SHORT SUMMARY

We could summarize all mentioned in the table in the following way:

1. Melbourne & Seoul & Washington & Met Office & Toulouse GISCs portals (i.e. five of fifteen GISCs) have the same interface which is based on Open WIS software. There is no option for search by category in this interface. Search accuracy has different options (from imprecise to precise). The different search accuracy gives extremely different number of search results, but user can't have clear understanding between search accuracy and output results. From my point of view it could be much more efficient if user could put the tick "strict accordance (based on all forms of words)" or as it is implemented in Beijing Portal to have a chance to choose one of the options: any / all (*words*).

Also users do not have a possibility to search for the products based on defined set of categories.

And it extremely important (from user prospective) to specify if they search for the products with free or restricted licenses.

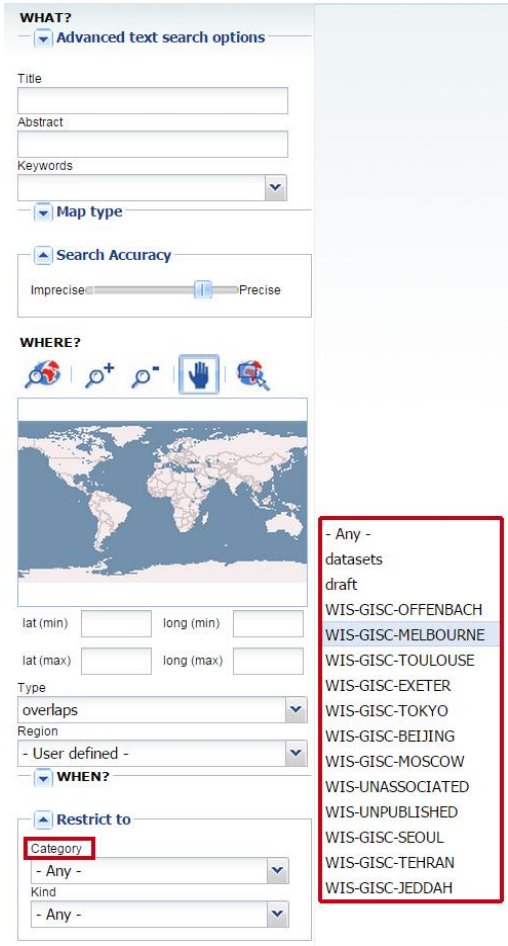
2. Brasilia GISC Portal has much more extended interface (with more options). This interface has category search (climatology, model, observation, forecast, analysis, others). It is quite efficient mechanisms, especially for new users. But it could be provided more detailed classification within different categories.

3. New Delhi & Kingdom of Saudi Arabia GISCs portals have the same interface. This interface has product search (GMDSS bulletin, NWP Charts, City weather on WMO site, Doppler Radar products and etc.). From my point of view the list of products should be arranged in more logic way (especially, these two portals have different categories of products).

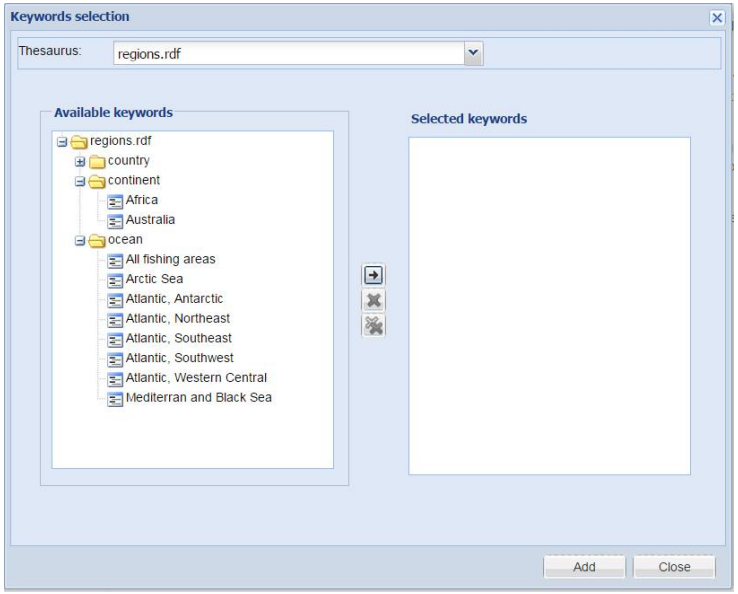
4. South Africa GISC has a very simple (easy to use) interface: only one box for search, specification of license type: free and restricted (this option is also implemented in Brasilia & Offenbach GISC Portals), and geographic boundaries. But time period could not be chosen by the user from the starting page (only if you go to each record in search results page).

