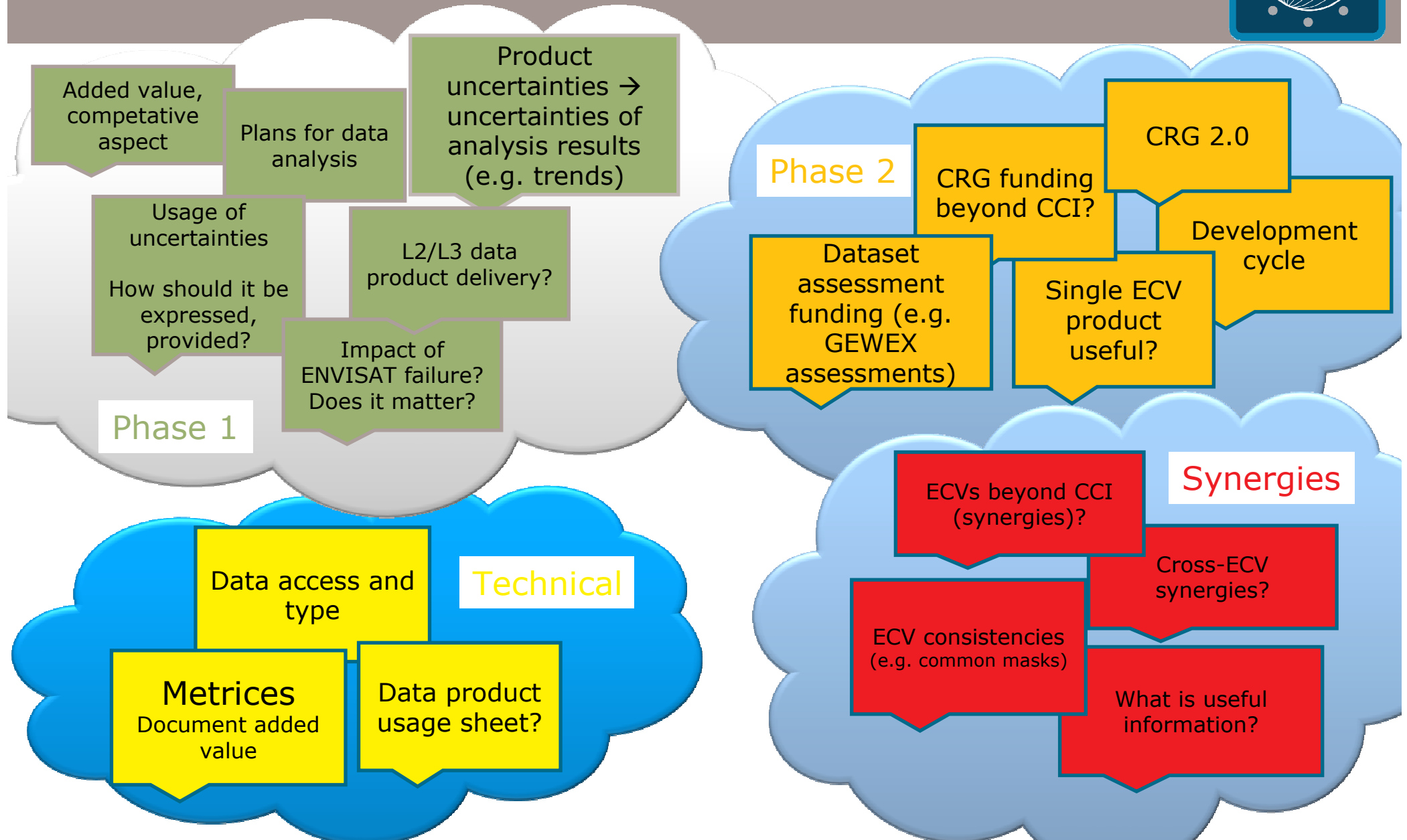




Splinter Group B

CRG

Topics covered



CCI 1.0



Phase 1

Plans for data analysis

- **Planned usage within CRG?**
 - Model confrontation ... data assimilation
 - Global ... very detailed studies envisaged
 - CRG seem to be ready to work by tomorrow
- **Value of CCI data sets needs to be demonstrated for engagement of larger community**
 - Some projects perform benchmarking with independent data (other variables, in situ)



Plans for data analysis

Product uncertainties → uncertainties of analysis results (e.g. trends)

Usage of uncertainties

How should it be expressed, provided?

