



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

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To: CNRS.

Re: Reference for Dr Anna Kotova.

Dear Sir/Madame,

I have known Anna Kotova for almost 2 years while I have been working for the British Antarctic Survey, Cambridge, UK as a senior scientist. Anna worked as part of a team of scientists who were involved in developing end-to-end simulations of the Daedalus Satellite during Phase 0 of ESA's Earth Explorer 10 Mission. Anna and I worked as part of a small sub-team which simulated the performance of energetic particle detectors placed on the spacecraft. We met on occasion at ESA's ESTEC in Noordwijk, and met many times via video conference. I found Anna to be highly professional, positive in outlook, willing to tackle scientific challenges, and easy to work with.

The eccentric orbit of Daedalus, plunging low into the Earth's atmosphere and high into the Inner Radiation Belt, required detailed understanding of the distribution of electron populations around the spacecraft. To this end, Anna undertook the task of developing the software simulation of the characteristics of the particle detectors, their orientations relative to the spacecraft, and their orientations relative to the local magnetic field as it changed throughout the orbit. The work culminated in a complete description of the particle environment around the spacecraft at all times, and the resultant particle energy input into the lower atmosphere. These were key mission objectives, and the simulations would not have been completed without the hardwork and dedication of Anna in converting concepts into software descriptions. Anna was also happy to present her results to the wider Daedalus science teams, as well as taking on additional reporting roles to ESA when asked to do so.

I thoroughly enjoyed working with Anna on the Daedalus project, and value her contributions to the final Phase 0 outputs. I recommend Anna to you.

Yours sincerely, *M. Clilverd*

Dr Mark A Clilverd,
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Space Weather and Atmosphere Team,
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