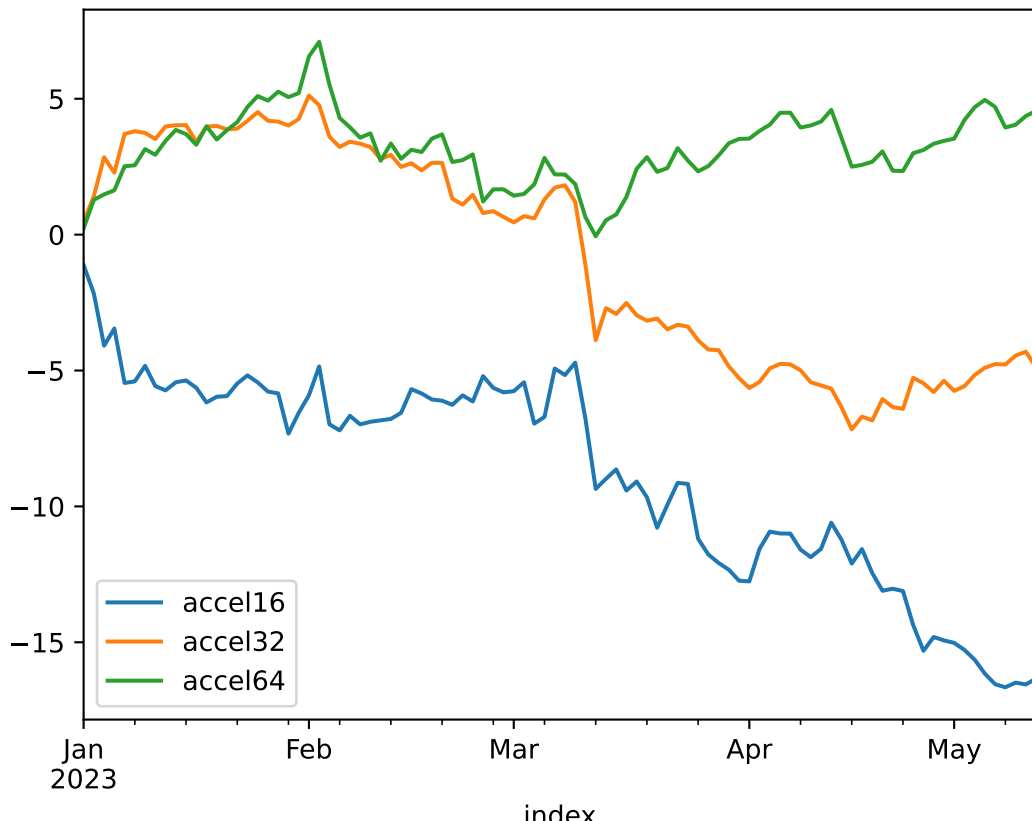
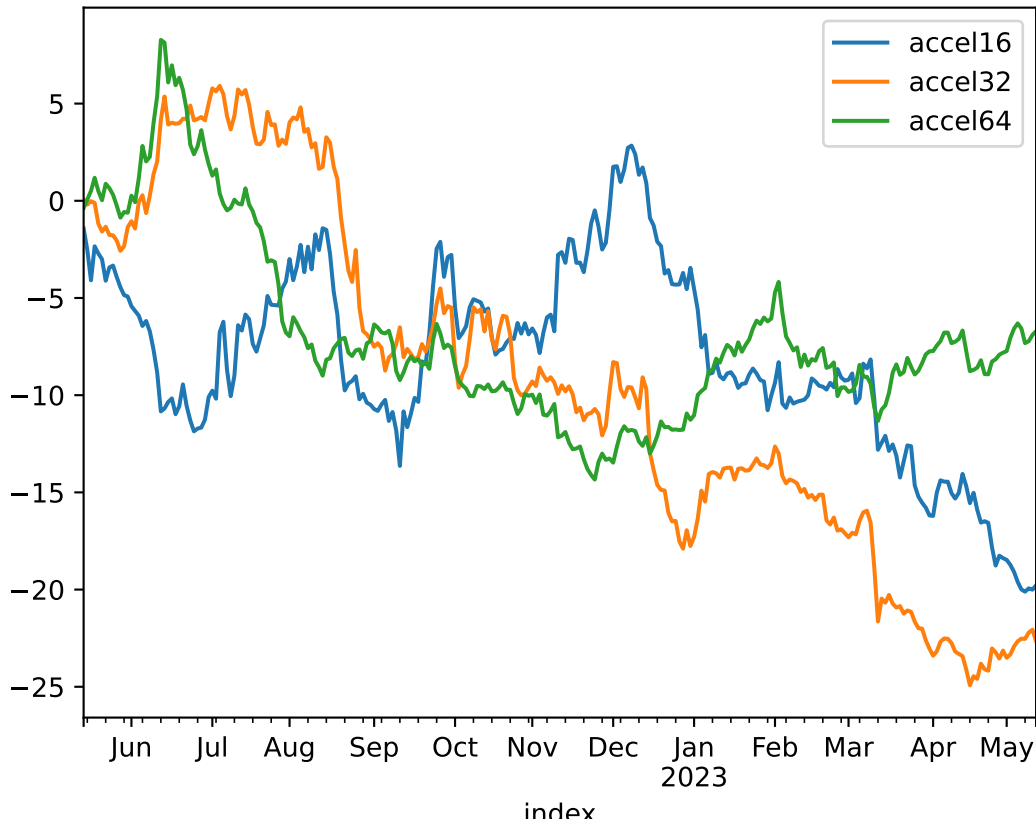


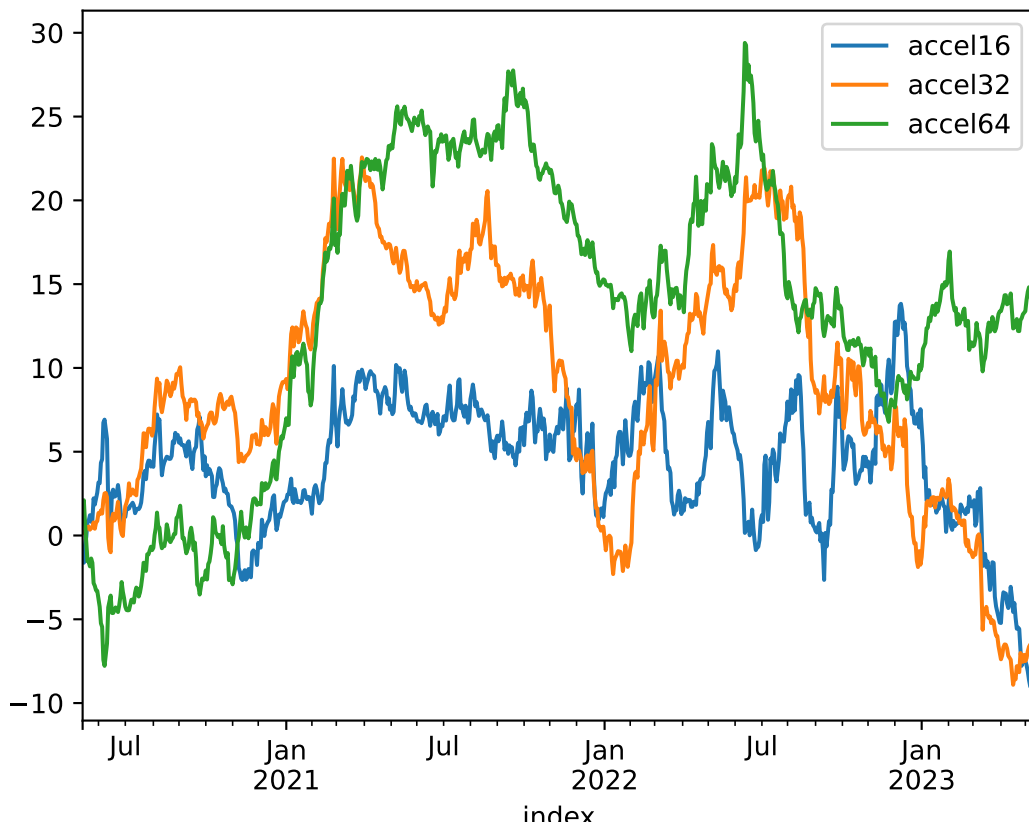
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -44.477, 'accel32': -13.314, 'accel64': 12.398}
ann. std {'accel16': 12.407, 'accel32': 9.746, 'accel64': 9.125}
ann. SR {'accel16': -3.58, 'accel32': -1.37, 'accel64': 1.36}



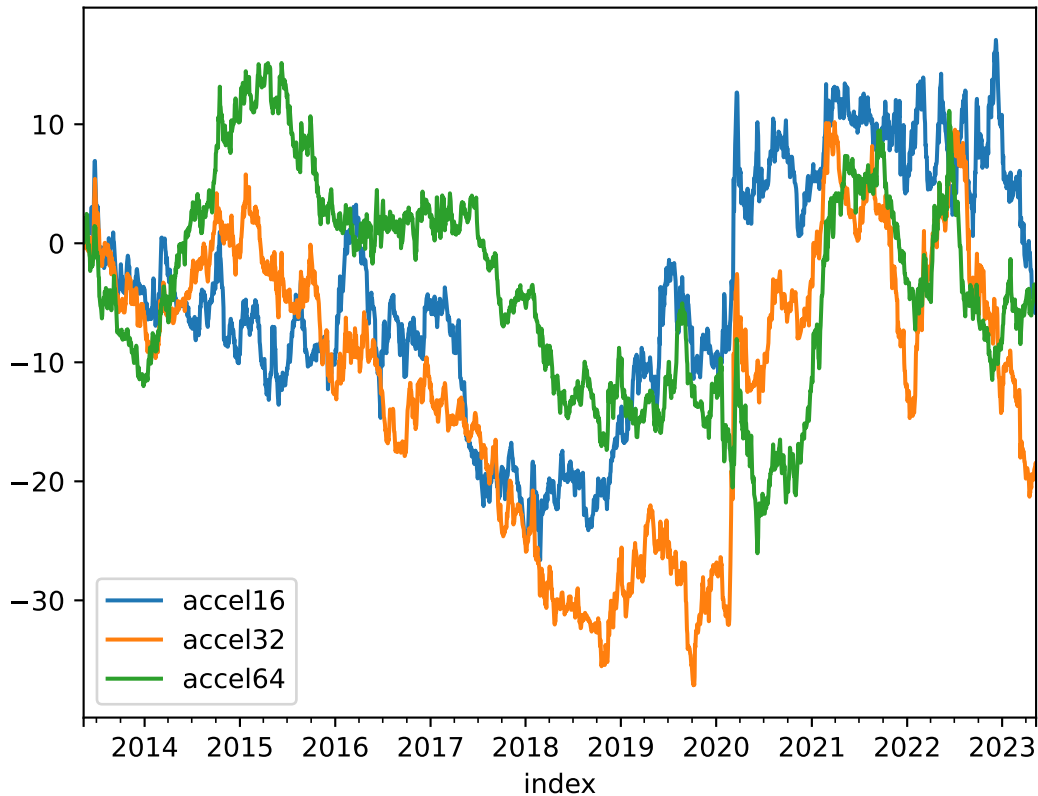
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -19.478, 'accel32': -22.299, 'accel64': -6.61}
ann. std {'accel16': 15.723, 'accel32': 12.808, 'accel64': 10.263}
ann. SR {'accel16': -1.24, 'accel32': -1.74, 'accel64': -0.64}



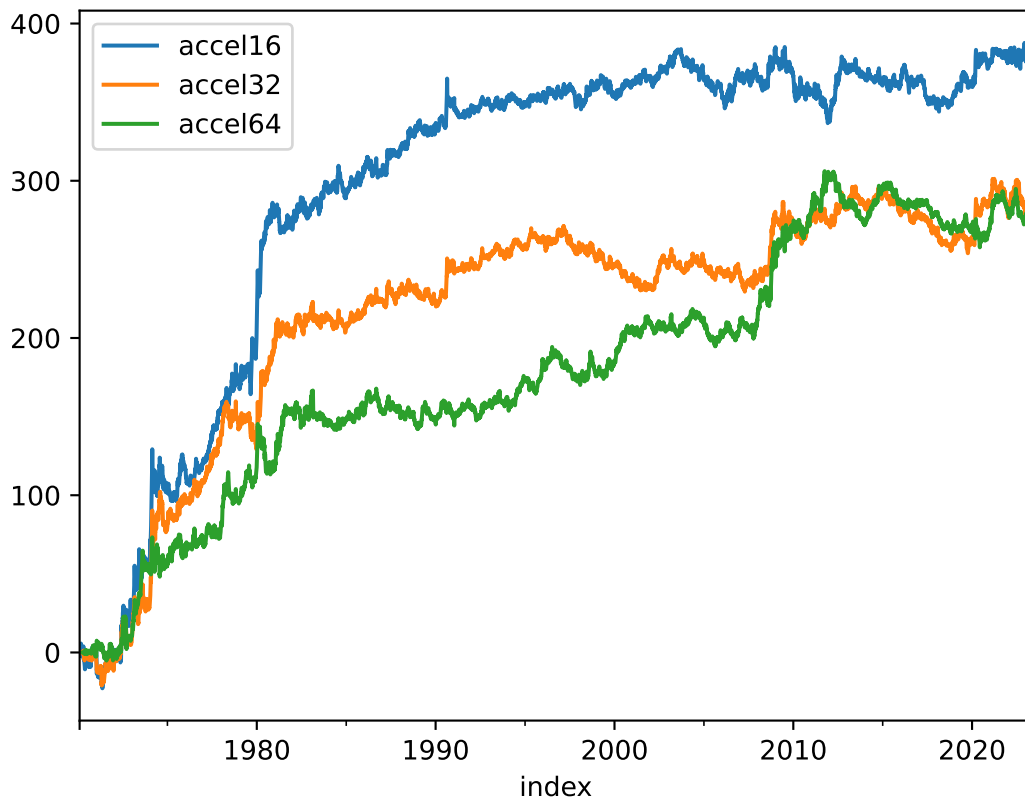
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.879, 'accel32': -2.171, 'accel64': 4.716}
ann. std {'accel16': 13.533, 'accel32': 11.731, 'accel64': 10.51}
ann. SR {'accel16': -0.21, 'accel32': -0.19, 'accel64': 0.45}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.543, 'accel32': -1.866, 'accel64': -0.379}
ann. std {'accel16': 11.69, 'accel32': 10.657, 'accel64': 9.326}
ann. SR {'accel16': -0.05, 'accel32': -0.18, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.724, 'accel32': 5.011, 'accel64': 5.155}
ann. std {'accel16': 14.126, 'accel32': 12.45, 'accel64': 12.1}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

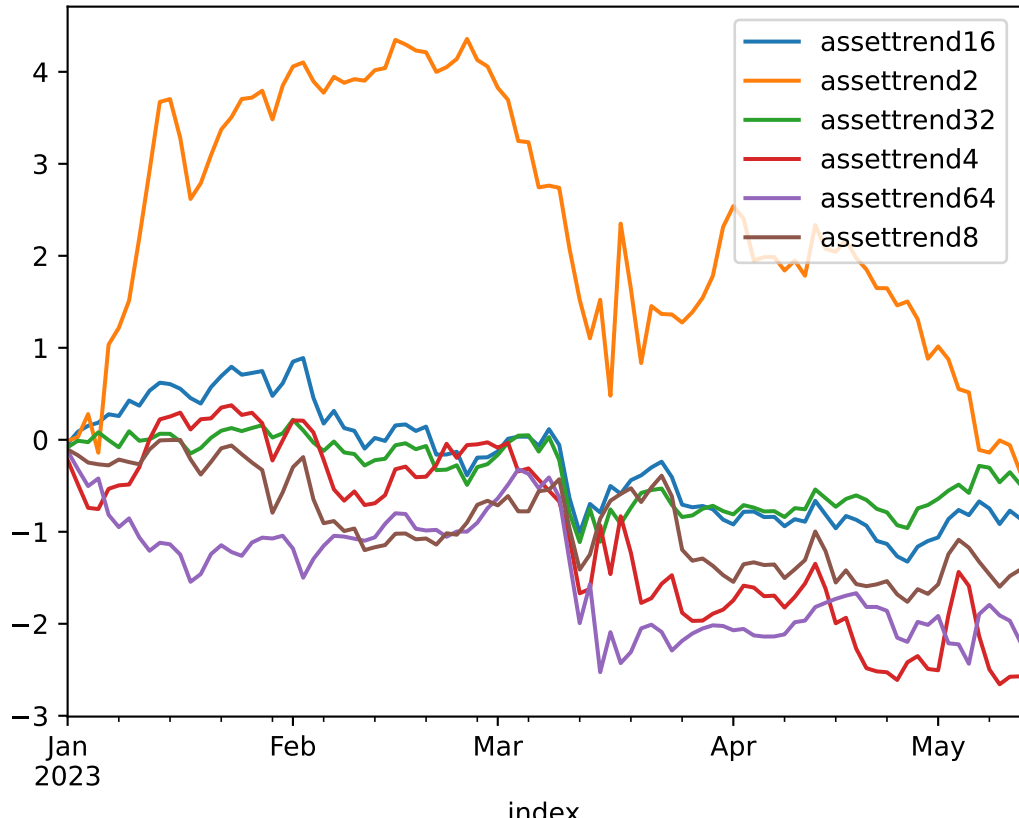


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -2.33, 'assetrend2': -0.94, 'assetrend32': -1.318, 'assetrend4': -7.003, 'assetrend64': -5.968, 'assetrend8': -3.848}

ann. std {'assetrend16': 2.485, 'assetrend2': 6.356, 'assetrend32': 2.28, 'assetrend4': 3.82, 'assetrend64': 3.38, 'assetrend8': 2.841}

ann. SR {'assetrend16': -0.94, 'assetrend2': -0.15, 'assetrend32': -0.58, 'assetrend4': -1.83, 'assetrend64': -1.77, 'assetrend8': -1.35}