Phase 1

- **Uncertainties?**

- Observed differences (e.g. model, data) real (e.g. 80 : 100)?
- Uncertainty information needs to help to answer this question
- Random noise + bias + stability
- → (spatial, temporal) bias information as **part of the product**
- Or even correct for bias already in product



Plans for data analysis

Product uncertainties → uncertainties of analysis results (e.g. trends)

Usage of uncertainties

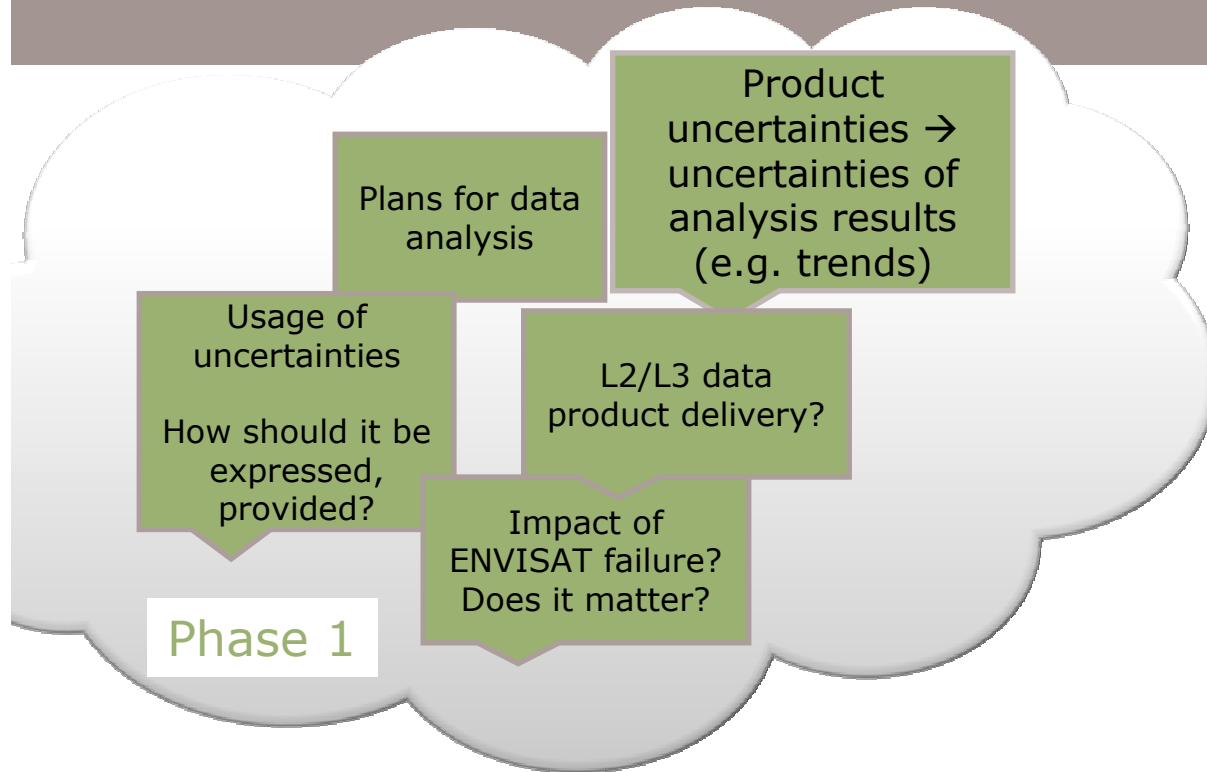
How should it be expressed, provided?

