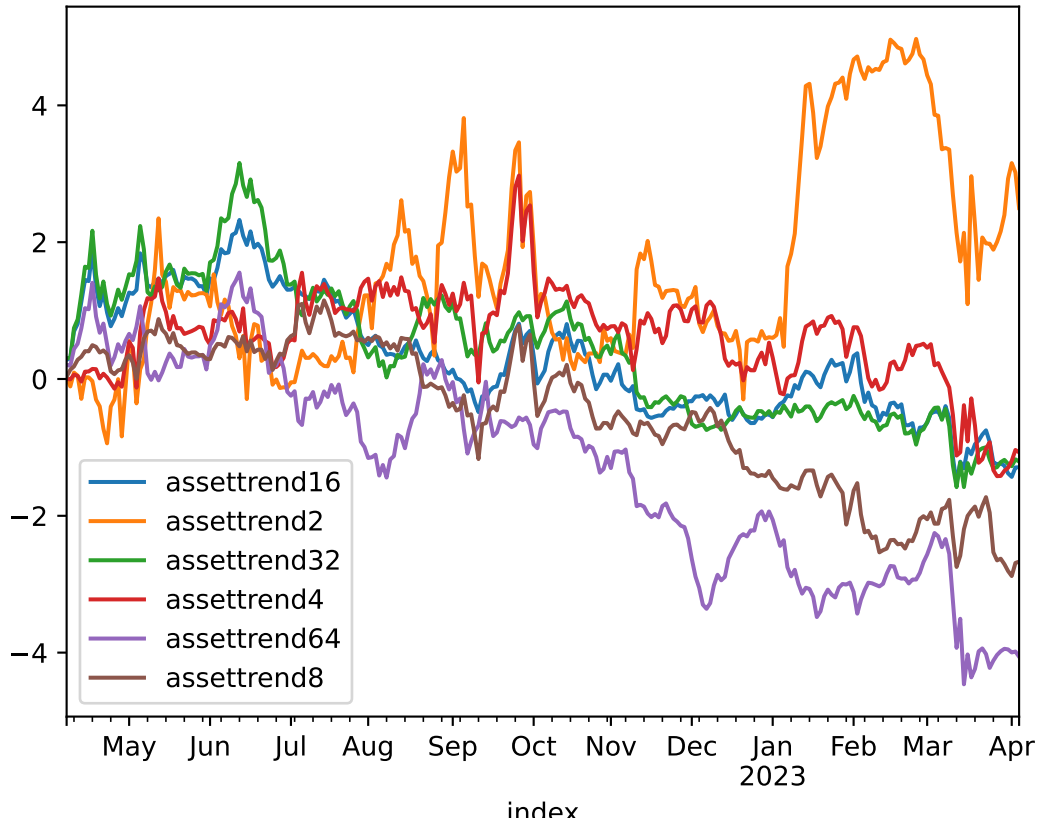
ann. std {'assettrend16': 2.687, 'assettrend2': 7.114, 'assettrend32': 2.441, 'assettrend4': 3.765, 'assettrend64': 3.624, 'assettrend8': 2.971}

ann. SR {'assettrend16': -1.08, 'assettrend2': 1.0, 'assettrend32': -1.14, 'assettrend4': -1.6, 'assettrend64': -2.21, 'assettrend8': -1.68}



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

ann. mean {'assettrend16': -1.27, 'assettrend2': 2.461, 'assettrend32': -1.188, 'assettrend4': -1.056, 'assettrend64': -3.998, 'assettrend8': -2.629}
ann. std {'assettrend16': 2.518, 'assettrend2': 6.428, 'assettrend32': 2.904, 'assettrend4': 3.937, 'assettrend64': 3.273, 'assettrend8': 2.615}
ann. SR {'assettrend16': -0.5, 'assettrend2': 0.38, 'assettrend32': -0.41, 'assettrend4': -0.27, 'assettrend64': -1.22, 'assettrend8': -1.01}

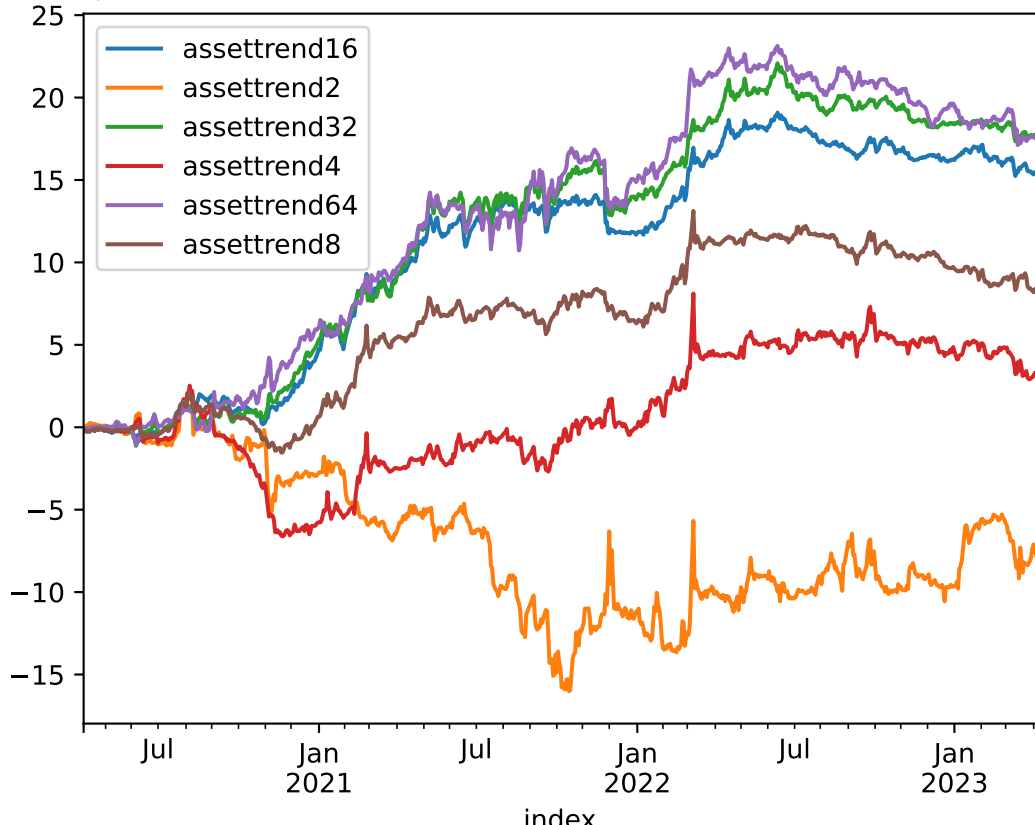


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.065, 'assettrend2': -2.542, 'assettrend32': 5.799, 'assettrend4': 1.068, 'assettrend64': 5.734, 'assettrend8': 2.75}

ann. std {'assettrend16': 3.403, 'assettrend2': 7.787, 'assettrend32': 4.118, 'assettrend4': 4.927, 'assettrend64': 4.992, 'assettrend8': 3.502}

ann. SR {'assettrend16': 1.49, 'assettrend2': -0.33, 'assettrend32': 1.41, 'assettrend4': 0.22, 'assettrend64': 1.15, 'assettrend8': 0.79}

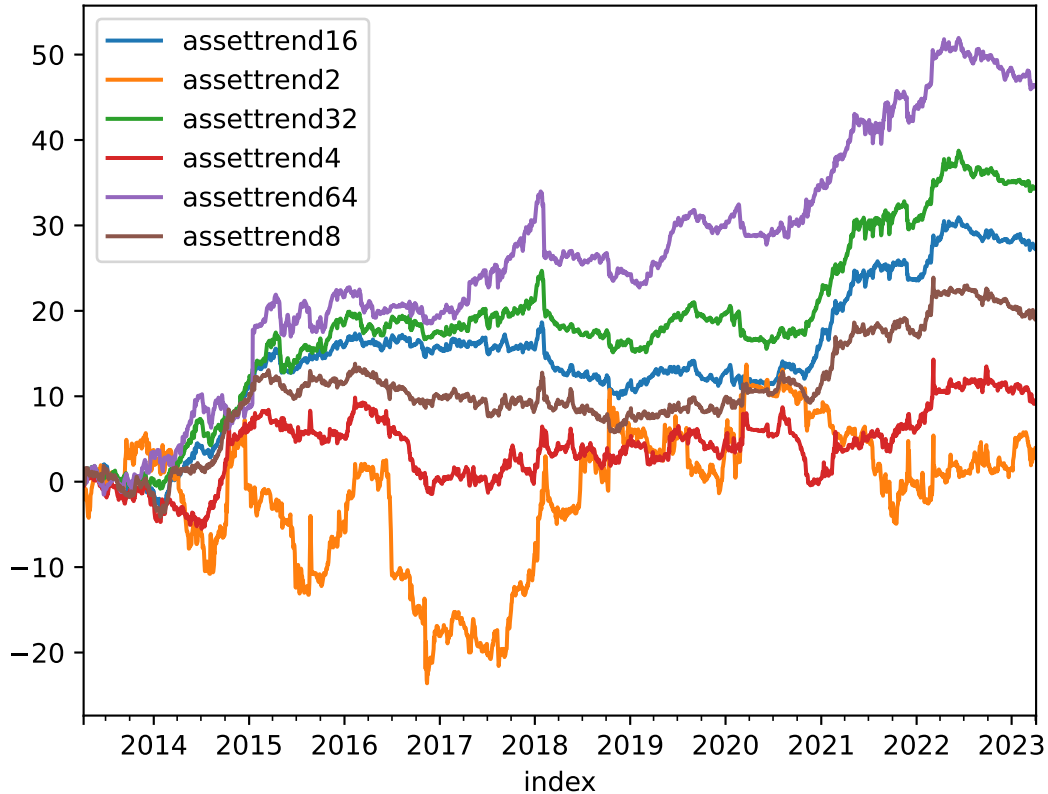


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.684, 'assettrend2': 0.326, 'assettrend32': 3.376, 'assettrend4': 0.928, 'assettrend64': 4.548, 'assettrend8': 1.882}

ann. std {'assettrend16': 3.164, 'assettrend2': 9.801, 'assettrend32': 3.596, 'assettrend4': 4.981, 'assettrend64': 5.199, 'assettrend8': 3.473}

ann. SR {'assettrend16': 0.85, 'assettrend2': 0.03, 'assettrend32': 0.94, 'assettrend4': 0.19, 'assettrend64': 0.87, 'assettrend8': 0.54}

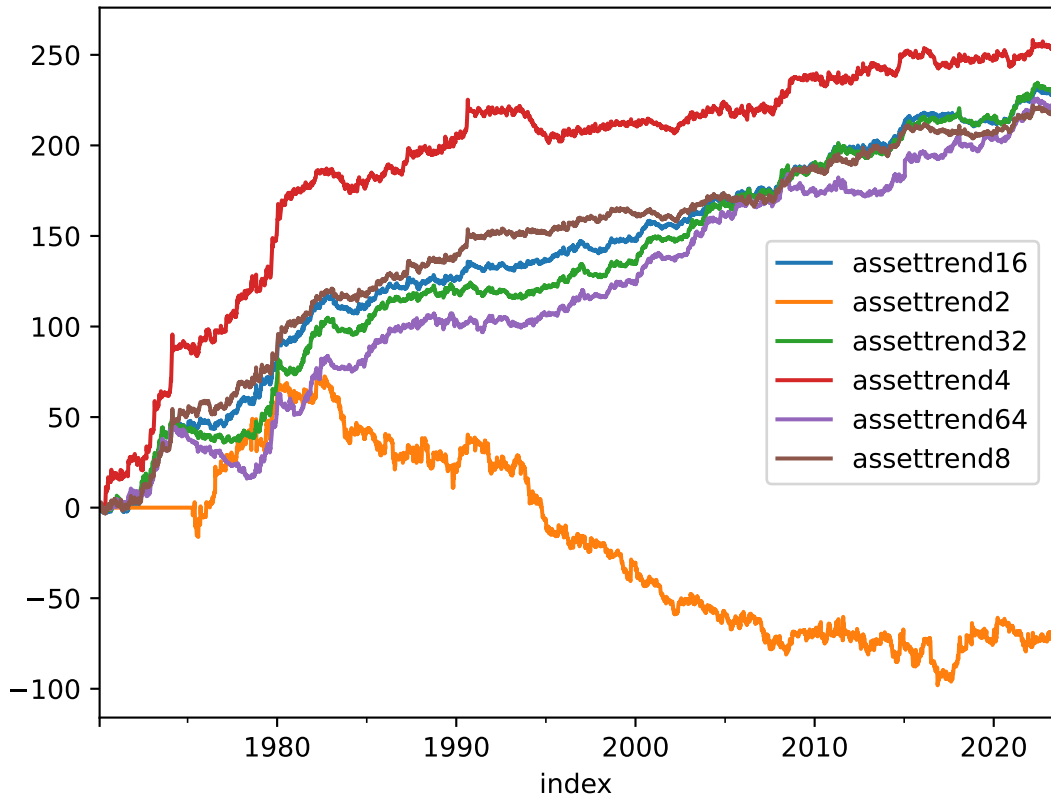


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.209, 'assettrend2': -1.313, 'assettrend32': 4.25, 'assettrend4': 4.676, 'assettrend64': 4.065, 'assettrend8': 4.009}

ann. std {'assettrend16': 4.305, 'assettrend2': 10.264, 'assettrend32': 4.497, 'assettrend4': 6.549, 'assettrend64': 4.997, 'assettrend8': 4.635}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.95, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.87}

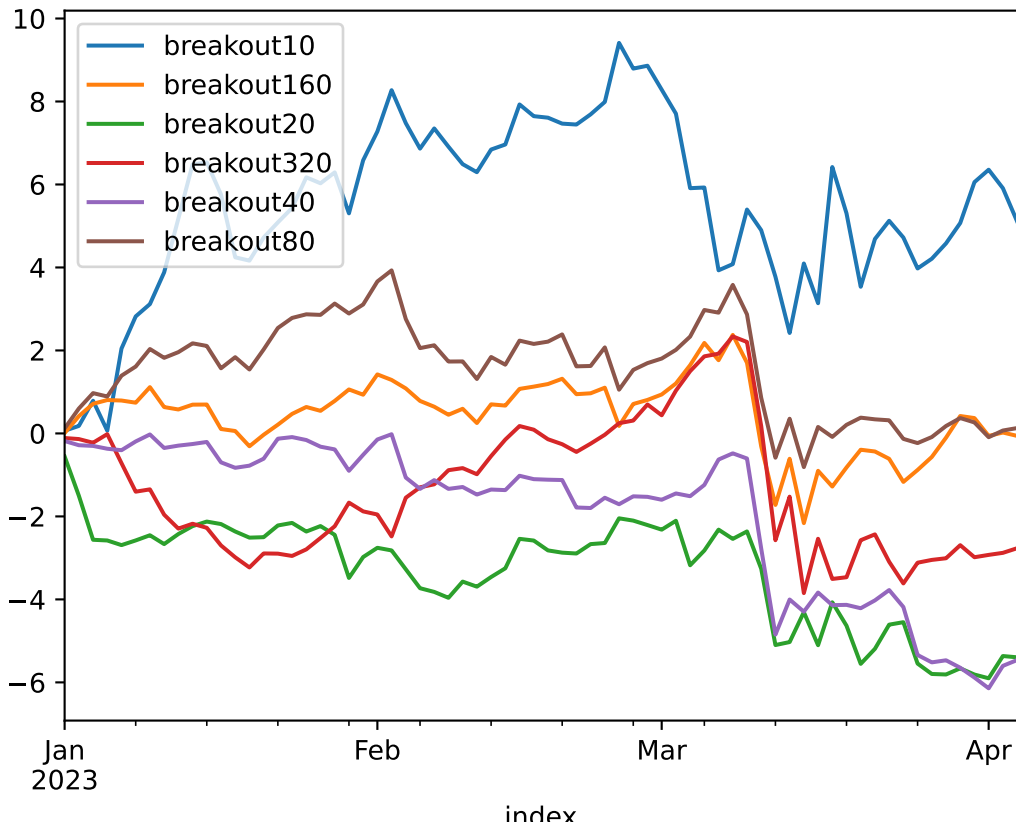


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 19.241, 'breakout160': -0.223, 'breakout20': -20.313, 'breakout320': -10.415, 'breakout40': -20.562, 'breakout80': 0.486}

ann. std {'breakout10': 15.047, 'breakout160': 8.386, 'breakout20': 7.953, 'breakout320': 10.423, 'breakout40': 7.736, 'breakout80': 8.532}

ann. SR {'breakout10': 1.28, 'breakout160': -0.03, 'breakout20': -2.55, 'breakout320': -1.0, 'breakout40': -2.66, 'breakout80': 0.06}

