

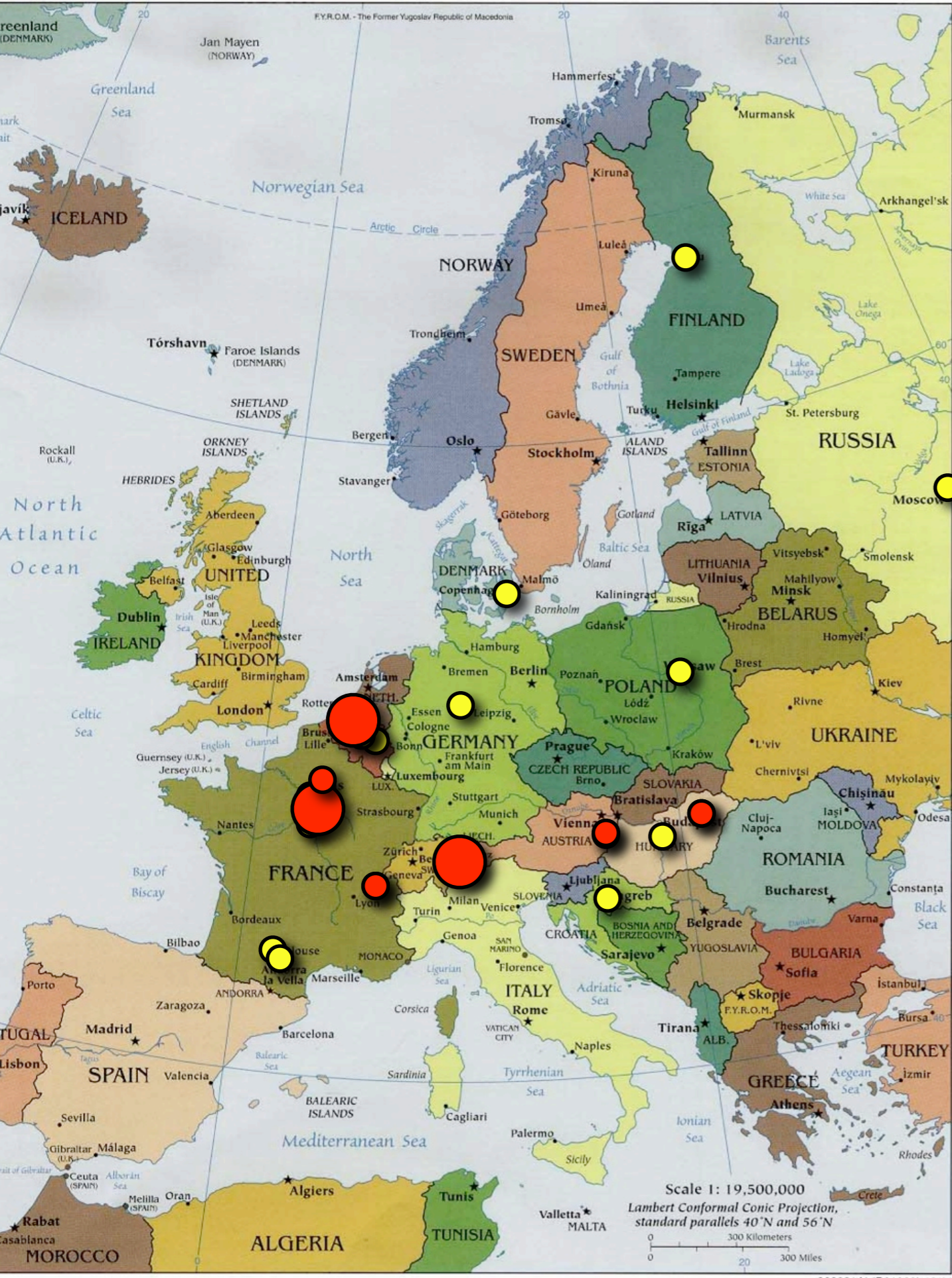
WP5 “Irradiance”

