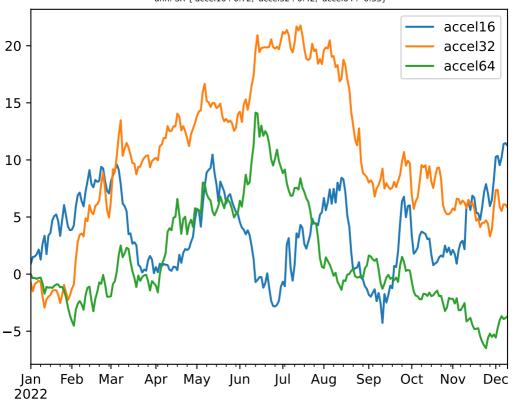
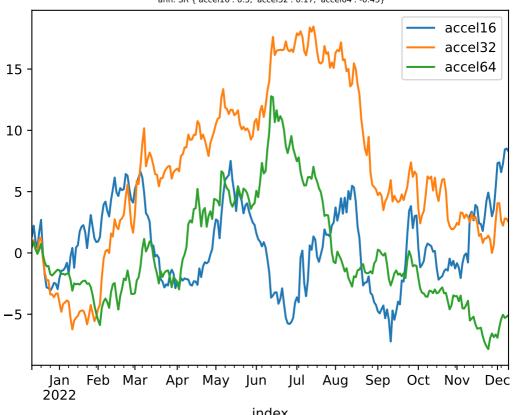
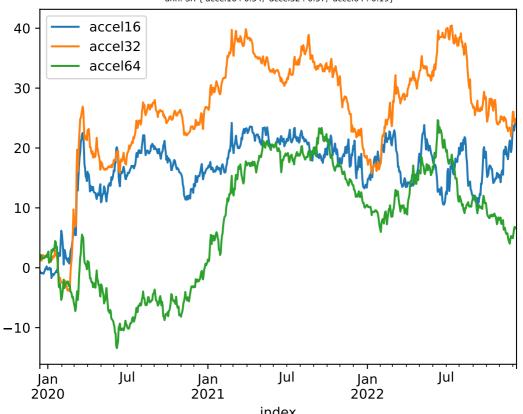
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': 11.744, 'accel32': 6.074, 'accel64': -3.865} ann. std {'accel16': 16.294, 'accel32': 14.358, 'accel64': 11.858} ann. SR {'accel16': 0.72, 'accel32': 0.42, 'accel64': -0.33}



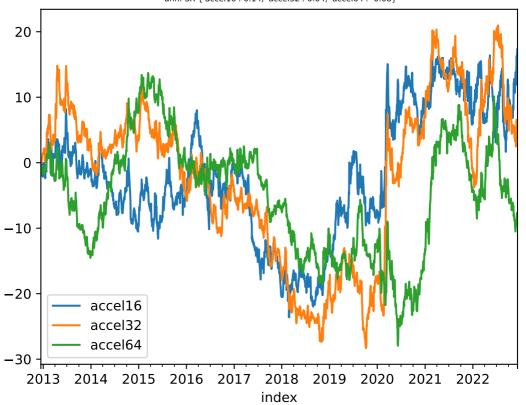
Total Trading Rule P&L for period '1Y'
ann. mean {'iaccel16': 8.156, 'accel32': 2.474, 'accel64': -4.986}
ann. std {'accel16': 16.413, 'accel32': 14.246, 'accel64': 11.639}
ann. SR {'accel16': 0.5, 'accel32': 0.17, 'accel64': -0.43}



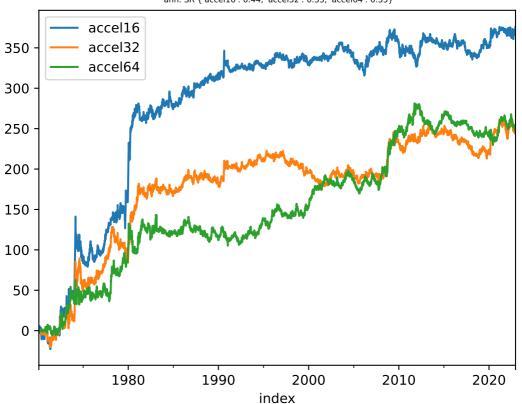
Total Trading Rule P&L for period '3Y' ann. mean { 'accel16': 8.066, 'accel32': 8.03, 'accel64': 2.23} ann. std { 'accel16': 14.848, 'accel32': 4.089, 'accel64': 11.771} ann. SR { 'accel16': 0.54, 'accel32': 0.57, 'accel64': 0.19}



Total Trading Rule P&L for period '10Y'
ann. mean {'iaccel16': 1.686, 'accel32': 0.491, 'accel64': -0.758}
ann. std {'accel16': 11.899, 'accel32': 11.125, 'accel64': 9.571}
ann. SR {'accel16': 0.14, 'accel32': 0.04, 'accel64': -0.08}

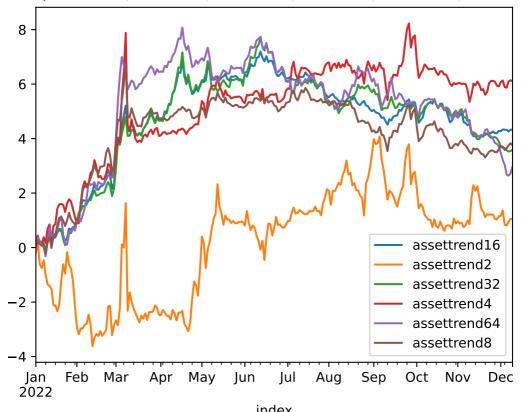


Total Trading Rule P&L for period '99Y' ann. mean {'accel16': 6.985, 'accel32': 4.571, 'accel64': 4.641} ann. std {'accel16': 15.731, 'accel32': 13.795, 'accel64': 13.333} ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}



