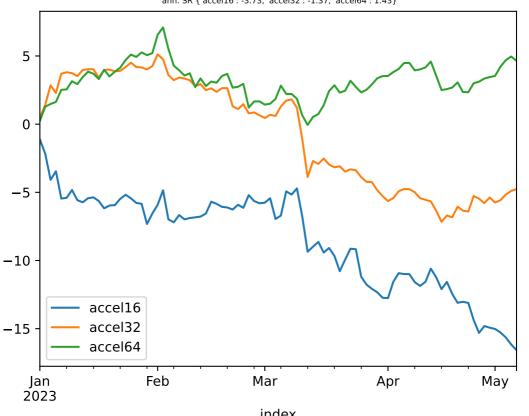
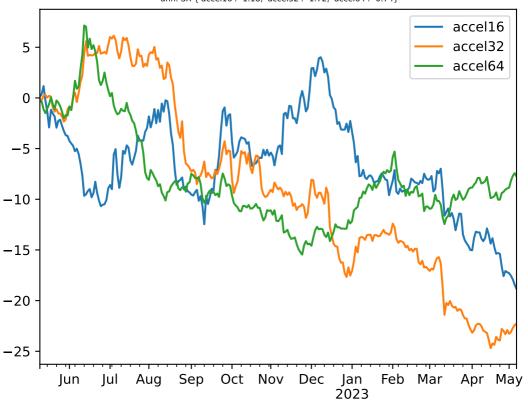
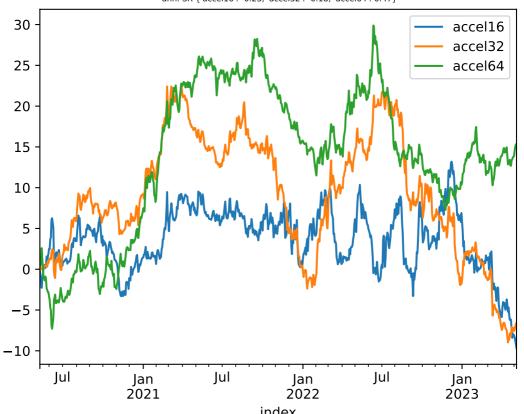
Total Trading Rule P&L for period 'YTD' ann. mean {'accel16': -47.147, 'accel32': -13.527, 'accel64': 13.211} ann. std {'accel16': 12.651, 'accel32': 9.896, 'accel64': 9.218} ann. SR {'accel16': -3.73, 'accel32': -1.37, 'accel64': 1.43}



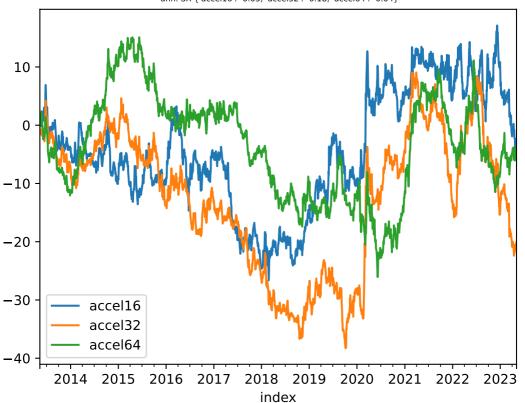
Total Trading Rule P&L for period '1Y' ann. mean {'accel16': -18.63, 'accel32': -22.024, 'accel64': -7.652} ann. std {'accel16': 15.777, 'accel32': -1.826, 'accel64': 10.278} ann. SR {'accel16': -1.18, 'accel32': -1.72, 'accel64': -0.74}



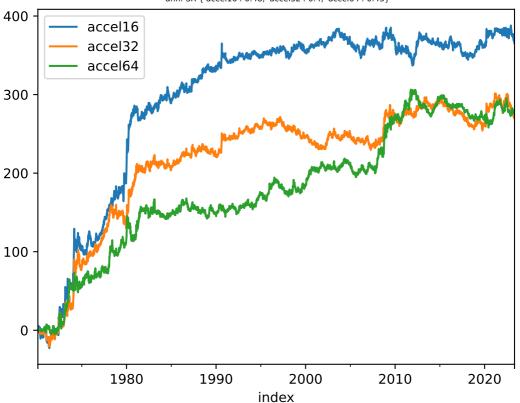
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.176, 'accel32': -2.154, 'accel64': 4.923}
ann. std {'accel16': 13.553, 'accel32': -11.741, 'accel64': 10.514}
ann. SR {'accel16': -0.23, 'accel32': -0.18, 'accel64': 0.47}



Total Trading Rule P&L for period '10Y' ann. mean {'iaccel16': -0.564, 'accel32': -1.964, 'accel64': -0.37} ann. std {'accel16': 11.697, 'accel32': 10.668, 'accel64': 9.327} ann. SR {'accel16': -0.05, 'accel32': -0.18, 'accel64': -0.04}

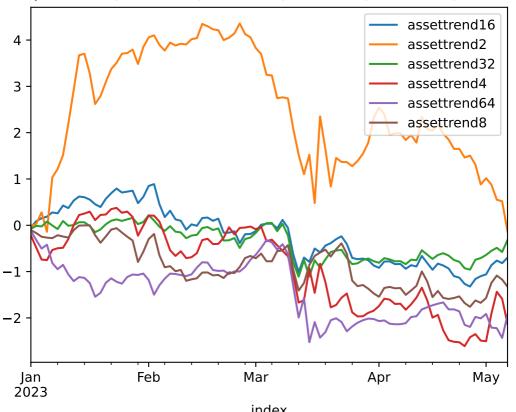


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.728, 'accel32': 5.02, 'accel64': 5.164}
ann. std {'accel16': 14.128, 'accel32': 12.451, 'accel64': 12.101}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

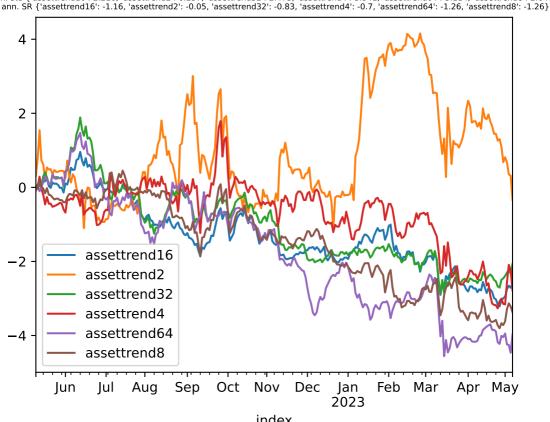


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -1.989, 'assettrend2': -0.384, 'assettrend32': -0.903, 'assettrend4': -6.048, 'assettrend64': -5.516, 'assettrend8': -3.773} ann. std {'assettrend16': 2.501, 'assettrend2': 6.482, 'assettrend4': 3.484, 'assettrend64': 3.407, 'assettrend64': 2.2878} ann. SR {'assettrend16': -0.8, 'assettrend2': -0.06, 'assettrend12': -0.4, 'assettrend4': -1.57, 'assettrend64': -1.62, 'assettrend8': -1.31}



