

For the following Master’s programmes: Atmospheric Sciences, Particle Physics and Astrophysical Sciences, Environmental Changes in Higher Latitudes

	0	1	2	3	4	5
<p>1. Objective and question setting of the thesis</p> <ul style="list-style-type: none"> Justifying the research topic and its significance Defining a clear research question and objective, research problem or theme Considering research ethics 	<p>The research question and its significance has not been explained at all. The objective is missing or not understandable.</p>	<p>The research question and its significance have not been explained or motivated clearly. The objective or topic area of the work has not been fully understood, or it is not apparent when reading the work.</p>	<p>The research question and its significance are vaguely defined. The objective is unspecific. There may be problems with outlining or delimiting the research area.</p>	<p>The objective of the thesis, the research question and its significance are presented clearly.</p>	<p>The research question and its significance are very clear and described in appropriate detail. The objective is well outlined with a focus on the essential.</p>	<p>The objective of the thesis, research topic and question as well as their significance are presented in an excellent manner.</p>
<p>2. Scientific framework of the thesis and use of sources</p> <ul style="list-style-type: none"> Being familiar with relevant research and literature Defining a research perspective and concepts relevant to the problem discussed Using source criticism and original scientific sources Analytically examining perspectives presented in the source literature and creating syntheses 	<p>The work shows lack of familiarity with the research area. The reference material is absent, or has not been used in an appropriate way.</p>	<p>The work shows significant shortcomings in the knowledge of the research area. Some reference material has been used, but the references are irrelevant, or of inadequate quality.</p>	<p>The work shows limited knowledge of the research area. Reference material has been used, but its scope is limited or not fully relevant. Critical assessment of the reference material is largely missing.</p>	<p>The work shows familiarity with the research area through background literature. The reference material is relevant and its scope is appropriate. The topic and reference material has been mainly analysed critically.</p>	<p>The work shows good command of the research area. Comprehensive reference material of good quality. The topic and reference material has been analysed critically.</p>	<p>Excellent in-depth command of the research area, based on high quality scientific reference material. Discussion proving excellent understanding and critical maturity.</p>
<p>3. Data and research method</p> <ul style="list-style-type: none"> Describing the material Selecting an appropriate method to address the research question Describing the method comprehensively (strategy, information retrieval and analysis) Ensuring that the material is sufficient and applicable 	<p>Data, methods or analysis are inadequate for the research question.</p>	<p>Significant shortcomings in choice of methods, data, or analysis.</p>	<p>The research methods and data used in the work are mainly adequate, but the work contains some problems or inconsistencies in the choice of data, methods or analysis.</p>	<p>The research methods and data are suitable for the problem, and their choice is well argued. The analysis is mainly justified.</p>	<p>Good and well-argued use of research methods and data, clearly based on scientific literature or tradition. The analysis is well justified.</p>	<p>Excellent selection of research data and methods. The analysis is excellent.</p>

