

Fig. R1. Map of mean annual precipitation (July 1981- June 2016) of (a) gauged data* and isohyets** and (b) CHIRPS satellite product. Source: *SENAMHI, **Ministry of Rural Development and Land of Bolivia.

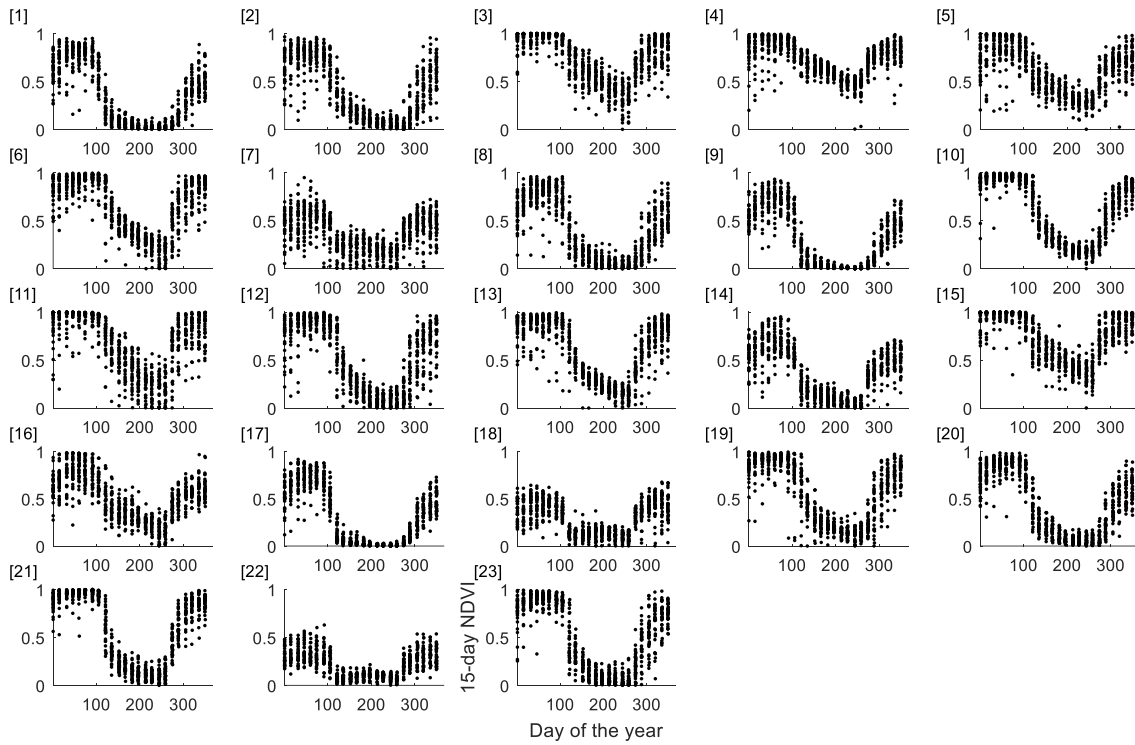


Fig R2. Scatterplot of the day of the year (DOY) and 15-day NDVI from July 1981 to December 2015 for the 23 locations described in Table A1.

