

How to review? A Recipe for the online-Excel sheet

1. Get access to the article (via DOI and your university access):

If you have access: Download the PDF. Add your name in the online-Excel column „Reviewer(s)“
→ **continue**

If you have no access, note that in the online-Excel column „Access“ → **finished** (other reviewers might try to get access)

doi	url
10.5334/bc.377	https://www.scopus.com/inward/record.uri
10.2166/wcc.2023.233	https://www.scopus.com/inward/record.uri

Reviewer(s)
Feline

Access	Column 1

Yes

No

2. Check the publication type of the article:

Is it a peer-reviewed journal article? → **read**

If not (e.g. a conference abstract): note that in the online-Excel column „Anomaly“ → **finished**

Anomaly	Column 1
Maybe	

Yes

No

Maybe

Wrong publication type

does not address research question

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3. Read the full text: Does it address our research question (slide 2!)?

We only screened the abstract. Hence, it might be that unsuitable papers are still in there, which can be directly excluded, e.g. due to the following reasons: not urban, not water-related, no adaptation

Addresses research question → **read further**

Does not address research question: note that in the online-Excel column „Anomaly“ → **finished**



The screenshot shows a dropdown menu for the 'Anomaly' column. The menu options are 'Yes', 'No', and 'Maybe'. The 'Maybe' option is selected, and a tooltip is visible with the text 'Wrong publication type' and 'does not address research question'.

4. Read the full text: Fill remaining columns of the online-Excel document

- Blue columns:** Choose one of a selection of fixed categories
- Orange columns:** You may add categories (or choose existing ones)

Example screenshots
on the next slide

→ After that you successfully conducted a full-text review including the article

Reviewers Checklist Item	LLM	Reviewer1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5	Reviewer 6	Reviewer 7	Score
Research method	mixed	Match	Match	Match	Match	Match	Match	Match	7
Type of Methodology	Participatory Approach, Shannon Entropy, Fuzzy Theory	Match	Match	No	Match (LLM is specific)	Match (LLM is specific)	Match (LLM is specific)	Match (LLM missed specifics)	5.5
Type (s) of Case Study Analysis	single-case design	Match	Match	Match	Match	Match	Match	Match	7
Geographic Location	Brazil, South America	Match	Match	Match	Match	Match	Match	Match	7
Population	<1 million	Match	Match	Match	Match	Match	Match	Match	7
Natural Hazards	urban flooding Increase of urbanization, Buildings in risk areas, Problems with the design of the drainage network, Lack of maintenance of drainage network, Interventions in the catchment, interventions on the channels, Lack of appropriate legislation to deal with floods, There are laws, but they are neglected, There are laws, but they are not implemented	Match (water scarcity missed by LLM)	Match (missed drought)	Match	Match (water scarcity missed by LLM)	Match (water scarcity missed by LLM)	Match (water scarcity missed by LLM)	Match	4.5
Urban Problem	are not implemented	Match with extra from LLM	Match (missed water scarcity) LLM ha:	Match (LLM has more information)	No (Reviewer doesn't answer)	Match (LLM is specific)	Match (LLM is specific and more informatio	Match	5.5
Sustainability Mentioned	no	Match	Match	Match	Match	Match	Match	Match	7
Climate Change Mentioned	yes	Match	Match	Match	Match	Match	Match	Match	7
Circularity of Water Mentioned	no	Match	Match	Match	Match	Match	No	Match	6
Adaptation Measures	Structural/physical adaptation: improvement of drainage network design and maintenance, sustainable drainage systems, institutional/policy adaptation: updating and enforcing legislation, integration of urban planning and water management, stakeholder collaboration, Technological adaptation: GIS-based vulnerability mapping, pixel-by-pixel analysis, monitoring, Behavioral/social adaptation: participatory citizen science, risk communication, Anticipatory adaptation: pre-event vulnerability and exposure mapping, Reactive adaptation: coping capacity enhancement and post-flood recovery support Lack of representative datasets, Data scarcity and quality issues, Complexity in selecting and weighting indicators, Stakeholder inability to quantify weight preferences, Governance and institutional constraints, Poor integration of urban planning and water management, Financial constraints, Need for regular reassessment	Match with extra from LLM	No (reviewer misunderstanding)	No (Impervious Surface for infiltration m	Match (LLM has more information)	No (reviewer thinks no explicit adapta	Match (LLM is specific and descriptive)	Match (LLM more specific and desc	4.5
Adaptation Challenges	reassessment	Match with extra from LLM	Match	Match (LLM has more information)	Match (LLM has more and specific info	Match (LLM has more information)	Match (LLM is descriptive and specific)	Match (LLM specif and decriptive)	7

Total = 84 **75 89%**
38078915

Comments	Exact Match or LLM is more specific and descriptive = 1 point against each human reviewer LLM misses something but matched partially, 0.5 point against each human reviewer LLM doesn't match at all, 0 point against each huma reviewer Calculate the total points and the percentage based on the points achieved.
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	38078915				38075286				38075207				38096217				38092379				38075373				38075658				38062209				38075652				38075668											
	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H	F1	P	R=C	H								
Natural Hazards	0.67	1	0.5	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0
Urban Problem	0.7	0.89	0.57	0.11	0.5	0.6	0.43	0.4	0.61	0.78	0.5	0.22	0.52	0.86	0.38	0.14	0.55	0.75	0.43	0.25	0.43	0.6	0.33	0.4	0.36	0.8	0.24	0.2	0.71	0.83	0.62	0.17	0.43	0.5	0.38	0.5	0.5	0.5	0.6	0.43	0.4	0.4	0.56	0.17				
Ad. Measures	0.8	0.8	0.8	0.2	0.55	0.6	0.5	0.4	0.88	1	0.79	0	0.62	0.5	0.83	0.5	0.75	1	0.6	0	0.33	1	0.2	0	0.5	0.5	0.5	0.5	0.85	1	0.73	0	0.5	0.67	0.4	0.33	0.67	0.83	0.56	0.17								
Ad. Challenges	0.53	0.71	0.42	0.29	0.5	0.5	0.5	0.5	0.76	1	0.61	0	0.56	0.7	0.47	0.3	0.59	0.56	0.62	0.44	0.76	1	0.62	0	0.45	0.62	0.36	0.38	0.67	1	0.5	0	0.55	0.86	0.4	0.14	0.75	1	0.6	0								
Total/ average score	0.89	0.85	0.51	0.18	0.8	0.675	0.61	0.33	0.77	0.945	0.72	0.06	0.72	0.765	0.67	0.23	0.82	0.8275	0.66	0.17	0.79	0.9	0.54	0.1	0.86	0.73	0.53	0.27	0.85	0.9575	0.71	0.04	0.87	0.7575	0.54	0.24	0.83	0.8575	0.65	0.14								

	F1	P	R=C	H
Average scores of 10 papers	0.82	0.8265	0.614	0.176
	~82%	~83%	~61%	~18%

average	F1	P	R=C	H	scores of all papers
Natural Hazards	0.967	1	0.95	0	
Urban Problem	0.531	0.721	0.431	0.279	
Ad. Measures	0.645	0.79	0.591	0.21	
Ad. Challenges	0.612	0.795	0.51	0.205	