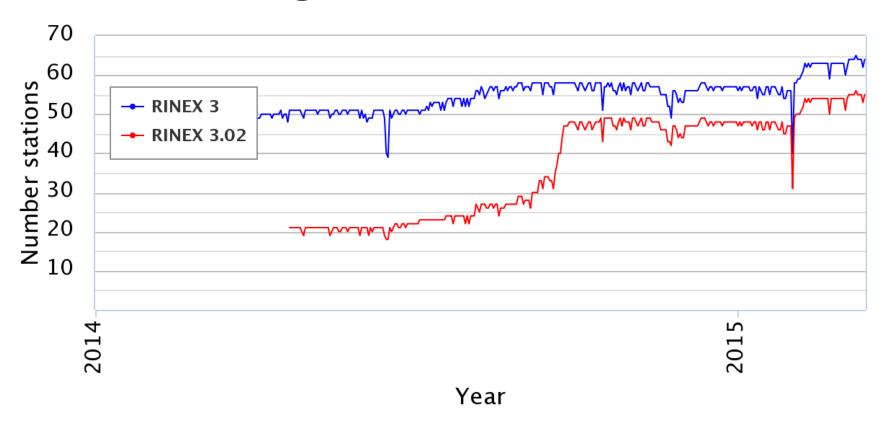
RINEX3 @ EPN CB and future EPN data flow

C. Bruyninx ROB

Increasing nr of RINEX 3.02 data



Uploaded only to and available only from BKG.

File name of RINEX 3 = RINEX 2 file name.

New long file names are not yet used, e.g.

BRUX00BEL_R_20151200000_01D_30S_MO.rnx.gz

STATNAME YYYYDOYHHMM SS

Detailed info on RINEX 3 data availability

Not all stations that indicate GPS+GLO+GAL in their site log are actually submitting RINEX 3 data with GAL, e.g.

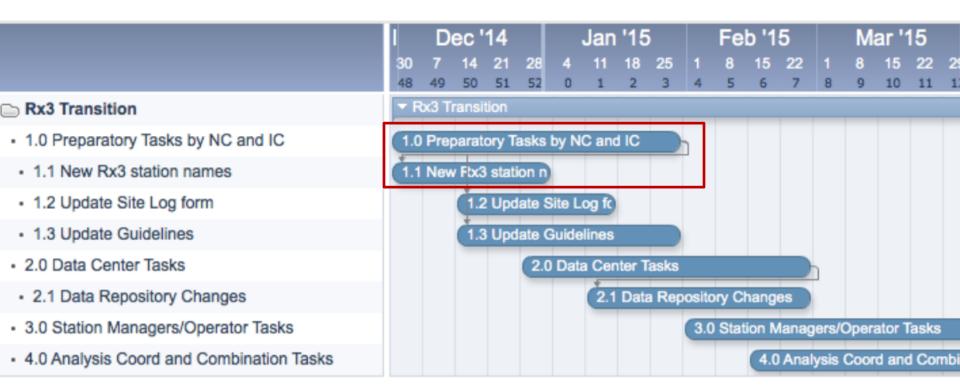
```
BISK BYDG CAG1 COST DRES EBRE GWWL HELG HOE2 LINZ LODZ NEWL QAQ1 RAMO RANT REDZ RIGA SALA SFER STAS SWKI TERS USDL ZYWI
```

Site log instructions:

Satellite System :(GPS+GLO+GAL+CMP+QZSS+SBAS)

Indicates the receiver capability with the installed firmware.

Station managers are contacted one a month.



Introduction of long RINEX 3 station names

In accordance with IGS CB (upgrade of internal data base in progress, but keeping compatibility with 4-char station names)

http://www.epncb.oma.be/_networkdata/stationlist.php

Long Station		City	Sat. System				RINEX 3 data		
Name			G	R	E	C	J	S	available
	_		_	_	_	-	_	Δ.	_
ACOR00ESP	A Coruna		~		_	_		_	_
AJAC00FRA	Ajaccio		/	/	✓	V	_	~	3.02
ALAC00ESP	Alicante		V	/	✓			•	3.01
ALBA00ESP	Albacete		/	/	V		_	/	3.01
ALME00ESP	Almeria		V	_	_		_		_
ANKROOTUR	Ankara		~	/			_	_	_
AQUIOOITA	L'Aquila		/	_					_

