

The University of Leeds

EXTERNAL EXAMINER'S REPORT

ACADEMIC YEAR: 2016-17

Part A: General Information

Subject area and awards being examined

Faculty / School of:	Earth and Environment
Subject(s):	Climate and Atmospheric Science
Awards (e.g. BA/BSc/MSc etc):	MRes Climate and Atmospheric Science

Part B: Comments for the Institution on the Examination Process and Standards

Points of innovation and/or good practice

Please highlight areas of innovation or good practice within the programmes or processes you have been involved with in this box.
I thought the dissertations were very topical, covering many current key research questions in weather and climate. There were also good links with the Met Office. It was also very helpful to speak directly to students.

Enhancements made from the previous year

Please highlight any enhancements made to the programme(s) or processes over the past year in this box.
This is already a mature and well-established programme. Since this is my first year as external examiner, I am not aware of any significant enhancements from last year.

Matters for Urgent Attention

If there are any areas which you think require urgent attention before the programme is offered again please note them in this box

None

For Examiners in the first year of appointment

1.	Were you provided with an External Examiners Handbook?	Y
2.	Were you provided with copies of previous relevant External Examiners' reports and the response of the School to these?	Y
3.	Were you provided with a External Examiner Mentor?	Y

For Examiners completing their term of appointment

4.	Have you observed improvements in the programme(s) over the period of your appointment?	N/A
5.	Has the school responded to comments and recommendations you have made?	N/A
6.	Where recommendations have not been implemented, did the school provide clear reasons for this?	N/A
7.	Have you acted as a External Examiner Mentor?	N/A

Please comment on your experience of the programme(s) over the period of your appointment, remarking in particular on changes from year to year and the progressive development and enhancement of the learning and teaching provision, on standards achieved, on marking and assessment and the procedures of the School

Standards

8.	Is the overall programme structure coherent and appropriate for the level of study?	Y
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9.	Does the programme structure allow the programme aims and intended learning outcomes to be met?	Y
10.	Are the programme aims and intended learning outcomes commensurate with the level of award?	Y
11.	Did the Aims and ILOs meet the expectations of the national subject benchmark (where relevant)?	Y
12.	Is the programme(s) comparable with similar programmes at other institutions?	Y
<p><i>Please use this box to explain your overall impression of the programme structure, design, aims and intended learning outcomes.</i></p> <p>This is a well-structured and topical programme. It is split into four “super-modules” that allow the students the flexibility to take individual courses relevant to their research path, whilst still providing a clear structure. The intended learning outcomes are ambitious and relevant. They allow a student with no background in weather and climate to be very well prepared for a future in research by the end of the programme.</p>		
13.	Is the influence of research on the curriculum and learning and teaching clear?	Y
<p><i>Please explain how this is/could be achieved (examples might include: curriculum design informed by current research in the subject; practice informed by research; students undertaking research)</i></p> <p>This is very clearly a research-driven programme. See my other comments.</p>		
14.	Does the programme form part of an Integrated PhD?	Y
<p><i>Please comment on the appropriateness of the programme as training for a PhD:</i></p> <p>At least three of the students are accepted onto PhD projects next year with others considering similar options. That in itself indicates the success of the programme. I was impressed by the progress the students had made with new and difficult research problems (as opposed to simply reproducing past work). In some of the cases, and possibly with a little more work, it is realistic to expect their work to be publishable. In this way, they are more than adequately prepared for a PhD.</p>		
15.	Does the programme include clinical practice components?	N/A
<p><i>Please comment on the learning and assessment of practice components of the curriculum here:</i></p> <p>N/A</p>		
16.	Is the programme accredited by a Professional or Statutory Regulatory Body (PSRB)?	Y
<p><i>Please comment on the value of, and the programme’s ability to meet, PSRB requirements here:</i></p> <p>The programme has active industry links with the Met Office and British Antarctic Survey. It is also affiliated to the NERC National Centre for Atmospheric Sciences.</p>		

