

Zeitschrift: Swiss express : the Swiss Railways Society journal
Herausgeber: Swiss Railways Society
Band: - (2008)
Heft: 93

Artikel: The Gotthard by numbers
Autor: Edgley, Hugh
DOI: <https://doi.org/10.5169/seals-854610>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

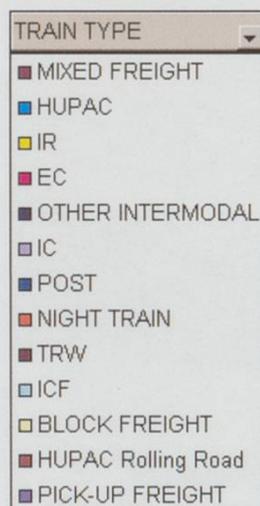
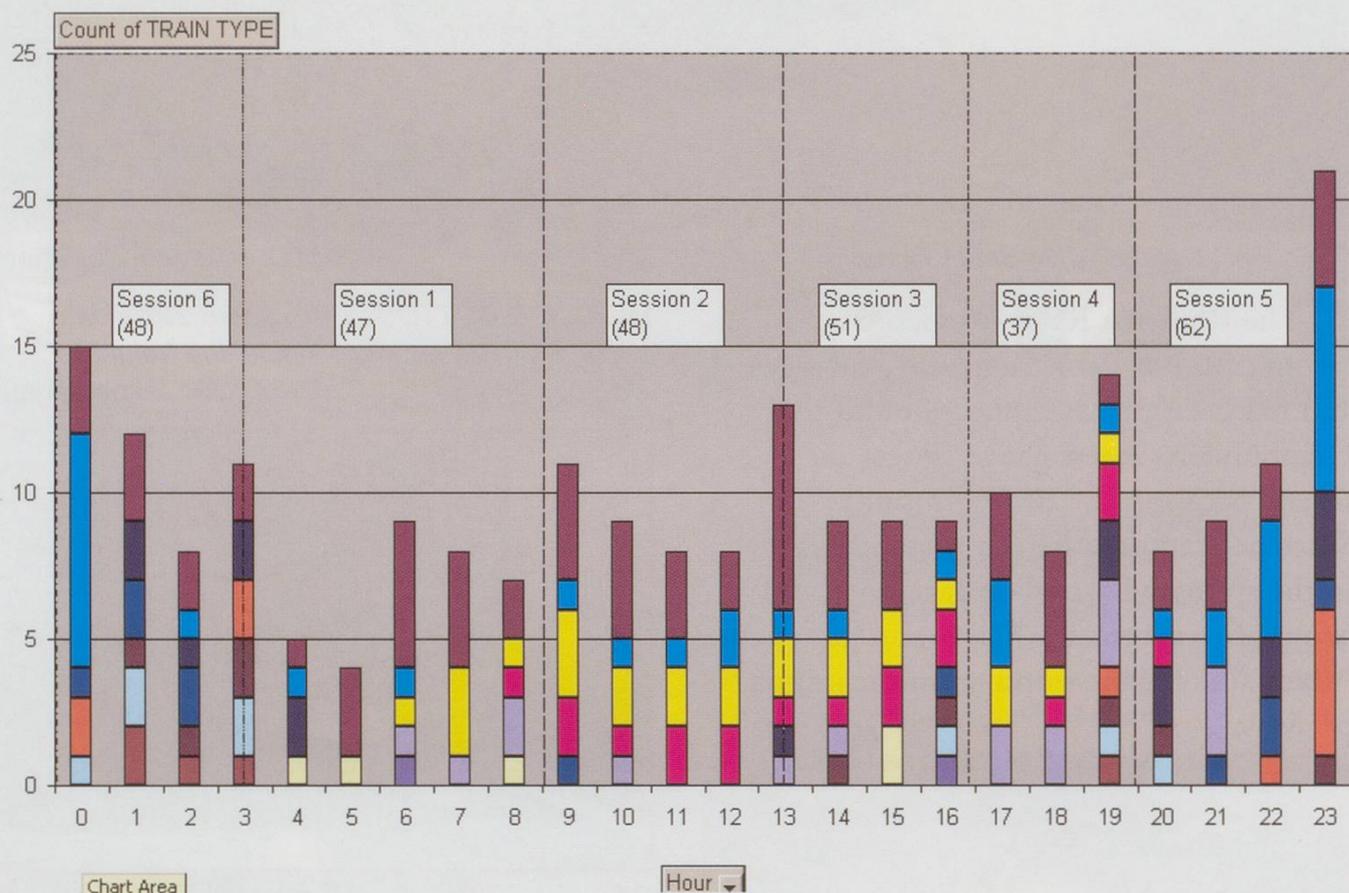
Download PDF: 16.03.2026