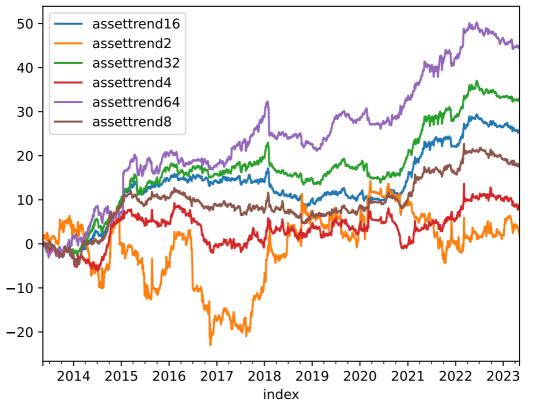
Total Trading Rule P&L for period '1Y' ann. mean {'assettrend16': -2.562, 'assettrend2': -0.334, 'assettrend32': -2.043, 'assettrend4': -2.75, 'assettrend64': -3.926, 'assettrend8': -3.332} ann. std {'assettrend16': 2.216, 'assettrend2': 6.257, 'assettrend32': 2.473, 'assettrend4': 3.941, 'assettrend64': 3.114, 'assettrend8': 2.647}



Total Trading Rule P&L for period '3Y' ann. mean {'assettrend16': 5.203, 'assettrend2': -3.22, 'assettrend32': 5.998, 'assettrend4': 0.952, 'assettrend64': 5.783, 'assettrend8': 2.821} ann. std {'assettrend16': 3.413, 'assettrend2': 7.82, 'assettrend32': 4.128, 'assettrend4': 4.98, 'assettrend64': 5.016, 'assettrend8': 3.529} ann. SR {'assettrend16': 1.52, 'assettrend2': -0.41, 'assettrend32': 1.45, 'assettrend4': 0.19, 'assettrend64': 1.15, 'assettrend8': 0.8} 25 assettrend16 assettrend2 20 assettrend32 assettrend4 15 assettrend64 assettrend8 10 5 0 **-**5 -10-15Jul Jul Jul Jan Jan Jan 2021 2022 2023

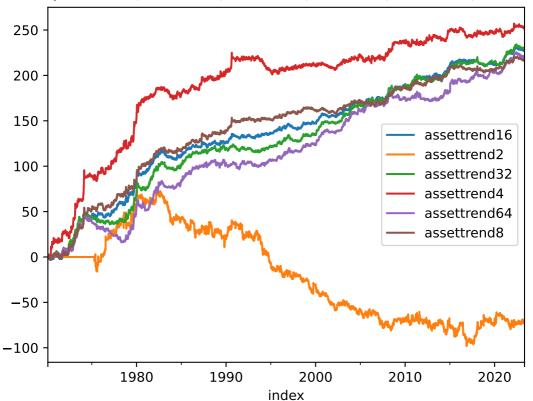
Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.539, 'assettrend2': 0.179, 'assettrend32': 3.249, 'assettrend4': 0.811, 'assettrend64': 4.401, 'assettrend8': 1.765} ann. std {'assettrend16': 3.151, 'assettrend2': 9.773, 'assettrend32': 3.588, 'assettrend4': 4.977, 'assettrend64': 5.193, 'assettrend8': 3.452} ann. SR {'assettrend16': 0.81, 'assettrend2': 0.02, 'assettrend32': 0.91, 'assettrend4': 0.16, 'assettrend64': 0.85, 'assettrend8': 0.51}



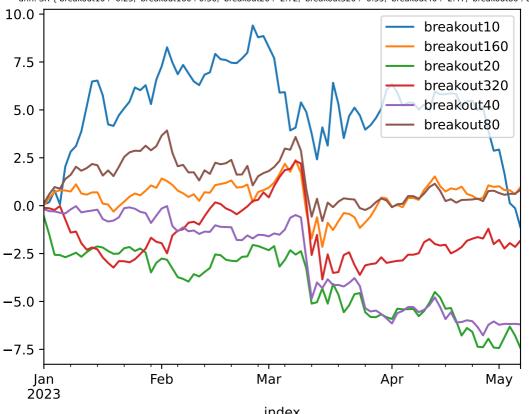
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.192, 'assettrend2': -1.352, 'assettrend32': 4.243, 'assettrend4': 4.641, 'assettrend64': 4.054, 'assettrend8': 3.99} ann. std {'assettrend16': 4.303, 'assettrend2': 10.257, 'assettrend32': 4.493, 'assettrend4': 6.546, 'assettrend64': 4.994, 'assettrend8': 4.632} ann. SR {'assettrend16': 0.97, 'assettrend2': 0.13, 'assettrend2': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}



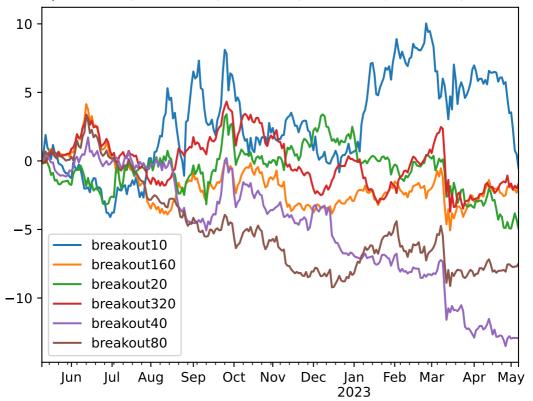
Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -3.249, 'breakout160': 2.749, 'breakout20': -21.155, 'breakout320': -5.171, 'breakout40': -17.626, 'breakout80': 2.365} ann. std {'breakout10': 14.109, 'breakout160': 7.658, 'breakout20': 7.783, 'breakout320': 9.414, 'breakout40': -17.626, 'breakout80': 7.636} ann. St {'breakout10': -0.23, 'breakout160': 0.36, 'breakout20': -2.72, 'breakout320': -0.55, 'breakout40': -2.47, 'breakout80': 0.31}