Phase 1

- **Uncertainties usage**

- Data assimilation
- Spatial scaling (covariance of error; e.g. SST)
- Ensemble generation of e.g. models
- Simple comparison: weighting of differences; model improvement

CCI 1.0



- **L2/L3 needed? yes, and perhaps even L4 (e.g. outreach; trends)**
- **ENVISAT failure as a problem for applications?**
 - No clear picture; YES for SST
 - Concerns about impact on longterm analysis; general: data rich vs. data poor periods. → should be reflected in overall uncertainties

CCI 1.0



Added value,
competative
aspect

Plans for data
analysis

Product
uncertainties →
uncertainties of
analysis results
(e.g. trends)

Usage of
uncertainties

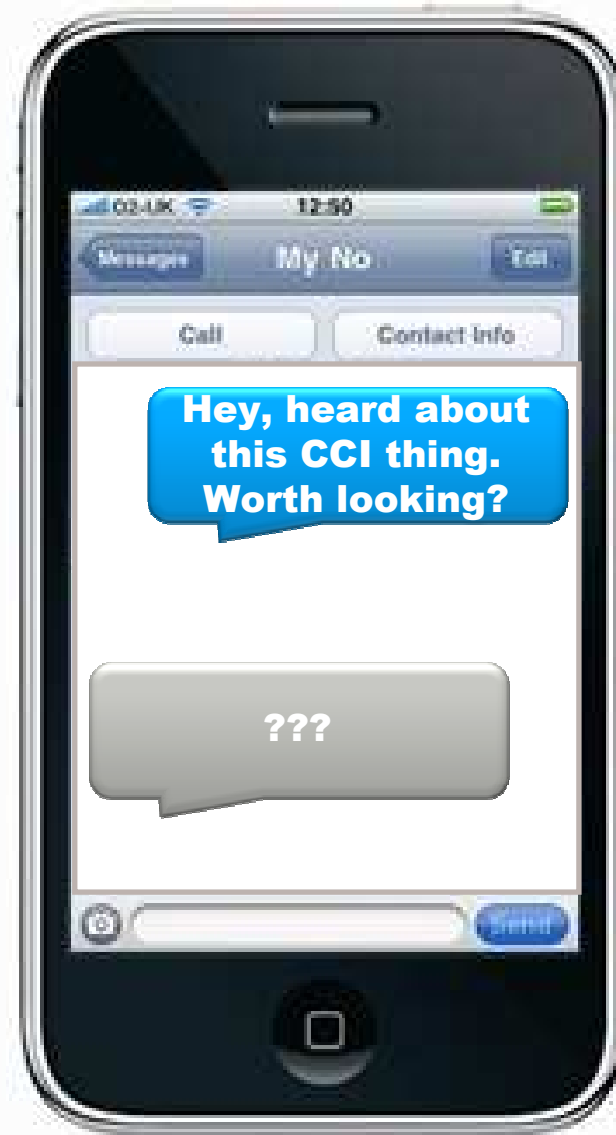
How should it be
expressed,
provided?

L2/L3 data
product delivery?

Impact of
ENVISAT failure?
Does it matter?

Phase 1

Added value: user perspective



CRG answers ...