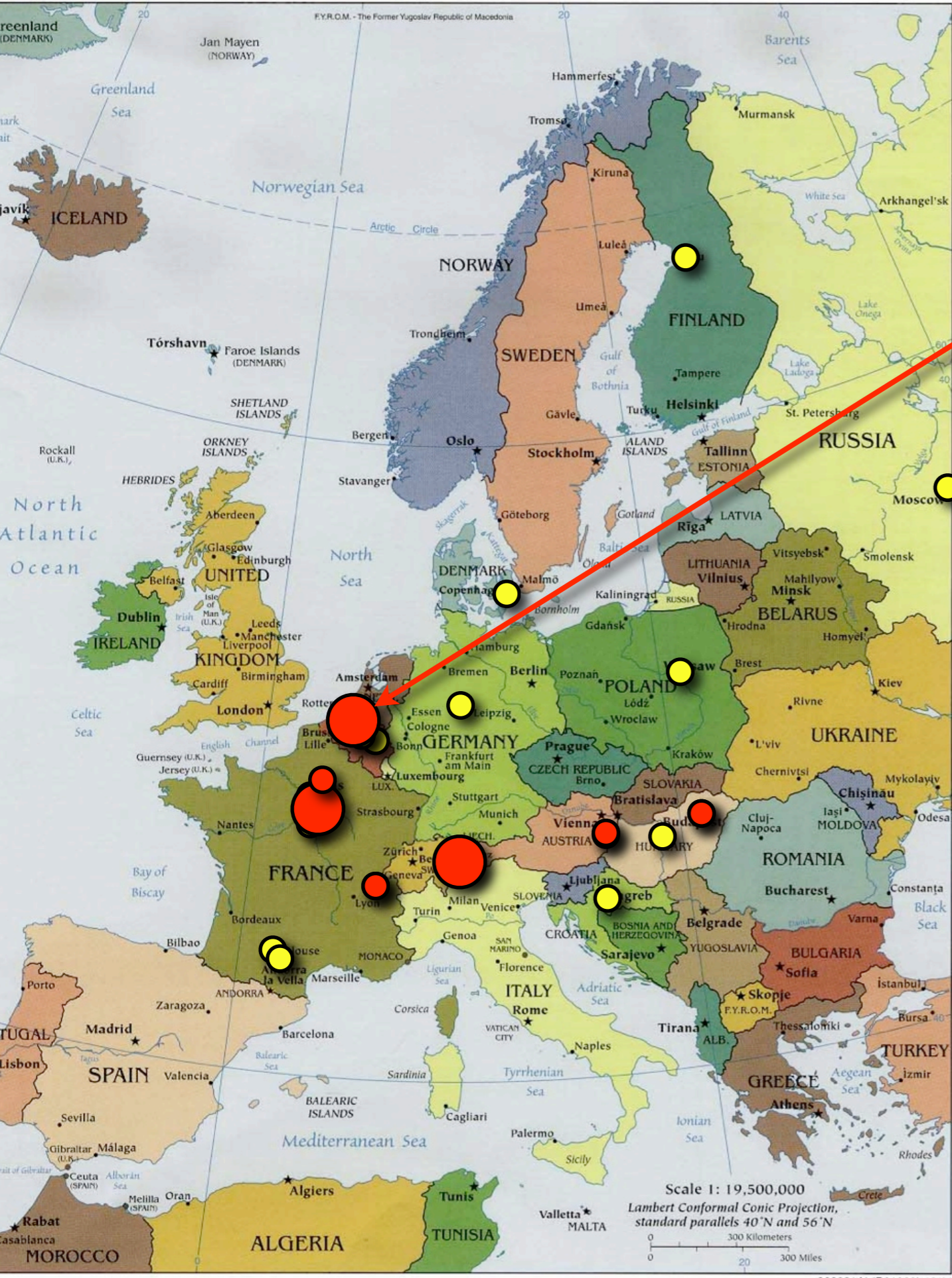
T. Dudok de Wit + WP3 team

ROPE

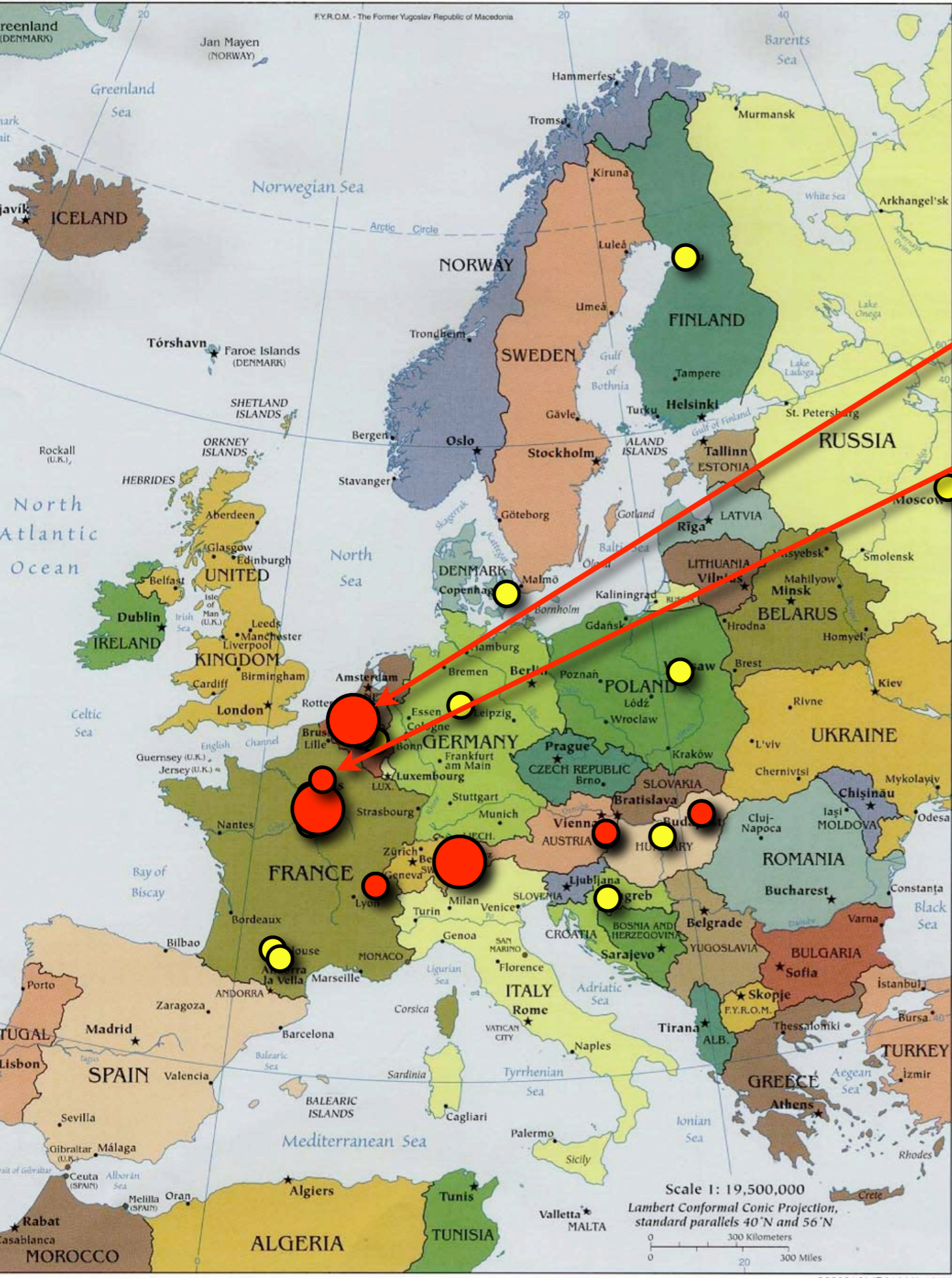


ROPE





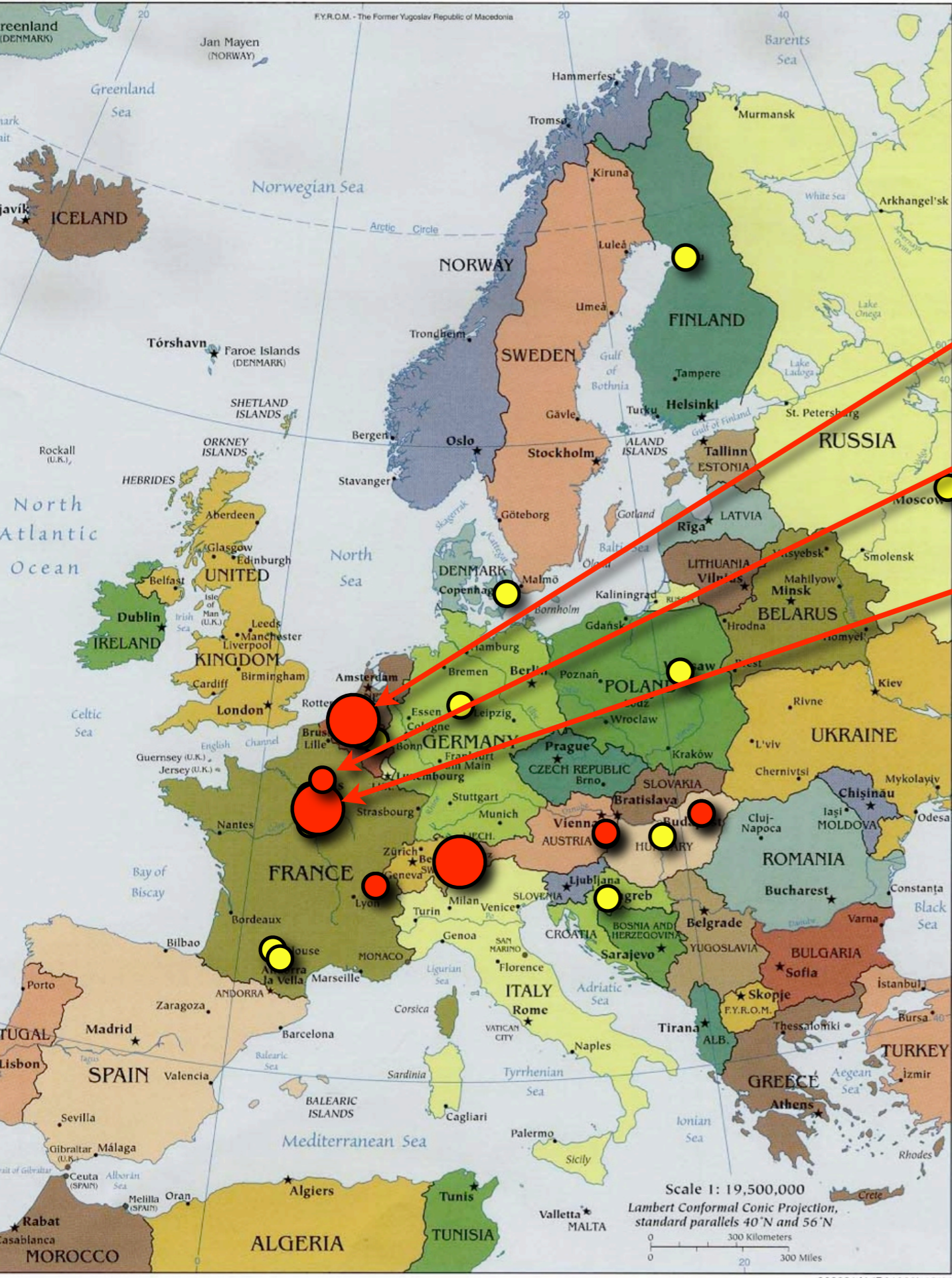
Royal Observatory of Belgium (ROB)



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Observatoire de Paris

Scale 1: 19,500,000
Lambert Conformal Conic Projection,
standard parallels 40°N and 56°N