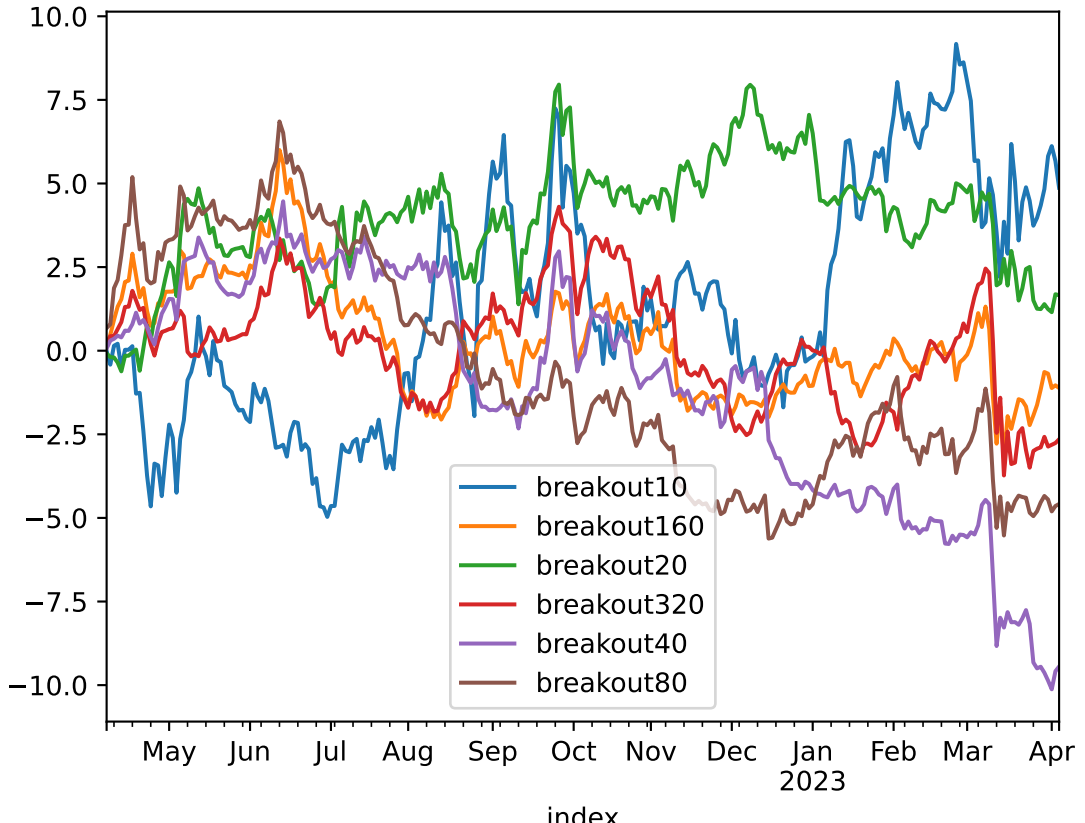


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 4.798, 'breakout160': -1.099, 'breakout20': 1.632, 'breakout320': -2.608, 'breakout40': -9.299, 'breakout80': -4.514}

ann. std {'breakout10': 13.616, 'breakout160': 7.151, 'breakout20': 8.585, 'breakout320': 7.566, 'breakout40': 7.181, 'breakout80': 7.342}

ann. SR {'breakout10': 0.35, 'breakout160': -0.15, 'breakout20': 0.19, 'breakout320': -0.34, 'breakout40': -1.29, 'breakout80': -0.61}

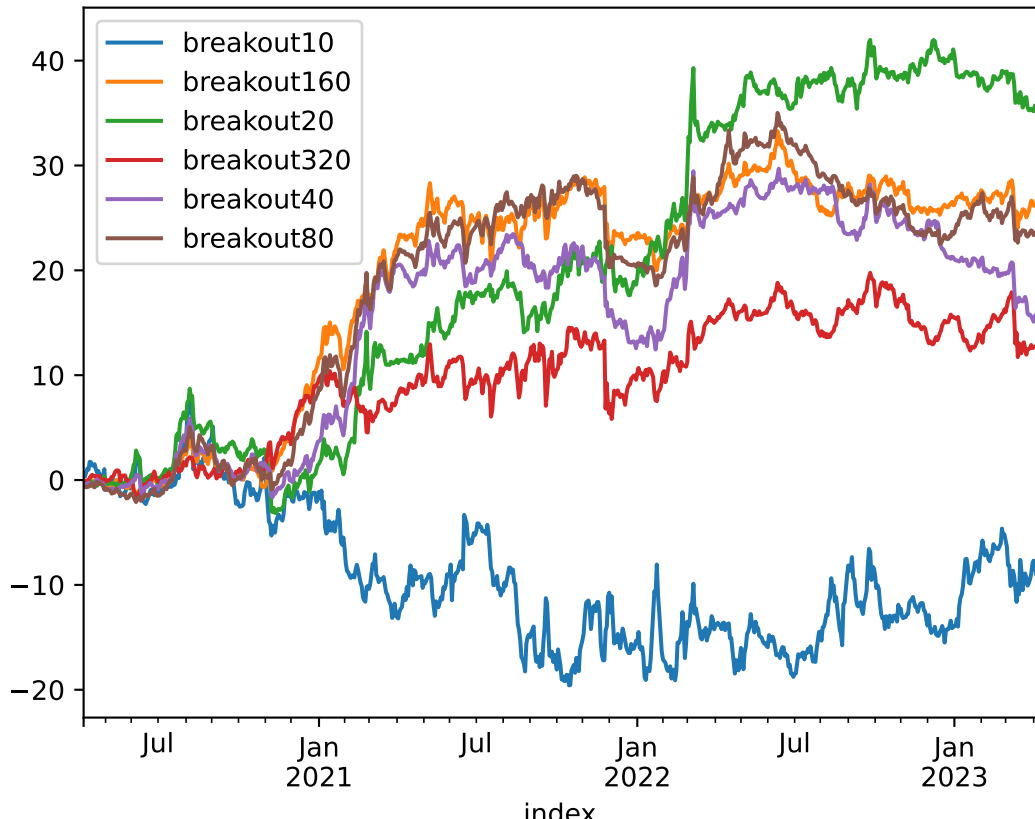


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -2.923, 'breakout160': 8.564, 'breakout20': 11.679, 'breakout320': 4.193, 'breakout40': 5.166, 'breakout80': 7.717}

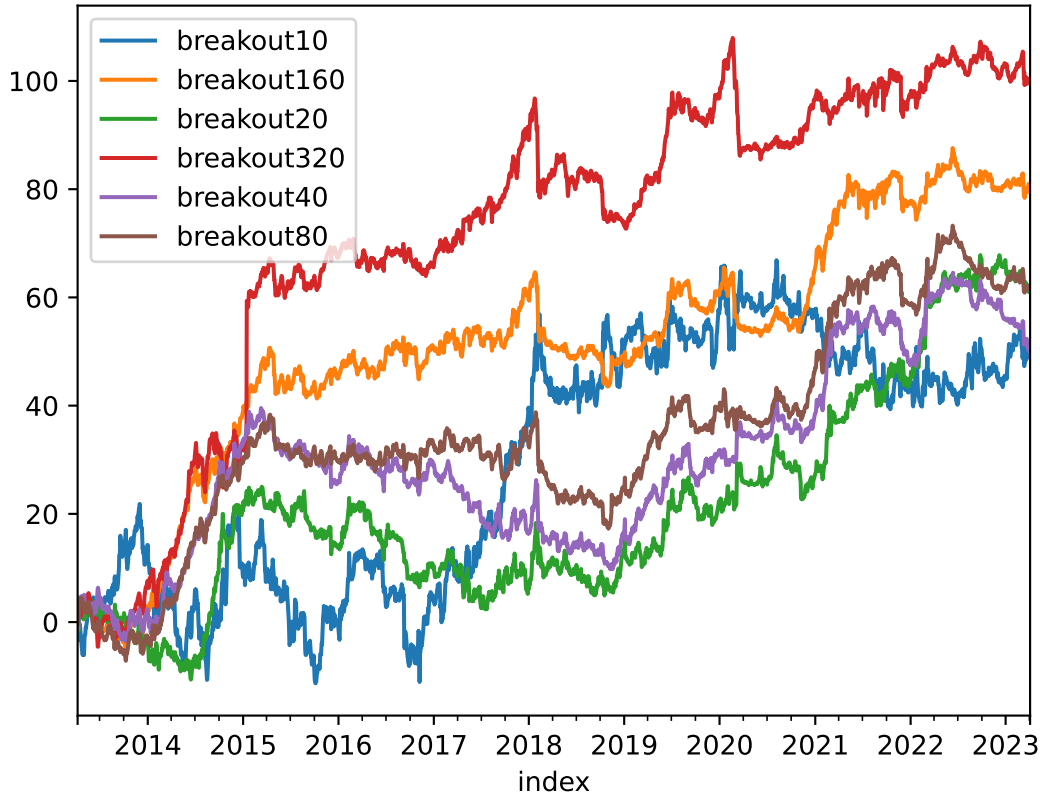
ann. std {'breakout10': 15.051, 'breakout160': 9.163, 'breakout20': 11.005, 'breakout320': 9.886, 'breakout40': 9.456, 'breakout80': 8.903}

ann. SR {'breakout10': -0.19, 'breakout160': 0.93, 'breakout20': 1.06, 'breakout320': 0.42, 'breakout40': 0.55, 'breakout80': 0.87}



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

ann. mean {'breakout10': 4.907, 'breakout160': 7.901, 'breakout20': 6.038, 'breakout320': 9.847, 'breakout40': 4.972, 'breakout80': 6.068}
ann. std {'breakout10': 17.851, 'breakout160': 8.886, 'breakout20': 11.129, 'breakout320': 13.092, 'breakout40': 9.456, 'breakout80': 8.761}
ann. SR {'breakout10': 0.27, 'breakout160': 0.89, 'breakout20': 0.54, 'breakout320': 0.75, 'breakout40': 0.53, 'breakout80': 0.69}

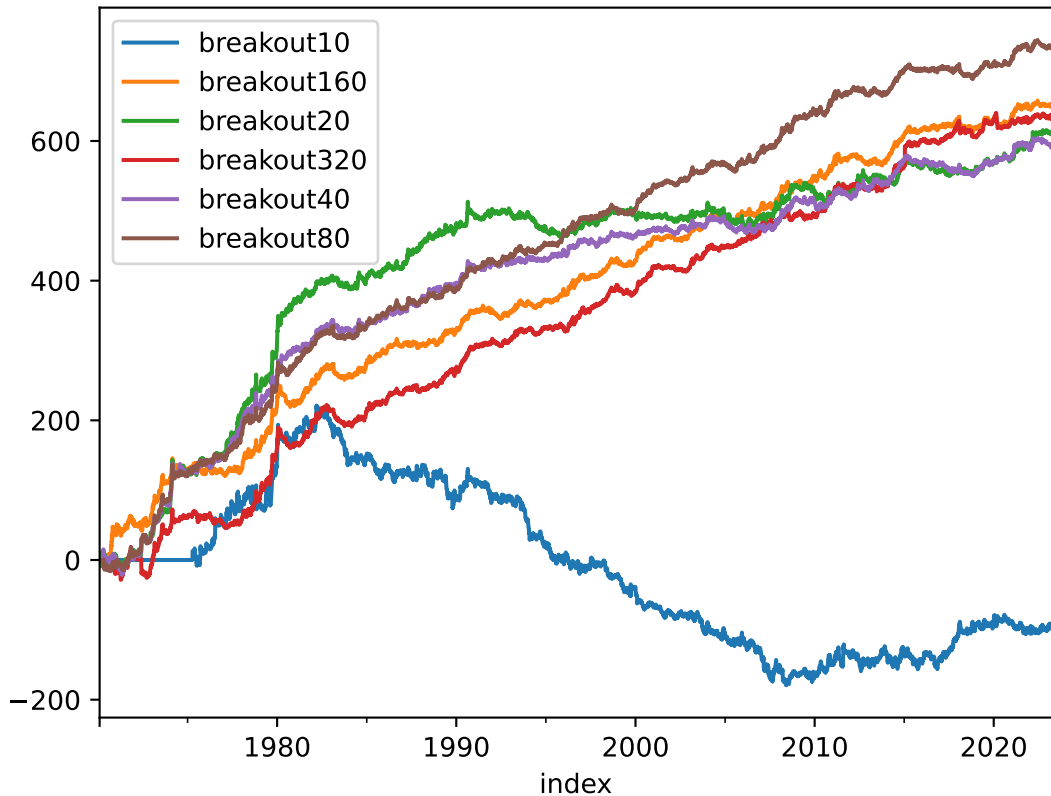


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.757, 'breakout160': 12.008, 'breakout20': 11.245, 'breakout320': 11.673, 'breakout40': 10.894, 'breakout80': 13.533}

ann. std {'breakout10': 21.328, 'breakout160': 11.533, 'breakout20': 14.896, 'breakout320': 12.12, 'breakout40': 12.116, 'breakout80': 11.722}

ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

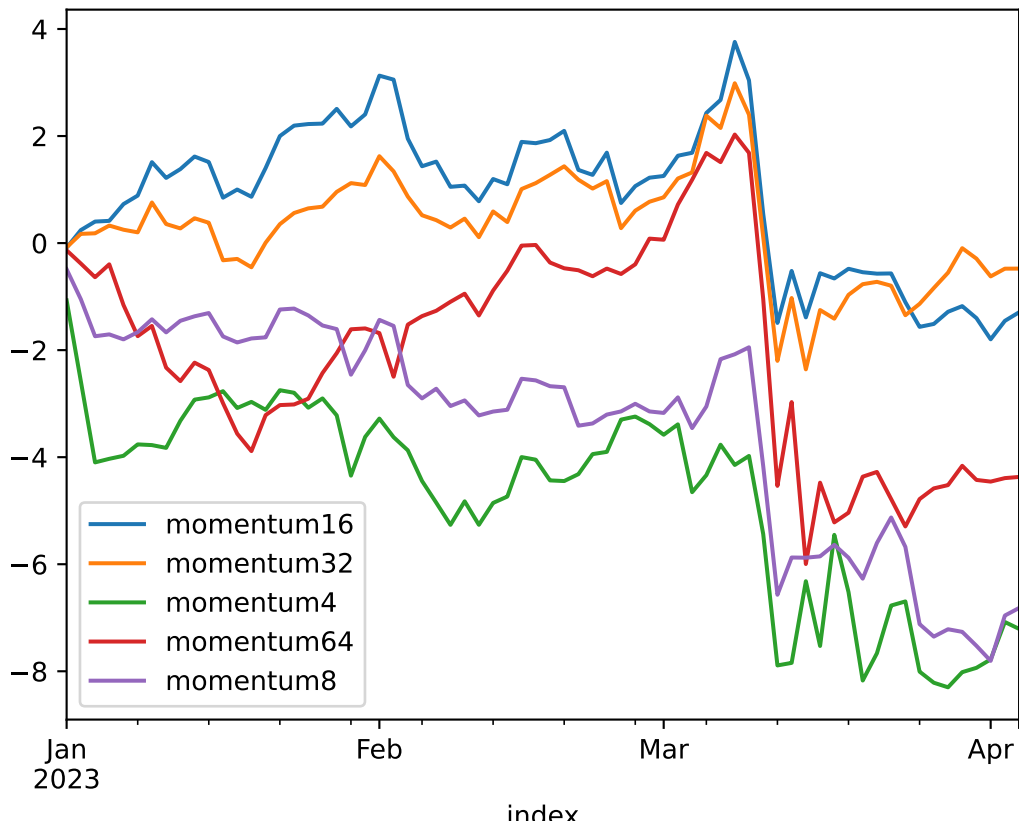


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -4.866, 'momentum32': -1.794, 'momentum4': -27.136, 'momentum64': -16.448, 'momentum8': -25.667}

ann. std {'momentum16': 9.431, 'momentum32': 9.321, 'momentum4': 11.785, 'momentum64': 12.876, 'momentum8': 9.097}

ann. SR {'momentum16': -0.52, 'momentum32': -0.19, 'momentum4': -2.3, 'momentum64': -1.28, 'momentum8': -2.82}

