

How to run the mni2tal script

```
>matlab5 (version 5; doesn't work in version 6)
>a = mni2tal([3,15,26])
```

```
>then run Talairach Daemon to find the brain region corresponding to
that Talairach coordinate (see instructions at
http://125.100.1.67/imggroup/atlas.html)
```

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
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%%THE SCRIPT
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
function outpoints = mni2tal(inpoints)
% Converts coordinates from MNI brain to best guess
% for equivalent Talairach coordinates
% FORMAT outpoints = mni2tal(inpoints)
% Where inpoints is N by 3 or 3 by N matrix of coordinates
% (N being the number of points)
% outpoints is the coordinate matrix with Talairach points
% Matthew Brett 10/8/99
```

```
dimdim = find(size(inpoints) == 3);
if isempty(dimdim)
    error('input must be a N by 3 or 3 by N matrix')
end
if dimdim == 2
    inpoints = inpoints';
end
```

```
% Transformation matrices, different zooms above/below AC
upT = spm_matrix([0 0 0 0.05 0 0 0.99 0.97 0.92]);
downT = spm_matrix([0 0 0 0.05 0 0 0.99 0.97 0.84]);
```

```
tmp = inpoints(3,:) < 0; % 1 if below AC
inpoints = [inpoints; ones(1, size(inpoints, 2))];
inpoints(:, tmp) = downT * inpoints(:, tmp);
inpoints(:, ~tmp) = upT * inpoints(:, ~tmp);
outpoints = inpoints(1:3, :);
if dimdim == 2
    outpoints = outpoints';
end
```