%prep1 = getelementptr inbounds %struct.jpeg_compress_struct, ... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 53 %0 = bitcast %struct.jpeg_c_prep_controller** %prep1 to ... %struct.my_prep_controller** %1 = load %struct.my_prep_controller*, %struct.my_prep_controller** %0, ... align 8, !tbaa !3 %2 = load i32, i32* %in_row_ctr, align 4, !tbaa !11 %cmp119 = icmp ult i32 %2, %in_rows_avail br i1 %cmp119, label %land.rhs.lr.ph, label %while.end, !prof !12 land.rhs.lr.ph: %max_v_samp_factor = getelementptr inbounds %struct.jpeg_compress_struct, ... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 39 %next_buf_row = getelementptr inbounds %struct.my_prep_controller, .. %struct.my_prep_controller* %1, i64 0, i32 3 %cconvert = getelementptr inbounds %struct.jpeg_compress_struct, ... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 56 %arraydecay = getelementptr inbounds %struct.my_prep_controller, ... %struct.my_prep_controller* %1, i64 0, i32 1, i64 0 %rows_to_go = getelementptr inbounds %struct.my_prep_controller, ... %struct.my_prep_controller* %1, i64 0, i32 2 %num_components = getelementptr inbounds %struct.jpeg_compress_struct, .. %struct.jpeg compress struct* %cinfo, i64 0, i32 12 %image_width = getelementptr inbounds %struct.jpeg_compress_struct, ... %struct.jpeg_compress_struct* %cinfo, i64 0, i32 6 %downsample = getelementptr inbounds %struct.jpeg_compress_struct, .. %struct.jpeg_compress_struct* %cinfo, i64 0, i32 57 %3 = bitcast i32* %rows_to_go to i64* br label %land.rhs land.rhs: %4 = phi i32 [%2, %land.rhs.lr.ph], [%32, %while.cond.backedge] %5 = load i32, i32* %out_row_group_ctr, align 4, !tbaa !11 %cmp2 = icmp ult i32 %5, %out_row_groups_avail br i1 %cmp2, label %while.body, label %while.end.loopexit, !prof!12 while.body: %sub = sub i32 %in_rows_avail, %4 %6 = load i32, i32* %max_v_samp_factor, align 4, !tbaa !13 %7 = load i32, i32* %next_buf_row, align 4, !tbaa !14 %sub3 = sub nsw i32 %6, %7 %cmp4 = icmp ult i32 %sub3, %sub %cond = select i1 %cmp4, i32 %sub3, i32 %sub %8 = load %struct.jpeg_color_converter*, %struct.jpeg_color_converter** ... %cconvert, align 8, !tbaa !17 %color_convert = getelementptr inbounds %struct.jpeg_color_converter, ... %struct.jpeg_color_converter* %8, i64 0, i32 1 %9 = load void (%struct.jpeg_compress_struct*, i8**, i8***, i32, i32)*, void ... (%struct.jpeg_compress_struct*, i8**, i8***, i32, i32)** %color_convert, ... align 8, !tbaa !18 %idx.ext = zext i32 %4 to i64 %add.ptr = getelementptr inbounds i8*, i8** %input_buf, i64 %idx.ext tail call void %9(%struct.jpeg_compress_struct* nonnull %cinfo, i8** ... %add.ptr, i8*** %arraydecay, i32 %7, i32 %cond) #3 %10 = load i32, i32* %in_row_ctr, align 4, !tbaa !11 %add = add i32 %10, %cond store i32 %add, i32* %in_row_ctr, align 4, !tbaa !11 %11 = load i32, i32* %next_buf_row, align 4, !tbaa !14 %add7 = add nsw i32 %11, %cond store i32 %add7, i32* %next_buf_row, align 4, !tbaa !14 %12 = load i64, i64* %3, align 8 %13 = trunc i64 %12 to i32 %sub8 = sub i32 %13, %cond store i32 %sub8, i32* %rows_to_go, align 8, !tbaa !20 %cmp10 = icmp eq i32 %13, %cond %14 = 1 shr i 64 % 12, 32%15 = trunc i64 %14 to i32 %16 = load i32, i32* %max_v_samp_factor, align 4, !tbaa !13 %cmp13 = icmp slt i32 %15, %16 %or.cond = and i1 %cmp10, %cmp13 br i1 %or.cond, label %for.cond.preheader, label %if.end, !prof !21 for.body: %18 = phi i32 [%23, %expand_bottom_edge.exit.for.body_crit_edge], [%17, ... %for.body.preheader] %19 = phi i32 [%.pre122, %expand_bottom_edge.exit.for.body_crit_edge], [... %16, %for.body.preheader %20 = phi i32 [%.pre, %expand_bottom_edge.exit.for.body_crit_edge], [%15, ... %for.body.preheader] %indvars.iv120 = phi i64 [%indvars.iv.next121, ... %expand_bottom_edge.exit.for.body_crit_edge], [0, %for.body.preheader] %arrayidx = getelementptr inbounds %struct.my_prep_controller, ... %struct.my_prep_controller* %1, i64 0, i32 1, i64 %indvars.iv120 %21 = load i8**, i8*** %arrayidx, align 8, !tbaa !23 %22 = load i32, i32* %image_width, align 8, !tbaa !24 %cmp6.i = icmp slt i32 %20, %19 br i1 %cmp6.i, label %for.body.lr.ph.i, label %expand_bottom_edge.exit for.body.lr.ph.i: %sub.i = add nsw i32 %20, -1br label %for.body.i for.body.i: %row.07.i = phi i32 [%20, %for.body.lr.ph.i], [%inc.i, %for.body.i] tail call void @jcopy_sample_rows(i8** %21, i32 %sub.i, i8** %21, i32 ... %row.07.i, i32 1, i32 %22) #3 %inc.i = add nsw i32 %row.07.i, 1 %exitcond.i = icmp eq i32 %inc.i, %19 br i1 %exitcond.i, label %expand_bottom_edge.exit.loopexit, label %for.body.i expand_bottom_edge.exit.loopexit: %.pre123 = load i32, i32* %num_components, align 4, !tbaa !22 br label %expand_bottom_edge.exit expand_bottom_edge.exit: %23 = phi i32 [%.pre123, %expand_bottom_edge.exit.loopexit], [%18, ... %for.body] %indvars.iv.next121 = add nuw nsw i64 %indvars.iv120, 1 %24 = sext i 32 % 23 to i 64%cmp14 = icmp slt i64 %indvars.iv.next121, %24 br i1 %cmp14, label %expand_bottom_edge.exit.for.body_crit_edge, label ... %for.end.loopexit F expand_bottom_edge.exit.for.body_crit_edge: %.pre = load i32, i32* %next_buf_row, align 4, !tbaa !14 %.pre122 = load i32, i32* %max_v_samp_factor, align 4, !tbaa !13 br label %for.body if.end: %cmp22 = icmp eq i32 %15, %16 br i1 %cmp22, label %if.then23, label %if.end29, !prof !25 if.then23: %26 = load %struct.jpeg_downsampler*, %struct.jpeg_downsampler** ... %downsample, align 8, !tbaa !26 %downsample24 = getelementptr inbounds %struct.jpeg_downsampler, ... %struct.jpeg_downsampler* %26, i64 0, i32 1 %27 = load void (%struct.jpeg_compress_struct*, i8***, i32, i8***, i32)*, ... void (%struct.jpeg_compress_struct*, i8***, i32, i8***, i32)** %downsample24, align 8, !tbaa !27 %28 = load i32, i32* %out_row_group_ctr, align 4, !tbaa !11 tail call void %27(%struct.jpeg_compress_struct* nonnull %cinfo, i8*** ... nonnull %arraydecay, i32 0, i8*** %output_buf, i32 %28) #3 store i32 0, i32* %next_buf_row, align 4, !tbaa !14 %29 = load i32, i32* %out_row_group_ctr, align 