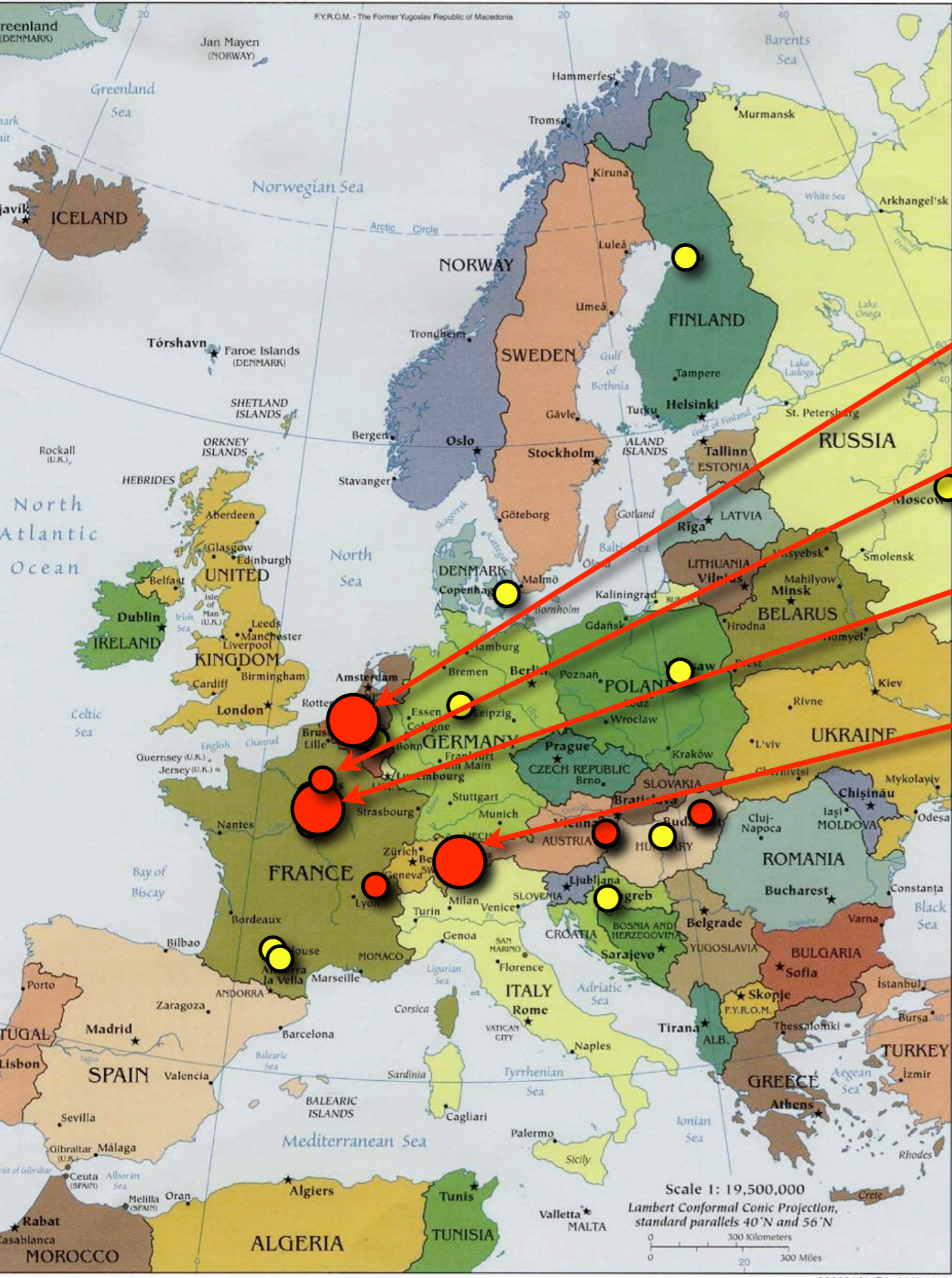


Royal Observatory of Belgium (ROB)

Observatoire de Paris

Lab. de Physique et Chimie de l'Environnement (LPCE)

Scale 1: 19,500,000
Lambert Conformal Conic Projection,
standard parallels 40°N and 56°N
0 300 Kilometers
0 20 300 Miles