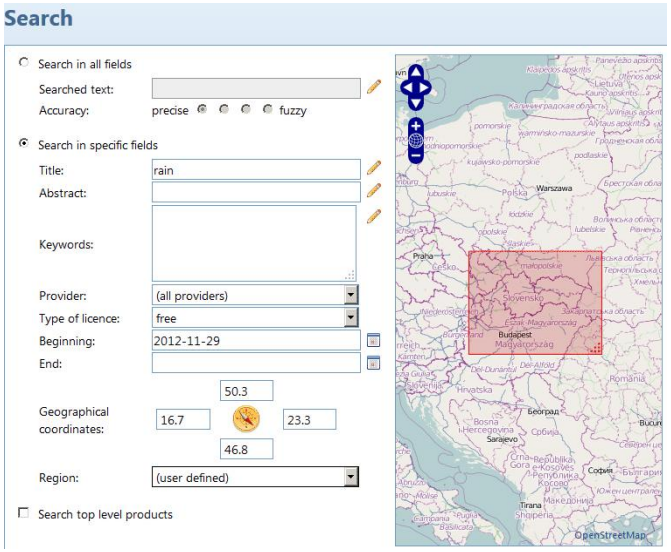
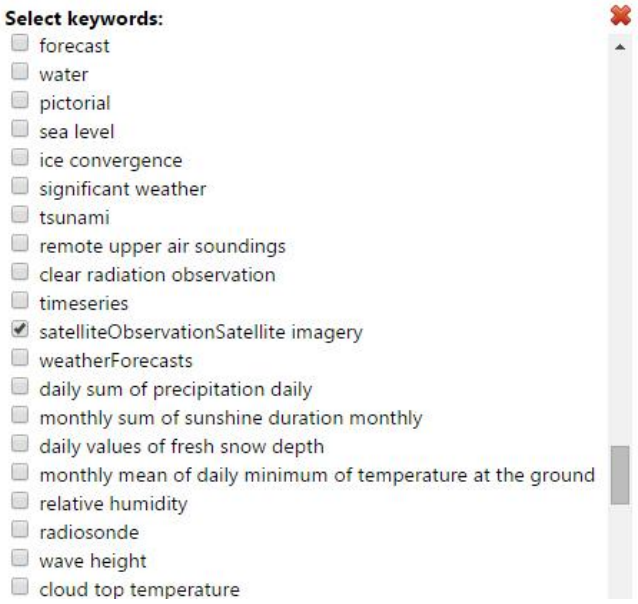
5. Iran GISC portal has non-typical interface. In particular non-typical categories for data search (Administrative and Political Boundaries, Agriculture and Farming, Atmosphere and Climatic, Biology and Ecology, Business and Economic, Cadastral, Cultural, Society and Demography, Elevation and Derived Products, Environment and Conservation and etc.).

