

```

function ha = tight_subplot(Nh, Nw, gap, marg_h, marg_w)

%tight_subplot creates "subplot" axes with adjustable gaps and margins
%
%ha = tight_subplot(Nh, Nw, gap, marg_h, marg_w(
%
%in: Nh    number of axes in height (vertical direction(
      %Nw    number of axes in width (horizontal direction(
      %gap    gaps between the axes in normalized units (0...1(
              %or [gap_h gap_w] for different gaps in height and width
      %marg_h margins in height in normalized units (0...1(
              %or [lower upper] for different lower and upper margins
      %marg_w margins in width in normalized units (0...1(
              %or [left right] for different left and right margins
%
%out: ha    array of handles of the axes objects
              %starting from upper left corner, going row-wise as in
              %going row-wise as in
%
%Example: ha = tight_subplot(3,2,[.01 .03],[.1 .01],[.01 .01](
      %for ii = 1:6; axes(ha(ii)); plot(randn(10,ii)); end
      %set(ha(1:4),'XTickLabel',''); set(ha,'YTickLabel(''
%
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if nargin<3; gap = .02; end

```

```
if nargin<4 || isempty(marg_h); marg_h = .05; end
```

```
if nargin<5; marg_w = .05; end
```

```
if numel(gap)==1 ;
```

```
    gap = [gap gap];
```

```
end
```

```
if numel(marg_w)==1 ;
```

```
    marg_w = [marg_w marg_w];
```

```
end
```

```
if numel(marg_h)==1 ;
```

```
    marg_h = [marg_h marg_h];
```

```
end
```

```
axh = (1-sum(marg_h)-(Nh-1)*gap(1))/Nh ;
```

```
axw = (1-sum(marg_w)-(Nw-1)*gap(2))/Nw;
```

```
py = 1-marg_h(2)-axh ;
```

```
ha = zeros(Nh*Nw,1);
```

```
ii = 0;
```

```
for ih = 1:Nh
```

```
    px = marg_w(1);
```

```
    for ix = 1:Nw
```

```
        ii = ii+1;
```

```
        ha(ii) = axes('Units','normalized... ',
```

```
'        Position',[px py axw axh... ,
```

```
'        XTickLabel... ',
```

```
' YTickLabel;(';  
    px = px+axw+gap(2;(   
end  
    py = py-axh-gap(1;(   
end
```