ForSAFE-VEG: Deposition Related Input for Switzerland

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Input Requirements: Deposition

- annual deposition rates for a reference year.
- (relative) deposition trend curves over the modelling period.
- ForSAFE calculates the temporal evolution of dry deposition as a function of the vegetation status. Therefore, wet and dry deposition must be supplied separately.
Input Requirements: Deposition

Wet and dry deposition of:

- oxidized nitrogen
- reduced nitrogen
- sulphur
- Bc (= Ca + Mg + K)
- Na
- Cl
Deposition Model

• Deposition rates were modeled or interpolated on the basis of results from various monitoring sites: a generalised combined approach for the reference year 2000.
• Emission-dispersion models for gases (NO₂, NH₃) and particles (NO₃, NH₄)
• Geostatistical interpolation or simple altitude functions: Wet deposition, SO₂
Deposition 2000: sulphate, wet

precipitation map •
calculated concentrations
Deposition 2000: NH$_3$, gas

1. activity map • Ef,
2. atmosph. dispersion model
3. concentrations • Vdep
Deposition Trends Base cations

Rough estimates, national emissions of HCl and dust

![Graph showing deposition trends for different cations over time.](image-url)