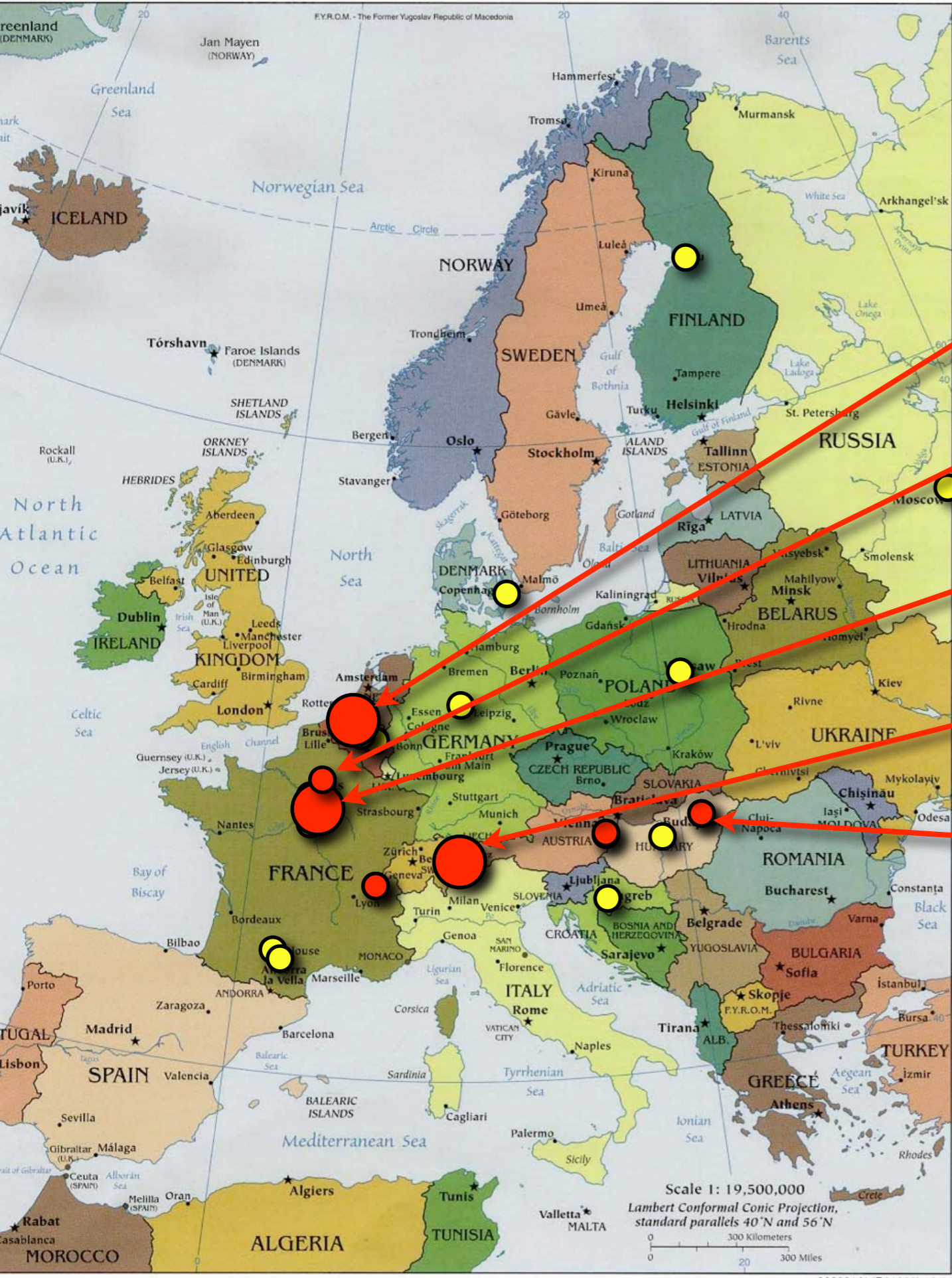


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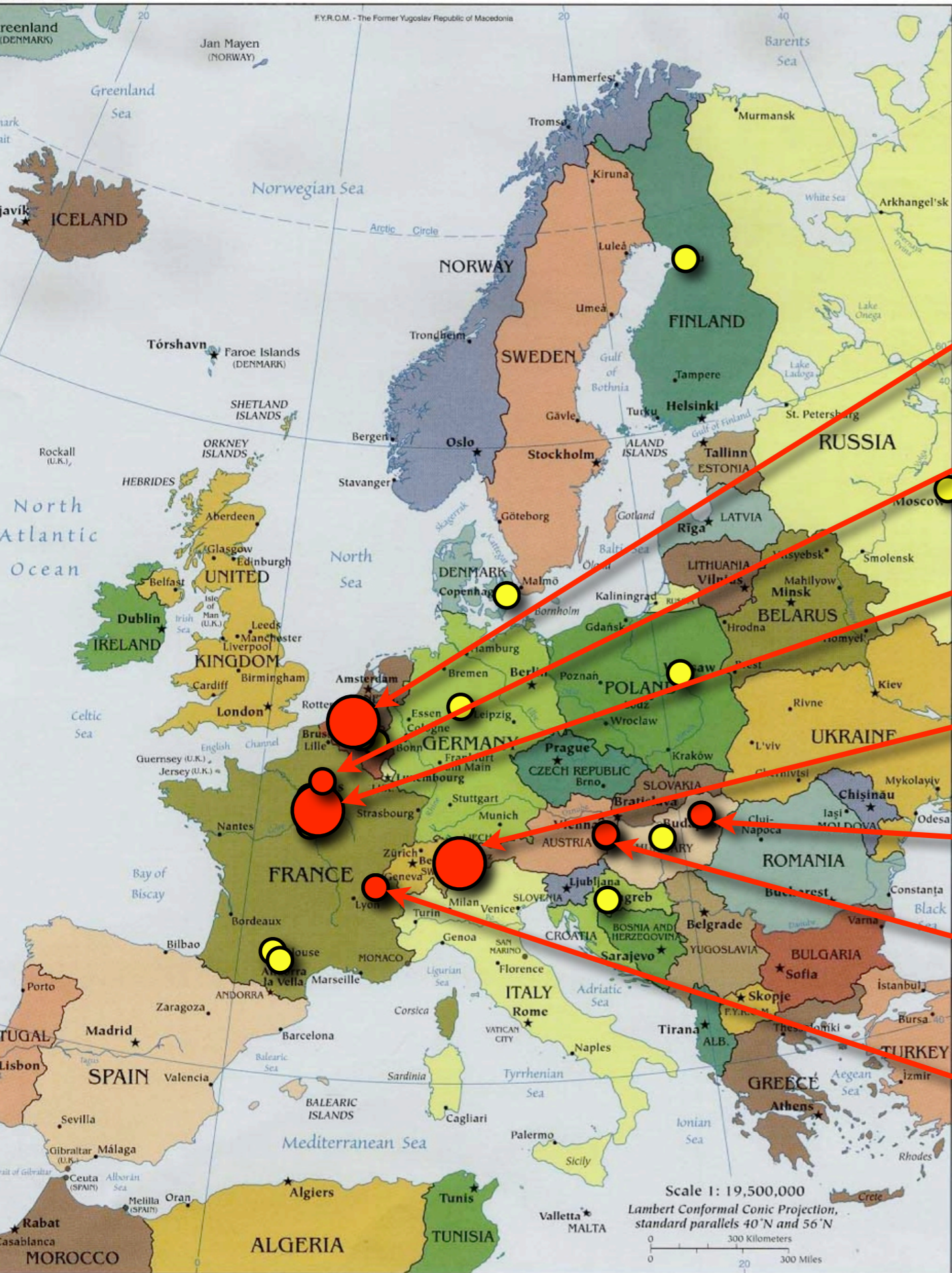
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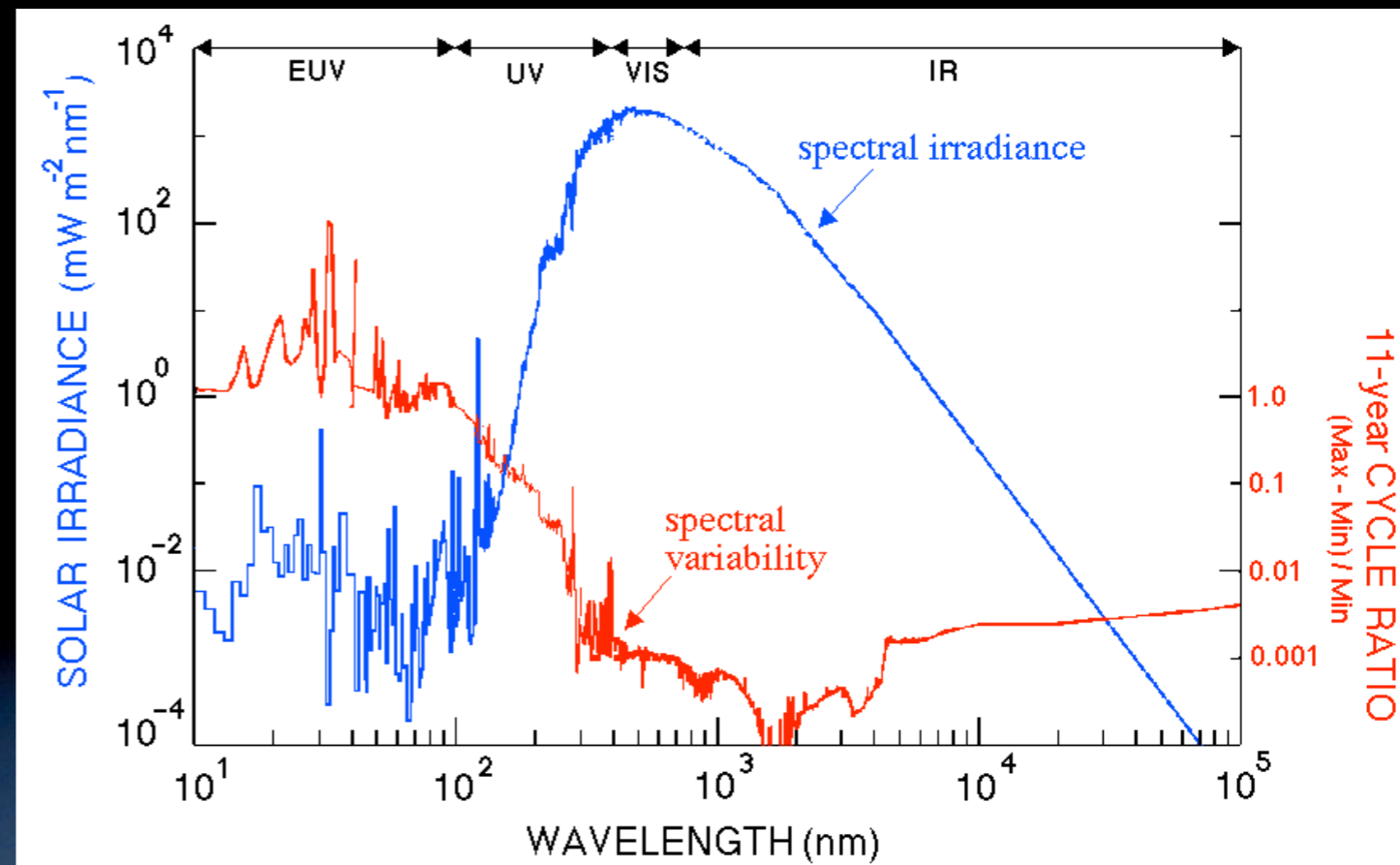
Lab. de Planétologie de Grenoble (LPG)

