



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_37789
Title of the Manuscript:	Dynamics of low energy gamma rays near ground level during July to September 2017, in São José dos Campos, SP, Brazil
Type of Article:	

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
<p>Authors correctly improved the article.</p> <p>The following author's answer contains not true information. "We are measuring from 200 keV to 10 MeV and the two elements (Be-7, Na-22) are in a energy range below 200 keV."</p> <p>Gamma rays energy of Be-7 is 477,6 keV and for Na-22 it is 1274,53 keV, so this energies are in the range 200 keV – 10 MeV.</p>	<p>The Na-22 and Be-7 are cosmogenic radionuclides present in the earth's atmosphere produced mainly by secondary cosmic rays in the troposphere and stratosphere. Spallations reactions caused by high energy particles on oxygen, argon or nitrogen atoms are one of the important process. Both nuclides were also formed due to thermonuclear explosions in the atmosphere. To measure the gamma rays photopeak from Be-7 (477,6 keV) and Na-22 (1274,5 keV) it is necessary to use a ultra low background gamma ray spectrometric system with HPGe detector. The multichannel gamma ray analyser with NaI(Tl), 3" x 3" detector used in our measurements never appeared the Na-22 and Be-7 lines of that cosmogenic radionuclides.</p> <p>As soon as the intensity of the gamma-ray flux caused by the Na-22 and Be-7 sources is very small, they do not interfere with the measurements presented in this work, mainly from the radon gas influence.</p>