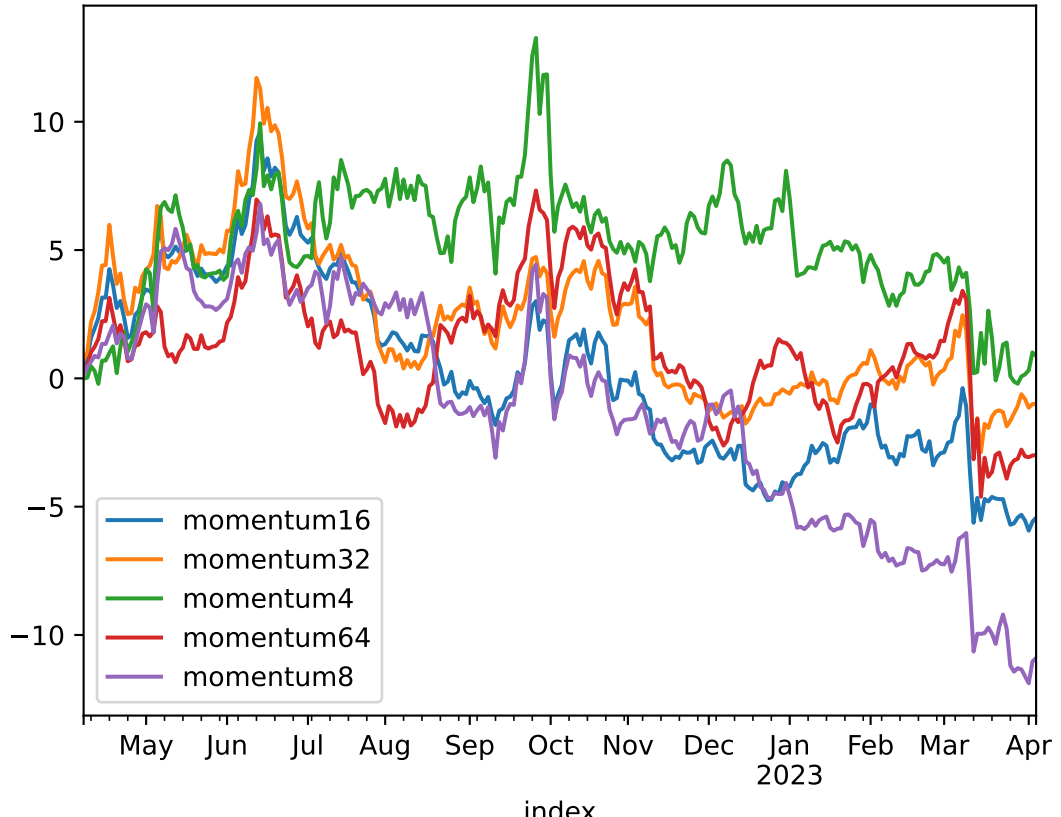


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -5.347, 'momentum32': -0.982, 'momentum4': 0.87, 'momentum64': -2.939, 'momentum8': -10.728}

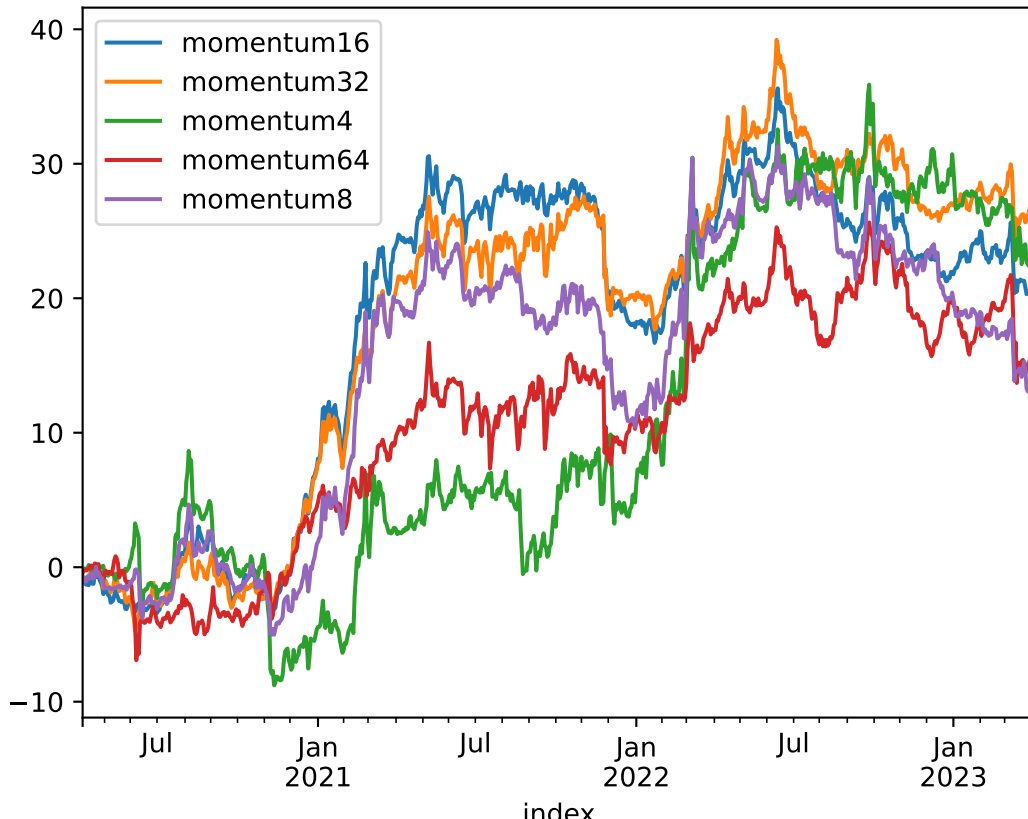
ann. std {'momentum16': 9.06, 'momentum32': 9.731, 'momentum4': 13.584, 'momentum64': 10.398, 'momentum8': 10.024}

ann. SR {'momentum16': -0.59, 'momentum32': -0.1, 'momentum4': 0.06, 'momentum64': -0.28, 'momentum8': -1.07}



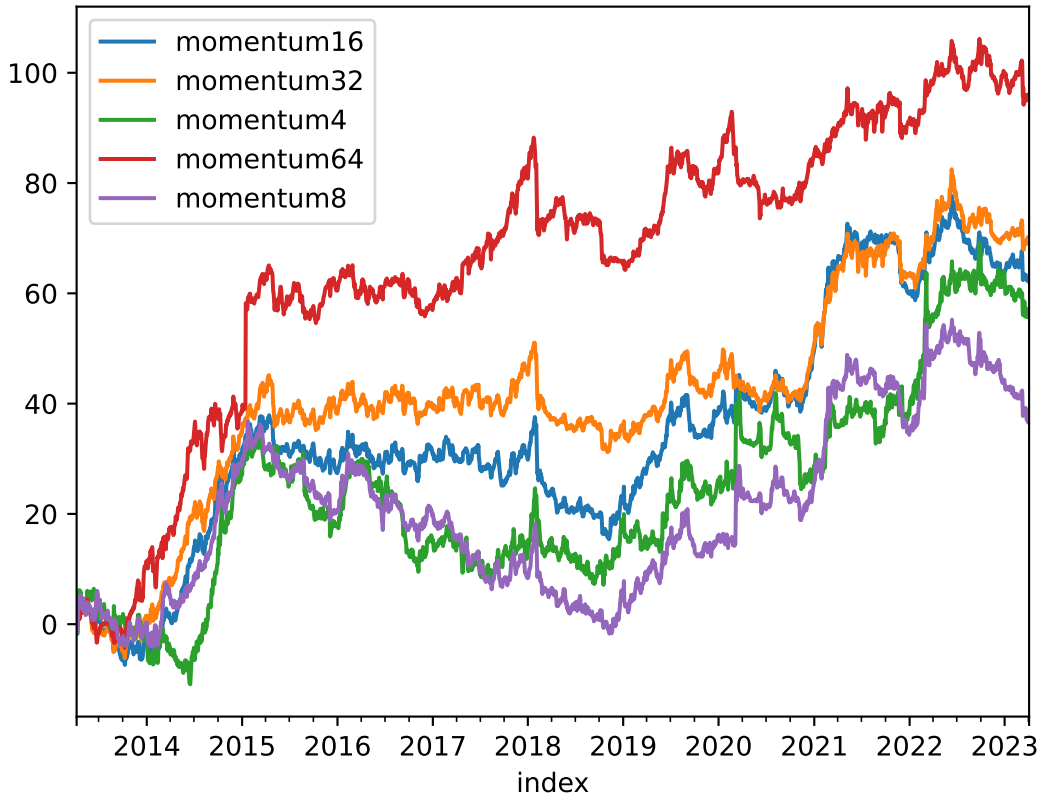
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 6.736, 'momentum32': 8.677, 'momentum4': 7.694, 'momentum64': 5.017, 'momentum8': 4.452}
ann. std {'momentum16': 10.161, 'momentum32': 10.395, 'momentum4': 14.595, 'momentum64': 10.819, 'momentum8': 11.413}
ann. SR {'momentum16': 0.66, 'momentum32': 0.83, 'momentum4': 0.53, 'momentum64': 0.46, 'momentum8': 0.39}



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

ann. mean {'momentum16': 6.148, 'momentum32': 6.851, 'momentum4': 5.571, 'momentum64': 9.407, 'momentum8': 3.683}
ann. std {'momentum16': 9.705, 'momentum32': 9.286, 'momentum4': 13.745, 'momentum64': 11.875, 'momentum8': 10.927}
ann. SR {'momentum16': 0.63, 'momentum32': 0.74, 'momentum4': 0.41, 'momentum64': 0.79, 'momentum8': 0.34}

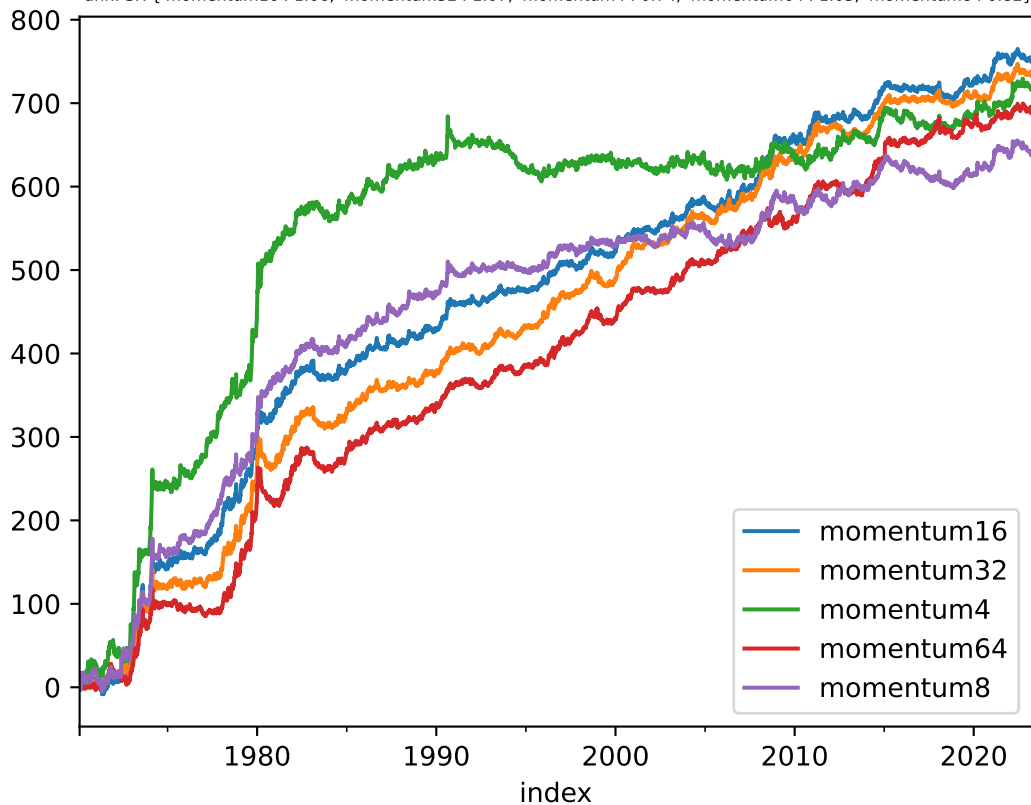


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.841, 'momentum32': 13.553, 'momentum4': 13.235, 'momentum64': 12.723, 'momentum8': 11.767}

ann. std {'momentum16': 13.052, 'momentum32': 12.614, 'momentum4': 17.9, 'momentum64': 12.336, 'momentum8': 14.336}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}

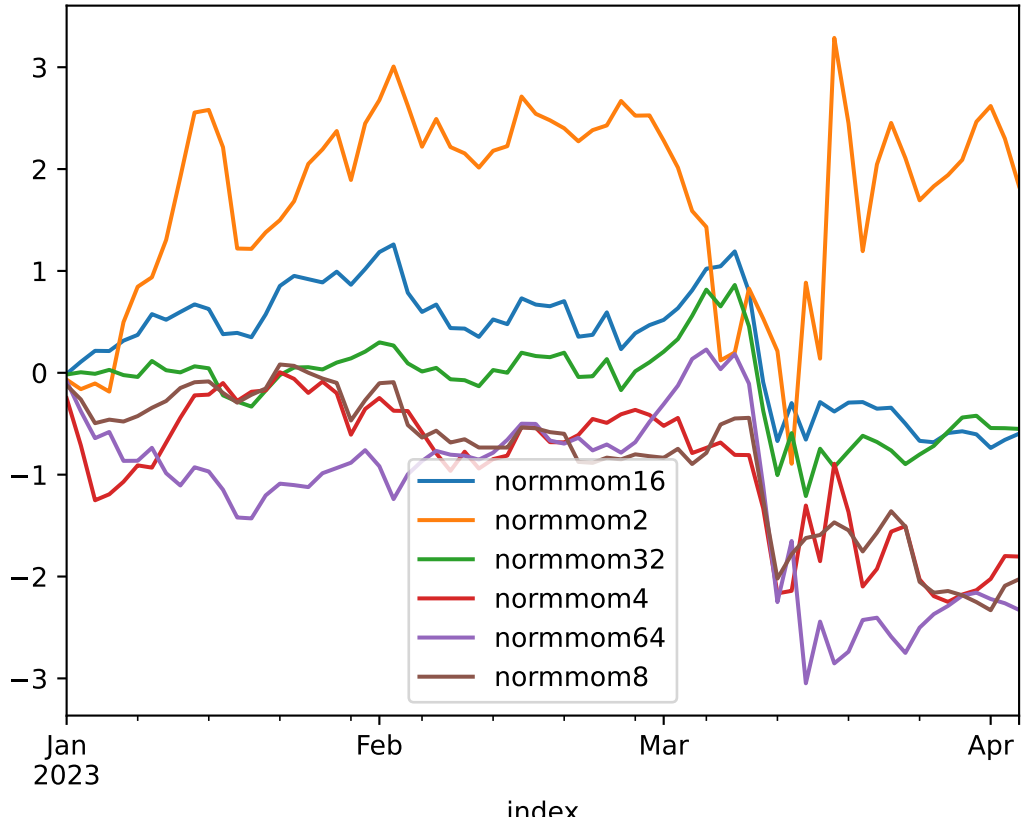


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -2.249, 'normmom2': 6.895, 'normmom32': -2.073, 'normmom4': -6.791, 'normmom64': -8.763, 'normmom8': -7.628}

ann. std {'normmom16': 3.413, 'normmom2': 9.96, 'normmom32': 3.353, 'normmom4': 4.704, 'normmom64': 5.019, 'normmom8': 3.214}

ann. SR {'normmom16': -0.66, 'normmom2': 0.69, 'normmom32': -0.62, 'normmom4': -1.44, 'normmom64': -1.75, 'normmom8': -2.37}

