
```

function [ elevation_upliftCorrected elevationError_upliftCorrected ] =...
    upliftCorrectElevation_NOGIA...
    ( coralData,ageApplication,rowIdentifierCorals,rowIdentifierAge)
%uplift correct elevations for corals depending on a simulated age

    if coralData(rowIdentifierCorals,3)~=0
        %i.e. where uplift has a non-zero value
        elevation_upliftCorrected=coralData(rowIdentifierCorals,5)-...
            (coralData(rowIdentifierCorals,3) *...
            ageApplication(rowIdentifierAge,1));
        errorTerm1=coralData(rowIdentifierCorals,6)^2;
        errorTerm2=(coralData(rowIdentifierCorals,3)*...
            ageApplication(rowIdentifierAge,1))*sqrt...
            (((coralData(rowIdentifierCorals,4)/coralData...
            (rowIdentifierCorals,3))^2)+...
            (((coralData(rowIdentifierCorals,12)/2)/...
            ageApplication(rowIdentifierAge,1))^2));
        elevationError_upliftCorrected=sqrt((errorTerm1) + (errorTerm2^2));
    else
        %can keep same equation for zedtcp, but not for error
        elevation_upliftCorrected=coralData(rowIdentifierCorals,5)-...
            (coralData(rowIdentifierCorals,3) *...
            ageApplication(rowIdentifierAge,1));
        elevationError_upliftCorrected=coralData(rowIdentifierCorals,6);
    end
end
end

```

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