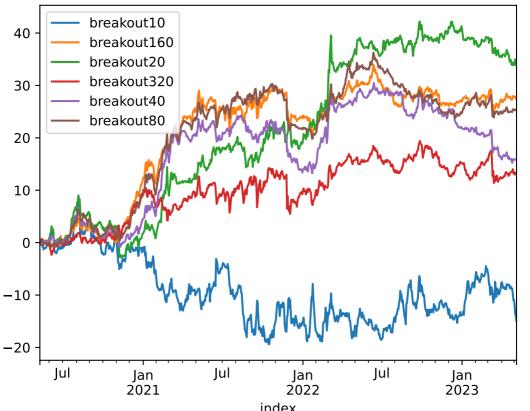
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': -0.514, 'breakout160': -1.926, 'breakout20': -4.887, 'breakout320': -1.656, 'breakout40': -12.789, 'breakout80': -7.401} ann. std {'breakout10': 13.291, 'breakout160': 6.887, 'breakout20': 8.413, 'breakout320': 7.533, 'breakout40': 7.106, 'breakout80': 6.491} ann. SR {'breakout10': -0.04, 'breakout160': -0.28, 'breakout20': -0.58, 'breakout320': -0.22, 'breakout40': -1.8, 'breakout80': -1.14}



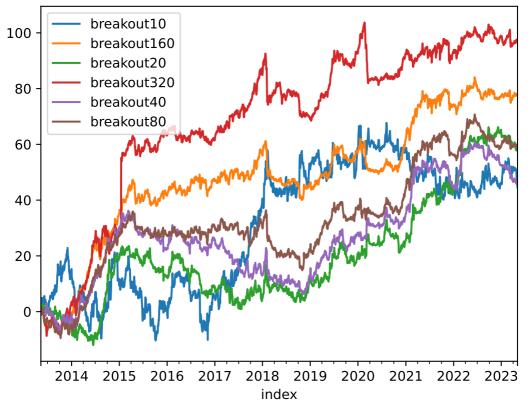
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.926, 'breakout160': 9.151, 'breakout20': 11.114, 'breakout320': 4.401, 'breakout40': 5.192, 'breakout80': 8.374} ann. std {'breakout10': 15.101, 'breakout160': 9.191, 'breakout20': 11.078, 'breakout320': 9.922, 'breakout40': 9.488, 'breakout80': 8.913} ann. SR {'breakout10': -0.33, 'breakout160': 1.0, 'breakout20': 1.0, 'breakout320': 0.44, 'breakout40': 0.55, 'breakout80': 0.94}



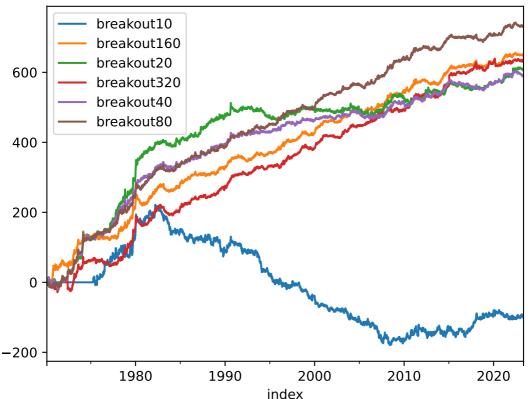
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.372, 'breakout160': 7.662, 'breakout20': 5.682, 'breakout320': 9.527, 'breakout40': 4.561, 'breakout80': 5.892} ann. std {'breakout10': 17.811, 'breakout160': 8.867, 'breakout20': 11.074, 'breakout320': 13.089, 'breakout40': 9.368, 'breakout80': 8.718} ann. SR {'breakout10': 0.25, 'breakout160': 0.86, 'breakout20': 0.51, 'breakout320': 0.73, 'breakout40': 0.49, 'breakout80': 0.68}



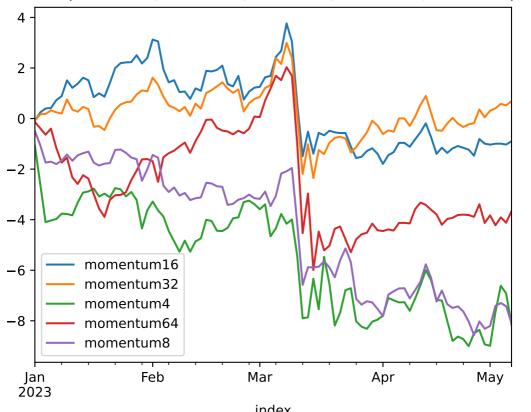
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.879, 'breakout160': 11.984, 'breakout20': 11.161, 'breakout320': 11.654, 'breakout40': 10.84, 'breakout80': 13.484} ann. std {'breakout10': 21.316, 'breakout160': 11.526, 'breakout20': 14.887, 'breakout320': 12.112, 'breakout40': 12.108, 'breakout80': 11.714} ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}



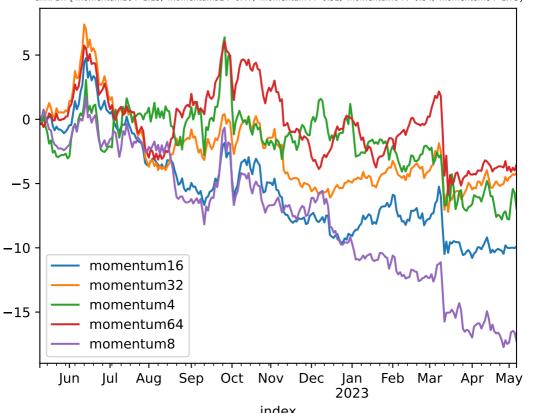
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.555, 'momentum32': 1.952, 'momentum4': -23.179, 'momentum64': -10.423, 'momentum8': -23.018} ann. std ('momentum16': 8.509, 'momentum32': 8.523, 'momentum4': 11.33, 'momentum64': 11.469, 'momentum8': 8.671} ann. SR {'momentum66': -0.3, 'momentum82': 0.23, 'momentum4': -2.05, 'momentum64': -0.91, 'momentum82': -2.65}



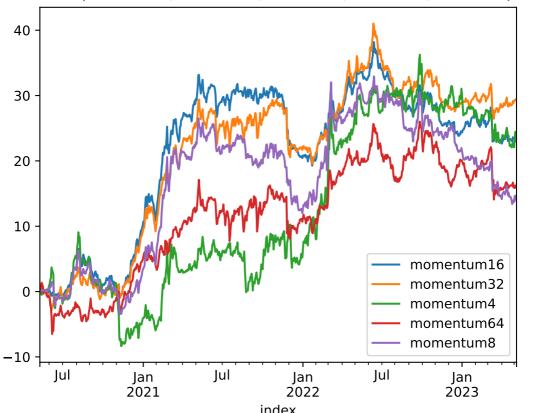
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -9.78, 'momentum32': -4.117, 'momentum4': -6.871, 'momentum64': -1.485, 'momentum8': -17.059} ann. std {'momentum16': 8.489, 'momentum32': 8.819, 'momentum4': 13.23, 'momentum64': 10.166, 'momentum8': 9.76} ann. SR {'momentum16': -1.15, 'momentum32': -0.47, 'momentum4': -0.52, 'momentum64': -0.34, 'momentum8': -1.75}