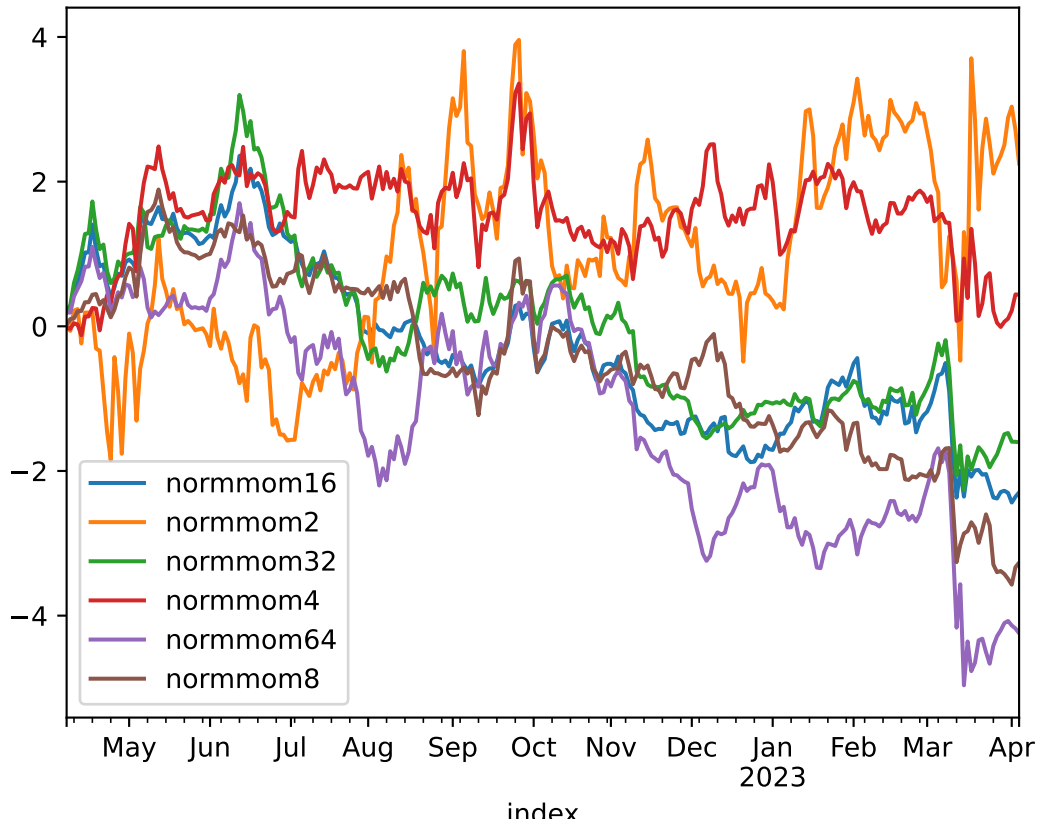


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.261, 'normmom2': 2.215, 'normmom32': -1.579, 'normmom4': 0.429, 'normmom64': -4.177, 'normmom8': -3.217}

ann. std {'normmom16': 2.716, 'normmom2': 7.86, 'normmom32': 3.043, 'normmom4': 4.342, 'normmom64': 3.869, 'normmom8': 2.953}

ann. SR {'normmom16': -0.83, 'normmom2': 0.28, 'normmom32': -0.52, 'normmom4': 0.1, 'normmom64': -1.08, 'normmom8': -1.09}

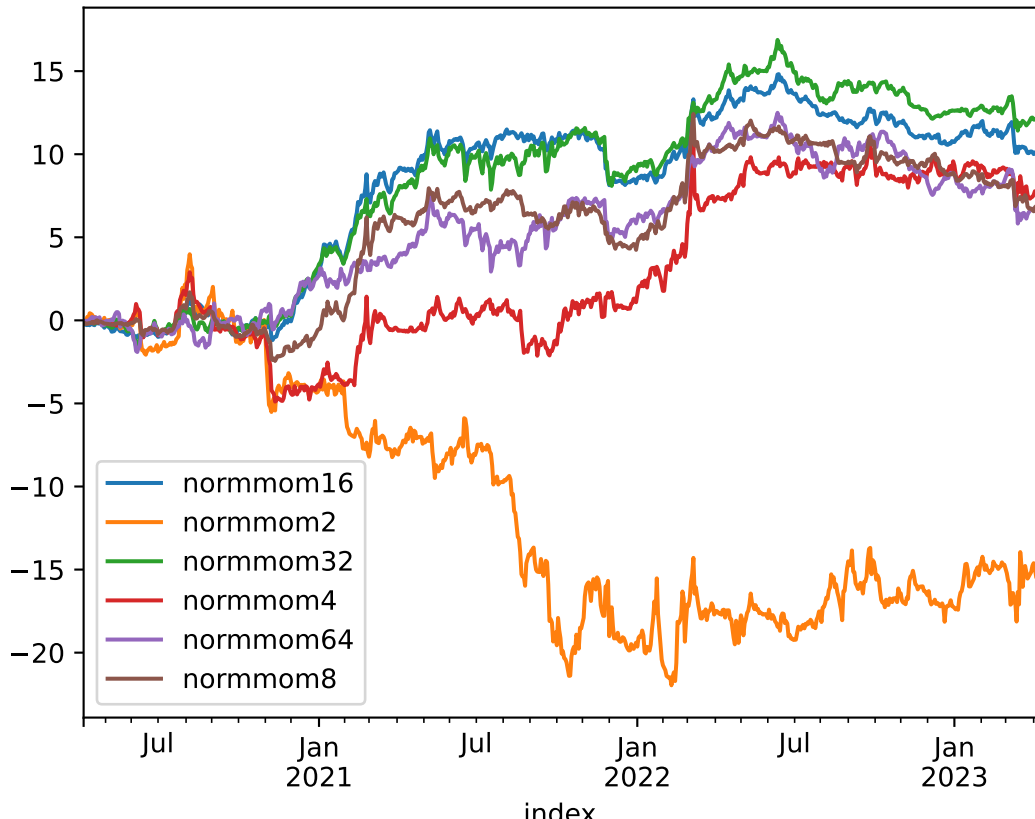


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.321, 'normmom2': -5.043, 'normmom32': 3.954, 'normmom4': 2.543, 'normmom64': 2.143, 'normmom8': 2.248}

ann. std {'normmom16': 3.509, 'normmom2': 8.611, 'normmom32': 3.879, 'normmom4': 5.346, 'normmom64': 4.274, 'normmom8': 3.915}

ann. SR {'normmom16': 0.95, 'normmom2': -0.59, 'normmom32': 1.02, 'normmom4': 0.48, 'normmom64': 0.5, 'normmom8': 0.57}

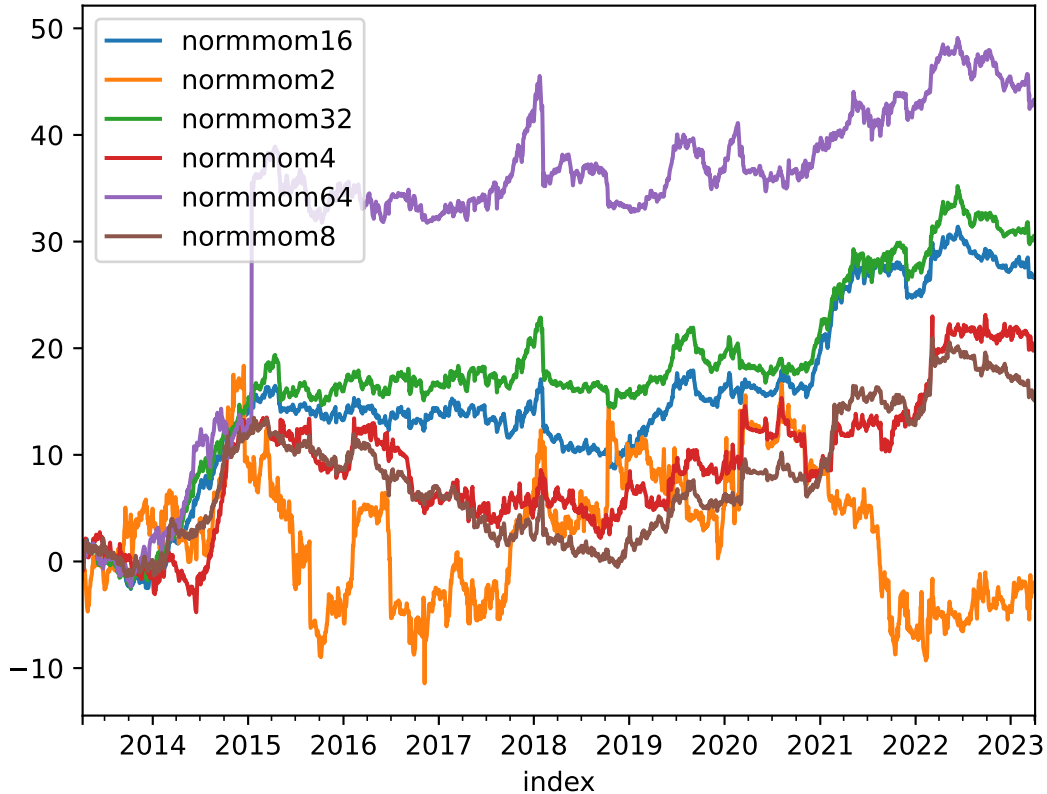


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.623, 'normmom2': -0.267, 'normmom32': 2.985, 'normmom4': 1.984, 'normmom64': 4.236, 'normmom8': 1.511}

ann. std {'normmom16': 3.489, 'normmom2': 10.338, 'normmom32': 3.631, 'normmom4': 5.469, 'normmom64': 8.272, 'normmom8': 3.91}

ann. SR {'normmom16': 0.75, 'normmom2': -0.03, 'normmom32': 0.82, 'normmom4': 0.36, 'normmom64': 0.51, 'normmom8': 0.39}

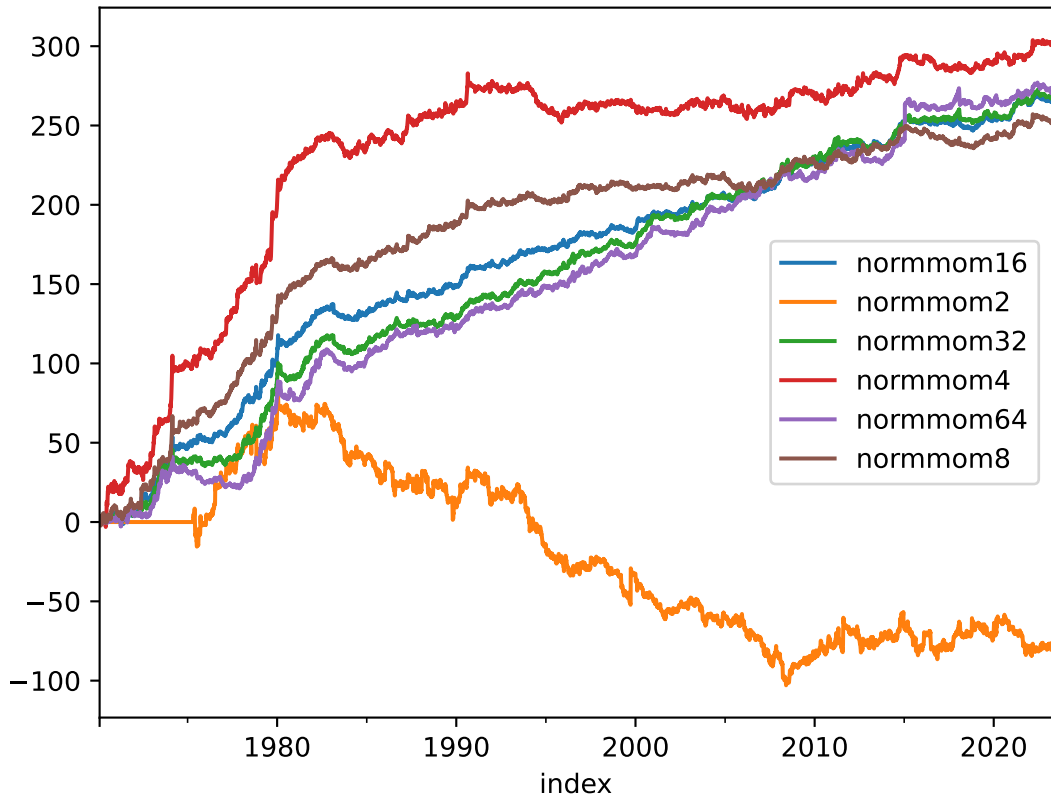


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.889, 'normmom2': -1.436, 'normmom32': 4.939, 'normmom4': 5.556, 'normmom64': 5.004, 'normmom8': 4.643}

ann. std {'normmom16': 4.534, 'normmom2': 11.616, 'normmom32': 4.611, 'normmom4': 7.387, 'normmom64': 5.873, 'normmom8': 5.367}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

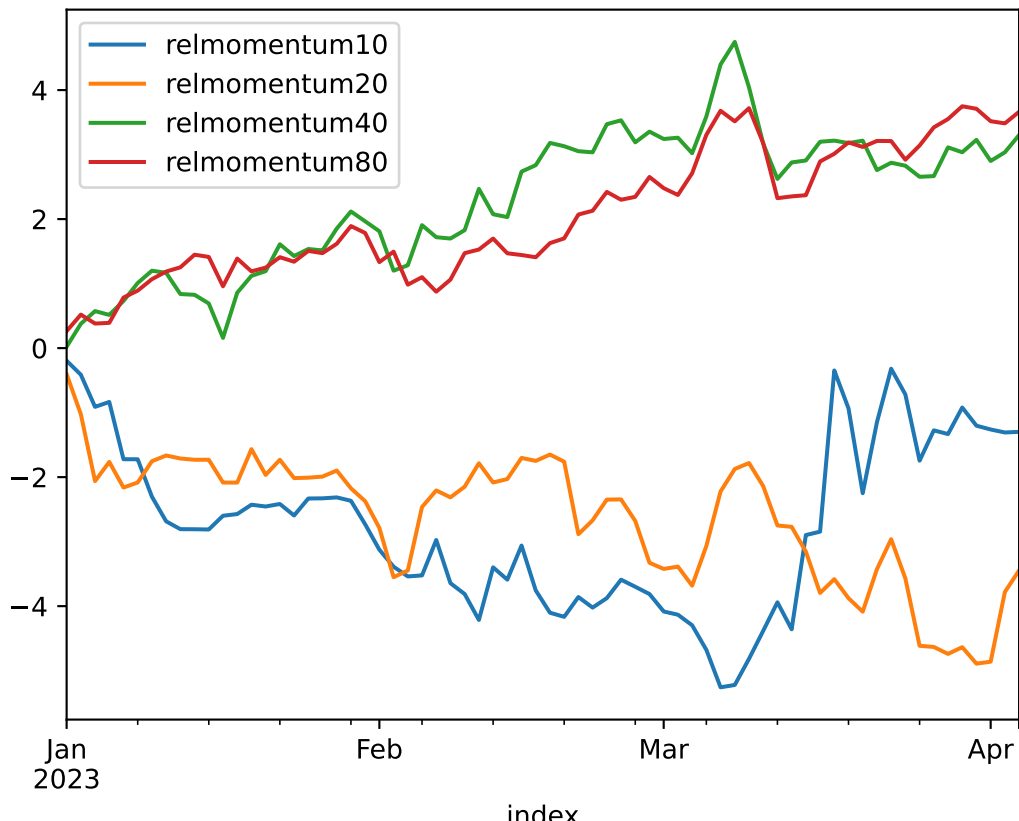


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -4.887, 'relmomentum20': -12.974, 'relmomentum40': 12.433, 'relmomentum80': 13.791}

ann. std {'relmomentum10': 8.806, 'relmomentum20': 6.996, 'relmomentum40': 5.363, 'relmomentum80': 4.131}

ann. SR {'relmomentum10': -0.55, 'relmomentum20': -1.85, 'relmomentum40': 2.32, 'relmomentum80': 3.34}

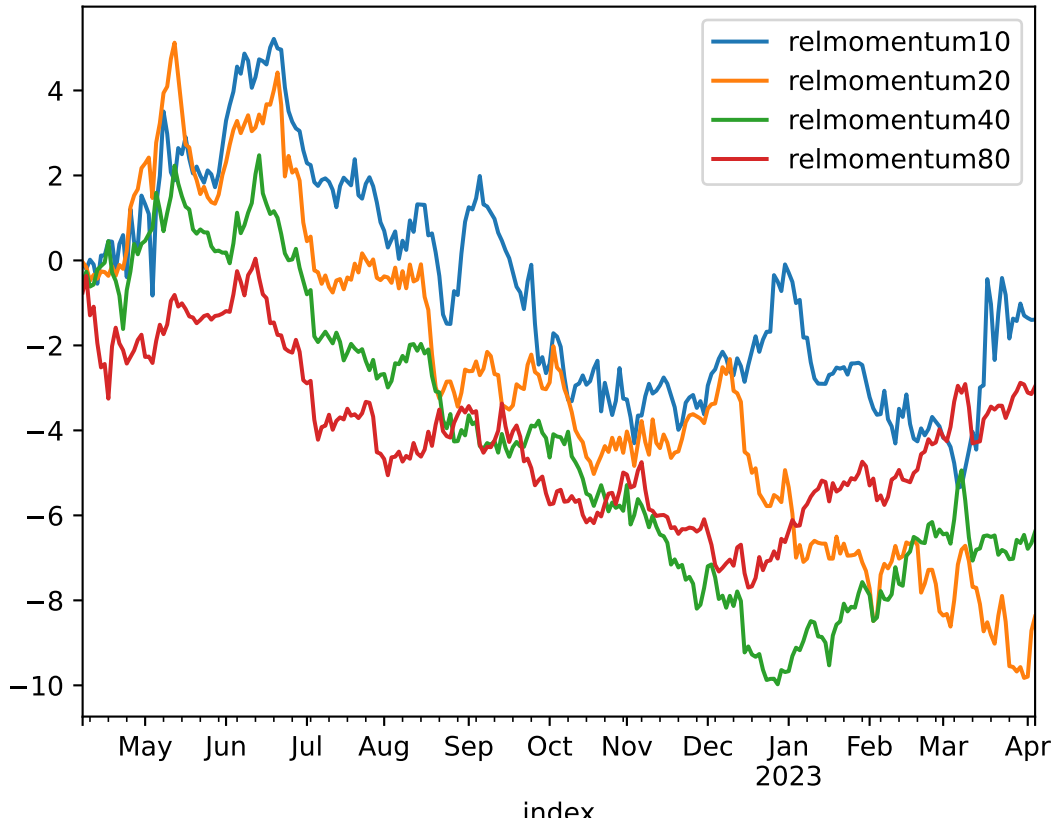


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.37, 'relmomentum20': -8.251, 'relmomentum40': -6.287, 'relmomentum80': -2.921}

ann. std {'relmomentum10': 8.337, 'relmomentum20': 6.681, 'relmomentum40': 5.498, 'relmomentum80': 4.935}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -1.24, 'relmomentum40': -1.14, 'relmomentum80': -0.59}

