Review Form 3

JournalName:	InternationalJournalofEnvironmentandClimateChange
ManuscriptNumber:	**Ms_IJECC_126556**
TitleoftheManuscript:	**ANALYSISOFFORECASTEDRAINFALLOVERITSBLOCKSANDGUNTURDISTRICTOFANDHRAPRADESH**
TypeoftheArticle	

Review Form 3

PART1:ReviewComments

CompulsoryREVISIONcomments	**Reviewer'scomment**	**Author's Feedback** *(Please correct the manuscript and highlight that part inthemanuscript.Itismandatorythatauthorsshouldwritehis/herfeedback here)*
Please write a few sentences regarding the importance ofthismanuscriptforthescientificcommunity.Whydo youlike(ordislike)thismanuscript? Aminimumof3-4 sentences may be required for this part.	This manuscript is highly valuable to the scientific community as it provides a detailed and methodologically sound analysis of agro-meteorological forecasted rainfall in a region that is critical for agricultural production. By employing both quantitative and qualitative validation techniques, it offers a comprehensive evaluation of the forecasting models used by the IMD, which is essential for improving forecast accuracy and agricultural planning in regions like Guntur. The use of both district-level and block-level analyses provides valuable granular insightsthatcouldbeappliedtootherregionswithsimilarmonsoonalpatterns,contributingto more localized and precise weather prediction models. Overall, this study's integration of established meteorological validation methods with real-world agricultural data makes it a relevant and insightful contribution to both climate science and agricultural meteorology. I find this manuscript to be scientifically engaging and technically sound, offering practical implicationsforimprovingrainfallpredictionmodelsandtheirapplicationsinagricultural management.	
Isthetitleofthearticlesuitable? (Ifnotpleasesuggestanalternativetitle)	"Analysisof ForecastedRainfallacrossBlocksin GunturDistrict,Andhra Pradesh"	

Review Form 3

Is the abstract of the article comprehensive? Do you suggesttheaddition(ordeletion)ofsomepointsinthis section? Please write your suggestions here.	Theabstractiswell-written,concise,andeffectivelysummarizesthekeycomponentsof the study, including the purpose, methods, and main findings Herearesomesuggestions toenhance clarityandcompleteness: **SuggestionsforImprovement** 1. **Add Context on the Study's Importance**: Briefly mention why analyzing forecast accuracyattheblockanddistrictlevelsisvaluableforagriculturalplanninginGuntur district. This context can help highlight the study"s relevance. 2. **Clarify Data Source and Study Area**: While you mention that the data came from IMD Amaravathi, it might be useful to specify that Guntur district includes multiple blocks,helpingreadersunfamiliarwiththeareatounderstandthemulti-levelanalysis. 3. **Expand on the Qualitative Analysis Results**: Consider mentioning the specific successratesobservedinthequalitativeanalysis.Statingthatthenortheastmonsoon had the "highest success rates, reaching [insert range or value]" would quantify this part of the findings, providing a stronger sense of the data. 4. **ConsiderRephrasingfor Clarity**: • Forexample,inthequantitativeanalysis,"TheHansenandKuipers(HK) scoretest showed strongagreement duringthe northeast monsoon (0.5 to 0.8)..."couldberephrasedtoemphasizethathigherscoresindicatebetter forecast agreement. • Inthequalitativeanalysis,thephrase"successratesforforecastedrainfall" might be clarified as "success rates for forecasted rainfall accuracy." 5. **PossibleAdditiononImplications**: Ifspaceallows,mentionpotentialapplicationsof thisanalysisforfarmers,policy-makers,oragro-meteorologicalplanning,highlighting the practical significance of accurate forecasts in agricultural productivity.	
Aresubsectionsandstructureofthemanuscript appropriate?	The structure and subsections of your manuscript seem well-organized, with clear divisions betweendifferenttypesofanalyses(quantitativeandqualitative)andalogicalflowfromdata source to findings. However, to ensure clarityand ease of understandingfor readers, here are some recommendations for refining the structure: **SuggestedStructureandSubsections** 1. **Introduction** o Brieflyintroducethesignificanceofaccuraterainfallforecastingforagriculture in Andhra Pradesh, especially in Guntur district. o Explainthecontextforusingbothquantitativeandqualitativeanalysesto validate forecasted rainfall. 2. **StudyArea** o DescribeGunturdistrict,focusingonitsclimate,croppingpatterns,andthe need for accurate rainfall forecasts. o Includerelevantdetailsliketheagro-climaticzone,primarycrops,andthe district"s reliance on monsoon rainfall.	