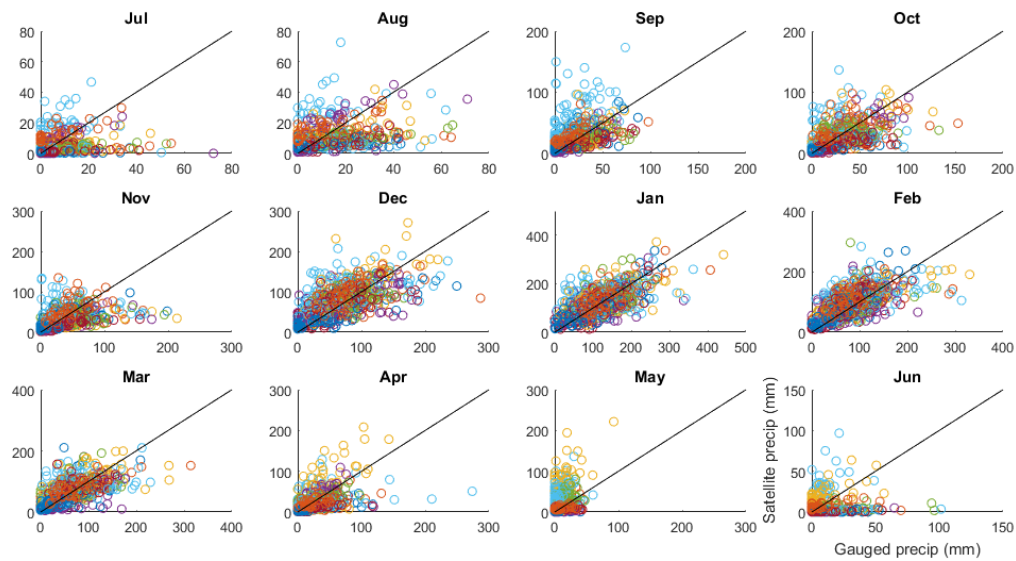


Figure R3. Scatterplot of monthly gauged and satellite precipitation data for the 23 studied locations from July 1981 to December 2015.

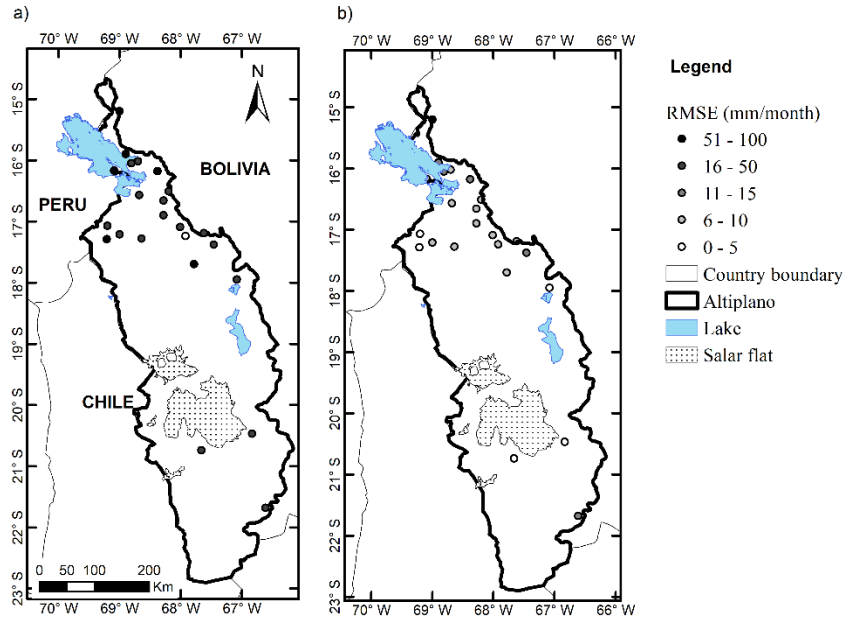


Fig. R4. RMSE for (a) January and (b) June.

