

Time-lapse hyperspectral radiance data for the scene Sete Fontes
Foster et al., *Vision Research*, 2015, <http://dx.doi.org/10.1016/j.visres.2015.03.012>

Location name	Sete Fontes, Braga, Portugal		
Scene description	Rock face		
Geographic reference points	Rock	Approx. latitude 41.571864°	Approx. longitude -8.403911°
	Camera	Approx. latitude 41.560047°	Approx. longitude -8.398496°
Date of acquisition	6 October 2003		
Times of acquisition	12:25, 13:21, 14:38, 15:15, 16:14, 17:13, 18:15, 18:40.		
Viewing geometry	Visual angle of scene from camera: 6.9° × 5.3°		
	Distance to the reference plate in the scene from camera: 29 m		
Matlab Files	Sete_Fontes_1225.mat, _1321.mat, _1439.mat, _1515.mat, _1614.mat, _1713.mat, _1815.mat, _1840.mat		
BMP Files	Sete_Fontes_1225.bmp, _1321.bmp, _1439.bmp, _1515.bmp, _1614.bmp, _1713.bmp, _1815.bmp, _1840.bmp. All are unedited.		
How to load data	In Matlab, if hyperspectral image files are in your working directory, then Matlab command <code>>> load ('Sete_Fontes_1225.bmp')</code> loads hyperspectral image data into memory with name 'hs1', same for every scene		
What the data represent	Array 'hs1' has size 1024 × 1344 × 33. It represents a set of 33 greyscale images of size 1344 (H) × 1024 (V) pixels sampled at wavelengths 400, 410, ..., 720 nm, with each pixel value representing spectral radiance in $\text{W m}^{-2} \text{ sr}^{-1} \text{ nm}^{-1}$		
Postprocessing	See Section 2.2. <i>Image processing</i> , in Foster, D.H., Amano, K., & Nascimento, S.M.C. (2015). <i>Vision Research</i> , http://dx.doi.org/10.1016/j.visres.2015.03.012 .		
Notes	The Munsell reference surfaces can be seen as a square patch at the bottom of the scene. The thin black or coloured edges present in some images are the result of multiple hyperspectral image registrations, mainly over time. .		
More details	See Foster, D.H., Amano, K., & Nascimento, S.M.C. (2015). <i>Vision Research</i> , http://dx.doi.org/10.1016/j.visres.2015.03.012 .		
Usage and citation	These data are for personal use only. If you use these hyperspectral images or the colour images rendered from them in any published work arising from these data, please cite the source publication in full: Foster, D.H., Amano, K., & Nascimento, S.M.C. (2015). Time-lapse ratios of cone excitations in natural scenes. <i>Vision Research</i> , http://dx.doi.org/10.1016/j.visres.2015.03.012 .		
Authors	David Foster < d.h.foster@manchester.ac.uk >, Kinjiro Amano < k.amano@manchester.ac.uk >, and Sérgio Nascimento < smcn@fisica.uminho.pt >		
Last update	29 September 2015		