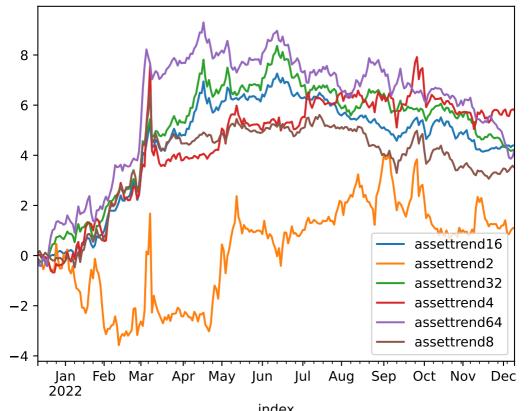
Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.523, 'assettrend2': 1.102, 'assettrend32': 3.744, 'assettrend4': 6.378, 'assettrend64': 3.113, 'assettrend8': 3.916} ann. std {'assettrend16': 3.095, 'assettrend2': 7.873, 'assettrend32': 3.422, 'assettrend4': 5.882, 'assettrend64': 4.078, 'assettrend8': 3.847} ann. SR {'assettrend16': 1.46, 'assettrend2': 0.14, 'assettrend32': 1.09, 'assettrend4': 1.08, 'assettrend64': 0.76, 'assettrend8': 1.02



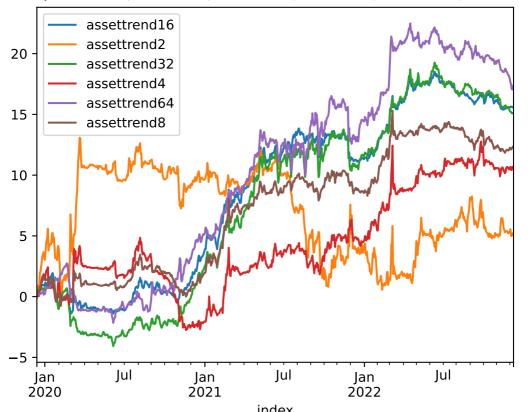
Total Trading Rule P&L for period '1Y'

ann. mean { 'assettrend16': 4.327, 'assettrend2': 1.084, 'assettrend32': 4.169, 'assettrend4': 5.708, 'assettrend64': 4.141, 'assettrend8': 3.447} ann. std { 'assettrend16': 3.016, 'assettrend2': 7.786, 'assettrend32': 3.388, 'assettrend4': 5.735, 'assettrend64': 4.095, 'assettrend8': 3.75} ann. SR { 'assettrend16': 1.43, 'assettrend2': 0.14, 'assettrend32': 1.23, 'assettrend4': 1.0, 'assettrend64': 1.01, 'assettrend8': 0.92}



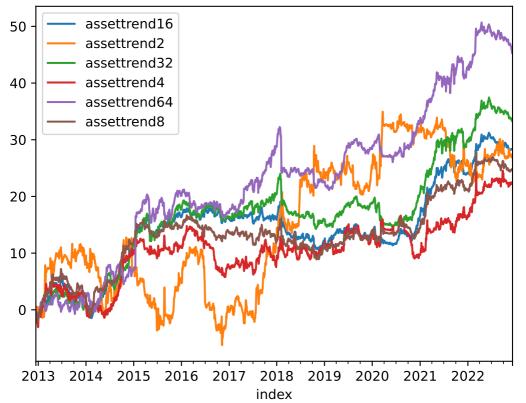
Total Trading Rule P&L for period '3Y'

ann. mean { 'assettrend16': 5.125, 'assettrend2': 1.716, 'assettrend32': 4.961, 'assettrend4': 3.492, 'assettrend64': 5.702, 'assettrend8': 4.023} ann. std { 'assettrend16': 3.613, 'assettrend2': 7.892, 'assettrend32': 4.432, 'assettrend4': 5.46, 'assettrend64': 5.135, 'assettrend8': 3.761} ann. SR { 'assettrend16': 1.42, 'assettrend2': 0.22, 'assettrend32': 1.12, 'assettrend4': 0.64, 'assettrend64': 1.11, 'assettrend8': 1.07}



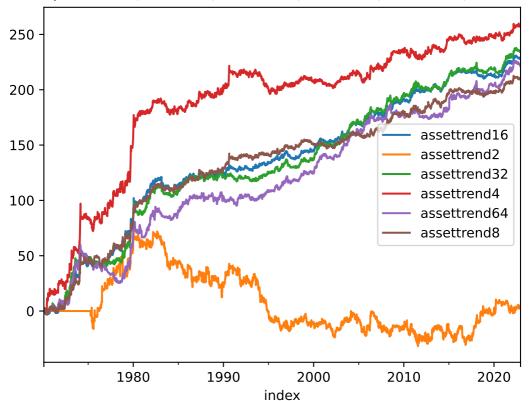
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.787, 'assettrend2': 2.661, 'assettrend32': 3.274, 'assettrend4': 2.203, 'assettrend64': 4.478, 'assettrend8': 2.436} ann. std {'assettrend16': 3.281, 'assettrend2': 8.455, 'assettrend32': 3.761, 'assettrend4': 5.041, 'assettrend64': 5.313, 'assettrend8': 3.592} ann. SR {'assettrend16': 0.85, 'assettrend2': 0.31, 'assettrend32': 0.87, 'assettrend4': 0.44, 'assettrend64': 0.84, 'assettrend8': 0.68}



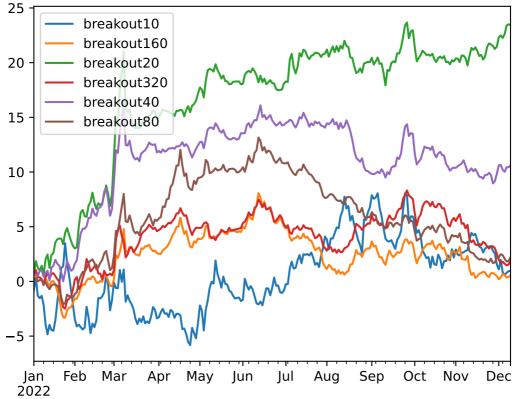
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.233, 'assettrend2': 0.049, 'assettrend32': 4.341, 'assettrend4': 4.786, 'assettrend64': 4.107, 'assettrend8': 3.892} ann. std {'assettrend16': 4.663, 'assettrend2': 10.055, 'assettrend32': 4.899, 'assettrend4': 7.353, 'assettrend64': 5.473, 'assettrend8': 5.039} ann. SR {'assettrend16': 0.91, 'assettrend2': 0.0, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.77}



