Review Report on the 1st Revision of the Paper

'Solving the Nonstationary Richards Equation
With Adaptive hp-FEM'

by P. Solin et. al.

Whilst the authors have addressed some of the concerns in my previous report, I feel that there is still a number of issues which need to be considered further.

1. It is still my opinion that the paper contains too much technical material on hp-FEM and on the proposed software packages. In particular, Section 7 could be shortened considerably by simply sticking to the *general* key points, possibly by giving suitable references, or by adding a short comment for each of them. In addition, Section 8.2 could be dropped completely by giving a web link where the interested user could find the corresponding information in form of. e.g., a tutorial.

2. The example in Section 3 is unchanged. My suggestion was to replace this example by an example that illustrates the ability of adaptive hp FEM (i.e., the combination of h and p refinements) in a better way. In the current example the hp method behaves like a spectral scheme. Therefore, an example featuring, for instance, a corner singularity would be more appropriate.

3. The author's explanation on the use of Runge-Kutta time integration schemes seems very vague. Indeed, it does not seem to be clear why, in general, the use of a low-order time stepping method (Crank-Nicholson is applied in the paper) in combination with a highly accurate hp method in space is a plausible choice. Also, resolving initial singularities at time $t = 0$, which my appear even for 'decent' initial conditions, seems to be relevant for the purpose of good numerical approximations in practice.