Supplementary Material for Rocket Science: The Effect of Spaceflight on Germination Physiology, Ageing, and Transcriptome of *Eruca sativa* Seeds

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**Figure S1.** Flowchart depicting the details of the spaceflight and controls of the *Eruca sativa* (rocket) seed storage conditions (temperature, relative humidity (RH)).



**Figure S2.** Effect of spaceflight on seed moisture content in *Eruca sativa* (rocket). Comparative seed moisture contents of. Mean values ± SEM of three replicates for Space, Earth and Earth-WS batches; \* indicates statistical difference with *p* < 0.05.



**Figure S3.** Effect of spaceflight on metabolite contents in *Eruca sativa* (rocket).seedlings. Metabolites were quantified in 35-day old seedlings grown at 22 °C. Mean values ± SD of 3 replicates of 14 pooled samples each comprising of 12 seedlings. Student's *t*-test revealed no statistical difference between Space and Earth seedlings for any metabolite.



**Figure S4.** Effect of spaceflight on electrical conductivity (EC) in *Eruca sativa.*(rocket) seeds. EC was measured after soaking seeds for 4, 8, 12 and 24 hours at 20 °C. Mean values ± SEM of four replicates of 100 seeds soaked in 50 mL water.

A close up of a map

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**Figure S5.** Principle Component Analysis (PCA) of all samples identified Space dry replicate 2 as outlier.

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