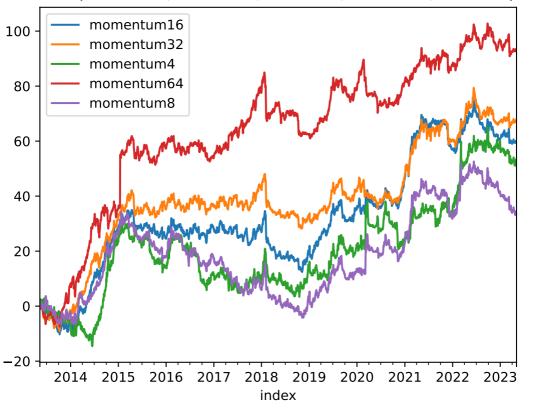
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.724, 'momentum32': 9.678, 'momentum4': 7.522, 'momentum64': 5.384, 'momentum8': 4.553} ann. std {'momentum16': 10.128, 'momentum32': 10.388, 'momentum4': 14.695, 'momentum64': 10.843, 'momentum8': 11.444} ann. SR {'momentum16': 0.76, 'momentum32': 0.93, 'momentum4': 0.51, 'momentum64': 0.5, 'momentum8': 0.4}



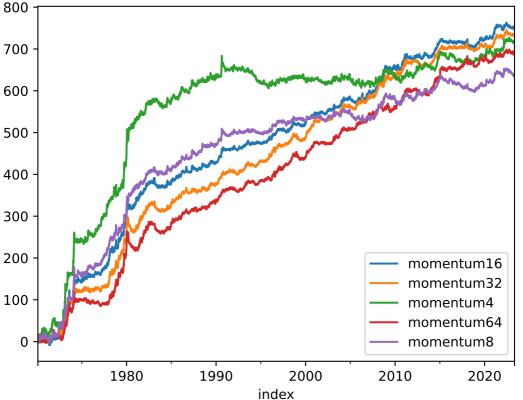
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 5.886, 'momentum32': 6.664, 'momentum4': 5.1, 'momentum64': 9.153, 'momentum8': 3.302} ann. std {'momentum16': 9.642, 'momentum32': 9.267, 'momentum4': 13.886, 'momentum64': 11.876, 'momentum81': 10.848} ann. SR {'momentum16': 0.61, 'momentum82': 0.72, 'momentum4': 0.37, 'momentum64': 0.77, 'momentum64': 0.78, 'momentum



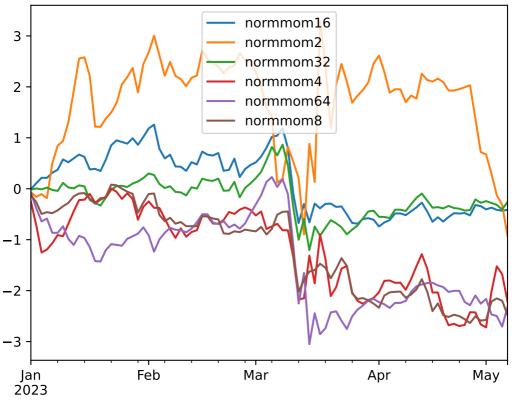
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.797, 'momentum32': 13.529, 'momentum4': 13.163, 'momentum64': 12.698, 'momentum8': 11.693} ann. std {'momentum16': 13.043, 'momentum32': 12.607, 'momentum4': 17.89, 'momentum64': 12.328, 'momentum8': 14.328} ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}



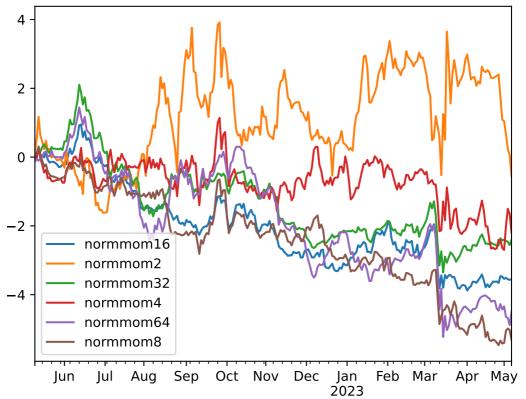
Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.179, 'normmom2': -2.634, 'normmom32': -0.736, 'normmom4': -6.295, 'normmom64': -6.606, 'normmom8': -7.044} ann. std {'normmom16': 3.053, 'normmom2': 8.963, 'normmom32': 3.003, 'normmom4': 4.697, 'normmom64': 4.518, 'normmom8': 3.081} ann. SR {'normmom16': -0.39, 'normmom2': -0.29, 'normmom32': -0.25, 'normmom4': -1.34, 'normmom64': -1.46, 'normmom8': -2.29}



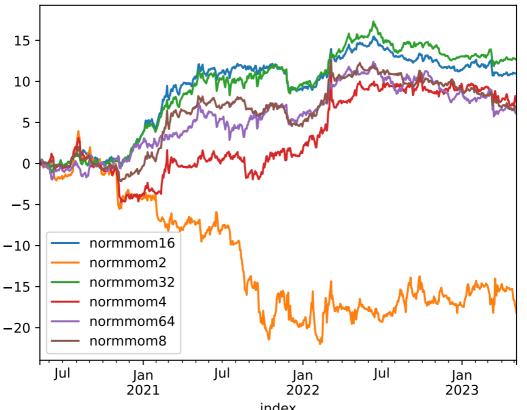
Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.511, 'normmom2': -0.55, 'normmom32': -2.381, 'normmom4': -2.168, 'normmom64': -4.447, 'normmom8': -5.246} ann. std {'normmom16': 2.531, 'normmom2': 7.505, 'normmom32': 2.829, 'normmom4': 4.343, 'normmom64': 3.822, 'normmom8': 2.903} ann. SR {'normmom16': -1.39, 'normmom2': -0.07, 'normmom32': -0.84, 'normmom4': -0.5, 'normmom64': -1.16, 'normmom8': -1.81}