Detailed info on RINEX 3 data availability

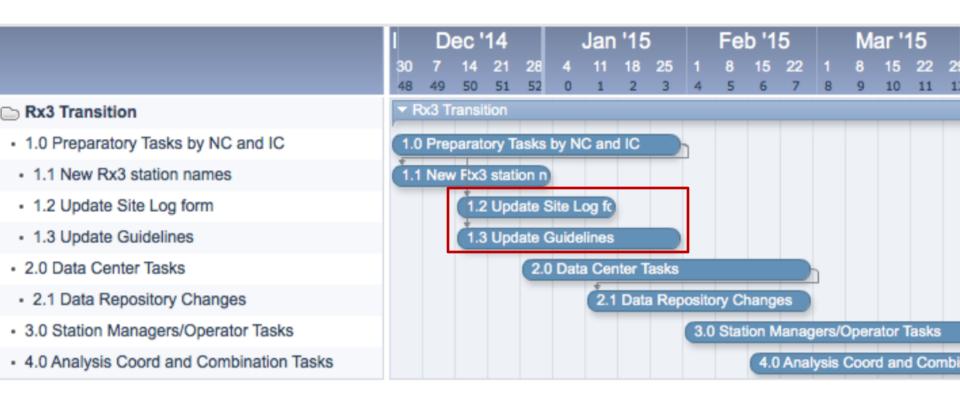
Individual station web pages have been upgraded:

GNSS DATA (RINEX, RTCM, ...)

SATELLITE SYSTEM	STATION LOG: GPS+GLO+GAL+BDS RINEX V2.11: M (MIXED) RINEX V3.02: GPS+GLO+GAL+BDS	
DAILY	FORMAT: RINEX V2.11, 30 sec, Hatanaka compressed ACCESS: free	More
	FORMAT: RINEX V3.02, 30 sec, Hatanaka compressed (unvalidated data, only for test purposes!) ACCESS: free	More
HOURLY	FORMAT: RINEX V2.11, 30 sec, Hatanaka compressed ACCESS: free	More
	FORMAT: RINEX V3.02, 30 sec, Hatanaka compressed (unvalidated data - download from here - , only for test purposes!) ACCESS: free	
REAL-TIME	FORMATS: RAW, RTCM 3.0, RTCM 3.2 ACCESS: free, using Ntrip	More

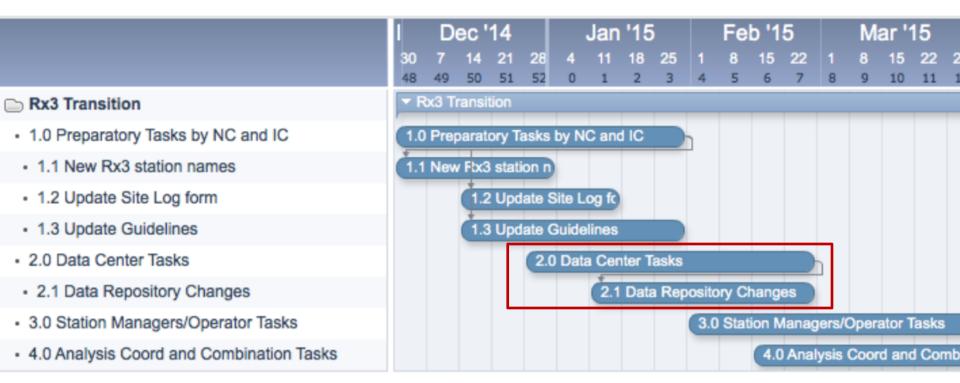
Detailed info on RINEX 3 data availability

GNSS DATA (RINEX, RTCM, ...) SATELLITE SYSTEM STATION LOG: GPS+GLO+GAL+BDS RINEX V2.11: M (MIXED) RINEX V3.02: GPS+GLO+GAL+BDS DAILY FORMAT: RINEX V2.11, 30 sec, Hatanaka compressed Less ... ACCESS: free DATA CENTRES DOWNLOAD DATA Online Last data March 2015 Name Availability Wk No Mon Thu Sun Tue Wed Fri Sat BKGI 076/2015 100% 1834 01 (060) 02 (061) 03 (062) 04 (063) 05 (064) 06 (065) 07 (066) OLG 076/2015 100% 1835 08 (067) 09 (068) 10 (069) 11 (070) 12 (071) 13 (072) 14 (073) ROB 076/2015 100% 1836 15 (074) 16 (075) 17 (076) 18 (077) 19 (078) 20 (079) 21 (080) **EPNCB** 031/2015 N/A **1837** 22 (081) 23 (082) 24 (083) 25 (084) 26 (085) 27 (086) 28 (087) (historical) **1838** 29 (088) 30 (089) 31 (090) FORMAT: RINEX V3.02, 30 sec, Hatanaka compressed Less ... (unvalidated data, only for test purposes!) ACCESS: free DATA CENTRES DOWNLOAD DATA Name Online Last data Availability March 2015 Wk No Sun Mon Tue Thu BKGI 076/2015 100% 1834 01 (060) 02 (061) 03 (062) 04 (063) 05 (064) 06 (065) 07 (066) 1835 08 (067) 09 (068) 10 (069) 11 (070) 12 (071) 13 (072) 14 (073) 1836 | 15 (074) | 16 (075) | 17 (076) | 18 (077) | 19 (078) | 20 (079) | 21 (080) **1837** 22 (081) 23 (082) 24 (083) 25 (084) 26 (085) 27 (086) 28 (087) **1838** 29 (088) 30 (089) 31 (090)