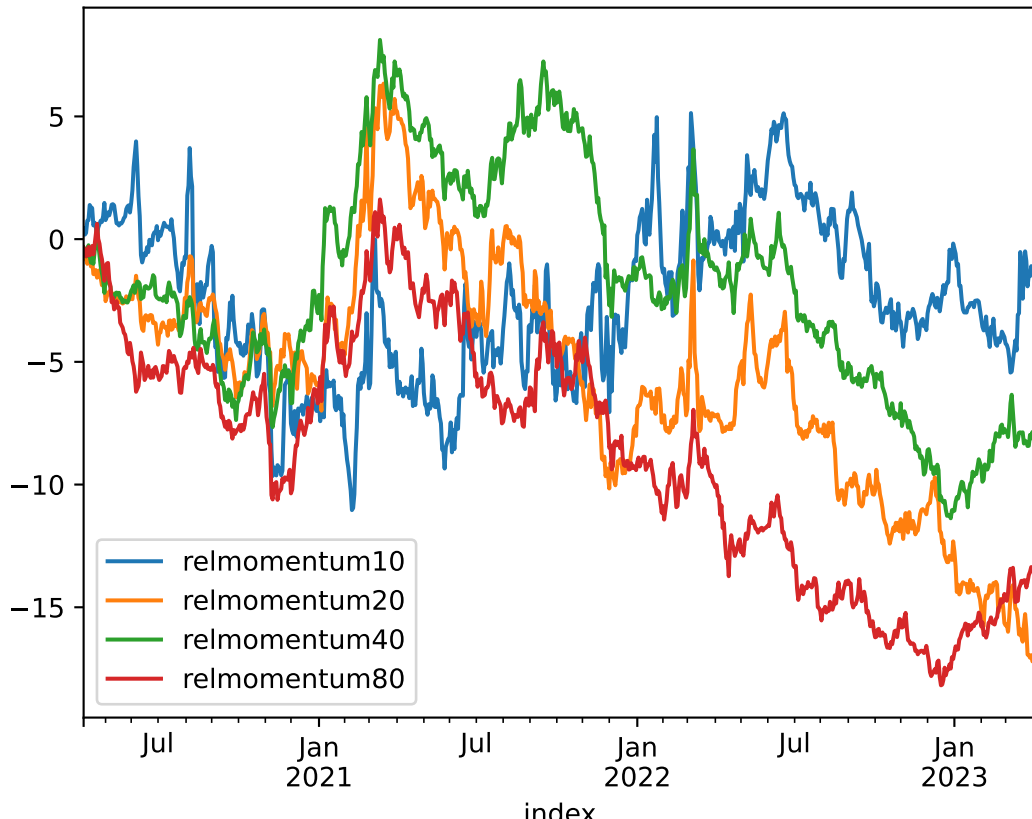


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.484, 'relmomentum20': -5.16, 'relmomentum40': -2.548, 'relmomentum80': -4.402}

ann. std {'relmomentum10': 11.926, 'relmomentum20': 8.355, 'relmomentum40': 6.974, 'relmomentum80': 6.346}

ann. SR {'relmomentum10': -0.04, 'relmomentum20': -0.62, 'relmomentum40': -0.37, 'relmomentum80': -0.69}

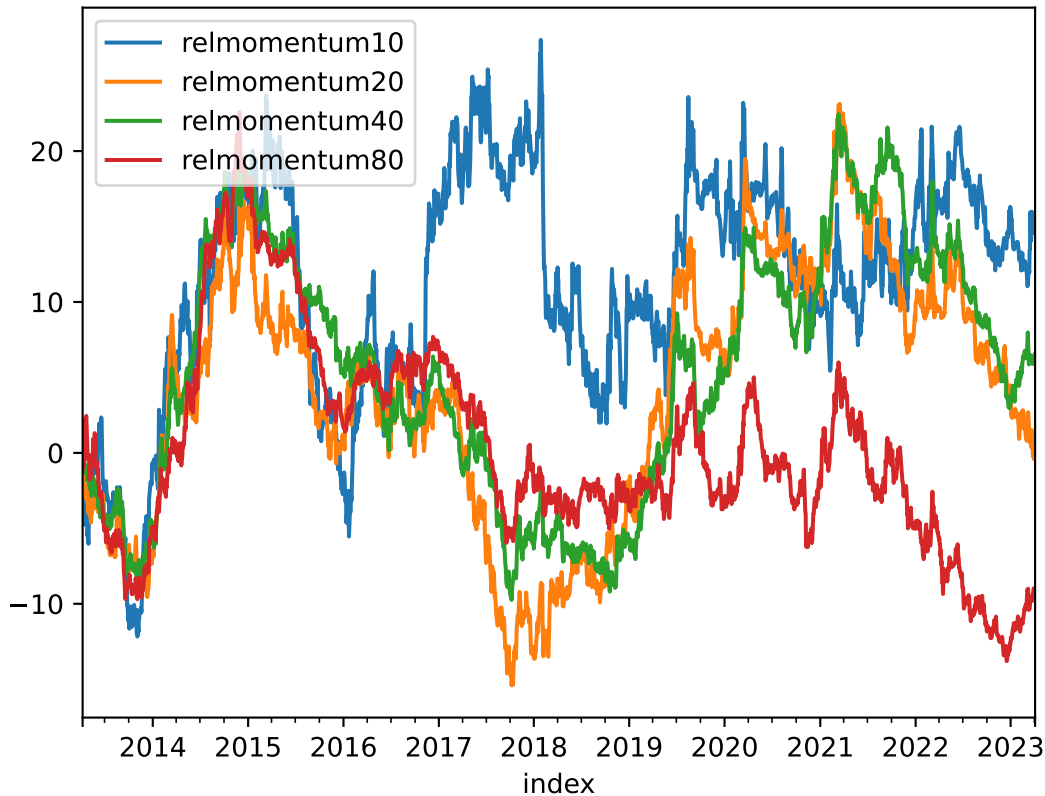


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.473, 'relmomentum20': 0.101, 'relmomentum40': 0.642, 'relmomentum80': -0.89}

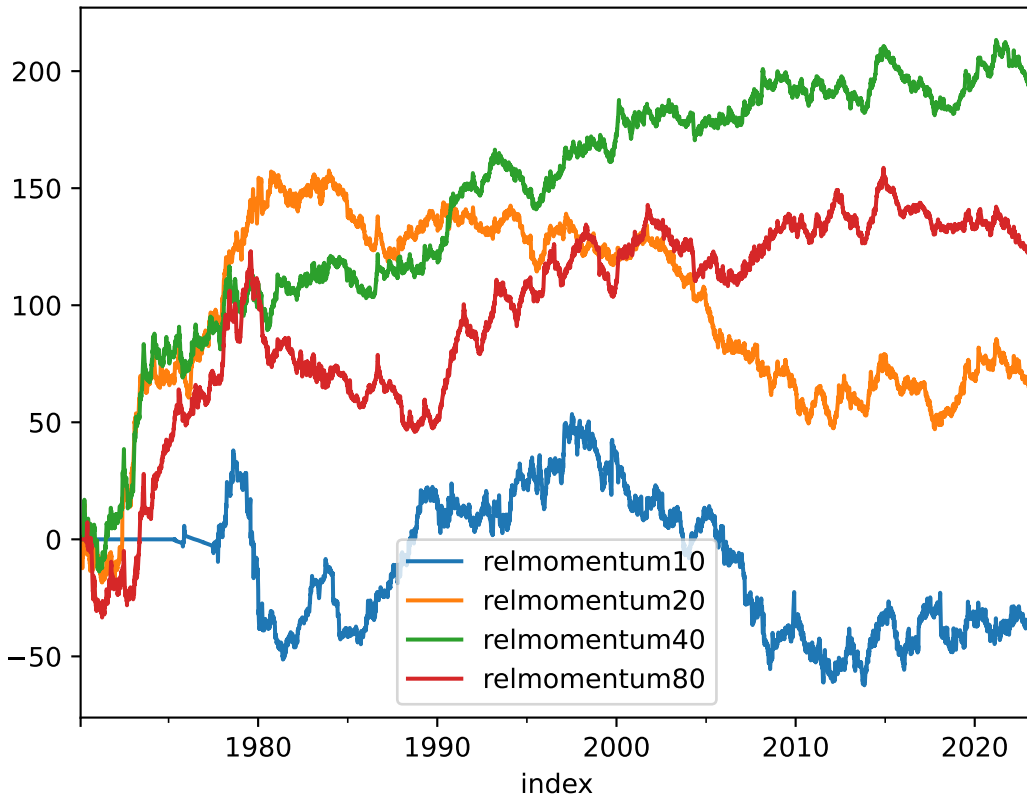
ann. std {'relmomentum10': 13.479, 'relmomentum20': 8.625, 'relmomentum40': 7.03, 'relmomentum80': 6.446}

ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.01, 'relmomentum40': 0.09, 'relmomentum80': -0.14}

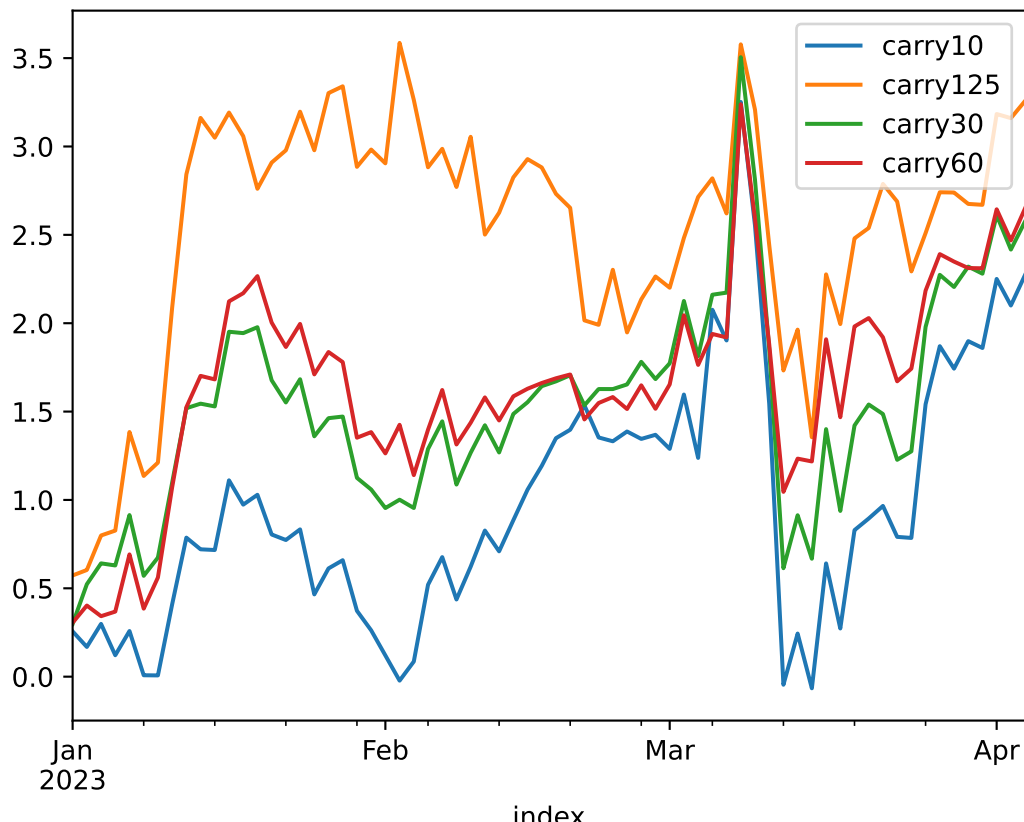


Total Trading Rule P&L for period '99Y'

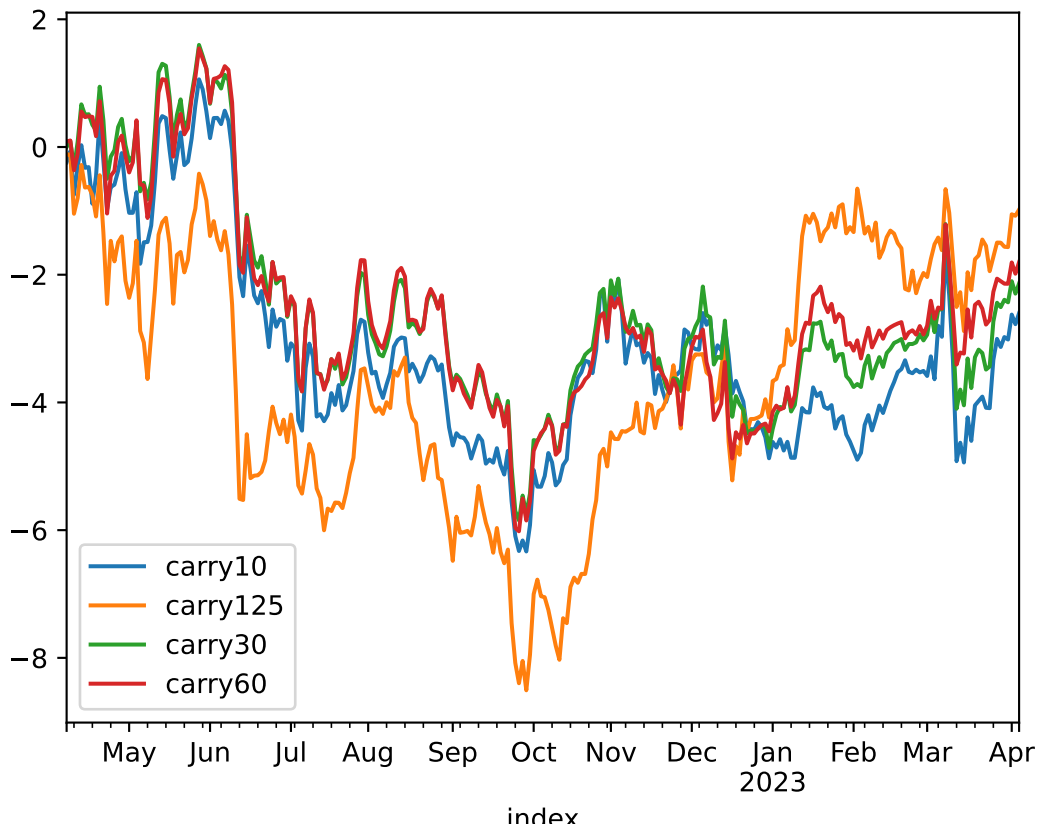
ann. mean	{'relmomentum10': -0.649, 'relmomentum20': 1.172, 'relmomentum40': 3.644, 'relmomentum80': 2.345}
ann. std	{'relmomentum10': 13.397, 'relmomentum20': 10.473, 'relmomentum40': 9.642, 'relmomentum80': 9.787}
ann. SR	{'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 8.56, 'carry125': 12.265, 'carry30': 9.699, 'carry60': 9.978}
ann. std {'carry10': 6.307, 'carry125': 5.892, 'carry30': 5.77, 'carry60': 5.159}
ann. SR {'carry10': 1.36, 'carry125': 2.08, 'carry30': 1.68, 'carry60': 1.93}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.561, 'carry125': -0.964, 'carry30': -2.104, 'carry60': -1.774}
ann. std {'carry10': 6.313, 'carry125': 7.035, 'carry30': 6.209, 'carry60': 6.227}
ann. SR {'carry10': -0.41, 'carry125': -0.14, 'carry30': -0.34, 'carry60': -0.28}

