```
%10:
                                                                                                                                                              %mul.i.i = shl i64 %7, 5
                                                                                                                                                              %mul3.i.i = shl i64 %8, 3
                                                                                                                                                              %sub.i = add nsw i32 %2, -1, !llvm.access.group !12
                                                                                                                                                              %cmp.i = icmp sgt i32 %sub.i, %5, !llvm.access.group !12
                                                                                                                                                              %sub4.i = add nsw i32 %3, -1, !llvm.access.group !12
                                                                                                                                                              %sub8.i = add nsw i32 %4, -1
                                                                                                                                                              %cmp12.i = icmp sgt i32 %5, 0
                                                                                                                                                              %mul189.i = mul i32 %5, %3
                                                                                                                                                              %sub20.i = add nsw i32 %5, -1
                                                                                                                                                              %mul.i = mul nsw i32 %4, %3
                                                                                                                                                              %mul21.i = mul nsw i32 %sub20.i, %mul.i
                                                                                                                                                              %add27.i = add nuw nsw i32 %5, 1
                                                                                                                                                              %mul29.i = mul nsw i32 %add27.i, %mul.i
                                                                                                                                                              %mul84.i = mul nsw i32 %mul.i, %5
                                                                                                                                                              br label %pregion for entry.pregion for init.i
                                                                                                                                                 pregion for entry.pregion for init.i:
                                                                                                                                                  \%_{local\_id\_y.0} = phi i64 [0, \%10], [\%39, \%pregion_for_end.i]
                                                                                                                                                  %add6.i.i = add nuw nsw i64 %_local_id_y.0, %mul3.i.i, !llvm.access.group !12
                                                                                                                                                  %conv2.i = trunc i64 %add6.i.i to i32, !llvm.access.group !12
                                                                                                                                                  %cmp5.i = icmp sgt i32 %sub4.i, %conv2.i, !llvm.access.group !12
                                                                                                                                                  %or.cond334.i = and i1 %cmp.i, %cmp5.i, !llvm.access.group !12
                                                                                                                                                 %cmp15.i = icmp sgt i32 %conv2.i, 0
%reass.add.i = add i32 %mul189.i, %conv2.i
                                                                                                                                                  %reass.mul.i = mul i32 %reass.add.i, %4
                                                                                                                                                  %sub22.i = add nsw i32 %conv2.i, -1
                                                                                                                                                  %mul23.i = mul nsw i32 %sub22.i, %4
                                                                                                                                                  %add.i = add nsw i32 %mul23.i, %mul21.i
                                                                                                                                                  %add32.i = add nsw i32 %mul23.i, %mul29.i
                                                                                                                                                  %mul97.i = mul nsw i32 %conv2.i, %4
                                                                                                                                                  %add107.i = add nuw nsw i32 %conv2.i, 1
                                                                                                                                                  %mul108.i = mul nsw i32 %add107.i, %4