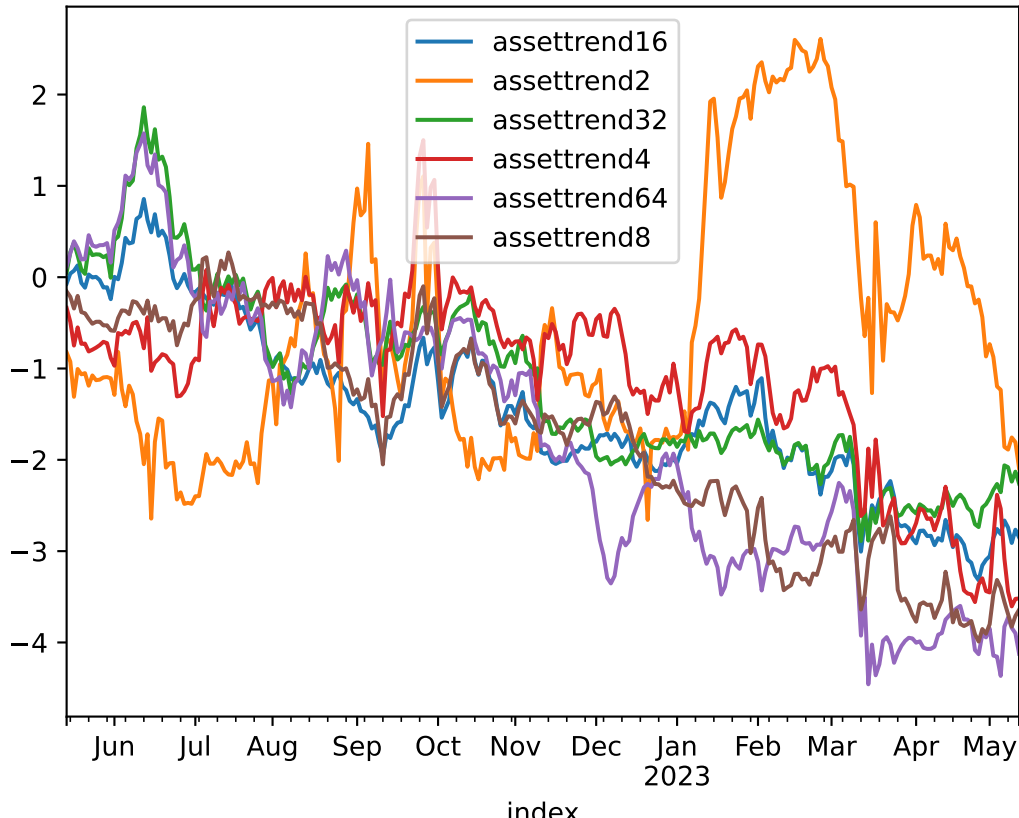


Total Trading Rule P&L for period '1Y'

ann. mean {'assetrend16': -2.806, 'assetrend2': -2.062, 'assetrend32': -2.226, 'assetrend4': -3.464, 'assetrend64': -4.06, 'assetrend8': -3.586}

ann. std {'assetrend16': 2.225, 'assetrend2': 6.177, 'assetrend32': 2.478, 'assetrend4': 3.943, 'assetrend64': 3.121, 'assetrend8': 2.641}

ann. SR {'assetrend16': -1.26, 'assetrend2': -0.33, 'assetrend32': -0.9, 'assetrend4': -0.88, 'assetrend64': -1.3, 'assetrend8': -1.36}

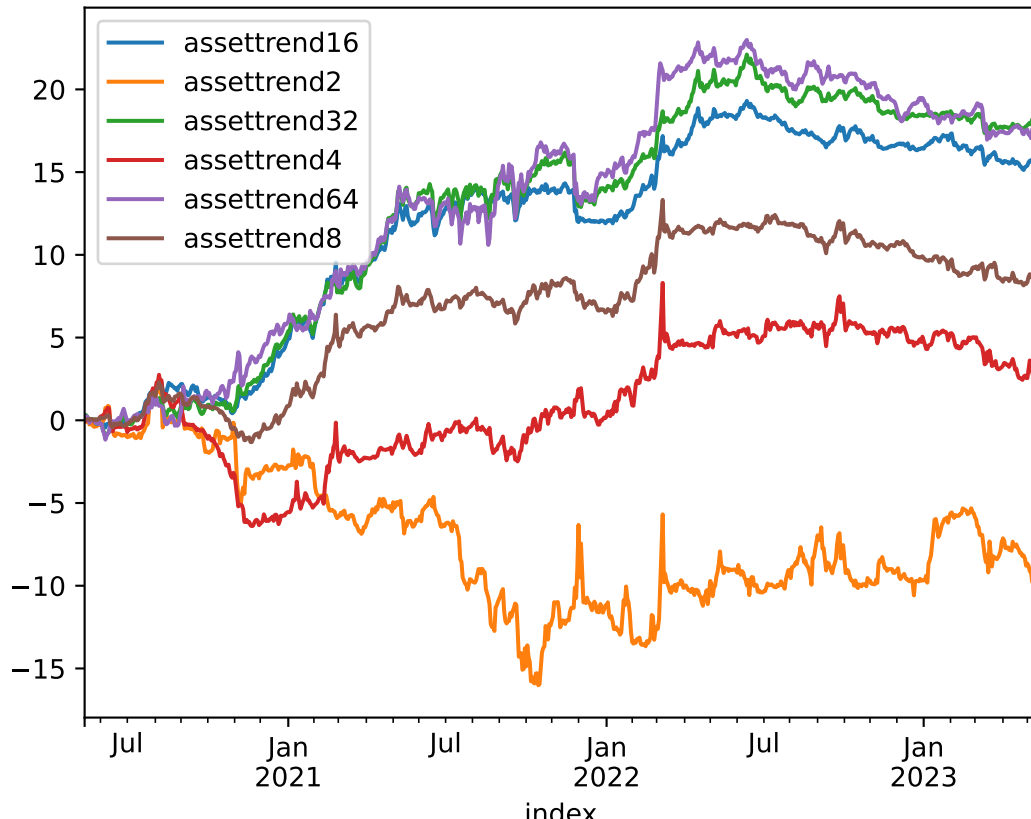


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.106, 'assettrend2': -3.28, 'assettrend32': 5.888, 'assettrend4': 0.812, 'assettrend64': 5.661, 'assettrend8': 2.783}

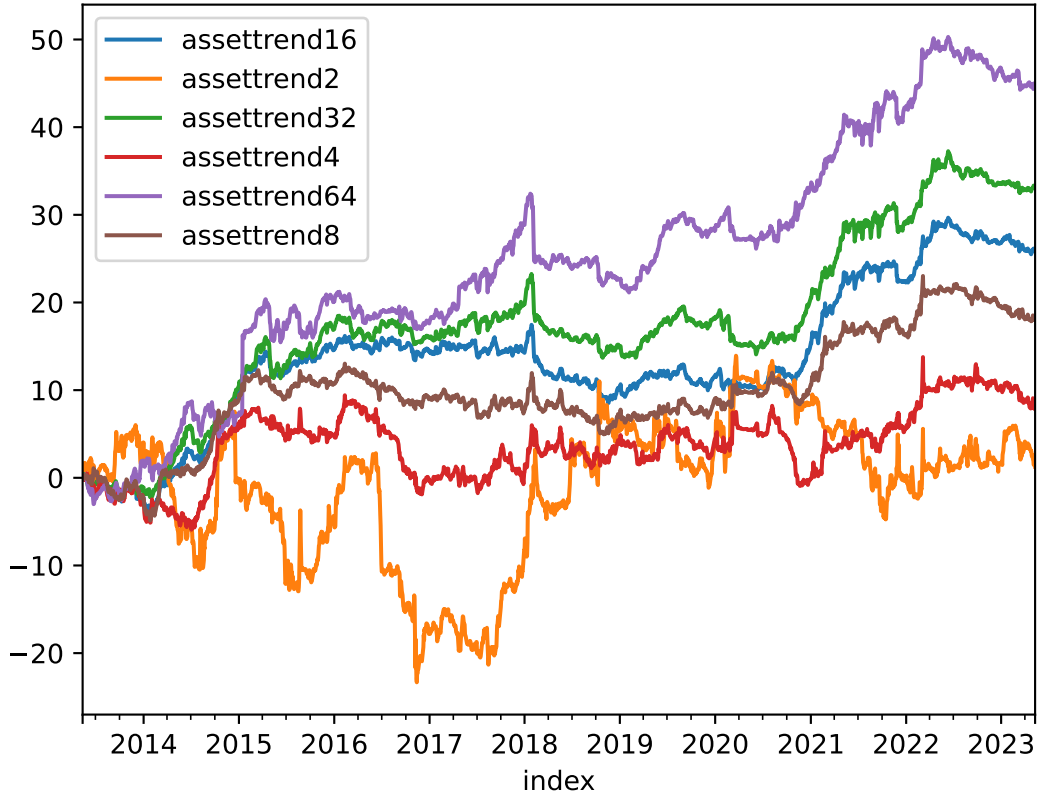
ann. std {'assettrend16': 3.412, 'assettrend2': 7.811, 'assettrend32': 4.126, 'assettrend4': 4.979, 'assettrend64': 5.013, 'assettrend8': 3.527}

ann. SR {'assettrend16': 1.5, 'assettrend2': -0.42, 'assettrend32': 1.43, 'assettrend4': 0.16, 'assettrend64': 1.13, 'assettrend8': 0.79}



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

ann. mean {'assetrend16': 2.548, 'assetrend2': 0.123, 'assetrend32': 3.251, 'assetrend4': 0.78, 'assetrend64': 4.376, 'assetrend8': 1.786}
ann. std {'assetrend16': 3.149, 'assetrend2': 9.768, 'assetrend32': 3.586, 'assetrend4': 4.976, 'assetrend64': 5.191, 'assetrend8': 3.449}
ann. SR {'assetrend16': 0.81, 'assetrend2': 0.01, 'assetrend32': 0.91, 'assetrend4': 0.16, 'assetrend64': 0.84, 'assetrend8': 0.52}

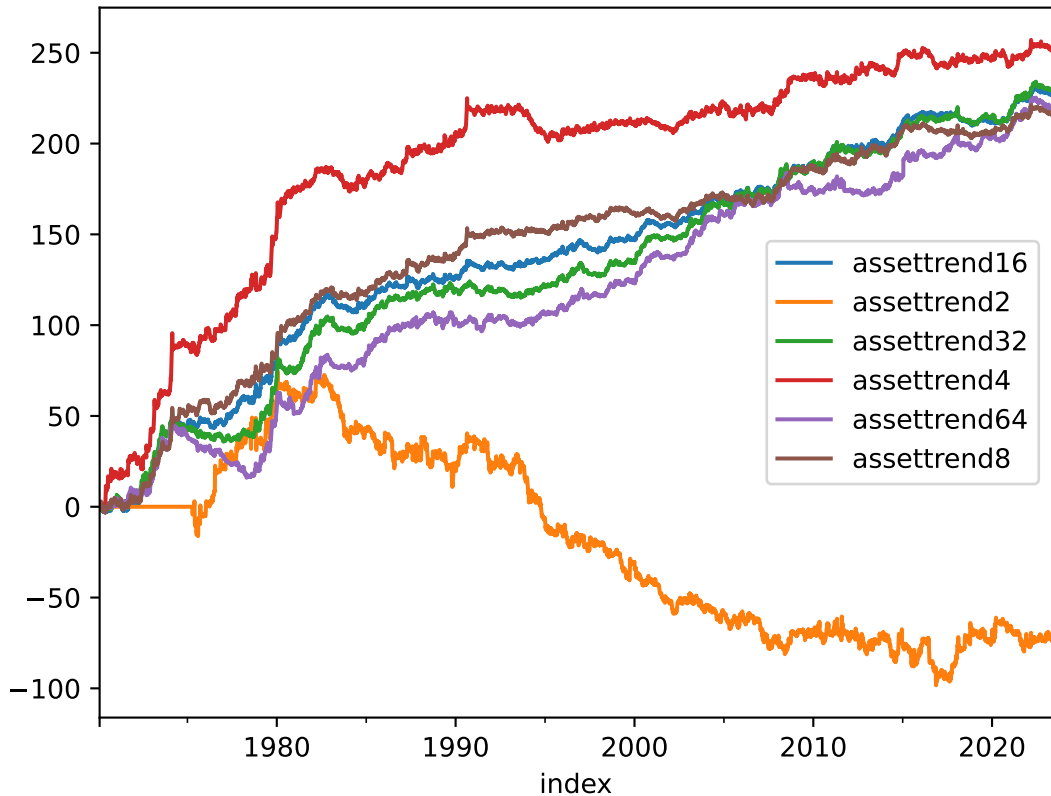


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.185, 'assettrend2': -1.358, 'assettrend32': 4.236, 'assettrend4': 4.628, 'assettrend8': 3.985}

ann. std {'assettrend16': 4.302, 'assettrend2': 10.255, 'assettrend32': 4.493, 'assettrend4': 6.545, 'assettrend64': 4.994, 'assettrend8': 4.632}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

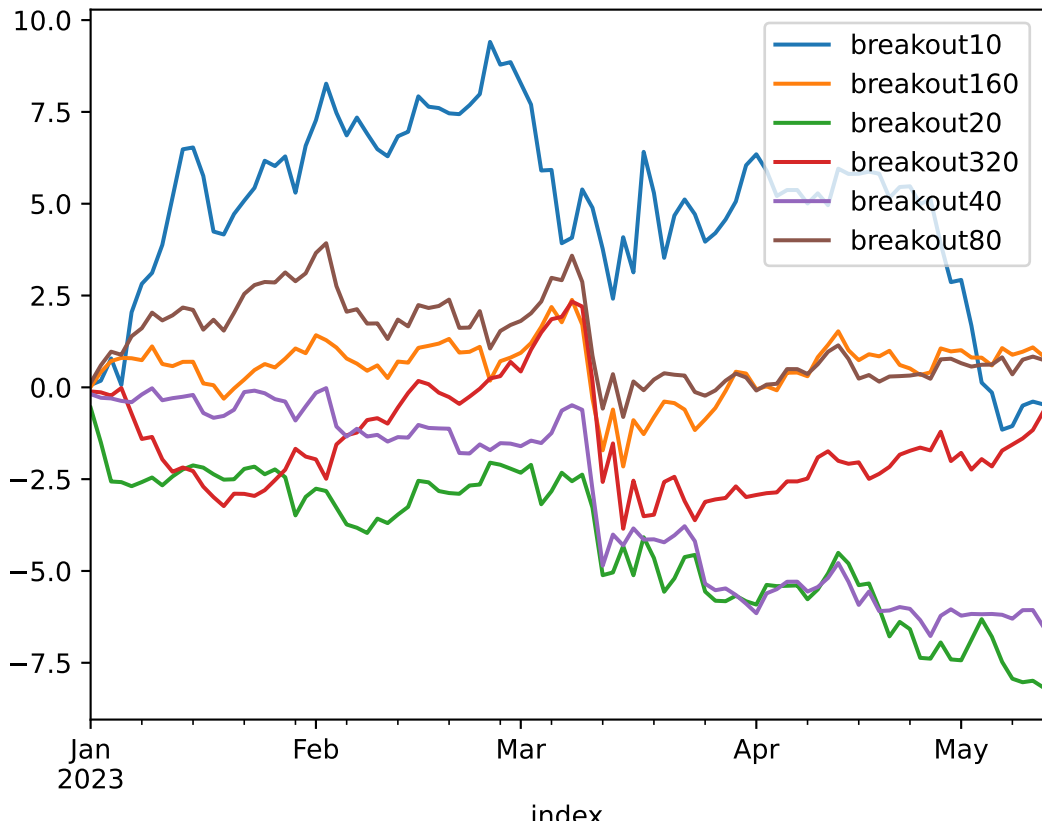


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -1.26, 'breakout160': 2.335, 'breakout20': -22.244, 'breakout320': -1.837, 'breakout40': -17.717, 'breakout80': 2.04}

ann. std {'breakout10': 13.839, 'breakout160': 7.528, 'breakout20': 7.651, 'breakout320': 9.277, 'breakout40': 7.038, 'breakout80': 7.541}

ann. SR {'breakout10': -0.09, 'breakout160': 0.31, 'breakout20': -2.91, 'breakout320': -0.2, 'breakout40': -2.52, 'breakout80': 0.27}

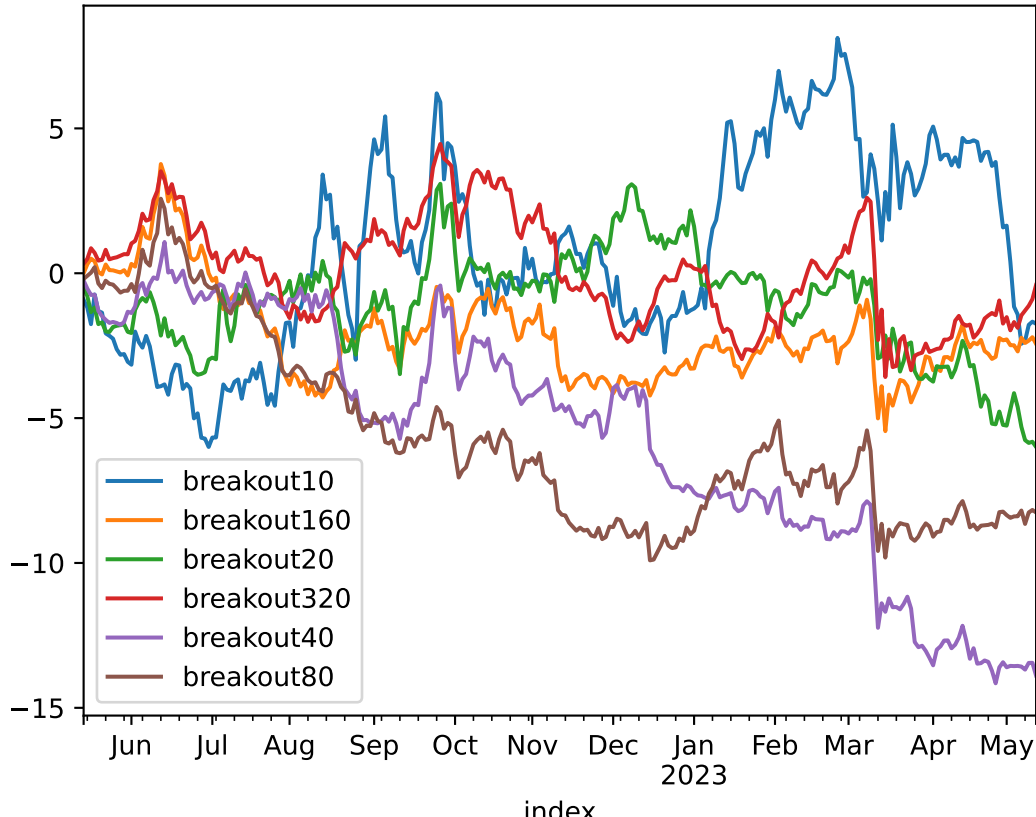


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': -1.719, 'breakout160': -2.4, 'breakout20': -5.902, 'breakout320': -0.398, 'breakout40': -13.675, 'breakout80': -8.131}

ann. std {'breakout10': 13.214, 'breakout160': 6.881, 'breakout20': 8.395, 'breakout320': 7.544, 'breakout40': 7.083, 'breakout80': 6.491}

ann. SR {'breakout10': -0.13, 'breakout160': -0.35, 'breakout20': -0.7, 'breakout320': -0.05, 'breakout40': -1.93, 'breakout80': -1.25}