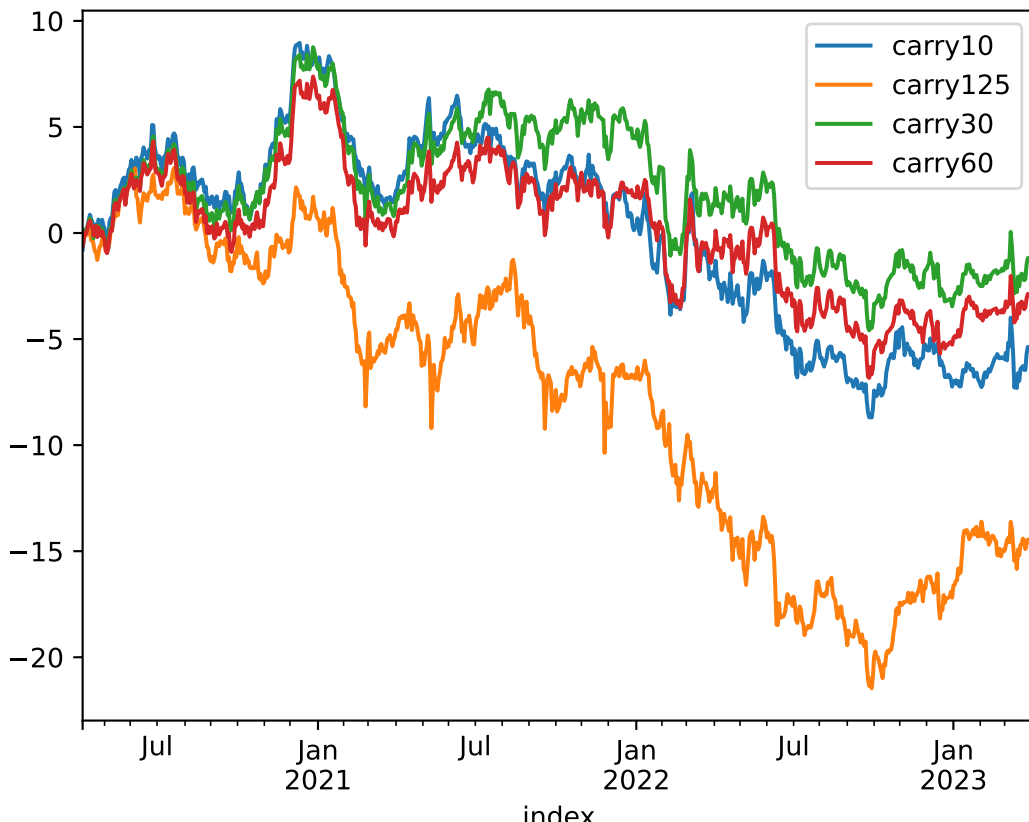


Total Trading Rule P&L for period '3Y'

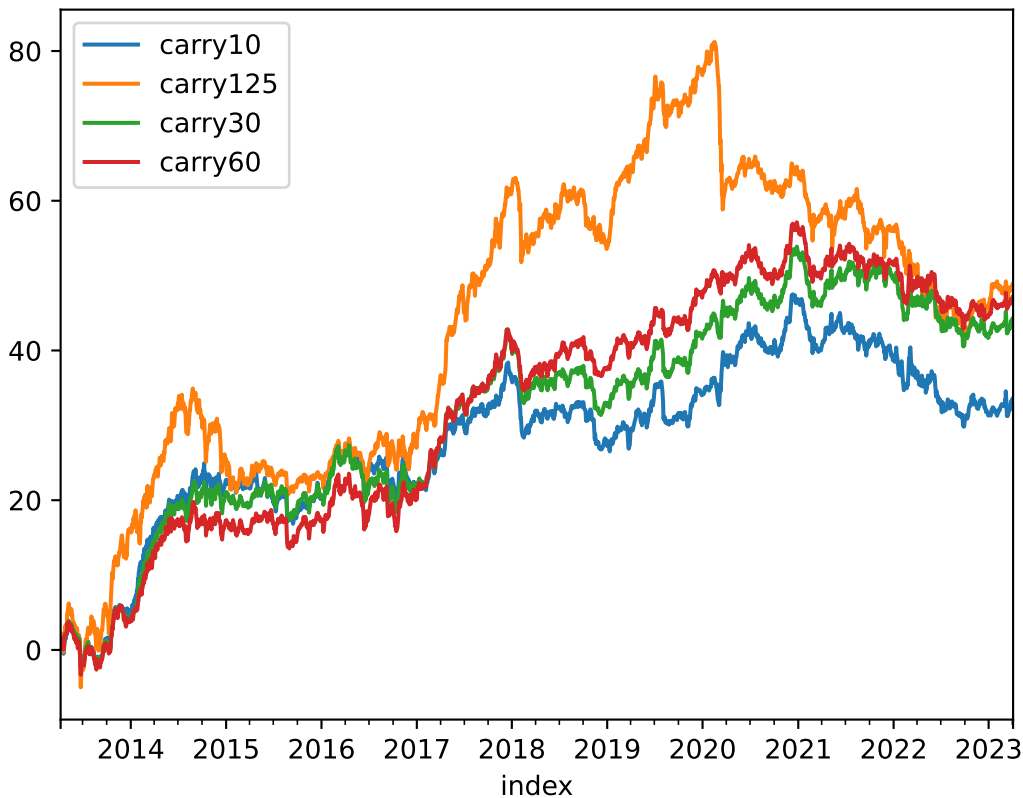
ann. mean {'carry10': -1.626, 'carry125': -4.562, 'carry30': -0.288, 'carry60': -0.856}

ann. std {'carry10': 6.596, 'carry125': 7.999, 'carry30': 6.51, 'carry60': 6.491}

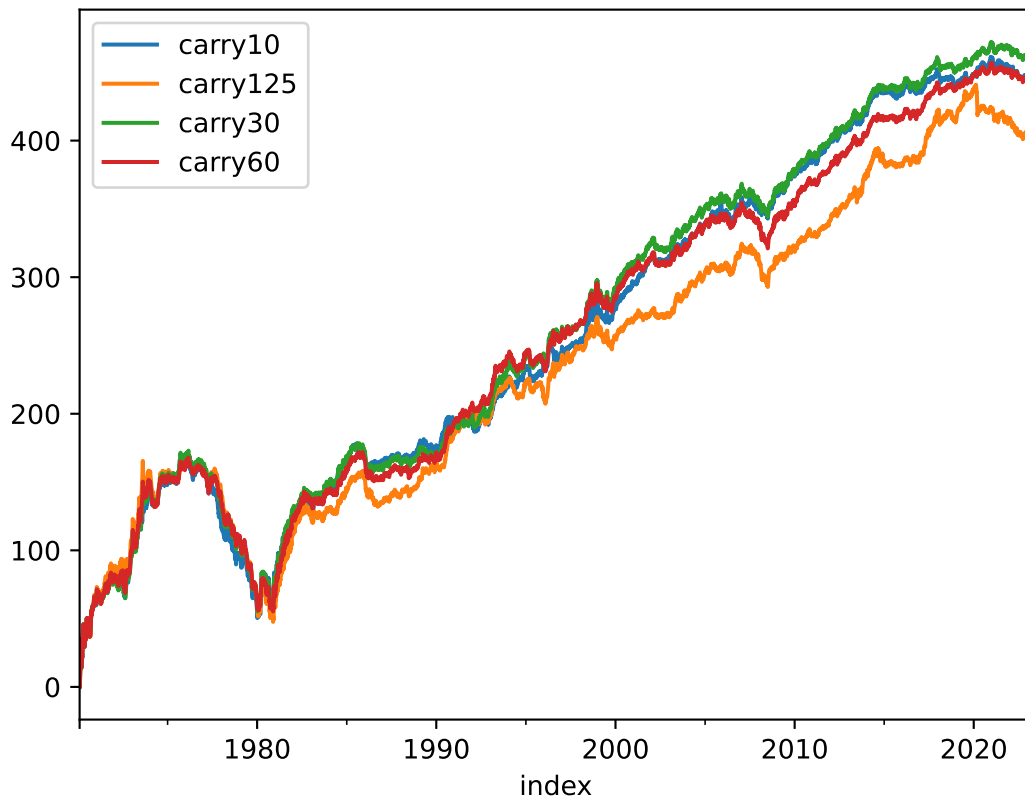
ann. SR {'carry10': -0.25, 'carry125': -0.57, 'carry30': -0.04, 'carry60': -0.13}



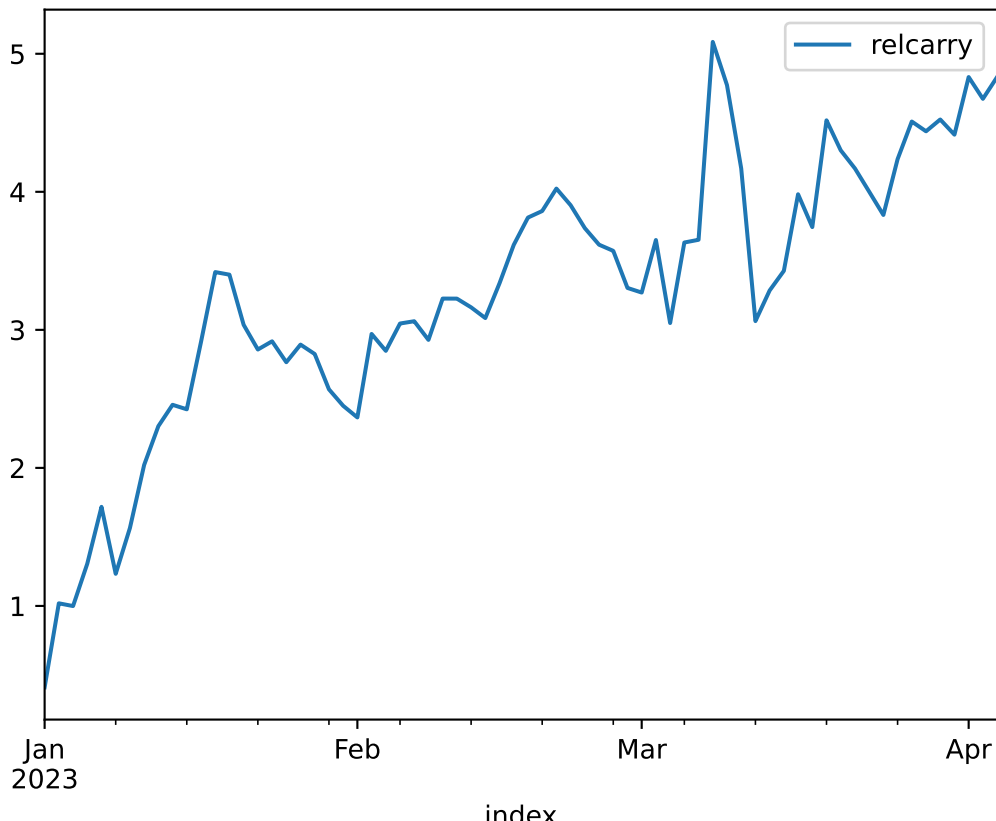
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.296, 'carry125': 4.801, 'carry30': 4.343, 'carry60': 4.628}
ann. std {'carry10': 6.39, 'carry125': 8.996, 'carry30': 6.478, 'carry60': 6.43}
ann. SR {'carry10': 0.52, 'carry125': 0.53, 'carry30': 0.67, 'carry60': 0.72}



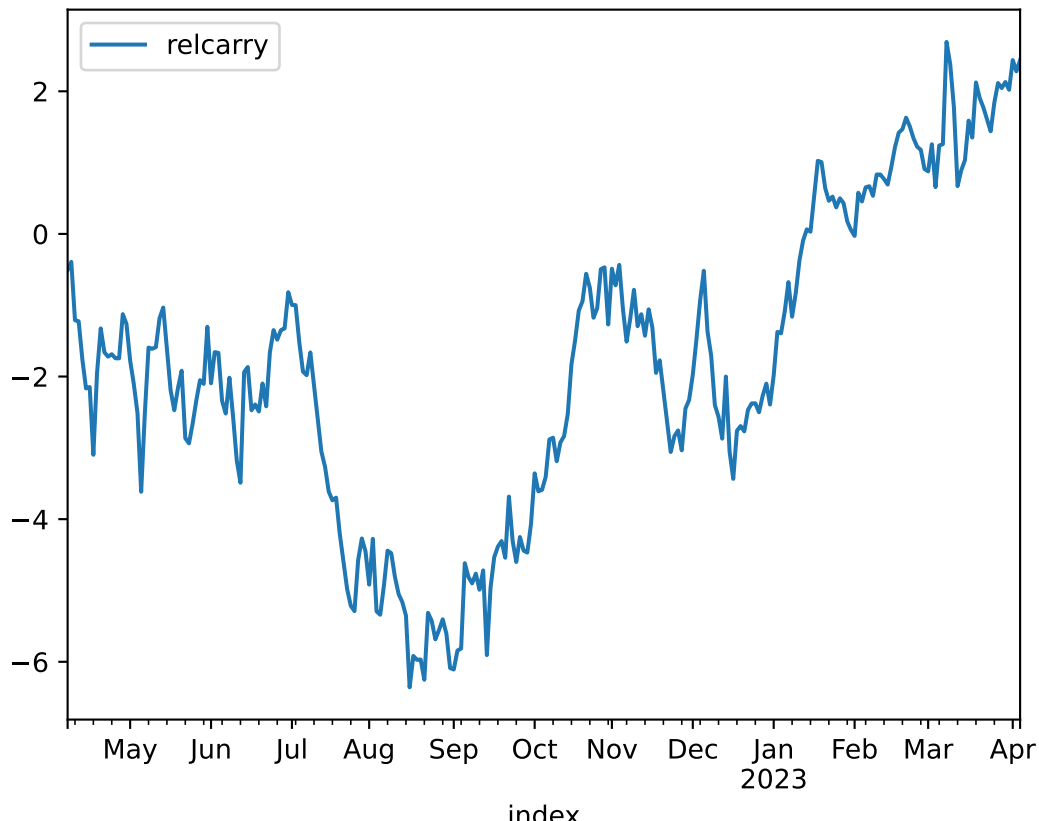
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.256, 'carry125': 7.541, 'carry30': 8.537, 'carry60': 8.248}
ann. std {'carry10': 11.204, 'carry125': 11.561, 'carry30': 11.261, 'carry60': 11.264}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



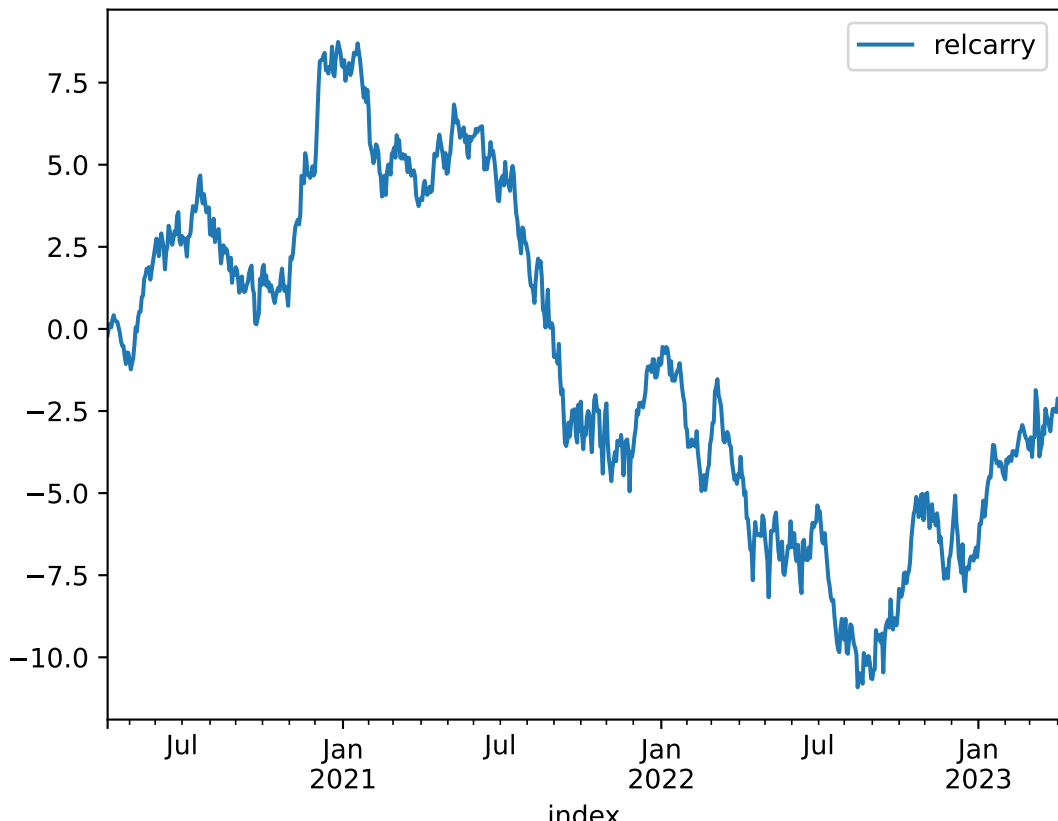
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 18.189}
ann. std {'relcarry': 5.87}
ann. SR {'relcarry': 3.1}