Assessment and Feedback

17.	Does the programme design clearly align intended learning outcomes with assessment?	Y
<p><i>Please comment on the assessment methods and the appropriateness of these to the ILOs, in particular: the design and structure of the assessment methods, and the arrangements for the marking of modules and the classification of awards; the quality of teaching, learning and assessment methods that may be indicated by student performance.</i></p> <p>Yes, I think the assessment methods are appropriate for the ILOs.</p>		
18.	Is the design and structure of the assessment methods appropriate to the level of award?	Y
19.	Were students given adequate opportunity to demonstrate their achievement of the programme aims and intended learning outcomes?	Y
<p><i>Please comment on the academic standards demonstrated by the students and, where possible, their performance in relation to students on comparable courses; the strengths and weaknesses of the students as a cohort:</i></p> <p>All the projects were either merit or distinction, reflecting the high quality and the hard work of the cohort. Whilst the supervisors are best placed to assess the contribution to the fields involved, I thought the general scientific writing, quality of conclusions, ability to explain the material, scope and ambition of the projects was of a high standard.</p> <p>I also thought the splits between merit and distinction were well judged and consistent with historical marks.</p>		

Please use this box to provide any additional comments you would like to make in relation to assessment and feedback:

The Progression and Awards Process

20.	Were you provided with guidance relating to the External Examiners role, powers and responsibilities in the examination process?	Y
21.	Was the progression and award guidance provided sufficient for you to act effectively as an External Examiner?	Y
22.	Did you receive appropriate programme documentation for your area(s) of responsibility?	Y
23.	Did you receive appropriate module documentation for your area(s) of responsibility?	Y
24.	Did you receive full details of marking criteria applicable to your area(s) of responsibility?	Y
25.	Were you provided with all draft examination papers/assessments?	Y
26.	Was the nature and level of the assessment questions appropriate?	Y
27.	Were suitable arrangements made to consider your comments on assessment questions?	Y
28.	Was sufficient assessed work made available to enable you to have confidence in your evaluation of the standard of student work?	Y
29.	Were the examination scripts clearly marked/annotated?	Y
30.	Was the choice of subjects for final year projects and/or dissertations appropriate?	Y
31.	Was the method and standard of assessment appropriate for the final year projects and/or dissertations?	Y
32.	Were the administrative arrangements satisfactory for the whole process, including the operation of the Progression and Awards Board?	Y
33.	Were you able to attend the Progression and Awards Board meeting?	Y
34.	Were you satisfied with the recommendations of the Progression and Awards Board?	Y
35.	Were you satisfied with the way decisions from the School Special Circumstances meeting were communicated to the Progression and Awards Board?	Y

Please use this box to provide any additional comments you would like to make on the questions above:

Other comments

Please use this box if you wish to make any further comments not covered elsewhere on the form

The student cohort had a strong team ethos and, on the whole, seemed to have really enjoyed their experience of the MRes. They presented the following points to me in order make the programme even better in the future:

Arran fieldtrip. The students really valued the bonding experience of the field work right at the start of their degree. However, with no prior knowledge of meteorology, they felt “thrown in the deep end” and thought the mark distribution was biased low for this reason. They also felt unfairly compared to the year 3 students with backgrounds in meteorology. They suggested either scaling the marks up or delaying assessments (e.g. waiting until thermodynamics is covered until testing tephigram skills). Alternatively, there could be some more reassurance at the start or mentoring in their room. I am impressed with this aspect of the programme as fieldwork is really valuable, even for those who pursue modelling in their future careers.

Balanced workload within super-modules For example, there is a mixture of year 2 and M level modules in some super-modules. This gives the impression that you can complete the super-module with fewer credits if certain combinations are taken. The dynamics of weather systems module in term 2 used NCL, and this didn't have sufficient support. Some were worried about parity in assessment between lab and coding projects.

Supervisor contact and engagement The experience of some was good, whilst one or two others only saw their supervisor once per month. Could supervisors be reminded of the expected time commitment.

Part C: School Response to External Examiner Report**Name of School and Head of School (or nominee)**

Title and Name of Responder:	
Position*:	Head of School
Faculty / School of:	<i>Faculty of Environment / School of Earth and Environment</i>
Address for communication:	School of Earth and Environment Maths/Earth and Environment Building The University of Leeds Leeds. LS2 9JT United Kingdom
Email:	
Telephone:	

*If the individual responding to the report is not the Head of School please state their position within the School.