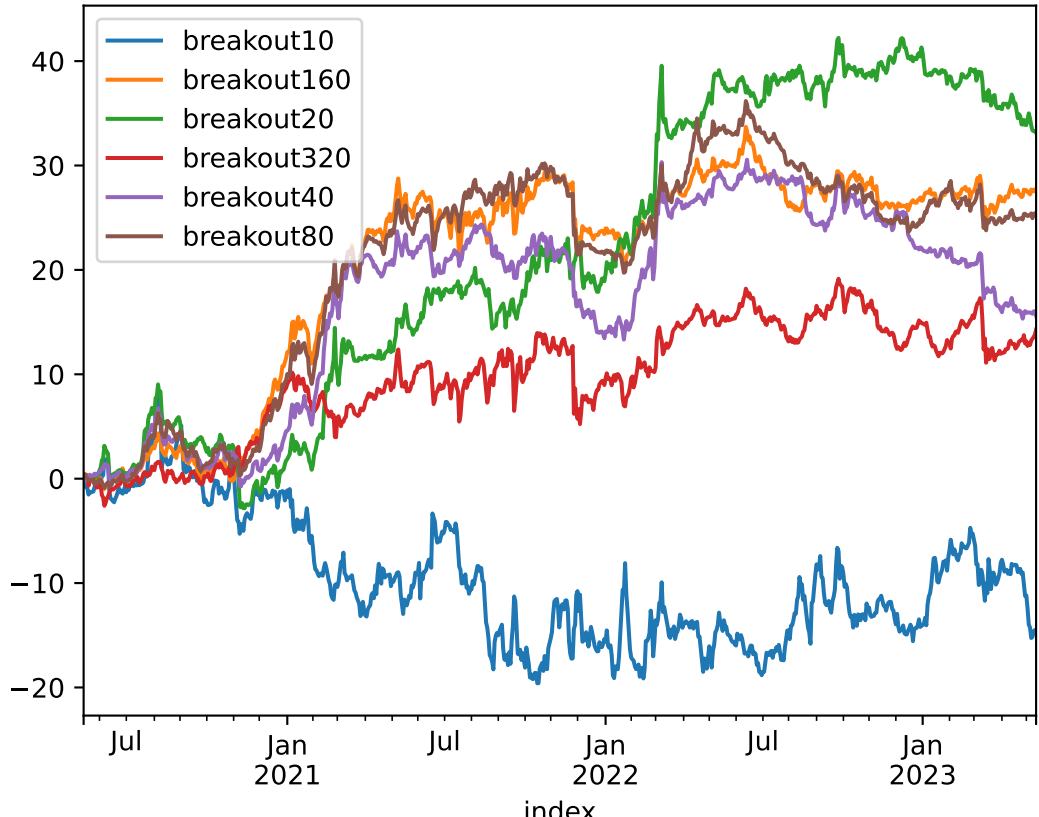


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.771, 'breakout160': 8.999, 'breakout20': 10.849, 'breakout320': 4.676, 'breakout40': 5.104, 'breakout80': 8.297}

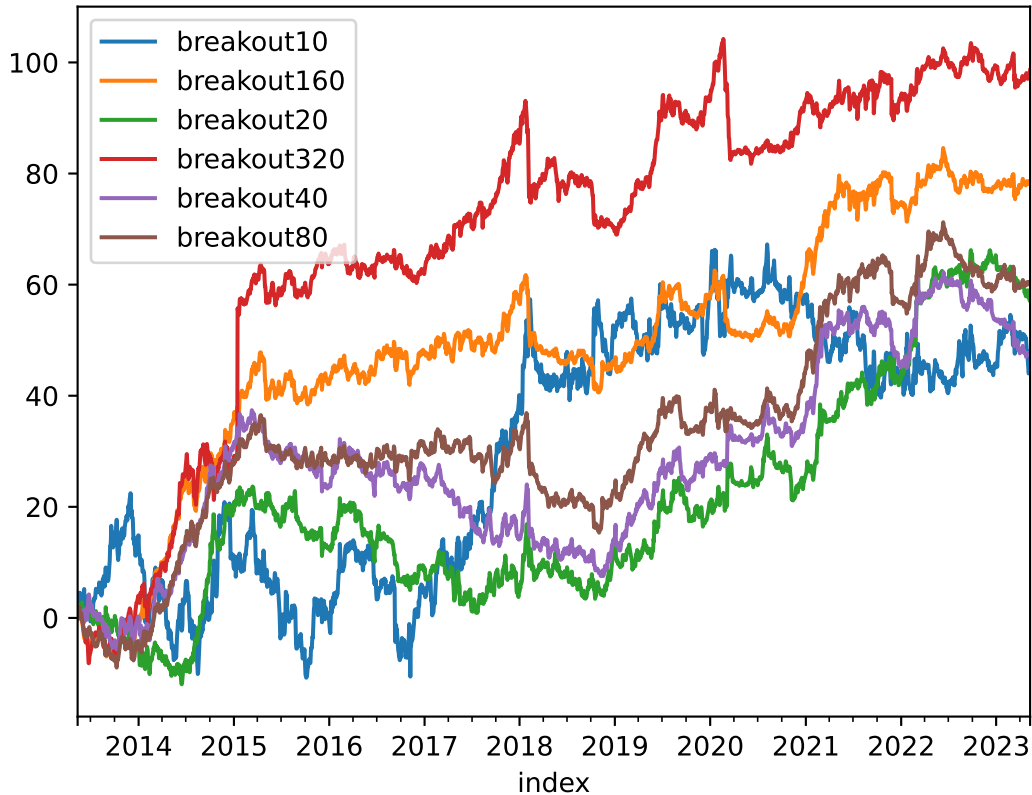
ann. std {'breakout10': 15.085, 'breakout160': 9.183, 'breakout20': 11.069, 'breakout320': 9.915, 'breakout40': 9.48, 'breakout80': 8.909}

ann. SR {'breakout10': -0.32, 'breakout160': 0.98, 'breakout20': 0.98, 'breakout320': 0.47, 'breakout40': 0.54, 'breakout80': 0.93}



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

ann. mean {'breakout10': 4.385, 'breakout160': 7.692, 'breakout20': 5.606, 'breakout320': 9.677, 'breakout40': 4.638, 'breakout80': 5.927}
ann. std {'breakout10': 17.801, 'breakout160': 8.861, 'breakout20': 11.069, 'breakout320': 13.081, 'breakout40': 9.357, 'breakout80': 8.713}
ann. SR {'breakout10': 0.25, 'breakout160': 0.87, 'breakout20': 0.51, 'breakout320': 0.74, 'breakout40': 0.5, 'breakout80': 0.68}

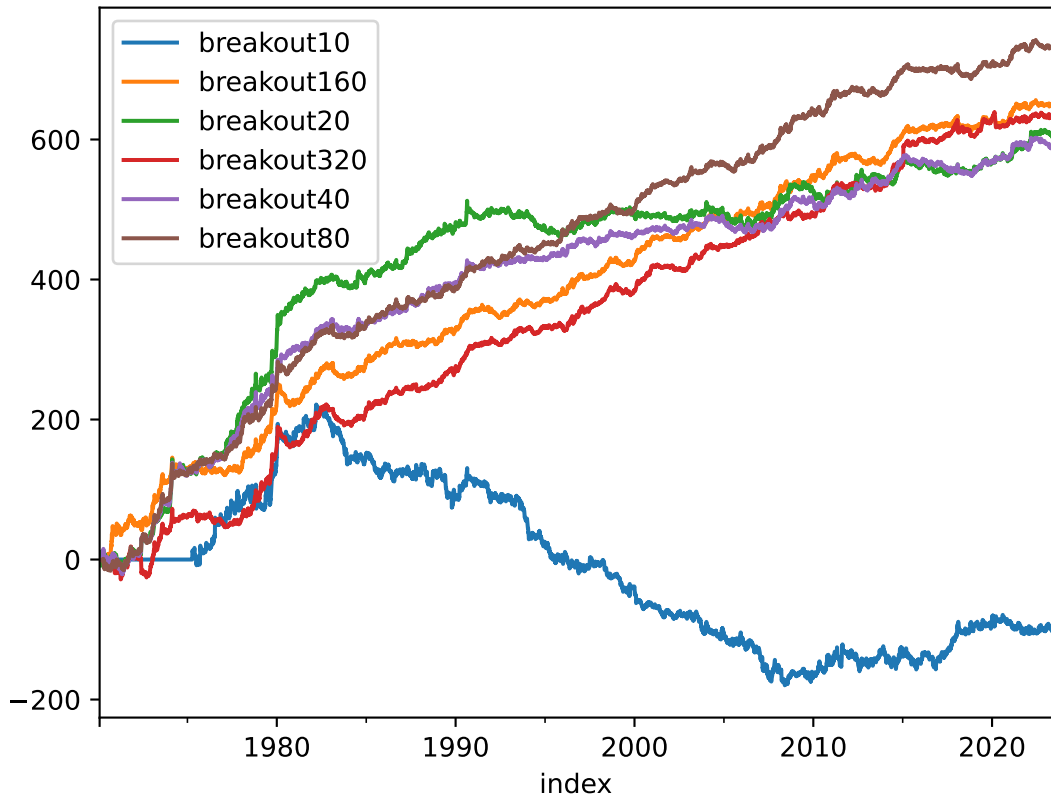


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.871, 'breakout160': 11.975, 'breakout20': 11.139, 'breakout320': 11.669, 'breakout40': 10.826, 'breakout80': 13.473}

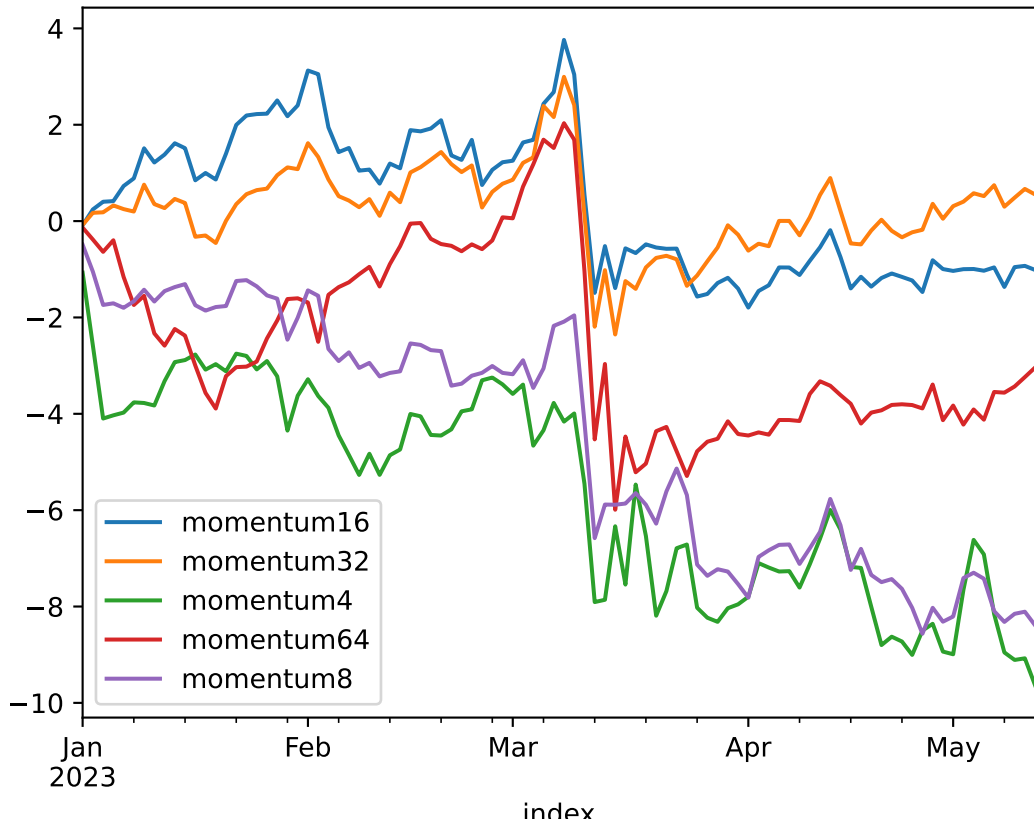
ann. std {'breakout10': 21.313, 'breakout160': 11.524, 'breakout20': 14.885, 'breakout320': 12.11, 'breakout40': 12.107, 'breakout80': 11.713}

ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.89, 'breakout80': 1.15}



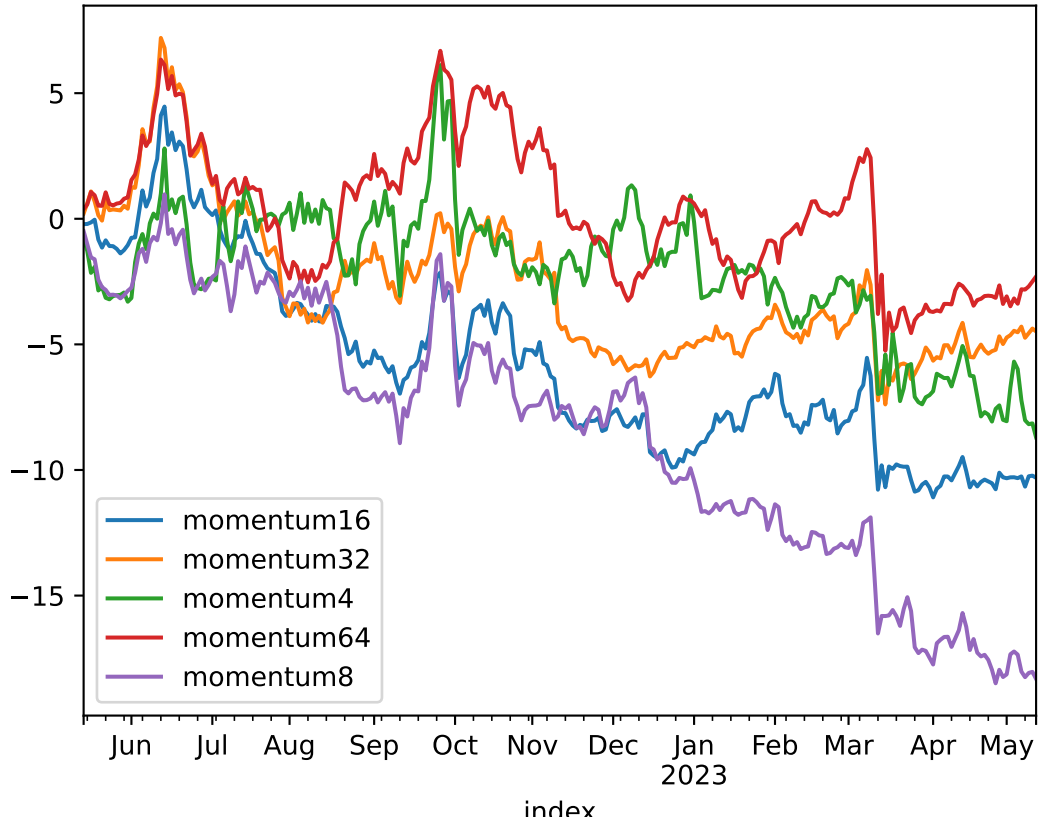
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.763, 'momentum32': 1.505, 'momentum4': -26.241, 'momentum64': -8.278, 'momentum8': -22.851}
ann. std {'momentum16': 8.378, 'momentum32': 8.388, 'momentum4': 11.175, 'momentum64': 11.252, 'momentum8': 8.505}
ann. SR {'momentum16': -0.33, 'momentum32': 0.18, 'momentum4': -2.35, 'momentum64': -0.74, 'momentum8': -2.69}



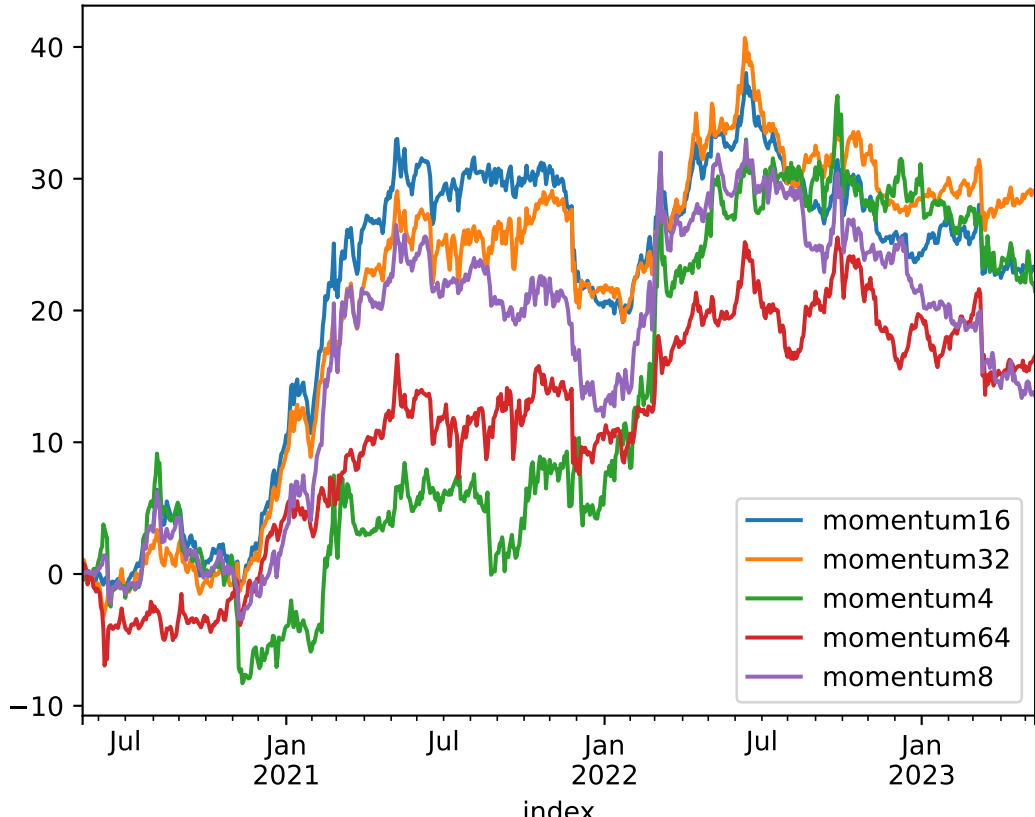
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -10.151, 'momentum32': -4.416, 'momentum4': -8.57, 'momentum64': -2.264, 'momentum8': -18.036}
ann. std {'momentum16': 8.484, 'momentum32': 8.812, 'momentum4': 13.218, 'momentum64': 10.146, 'momentum8': 9.721}
ann. SR {'momentum16': -1.2, 'momentum32': -0.5, 'momentum4': -0.65, 'momentum64': -0.22, 'momentum8': -1.86}