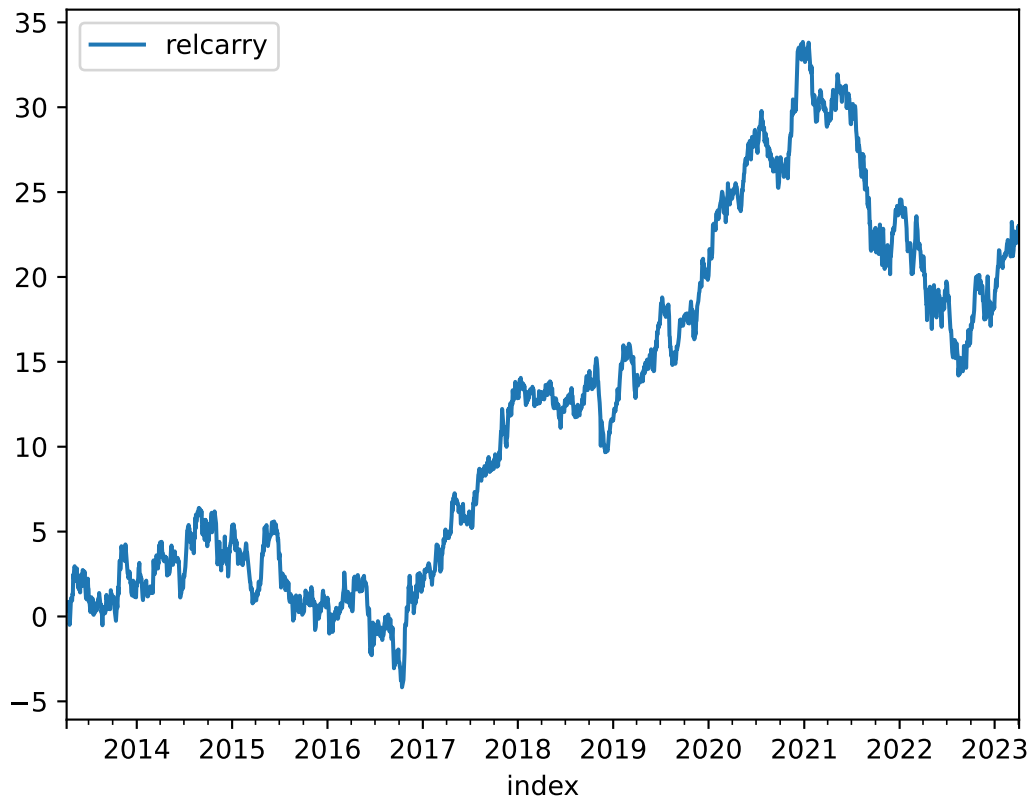
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 2.401}
ann. std {'relcarry': 7.185}
ann. SR {'relcarry': 0.33}



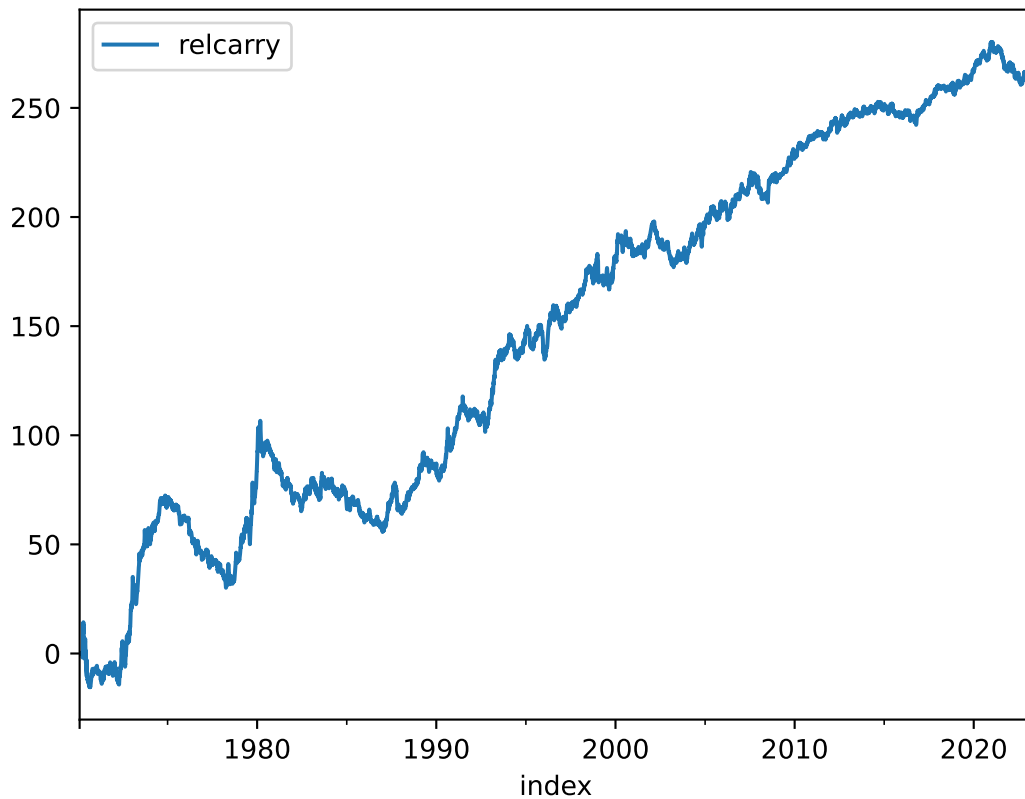
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.693}
ann. std {'relcarry': 6.642}
ann. SR {'relcarry': -0.1}



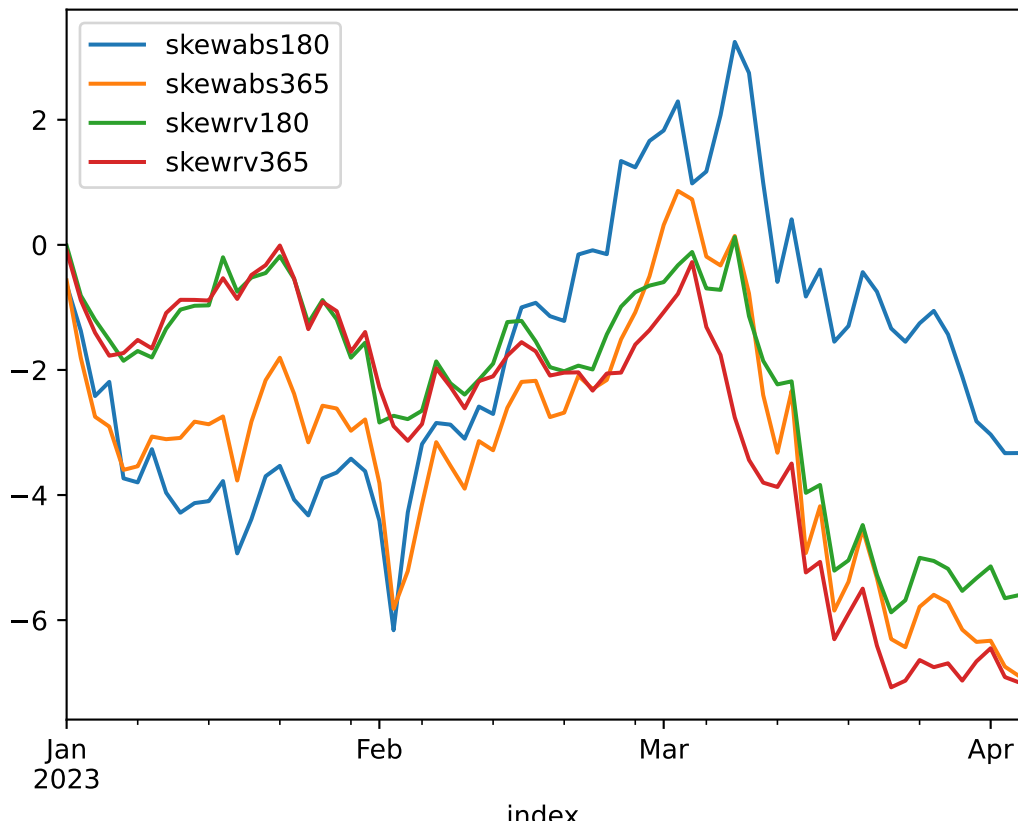
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.257}
ann. std {'relcarry': 5.836}
ann. SR {'relcarry': 0.39}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.971}
ann. std {'relcarry': 8.961}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -12.531, 'skewabs365': -25.957, 'skewrv180': -21.081, 'skewrv365': -26.338}
ann. std {'skewabs180': 12.2, 'skewabs365': 12.115, 'skewrv180': 8.27, 'skewrv365': 7.907}
ann. SR {'skewabs180': -1.03, 'skewabs365': -2.14, 'skewrv180': -2.55, 'skewrv365': -3.33}

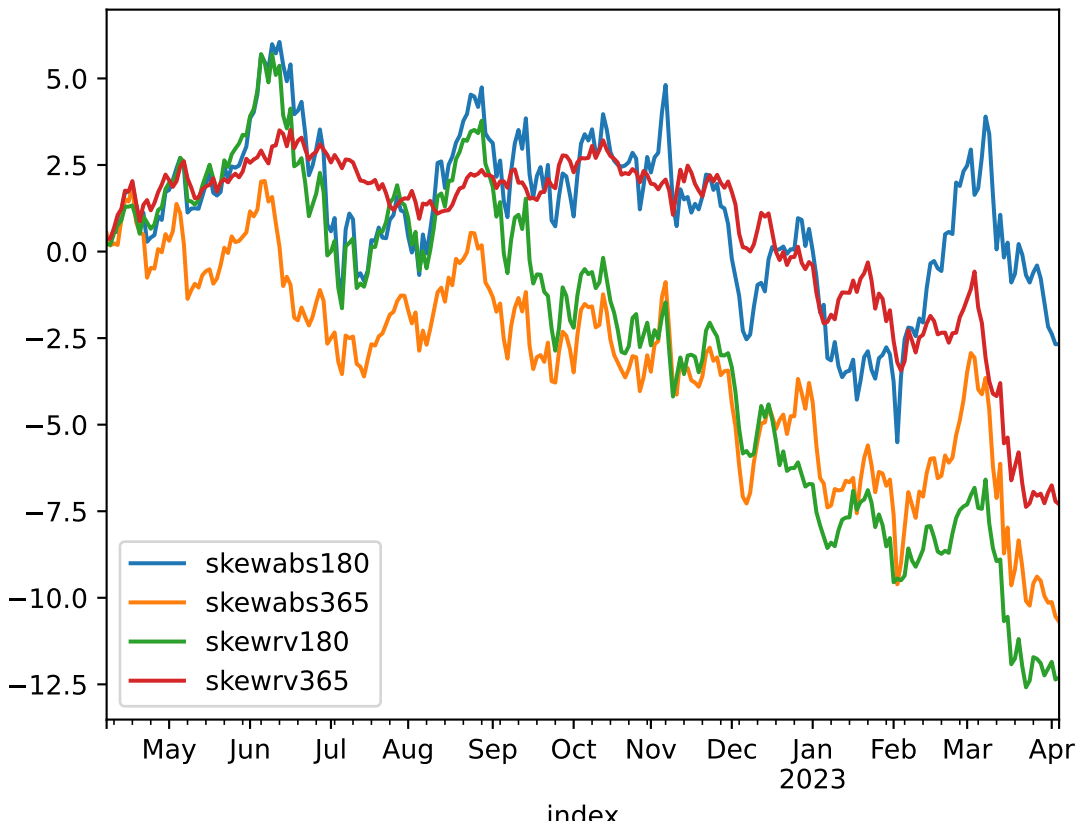


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -2.633, 'skewabs365': -10.524, 'skewrv180': -12.12, 'skewrv365': -7.186}

ann. std {'skewabs180': 11.043, 'skewabs365': 9.887, 'skewrv180': 9.178, 'skewrv365': 5.569}

ann. SR {'skewabs180': -0.24, 'skewabs365': -1.06, 'skewrv180': -1.32, 'skewrv365': -1.29}

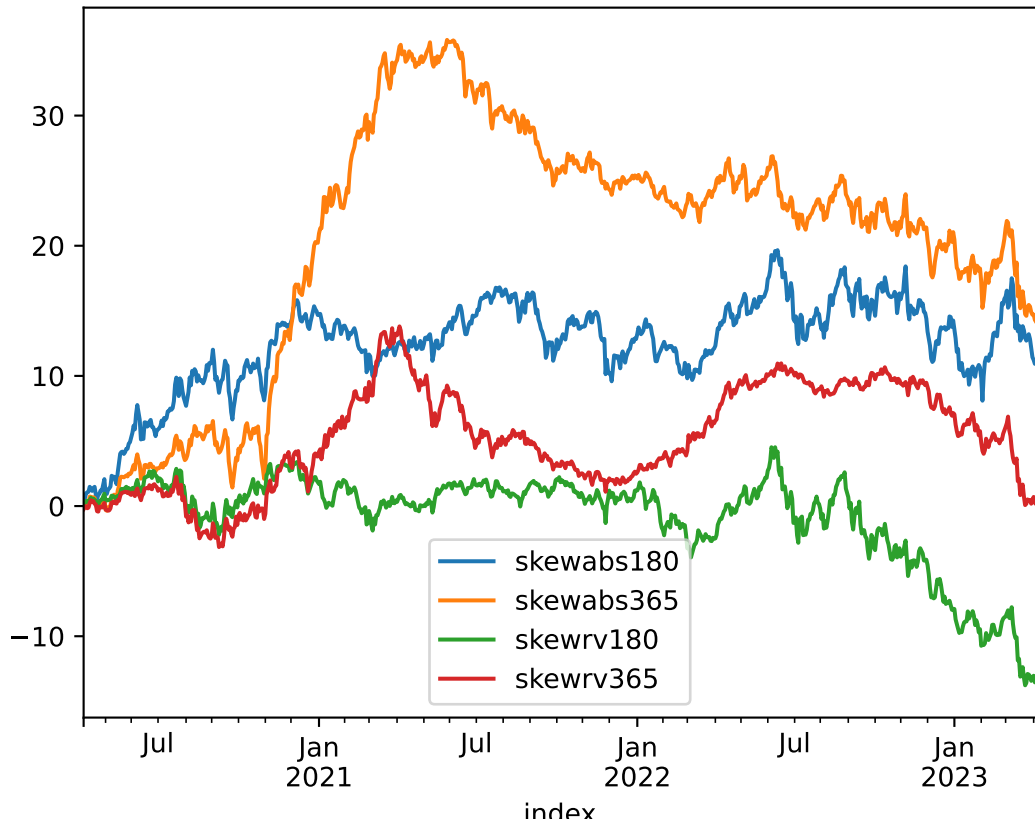


Total Trading Rule P&L for period '3Y'