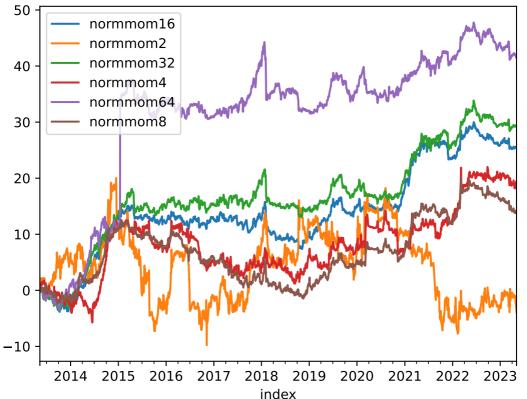
Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.601, 'normmom2': -5.98, 'normmom32': 4.198, [']normmom4': 2.47, 'normmom64': 2.118, 'normmom8': 2.185} ann. std {'normmom16': 3.509, 'normmom2': 8.648, 'normmom32': 3.882, 'normmom4': 5.41, 'normmom64': 4.286, 'normmom8': 3.941} ann. SR {'normmom16': 1.03, 'normmom2': -0.69, 'normmom32': 1.08, 'normmom4': 0.46, 'normmom64': 0.49, 'normmom8': 0.55}



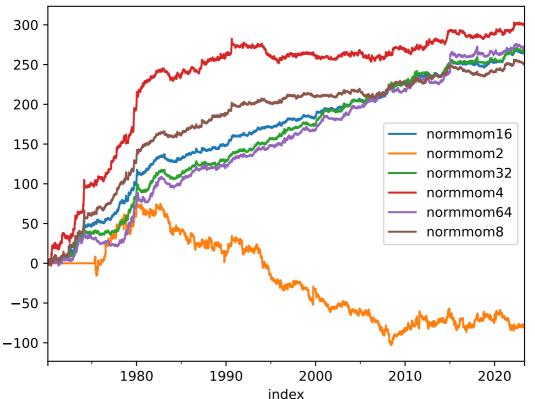
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.505, 'normmom2': -0.387, 'normmom32': 2.883, 'normmom4': 1.836, 'normmom64': 4.109, 'normmom8': 1.368} ann. std {'normmom16': 3.46, 'normmom2': 10.319, 'normmom32': 3.62, 'normmom4': 5.452, 'normmom64': 8.276, 'normmom8': 3.878} ann. SR {'normmom16': 0.72, 'normmom2': -0.04, 'normmom32': 0.8, 'normmom4': 0.34, 'normmom64': 0.5, 'normmom8': 0.35}

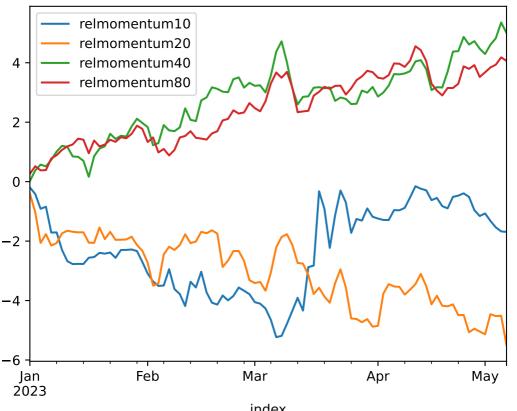


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.87, 'normmom2': -1.49, 'normmom32': 4.923, 'normmom4': 5.521, 'normmom64': 4.981, 'normmom8': 4.612} ann. std {'normmom16': 4.531, 'normmom2': 11.608, 'normmom32': 4.608, 'normmom4': 7.383, 'normmom64': 5.869, 'normmom8': 5.364} ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

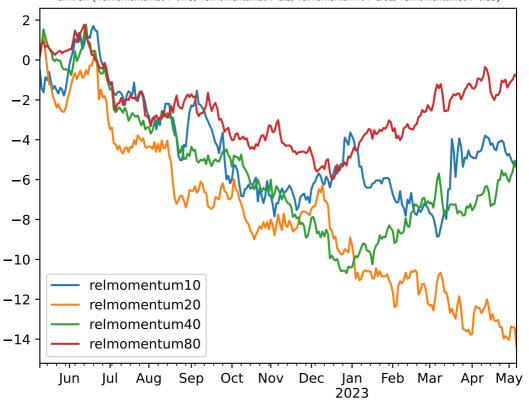


Total Trading Rule P&L for period 'YTD' ann. mean {'relmomentum10': -4.811, 'relmomentum20': -15.645, 'relmomentum40': 14.229, 'relmomentum80': 11.56} ann. std {'relmomentum10': 7.846, 'relmomentum20': 6.683, 'relmomentum40': 5.33, 'relmomentum80': 4.282} ann. SR {'relmomentum10': -0.61, 'relmomentum20': -2.34, 'relmomentum40': 2.67, 'relmomentum80': 2.7}



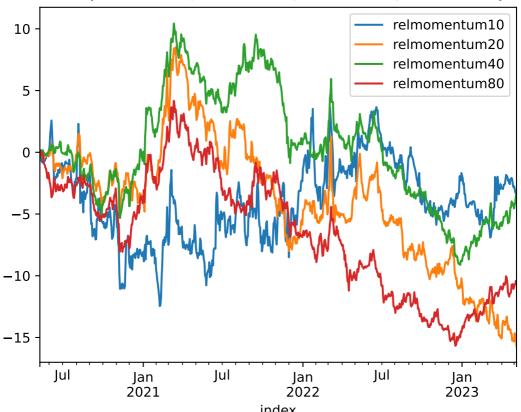
Total Trading Rule P&L for period '1Y'

ann. mean { relmomentum10': -5.264, 'relmomentum20': -14.233, 'relmomentum40': -5.341, 'relmomentum80': -0.831} ann. std { relmomentum10': 7.248, 'relmomentum20': 6.475, 'relmomentum40': 5.289, 'relmomentum80': 4.502} ann. SR { relmomentum10': -0.73, 'relmomentum20': -2.2, 'relmomentum40': -1.01, 'relmomentum80': -0.18}



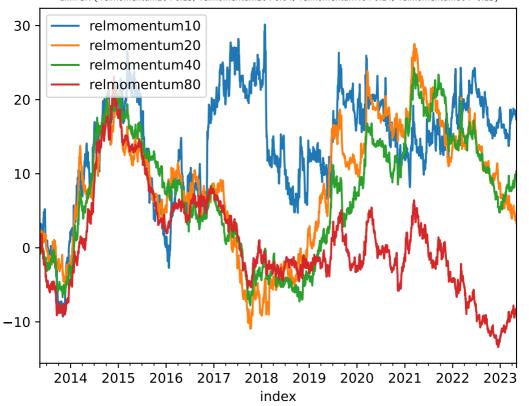
Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.106, 'relmomentum20': -5.154, 'relmomentum40': -1.26, 'relmomentum80': -3.456} ann. std {'relmomentum10': 11.921, 'relmomentum20': 8.367, 'relmomentum40': 6.952, 'relmomentum80': 6.316} ann. SR {'relmomentum10': -0.09, 'relmomentum20': -0.62, 'relmomentum40': -0.18, 'relmomentum80': -0.55}