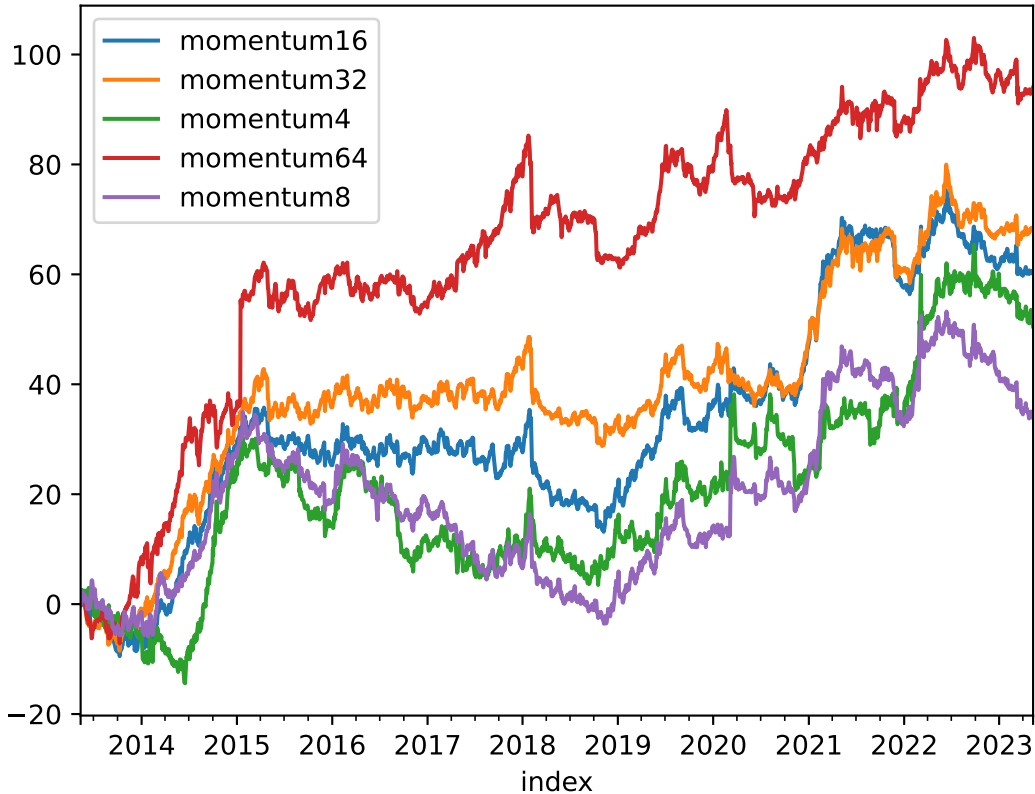
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.612, 'momentum32': 9.495, 'momentum4': 7.032, 'momentum64': 5.419, 'momentum8': 4.43}
ann. std {'momentum16': 10.121, 'momentum32': 10.379, 'momentum4': 14.688, 'momentum64': 10.828, 'momentum8': 11.432}
ann. SR {'momentum16': 0.75, 'momentum32': 0.91, 'momentum4': 0.48, 'momentum64': 0.5, 'momentum8': 0.39}



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

ann. mean {'momentum16': 5.938, 'momentum32': 6.7, 'momentum4': 4.957, 'momentum64': 9.227, 'momentum8': 3.331}
ann. std {'momentum16': 9.635, 'momentum32': 9.262, 'momentum4': 13.682, 'momentum64': 11.87, 'momentum8': 10.841}
ann. SR {'momentum16': 0.62, 'momentum32': 0.72, 'momentum4': 0.36, 'momentum64': 0.78, 'momentum8': 0.31}

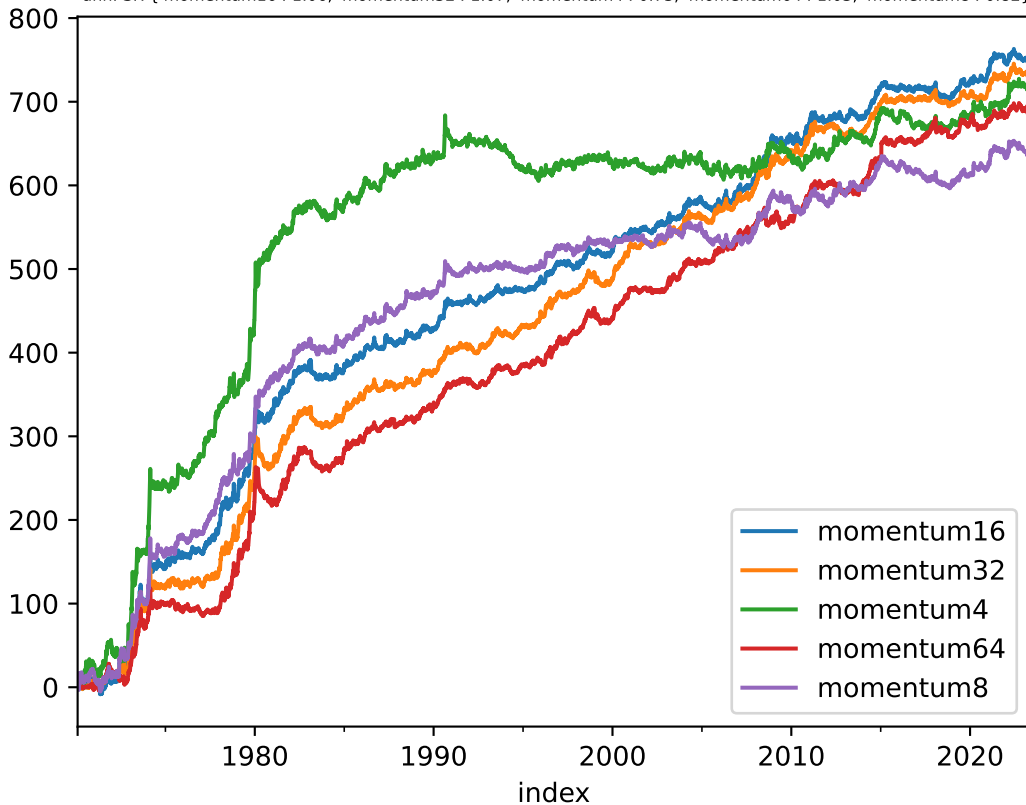


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.785, 'momentum32': 13.519, 'momentum4': 13.126, 'momentum64': 12.702, 'momentum8': 11.679}

ann. std {'momentum16': 13.041, 'momentum32': 12.605, 'momentum4': 17.888, 'momentum64': 12.326, 'momentum8': 14.326}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.73, 'momentum64': 1.03, 'momentum8': 0.82}

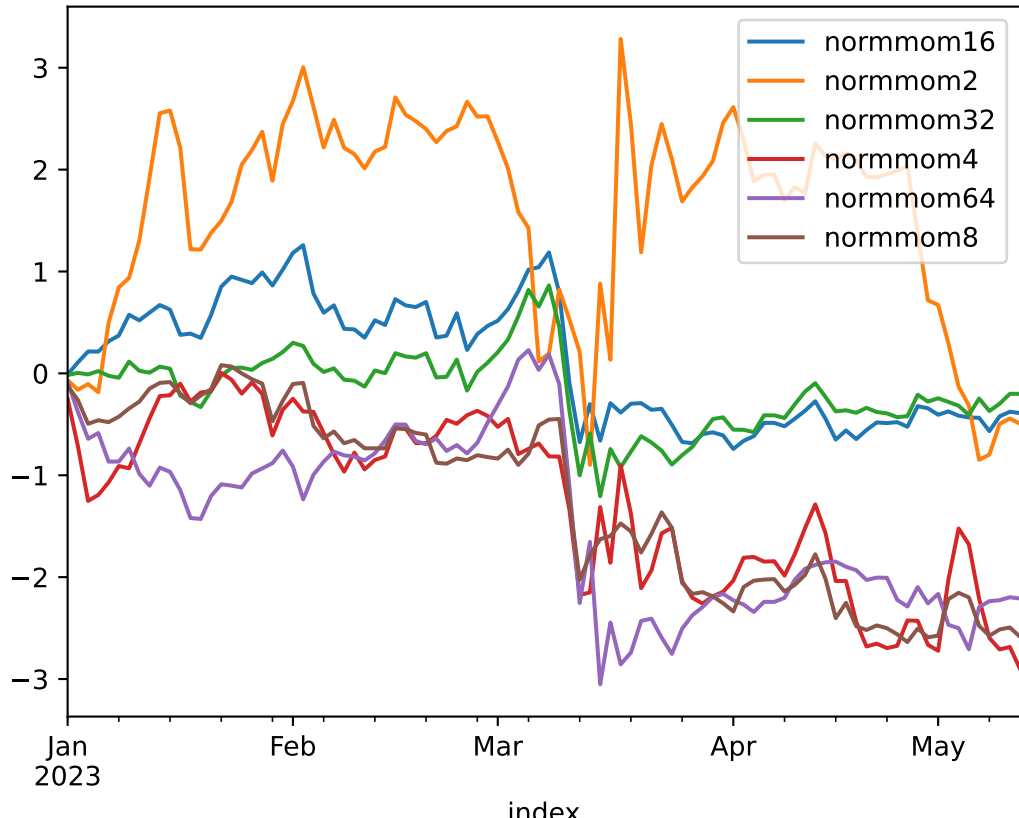


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.063, 'normmom2': -1.347, 'normmom32': -0.547, 'normmom4': -7.905, 'normmom64': -6.019, 'normmom8': -7.044}

ann. std {'normmom16': 3.005, 'normmom2': 8.771, 'normmom32': 2.954, 'normmom4': 4.646, 'normmom64': 4.431, 'normmom8': 3.023}

ann. SR {'normmom16': -0.35, 'normmom2': -0.15, 'normmom32': -0.19, 'normmom4': -1.7, 'normmom64': -1.36, 'normmom8': -2.33}

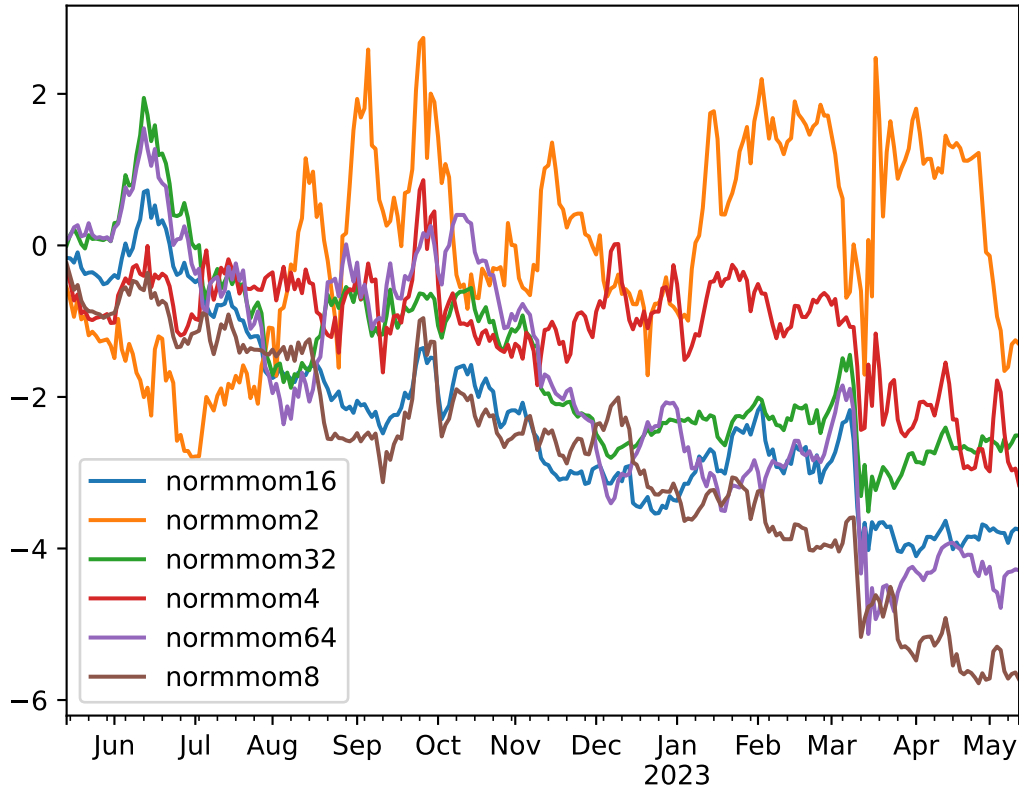


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.693, 'normmom2': -1.283, 'normmom32': -2.47, 'normmom4': -3.114, 'normmom64': -4.221, 'normmom8': -5.64}

ann. std {'normmom16': 2.527, 'normmom2': 7.452, 'normmom32': 2.824, 'normmom4': 4.344, 'normmom64': 3.816, 'normmom8': 2.891}

ann. SR {'normmom16': -1.46, 'normmom2': -0.17, 'normmom32': -0.87, 'normmom4': -0.72, 'normmom64': -1.11, 'normmom8': -1.95}



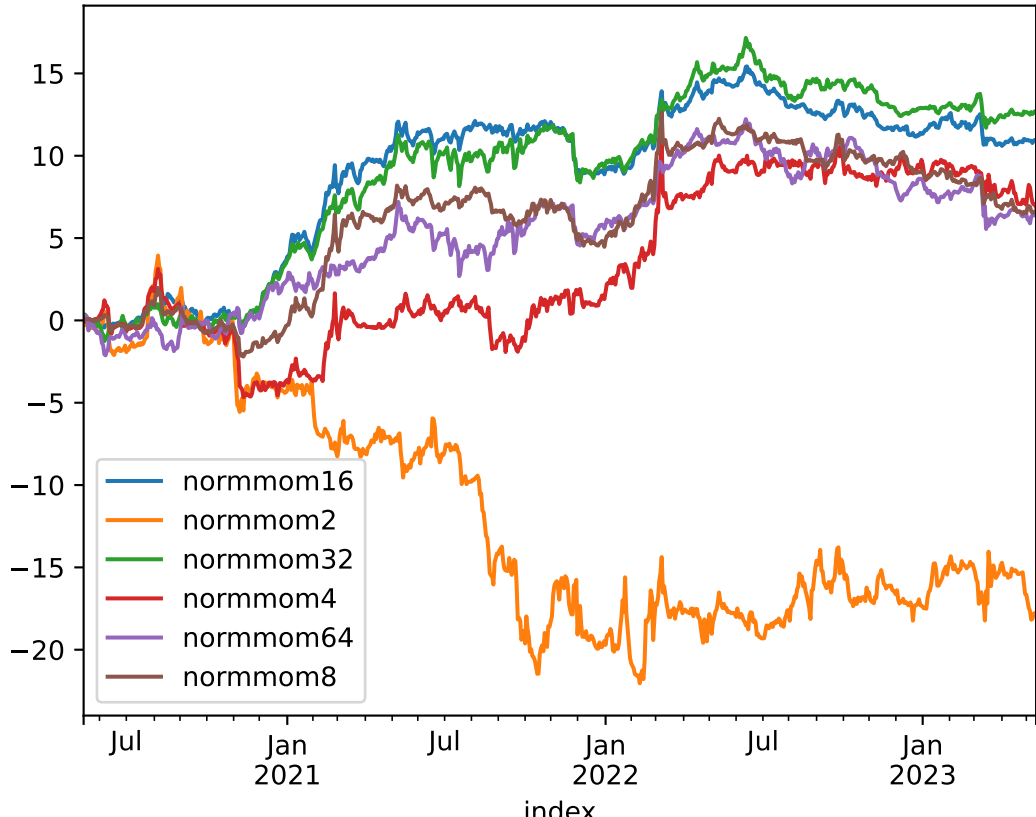
index

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

ann. mean {'normmom16': 3.585, 'normmom2': -5.835, 'normmom32': 4.158, 'normmom4': 2.242, 'normmom64': 2.092, 'normmom8': 2.134}

ann. std {'normmom16': 3.506, 'normmom2': 8.638, 'normmom32': 3.878, 'normmom4': 5.409, 'normmom64': 4.28, 'normmom8': 3.937}

ann. SR {'normmom16': 1.02, 'normmom2': -0.68, 'normmom32': 1.07, 'normmom4': 0.41, 'normmom64': 0.49, 'normmom8': 0.54}