4, !tbaa !11 %inc28 = add i32 %29, 1 store i32 %inc28, i32* %out_row_group_ctr, align 4, !tbaa !11 br label %if.end29 if.end29: %30 = load i32, i32* %rows_to_go, align 8, !tbaa !20 %cmp31 = icmp eq i32 %30, 0 br i1 %cmp31, label %land.lhs.true32, label %while.cond.backedge, !prof !29 while.cond.backedge: %32 = load i32, i32* %in_row_ctr, align 4, !tbaa !11 %cmp = icmp ult i32 %32, %in_rows_avail br i1 %cmp, label %land.rhs, label %while.end.loopexit, !prof !12 while.end.loopexit: br label %while.end for.body38: %35 = phi i32 [%33, %for.body38.preheader], [%40, ... %expand_bottom_edge.exit113.for.body38_crit_edge] %36 = phi i32 [%.lcssa, %for.body38.preheader], [%.pre126, ... %expand_bottom_edge.exit113.for.body38_crit_edge] %indvars.iv = phi i64 [0, %for.body38.preheader], [%indvars.iv.next, ... %expand_bottom_edge.exit113.for.body38_crit_edge] %compptr.0116 = phi %struct.jpeg_component_info* [%34, ... %for.body38.preheader], [%incdec.ptr, ... %expand_bottom_edge.exit113.for.body38_crit_edge] %arrayidx40 = getelementptr inbounds i8**, i8*** %output_buf, i64 %indvars.iv %37 = load i8**, i8*** %arrayidx40, align 8, !tbaa !23 %width_in_blocks = getelementptr inbounds %struct.jpeg_component_info, ... %struct.jpeg_component_info* %compptr.0116, i64 0, i32 7 %38 = load i32, i32* %width_in_blocks, align 4, !tbaa !32 %mul = shl i32 %38, 3 %v_samp_factor = getelementptr inbounds %struct.jpeg_component_info, ... %struct.jpeg_component_info* %compptr.0116, i64 0, i32 3 %39 = load i32, i32* %v_samp_factor, align 4, !tbaa !34 %mul41 = mul i32 %39, %36 %mul43 = mul i32 %39, %out_row_groups_avail %cmp6.i106 = icmp slt i32 %mul41, %mul43 br i1 %cmp6.i106, label %for.body.lr.ph.i108, label ... %expand_bottom_edge.exit113 F for.body.lr.ph.i108: % sub.i107 = add nsw i32 % mul41, -1 br label %for.body.i112 for.body.i112: %row.07.i109 = phi i32 [%mul41, %for.body.lr.ph.i108], [%inc.i110, ... %for.body.i112] tail call void @jcopy_sample_rows(i8** %37, i32 %sub.i107, i8** %37, i32 .. %row.07.i109, i32 1, i32 %mul) #3 %inc.i110 = add nsw i32 %row.07.i109, 1 %exitcond.i111 = icmp eq i32 %inc.i110, %mul43 br i1 %exitcond.i111, label %expand_bottom_edge.exit113.loopexit, label ... %for.body.i112 expand_bottom_edge.exit113.loopexit: %.pre127 = load i32, i32* %num_components, align 4, !tbaa !22 br label %expand_bottom_edge.exit113 expand_bottom_edge.exit113: %40 = phi i32 [%.pre127, %expand_bottom_edge.exit113.loopexit], [%35, .. %for.body38] %indvars.iv.next = add nuw nsw i64 %indvars.iv, 1 %41 = sext i 32 % 40 to i 64%cmp37 = icmp slt i64 %indvars.iv.next, %41 br i1 %cmp37, label %expand_bottom_edge.exit113.for.body38_crit_edge, label ... %for.end46.loopexit F expand_bottom_edge.exit113.for.body38_crit_edge: %incdec.ptr = getelementptr inbounds %struct.jpeg_component_info, ... %struct.jpeg_component_info* %compptr.0116, i64 1 %.pre126 = load i32, i32* %out_row_group_ctr, align 4, !tbaa !11 br label %for.body38 while.end:

ret void