Completing the School response

The completed School response (including the full original report) should be attached to an e-mail and sent to the Pro-Dean for Student Education in the relevant Faculty. Following approval by the Pro-Dean for Student Education, the School must send the response (including the full original report) directly to the External Examiner. A copy must also be emailed to the Quality Assurance Team at qat@leeds.ac.uk. External Examiners should receive a formal response no later than six weeks after receipt of the original report.

Response to Points of innovation and/or good practice

We are pleased to see that the examiner noted that the student's dissertations were "very topical, covering many current key research questions in weather and climate" as it is the aim of the programme to see each of the student become embedded in the active research being conducted in SEE. The examiner also noted our links with the Met Office and other industrial and academic partners. We see this as a strength of our programme as it connects the students to the wider atmospheric science and climate research community. We will continue to push this aspect of the programme.

Response to Enhancements made from the previous year

As noted by the examiner, the programme is mature and has a well-established curriculum. No major programmatic changes were made this year besides the handover of programme leadership from _____ to _____ . _____ will take comments from this year and make the appropriate changes to address the concerns below.

Response to Matters for Urgent Attention

If any areas have been identified for urgent attention before the programme is offered again please provide a specific response to them here:

None to be addressed.

Response to questions 1-7 (and related comments)

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

No response needed.

Standards**Response to questions 8 to 16 (and related comments)**

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

In relation to standards of the programme, the examiner's comments are summarised by _____ remark that the students "are more than adequately prepared for a PhD" after they have completed the programme. As this is the ultimate aim (i.e. to provide students with a basis to either work in industry as a professional researcher or be equipped to go into a Ph.D.) we believe that the standards of the programme are appropriate and being met in a way that accomplishes the overall learning objectives.

Assessment and Feedback

Response to questions 17 to 19 (and related comments)

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

The examiner summarises his comments by saying that “the general scientific writing, quality of conclusions, ability to explain the material, scope and ambition of the projects was of a high standard” and that the “splits between merit and distinction were well judged and consistent with historical marks”. We agree with this and, though each cohort is different, we believe this year’s group met and exceeded the challenges set out by the course assessments.

The Progression and Awards Process

Response to questions 20-35 (and related comments)

Schools may provide a general response; however, where Examiners raise specific points these must be addressed individually:

The examiner notes that we have met all our responsibilities, all assessment is appropriate and all recommendation of awards were appropriate. No specific points were raised to be addressed.

Other comments

Response to items included in the ‘Other Comments’ section of the report

The examiner’s remarks began by acknowledging the strong academic culture that the programme instils in the cohort. We are glad to see that the examiner noted this and will continue creating this experience for the future. See below for specific points to other concerns:

Arran fieldtrip. We agree with the comment that this trip is in part a bonding experience. We believe this is a crucial part of the course in terms of the course’s culture and the soft skills we are trying to teach. We also agree that most of the students are “thrown in the deep end” due to their lack of experience in the field. The intent of the field trip is to jump start their knowledge of practical atmospheric science research. As such, the students are in no way compared to the other undergraduate students on the course. We do not know why this perception was held by the MRes cohort in 2016/16 but in the future, more clarity will be given. The low marks received by the cohort did not represent this bias but were in fact low due to the exceptionally poor quality of the work handed in (including lots of missing work). Future cohorts will be mentored more during the course and will be given more preparatory material to read before departing for Arran.

Balanced workload within super-modules. The modules selected as part of the taught course work within each of the super-modules are individual to each of the students and is evaluated by the programme leader. The modules are approved on the basis of being challenging for the student (i.e. it cannot be a revision of a previous module). As such, some students with backgrounds in atmospheric science are expected to take more demanding courses than others who come from different fields. This will be explained with more clarity in the future so that expectations are managed.

Supervisor contact and engagement. Though reminders and explanations of expectations were laid out this year some supervisors did not engage with these requirements. The programme leader will in the future make sure that all advisors understand the expectations and standards of the programme more clearly and will not allow poor advising relationships to continue, reinforced by School leadership where necessary