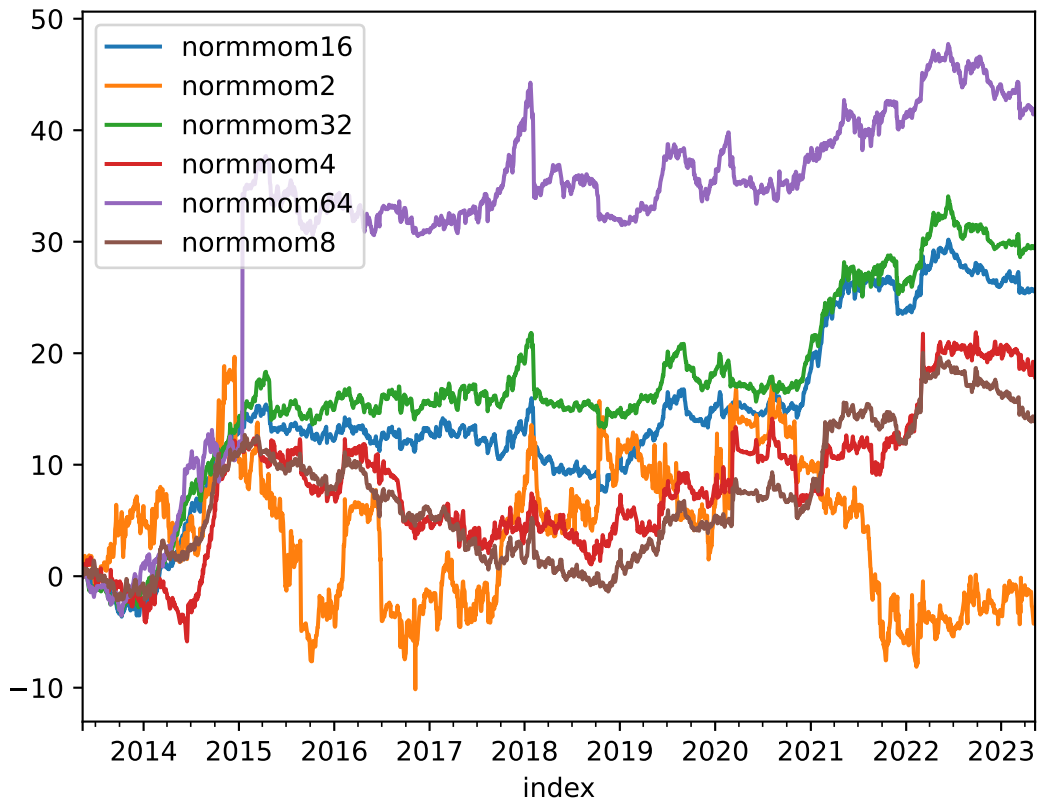


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.523, 'normmom2': -0.383, 'normmom32': 2.906, 'normmom4': 1.752, 'normmom64': 4.112, 'normmom8': 1.365}

ann. std {'normmom16': 3.458, 'normmom2': 10.312, 'normmom32': 3.618, 'normmom4': 5.451, 'normmom64': 8.271, 'normmom8': 3.876}

ann. SR {'normmom16': 0.73, 'normmom2': -0.04, 'normmom32': 0.8, 'normmom4': 0.32, 'normmom64': 0.5, 'normmom8': 0.35}

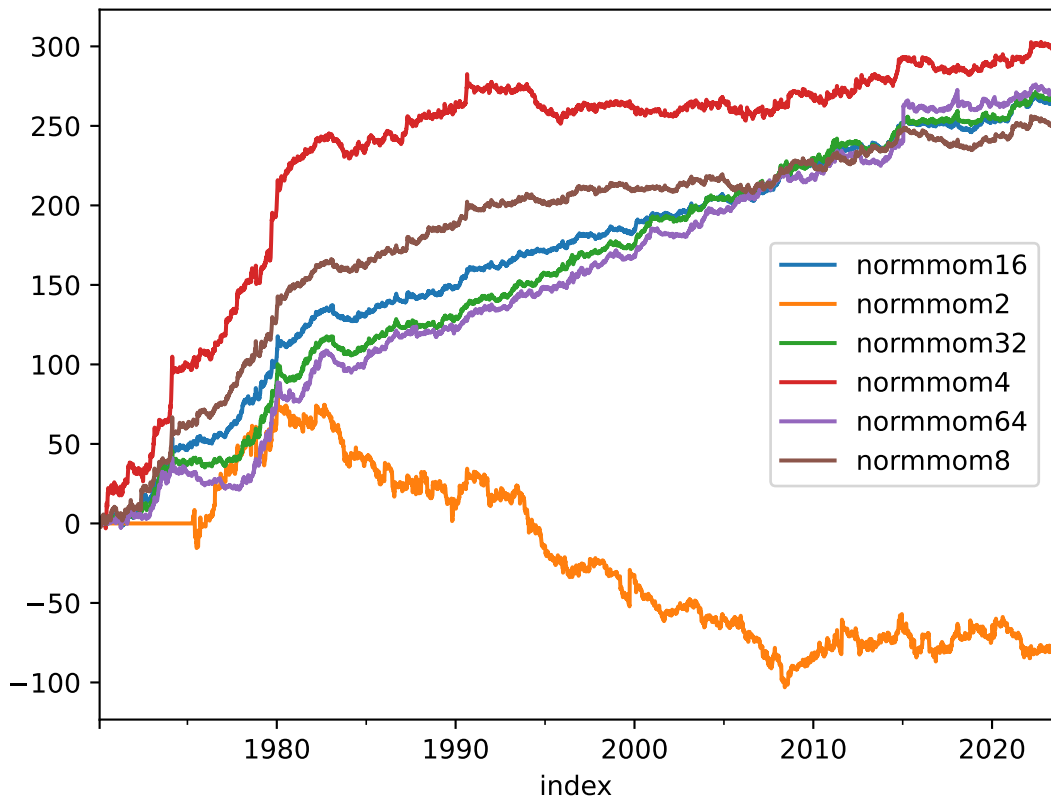


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.866, 'normmom2': -1.484, 'normmom32': 4.92, 'normmom4': 5.504, 'normmom64': 4.979, 'normmom8': 4.606}

ann. std {'normmom16': 4.53, 'normmom2': 11.607, 'normmom32': 4.607, 'normmom4': 7.383, 'normmom64': 5.868, 'normmom8': 5.363}

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': -3.963, 'relmomentum20': -15.352, 'relmomentum40': 13.928, 'relmomentum80': 11.703}

ann. std {'relmomentum10': 7.729, 'relmomentum20': 6.637, 'relmomentum40': 5.473, 'relmomentum80': 4.434}

ann. SR {'relmomentum10': -0.51, 'relmomentum20': -2.31, 'relmomentum40': 2.54, 'relmomentum80': 2.64}

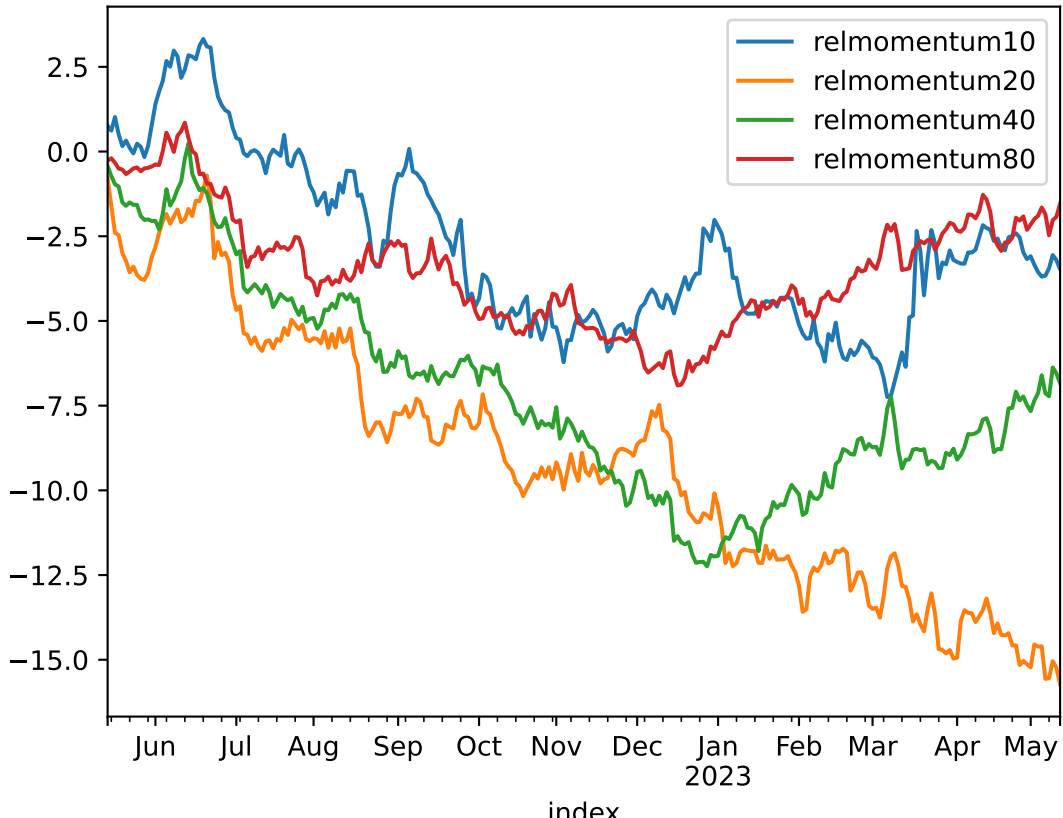


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.418, 'relmomentum20': -15.483, 'relmomentum40': -6.734, 'relmomentum80': -1.51}

ann. std {'relmomentum10': 7.181, 'relmomentum20': 6.442, 'relmomentum40': 5.287, 'relmomentum80': 4.536}

ann. SR {'relmomentum10': -0.48, 'relmomentum20': -2.4, 'relmomentum40': -1.27, 'relmomentum80': -0.33}

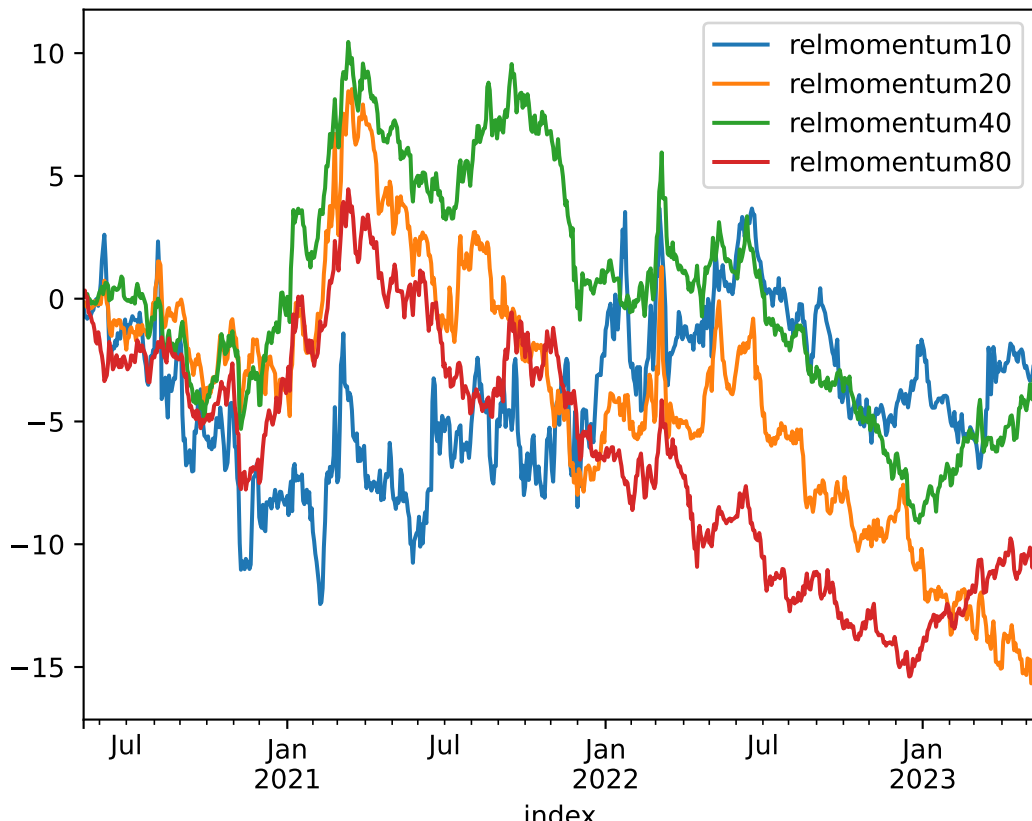


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.022, 'relmomentum20': -5.181, 'relmomentum40': -1.218, 'relmomentum80': -3.279}

ann. std {'relmomentum10': 11.909, 'relmomentum20': 8.366, 'relmomentum40': 6.967, 'relmomentum80': 6.322}

ann. SR {'relmomentum10': -0.09, 'relmomentum20': -0.62, 'relmomentum40': -0.17, 'relmomentum80': -0.52}

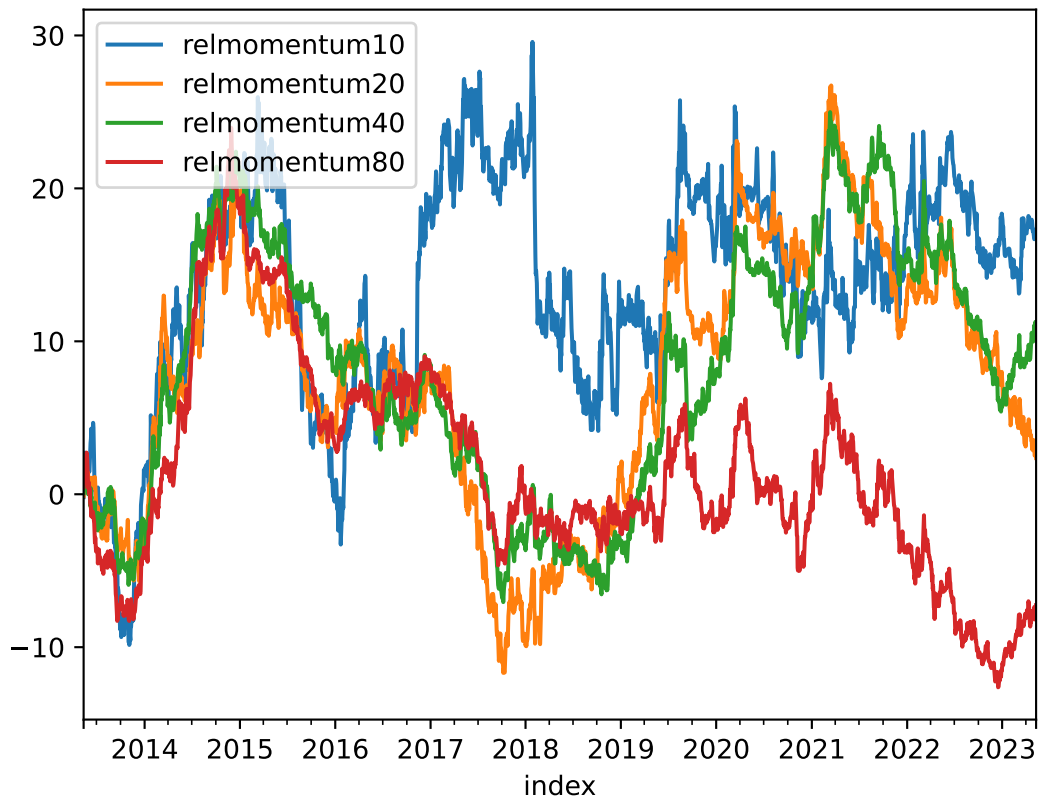


Total Trading Rule P&L for period '10Y'

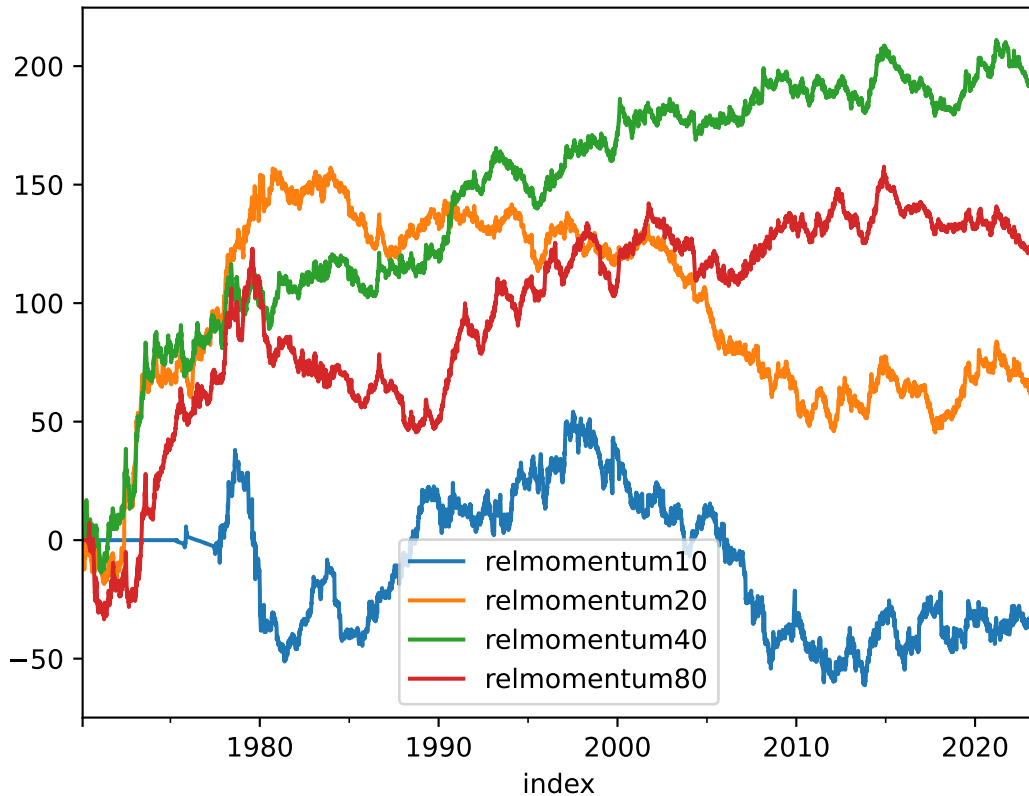
ann. mean {'relmomentum10': 1.658, 'relmomentum20': 0.232, 'relmomentum40': 1.06, 'relmomentum80': -0.712}

ann. std {'relmomentum10': 13.387, 'relmomentum20': 8.541, 'relmomentum40': 6.993, 'relmomentum80': 6.361}