Mr. SSH: „best dataset with climate signal (trend)“

Mr. Aerosol: „first longterm persp.; Polder highest inf. content “

Mr. GHG: „unique longterm record incl. bias correction “

Mrs. SST: „Darling I have you soooo much to tell ...“

[unique

Mr. Clouds: „first longterm L1 multisensor record; optimal estimation approach“

Mr. Ocean color: „only dataset with uncertainties“

Mr. Ozone: „cont. longterm global vertical rec. for fluctuations & trends“

Mr. Sea ice: „unique record of longterm sea ice thickness “

Mr. LC: „most detailed high res. LC + LC conditions “

Mr. IceSheet: „longterm consistent records; complementary velocity maps“

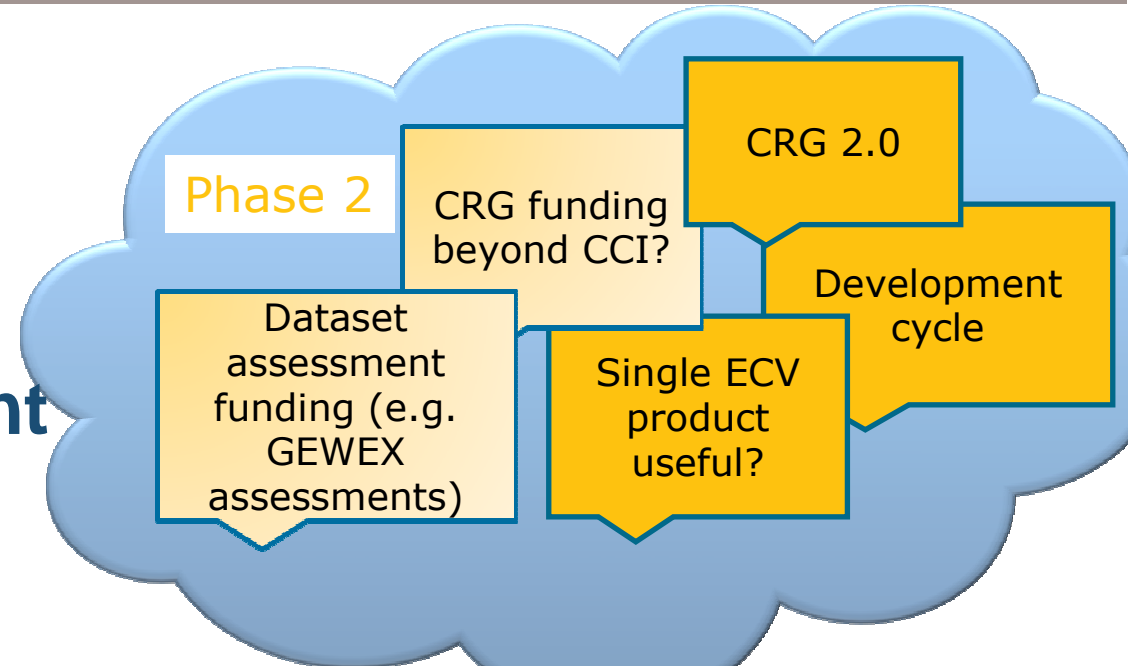
Mr. Fire: „unique merged data product from 3 different sensors“

Mrs. SM: „only global 30+ record with well charac. uncertainties“

Mr. Glacier: „first ever comprehensive glacier inventory“



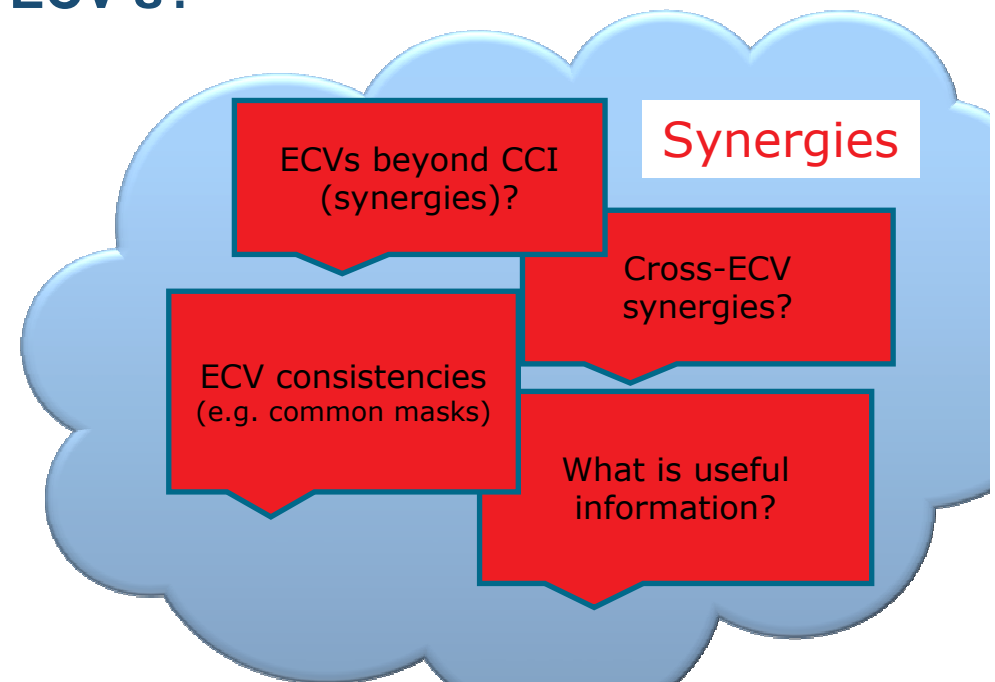
- **Widening user perspective (e.g. mitigation)**
- **Strong user involvement essential**
- **Single ECV product vs. „beauty contest“**
 - Not feasible
 - **Diversity essential**
 - Similar to ESM development (1 world but multiple realizations of it)



