

## [Partially seen] Quiz

### Preliminary background information:

Data are available on national track records for various distances held by women from 55 different countries (as they stood at the start of the 1984 Los Angeles Olympics). The distances are, in metres, 100, 200, 400, 800, 1500, 3000 and marathon. A small sample of the data is given below:

```
> womentrackrecords[1:10,]; womentrackrecords[46:55,]
      X100m X200m X400m X800m X1500m X3000m marathon
argentin 11.61 22.94 54.50  2.15  4.43  9.79  178.52
australi 11.20 22.35 51.08  1.98  4.13  9.08  152.37
austria  11.43 23.09 50.62  1.99  4.22  9.34  159.37
belgium  11.41 23.04 52.00  2.00  4.14  8.88  157.85
bermuda  11.46 23.05 53.30  2.16  4.58  9.81  169.98
brazil   11.31 23.17 52.80  2.10  4.49  9.77  168.75
burma    12.14 24.47 55.00  2.18  4.45  9.51  191.02
canada   11.00 22.25 50.06  2.00  4.06  8.81  149.45
chile    12.00 24.52 54.90  2.05  4.23  9.37  171.38
china    11.95 24.41 54.97  2.08  4.33  9.31  168.48
.....
.....
singapor 12.30 25.00 55.08  2.12  4.52  9.94  182.77
spain    11.80 23.98 53.59  2.05  4.14  9.02  162.60
sweden   11.16 22.82 51.79  2.02  4.12  8.84  154.48
switzerl 11.45 23.31 53.11  2.02  4.07  8.77  153.42
taipei   11.22 22.62 52.50  2.10  4.38  9.63  177.87
thailand 11.75 24.46 55.80  2.20  4.72 10.28  168.45
turkey   11.98 24.44 56.45  2.15  4.37  9.38  201.08
usa      10.79 21.83 50.62  1.96  3.95  8.50  142.72
ussr     11.06 22.19 49.19  1.89  3.87  8.45  151.22
wsamoa   12.74 25.85 58.73  2.33  5.81 13.04  306.00
```

The complete list of countries as held in the data file is

```
rownames(womentrackrecords)
 [1] "argentin" "australi" "austria"  "belgium"  "bermuda"  "brazil"
 [7] "burma"    "canada"   "chile"    "china"    "columbia" "cookis"
[13] "costa"    "czech"    "denmark"  "domrep"   "finland"  "france"
[19] "gdr"      "frg"      "gbni"     "greece"   "guatemal" "hungary"
[25] "india"    "indonesi" "ireland"  "israel"   "italy"    "japan"
[31] "kenya"    "korea"    "dprkorea" "luxembou" "malaysia" "mauritiu"
[37] "mexico"   "netherla" "nz"       "norway"   "png"      "philippi"
[43] "poland"   "portugal" "rumania"  "singapor" "spain"    "sweden"
[49] "switzerl" "taipei"   "thailand" "turkey"   "usa"      "ussr"
[55] "wsamoa"
```

(NB `gdr` the [former] East Germany. `frg` is the [former] West Germany, `gbni` is the UK and `png` is Papua New Guinea.



Below are some preliminary multivariate data analyses:

```
> print(wtrcov.pc$loadings,cutoff=0.001); print(wtrcorr.pc$loadings)
```

Loadings:

	Comp.1	Comp.2	Comp.3	Comp.4	Comp.5	Comp.6	Comp.7
X100m	-0.010	-0.120	0.326	-0.150	0.925	0.002	-0.017
X200m	-0.025	-0.315	0.880	-0.014	-0.354	-0.025	-0.012
X400m	-0.062	-0.934	-0.328	0.122	0.013	0.022	0.025
X800m	-0.003	-0.026	-0.037	-0.049	-0.015	-0.262	-0.963
X1500m	-0.010	-0.039	-0.055	-0.340	-0.034	-0.899	0.265
X3000m	-0.024	-0.082	-0.088	-0.919	-0.130	0.349	-0.041
marathon	-0.997	0.070	-0.002	0.020	0.002		

Loadings:

	Comp.1	Comp.2	Comp.3	Comp.4	Comp.5	Comp.6	Comp.7
X100m	-0.368	0.490	0.286	-0.319	-0.231	0.620	
X200m	-0.365	0.537	0.230			-0.711	-0.109
X400m	-0.382	0.247	-0.515	0.347	0.572	0.191	0.208
X800m	-0.385	-0.155	-0.585		-0.620		-0.315
X1500m	-0.389	-0.360		-0.430		-0.231	0.693
X3000m	-0.389	-0.348	0.153	-0.363	0.463		-0.598
marathon	-0.367	-0.369	0.484	0.672	-0.131	0.142	

Various questions will follow later.