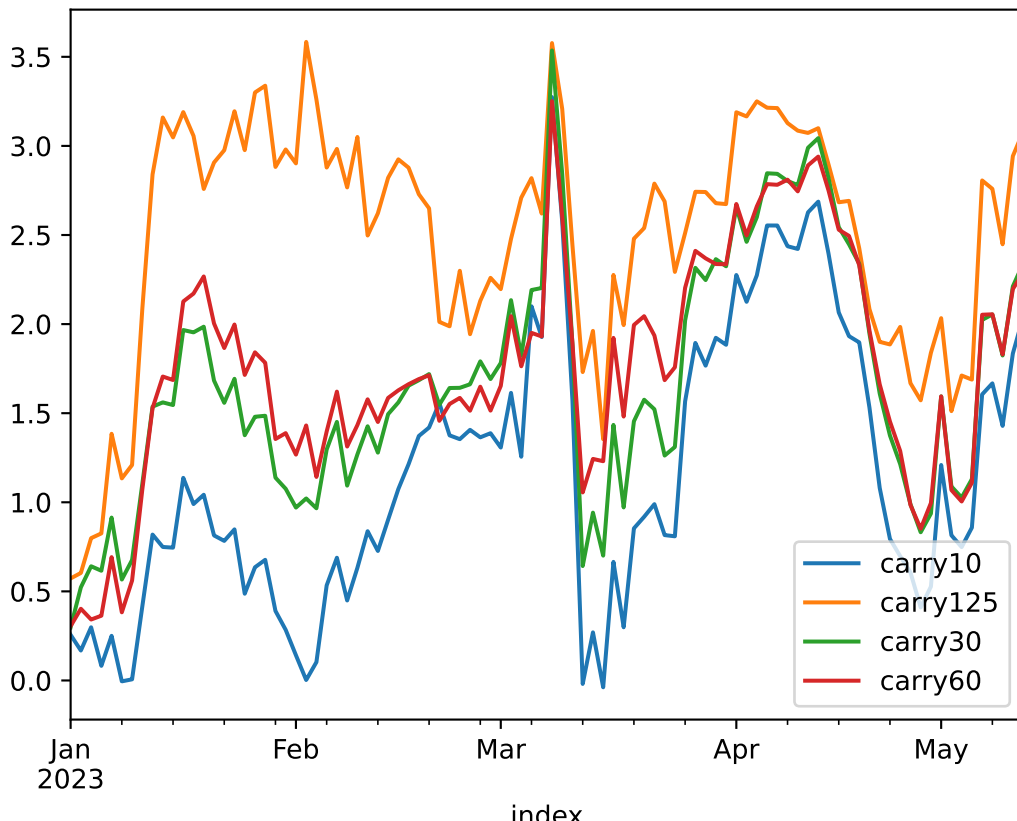
ann. SR {'relmomentum10': 0.12, 'relmomentum20': 0.03, 'relmomentum40': 0.15, 'relmomentum80': -0.11}



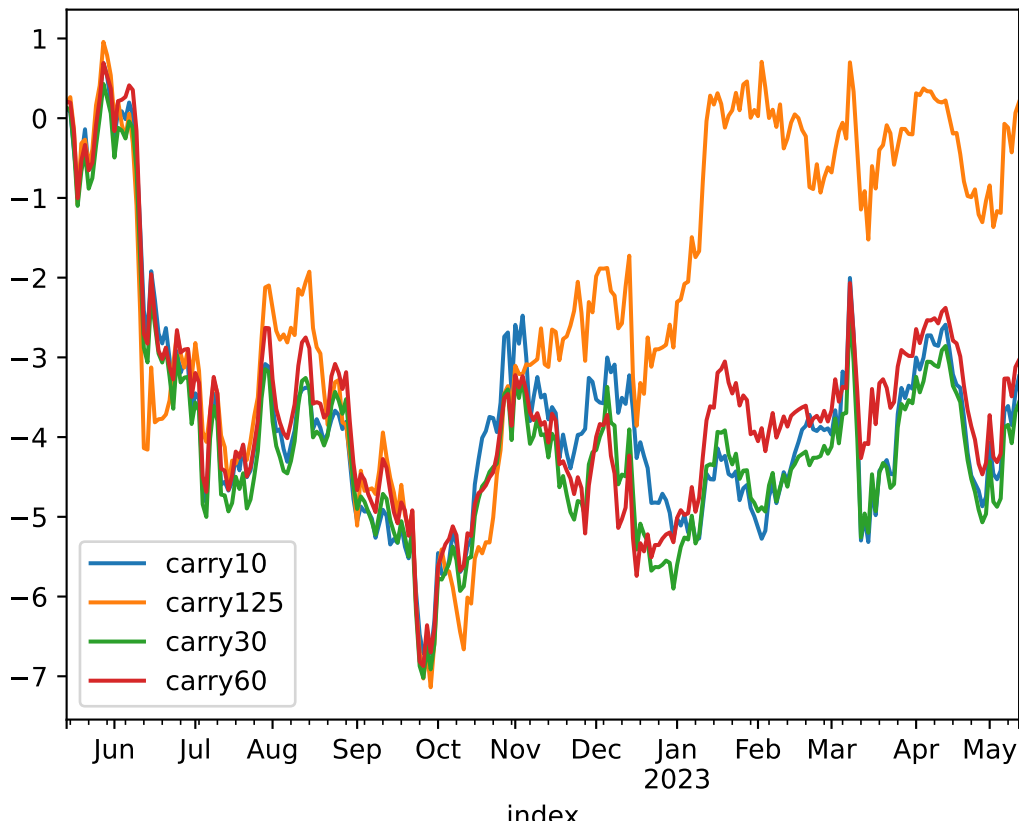
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.635, 'relmomentum20': 1.095, 'relmomentum40': 3.627, 'relmomentum80': 2.328}
ann. std {'relmomentum10': 13.384, 'relmomentum20': 10.466, 'relmomentum40': 9.636, 'relmomentum80': 9.78}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 5.553, 'carry125': 8.388, 'carry30': 6.37, 'carry60': 6.231}
ann. std {'carry10': 5.928, 'carry125': 5.655, 'carry30': 5.555, 'carry60': 5.074}
ann. SR {'carry10': 0.94, 'carry125': 1.48, 'carry30': 1.15, 'carry60': 1.23}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.189, 'carry125': 0.2, 'carry30': -3.507, 'carry60': -2.984}
ann. std {'carry10': 5.93, 'carry125': 6.466, 'carry30': 5.92, 'carry60': 5.867}
ann. SR {'carry10': -0.54, 'carry125': 0.03, 'carry30': -0.59, 'carry60': -0.51}

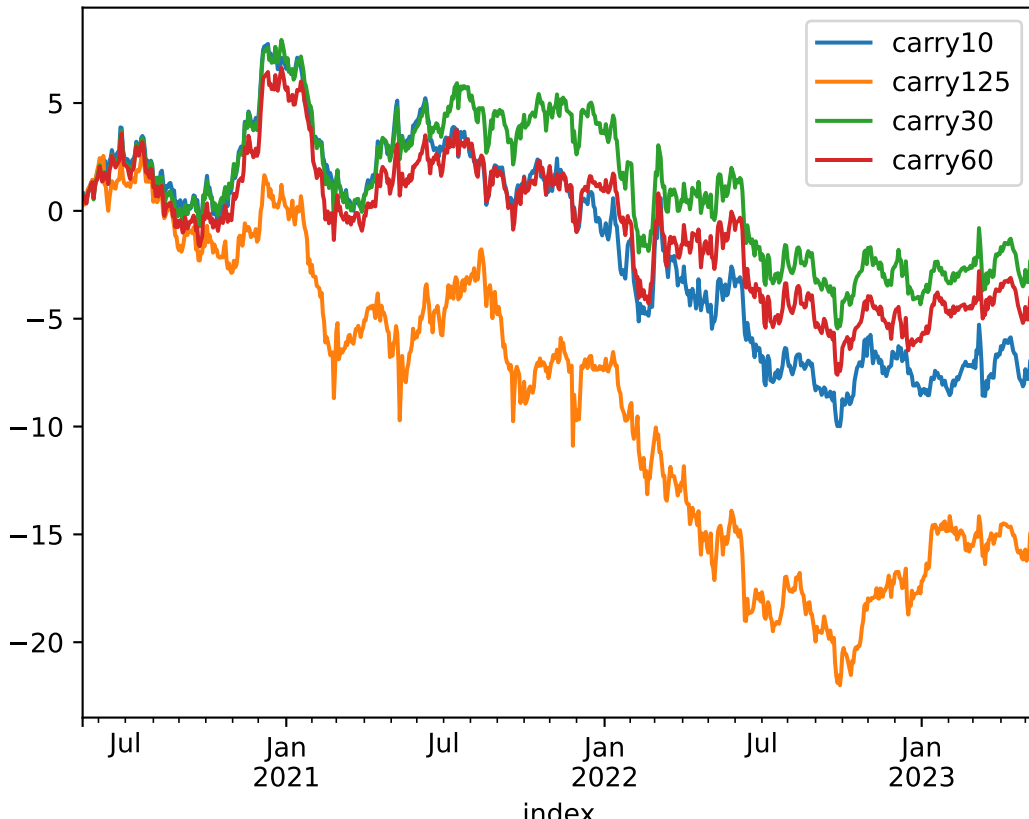


Total Trading Rule P&L for period '3Y'

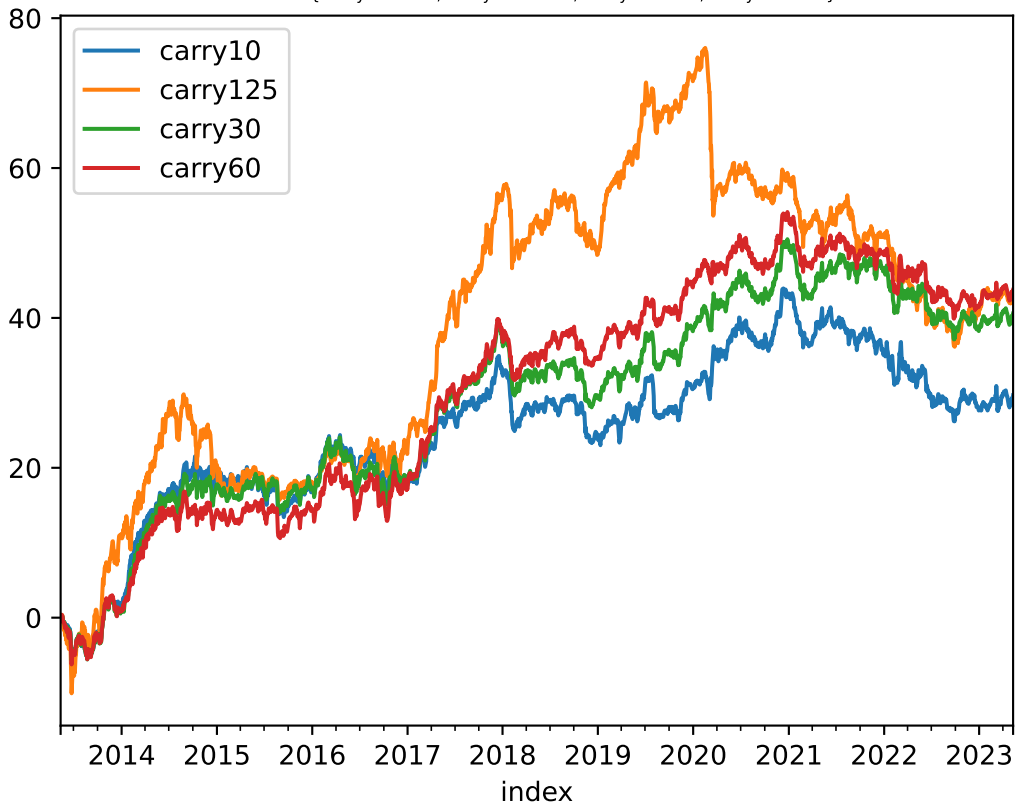
ann. mean {'carry10': -2.131, 'carry125': -4.798, 'carry30': -0.653, 'carry60': -1.231}

ann. std {'carry10': 6.546, 'carry125': 8.016, 'carry30': 6.482, 'carry60': 6.476}

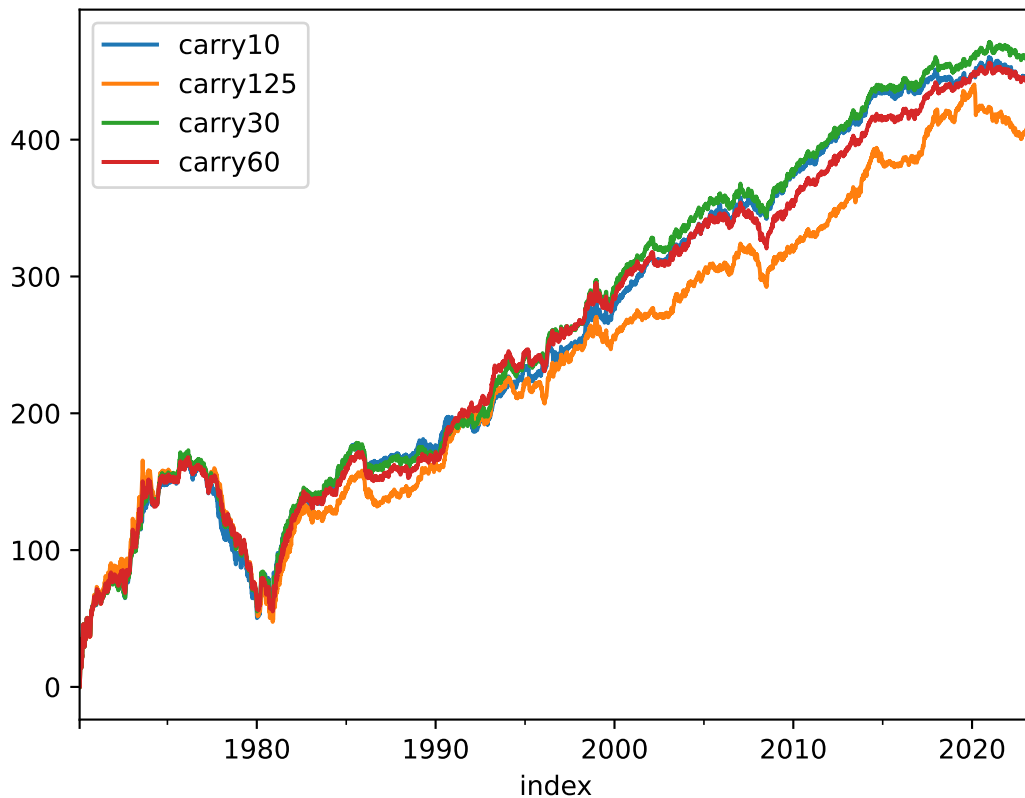
ann. SR {'carry10': -0.33, 'carry125': -0.6, 'carry30': -0.1, 'carry60': -0.19}



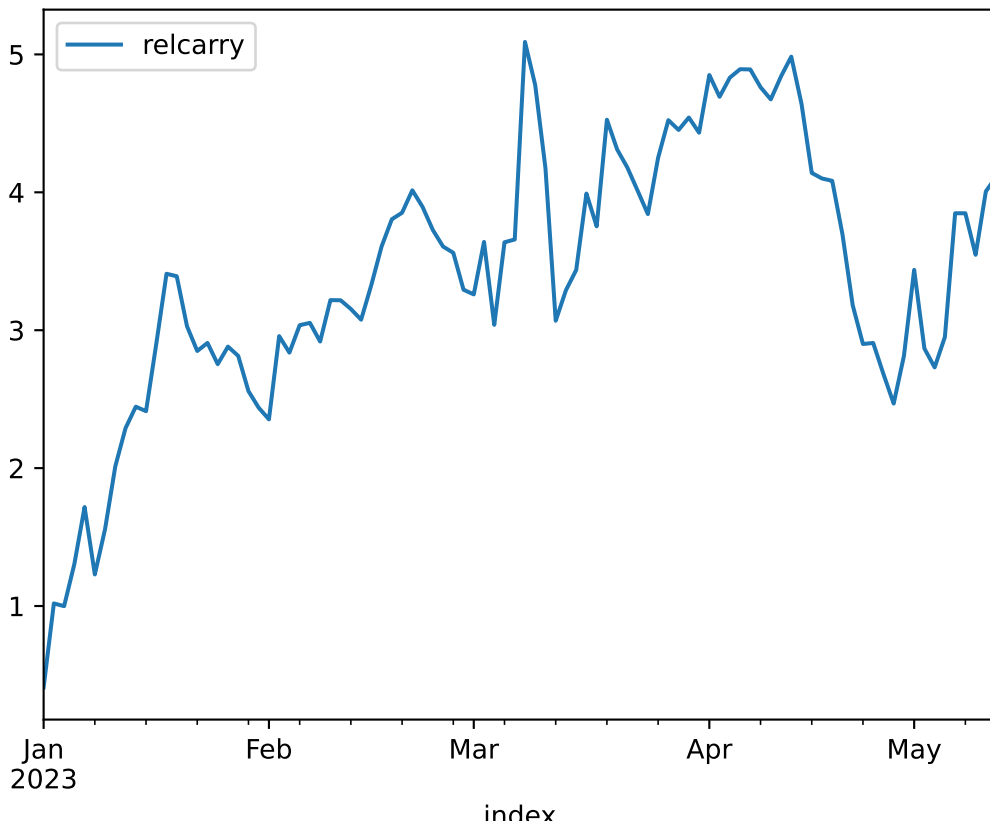
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.913, 'carry125': 4.268, 'carry30': 3.982, 'carry60': 4.292}
ann. std {'carry10': 6.367, 'carry125': 8.948, 'carry30': 6.453, 'carry60': 6.399}
ann. SR {'carry10': 0.46, 'carry125': 0.48, 'carry30': 0.62, 'carry60': 0.67}



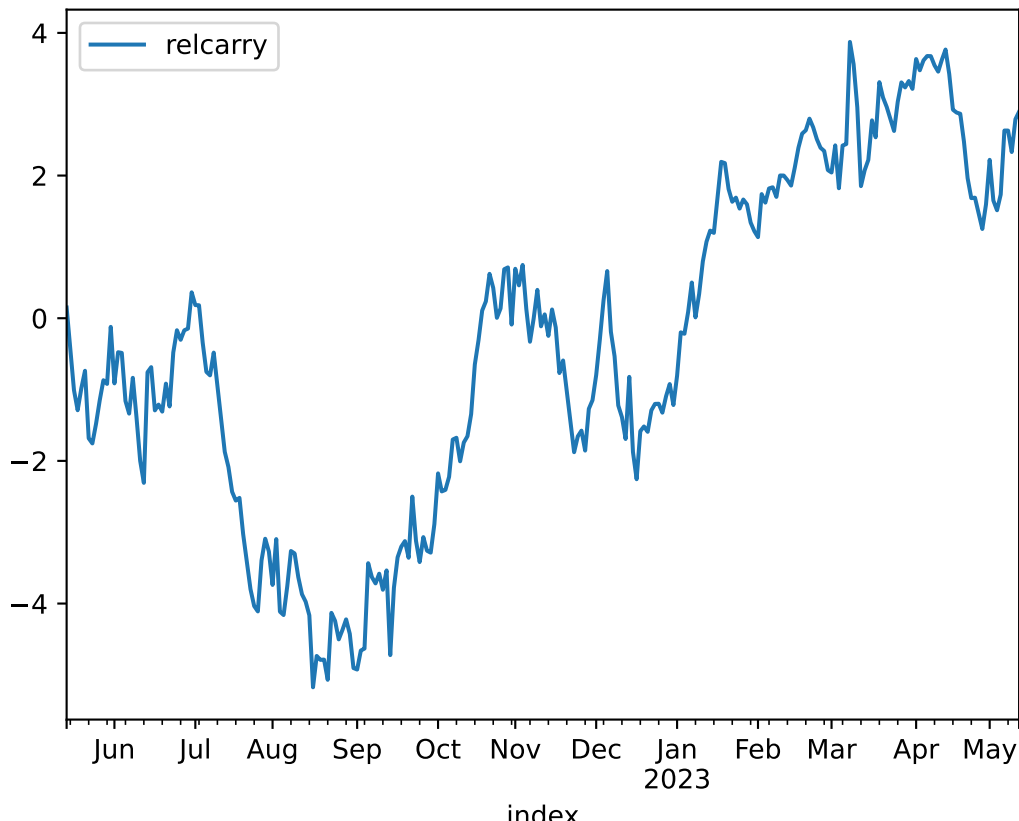
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.215, 'carry125': 7.511, 'carry30': 8.501, 'carry60': 8.212}
ann. std {'carry10': 11.198, 'carry125': 11.555, 'carry30': 11.255, 'carry60': 11.258}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



