BEGIN=30;T1=15;T2=250;C=.75;

backg=imread([num2str(BEGIN) '.bmp']);

oldcars = zeros(size(backg,1),size(backg,2));

for beeld=BEGIN+5:3:BEGIN+35

    beeld

    foreg=imread([num2str(beeld) '.bmp']);

    avgim=double(sum(backg,3)/3);

    dbackg1=double(backg(:,:,1));

    dbackg2=double(backg(:,:,2));

    dbackg3=double(backg(:,:,3));

    road=abs(avgim-dbackg1)<T1&abs(avgim-dbackg2)<T1&abs(avgim-dbackg3)<T1&avgim<T2&avgim>0;

    %figure, imshow(road)

    fillroad=imfill(road,'holes');

    %figure, imshow(fillroad)

    newcars=fillroad&(~road);

    newcarcount=bwlabel(newcars);

    cars = zeros(size(backg,1),size(backg,2));

    max(newcarcount(:))

    for teller=1:max(newcarcount(:))

        if mod(teller,100)==0

            teller

        end

        singleblob=(newcarcount==teller);

        overlap=oldcars&singleblob;

        if sum(overlap(:))<C\*sum(singleblob(:))

            cars(singleblob)=1;

        end

    end

    film1=min(255,dbackg1+255\*cars);

    film2=max(0,dbackg2-255\*cars);

    %film2=dbackg2;

    film3=max(0,dbackg3-255\*cars);

    %film3=dbackg3;

    res=backg;

    res(:,:,1)=uint8(film1);

    res(:,:,2)=uint8(film2);

    res(:,:,3)=uint8(film3);

    figure, imshow(res)

    %imwrite(res,['G13M' num2str(beeld) '.bmp'],'bmp')

    backg=foreg;

    oldcars=newcars;

end