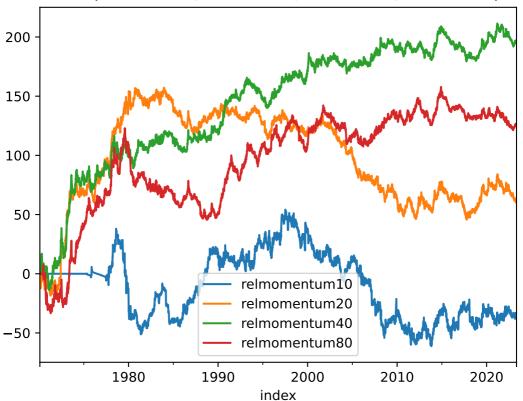
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.696, 'relmomentum20': 0.324, 'relmomentum40': 0.984, 'relmomentum80': -0.813} ann. std {'relmomentum10': 13.394, 'relmomentum20': 8.546, 'relmomentum40': 6.995, 'relmomentum80': 6.364} ann. SR {'relmomentum10': 0.13, 'relmomentum20': 0.04, 'relmomentum40': 0.14. 'relmomentum80': -0.13}

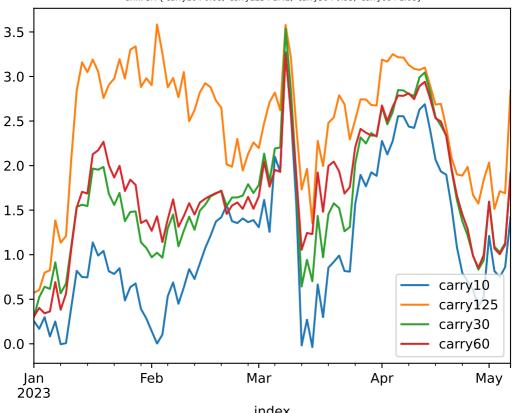


Total Trading Rule P&L for period '99Y'

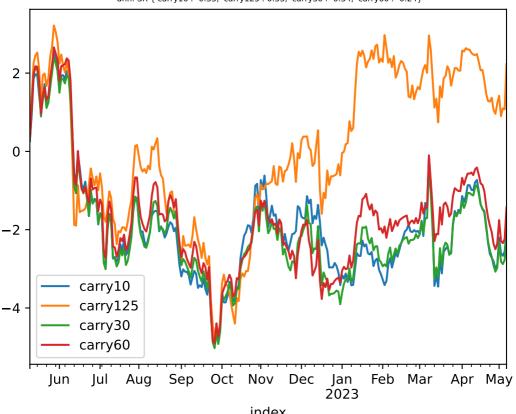
ann. mean {'relmomentum10': -0.637, 'relmomentum20': 1.104, 'relmomentum40': 3.633, 'relmomentum80': 2.329} ann. std {'relmomentum10': 13.386, 'relmomentum20': 10.467, 'relmomentum40': 0.637, 'relmomentum80': 9.781} ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD' ann. mean {'carry10': 4.038, 'carry125': 8.089, 'carry30': 5.299, 'carry60': 5.457} ann. std {'carry10': 5.942, 'carry125': 5.713, 'carry30': 5.56, 'carry60': 5.071} ann. SR {'carry10': 0.68, 'carry125': 1.42, 'carry30': 0.95, 'carry60': 1.08}

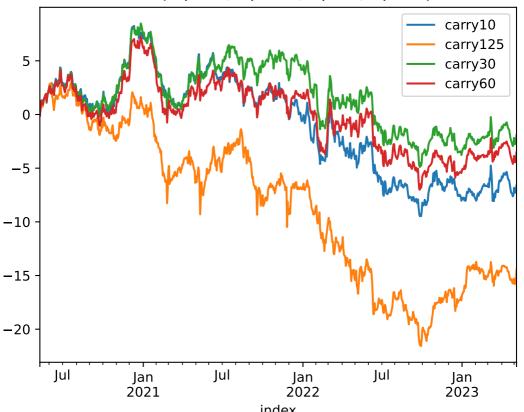


Total Trading Rule P&L for period '1Y' ann. mean {'carry10': -1.975, 'carry125': 2.204, 'carry30': -2.02, 'carry60': -1.416} ann. std {'carry10': 6.015, 'carry125': 6.586, 'carry30': 6.024, 'carry60': 5.965} ann. SR {'carry10': -0.33, 'carry125': 0.33, 'carry30': -0.34, 'carry60': -0.24}

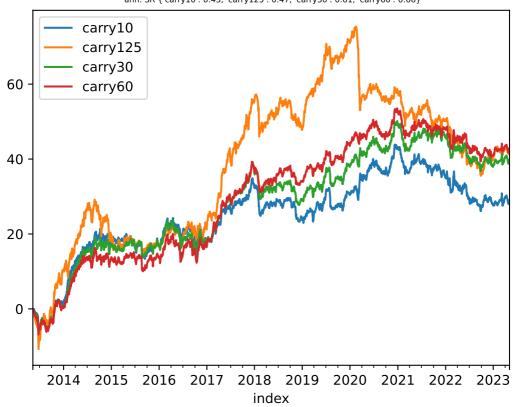


Total Trading Rule P&L for period '3Y'

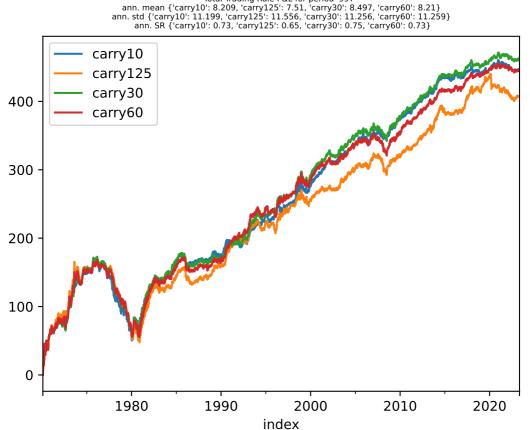
ann. mean {'carry10': -2.171, 'carry125': -4.75, 'carry30': -0.627, 'carry60': -1.159} ann. std {'carry10': 6.551, 'carry125': 8.023, 'carry30': 6.49, 'carry60': 6.484} ann. SR {'carry10': -0.33, 'carry125': -0.59, 'carry30': -0.1, 'carry60': -0.18}