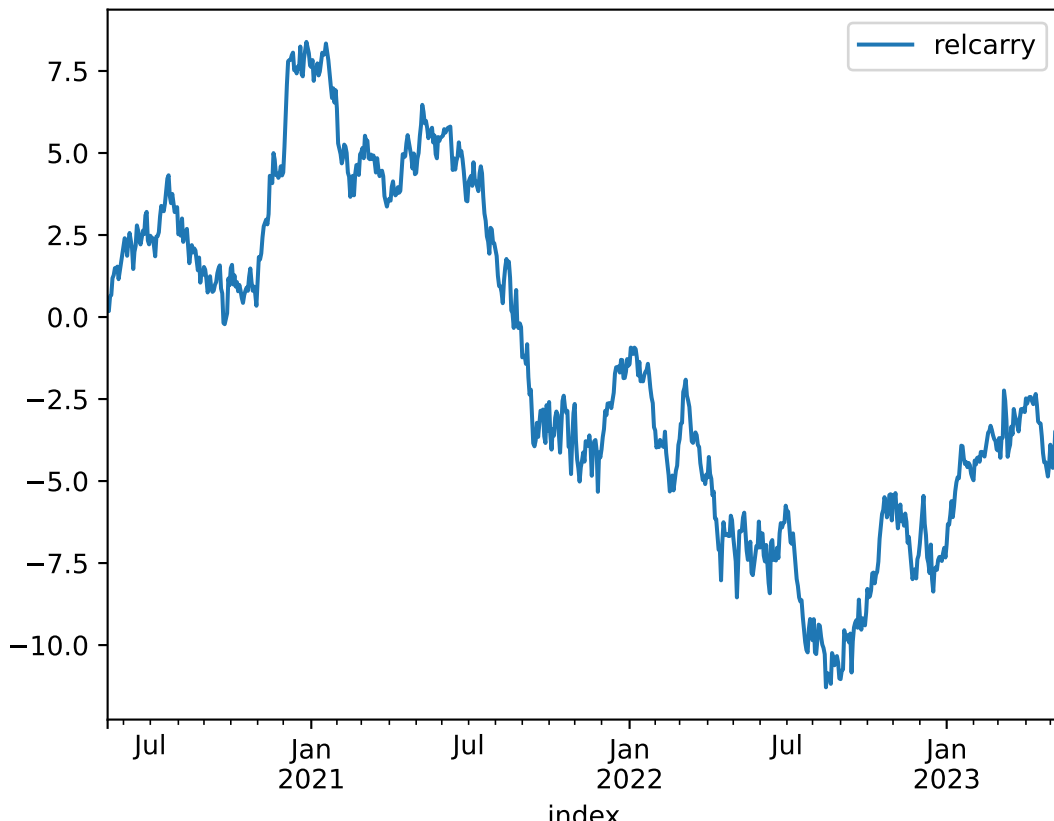
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 11.199}
ann. std {'relcarry': 5.808}
ann. SR {'relcarry': 1.93}



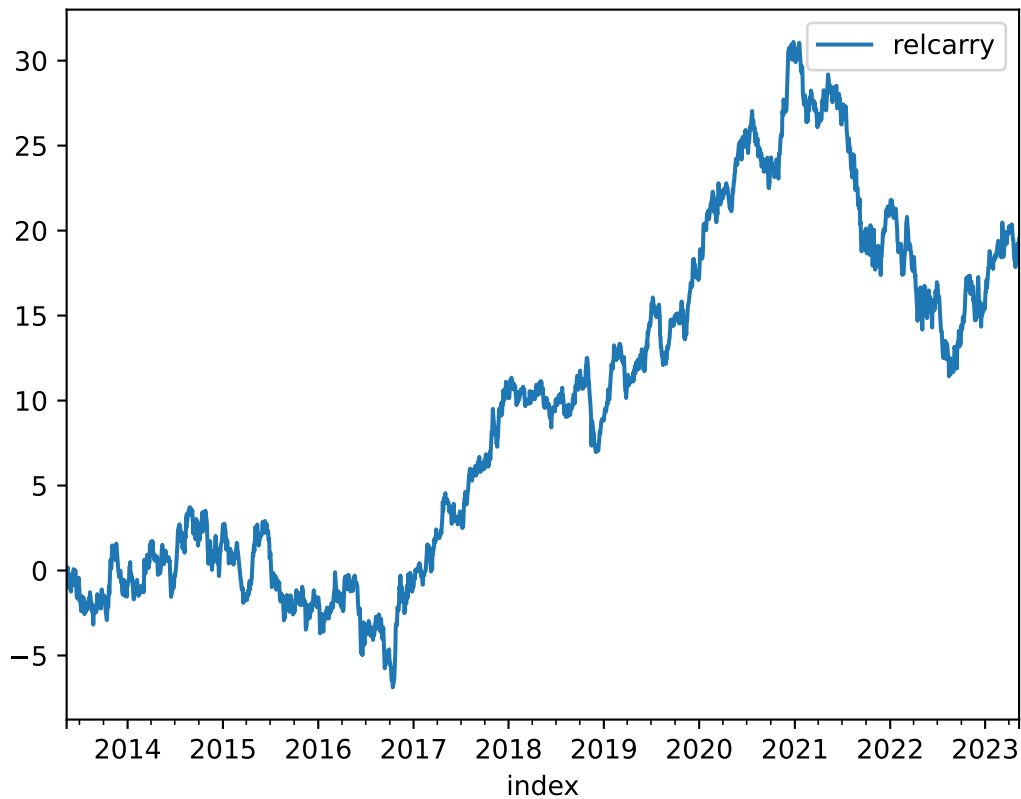
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 2.851}
ann. std {'relcarry': 6.801}
ann. SR {'relcarry': 0.42}



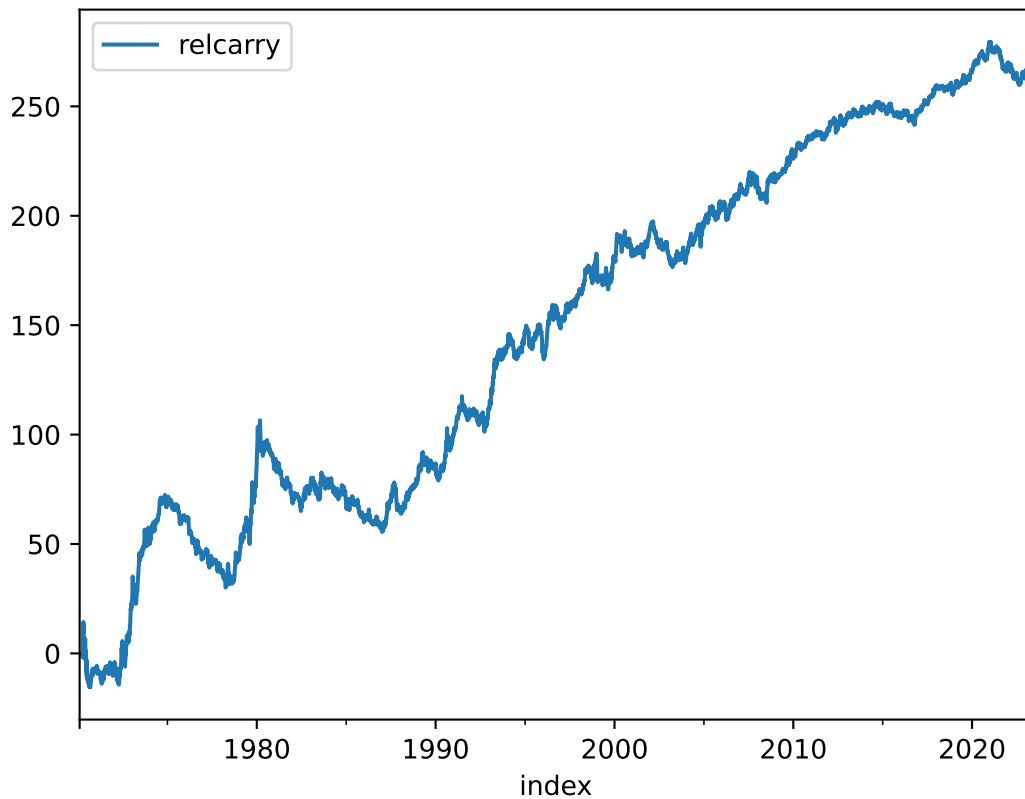
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.053}
ann. std {'relcarry': 6.683}
ann. SR {'relcarry': -0.16}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.913}
ann. std {'relcarry': 5.823}
ann. SR {'relcarry': 0.33}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.934}
ann. std {'relcarry': 8.959}
ann. SR {'relcarry': 0.55}

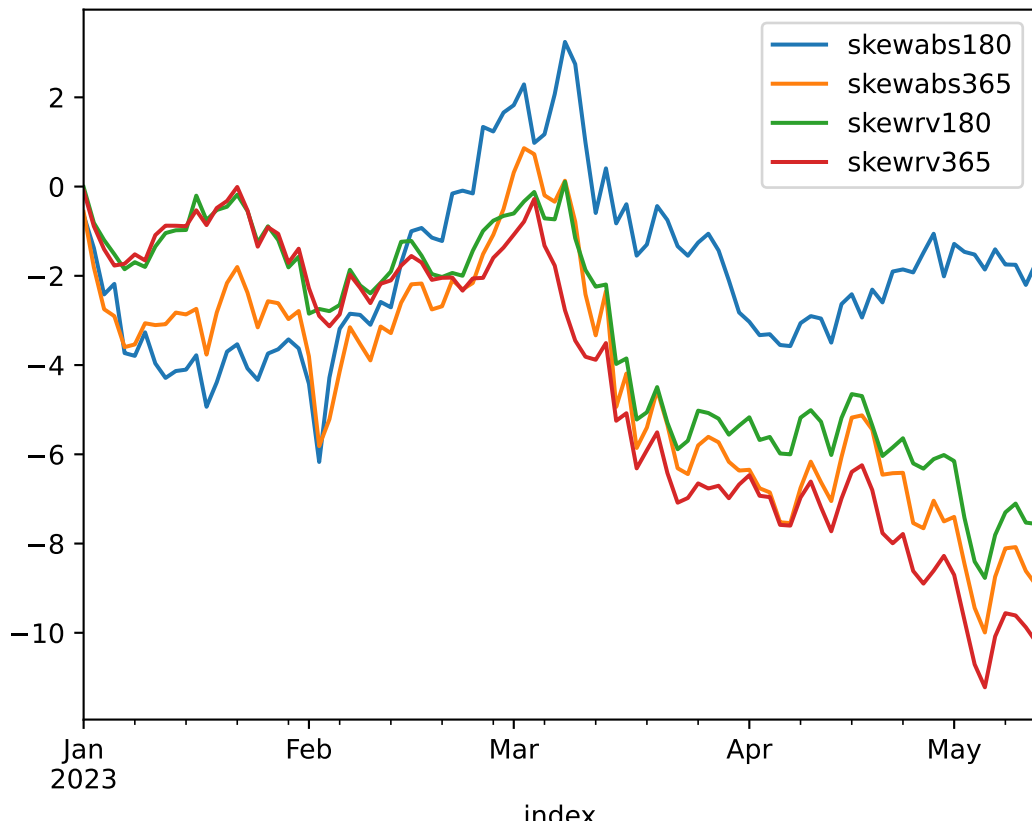


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': -4.645, 'skewabs365': -24.317, 'skewrv180': -20.588, 'skewrv365': -27.79}

ann. std {'skewabs180': 11.072, 'skewabs365': 11.681, 'skewrv180': 8.407, 'skewrv365': 8.284}

ann. SR {'skewabs180': -0.42, 'skewabs365': -2.08, 'skewrv180': -2.45, 'skewrv365': -3.35}

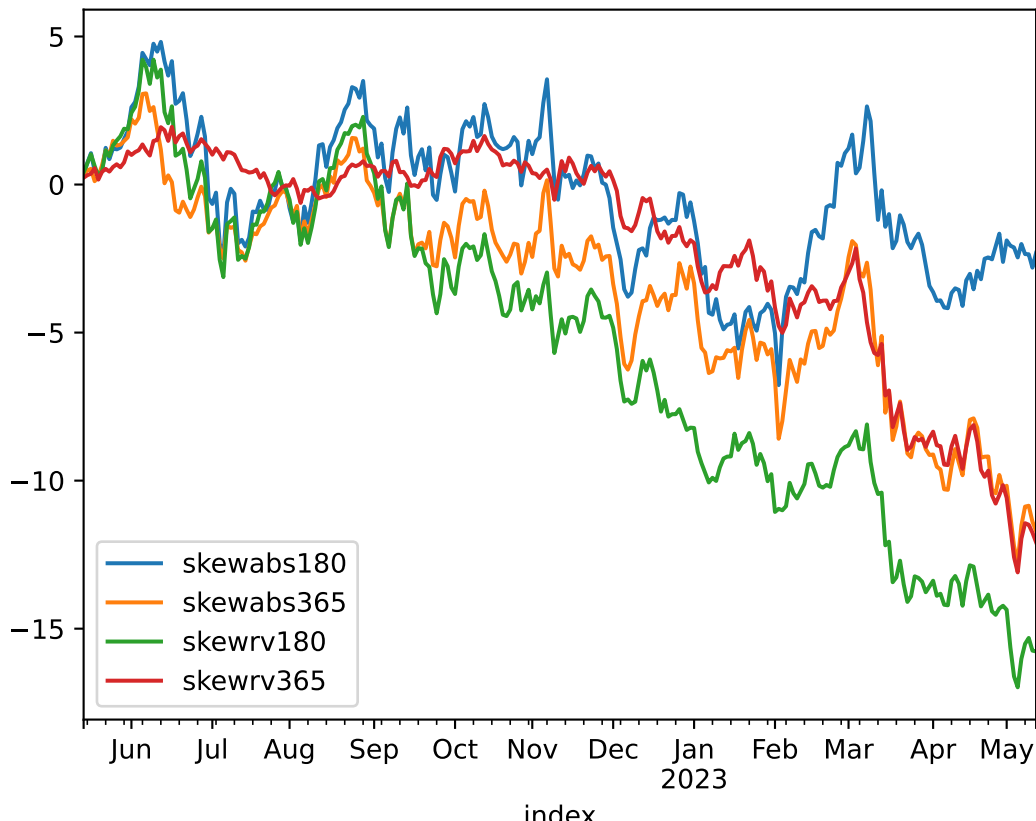


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -2.273, 'skewabs365': -11.519, 'skewrv180': -15.527, 'skewrv365': -11.895}

ann. std {'skewabs180': 11.04, 'skewabs365': 9.994, 'skewrv180': 9.412, 'skewrv365': 6.066}

ann. SR {'skewabs180': -0.21, 'skewabs365': -1.15, 'skewrv180': -1.65, 'skewrv365': -1.96}

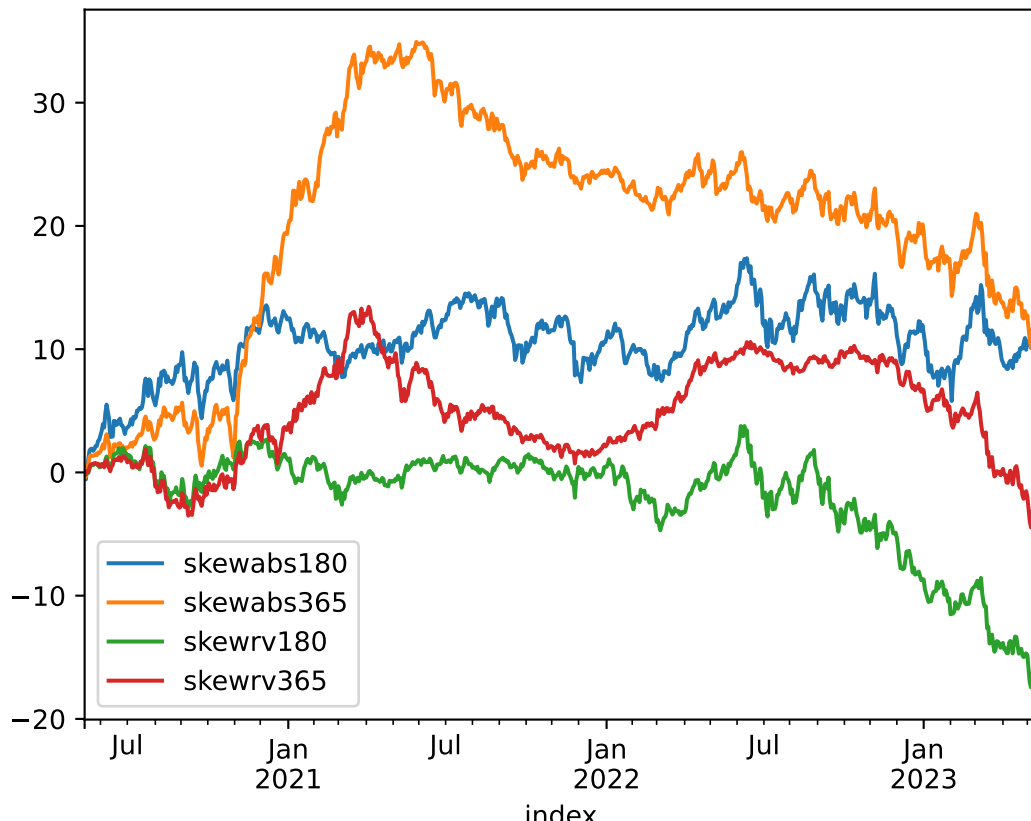


Total Trading Rule P&L for period '3Y'