Not yet done at IGS level

EPN: wait for IGS and then get started



CDDIS:

ftp://cddis.nasa.gov/pub/gps/data/campaign/mgex/daily/rinex3/2015/060/crx/

CDDIS RINEX 3 Directory

CEBR00ESP_R_20150600000_01D_30S_MO.crx.gz	1,471 KB	GZ File	01-Mar-15 21:19
CEBR00ESP_R_20150600000_01D_EN.rnx.gz	2 KB	GZ File	01-Mar-15 21:19
CEBR00ESP_R_20150600000_01D_GN.rnx.gz	31 KB	GZ File	01-Mar-15 21:19
CEBR00ESP_R_20150600000_01D_RN.rnx.gz	34 KB	GZ File	01-Mar-15 21:19
CEBR00ESP_R_20150600000_01D_SN.rnx.gz	18\@\	GZ File	01-Mar-15 21:19
KIRU00SWE_R_20150600000_01D_30S_MO.crx.gz	≤1,702 KB	GZ File	01-Mar-15 21:19
KIRU00SWE_R_20150600000_01D_EN.rnx.gz	18101 EPN 51392 KB 2 KB	GZ File	01-Mar-15 21:19
KIRU00SWE_R_20150600000_01D_GN.rnx.gz	36 KB	GZ File	01-Mar-15 21:18
KIRU00SWE_R_20150600000_01D_RN.rnx.gz	37 KB	GZ File	01-Mar-15 21:18
KIRU00SWE_R_20150600000_01D_SN.rnx.gz	25 KB	GZ File	01-Mar-15 21:18
OUR00GUF_R_20150600000_01D_30S_MO.crx.gz	1,546 KB	GZ File	01-Mar-15 21:18
KOUR00GUF_R_20150600000_01D_GN.rnx.gz	32 KB	GZ File	01-Mar-15 21:18
KOUR00GUF_R_20150600000_01D_RN.rnx.gz	32 KB	GZ File	01-Mar-15 21:18
MAL200KEN_R_20150600000_01D_30S_MO.crx.gz	2,179 KB	GZ File	01-Mar-15 21:18
MAL200KEN_R_20150600000_01D_GN.rnx.gz	32 KB	GZ File	01-Mar-15 21:18
MAL200KEN_R_20150600000_01D_SN.rnx.gz	12 KB	GZ File	01-Mar-15 21:18

ftp://igs.bkg.bund.de/EUREF/obs_v3/2015/0 75/

10	bscn0750.15I.Z	2 KB	18-Mar-15	00:10:00	
6 2	bscn0750.15n.Z	35 KB	18-Mar-15	00:10:00	
6	bute0750.15d.Z	914 KB	17-Mar-15	02:12:00	
6	caen0750.15d.Z	1561 KB	18-Mar-15	00:10:00	
6	caen0750.15f.Z	19 KB	18-Mar-15	00:10:00	
E	caen0750.15g.Z	41 KB	18-Mar-15	00:10:00	
6 2	caen0750.15I.Z	2 KB	18-Mar-15	00:10:00	
55	caen0750.15n.Z	39 KB	18-Mar-15	00:10:00	
6	cebr0750.15d.Z	1400 KB	17-Mar-15	00:39:00	
6	cebr0750.15g.Z	38 KB	17-Mar-15	00:38:00	
6 2-	cebr0750.15h.Z	36 KB	17-Mar-15	00:38:00	
6	cebr0750.15I.Z	45 KB	17-Mar-15	00:38:00	
E	cebr0750.15n.Z	40 KB	17-Mar-15	00:38:00	
E	crei0750.15d.Z	1687 KB	18-Mar-15	00:10:00	
6	crei0750.15f.Z	20 KB	18-Mar-15	00:10:00	
6	crei0750.15g.Z	42 KB	18-Mar-15	00:10:00	
E	crei0750.15I.Z	2 KB	18-Mar-15	00:10:00	
55	crei0750.15n.Z	42 KB	18-Mar-15	00:10:00	
6 1	dent0750.15d.Z	1079 KB	17-Mar-15	00:05:00	
_					

Final goal:

RINEX 3 data with new file name needs to be accepted by DC and put in same directory as RINEX 2 data.

Possible action plan for EPN DC:

- Both RDC accept RINEX 3 (new file name)
 - In separate directory (to get started)
 - In RINEX 2 directory
- What about LDC and historical DC?
- What about previous RINEX 3 data with old filenames? rename or not?
- Start with test uploads of RINEX 3 (new filename)?
- Activities to be coordinated by EPN data flow coordinator or Chair multi-GNSS WG?

Next steps?

- Both RDC accept RINEX 3 (new file name)
 - In separate directory (to get started)
 - In RINEX 2 directory
- What about LDC and historical DC?
- What about previous RINEX 3 data with old filenames? rename or not?
- Start with test uploads of RINEX 3 (new filename)
- Activities to be coordinated by EPN data flow coordinator or Chair multi-GNSS WG