Cross ECV perspectives



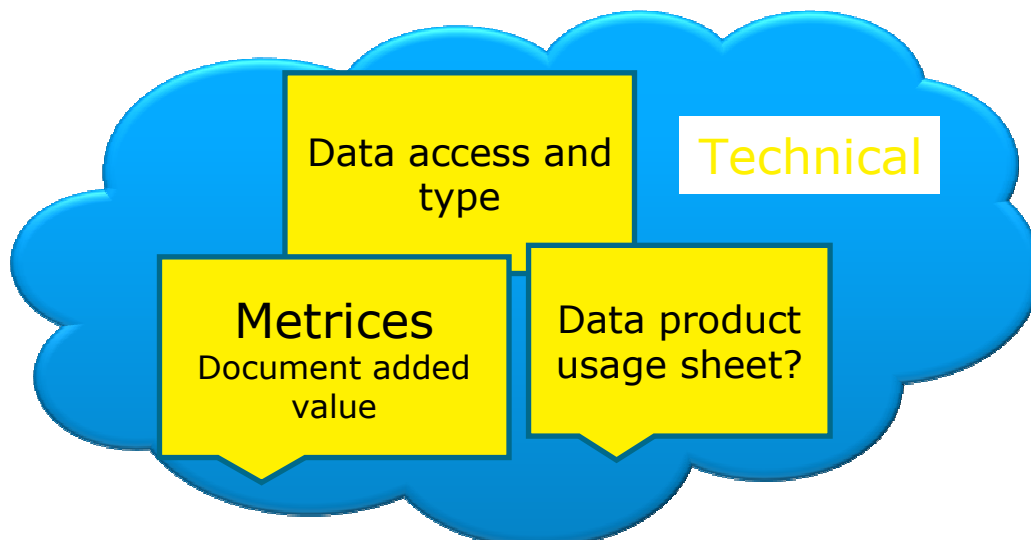
- No full survey
- Cross ECV analysis for some ECV's
- More crosscutting work in phase 2
- Synergies with other projects (not CCI; e.g. Geoland2, Glob projects ...)
- New ECV's?



Technical aspects



- **Data provision phase 1**
 - No single data access point envisaged yet (project basis) as a fact. Critical for outreach?
 - ESG as one data access point (projects free to initiate contact with NASA JPL → will this happen?)
 - Data product sheet as suggested by obs4mips considered to be very useful



Expected preliminary data delivery (session 2)



ECV	Q2/2012	Q3/2012	Q4/2012	Q1/2013	Q2/2013
Landcover		Sep.			
Fire	Aug				
Soil moisture	June				
Ice sheet					
Glaciers	Feb				
SST				Feb	
SSH		Sep			
Ocean color		Sep			
Sea ice					
Aerosols		Oct			
Clouds		Sep			
GHG				March	
Ozone		Nov			