Who is mainly involved ?

- **ROB (30)** : D. Berghmans, V. Delouille, C. Timmermans
- **LPCE (37)** : T. Dudok de Wit, M. Kretzschmar, P. Gille, J. Watermann, post-doc
- **PMOD (45)** : W. Schmutz, E. Rozanov, T. Egorova
- **LPG (8)** : J. Lilensten
- **KO (4)** : András Ludmány, ...
- **UNIGRAZ (5)** : Wolfgang Otruba, ...
- **OBSPARIS (8)** : Jean Aboudarham, Nicolas Fuller

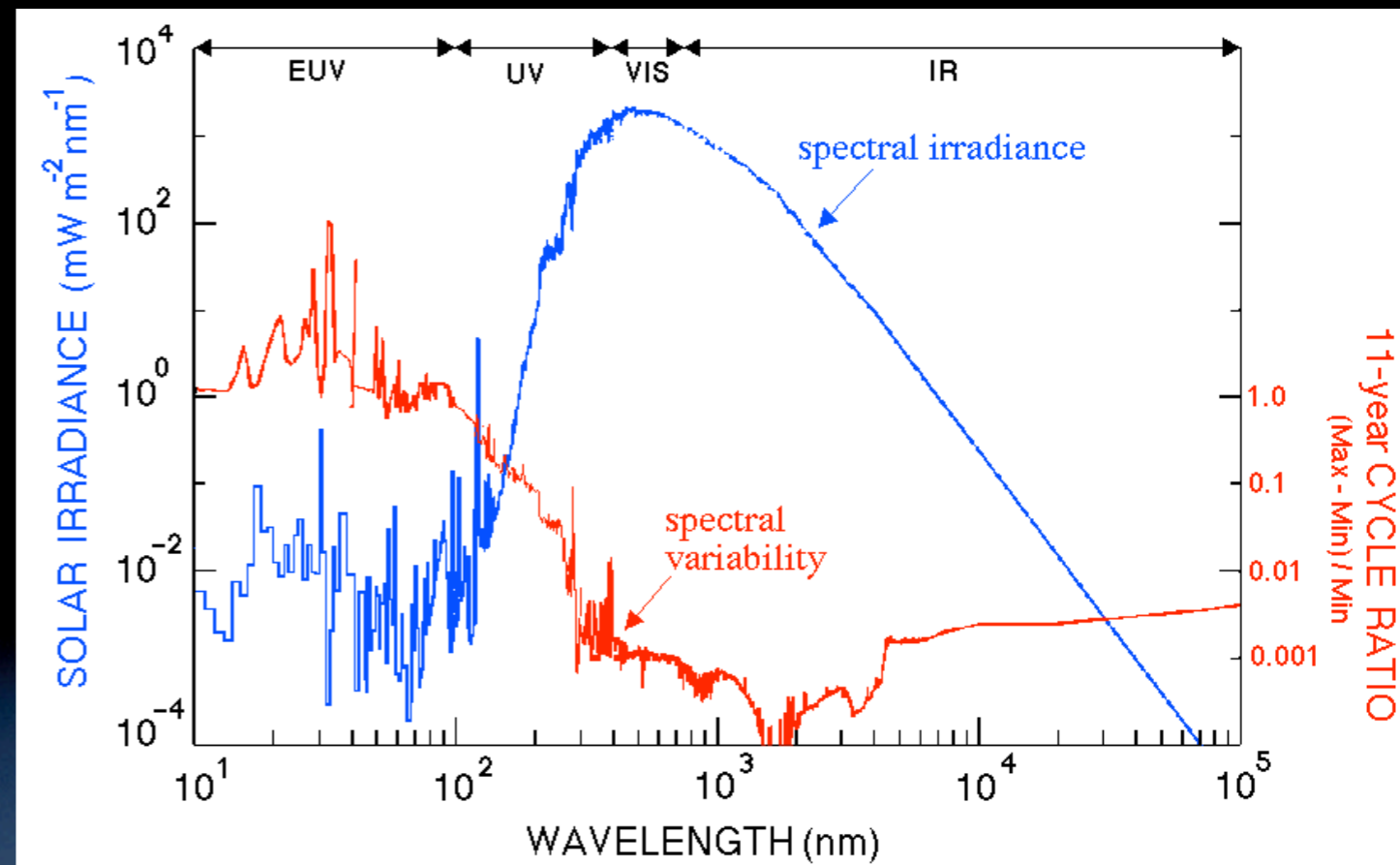
*in blue : people to be hired by SOTERIA
numbers = nr of man-years*