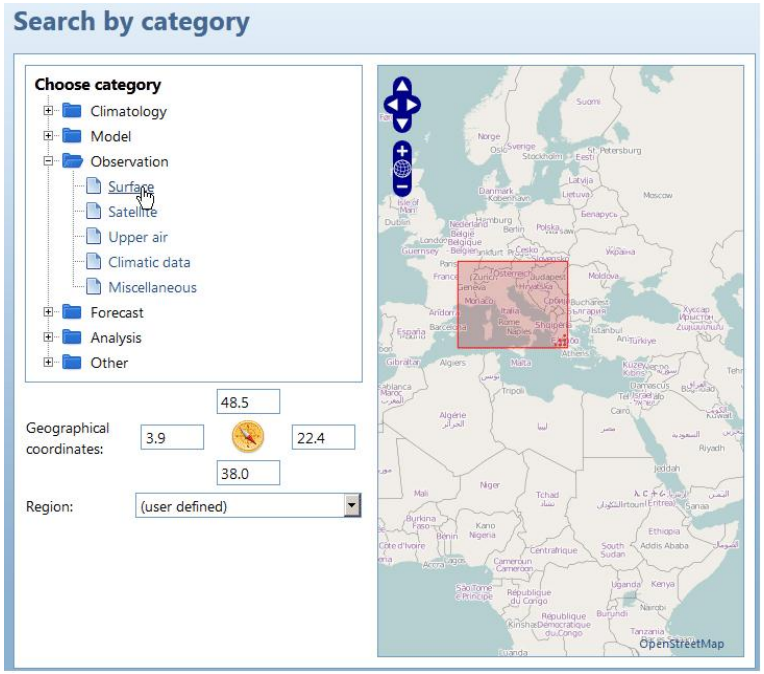
WIS GISCs Portals Interfaces

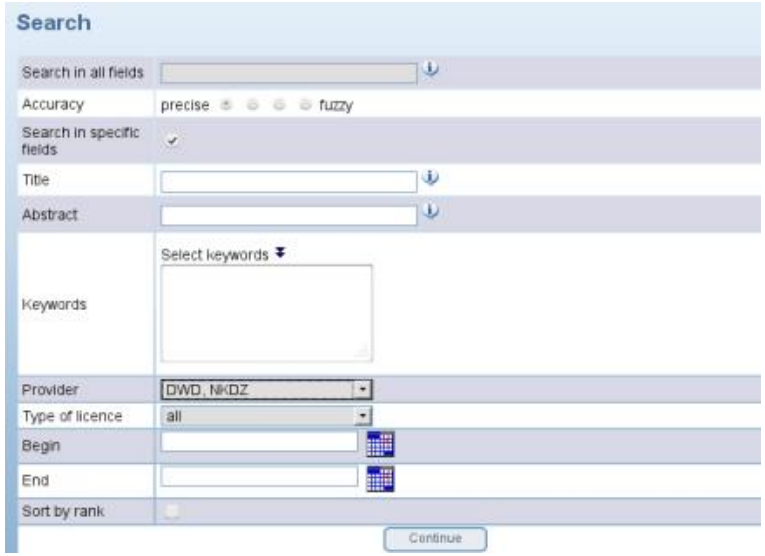
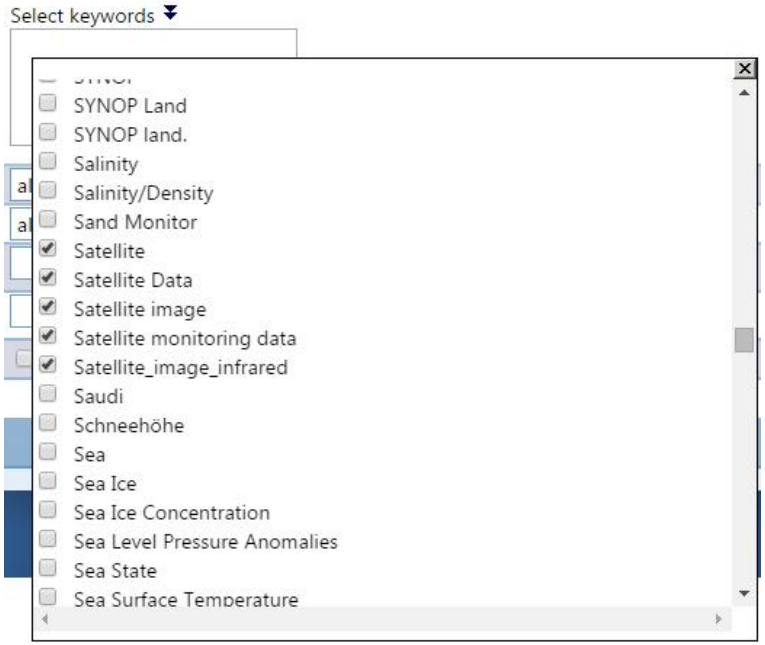
	Items	WIS GISCs portals screenshots	Comments / Recommendations
1	**SEARCH OPTIONS** (AVAILABLE KEYWORDS CATEGORIZATION, SEARCH ACCURACY)	**MELBOURNE & SEOUL & WASHINGTON & MET OFFICE & TOULOUSE GISCS**  *Washington / Met Office / Toulouse/ Melbourne GISCs*	***All these portals are based Open-WIS software.*** ***Text-based search***: **there are two options: normal search (search in all field – one box) & advanced search (search in different fields).** **From my point of view the option "search in all field" is very similar with your idea of predominant one text box as input ("No implementation of main search engine universal UI conventions"). And it is implemented in GISC portals, but also users have a chance to search in specific field (actually, I think it could be useful). But the idea of necessity "search result pages containing a short title for the product and a short product description with meaningful information regarding the products" is extremely important, as this option is not implemented in the GISC portals.** ***Advanced search*** based on title, abstract, keywords, category of providers (WIS-GISC-Melbourne and