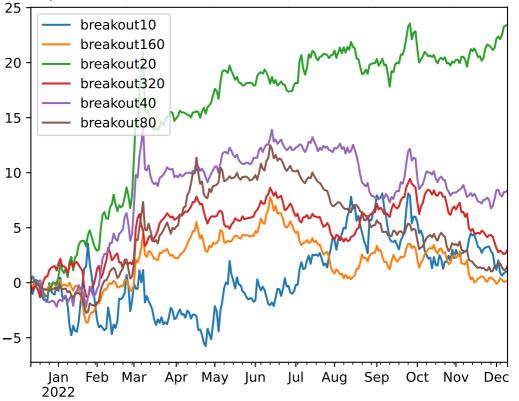
Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 0.999, 'breakout160': 0.531, 'breakout20': 24.496, 'breakout320': 1.966, 'breakout40': 11.08, 'breakout80': 2.304} ann. std {'breakout10': 13.928, 'breakout160': 7.26, 'breakout20': 12.269, 'breakout320': 7.587, 'breakout40': 9.753, 'breakout80': 7.984} ann. SR {'breakout10': 0.07, 'breakout160': 0.07, 'breakout20': 2.0, 'breakout320': 0.26, 'breakout40': 1.14, 'breakout80': 0.29}



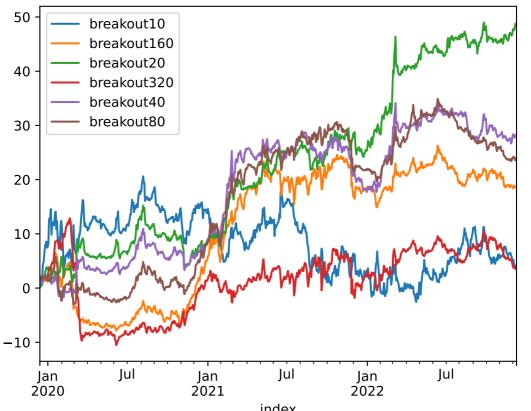
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 0.999, 'breakout160': 0.201, 'breakout20': 22.972, 'breakout320': 2.96, 'breakout40': 8.277, 'breakout80': 1.515} ann. 5td {'breakout10': 13.749, 'breakout160': 7.119, 'breakout20': 12.003, 'breakout320': 7.54, 'breakout40': 9.583, 'breakout80': 7.766} ann. 5R {'breakout10': 0.07, 'breakout160': 0.03, 'breakout20': 1.91, 'breakout320': 0.39, 'breakout40': 0.86, 'breakout80': 0.2}



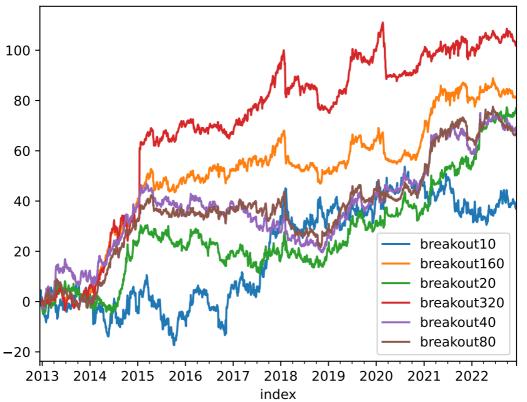
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 1.38, 'breakout160': 6.135, 'breakout20': 15.983, 'breakout320': 1.298, 'breakout40': 9.284, 'breakout80': 7.852} ann. std {'breakout10': 15.105, 'breakout160': 9.787, 'breakout20': 11.516, 'breakout320': 10.789, 'breakout40': 9.959, 'breakout80': 9.634} ann. SR {'breakout10': 0.09, 'breakout160': 0.63, 'breakout20': 1.39, 'breakout320': 0.12, 'breakout40': 0.93, 'breakout80': 0.81}



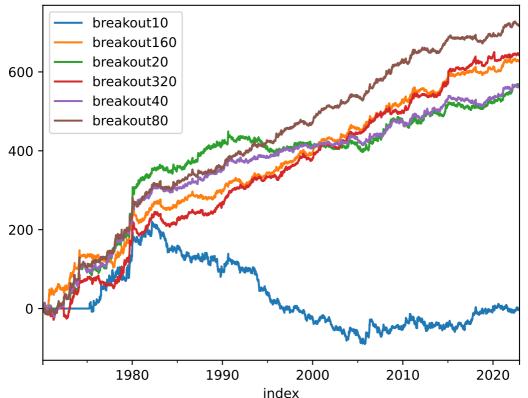
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.661, 'breakout160': 7.988, 'breakout20': 7.57, 'breakout320': 10.031, 'breakout40': 6.801, 'breakout80': 6.543} ann. std {'breakout10': 15.771, 'breakout160': 9.142, 'breakout20': 11.212, 'breakout320': 13.347, 'breakout40': 9.839, 'breakout80': 9.017} ann. SR {'breakout10': 0.23, 'breakout160': 0.87, 'breakout20': 0.68, 'breakout320': 0.75, 'breakout40': 0.69, 'breakout40': 0.73}



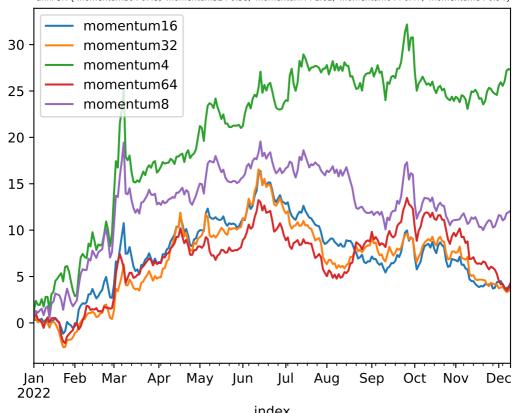
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.079, 'breakout160': 11.633, 'breakout20': 10.568, 'breakout320': 11.908, 'breakout40': 10.436, 'breakout80': 13.311} ann. std {'breakout10': 20.847, 'breakout160': 12.504, 'breakout20': 16.111, 'breakout320': 13.058, 'breakout40': 13.241, 'breakout80': 12.763} ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.66, 'breakout320': 0.91, 'breakout40': 0.79, 'breakout80': 1.04}



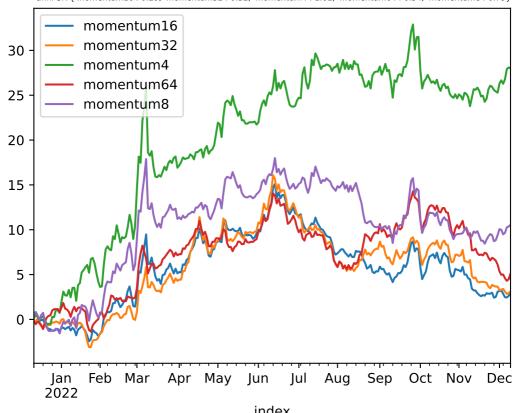
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.443, 'momentum32': 3.767, 'momentum4': 28.498, 'momentum64': 4.485, 'momentum8': 12.639} ann. std {'momentum16': 10.229, 'momentum32': 9.876, 'momentum4': 17.561, 'momentum64': 9.562, 'momentum8': 13.401} ann. SR ('momentum16': 0.43, 'momentum32': 0.38, 'momentum4': 1.62, 'momentum64': 0.47, 'momentum8': 0.94}