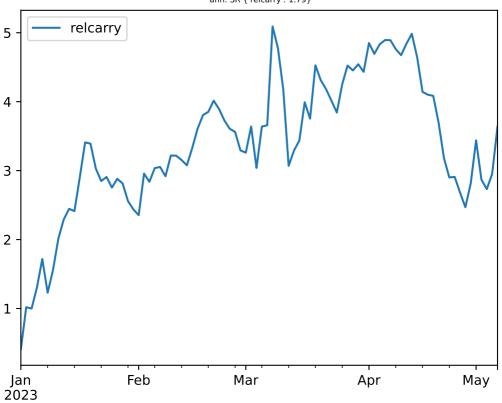
Total Trading Rule P&L for period '10Y' ann. mean {'carry10': 2.85, 'carry125': 4.189, 'carry30': 3.906, 'carry60': 4.205} ann. std {'carry10': 6.367, 'carry125': 8.954, 'carry30': 6.455, 'carry60': 6.402} ann. SR {'carry10': 0.45, 'carry125': 0.47, 'carry30': 0.61, 'carry60': 0.66}



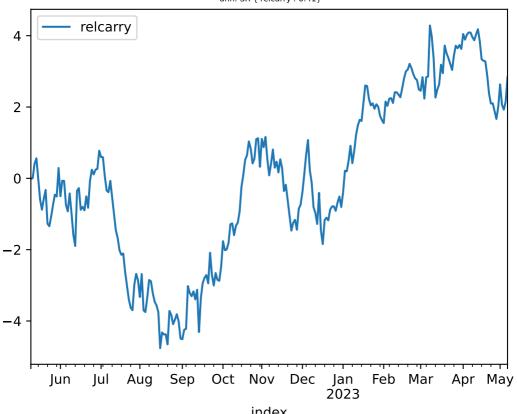
Total Trading Rule P&L for period '99Y'



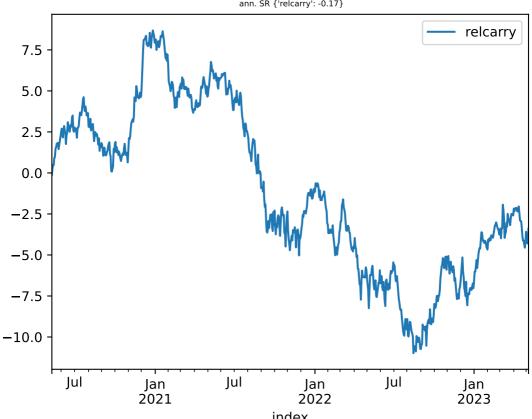
Total Trading Rule P&L for period 'YTD' ann. mean {'relcarry': 10.355} ann. std {'relcarry': 5.787} ann. SR {'relcarry': 1.79}



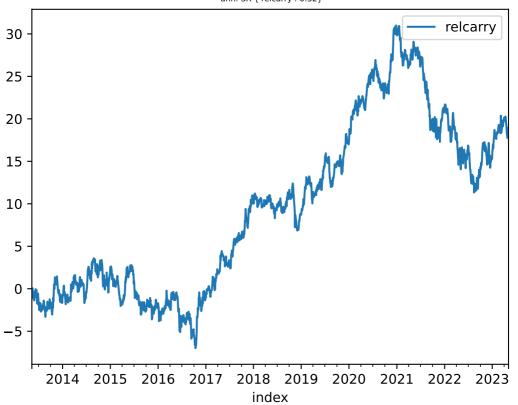
Total Trading Rule P&L for period '1Y' ann. mean {'relcarry': 2.804} ann. std {'relcarry': 6.779} ann. SR {'relcarry': 0.41}



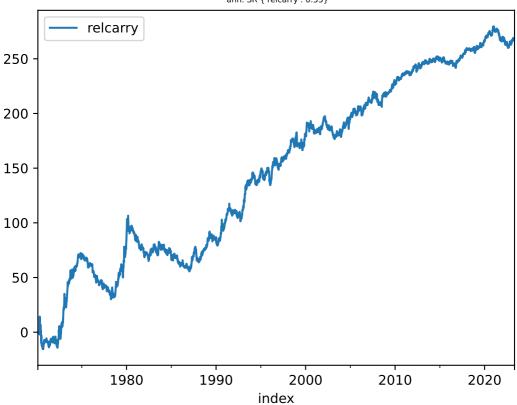
Total Trading Rule P&L for period '3Y' ann. mean {'relcarry': -1.111} ann. std {'relcarry': 6.68} ann. SR {'relcarry': -0.17}



Total Trading Rule P&L for period '10Y' ann. mean {'relcarry': 1.859} ann. std {'relcarry': 5.822} ann. SR {'relcarry': 0.32}

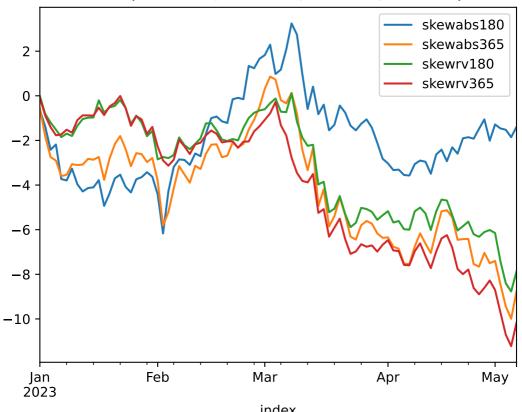


Total Trading Rule P&L for period '99Y' ann. mean {'relcarry': 4.929} ann. std {'relcarry': 8.959} ann. SR {'relcarry': 0.55}



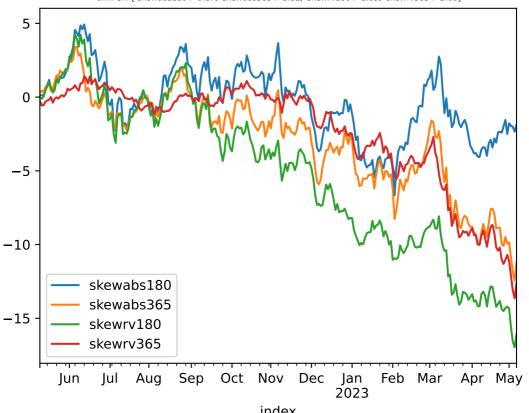
Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': -3.966, 'skewabs365': -24.954, 'skewrv180': -22.4, 'skewrv365': -28.947} ann. std {'skewabs180': 11.248, 'skewabs365': 11.835, 'skewrv180': 8.478, 'skewrv365': 8.348} ann. SR {'skewabs180': -0.35, 'skewabs365': -2.11, 'skewrv180': -2.64, 'skewrv365': -3.47}



