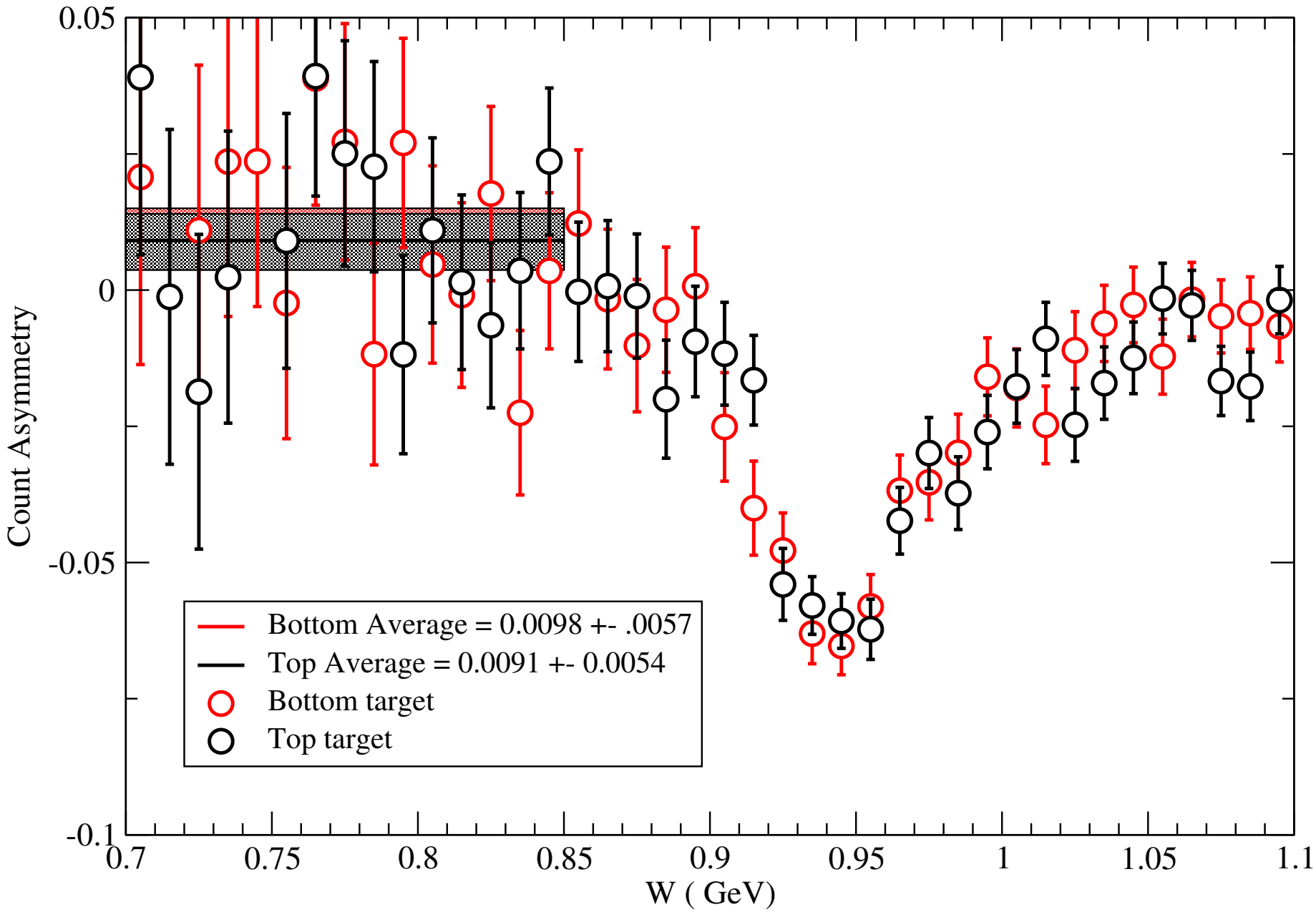Perpendicular target field