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

THE GOTTHARD BY NUMBERS

Hugh Edgley

After much research, the following graph profiles the number and type of trains by hour on a summer Friday on the Gotthard line in 1995. The overview has been derived from a detailed schedule which I use to run my HO Gotthard north ramp layout "Erststeig". The 24 hour period is split into 6 actual 2-3 hour operating sessions e.g. Session 1 runs from 03:30 to 9:00. The ebb and flow of different train types over 24 hours would be typical of many lines. The number of movements per session is shown in brackets. The information was built up from the SBB timetable plus other sources such as Hupac, TRW, www.trasse.ch, *Today's Railways* and wracking David Adams' experienced brain. Further information is always welcome.



293 movements are needed to get 236 trains around the layout. looping freights, pick-up freights and works trains add to the movements required per train. 236 trains equates to 5 trains per hour per direction. 154 of the 236 are freight trains.

My layout climbs from North Staging to Wiler, Zraggen and then Legistein as the summit station before the summit tunnel to South Staging. This mirrors the Gurtellen to Göschenen northern ramp section of the real line connecting Northern Europe with Italy.

The movements for each session are pre-planned so the trains successfully navigate from staging yard to staging yard. Freight trains are looped as required. Some freight trains start or finish in loops at

Wiler or Legistein rather than hidden staging due to lack of storage space. Step by step movements allow for a session to be started and stopped as required. Starting positions for each session are documented for easy set up. The divide between sessions has been guided by the need to avoid consecutive movements by the same train in the same direction in the same session.

Mixed freight train lengths have been determined according to their movements (and therefore loop length restrictions) across the 6 sessions. Maximum train length equates to 10 coaches.

To run a typical day on the Gotthard I use the following trains:-

- 1 - SBB IC
- 2 - IR (1 using EWIV stock, 1 EWII stock)
- 1 - DB EC
- 1 - FS IC/EC
- 2 - Hupac/TRW intermodal trains
- 1 - Hupac Rolling Road Train
- 1 - ICF container train (Used to cover ICF and other services e.g. Ambrogio, Skandi, Euroshuttle)
- 12 - Mixed freight trains
- 3 - Block freight trains (more to be added)
- 1 - Post train
- 1 - Pick-up goods train

Strengthening coaches, restaurant cars and international night stock are also used to provide the full range of trains. A summer Friday has been chosen to give more night services. Intermodal services have also been made Friday specific.

Passenger and intermodal trains are re-used during a session as required. The majority of mixed freight trains are planned to run only once per session. I try to tailor my intermodal train loads to represent specific corridors such as a Rotterdam-Novara Hupac service filled with Dutch based hauliers' containers/swap bodies, or a Ludwigshafen-Busto Arisizio service laden with chemical container tanks. Each train's number, source and destination is part of the schedule.

In this model world a fleet of 460s, Re4/4ⁱⁱ+ⁱⁱⁱs, Re6/6s, Ae6/6s and a preserved Crocodile keep trains rolling, whilst Open Access, advertising liveries, Cisalpino and Sectorisation are still in the future. Double-headed red 460s and Re10/10s rule – and 24 hours can last quite a while!

The Siemens version of an international multi-voltage locomotive. ES 64 U2-100 in silver-grey livery with "Hupac" markings, on display at Biasca, accompanied by several modern container vehicles.

PHOTO: John Jesson

