Reply to report

We are very grateful for the very precise and sharp remarks the anonymous referee had about our paper. The suggested revisions have been addressed in the new submission, as explained below following the bullet points in the referee report.

- p. 5 We have replaced the verb "form" by "generate".

- p. 6 We have rewritten the second paragraph and added a brief footnote pointing out why the construction of such a basis is possible.

- p. 7 We have rewritten the expression of $*_s F_2$ in eq. (2.11) to avoid confusion.

- p. 8 We have rewritten and reordered the paragraphs at the beginning of section 2.2. As the referee pointed out, our statement about the Maurer–Cartan form defining a metric was incorrect so we have included a new discussion regarding the metric in a footnote that appears on page 9.

- p. 8 We have replaced the terminology "coset space" by "homogeneous space" throughout the whole text. We have amended the wrong statement of $\mathfrak{m}$ being a Lie subalgebra.

- p. 14 We have corrected the statement about the SU(2)-bundle being identified with the bundle of self-dual forms.

- p. 18 We have made the changes suggested by the referee.

- p. 25 We have clarified that we are speaking about the range of values of s.

- p. 26 We have added a paragraph in the introduction of section 5 commenting on how we denote the solutions throughout the whole section. Our notation is precisely as the referee pointed out.

- p. 36 We have added a paragraph commenting on the possibility of having a disconnected moduli space.

We have also amended some harmless typos present in the text and that we have detected since the submission of the manuscript.