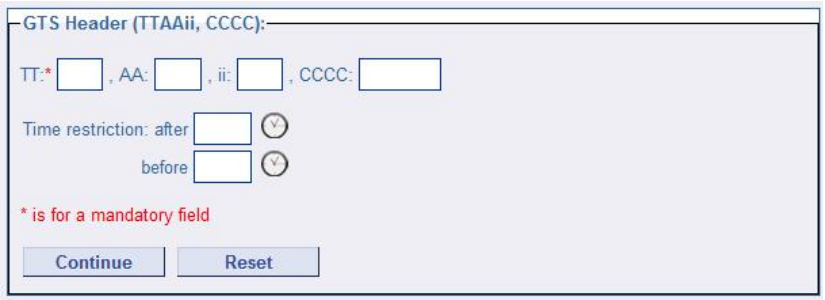
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		 *Seoul GISC (also remote search for the data from other portals).*	other datasets). ***Keywords selection***: available only the category of regions (country, continent, ocean). Even arbitrary keywords search is not available. Option for arbitrary keywords search should be added. ***Search accuracy***: from Imprecise (0) to Precise (100). **Option for choosing type of license (free or restricted) should be added.**

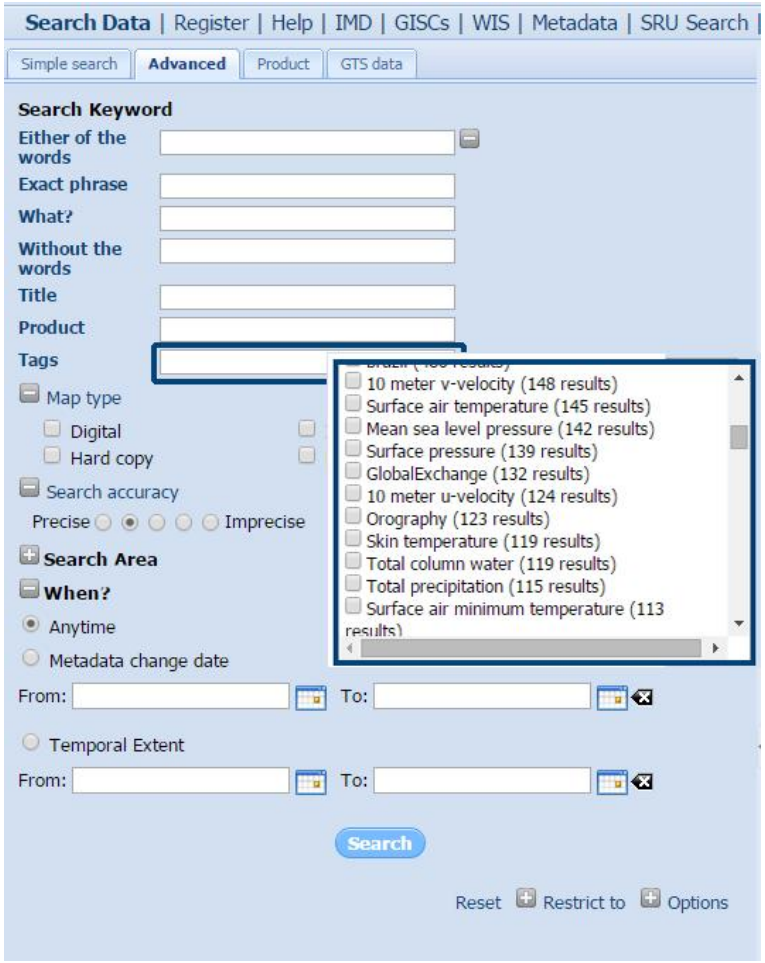
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
			