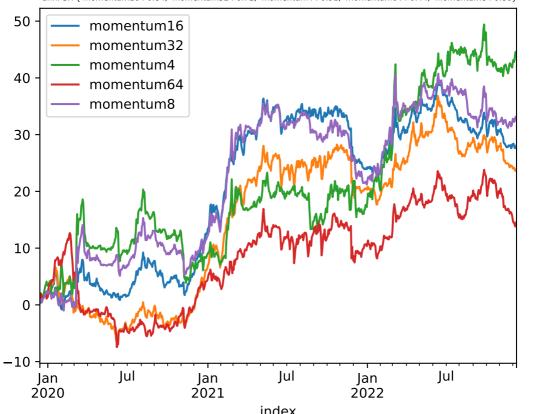
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.933, 'momentum32': 3.079, 'momentum4': 27.563, 'momentum64': 5.026, 'momentum8': 10.371} ann. std {'momentum16': 9.978, 'momentum32': 9.631, 'momentum4': 17.112, 'momentum64': 9.381, 'momentum8': 13.123} ann. SR ('momentum16': 0.29, 'momentum32': 0.32, 'momentum4': 1.61, 'momentum64': 0.54, 'momentum8': 0.79}



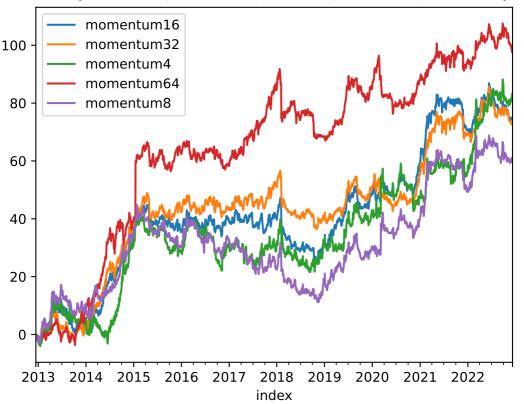
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 9.228, 'momentum32': 7.832, 'momentum4': 14.593, 'momentum64': 4.795, 'momentum8': 10.908} ann. std {'momentum16': 11.032, 'momentum32': 10.902, 'momentum4': 16.069, 'momentum64': 10.999, 'momentum8: 12.741} ann. SR {'momentum16': 0.84, 'momentum32': 0.72, 'momentum4': 0.91, 'momentum64': 0.44, 'momentum8': 0.86}



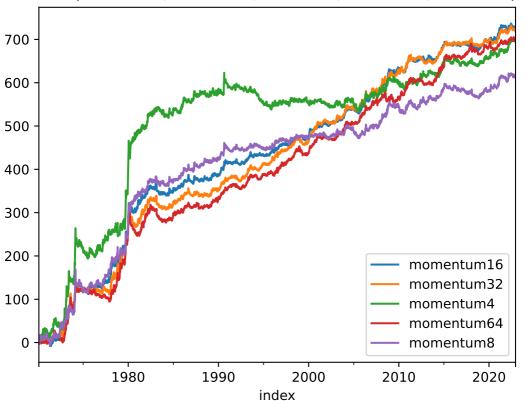
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.342, 'momentum32': 7.148, 'momentum4': 8.179, 'momentum64': 9.658, 'momentum8': 6.023} ann. std {'momentum16': 9.954, 'momentum32': 9.509, 'momentum4': 13.683, 'momentum64': 12.015, 'momentum8': 11.321} ann. SR {'momentum16': 0.74, 'momentum32': 0.75, 'momentum4': 0.6, 'momentum64': 0.8, 'momentum8': 0.53}



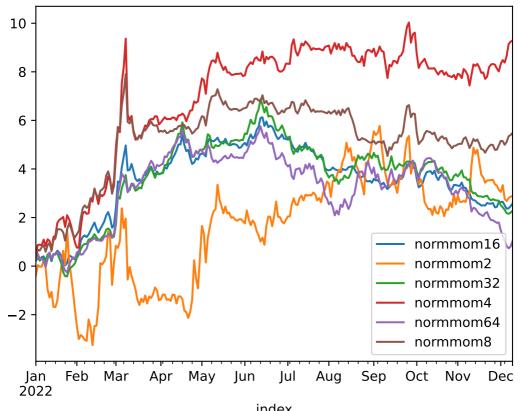
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.455, 'momentum32': 13.351, 'momentum4': 12.989, 'momentum64': 12.925, 'momentum8': 11.405} ann. std {'momentum16': 14.231, 'momentum32': 13.862, 'momentum4': 20.088, 'momentum64': 13.498, 'momentum8': 15.881} ann. SR {'momentum16': 0.95, 'momentum32': 0.96, 'momentum4': 0.65, 'momentum64': 0.96, 'momentum8': 0.72



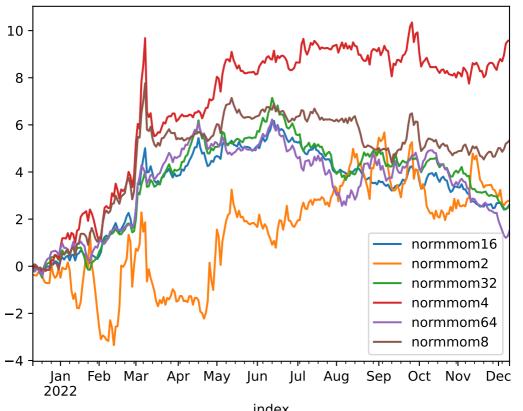
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.694, 'normmom2': 3.012, 'normmom32': 2.384, 'normmom4': 9.697, 'normmom64': 1.074, 'normmom8': 5.728} ann. std {'normmom16': 3.176, 'normmom2': 8.212, 'normmom32': 3.246, 'normmom4': 6.074, 'normmom64': 3.509, 'normmom8': 4.329} ann. SR {'normmom16': 0.85, 'normmom2'': 0.37, 'normmom32': 0.73, 'normmom4': 1.6, 'normmom64': 0.31, 'normmom8': 1.32}