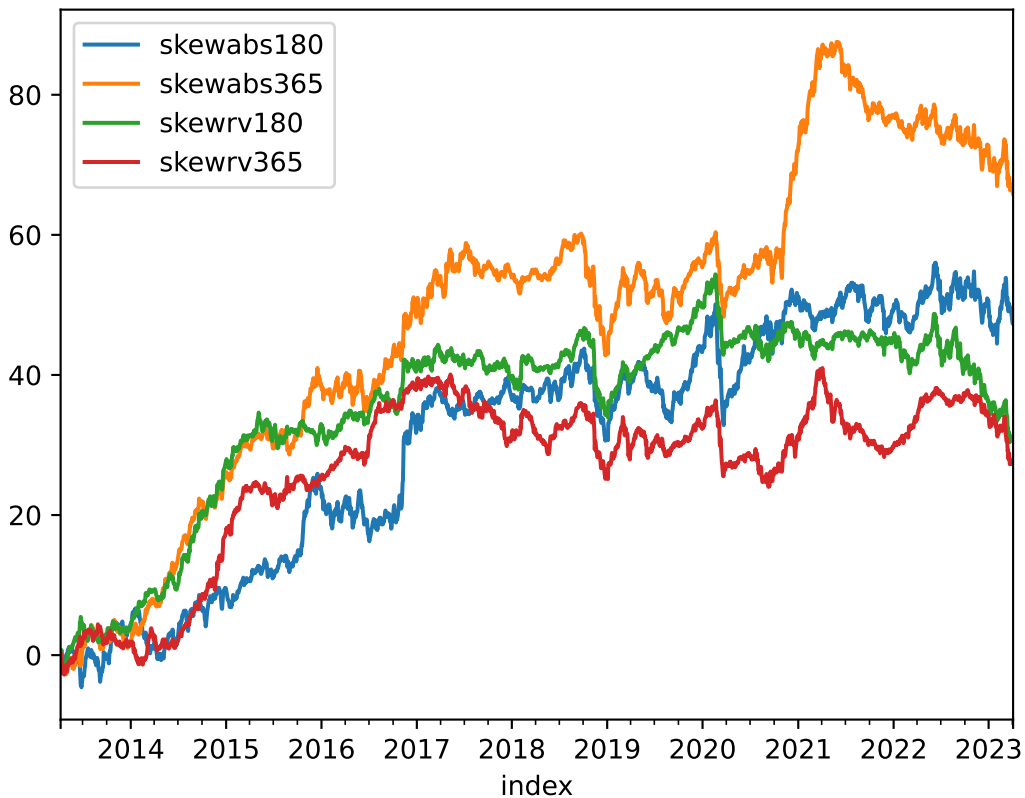
ann. mean {'skewabs180': 3.578, 'skewabs365': 4.633, 'skewrv180': -4.418, 'skewrv365': 0.05}

ann. std {'skewabs180': 9.108, 'skewabs365': 8.828, 'skewrv180': 7.175, 'skewrv365': 6.252}

ann. SR {'skewabs180': 0.39, 'skewabs365': 0.52, 'skewrv180': -0.62, 'skewrv365': 0.01}



Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.643, 'skewabs365': 6.467, 'skewrv180': 3.011, 'skewrv365': 2.683}
ann. std {'skewabs180': 8.002, 'skewabs365': 7.951, 'skewrv180': 6.382, 'skewrv365': 6.05}
ann. SR {'skewabs180': 0.58, 'skewabs365': 0.81, 'skewrv180': 0.47, 'skewrv365': 0.44}

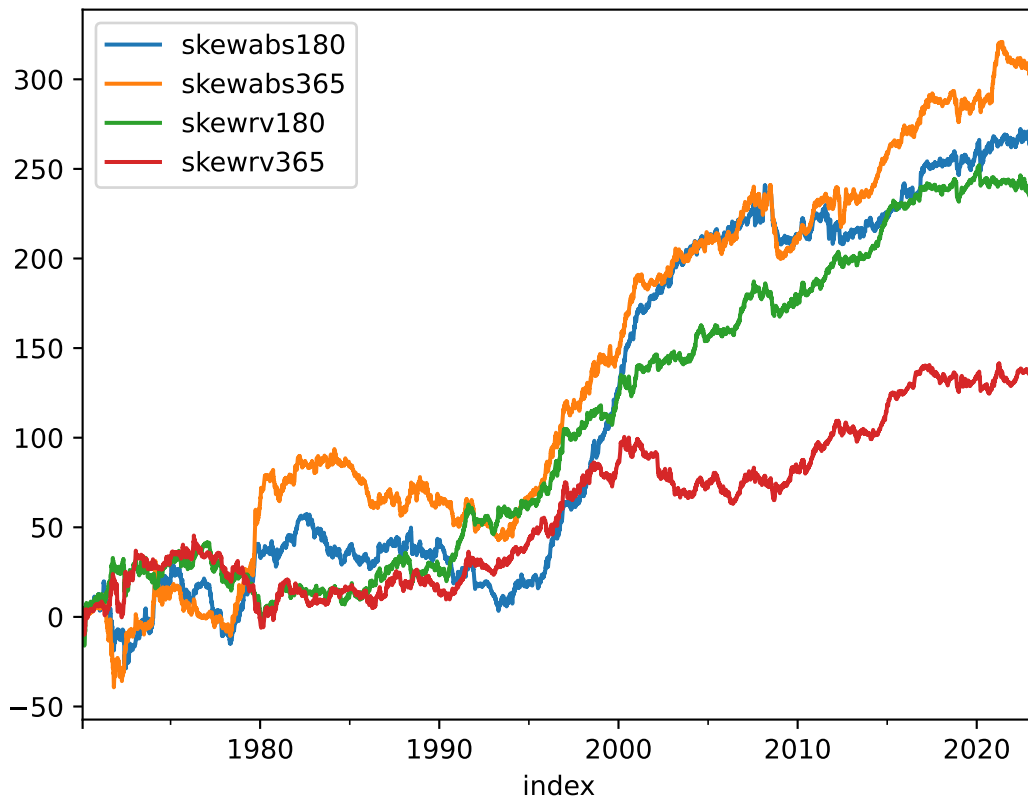


Total Trading Rule P&L for period '99Y'

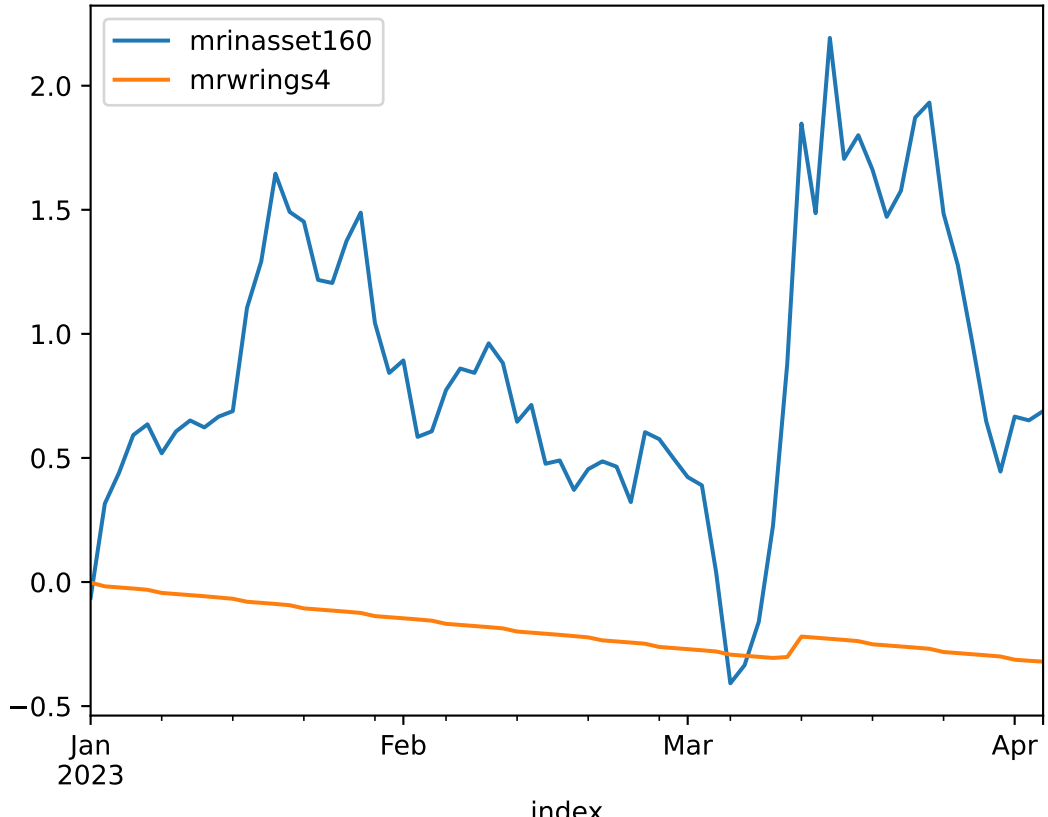
ann. mean {'skewabs180': 4.861, 'skewabs365': 5.522, 'skewrv180': 4.215, 'skewrv365': 2.359}

ann. std {'skewabs180': 10.102, 'skewabs365': 9.867, 'skewrv180': 8.751, 'skewrv365': 8.122}

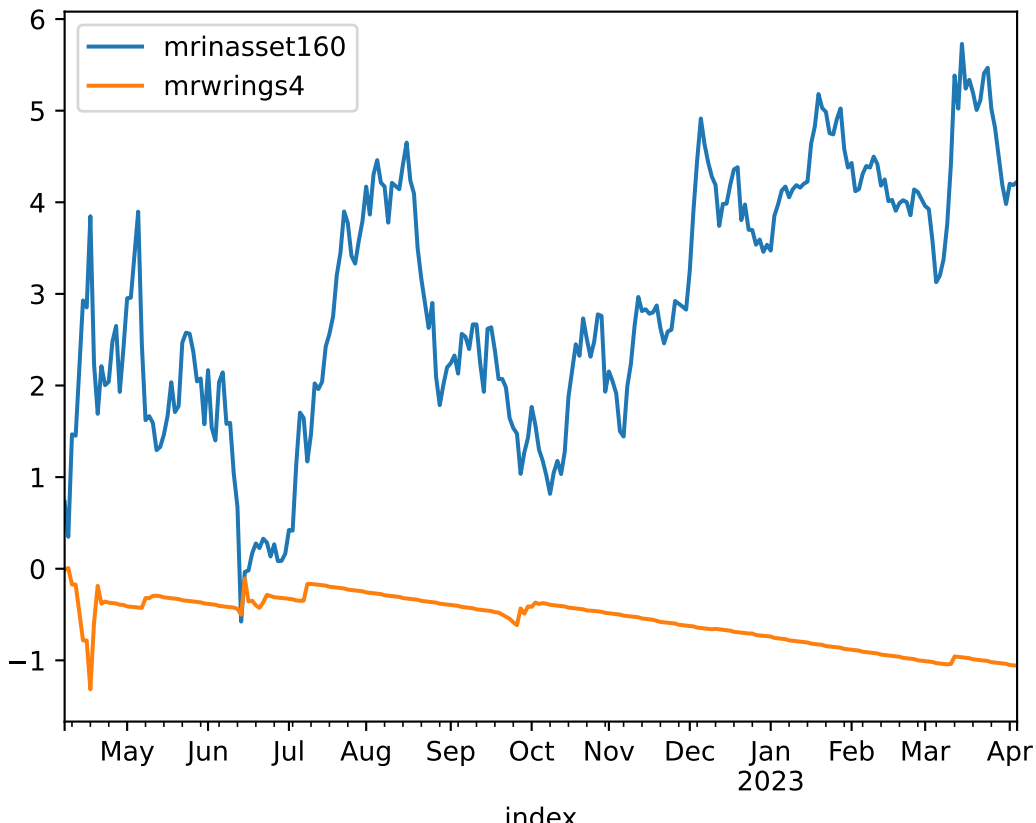
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



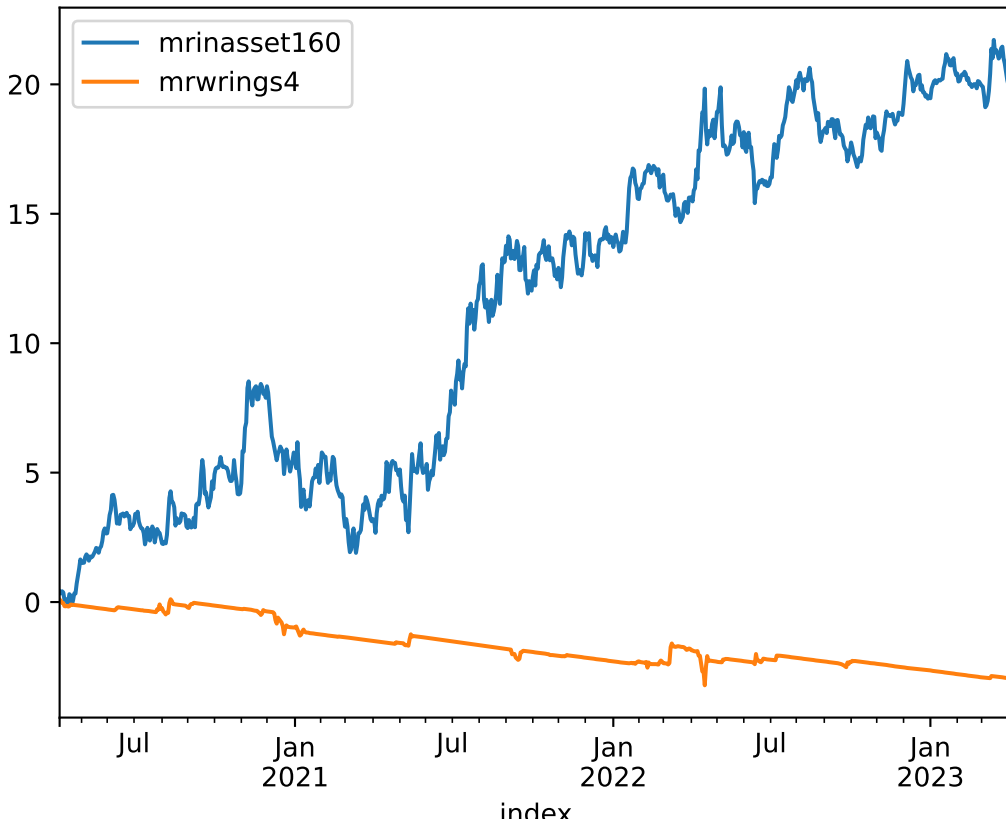
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 2.593, 'mrwrings4': -1.207}
ann. std {'mrinasset160': 4.259, 'mrwrings4': 0.181}
ann. SR {'mrinasset160': 0.61, 'mrwrings4': -6.69}



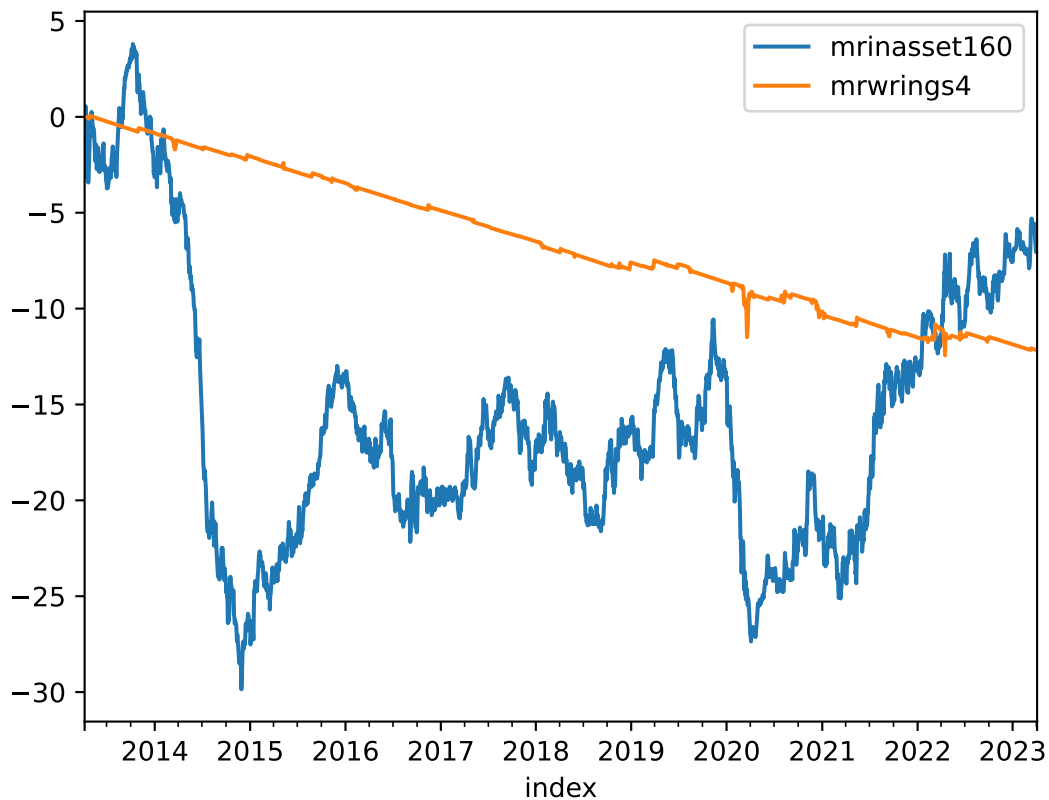
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 4.16, 'mrwrings4': -1.042}
ann. std {'mrinasset160': 5.773, 'mrwrings4': 1.248}
ann. SR {'mrinasset160': 0.72, 'mrwrings4': -0.83}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.617, 'mrwrings4': -0.969}
ann. std {'mrinasset160': 6.252, 'mrwrings4': 1.023}
ann. SR {'mrinasset160': 1.06, 'mrwrings4': -0.95}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.668, 'mrwrings4': -1.195}
ann. std {'mrinasset160': 6.307, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.11, 'mrwrings4': -1.36}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.553, 'mrwrings4': -2.12}
ann. std {'mrinasset160': 9.871, 'mrwrings4': 2.089}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.01}