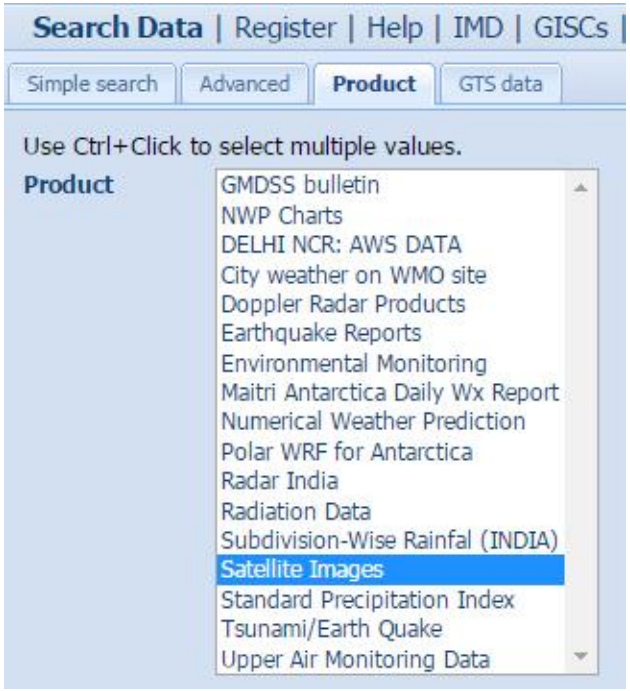
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		BRASILIA GISC   	***Text-based search***: there are two options: search in all fields & search in specific fields ***Search in specific fields*** allows you to search the GISC database for metadata according to a set of search criteria: title, abstract, keywords, provider, type of license (free or restricted) which combine text searches and specification of geographical area. Search top level products: specify which metadata records should be searched, with respect to data hierarchy: • if checked: only top level metadata is returned, i.e. data which has no parent data • if unchecked: only leaves are returned, i.e. metadata that have parent data ***Keywords selection***: available a great number of categories (including Satellite Observation & Satellite Imagery and etc.) and also arbitrary keywords search are implemented (e.g. METEOSAT). ***Search accuracy***: from fuzzy to precise (four options). This setting determines the precision of

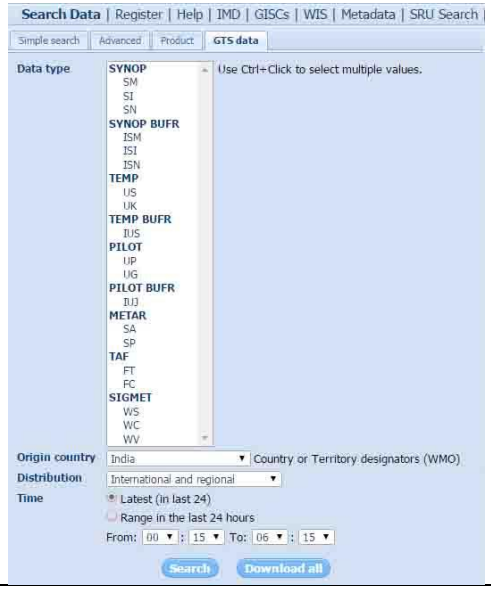
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		 	the search: a fuzzy search will give more results, as e.g. mismatches in spelling will be overlooked, but on the other hand the result list may become too large. ***Search by category*** (climatology, model, observation, forecast, analysis, others) offers you to access metadata by category. **"Search by category" is a quite efficient mechanism. But it could be added more detailed classification within different categories.** For example, for satellite observation: orbit type – operating agency – and some other essential information. ***Expert Search*** allows to search for metadata records via their *GTS Heading*.

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		OFFENBACH GISC   	***Text-based search***: there are two options: search in all fields & search in specific fields ***Search in specific fields*** allows you to search the GISC database for metadata according to a set of search criteria: title, abstract, keywords, provider, type of license (free or restricted). ***Keywords selection***: available a great number of categories (including Satellite, Satellite Data, Satellite image, Satellite monitoring data, Satellite image infrared and etc.) and also arbitrary keywords search are implemented (e.g. METEOSAT). There are a great number of different categories, but it should be more efficient if the keywords are systematically arranged. ***Search accuracy***: from fuzzy to precise (four options). This setting determines the precision of the search: a fuzzy search will give more results, as e.g. mismatches in spelling will be overlooked, but on the other hand the result list may become too

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
			large. ***Expert Search*** allows to search for metadata records via their *GTS Heading*.

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		NEW DELHI & KINGDOM OF SAUDI ARABIA GISCS 	***Text-based search***: there are two options: simple search (one box for search) & advanced search (search in specific fields) ***Advanced search data*** allows you to search the GISC database for metadata according to a set of search criteria: title, product, tags. ***Search accuracy***: from Precise to Imprecise (four options). The definition of search accuracy (fuzzy & precise) is not clear. The option "taking into account all forms of words (strict accordance)" could be more effective. ***Tags***: available a great number of categories (including Geostationary Satellite) and also arbitrary keywords search are implemented.

