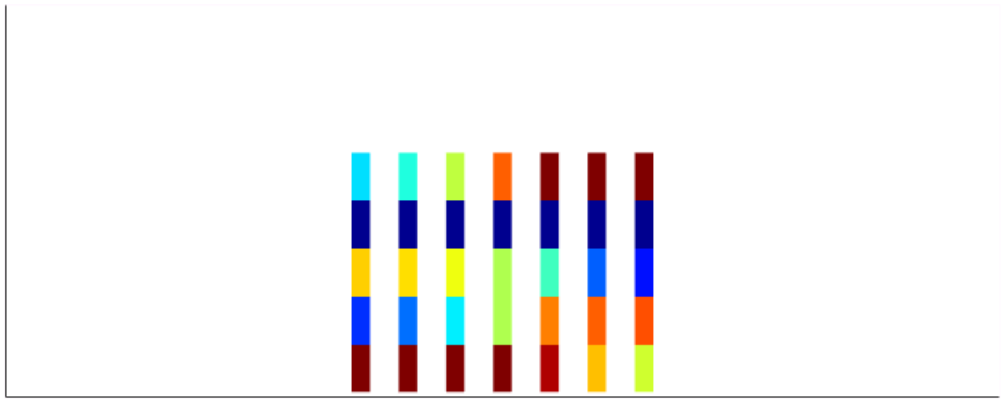
```
% gda01_05
%
% plot for mixing example figure
% supports Figure 1.5

clear all;

M=5; % number of elements
s1 = [1, 0, 2, 0.5, 3]';    % endmember (factor) 1
s2 = [3, 0.7, 1, 2.5, 2]';  % endmember (factor) 2

% sample 1
x=0.1;
sx1 = x*s2 + (1-x)*s1;

% sample 2
x=0.3;
sx2 = x*s2 + (1-x)*s1;

% sample 3
x=0.5;
sx3 = x*s2 + (1-x)*s1;

% sample 4
x=0.7;
sx4 = x*s2 + (1-x)*s1;

% sample 5
x=0.9;
sx5 = x*s2 + (1-x)*s1;

% make some simple vector plots
gda_draw(' ', s1, ' ', sx1, ' ', sx2, ' ', sx3, ' ', sx4, ' ', sx5, ' ', s2);
```



```
% Figure 1.5 Sediment on the floor of this idealized ocean is a mixture of rocks eroded from
% several sources si. The sources are characterized by chemical elements, e1 through e5, depic
% here with color bars. The chemical composition of the sediments is a simple mixture of the
% composition of the sources. The inverse problem is to determine the number and composition o
% sources from observations of the composition of the sediments. MatLab script gda01_05.
```