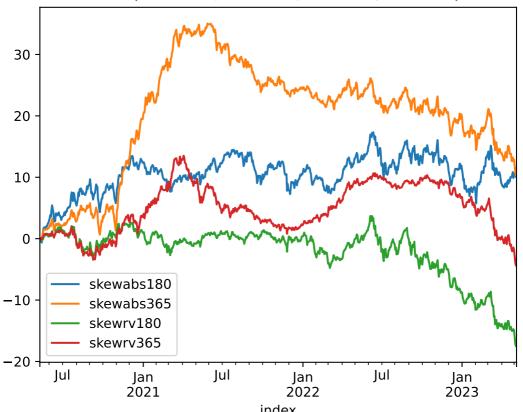
Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -1.864, 'skewabs365': -11.084, 'skewrv180': -15.88, 'skewrv365': -12.454} ann. std {'skewabs180': 11.037, 'skewabs365': 9.78, 'skewrv180': 9.398, 'skewrv365': 6.033} ann. SR {'skewabs180': -0.17, 'skewabs365': -1.11, 'skewrv180': -1.69, 'skewrv365': -2.06}



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

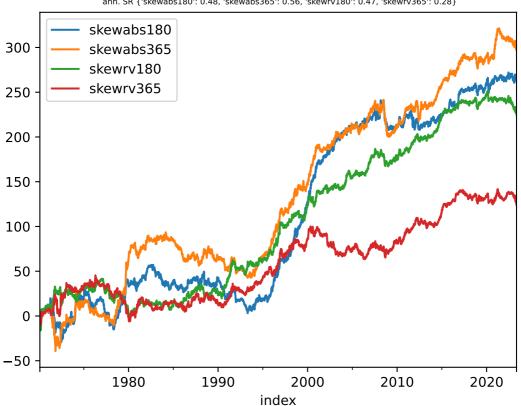
ann. mean {'skewabs180': 3.448, 'skewabs365': 3.769, 'skewrv180': -5.451, 'skewrv365': -1.096} ann. std {'skewabs180': 9.142, 'skewabs365': 8.992, 'skewrv180': -7.323, 'skewrv365': 6.44} ann. SR {'skewabs180': 0.38, 'skewabs365': 0.42, 'skewrv180': -0.74, 'skewrv365': -0.17}



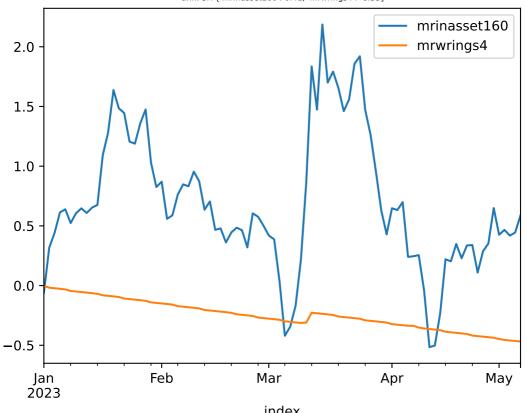
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.715, 'skewabs365': 6.339, 'skewrv180': 2.713, 'skewrv365': 2.458}
ann. std {'skewabs180': 8.021, 'skewabs365': 7.972, 'skewrv180': 6.416, 'skewrv365': 6.076}
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.8, 'skewrv180': 0.42, 'skewrv365': 0.4}



Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.887, 'skewabs365': 5.485, 'skewrv180': 4.155, 'skewrv365': 2.299}
ann. std {'skewabs180': 10.1, 'skewabs365': 9.871, 'skewrv180': 8.753, 'skewrv365': 8.127}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.47, 'skewrv365': 0.28}



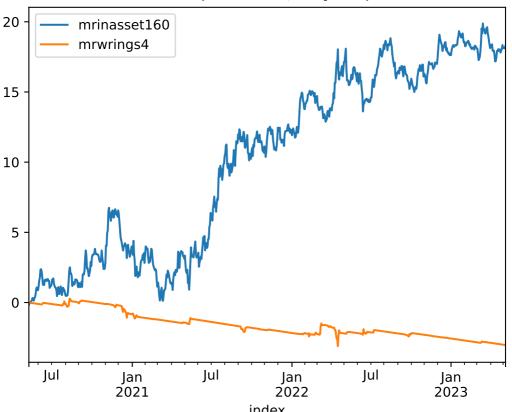
Total Trading Rule P&L for period 'YTD' ann. mean {'mrinasset160': 1.673, 'mrwrings4': -1.331} ann. std {'mrinasset160': 4.118, 'mrwrings4': 0.16} ann. SR {'mrinasset160': 0.41, 'mrwrings4': -8.33}



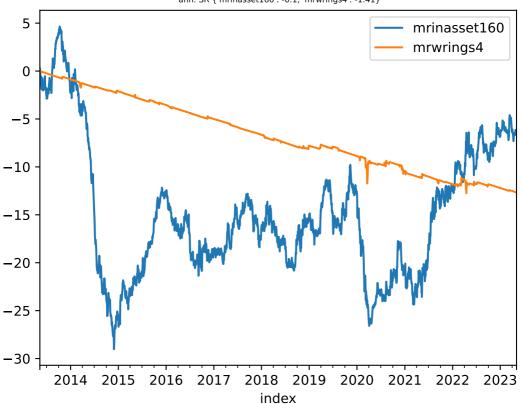
Total Trading Rule P&L for period '1Y' ann. mean {'mrinasset160': 2.442, 'mrwrings4': -0.899} ann. std {'mrinasset160': 4.801, 'mrwrings4': 0.576} ann. SR {'mrinasset160': 0.51, 'mrwrings4': -1.56}



Total Trading Rule P&L for period '3Y' ann. mean {'mrinasset160': 6.0, 'mrwrings4': -0.992} ann. std {'mrinasset160': 6.264, 'mrwrings4': 1.018} ann. SR {'mrinasset160': 0.96, 'mrwrings4': -0.97}



Total Trading Rule P&L for period '10Y' ann. mean {'mrinasset160': -0.609, 'mrwrings4': -1.244} ann. std {'mrinasset160': 6.195, 'mrwrings4': 0.879} ann. SR {'mrinasset160': -0.1, 'mrwrings4': -1.41}



Total Trading Rule P&L for period '99Y' ann. mean {'mrinasset160': -3.556, 'mrwrings4': -2.159} ann. std {'mrinasset160': 9.865, 'mrwrings4': 2.087} ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