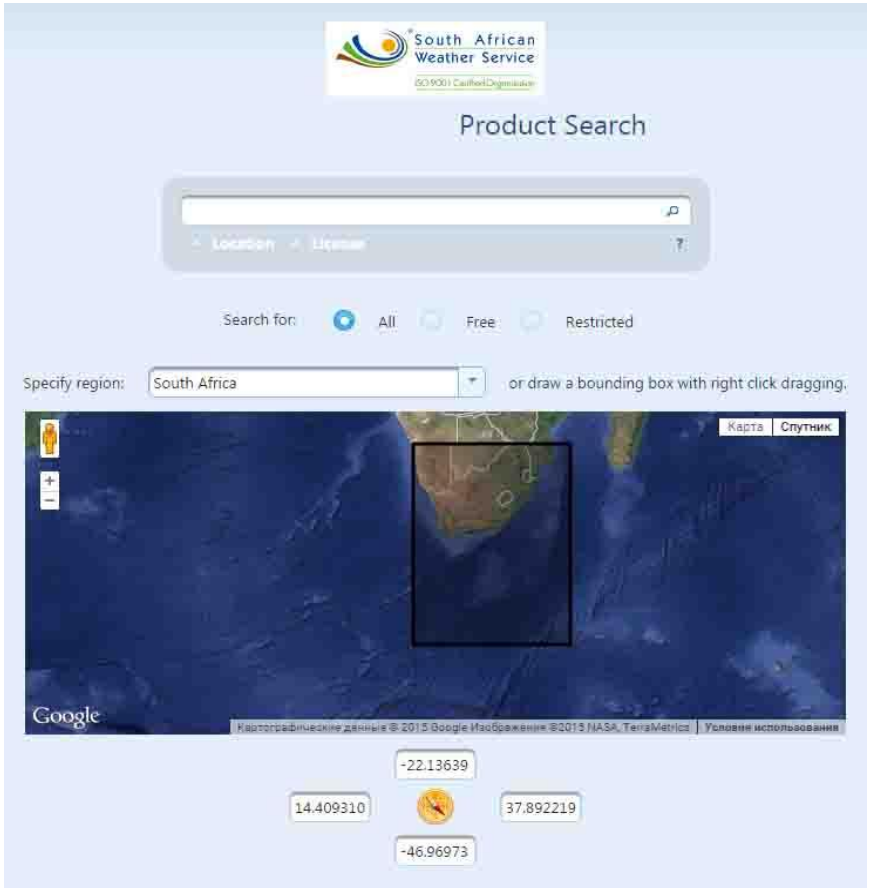
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		Product search (New Delhi GISC): 	**The product search is quite efficient, especially for new users of WIS portals.** But the category of products should be arranged in a more logic way. *And I'd like just to note that the categories of the products are different in these two portals (with the same interface) – see the next page for comparison.*

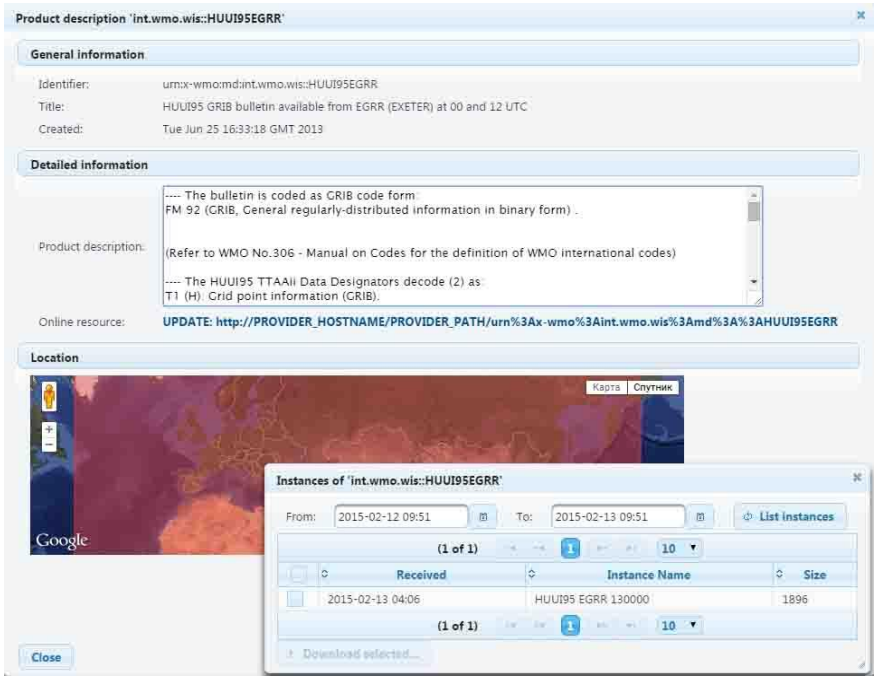
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		Product search (Kingdom of Saudi Arabia GISC):  ***Search for GST data:*** 	