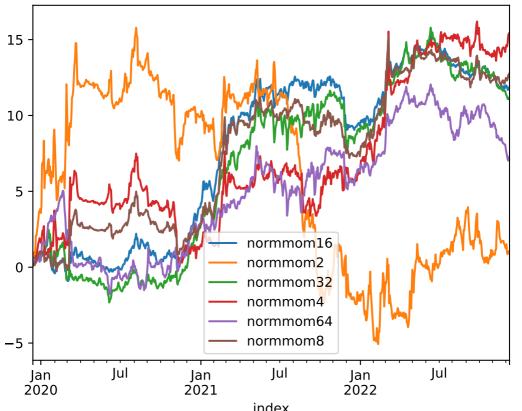
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.578, 'normmom2': 2.746, 'normmom32': 2.513, [']normmom4': 9.446, 'normmom64': 1.479, 'normmom8': 5.26} ann. std {'normmom16': 3.099, 'normmom2': 8.042, 'normmom32': 3.204, 'normmom4': 5.918, 'normmom64': 3.463, 'normmom8': 4.221} ann. SR {'normmom16': 0.83, 'normmom2': 0.34, 'normmom32': 0.78, 'normmom4': 1.6, 'normmom64': 0.43, 'normmom8': 1.25}



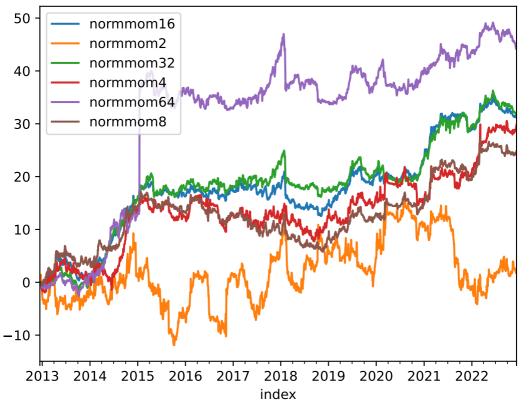
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.903, 'normmom2': 0.349, 'normmom32': 3.67, 'normmom4': 5.063, 'normmom64': 2.399, 'normmom8': 4.194} ann. std {'normmom16': 3.719, 'normmom2': 8.894, 'normmom32': 4.06, 'normmom4': 5.939, 'normmom64': 4.354, 'normmom8': 4.246} ann. SR {'normmom16': 1.05, 'normmom2': 0.04, 'normmom32': 0.9, 'normmom4': 0.85, 'normmom64': 0.55, 'normmom8': 0.99}



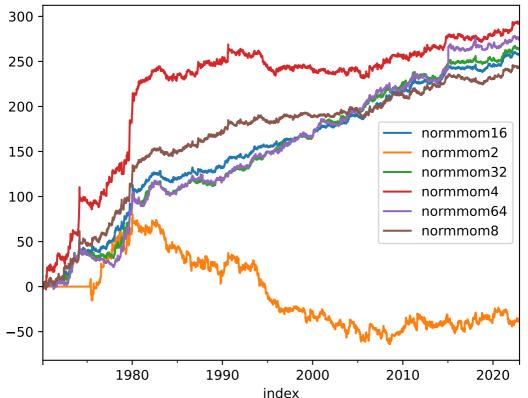
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.085, 'normmom2': 0.194, 'normmom32': 3.113, 'normmom4': 2.926, 'normmom64': 4.364, 'normmom8': 2.437} ann. std {'normmom16': 3.58, 'normmom2': 9.102, 'normmom32': 3.733, 'normmom4': 5.497, 'normmom64': 8.564, 'normmom8': 4.054} ann. SR {'normmom16': 0.86, 'normmom2': 0.02, 'normmom32': 0.83, 'normmom4': 0.53, 'normmom64': 0.51, 'normmom8': 0.6}



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

ann. mean {'normmom16': 4.773, 'normmom2': -0.705, 'normmom32': 4.879, 'normmom4': 5.451, 'normmom64': 5.078, 'normmom8': 4.521} ann. std {'normmom16': 4.926, 'normmom2': 11.206, 'normmom32': 4.995, 'normmom4': 8.327, 'normmom64': 6.314, 'normmom8': 5.935} 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': -1.534, 'relmomentum20': -2.251, 'relmomentum40': -7.09, 'relmomentum80': -11.1}

ann. std {'relmomentum10': 10.198, 'relmomentum20': 8.558, 'relmomentum40': 6.703, 'relmomentum80': 5.727} ann. SR {'relmomentum10': -0.15, 'relmomentum20': -0.26, 'relmomentum40': -1.06, 'relmomentum80': -1.94} 7.5 5.0 2.5 0.0 -2.5-5.0-7.5relmomentum10 relmomentum20 relmomentum40 -10.0relmomentum80 Feb Mar May Aug Sep Oct Nov Dec Jan Apr Jul Jun 2022

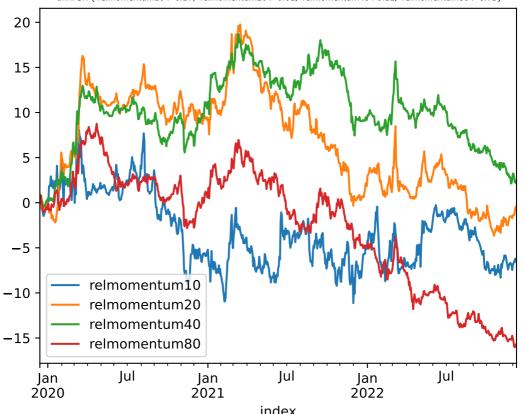
Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 0.356, 'relmomentum20': -0.961, 'relmomentum40': -6.693, 'relmomentum80': -11.555} ann. std {'relmomentum10': 10.133, 'relmomentum20': 8.392, 'relmomentum40': 6.55, 'relmomentum80': 5.695} ann. SR {'relmomentum10': 0.04, 'relmomentum20': -0.11, 'relmomentum40': -1.02, 'relmomentum80': -2.03}