<p>for the research question and analysis method</p> <ul style="list-style-type: none"> Considering research ethics 						
<p>4. Presentation of the results of the thesis</p> <ul style="list-style-type: none"> Reporting the results clearly and logically Illustrating the results with appropriate images, diagrams and tables Utility, usability, and/or applicability of results 	<p>The results of the thesis are not presented in an understandable manner.</p>	<p>Significant shortcomings in all areas of reporting the results.</p>	<p>The work shows some concept of reporting research findings, but clear shortcomings in communicating them logically. There are some shortcomings in use of pictures, figures, or tables.</p>	<p>The findings have mainly been reported in a clear and logical way. The use of pictures, figures, and tables is good and mostly supports the analysis of the results.</p>	<p>The findings are reported in a clear and logical way. The use of pictures, figures, and tables supports the analysis of results. Further applicability of results is presented.</p>	<p>The reporting of findings and use of pictures, figures, and tables is well considered and apt. The findings are applicable in further research and/or industrial application. The results have potential for publishing.</p>
<p>5. Reflection and conclusions</p> <ul style="list-style-type: none"> Reflecting how the presented results address the formulated research question Specifying the relationship between the research results and previous research Presenting new research problems Considering opportunities for applications Considering issues of research ethics Drawing thorough, reliable and insightful conclusions Basing the conclusions on the results 	<p>Conclusions and reflection are missing.</p>	<p>Conclusions and reflection do not address the research question. Understanding the significance of the results is not demonstrated.</p>	<p>Conclusions and reflection mostly address the research question. The work shows the student’s own input. It remains unclear if the significance of the results is understood.</p>	<p>Conclusions and reflection address the research question and are feasible. The student’s own input is evident in the conclusions and reflection of results. The significance of the findings has been demonstrated.</p>	<p>Conclusions and reflection clearly address the research question and the significance of the results. The student’s own input is evident and insightful.</p>	<p>Conclusions and reflection are clear and thorough, discussing how generalizable the findings are. The student’s own input is evident and insightful, presenting new research problems or showing opportunities for new applications. The discussion of findings may even show an aptitude for independent, critical, and innovative research.</p>
<p>6. Thesis as an academic text</p> <ul style="list-style-type: none"> Using a clear structure appropriate for the research approach 	<p>Thesis lacks structure. The text has not been written according to the standards of scientific writing.</p>	<p>Significant structural deficiencies. The use of the standards of scientific writing and citation technique are</p>	<p>The thesis structure is appropriate, but the parts are imbalanced. Room for improvement in</p>	<p>The structure of the thesis is good. The thesis conforms largely to the standards of scientific writing. The length is</p>	<p>The structure of the thesis is good, and the text runs smoothly. The presentation is consistent in style. The use of figures and tables is well</p>	<p>The structure of the thesis is excellent. The thesis conforms to the standards of scientific writing. The length is suitable and the overall style is excellent. The figures and tables in the thesis are</p>

<ul style="list-style-type: none"> Using grammatically correct language Documenting sources appropriately and consistently Writing a clear and accurate bibliography Using an appropriate layout 	<p>Citations to references are lacking. The overall style does not conform at all to standard of scientific writing. The figures and equations are irrelevant or poorly connected to the text.</p>	<p>deficient. The thesis is not of appropriate length or the requirements on the overall style are not met. The figures and tables in the thesis are of poor quality, lacking or do not support the text. The equations are unclear, unnecessary or wrong, or the symbols are not explained. The thesis contains lots of grammatical errors, lack of preciseness or scientific mistakes.</p>	<p>language and use of references. The figures, tables and equations in the thesis are of sufficient quality and mostly support the text. The thesis contains some grammatical errors, lack of preciseness or scientific mistakes.</p>	<p>acceptable and the requirements on the overall style are mostly met. The language of the thesis and use of references is appropriate. The figures and tables in the thesis are informative and support the written text. The equations are mostly in balance with the written text. The text is mostly clear and grammatically precise.</p>	<p>justified. The equations are in balance with the written text. Flawless use of references. The whole text is logical and consistent. The text is clear and grammatically precise.</p>	<p>prepared well, are informative and support the written text. The equations are sufficient and well balanced with the written text, and all used symbols and acronyms are explained. Language and use of references as well as the overall appearance are exemplary.</p>
<p>7. Working during the thesis process</p> <ul style="list-style-type: none"> Being open-minded and independent Adopting methods and solving problems creatively Completing the thesis in the planned timetable 	<p>Independence and capabilities to collaborate are difficult to assess or inexistent. The completion of the work was not predictable. The thesis took an exceptionally long time to finish.</p>	<p>Independence is largely missing and the thesis proceeded mainly by the decisions and advices of the supervisor. The work schedule was not predictable. The thesis fell significantly behind the planned schedule.</p>	<p>Independence is partly missing. There was some challenges in the interaction between the student and the supervisor. The work progressed at varying speeds, which made supervision challenging.</p>	<p>Some independent thinking during the thesis work. Student interacted actively with the supervisor but required often external input for making decisions. Work proceeded mainly in the planned schedule.</p>	<p>Independence in analysis and inspection of the results. Smooth collaboration and/or interaction with the supervisor and other team members (if relevant) during the thesis work. Planned schedule was mostly met.</p>	<p>Creativity and independence in analysis and inspection of the results. Skilled collaboration and/or interaction with the supervisor and other team members (if relevant) during the thesis work. Planned schedule was met.</p>