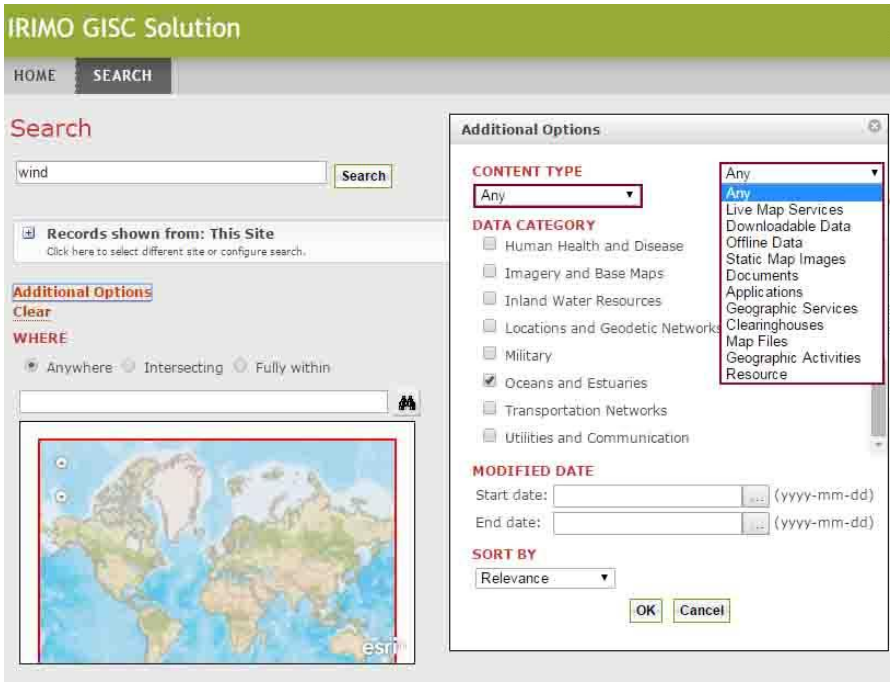
	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		BEIJING GISC ***Metadata search*** 	***Text-based search:*** the option "Full Text search" (search in all fields), and also search in specific fields (title, keywords, abstract, identifier, **data format**). **Search by data format is an efficient mechanism.** **Search accuracy is implemented as options (relation = any / all).** This option for search accuracy is more efficient than "Precise" & "Imprecise / Fuzzy" search. ***Keywords***: available a great number of categories, and also arbitrary keywords search is implemented.

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		Metadata directory (search by category) 	

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		TOKYO GISC 	Only the following interface is presented (focus has done only on GTS bulletin). No browsing search, only for the users, who understand GTS conventions.

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		SOUTH AFRICA GISC  	**This portal has the standard interface (like Google): one predominant search box; type of license (free or restricted); and geographic search, which is quite convenient.** **But users could specify required product time period only if they go to each record, which is very time consuming.** **From my point view the search by category could be also useful.**

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
			

	ITEMS	WIS GISCS PORTALS SCREENSHOTS	COMMENTS / RECOMMENDATIONS
		IRAN GISC 	**Not typical interface**. In particular, not typical data categories: Administrative and Political Boundaries, Agriculture and Farming, Atmosphere and Climatic, Biology and Ecology, Business and Economic, Cadastral, Cultural, Society and Demography, Elevation and Derived Products, Environment and Conservation, Facilities and Structures, Geological and Geophysical, Human Health and Disease and etc. Also user could choose different types of content: live map service, downloadable data, offline data, documents and etc.