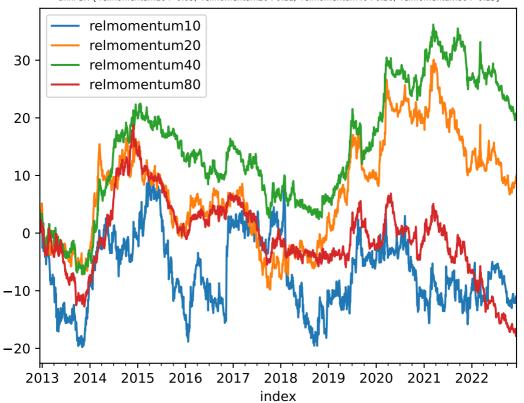
Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.161, 'relmomentum20': -0.103, 'relmomentum40': 0.784, 'relmomentum80': -5.123} ann. std {'relmomentum10': 12.734, 'relmomentum20': 9.044, 'relmomentum40': 7.463, 'relmomentum80': 6.973} ann. SR {'relmomentum10': -0.17, 'relmomentum40': 0.11, 'relmomentum80': -0.73}



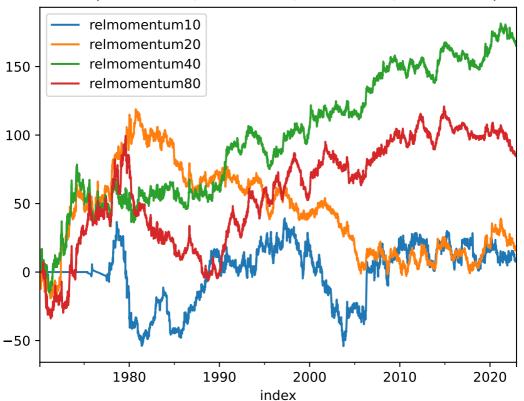
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.11, 'relmomentum20': 0.985, 'relmomentum40': 1.954, 'relmomentum80': -1.719} ann. std {'relmomentum10': 1.2989, 'relmomentum40': 0.383, 'relmomentum40': 0.835} ann. SR {'relmomentum10': -0.09, 'relmomentum20': 0.11, 'relmomentum40': 0.26, 'relmomentum80': -0.25}

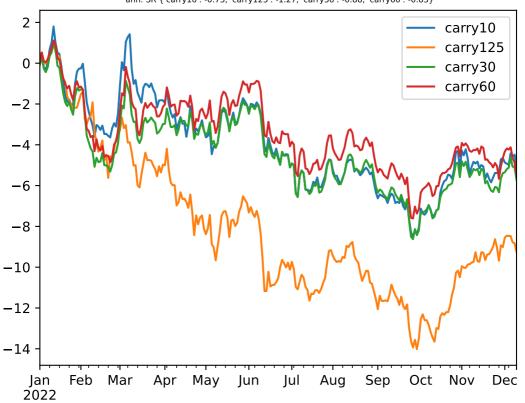


Total Trading Rule P&L for period '99Y'

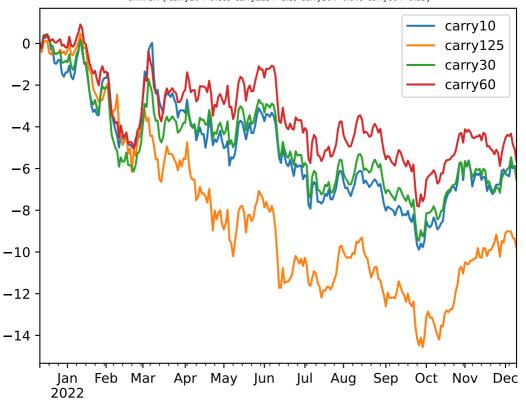
ann. mean {'relmomentum10': 0.172, 'relmomentum20': 0.352, 'relmomentum40': 3.066, 'relmomentum80': 1.572} ann. std {'relmomentum10': 13.329, 'relmomentum20': 11.529, 'relmomentum40': 10.8, 'relmomentum80': 1.1067} ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.3, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



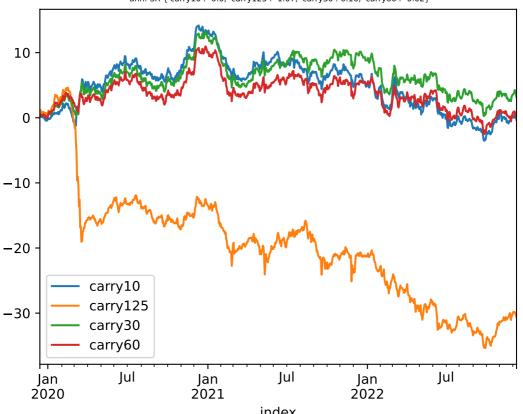
Total Trading Rule P&L for period 'YTD' ann. mean {'carry10': -5.242, 'carry125': -9.66, 'carry30': -5.973, 'carry60': -5.678} ann. std {'carry10': 7.23, 'carry125': 7.589, 'carry30': 6.81, 'carry60': 6.823} ann. SR {'carry10': -0.73, 'carry125': -1.27, 'carry30': -0.88, 'carry60': -0.83}



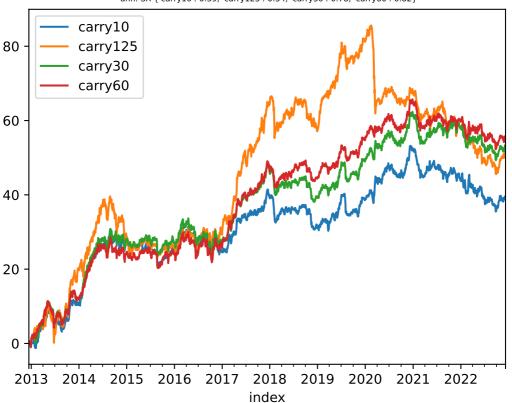
Total Trading Rule P&L for period '1Y' ann. mean {'carry10': -6.312, 'carry125': -9.64, 'carry30': -6.445, 'carry60': -5.553} ann. std {'carry10': 7.119, 'carry125': 7.421, 'carry30': 6.675, 'carry60': 6.663} ann. SR {'carry10': -0.89, 'carry125': -1.3, 'carry30': -0.97, 'carry60': -0.83}



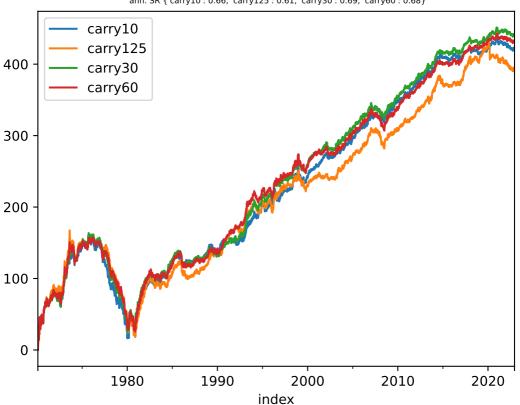
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': -0.019, 'carry125': -10.032, 'carry30': 1.037, 'carry60': -0.108}
ann. std {'carry10': 6.808, 'carry125': 9.4, 'carry30': 6.591, 'carry60': 6.531}
ann. SR {'carry10': -0.0, 'carry125': -1.07, 'carry30': 0.16, 'carry60': -0.02}