                                                                                                                                                  br label %pregion for entry.entry.i
                                                                                                                      pregion for entry.entry.i:
                                                                                                                       % local id x.0 = phi i64 [ 0, %pregion for entry pregion for init.i ], [
                                                                                                                      ... \( \frac{1}{3} \) \( \frac{1} \) \( \frac{1} \) \( \frac{1} \) \( \frac{1} \) \(
                                                                                                                       %add1.i.i = add nuw nsw i64 % local id x.0, %mul.i.i, !llvm.access.group !12
                                                                                                                       %conv.i = trunc i64 %add1.i.i to i32, !llvm.access.group !12
                                                                                                                       br i1 %or.cond334.i, label %land.lhs.true7.i, label %if.else.i,
                                                                                                                      ...!llvm.access.group!12
                                                                                                                                                                                               F
                                                                              land.lhs.true7.i:
                                                                               %cmp9.i = icmp sgt i32 %sub8.i, %conv.i, !llvm.access.group !12
                                                                               %or.cond.i = and i1 %cmp12.i, %cmp9.i, !llvm.access.group !12
                                                                               %or.cond195.i = and i1 %cmp15.i, %or.cond.i, !llvm.access.group !12
                                                                               %cmp18.i = icmp sgt i32 %conv.i, 0, !llvm.access.group !12
                                                                               %or.cond196.i = and i1 %cmp18.i, %or.cond195.i, !llvm.access.group !12
                                                                               br i1 %or.cond196.i, label %if.then.i, label %if.else.i, !llvm.access.group
if.then.i:
%sub24.i = add nsw i32 %conv.i, -1, !llvm.access.group !12
%add25.i = add nsw i32 %sub24.i, %add.i, !llvm.access.group !12
%idxprom.i = sext i32 %add25.i to i64, !llvm.access.group !12
%arrayidx.i = getelementptr inbounds float, float* %0, i64 %idxprom.i,
 ..!llvm.access.group!12
%11 = load float, float* %arrayidx.i, align 4, !tbaa !15, !llvm.access.group
... !12
%add34.i = add nsw i32 %sub24.i, %add32.i, !llvm.access.group !12
%idxprom35.i = sext i32 %add34.i to i64, !llvm.access.group !12
%arrayidx36.i = getelementptr inbounds float, float* %0, i64 %idxprom35.i,
 ..!llvm.access.group!12
%12 = load float, float* %arrayidx36.i, align 4, !tbaa !15,
 ..!llvm.access.group!12
%mul37.i = fmul float %12, 4.000000e+00, !llvm.access.group !12
%13 = tail call float @llvm.fmuladd.f32(float %11, float 2.000000e+00, float
 . %mul37.i) #3, !llvm.access.group !12
%14 = tail call float @llvm.fmuladd.f32(float %11, float 5.000000e+00, float
 .. %13) #3, !llvm.access.group !12
%15 = tail call float @llvm.fmuladd.f32(float %12, float 7.000000e+00, float
 .. %14) #3, !llvm.access.group !12
%16 = tail call float @llvm.fmuladd.f32(float %11, float -8.000000e+00,
... float %15) #3, !llvm.access.group !12
%17 = tail call float @llvm.fmuladd.f32(float %12, float 1.000000e+01, float
 . %16) #3, !llvm.access.group !12
%add87.i = add i32 %mul84.i, %conv.i, !llvm.access.group !12 %add89.i = add i32 %add87.i, %mul23.i, !llvm.access.group !12
%idxprom90.i = sext i32 %add89.i to i64, !llvm.access.group !12
%arrayidx91.i = getelementptr inbounds float, float* %0, i64 %idxprom90.i,
... !llvm.access.group !12
%18 = load float, float* %arrayidx91.i, align 4, !tbaa !15,
...!llvm.access.group!12
%19 = tail call float @llvm.fmuladd.f32(float %18, float -3.000000e+00,
 .. float %17) #3, !llvm.access.group !12
%add100.i = add i32 %add87.i, %mul97.i, !llvm.access.group !12
%idxprom101.i = sext i32 %add100.i to i64, !llvm.access.group !12
%arrayidx102.i = getelementptr inbounds float, float* %0, i64 %idxprom101.i,
 .. !llvm.access.group !12
%20 = load float, float* %arrayidx102.i, align 4, !tbaa !15,
 ..!llvm.access.group!12
%21 = tail call float @llvm.fmuladd.f32(float %20, float 6.000000e+00, float
... %19) #3, !llvm.access.group !12
%add111.i = add i32 %add87.i, %mul108.i, !llvm.access.group !12
%idxprom112.i = sext i32 %add111.i to i64, !llvm.access.group !12
%arrayidx113.i = getelementptr inbounds float, float* %0, i64 %idxprom112.i,
 ..!llvm.access.group!12
%22 = load float, float* %arrayidx113.i, align 4, !tbaa !15,
 ..!llvm.access.group!12
%23 = tail call float @llvm.fmuladd.f32(float %22, float -9.000000e+00,
... float %21) #3, !llvm.access.group !12
                                                                                                         if.else.i:
%add121.i = add nuw nsw i32 %conv.i, 1, !llvm.access.group !12
                                                                                                          %add192.i = add i32 %reass.mul.i, %conv.i, !llvm.access.group !12
%add122.i = add nsw i32 %add121.i, %add.i, !llvm.access.group !12
                                                                                                          %idxprom193.i = sext i32 %add192.i to i64, !llvm.access.group !12