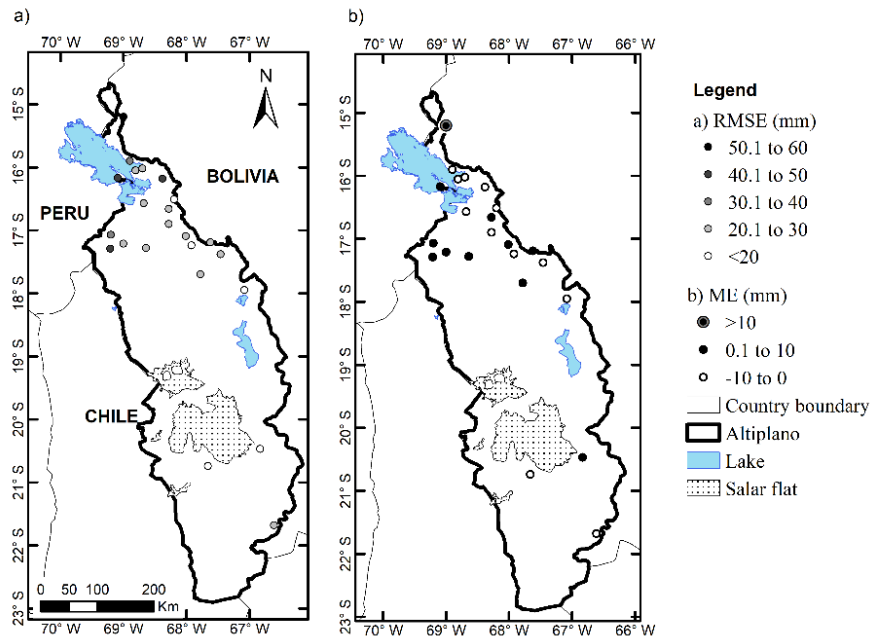


Fig. R5. Map of the Altiplano showing (a) RMSE and (b) ME at the 23 studied locations from July 1981 to June 2016

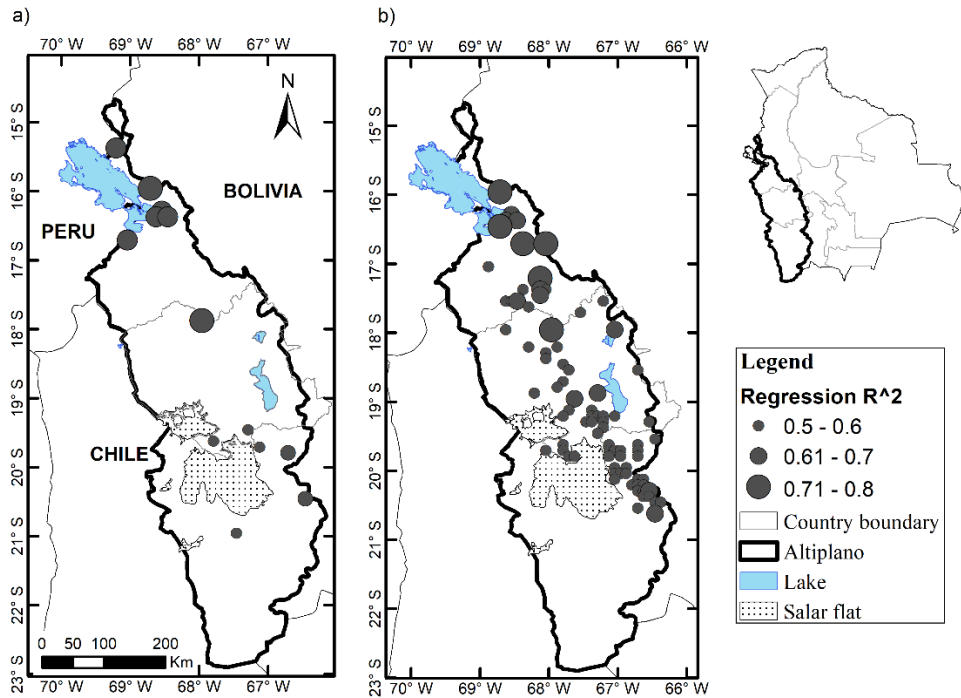


Fig R6. Correlation coefficient (R^2) of the regression of NDVI as the predictand, and precipitation as the predictor for the grids where NDVI better estimate the (a) quinoa and (b) potato yield.