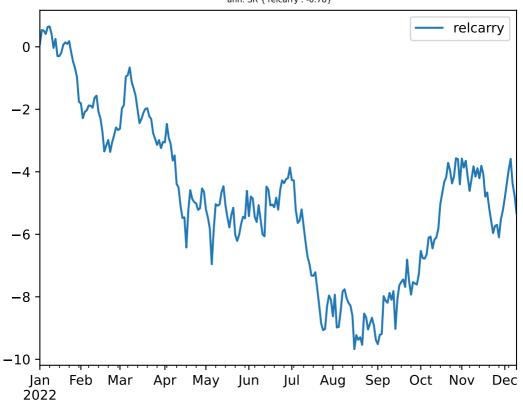
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 3.827, 'carry125': 4.944, 'carry30': 5.13, 'carry60': 5.346} ann. std {'carry10': 6.462, 'carry125': 9.129, 'carry30': 6.572, 'carry60': 6.538} ann. SR {'carry10': 0.59, 'carry125': 0.54, 'carry30': 0.78, 'carry60': 0.82}



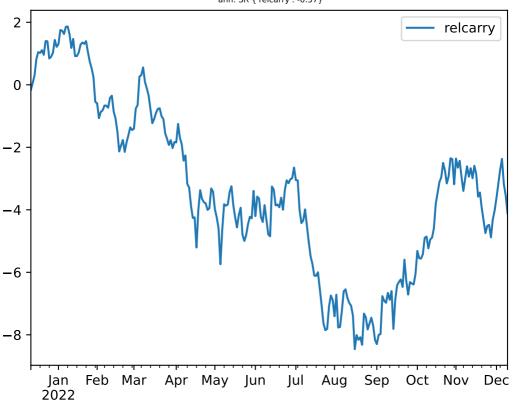
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.838, 'carry125': 7.331, 'carry30': 8.192, 'carry60': 8.013}
ann. std {'carry10': 11.865, 'carry125': 12.104, 'carry30': 11.876, 'carry60': 11.827}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': -5.565} ann. std {'relcarry': 7.174} ann. SR {'relcarry': -0.78}

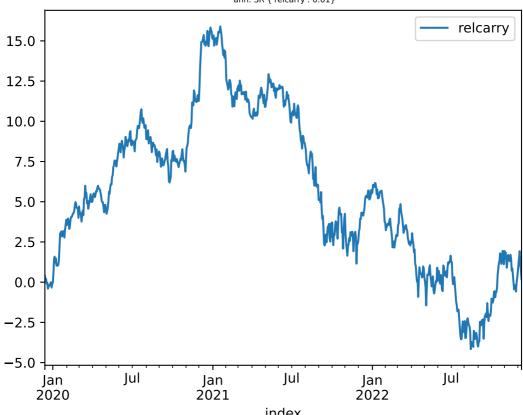


Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': -4.046} ann. std {'relcarry': 7.052} ann. SR {'relcarry': -0.57}

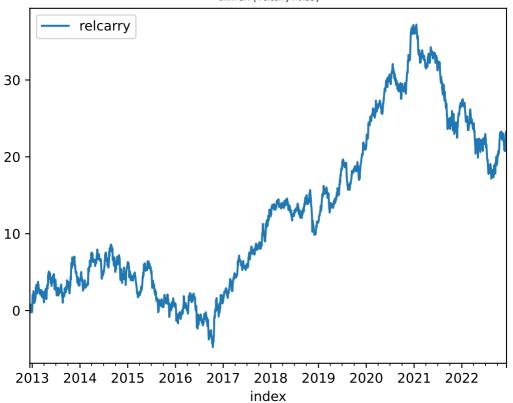


index

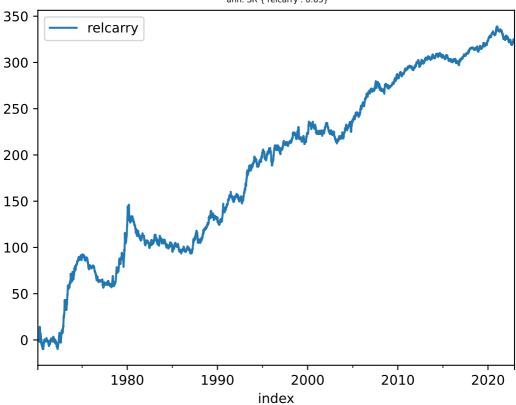
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': 0.061} ann. std {'relcarry': 6.82} ann. SR {'relcarry': 0.01}



Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 2.113} ann. std {'relcarry': 6.049} ann. SR {'relcarry': 0.35}



Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 6.001} ann. std {'relcarry': 9.561} ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD' ann. mean {'skewabs180': 1.09, 'skewabs365': -3.698, 'skewrv180': -5.584, 'skewrv365': 9.573} ann. std {'skewabs180': 10.031, 'skewabs365': 7.882, 'skewrv180': 9.377, 'skewrv365': 4.95} ann. SR {'skewabs180': 0.11, 'skewabs365': -0.47, 'skewrv180': -0.6, 'skewrv365': 1.93}

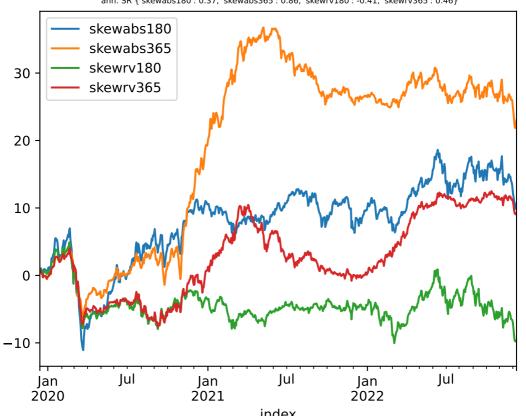


Total Trading Rule P&L for period '1Y' ann. mean {'skewabs180': 2.379, 'skewabs365': -3.34, 'skewrv180': -4.961, 'skewrv365': 9.089} ann. std {'skewabs180': 9.866, 'skewabs365': 7.697, 'skewrv180': 9.143, 'skewrv365': 4.863} ann. SR {'skewabs180': 0.24, 'skewabs365': -0.43, 'skewrv180': -0.54, 'skewrv365': 1.87}