	3. **DataSourceandMethodology** o **DataCollection**:Describehowforecastedandobservedrainfalldatawere obtained, specifying sources like the IMD in Amaravathi and the forecast intervals. o **QuantitativeAnalysisMethods**:Outlineeachquantitativemetric(e.g.,Ratio Score, HK Score, PoD) with brief explanations of their significance in evaluating forecast accuracy. o **Qualitative Analysis Methods**: Detail thequalitative success rate criteria and anythresholdsusedtocategorizeforecastaccuracy(e.g.,"Correct,""Usable"). 4. **ResultsandDiscussion** o **Quantitative Analysis Results**: Present the findings from ratio scores, HK scores, and PoD values for each block and the overall district. Considerdividingthissectionbymonsoonseasons(southwest,northeast,andoverall)for clarity. o **Qualitative Analysis Results**: Summarize success rates and accuracy variationsobservedacrossblocksandmonsoonperiods,anddiscusspotential factors affecting the success rates, such as spatial variability. 5. **Conclusion** o Summarizekeyinsightsfrombothquantitativeandqualitativeanalyses, emphasizing implications for agricultural planning. o Suggestfutureresearchdirections,likerefiningforecastmodelsor incorporating additional meteorological data.	
Please write a few sentences regarding the scientific correctnessofthismanuscript.Whydoyouthinkthat thismanuscriptisscientificallyrobustandtechnically sound? A minimum of 3-4 sentences may be required for this part.	This manuscript appears scientifically robust and technically sound due to its clear and systematic methodology for validating forecasted rainfall data. The use of both quantitative (ratio scores, Hansen and Kuipers score, Probability of Detection) and qualitative (success rates) analyses provides a comprehensive assessment of forecast accuracy, which strengthens the reliability of the findings. The quantitative metrics chosen are well-established in meteorologicalstudies,ensuringthattheresultsarecomparabletostandardindustrypractices. Additionally, the manuscript accounts for the spatio-temporal variations in rainfall, which is critical for evaluating forecast performance in a region with diverse weather patterns like Gunturdistrict. Thethoroughnessin datavalidationenhances the scientificrigor ofthe study.	
Arethereferencessufficientandrecent?Ifyouhave suggestions of additional references, please mention them in the review form. **-**	Referencesarenotsufficientnotrecentonealsoneed toaddstillmoreandrecentonelike 2023 to 2024 year published one.	

Review Form 3

MinorREVISIONcomments **Isthelanguage/Englishqualityofthearticlesuitable for scholarly communications?**	Language and English qualityof the article is generallysuitable for scholarly communication; however, there are a few areas where slight improvements could enhance clarity and readability. The manuscript demonstrates a strong command of technical terminology and the use of formal, academic language, which is appropriate for the intended audience. Some sentences could be streamlined or rephrased for better flow and precision, especially when presenting complex analytical results. Additionally, attention to sentence structure, punctuation, and consistencyin terminologywould furtherelevate themanuscript"sreadability and ensure a smooth communication of ideas. Overall,whilethelanguageisgenerallysuitableforscholarlypurposes,smallrevisionsfor clarity, coherence, and style would make it even more polished for publication.	
Optional/Generalcomments	Overall, this manuscript offers a comprehensive analysis of agro-meteorological forecasted rainfall,providingvaluableinsightsintoforecastaccuracyanditsimplicationsforagricultural planning in Guntur district, Andhra Pradesh. The combination of both qualitative and quantitative validation methods enhances the reliability and depth of the study. Hereareafewoptional/generalcommentsfor improvement: 1. **Clarity and Flow**: Some sections may benefit from more concise writing. For example, simplifying complex sentences or breaking them into smaller parts could improvereadability.Cleartransitionsbetweensections(e.g.,fromthemethodstothe results) would also help the reader follow the argument more smoothly. 2. **Figures and Tables**: Ensure that all figures and tables are appropriately referenced withinthetext.Itmightbehelpfultoincludeabriefdescriptionorsummaryofthekey findings from each table or figure within the manuscript itself to guide the reader. 3. **ContextualizationofResults**:Itwouldbevaluabletoprovidemorecontextregarding how the forecast accuracy observed in Guntur compares with other similar regions or studies. This would offer a better understanding of the broader implications of the study. 4. **Discussion and Future Work**: The discussion section could benefit from more in- depth interpretation of the results, particularlyin terms of their practical application. Additionally, mentioning future research directions or potential improvements in forecastingmethodscouldprovideaforward-lookingperspectiveforthemanuscript. 5. **Spelling/GrammarCheck**:Ensureathoroughreviewforminorspellingandgrammar inconsistencies (e.g., "south east monsoon" should be "southwest monsoon"). Even though these do not significantly impact the scientific content, polishing the language would improve the manuscript"s overall quality. Basedontheprovidedinformation,theredonotappeartobeanyethicalissuesinthis manuscript. The study seems to rely on publicly available forecasted rainfall data provided by the IMD (Indian Meteorological Department), and the analysis methods (both qualitative and quantitative) are standard scientific practices for validating forecast data. The use of this data is properly cited, and there is no indication of data manipulation or unethical research practices.	

Review Form 3 **PART 2:**

	Reviewer's comment	**Author's comment***(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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