Key questions



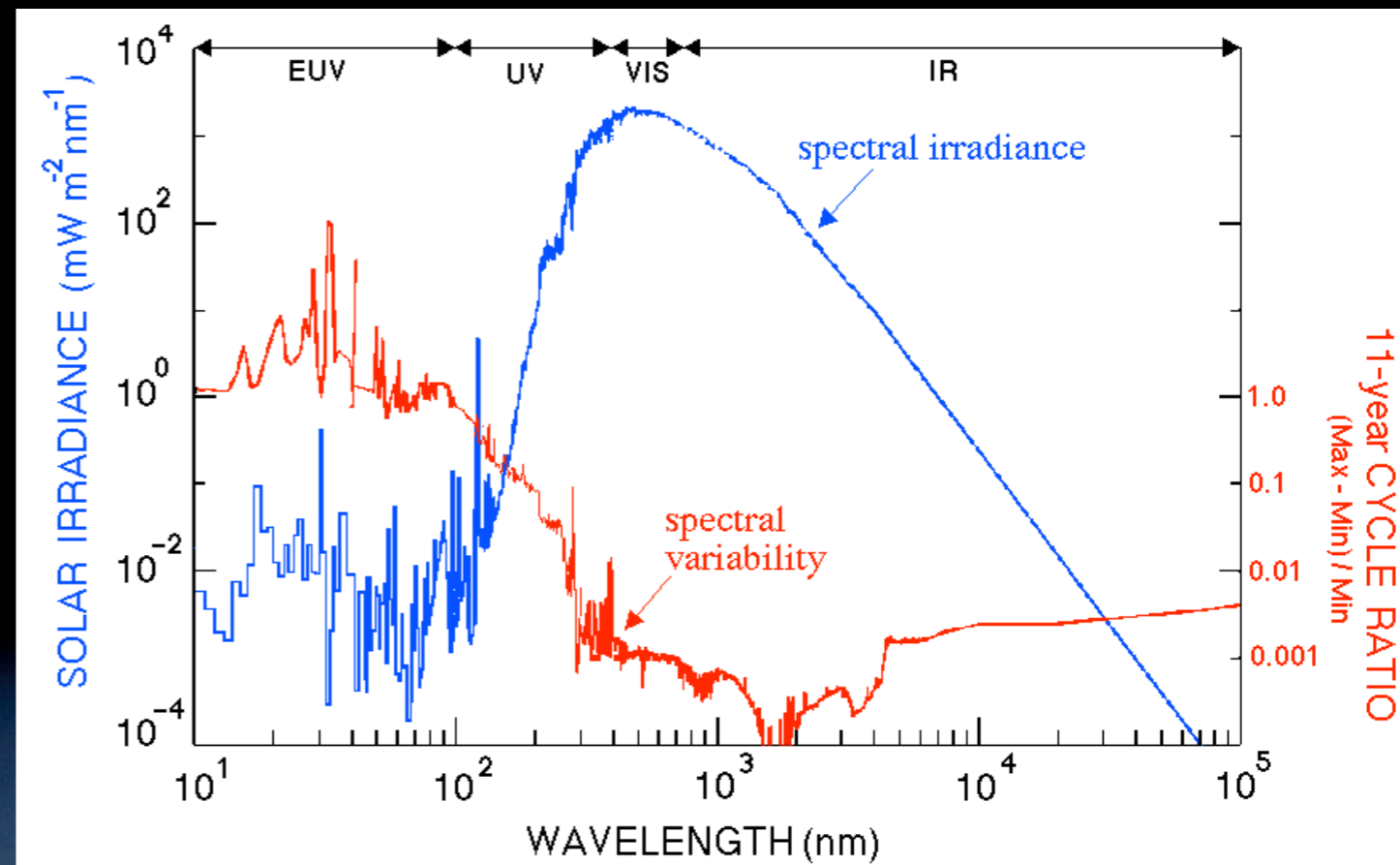
Key questions

- What causes the variability of the total solar irradiance ?