%idxprom123.i = sext i32 %add122.i to i64, !llvm.access.group !12
                                                                                                          br label %if.end.r exit.i, !llvm.access.group !12
%arrayidx124.i = getelementptr inbounds float, float* %0, i64 %idxprom123.i,
...!llvm.access.group!12
%24 = load float, float* %arrayidx124.i, align 4, !tbaa !15,
 ..!llvm.access.group!12
%25 = tail call float @llvm.fmuladd.f32(float %24, float 2.000000e+00, float
... %23) #3, !llvm.access.group !12
%add133.i = add nsw i32 %add121.i, %add32.i, !llvm.access.group !12
%idxprom134.i = sext i32 %add133.i to i64, !llvm.access.group !12
%arrayidx135.i = getelementptr inbounds float, float* %0, i64 %idxprom134.i,
...!llvm.access.group!12
%26 = load float, float* %arrayidx135.i, align 4, !tbaa !15,
...!llvm.access.group!12
%27 = tail call float @llvm.fmuladd.f32(float %26, float 4.000000e+00, float
... %25) #3, !llvm.access.group !12
%add142.i = add i32 %add121.i, %mul21.i, !llvm.access.group !12
%add144.i = add i32 %add142.i, %mul97.i, !llvm.access.group !12
%idxprom145.i = sext i32 %add144.i to i64, !llvm.access.group !12
%arrayidx146.i = getelementptr inbounds float, float* %0, i64 %idxprom145.i,
 ..!llvm.access.group!12
%28 = load float, float* %arrayidx146.i, align 4, !tbaa !15,
 ..!llvm.access.group!12
%29 = tail call float @llvm.fmuladd.f32(float %28, float 5.000000e+00, float
... %27) #3, !llvm.access.group !12
%add153.i = add i32 %add121.i, %mul29.i, !llvm.access.group !12
%add155.i = add i32 %add153.i, %mul97.i, !llvm.access.group !12
%idxprom156.i = sext i32 %add155.i to i64, !llvm.access.group !12
%arrayidx157.i = getelementptr inbounds float, float* %0, i64 %idxprom156.i,
 ..!llvm.access.group!12
%30 = load float, float* %arrayidx157.i, align 4, !tbaa !15,
...!llvm.access.group!12
%31 = tail call float @llvm.fmuladd.f32(float %30, float 7.000000e+00, float
 .. %29) #3, !llvm.access.group !12
%add166.i = add i32 %add142.i, %mul108.i, !llvm.access.group !12 %idxprom167.i = sext i32 %add166.i to i64, !llvm.access.group !12
%arrayidx168.i = getelementptr inbounds float, float* %0, i64 %idxprom167.i,
 ..!llvm.access.group!12
%32 = load float, float* %arrayidx168.i, align 4, !tbaa !15,
...!llvm.access.group!12
%33 = tail call float @llvm.fmuladd.f32(float %32, float -8.000000e+00,
 .. float %31) #3, !llvm.access.group !12
%add177.i = add i32 %add153.i, %mul108.i, !llvm.access.group !12
%idxprom178.i = sext i32 %add177.i to i64, !llvm.access.group !12
%arrayidx179.i = getelementptr inbounds float, float* %0, i64 %idxprom178.i,
 ..!llvm.access.group!12
%34 = load float, float* %arrayidx179.i, align 4, !tbaa !15,
...!llvm.access.group!12
%35 = tail call float @llvm.fmuladd.f32(float %34, float 1.000000e+01, float
 .. %33) #3, !llvm.access.group !12
br label %if.end.r exit.i, !llvm.access.group !12
                                                                                                                 if.end.r exit.i:
                                                                                                                 \%36 = \text{phi float} [0.000000e+00, \%if.else.i], [\%35, \%if.then.i]
                                                                                                                 %37 = phi i64 [ %idxprom193.i, %if.else.i ], [ %idxprom101.i, %if.then.i ]
                                                                                                                 %arrayidx194.i = getelementptr inbounds float, float* %1, i64 %37,
                                                                                                                 ...!llvm.access.group!12
                                                                                                                 store float %36, float* %arrayidx194.i, align 4, !tbaa !15,
                                                                                                                 ...!llvm.access.group!12
                                                                                                                 %38 = add nuw nsw i64 % local id x.0, 1
                                                                                                                 \%exitcond.not = icmp eq i64 \%38, 32
                                                                                                                 br i1 %exitcond.not, label %pregion_for_end.i, label
                                                                                                                 ... %pregion for entry.entry.i, !llvm.loop 119
                                                                                                                                                                                      F
                                                                                                                                 pregion for end.i:
                                                                                                                                  %39 = add nuw nsw i64 %_local_id_y.0, 1
                                                                                                                                  \%exitcond1.not = icmp eq \overline{i}64 \%\overline{3}9, 8
                                                                                                                                  br i1 %exitcond1.not, label %Convolution3D_kernel.exit, label
                                                                                                                                  ... %pregion for entry.pregion for init.i, !llvm.loop !22
                                                                                                                                  Convolution3D kernel.exit:
```