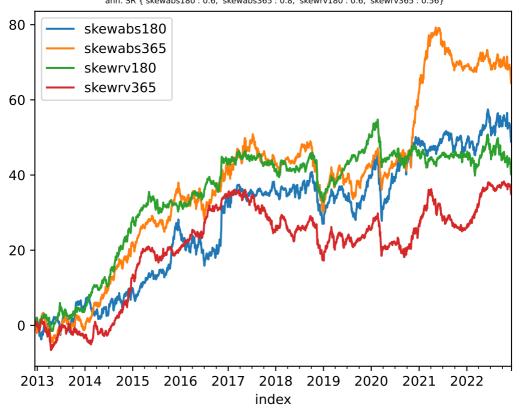


index

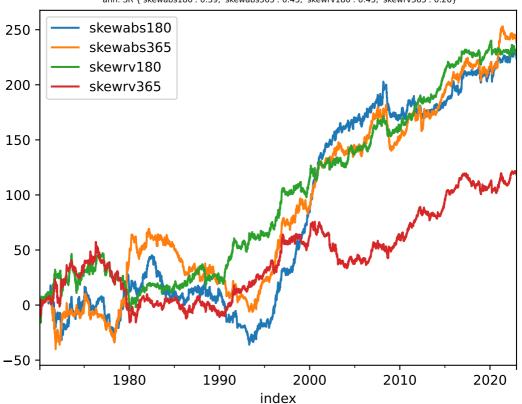
Total Trading Rule P&L for period '3Y' ann. mean {'skewabs180': 3.516, 'skewabs365': 7.539, 'skewrv180': -3.219, 'skewrv365': 3.034} ann. std {'skewabs180': 9.605, 'skewabs365': 8.749, 'skewrv180': 7.781, 'skewrv365': 6.584} ann. SR {'skewabs180': 0.37, 'skewabs365': 0.86, 'skewrv180': -0.41, 'skewrv365': 0.46}



Total Trading Rule P&L for period '10Y' ann. mean {'skewabs180': 4.87, 'skewabs365': 6.432, 'skewrv180': 3.935, 'skewrv365': 3.442} ann. std {'skewabs180': 8.074, 'skewabs365': 7.997, 'skewrv180': 6.591, 'skewrv365': 6.179} ann. SR {'skewabs180': 0.6, 'skewabs365': 0.8, 'skewrv180': 0.6, 'skewrv365': 0.56}



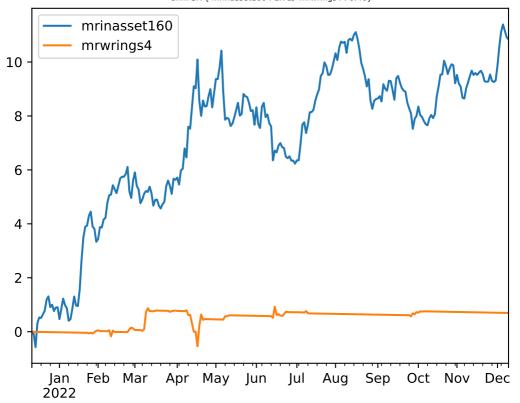
Total Trading Rule P&L for period '99Y' ann. mean {'skewabs180': 4.17, 'skewabs365': 4.441, 'skewr\180': 4.187, 'skewr\365': 2.2} ann. std {'skewabs180': 10.794, 'skewabs365': 10.3, 'skewr\180': 9.309, 'skewr\365': 8.605} ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewr\180': 0.45, 'skewr\365': 0.26}



Total Trading Rule P&L for period 'YTD' ann. mean {'mrinasset160': 10.377, 'mrwrings4': 0.747} ann. std {'mrinasset160': 6.316, 'mrwrings4': 1.526} ann. SR {'mrinasset160': 1.64, 'mrwrings4': 0.49}

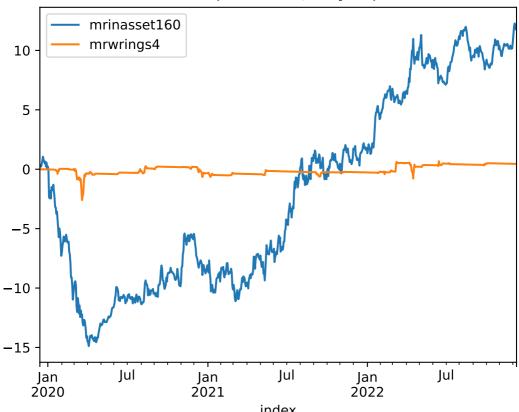


Total Trading Rule P&L for period '1Y' ann. mean {'mrinasset160': 10.672, 'mrwrings4': 0.685} ann. std {'mrinasset160': 6.249, 'mrwrings4': 1.481} ann. SR {'mrinasset160': 1.71, 'mrwrings4': 0.46}

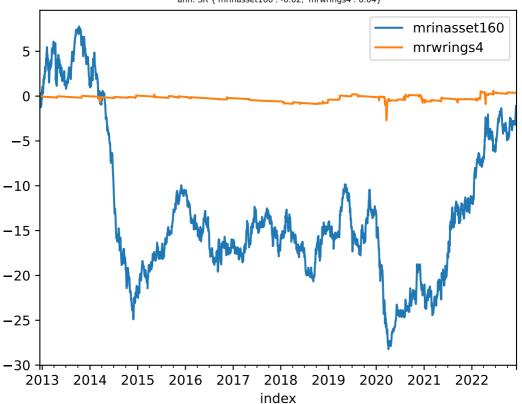


index

Total Trading Rule P&L for period '3Y' ann. mean {"mrinasset160": 3.84, 'mrwrings4": 0.146} ann. std {'mrinasset160": 0.84, 'mrwrings4": 1.537} ann. SR {'mrinasset160": 0.54, 'mrwrings4": 0.1}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.158, 'mrwrings4': 0.035} ann. std {'mrinasset160': 6.649, 'mrwrings4': 0.897} ann. SR {'mrinasset160': -0.02, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y' ann. mean { 'mrinasset160': -3.354, 'mrwrings4': -1.174} ann. std { 'mrinasset160': 10.926, 'mrwrings4': 2.632} ann. SR { 'mrinasset160': -0.31, 'mrwrings4': -0.45}