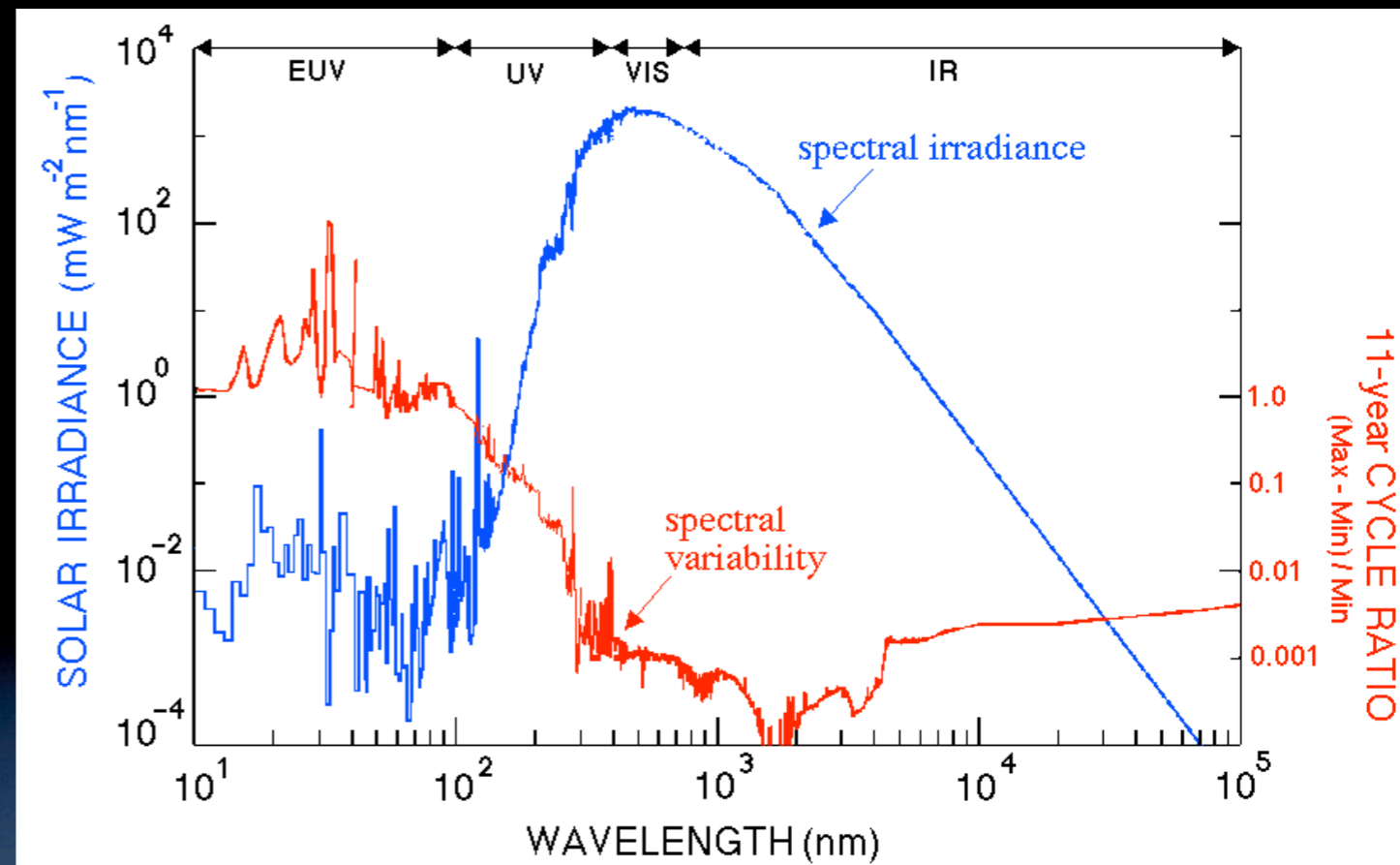
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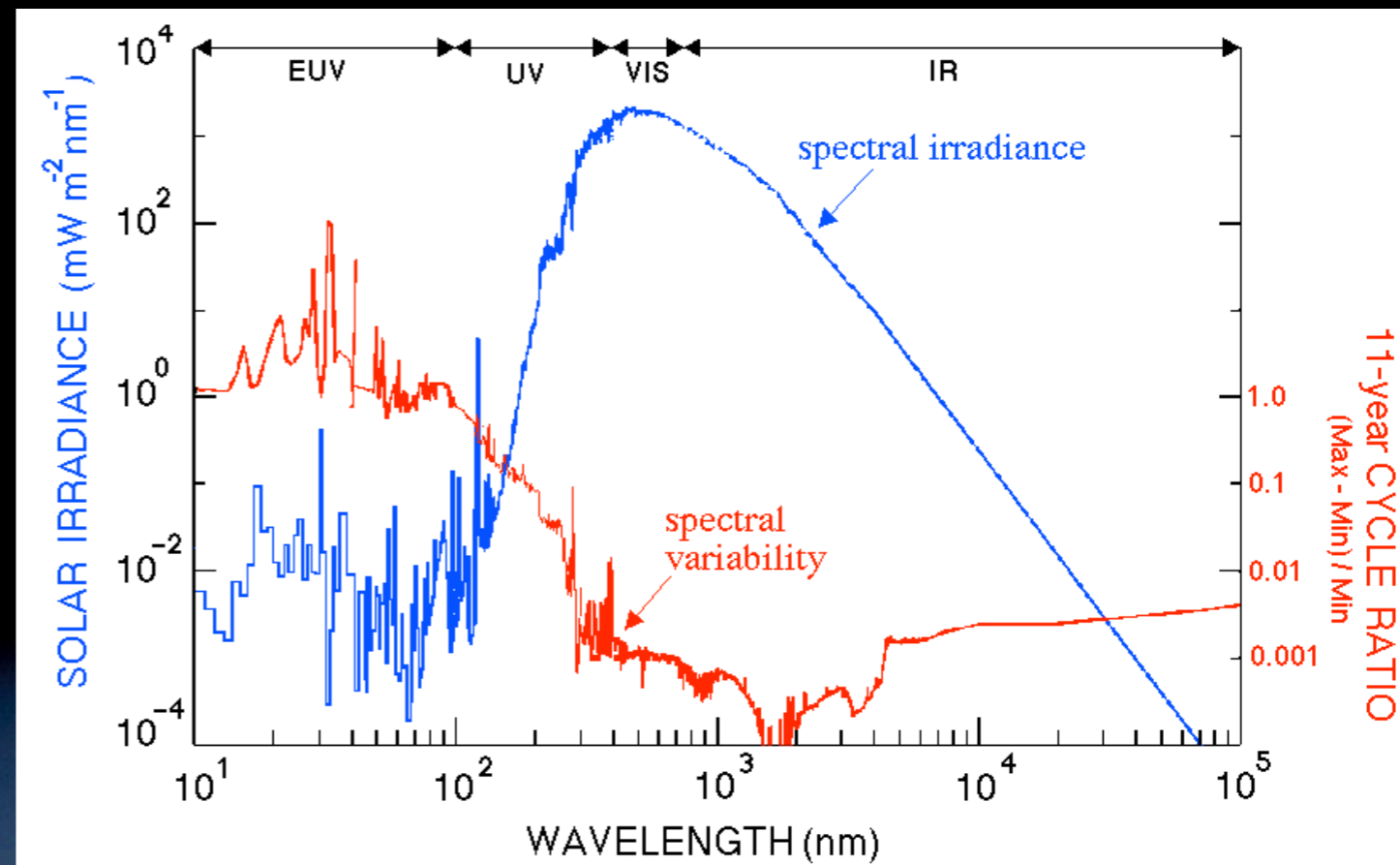
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- How does this affect **climate** ?
- How do **flares** affect the visible & infra-red parts of the spectrum ?
- How to properly measure the spectral variability for **space weather applications** (communications, orbitography, ...)



Tasks

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 - multi-wavelength studies (all)

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4. Statistical flare prediction (ROB)

Deliverables

1. Online flare prediction model (ROB)
2. Online UV spectrum nowcast (LPCE)
3. Online nowcast of the middle atmosphere (PMOD)
4. Intercomparison of TSI calibrations

More than just WP5

- We'll rely on more experiments than will be provided within SOTERIA
 - your contribution is also welcome !
- Our final objectives
 - get more involved in Sun-climate issues
 - pave the way for robust UV monitors/imagers for space weather applications
 - improve the synergies between these instruments (smart data analysis techniques)