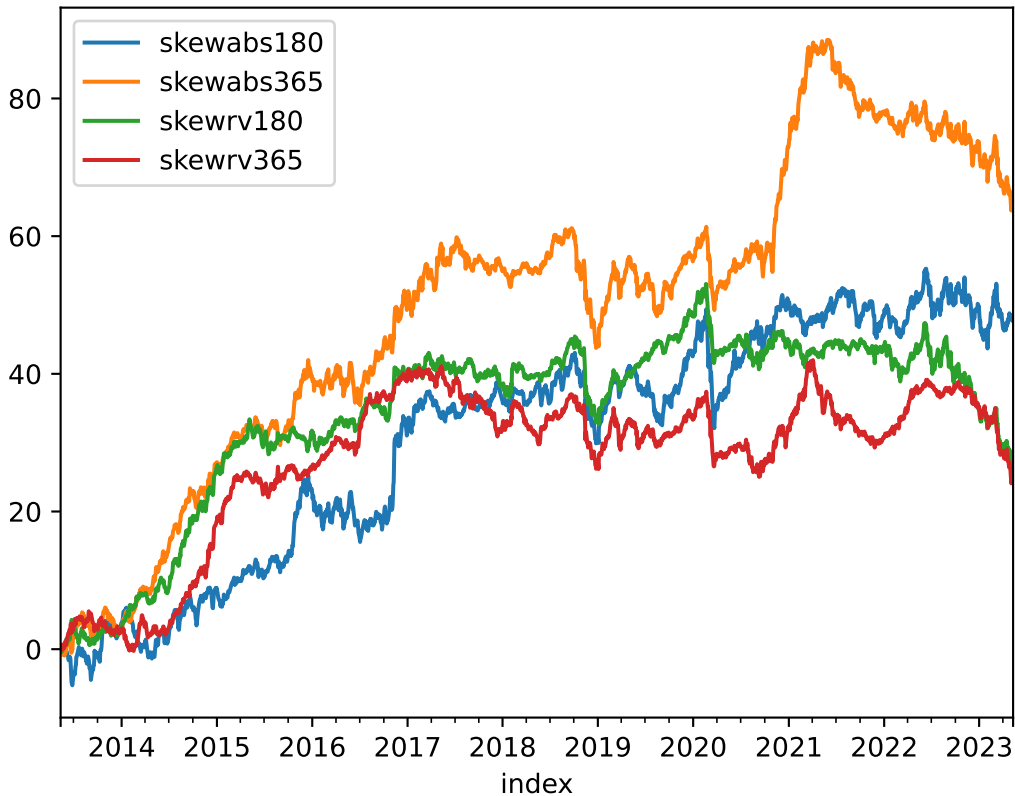
ann. mean {'skewabs180': 3.358, 'skewabs365': 3.668, 'skewrv180': -5.312, 'skewrv365': -1.129}

ann. std {'skewabs180': 9.14, 'skewabs365': 8.996, 'skewrv180': 7.327, 'skewrv365': 6.449}

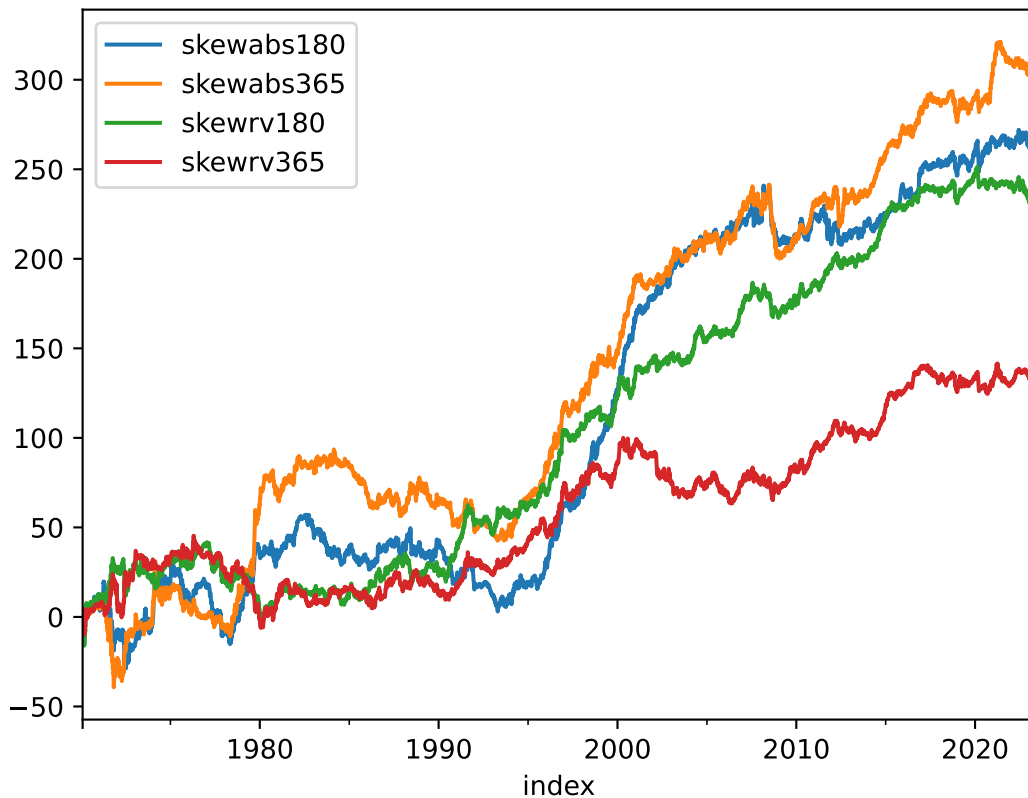
ann. SR {'skewabs180': 0.37, 'skewabs365': 0.41, 'skewrv180': -0.72, 'skewrv365': -0.18}



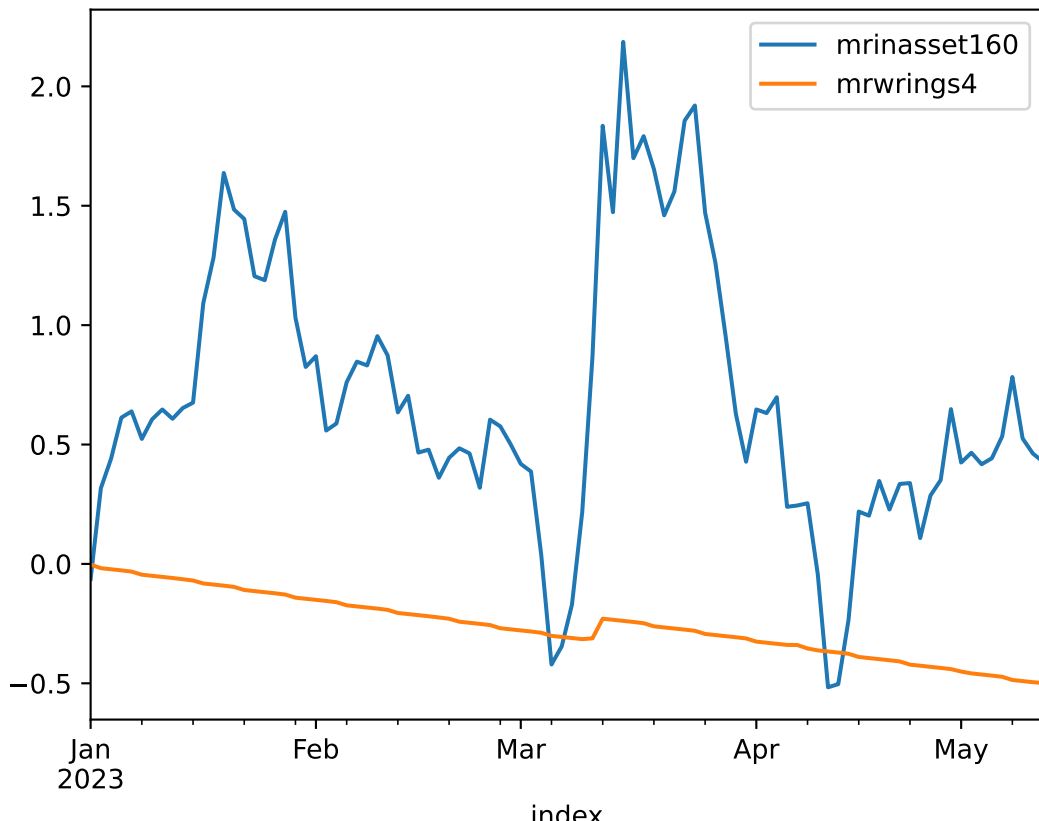
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.724, 'skewabs365': 6.356, 'skewrv180': 2.684, 'skewrv365': 2.464}
ann. std {'skewabs180': 8.018, 'skewabs365': 7.971, 'skewrv180': 6.415, 'skewrv365': 6.078}
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.8, 'skewrv180': 0.42, 'skewrv365': 0.41}



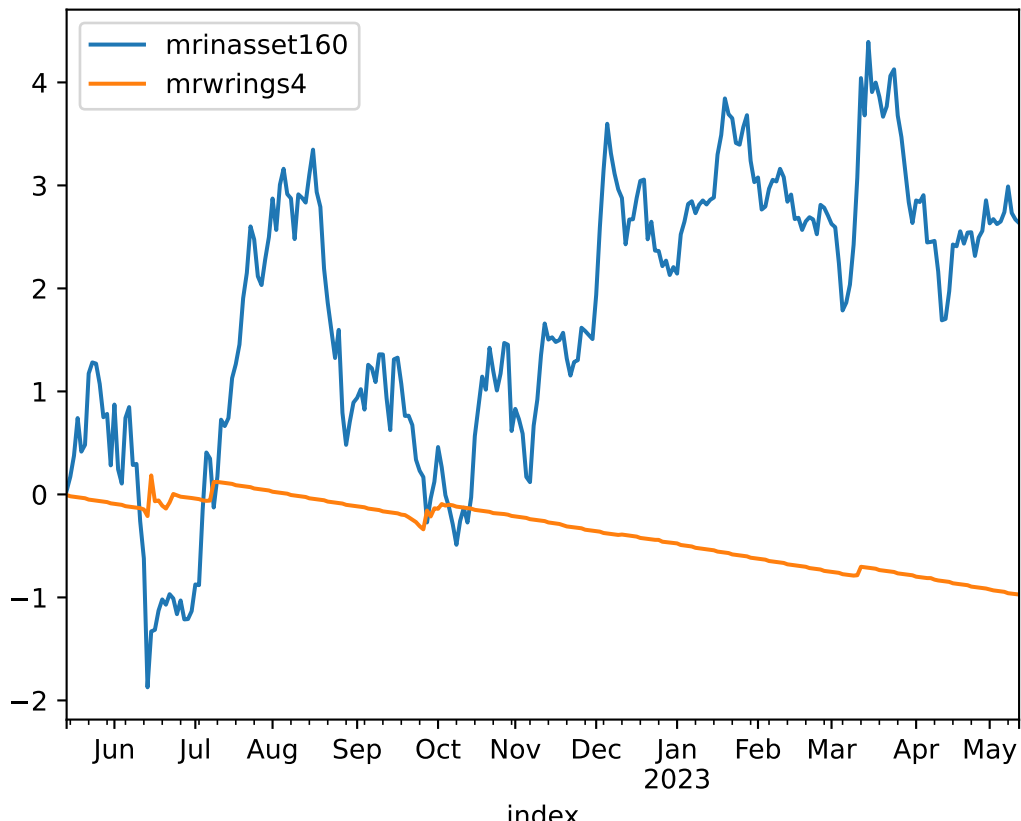
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.877, 'skewabs365': 5.478, 'skewrv180': 4.157, 'skewrv365': 2.296}
ann. std {'skewabs180': 10.099, 'skewabs365': 9.871, 'skewrv180': 8.752, 'skewrv365': 8.127}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.55, 'skewrv180': 0.47, 'skewrv365': 0.28}



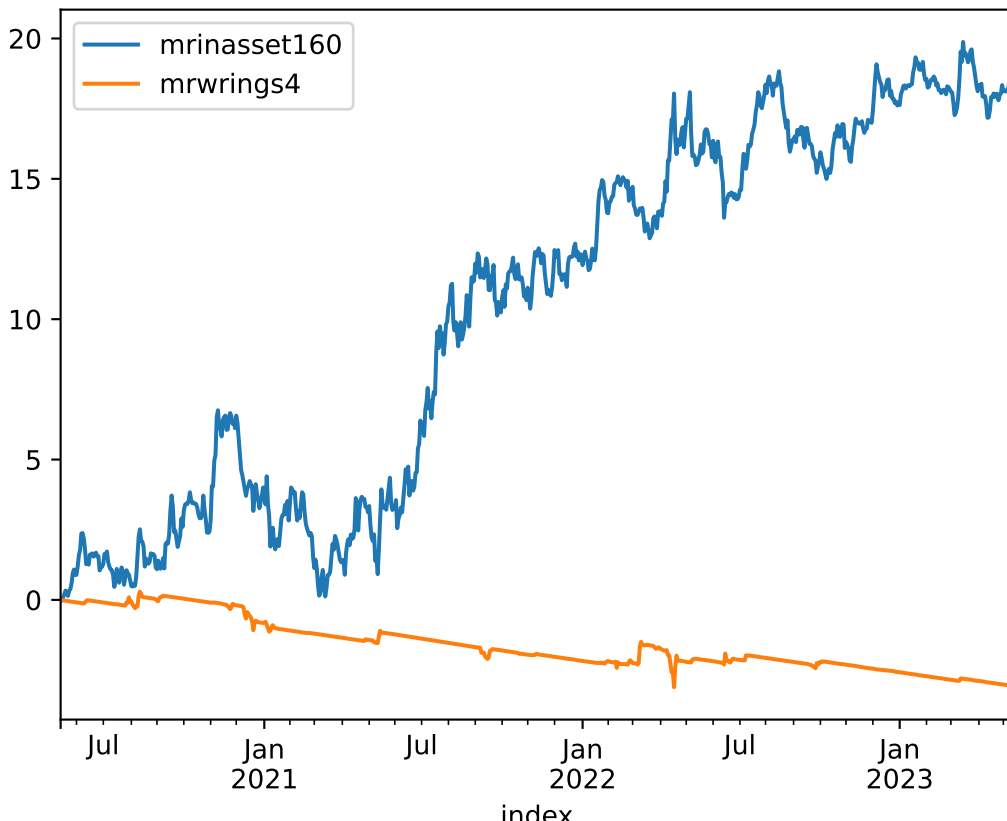
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 1.165, 'mrwrings4': -1.359}
ann. std {'mrinasset160': 4.07, 'mrwrings4': 0.157}
ann. SR {'mrinasset160': 0.29, 'mrwrings4': -8.65}



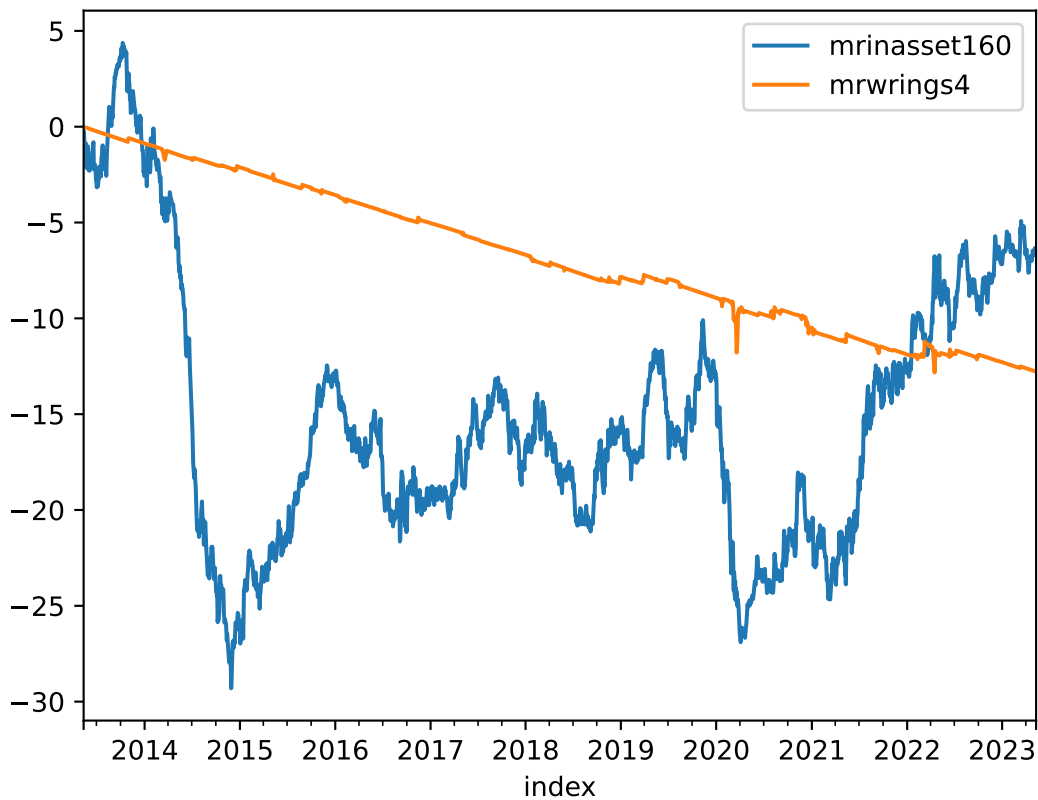
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 2.594, 'mrwrings4': -0.957}
ann. std {'mrinasset160': 4.794, 'mrwrings4': 0.574}
ann. SR {'mrinasset160': 0.54, 'mrwrings4': -1.67}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 5.932, 'mrwrings4': -1.004}
ann. std {'mriasset160': 6.258, 'mrwrings4': 1.017}
ann. SR {'mriasset160': 0.95, 'mrwrings4': -0.99}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.655, 'mrwrings4': -1.254}
ann. std {'mrinasset160': 6.192, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.11, 'mrwrings4': -1.43}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.561, 'mrwrings4': -2.167}
ann. std {'mrinasset160': 9.864, 'mrwrings4': 2.087}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.04}