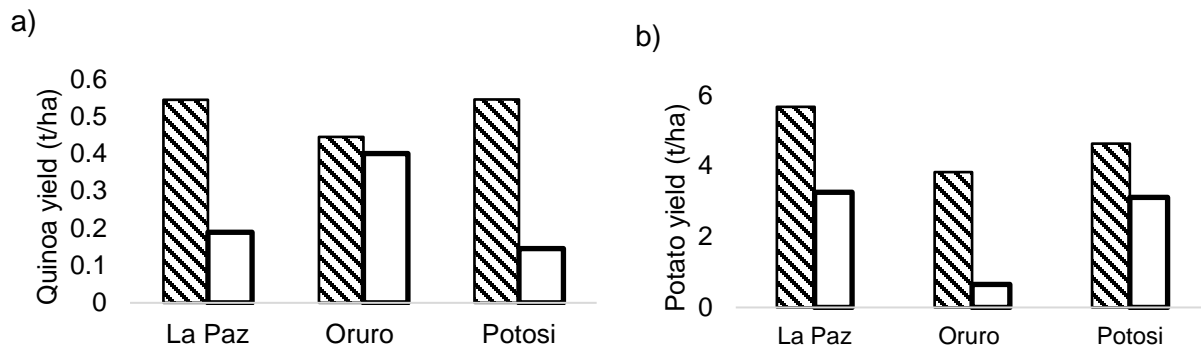


Fig. R7. Comparison of the crop production between the mean crop yield from 1981 to 2016 and the crop yield of 1982/1983 of a) quinoa and b) potato crops.

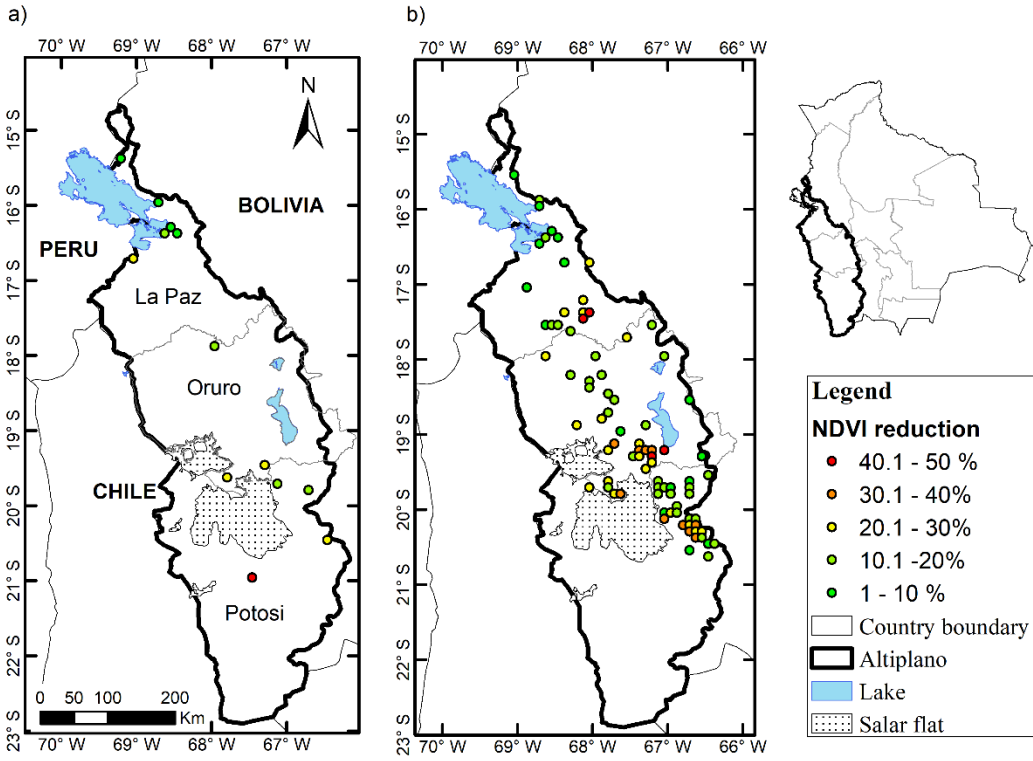


Fig. R8 NDVI reduction between the NDVI during a strong El Nino 1982-1983 and the mean NDVI from 1981 to 2016 for a) quinoa and b) potato crop.