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%input Parameters
sig = vho; %load target Vector
f = 0.1; %amplitude Hysterises
d = 2; %min samples between peak

%Setup Counter Variables
au = 0; %amplitude UP counter
ad = 0; %amplitude DOWN counter
pu = 0; %period counter UP
pd = 0; %period counter DOWN
area = 0; %number of sufficient areas above or below the curve

i = 1;
while i <= length(sig);
    if sig(i)>=1+f;
        pd = 0;
        ad = 0;
        pu = pu+1;
        if pu >=d;
            if au ==0;
                area = area+1;
                au = 1;
            end
        end
    elseif sig(i)<=1-f;
        pu = 0;
        au = 0;
        pd = pd+1;
        if pd >=d;
            if ad==0;
                area = area+1;
                ad =1;
            end
        end
    else
        pu = 0;
        pd = 0;
        au =0;
        ad=0;
    end
    i = i+1;
end

%Export the number of qualifying peaks, divided by two
round(area/2)
```